IV. INTERNATIONAL ISTANBUL ECONOMICS RESEARCH CONFERENCE (IIERC)

ECONOMY AND **SECURITY**

Rethinking **Global Stability** at the Crossroads of **Economic Policy** and **Security Strategy**

Book of Abstracts

06-08 November 2025
Istanbul University
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ABSTRACTS

Security, Hegemony, and Trade: An Assessment of the U.S.–China Economic Decoupling

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Abstract

This paper examines recent shifts in the international trade system through the lens of international political economy, with a particular focus on the interplay between economic relations and global security dynamics. On April 2, 2025, U.S. President Donald J. Trump issued an executive order declaring a national emergency in response to what was described as an extraordinary threat to national security and economic stability—stemming from the trade practices of U.S. partners and systemic imbalances in the global economic order. As part of this declaration, a uniform ad valorem tariff was imposed on all imports, aiming to correct trade asymmetries.

The study critically explores the evolving relationship between economic strength and national security, revisiting post-World War II developments that shaped American hegemony. It identifies key turning points that have led to a deepening decoupling between the U.S. and China and frames the so-called "trade wars" within broader strategic considerations. The findings point to a more fragmented, multipolar global trade system shaped by U.S. decoupling efforts and China's strengthened ties with the Global South through initiatives like the Belt and Road Initiative (BRI) and the Regional Comprehensive Economic Partnership (RCEP). Yet, rather than full disengagement, international corporations are adopting a "China +1" strategy, with diversification proving difficult. Finally, the Trump administration's tariff policies highlight that trade wars generally yield negative outcomes, leaving even developing countries exposed to rising global uncertainty.

Keywords: Economy-security nexus, international trade policy, US-China trade wars.

1. Introduction

In an era of intensifying geopolitical rivalry and systemic shifts in global production, this paper explores the deepening interconnection between international trade, national security, and global power realignment through the lens of international political economy. It emphasizes the evolving interplay between trade, global security, and the strategic behavior of states and firms. The analysis is situated in the context of the ongoing U.S.–China economic tensions, viewed not merely as a bilateral trade conflict, but as a manifestation of deeper structural transformations in the global political economy. The structural shifts in the global trade regime, which is often described as a trade war is, in fact, a multidimensional geopolitical conflict with far-reaching consequences. Central to this analysis is the growing securitization of trade policy and the global reorganization of production and supply chains.

The study is framed around a critical policy event: U.S. President Donald J. Trump's April 2, 2025, executive order declaring a national emergency in response to what was perceived as an 'extraordinary threat' to U.S. national security and economic well-being. The threat, ac-

cording to the order, arose from persistent trade deficits, lack of reciprocity in bilateral trade agreements, and systemic distortions caused by the economic policies of U.S. trading partners—especially China. As a countermeasure, a universal ad valorem tariff was imposed on all imports into the United States. This unprecedented action marked a significant escalation in the use of economic tools for strategic purposes. This measure was justified on the grounds of national security, signaling a renewed willingness to treat international trade not just as an economic issue but as a strategic domain. It serves as a critical case for examining the blurring lines between economic policy and security strategy in contemporary international relations.

The paper proceeds in three main parts. First, it revisits the post-World War II era, examining how U.S. economic dominance—anchored by American industrial capacity—underpinned the formation of the neoliberal international order. This historical foundation offers important context for understanding how the mutual influence of economics and security becomes visible in specific time periods and its evolution until today. The second section addresses the transformation of global trade structures, particularly through the rise of global value chains (GVCs) and the increasing influence of international corporations which were main drivers of the Asianization of production and increased Western reliance on Asian industrial capacity. This reliance has become a focal concern in U.S. security discourse, particularly in critical sectors like semiconductors, telecommunications, and pharmaceuticals. The third section examines the evolution of U.S.–China economic relations, identifying key turning points such as China's accession to the World Trade Organization (WTO), the 2008 global financial crisis, and the introduction of China's "Made in China 2025" strategy. These events are analyzed as stages in a broader shift from economic integration to geopolitical confrontation. It explores how U.S. policy has shifted from engagement to containment, and what is the role of US-based international corporations on this policy shift. Finally, the paper explores alternative scenarios for the future of the global political economy. It considers the sustainability of current decoupling strategies, the resilience of GVCs under geopolitical stress, and the implications for multilateral governance.

In sum, this paper argues that the contemporary trade regime is undergoing a paradigmatic shift—one in which economic interdependence is increasingly reframed as strategic vulnerability. It contends that the current global trade realignment is not merely a reaction to short-term economic imbalances but a fundamental restructuring of the international system. By linking the economic interests with national security imperatives, this study tries to contribute to a deeper understanding of the structural transformations redefining the global order and explore future scenarios for the global political economy under conditions of sustained tension and fragmentation.

2. Methodological Approach

This paper adopts a critical global political economy (GPE) perspective, drawing particularly on the theoretical contributions of Susan Strange, to examine the interplay between trade, security, and structural transformations in the global economy. Rather than treating economic and security phenomena as distinct or sequential, this study analyzes them as co-constitutive dimensions of global power, embedded in overlapping institutional and material structures. The methodological orientation is qualitative, historical, and structural, emphasizing the en-

during yet evolving power relations that shape state behavior and corporate strategy in an increasingly fragmented international order.

At the core of this methodological framework is Strange's concept of structural power, which refers to the ability not merely to influence outcomes through negotiation or coercion (relational power), but to shape the frameworks within which other actors operate. In this framework, security, is not treated in purely military terms but as the institutional capacity of actors to protect themselves from threats—whether economic, physical, or systemic. This study uses this expanded concept of security to analyze how economic structures have become securitized, particularly in the context of U.S. national emergency declarations and the framing of trade deficits and supply chains as existential threats.

In summary, the goal is to interpret complex interdependencies and uncover the underlying power relations that condition economic policy decisions.

3. Discussion and Conclusion

The findings point to a more fragmented, multipolar global trade system shaped by U.S. decoupling efforts and China's strengthened ties with the Global South through initiatives like the Belt and Road Initiative (BRI) and the Regional Comprehensive Economic Partnership (RCEP). The 2008 financial crisis and China's interventionist policies heightened U.S.–China tensions, while the Covid-19 pandemic accelerated debates on reshoring and supply chain diversification. Yet, rather than full disengagement, international corporations are adopting a "China +1" strategy, with diversification proving difficult. Finally, the Trump administration's tariff policies highlight that trade wars generally yield negative outcomes, leaving even developing countries exposed to rising global uncertainty.

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The Recurring Dichotomy of Globalization and Economic Nationalism: Implications for Global vs. Regional actors

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Abstract

The issue of globalization and its relation to certain countries' tendencies for economic nationalism or for achieving self-reliance has been an issue of discussion and debate. There is no doubt that both phenomena go hand in hand as countries try to balance between adjusting to the ever-increasing trend of inter-dependency while also protecting national interest and developing national industries. When assessing the impact of economic nationalism on the international standing as well as national interests of countries, one needs to take into account the role of said country, as superpowers and regional actors have different contexts which require differing assessments on the approach and need for economic nationalism which can prove beneficial or detrimental to national interests. While the United States hinders its international reputation and standing with its allies in the hopes for propping up domestic industry, regional actors such as Turkiye have increased their role due to effective and well-targeted economic nationalism policies. This study aims to analyze and asses the recent US strategy, emphasizing the need to re-think its approach, while also analyzing the successful policies of Turkiye in this regard, especially when it comes to targeted domestic defense industry development, from an economic, diplomatic and national interest perspective.

Keywords: Globalization, Autarky, Tariffs, Protectionism, Industry

1. Introduction

There is no doubt that the turn of the 20th century brought with it an irreversible trend of ever-closer relations and interdependency among nation-states in what we know as Globalization. Although Globalization can be defined from many aspects which encompass different forms of globalization such as cultural or political globalization, both of which are overtly visible in contemporary politics and society, the most impactful globalization has no doubt been the trend of economic globalization. Economic globalization encompasses the increasing reliance of nation-states upon each other for resources, development and trade which has brought with it beneficial as well as detrimental factors which put under question the context of economic globalization and how it should be assessed by governments in protecting and preserving their national interests.

Although economic globalization has been viewed as inevitable in contemporary society in which rapid industrialization requires imports as well as exports among nation-states, thus

creating a state of mutual interdependency, certain countries have demonstrated an intention of minimizing the impact of economic globalization, aiming to achieve a level of self-reliance and autarky due to either a cynical view of foreign actors in domestic economic structures or with an aim of developing domestic industries. These ideas of self-dependency can be defined as economic nationalism which is put into action through protectionist economic policies (Pryke, 2012).

2. Table and Figure

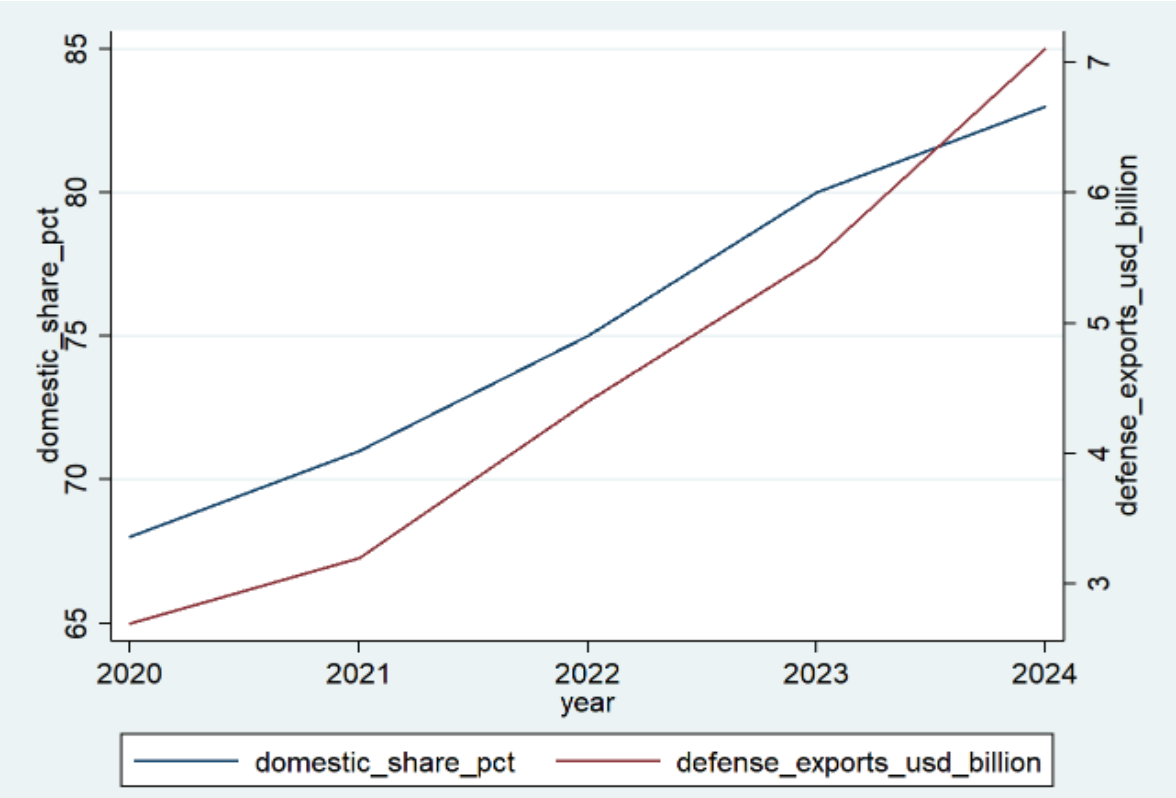

Figure 1: Domestic share of defense industry in percentage and defense industry exports of Turkiye in USD (2020-2024)

As indicated in figure 1 and further re-inforced by a linear regression shown in table 1, in which the impact of domestic share in defense industry has a high impact on defense industry exports of Turkiye. Turkiye has increased the domestic share of its defense industry from around 68 percent to almost 80 percent (Ongun, 2025), while at the same time the defense industry exports were also increased from around 3 billion US dollars in 2020 to over 7 billion US dollars in 2024 (Anadolu Agency, 2024). These statistics portray that correctly targeted economic nationalism can lead to beneficial outcomes for regional powers such as Turkiye which strive to increase their capacity as regional actors and furthermore as economic powerhouses. The investments of Turkiye in their defense industry and the encouragement of domestic production in the defense industry, albeit a trait of economic nationalism, has proven to play a vital role in Turkiye increasing its role and visibility in the international stage, particularly in recent years in which regional conflicts have been on a steady increase. On the other

hand, the Turkish role of mediation and peace-making in regional conflicts has increased the diplomatic capacity and moral credibility of Turkiye which points to an effective use of economic nationalism and diplomatic strategy to increase their role as a regional power, which reinforces the potential benefits for regional actors in expanding their influence through the development of domestic industry and targeted policies of autarky. While on the other hand, the United States, as a global superpower has misused its economic nationalism direction, creating further animosity and mistrust within its allies, which leads to a profound discussion on the assessment and utilization of economic nationalism from the perspective of regional and on the other hand, global actors.

Source	SS	df	MS		
				Number of obs	= 5
				F(1, 3)	= 105.41
Model	148.960657	1	148.960657	Prob > F	= 0.0020
Residual	4.23934323	3	1.41311441	R-squared	= 0.9723
				Adj R-squared	= 0.9631
Total	153.2	4	38.3	Root MSE	= 1.1887

domestic_share_pct	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
defense_exports_usd_billion	3.429113	.3339909	10.27	0.002	2.366205	4.492021
_cons	59.69466	1.619425	36.86	0.000	54.54093	64.8484

Table 1: Linear regression indicating a statistically significant impact of domestic share in defense industry on defense industry exports in Turkiye

3. Discussion and Conclusion

The aim of this paper will be to analyze different intentions of economic nationalism by taking into account the recent trend, and the position of the United States and how it has and further can impact economic globalization while on the other hand looking at Turkiye as a case study to understand how countries have balanced globalization with ensuring domestic industry development crucial to national interest and security. There is no doubt that the current attitude of the United States of America, particularly towards its allies through “America First” economic policies such as import tariffs will have a detrimental impact on the already dwindling position of the United States as a global leader and superpower, hindering its alliances and influence while leaving space for other global and regional actors. While on the other hand, economic nationalism of regional actors, in this case of Turkiye, has demonstrated beneficial results, increasing its regional influence and partnerships, economic capacities, and role as a regional power. Having this in consideration, the argument can be posed that superpowers do not have the luxury of engaging in isolationism, protectionism and economic nationalism as it hinders their position and influence while for regional actors targeted policies of self-reliance and economic nationalism can further increase their capabilities and thus their role as regional actors. On a “big-picture” level, these trends considerably hinder the US-led global order, leaving space for regional alliances and inter-dependencies while at the same time providing a platform to other global and regional actors to take their place.

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The Effects of AI on Utilisation, Skilled Workforce and Demand-Supply Dynamics in FTT Industries

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Abstract

AI represents a paradigm-shifting factor and is responsible for the structural changes observed in the global fashion industry's labour market. The technological acceleration caused by AI fundamentally changed the equilibrium between the demand for and supply of labor from fast fashion to ultra-fast fashion. This is a transformative force that constantly imposes an adaptation challenge on the upgrading of the skills of the workforce, which in turn demands recalibration of employment levels and wage systems in the Fashion, Textile, and Technology Industries (FTT). This article discusses the conceptual relationships between the cutting-edge AI-based technology employed for optimizing the decision-making process, organizational performance, and competitive efficiency against the well-being of the workforce. It also identifies the interconnections between replacement-displacement dynamics and mental health outcomes, while examining inequality dynamics and labor welfare through Industry 5.0's (I5.0) human-centric paradigm. The study also discusses the potential of AI-human collaboration, while recognizing that the transformative power of AI is not just about increasing efficiency but is also about reshaping regional customs, practices, and socio-economic relationships. These inferences reveal the true costs of technological advancement in contemporary fashion labor markets.

Keywords: Labour Economics, Demand-Supply, Utilisation, Security, FTT, AI, Well-being

1. Introduction

The ILO (2019) declaration on AI emphasized the need to take urgent action to shape the future in a responsible manner. The UNESCO Report also indicated that the role of AI in the creative industries is advantageous but also poses risks to some professions in the Cultural and Creative Industries (Hausmann and Baumgarten, 2024). The transition to Industry 5.0 from Industry 4.0 is a significant change since it focuses on the human element. I5.0 has introduced the use of interactive digital robots to work with humans to create hyper-personalization while accepting human creativity and decision-making as innovation drivers (Jahromi, 2024). I5.0 human-centric approach focuses on human-robot collaboration where robots do the repetitive work, and humans do the creative work (Atwell, 2017). I5.0 has moved away from the economic development focus of I4.0 at any cost to incorporate environmental and societal solutions through human-centricity, resilience, and sustainability (Breque, De Nul, and Petridis, 2021). I5.0 has also moved away from command programming to machine learning, which enabled computers to make decisions (Frey and Osborne, 2023). Generative AI is transforming the fash-

ion industry in design, production, and retailing while fundamentally reshaping occupations and labor market dynamics.

2. Employment Security

The technology-driven change also creates issues concerning employment security, displacement, replacement, and collaboration dynamics. Job polarization verifies new technology's direct impact on labor, as it replaces labor with capital in tasks requiring moderate skills (Autor, Levy, and Murnane, 2003). AI uniquely focuses on high-skilled jobs requiring complex problem-solving skills, while AI adoption reduces demand for low-skilled occupations (Zhang et al., 2024). It also increases displacement risks for low and medium-skilled jobs, as well as increasing demand for high-skilled workers (Zhou et al., 2025). However, the AI tools now aid the professionals rather than replacing them, increasing productivity at work (Bessen et al., 2025). Job destruction and creation dynamics coexist in the industries. However, destructive forces dominate the scene (Kucera, 2017). The impacts of AI technology, which drive ultra-fast change in all industries have a strong effect on *labour security*.

3. Conclusion

The proliferation of AI requires the exploration of the following question: "*Do organizational investments in AI-driven efficiency systematically erode worker well-being?*" The framework of Industry 5.0 emphasizes the importance of worker well-being (Kucera, 2017). Micro-level automation has positive employment effects on workers (Domini et al., 2021). However, the displacement effects of technological change far outweigh the productivity effects for existing workers in the SMEs (Bessen et al., 2025). There is a lack of a relationship between organizational productivity and worker well-being due to displacement effects and the absence of retraining (Autor, 2003). The overuse of digital technologies by organizations also creates mental health problems (Abeliansky et al., 2024) and ethical issues (de Lima, 2025). Job insecurity and psychological problems are more prevalent among secondary sector employees who are affected by the forces of technological displacement (Abeliansky et al., 2024). Therefore, the study concludes that technological progress is a double-edged sword that deepens socio-economic inequalities and undermines worker welfare in the absence of effective labor market regulation policies.

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Relocating State Corporations in Russa: Prospects for Regional Economic Security and Systemic Risks

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Abstract

Purposes

The idea of moving some state corporations from Moscow to the regions where their main activities are concentrated has been discussed for many years. Back in 2013, this initiative was announced at a meeting between the President and the Council of Legislators, but it did not receive further development due to concerns about a sharp reduction in the capital's budget. In 2014, Prime-minister D.A. Medvedev ordered the development of a plan to relocate the headquarters of a number of large state-owned companies to the Far East. In 2021, President V.V. Putin again raised the issue, particularly concerning Siberian regions. Following the results of the XXVII St. Petersburg International Economic Forum in 2024, the President instructed the Government to submit proposals on the phased relocation of state corporations and companies with state participation from Moscow to the federal subjects at the location of their main production and/or operational activities, paying particular attention to the Ural, Siberian and Far Eastern federal districts. One of the primary goals of this measure is to achieve a more even distribution of resources across the country and to redistribute the revenue potential of regional budgets. The excessive concentration of large companies in Moscow means that a significant portion of tax revenues ends up in the capital, while their actual activities are carried out in remote regions, thereby exacerbating interregional inequality. This spatial imbalance not only undermines regional fiscal autonomy but also poses systemic risks to the economic security of both business entities and the state as a whole, especially in the face of modern geopolitical and structural challenges.

Design/ Methodology/ Approach

The study analyzes the consequences of the possible relocation of headquarters of companies with state participation from Moscow to the Russian regions, with a focus on implications for the economic security of these business entities and the resilience of regional economies. The regulatory framework was formed based on an analysis of current regulations, official company websites, and materials from analytical centers and assess how spatial decentralization contributes to or undermines corporate economic security. The study included an analysis of cases of relocation of both state and private company headquarters in Russia to identify facilitating or hindering factors and to consider socioeconomic consequences, particularly in terms of operational stability, access to talent, and vulnerability to external shocks.

The first stage examines the historical context and current situation of concentration in

Moscow. The second stage examines the potential consequences and the difficulties in assessing them. The third stage describes existing examples of relocations within Russia. Traditional neoclassical location theory highlights megacities' appeal for corporate HQs—skilled labor, specialized services, infrastructure, government access, prestige, and knowledge spillovers. Yet some firms, particularly in manufacturing, favor locations near production sites. Geographic distribution hinges on urbanization economies (broad advantages) and cluster economies (specialized ones). From an economic security standpoint, proximity to core assets lowers logistical risks and boosts operational resilience.

Finding/ Results

According to Order of the Russian Federation Government no. 2199-r dated August 15, 2024, there are 58 state-owned joint-stock companies and federal state unitary enterprises, of which 41 have their head offices in the city of Moscow, 6 in the city of St. Petersburg, and 11 in other regions. This list is not exhaustive and excludes major state corporations like Rosatom, Roscosmos, and Gazprom. Data confirms a strong trend of centralization: by 2024, 72% of the headquarters of Russia's 100 largest companies were located in the city of Moscow. The choice of Moscow is often strategic, driven by access to government, financial markets, and skilled personnel, rather than proximity to production, which is frequently located in remote areas like Siberia and the Far East. This disconnect between decision-making centers and operational sites may compromise the economic security of state corporations by increasing coordination costs, reducing responsiveness to local risks, and weakening ties with regional stakeholders.

Existing relocation examples in Russia are limited and not always fully representative. VTB Bank moved its legal address to St. Petersburg in 2005, increasing the city's budget, but kept its main office and staff in Moscow. Gazprom relocated its registration to St. Petersburg in 2021, bringing significant tax revenue but also high development costs. RusHydro plans to move its headquarters to Krasnoyarsk by late 2024 to improve asset management and local integration, requiring major investments in property and housing. Planned moves by En Group to Irkutsk and RUSAL to Krasnoyarsk stalled or were partial, with key operations remaining in Moscow, reflecting ongoing tension between central control and regional economic security.

Originality / Conclusion/ Suggestion

The study concludes that the relocation of headquarters is only feasible and impactful if several medium-sized companies or one very large company moves to a single region simultaneously. An individual medium or small company will not have sufficient socioeconomic impact to justify the high relocation costs. Instead of focusing solely on relocating existing entities, a more promising solution may be to develop state support mechanisms aimed at creating and nurturing large businesses directly within the regions, thereby embedding economic security into the fabric of regional development from the outset.

Russia's unified tax and legal system reduces the financial appeal of relocating headquarters compared to countries with regional regulatory differences. Lower regional labor and rent costs rarely offset the risks of leaving Moscow and St. Petersburg—especially regarding access to capital, talent, and institutional stability, all critical to economic security. The Strategy for Spatial Development until 2030 (forecast to 2036) lacks a key metric: the share of large state-

owned company HQs located outside Moscow and St. Petersburg. Introducing this indicator would promote fiscal equity, diversify dependencies, and enhance national economic resilience by deconcentrating management and spreading economic activity more evenly—a step likely to begin in the near future.

Keywords: Spatial Development, State Corporations, Decentralization, Regional Development, Headquarters

Economic Nationalism and Populist Discourses Towards Immigrants in the Context of Welfare Nationalism in Germany

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Abstract

Welfare nationalism is the state's prioritization of social assistance, services, and social welfare policies solely for a specific group it considers part of a nation. In this context, welfare nationalism, also known as welfare chauvinism, prioritizes the economic security concerns of citizens in the allocation of economic resources. Immigration serves as the reference object for these economic security concerns, as the assumption of expenses by immigrants who benefit from welfare benefits has led to the rise and support of far-right movements engaging in populist politics within the nation-state in recent years. Right-wing populist parties, which utilize economic nationalism in their discourse, present the space left vacant by centrist parties in the political arena as a threat to economic security through immigrants, whom they see as invaders. In this context, they portray immigrants, who share the welfare of "natives," as invaders in their discourse. In this context, the Alternative für Deutschland (AfD), which increased its vote share, particularly with its anti-immigration stance, and experienced significant growth in local and national elections since its founding in Germany in 2013, is crucial for analyzing the construction of economic nationalism through populist discourses within the context of welfare nationalism.

Keywords: Welfare Nationalism, Economic Security, Immigration, AfD.

1. Introduction

Welfare nationalism is defined as "the limitation of social citizenship rights based on ethnic/national identity" (Keskinen, 2016). Economic security, on the other hand, relates to access to resources, finance, and markets necessary for maintaining welfare and state power (Buzan, 2015:38). In this context, economic nationalism plays a significant role in economic security for national states. While the state fulfills its primary duty to ensure the security of its citizens, it uses its revenues to maintain and enhance this security (Ürer, 2012:43).

Nationalist populist discourse constructed within the framework of welfare nationalism can become a security issue when evaluated within the context of citizenship and national affiliation. This has led to the rise of far-right parties in Europe, particularly in recent years, through a welfare nationalism constructed around "us" and "the other." Populist politicians portray immigrants as a threat to economic security. Mandacı and Özerim express this as follows:

"*These issues are brought to the agenda within the framework of posing a threat to the employment market, posing a threat to the welfare state and social security structure, employment of illegal immigrants, indirect taxation rather than direct, social dumping, not contributing to social security, creating health expenses along with their families, education*

expenses of immigrant children, government expenditures on refugees, giving priority to natives in the employment market and family reunification." (Mandacı and Özerim, 2013: 116).

The Alternative for Germany (AfD), which portrays immigrants as a security issue through its populist rhetoric and economic nationalism, uses securitizing language in its immigration policies. Migrants securitized in the economic arena are presented as a "threat" to the host society on a political level. This has led to the populist rhetoric and economic nationalism targeting immigrants as "exclusionary" subjects. The following statements by AfD group leader Alice Weidel are significant in this context:

"*Instead of absorbing the flow of illegal immigrants with social incentives and simplified residence permits, Germany should tighten its asylum law, reduce social benefits for asylum seekers, which are very high compared to the EU, and immediately deport illegal immigrants who must leave the country*." (Weidel, 2023).

The above statements highlight the relationship established in the name of immigration and economic nationalism, while also demonstrating that immigrants are held responsible for the crises they face. This can be explained by the need for an "other" in populist political discourse. The economy is transformed into a security issue through nationalist discourses. Populists ultimately divide society into two homogeneous and irreconcilable groups (Mudde, 2004:543). In this context, the AfD, through its populist rhetoric, has constructed exclusionary discourses based on economic nationalism between citizens, the true inhabitants of the welfare state, and immigrants, based on economic security.

2. Conceptual Framework

The Copenhagen School, which emerged as a critique of the traditional/realist understanding of security within security studies, expanded the scope of security through non-military threats. In this context, they developed three main approaches integrated with the Copenhagen School: "securitization," "sectoral analysis," and "regional security complexes" (Huymans, 1998:479-505). The study focuses on economic security within the context of "sectoral analysis," which is integrated with the Copenhagen School. The economic sector encompasses relations related to trade, production, and finance (Buzan, Waever, & Wilde,1998: 7). Within this framework, economic security is one of five sectors. Immigration, in addition to deteriorating the conditions of the welfare state for societies, is also viewed as a security problem by threatening national identity, social cohesion, and income distribution (Ratzmann, 2012: 263). The state, citing welfare, portrays immigrants as a threat to the national economy and securitizes through economic nationalism.

3. Conclusion

In recent years, the AfD has achieved significant success in both local and national elections in Germany with its populist anti-immigration rhetoric. Party rhetoric portrays immigrants as a threat to the German welfare state and social security. In this context, immigrants are seen as an economic burden. While immigrants are described as a problem for the German national economy, the burden of mass immigration on German citizens is emphasized within the context of economic nationalism. It is observed that such populist rhetoric has transformed into an economic security issue through welfare nationalism, specifically in Germany.

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Sustainable Development and Resilience of Russia's Regions Under Economic Crises and Geopolitical Conflicts

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Abstract

Purposes

This study investigates the interplay between sustainable development and resilience of regions in the Russian Federation amid profound global and domestic transformations after 2022. The central aim is to assess how Russia's regions navigate the New Normal which is the period marked by geopolitical realignment, economic sanctions, energy market volatility, and post-pandemic recovery while striving to align with the United Nations Sustainable Development Goals (SDGs). The research addresses critical gaps in both theoretical understanding and empirical measurement of regional resilience and sustainability in a highly centralized fiscal federation. It seeks to identify the structural, institutional, and financial determinants that enable-or hinder-regions from maintaining functional stability and developmental continuity under exogenous and endogenous shocks. Crucially, the paper situates these dynamics within the broader context of economic crises and policy conflicts emerging in a multipolar world, where competing geopolitical blocs impose divergent economic logics, trade restrictions, and normative frameworks on national and subnational actors.

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The report is based on results of the farther author`s researches:

Klimanov V., Kazakova S. (2022). Assessment of sustainable development of Russian regions. Area Development and Policy. Vol. 7, issue 3, pp. 312-324, DOI: 10.1080/23792949.2021.1994437.

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Klimanov V., Kazakova S. & Mikhaylova A. (2018). Regional Resilience: Theoretical Basics of the Question. Ekonomicheskaya Politika, 13 (6), 164-187.https://doi.org/10.18288/1994-5124-2018-6-164-187

Design/ Methodology/ Approach

The research is carried out on the basis of a combination of quantitative and qualitative methods, economicstatistical and comparative analysis, systematic and logical approaches. The hypothetical state of Russia's regions are modeled under various external influences, both in retrospect and in the future. An integral Regional Sustainable Development Index (RSDI) was developed, encompassing 37 indicators. Data were drawn from official Russian sources – Federal Statistic Agency (Rosstat), the Federal Treasury, and the Ministry of Finance, covering 85 regions. To assess resilience, a separate Regional Resilience Index was constructed using 17 socio-economic and fiscal indicators adapted from the Resilience Capacity Index (Foster, 2007), applied to panel data from 2007–2016 to capture responses to the 2008–2009 global financial crisis and the 2014–2015 monetary shock. Fiscal data from 2020–2024, including budget execution reports and debt statistics, were used to examine the impact of the COVID-19 pandemic and subsequent geopolitical shifts on regional fiscal resilience. The analysis explicitly accounts for how multipolarity reshapes fiscal autonomy, trade orientation, and investment flows – factors that increasingly determine whether regions can pursue endogenous development paths or remain locked into reactive, center-driven crisis management.

Finding/ Results

The analysis reveals that overall levels of sustainable development in Russia's regions remain low. The most stable regions are those with diversified economies, high GDP per capita, and strong industrial or extractive bases – particularly the Khanty-Mansi and Yamalo-Nenets Autonomous Districts, Sakhalin Oblast, and Moscow Region. Paradoxically, these economically robust regions often exhibit the poorest environmental performance, confirming a trade-off between economic growth and ecological sustainability. Conversely, the least resilient regions include agrarian and demographically challenged territories in the North Caucasus and Siberia, where poverty exceeds 20 per cent of the population and social infrastructure is underdeveloped.

Fiscal dependence on federal transfers emerges as a double-edged sword: highly subsidized regions demonstrated greater short-term stability during crises due to buffered revenue streams, yet they score poorly on long-term sustainability metrics. In contrast, fiscally independent regions suffered sharper revenue contractions during the 2020 pandemic but possess stronger institutional and financial capacities for recovery. This dichotomy reflects a deeper policy conflict inherent in a multipolar world: while the center seeks to maintain macroeconomic control and strategic alignment amid Western sanctions, regions face contradictory imperatives to attract foreign investment while pivoting to "friendly" markets, to decarbonize while expanding fossil fuel exports, and to pursue ESG goals while operating under restricted access to international capital.

The crisis of 2020 underscored the pivotal role of federal grants: intergovernmental transfers surged to 25 percent of regional revenues, cushioning the blow of collapsing tax receipts, especially in economically active regions. Yet this fiscal centralization, while stabilizing in the short term, exacerbates long-term vulnerabilities in a multipolar context where overreliance on federal redistribution limits regional adaptability to shifting global value chains and alternative development models.

Originality / Conclusion/ Suggestion

This research contributes original empirical evidence on the complex relationship between fiscal structure, economic diversification, and sustainability in a non-OECD federal system. It challenges conventional assumptions by showing that high economic development does not automatically ensure resilience or sustainability, particularly when environmental and institutional dimensions are weak. Most significantly, the study reframes regional resilience not merely as a technical capacity to absorb shocks, but as a political-economic negotiation within a fractured global system, where policy conflicts between sovereignty, sustainability, and security define the boundaries of feasible development.

The findings advocate embedding resilience as a core principle in Russia's spatial development strategy, moving beyond crisis response toward proactive adaptation. Future research should explore subregional disparities and the long-term fiscal impacts of infrastructure budget loans introduced in 2021.

Keywords: Russia, Regions, Resilience, Sustainable Development, Fiscal Policy

Supply Chain Shocks versus Monetary Policy: A Structural VAR Analysis of Turkiye's Inflationary Dynamics

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Abstract

This paper investigates the interplay between the external shocks emanated from the supply chain disruptions and the shocks from the internal monetary conditions in shaping Turkey's recent inflationary dynamics. Methodologically, a Blanchard-Quah (1989) style SVAR technique with long-run restrictions is employed. 11 variables, three of which are the representatives of external supply shocks, three of which are the internal policy instruments, two of which are the effect variables, and three of which are the control variables, are subsumed into the model. FEVD analysis indicates the decisive superiority of external conditions over monetary instruments in explaining inflationary dynamics in Turkiye-consumer and producer inflation primarily arise from the raw material imports, trade openness and PRC's total trade volume, with the monetary variables having almost no contribution in generation of Turkish inflation. Cumulative IRFs of consumer and producer inflation mostly capture significant and violent signals from the supply chain and economic security variables, and generally insignificant and mild inputs from the monetary policy variables, which is holistically why money-inflation channel is pretty much inoperative, and supply chain and economic security-inflation nexus is empirically evident.

Keywords: supply chain disruptions, inflationary dynamics, SVAR, FEVD, Cumulative IRFs

1. Introduction

Global supply chain disruptions and domestic monetary policies are often cited as the key drivers of inflation, yet their relative importance remains indecisive particularly when developing countries and emerging markets are concerned. With the inflation on the center, the study highlights how global vulnerabilities in trade and susceptibilities to the global supply chain interact with domestic stabilization efforts.

A Structural Vector Autoregression (SVAR) model with long-run restrictions is applied. External shocks are represented by China's trade volume, Turkey's trade openness, and raw material imports, while internal conditions are captured by money supply, interest rate, and real effective exchange rate. Control variables such as industrial production, GDP, and unemployment help isolate structural linkages, with producer and consumer prices serving as the most endogenous indicators of inflation.

The study contributes to the debates on Turkish resilience to the supply chain disruptions and its economic security, directly comparing external and internal shocks in one single model framework and treating inflation as associated with both global value chain and economic security beyond being a pure monetary phenomenon.

2. Tables and Figures

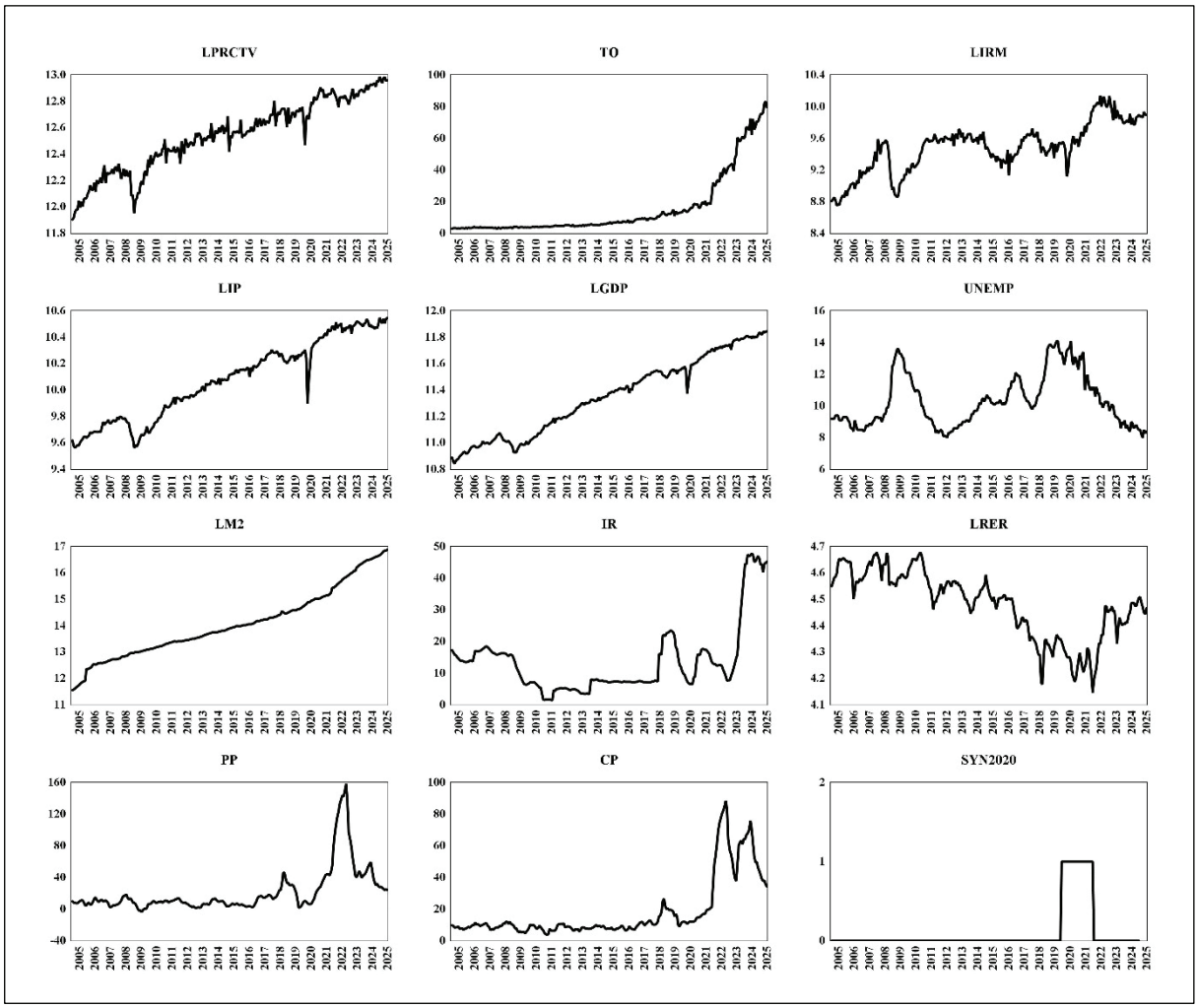

Figure 1: Visual representation of the variables

Table 1. Explanatives on Variables		
Variable	**Explanation**	Form
PRCTV	China's Total Trade Volume (Constant, billion $)	Supply Chain Proxy
TO	Turkish Trade Openness (Constant, %)	Supply Chain Proxy
IRM	Turkish Imports of Raw Materials (Constant, billion $)	Supply Chain Proxy
IP	Turkish Industrial Production (Constant, billion $)	Control Variable
GDP	Turkish Gross Domestic Product (Constant, trillion $)	Control Variable
UNEMP	Turkish Unemployment Rate (%)	Control Variable
M2	Turkish M2 Supply (Constant, trillion ₺)	Monetary Policy Proxy
IR	Turkish Interest Rate (Interbank, %)	Monetary Policy Proxy
RER	Turkish Real Effective Exchange Rate (PPI based)	Monetary Policy Proxy
PP	Turkish Inflation Rate (Producer Prices)	Effect Variable
CP	Turkish Inflation Rate (Consumer Prices)	Effect Variable
SYN2020	Structural Shift in 2020	Synthetic Exogenous Variable
OBSERVATION: 240 COVERAGE: 2025M01 – 2024M12		

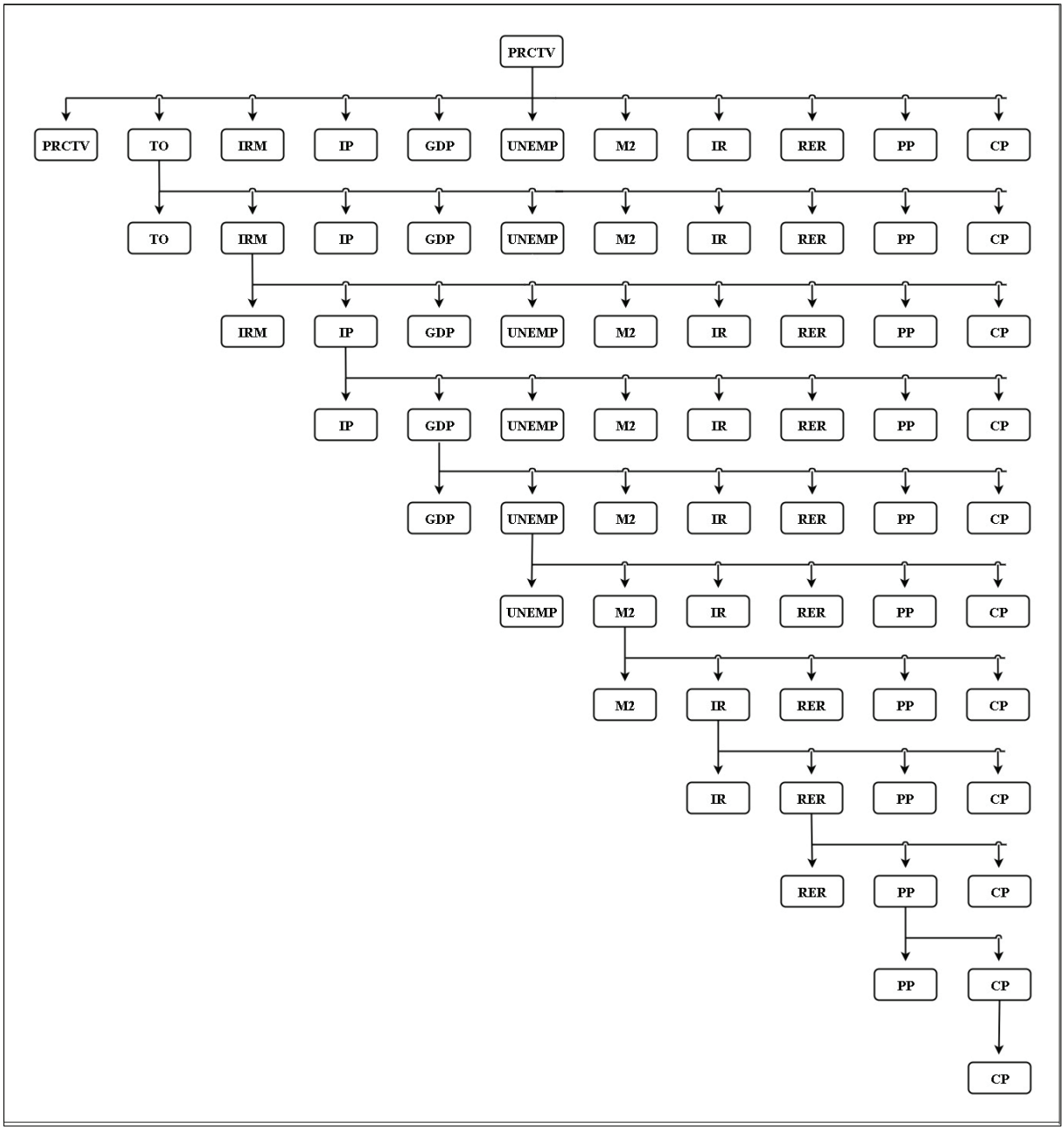

Figure 2: Visual representation of the variable flow based on SVAR block exogeneity

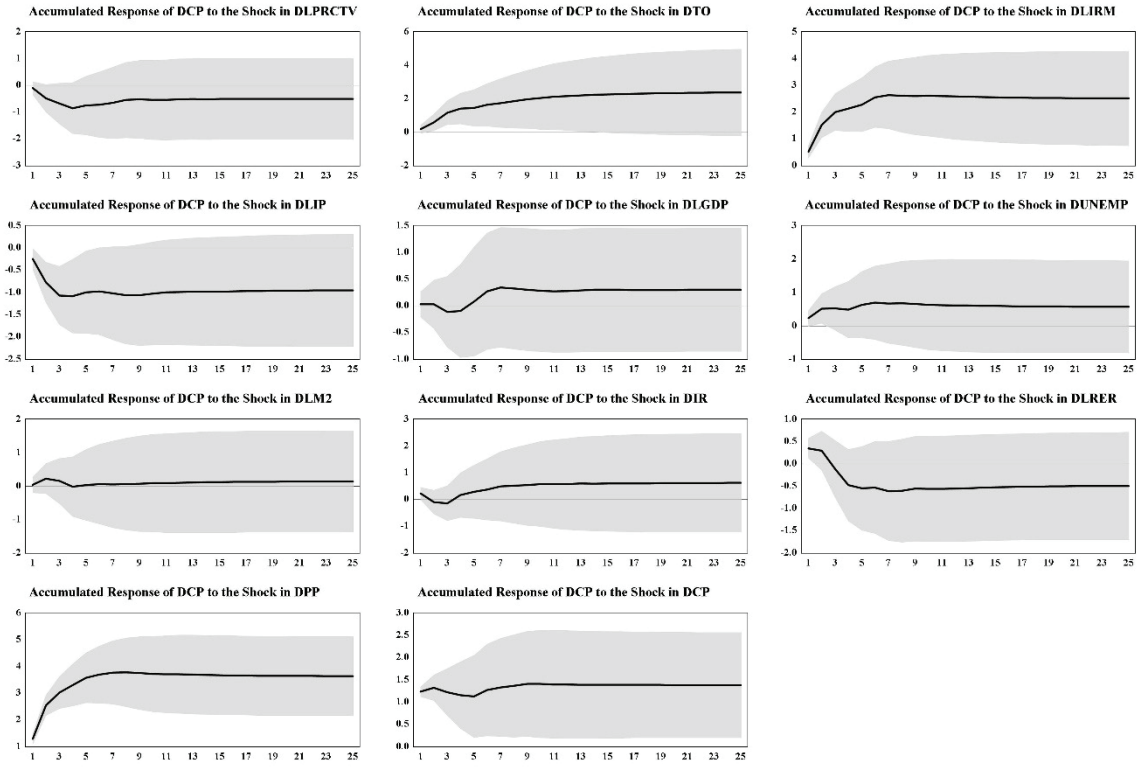

Figure 3: Accumulated responses of Consumer Inflation to the shocks

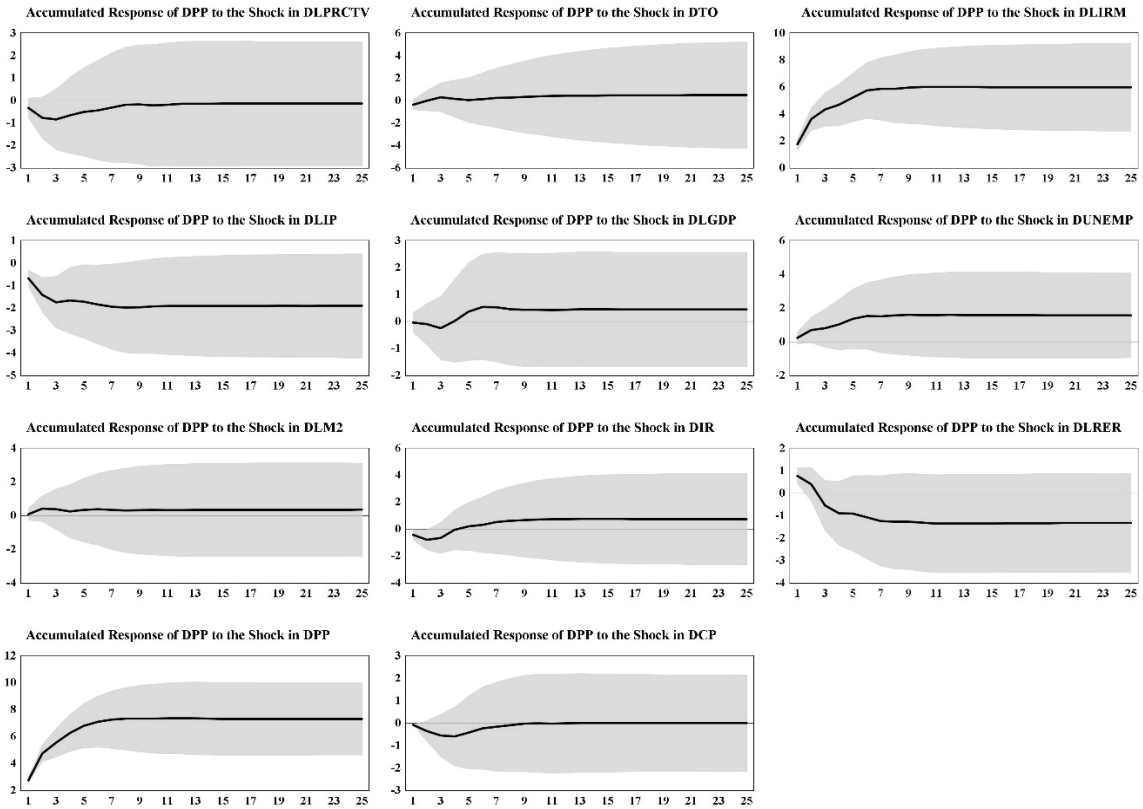

Figure 4: Accumulated responses of Producer Inflation to the shocks

Table 2. Vulnerabilities of the Variables to the Shocks

Time	in PRC	in TO	in IRM	in IP	in GDP	in UNEMP	in M2	in IR	in RER	in PP	in CP
Vulnerability of **PRC'S TRADE VOLUME** to the shocks											
SR	77.4	0.1	0.2	1.4	2.0	2.3	3.3	1.4	1.7	10.2	0.0
LR	64.7	1.1	1.1	2.7	2.2	6.1	4.3	3.3	3.2	10.4	0.8
Vulnerability of **TRADE OPENNESS** to the shocks											
SR	1.3	70.2	8.2	2.1	0.0	2.2	7.6	1.4	0.3	2.2	4.5
LR	1.2	56.9	7.8	2.2	3.0	2.0	10.5	1.9	3.5	1.8	9.3
Vulnerability of **IMPORTS OF RAW MATERIALS** to the shocks											
SR	9.0	6.7	68.0	0.2	1.0	0.1	3.2	9.2	0.1	2.4	0.1
LR	12.4	11.5	53.4	4.7	1.3	0.5	3.9	8.3	0.3	3.5	0.3
Vulnerability of **INDUSTRIAL PRODUCTION** to the shocks											
SR	1.0	3.4	23.4	**69.6**	0.1	0.2	0.1	0.4	1.1	0.7	0.1
LR	12.6	3.6	18.0	53.7	1.0	1.5	2.2	1.5	1.1	4.3	1.0
Vulnerability of **GROSS DOMESTIC PRODUCT** to the shocks											
SR	0.1	1.5	20.9	56.8	14.7	0.1	0.0	0.6	3.2	2.0	0.0
LR	11.1	2.2	15.9	44.1	11.1	1.8	2.2	1.6	3.0	6.1	1.0
Vulnerability of **UNEMPLOYMENT** to the shocks											
SR	0.2	4.9	5.9	0.5	4.7	75.2	2.4	4.2	0.4	1.4	0.3
LR	5.0	6.6	7.8	3.9	4.3	60.2	2.3	4.0	0.9	2.1	2.9
Vulnerability of **MONEY SUPPLY** to the shocks											
SR	0.2	14.3	0.1	4.1	3.5	0.0	67.1	0.2	4.0	4.0	2.7
LR	0.3	15.1	1.1	3.9	4.1	0.3	59.5	1.5	4.1	4.5	5.6
Vulnerability of **INTEREST RATE** to the shocks											
SR	0.1	2.5	8.3	4.0	1.7	8.6	2.2	49.2	8.9	5.4	9.2
LR	0.5	16.0	7.0	4.0	1.6	6.8	1.8	43.5	7.8	5.6	5.6
Vulnerability of **REAL EXCHANGE RATE** to the shocks											
SR	6.2	1.2	0.2	0.1	6.9	1.7	1.5	3.1	56.1	20.6	2.6
LR	4.9	3.9	0.7	0.9	7.8	2.4	3.2	8.7	43.6	17.6	4.5
Vulnerability of **PRODUCER PRICES** to the shocks											
SR	0.9	1.2	24.9	3.7	0.0	0.4	0.1	1.5	4.9	62.5	0.1
LR	1.5	1.6	29.3	4.3	1.0	1.8	0.6	3.1	6.8	49.3	0.8
Vulnerability of **CONSUMER PRICES** to the shocks											
SR	0.3	0.9	7.2	1.6	0.0	1.4	0.0	1.3	3.2	43.9	40.1
LR	2.7	7.4	17.6	4.7	1.0	1.8	0.8	3.1	4.7	39.2	17.0

Note: Based on authors' own calculation of forecast errors variance decomposition.

3. Discussion and Conclusion

Empirical results reveal that Türkiye's inflation is mainly driven by external supply chain shocks rather than domestic monetary factors. Global trade disruptions -especially those linked to China's trade volume, raw material imports, and trade openness -have strong and persistent effects on prices, while monetary variables remain insignificant. This indicates that the conventional money-inflation channel has weakened, and inflation has become increasingly shaped by global production vulnerabilities and economic security risks. Policy efforts should therefore prioritize supply chain resilience and diversification over traditional monetary adjustments.

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Integrating Cybersecurity Education into the AI in Accounting and Auditing Program: A Path to Economic and Data Security

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Abstract

The rapid integration of Artificial Intelligence (AI) into accounting and auditing has transformed how financial data is analyzed, processed, and interpreted. Yet, while students and professionals increasingly master AI-driven tools and big data analytics, their awareness of cybersecurity remains limited. Many assume that data protection is the sole responsibility of IT departments, overlooking their direct role in safeguarding sensitive financial information—especially when using cloud-based systems and generative AI tools.

This paper highlights the urgent need to embed cybersecurity education within the *AI in Accounting and Auditing* program. It argues that understanding data security and ethical data handling is as critical as mastering AI analysis itself. Through a conceptual and analytical review of current educational practices, the paper proposes the formal inclusion of a new course titled **"Cybersecurity and Data Protection"** in the program's curriculum. This integration would empower accounting and auditing students to manage and protect financial data responsibly, reduce exposure to cyber risks, and enhance both economic and data security in digital financial environments.

Keywords: Artificial Intelligence, Cybersecurity, Accounting, Auditing, Data Protection, Big Data, Cloud Systems

1. Introduction

Artificial Intelligence (AI) is revolutionizing the accounting and auditing profession by automating data-intensive tasks, improving accuracy, and enhancing the ability to detect anomalies and fraud. In response to these technological changes, **Applied Science Private University (ASU)** in Jordan has demonstrated regional leadership by introducing the first academic program in the region—**AI in Accounting and Auditing.** This pioneering program equips students not only to perform traditional accounting and auditing functions but also to analyze large datasets, extract insights, and identify patterns that support informed decision-making and fraud detection.

Despite this progress, a critical gap remains in students' understanding of cybersecurity and ethical data management. While students master AI applications and

big data tools, many fail to recognize their responsibility in safeguarding data integrity and confidentiality. As organizations increasingly rely on cloud-based financial systems, protecting sensitive information has become a strategic necessity. However, as the adoption of AI accelerates, cybersecurity education remains an overlooked yet essential component of accounting curricula. This paper explores the integration of cybersecurity education into accounting curricula, emphasizing its importance in enhancing both data protection and economic resilience.

2. Discussion and Conclusion

Findings from the *AI in Accounting and Auditing* program at Applied Science Private University (ASU) revealed that while students possess strong analytical and technical skills in AI-based data analysis, they have limited awareness of cybersecurity and ethical data handling. Many students assume that protecting financial data is the sole responsibility of IT departments, overlooking their own role in safeguarding sensitive information—especially when using cloud-based tools, big data platforms, and generative AI systems.

This limited understanding creates significant risks in professional practice, as unintentional data exposure or misuse could lead to security breaches, financial losses, and reputational harm for organizations. These observations highlight the urgent need to integrate cybersecurity principles directly into accounting and auditing education.

In response, the study proposes introducing a dedicated course titled **"Cybersecurity and Data Protection"** into the AI in Accounting and Auditing curriculum. This course would provide students with essential knowledge of data security fundamentals, AI-related cyber risks, ethical data management, and safe application of analytical tools such as Python and Power BI.

By embedding cybersecurity education into this specialized accounting program, ASU strengthens its position as a regional leader in academic innovation. The initiative prepares graduates who are not only capable of analyzing financial data using AI techniques but also skilled in protecting it—thereby enhancing both **economic resilience and data security** in the digital era.

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Business and Human Rights in an Era of Global Instability and Insecurity: An International Legal Analysis

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Abstract

This study examines the transformative impact of legal regulations in the fields of business and human rights on international trade and the global economy. The business and human rights movement, shaped primarily by serious human rights violations committed by commercial enterprises, particularly multinational corporations, and the resulting governance gaps, aims to establish corporate accountability for human rights abuses through both national and international regulatory frameworks. Within this context, the study seeks to delineate the overall legal framework of the business and human rights discourse by addressing both binding and non-binding regulatory initiatives under the United Nations as well as national and regional regulatory activities. Furthermore, it explores how responsibility is reflected in these regulations to establish corporate accountability, analyzing the effects of obligations such as due diligence requirements and prohibitions against forced labor on business operations. The study highlights that while these regulations aim to protect human rights, they also possess significant potential to reshape international trade dynamics substantially. It examines the paradox that the business and human rights movement, which has generally emerged under the leadership of the Global South, and the resulting legal regulations, high-risk emerging economies, potentially leading to a decline in investment and job losses. Such measures are often criticized as a form of backdoor protectionism designed by developing countries to undermine their comparative advantages based on low-cost labor. Ultimately, the study concludes that legal regulations targeting the business world and human rights fundamentally transform market dynamics by making respect for human rights a conditional factor in international trade.

Keywords: Business, Human Rights, Due Diligence, Globalisation, Corporate Accountability, Responsibility, International Trade, Law

1. Introduction

The global economic order, undergoing significant change and transformation due to globalization and neoliberal economic policies, has seen multinational corporations and commercial enterprises increasingly become the most important actors in this order. Their growing influence has significantly transformed not only production and investment models but also expectations regarding the protection and advancement of human rights. Indeed, the negative impacts on human rights caused by the activities of the business world, particularly multinational corporations, have increasingly turned into serious human rights violations. However, the failure to establish corporate accountability commensurate with these violations has led to governance gaps. The discourse on business and human rights has emerged with the aim of eliminating these governance gaps and holding the business world accountable for human rights violations, both under national and international law. While it is possible to trace the history of human rights violations caused by the business world back to the slave trade activities carried out by the East India Company in the 15th century, initiatives to regulate the human rights responsibilities of commercial enterprises, particularly multinational corporations, at the international level began to emerge in the 1970s. These initiatives have gradually gained ground within the United Nations, and a series of binding and non-binding regulations have been developed to date. While some regulatory initiatives made multinational corporations directly responsible for human rights at the international level, non-binding regulations such as the Global Compact and the UN Guiding Principles deliberately avoided attributing such responsibility to multinational corporations. They have instead limited themselves to holding multinational corporations accountable for respecting human rights through the intermediary of states, while recognizing states as the primary duty bearers.

Following the adoption of the UN Guiding Principles in 2011, the debate on business and human rights took on a new dimension and has prompted the international community to take renewed action on regulating the responsibilities of commercial enterprises, particularly multinational corporations, within the framework of human rights law through an internationally binding regulation. An intergovernmental open-ended working group within the UN Human Rights Council has been working on a draft binding agreement for approximately 12 years. These international regulatory initiatives have played a pioneering role in accelerating national and regional regulatory activities, particularly the European Union's Corporate Sustainability Due Diligence Directive (CSDDD), France's Duty of Vigilance Law, Germany's Supply Chain Due Diligence Act, and the United States' Uyghur Forced Labor Prevention Act (UFLPA).

The regulatory wave created by the discourse on business and human rights has not been limited to its legal dimension; the obligations imposed by national laws as well as regional and international regulations have also had significant effects on international trade relations. In particular, regulations such as mandatory due diligence obligations and import bans imposed on commercial enterprises under national laws generate new compliance costs, while also leaving commercial enterprises and developing economies facing the problem of reduced competitiveness for countries with low-cost advantages. Therefore, for commercial enterprises, operating in markets subject to these legal regulations requires the establishment

of compliance systems, reporting, and certification, which are fixed compliance costs. These costs increase the financial burden on small and medium-sized commercial enterprises. Consequently, markets subject to strict legal regulations are at a disadvantage compared to markets with more flexible rules, commercial enterprises shift their activities to the latter group of markets, and examples of markets at a competitive disadvantage emerge. In addition, these legal regulations, which emerged as a result of the business and human rights movement initiated by the countries of the Global South, are causing investors in developed economies to avoid high-risk

In addition, these legal regulations, which emerged as a result of the business and human rights movement initiated by the countries of the Global South, are effective in causing investors in developed economies to withdraw from high-risk developing countries or emerging market economies due to increasing costs and risks, This situation paradoxically leads to a decrease in economic opportunities and investments for Global South countries and potential job losses for workers. For this reason, developing countries view these legal regulations as backdoor protectionism, and these regulations are criticized as tools used by developed economies to undermine the comparative advantage based on cheap labor.

2. Discussion and Conclusion

This study will examine the transformative impact of legal regulations on international trade and the economy, which have emerged as a result of the need for commercial enterprises, particularly multinational corporations, to assume responsibility for the protection and promotion of human rights, thereby contributing to the discourse on business and human rights. The first section of the study will briefly cover the brief history and background of business and human rights, evaluating the factors that led to the emergence of this movement. The second part of the study will focus on legal regulations implemented by the United Nations, the European Union, the United States, and European states, which are based on the obligations of commercial enterprises within the framework of human rights responsibilities, and will evaluate how this responsibility is concretized in the regulations. The final part of the study will examine the impact of legal regulations in the fields of business and human rights on international trade and economic relations, and the transformative nature of this impact will be discussed in light of empirical data taking into account the current instability and insecurity of today's circumstances.

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Information Policy-Based Digital Economy Regulation: The Economic Calculation Problem

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Abstract

The digital economy is shaping a new paradigm in which individuals actively share data with one another and economic relations are based on information-driven processes. The rise of the information society and the realization that economic relations are based on information have increased the importance of information policy, elevating its status to that of a fundamental regulatory tool. Thus, this article evaluates the fundamental characteristics of regulating the digital economy through information policy. The study identifies areas directly related to information policy connected to the digital economy. The analysis draws on the legal framework of international experience in these digital economy areas. This framework includes the European Union's General Data Protection Regulation (GDPR), the EU Digital Services Act, the Digital Markets Act (DMA), the California Consumer Privacy Act (CCPA), Canada's Personal Information Protection and Electronic Documents Act, and China's Personal Information Protection Law (PIPL). The article argues that the sustainable economic model refers to a "planned economy." Thus, when examining the new economic model that is emerging within the framework of the digital and green economies, it is necessary to revisit the "socialist accounting debate." The study concludes that information policy, particularly carbon accounting regulations, is decisive in the digital economy.

Keywords: Dijital Economic calculation, Mode of regulation, Carbon accounting, Information policy.

1. Introduction

With the rise of the post-industrial era, the importance of information in economic relations began to increase. As the characteristics of the networked information society became apparent in social life, the concept of information policy underwent a transformation alongside economic relations, becoming a fundamental tool for regulation. Today, the definition and scope of information policy has changed significantly, sparking wide disagreement and debate. Within the framework of the old approach, information policy was essentially characterized only by libraries and mass media. However, with the widespread use of information and communication technologies in society, the nature of information policy has expanded

subjectively and field-wide (Duff, 2004). In particular, the development of the digital economy has necessitated regulations that address issues such as information management, data sovereignty, information ownership, privacy, and public information.

The framework for ensuring information governance and processes in the digital economy is still unclear (BURGER et al., 2015; Corrigan, 2012; Shcherbakova et al., 2020; Sibanda, 2009). Given the current conditions, the economic importance of various information policy areas provides the opportunity to offer regulatory alternatives for solving many problems. The main objective of this study is to determine the functionality of regulating the digital economy through information policy.

Although contemporary political scientists are familiar with the concept of information policy, they define its scope of activity and problem areas differently. The fundamental reason for this variation is that information policy lacks a generally accepted theoretical foundation. Instead, it is approached by focusing on one of several areas at different levels, such as the state, organizations, companies, and individuals. These areas include mass media, public opinion formation, agenda setting, information resource management, information and access rights, political processes, and the "Cold War." (Bağırzade, 2024, p. 121). This policy approach places significant emphasis on the role of the state. However, the development of information policies and the emergence of actors who can effectively manage information processes in the information space multiple times has led the state to reanalyze the implementation of these policies. For this reason, the study draws on Actor-Network Theory, which was developed by Bruno Latour, Michel Callon, and John Law (O'doherty, 2019). According to the fundamental principle of generalized symmetry, all entities, both human and non-human, that can be conceptualized as actors or records possess an equal capacity for action within formations. Actor Network Theory is a useful method for understanding space within the framework of complex relationships. It analyzes the social and physical processes (subjects, objects, and relationships) that arise from the actions of complex structures in shaping space.

To identify a comprehensive definition of information policy, the study has referred to different definitions (Braman, 2011; Maxwell, 2003; McClure & Jaeger, 2008; Overman & Cahill, 1990; Simonov, 2020). According to these introductions, information policy consists of constitutional, legal, and judicial decisions; rules; and socio-political, economic, and technological regulations based on doctrine. First and foremost, policy actors influence people's behavior, consciousness, and activities through information within the framework of state or civil societal interests (though other interests may exist). Politicians, scientists, writers, readers, viewers, and others involved in producing and disseminating information that meets the demands of social groups and public institutions have a unique domain. Information policy consists of decisions related to informational processes, and social life and mutual interaction are regulated by informational tools. In general terms, the literature review concludes that information policy is the regulation and management of informational activity.

The new economic model, shaped by the convergence of the green and digital economies (Bagirzade, 2024), provides an opportunity to revisit the "socialist calculation debate," a topic that has remained relevant since the 1920s. Ludwig von Mises argued that planned economies face the problem of rationally allocating resources. He cited the market economy as an example of a system in which supply and demand play a regulatory and determining role. In a market economy, the price of a product reflects its demand. Without this information, a planned economy cannot properly evaluate its means of production. The efforts of socialist economy planners (managers) to correct errors in value-price determination, despite lacking definitive information on value, lead to economic costs, reallocation of resources, and social injustice. While the digital economy shows great promise in overcoming the lack of economic calculation identified by Austrian economists, many obstacles remain to its implementation.

Before moving on to the issue of obstacles, we must answer this question: If socialism declined with the collapse of the Soviet Union and is no longer relevant, why is the lack of economic calculation important today? The article's claim provides an answer to this question. The article claims that the sustainable economic model itself refers to a "planned economy."

The study examines the regulatory function of information policy by moving beyond the dualism of the digital and green economies to define the objectives of the new economic model at a conceptual level. To this end, a qualitative research approach has been adopted that encompasses both theoretical and policy dimensions, involving conceptual analysis and literature review methods.

3. Discussion and Conclusion

The digital economy offers numerous opportunities for economic regulation and calculation. However, these opportunities cannot be realized without establishing the necessary informational processes. These processes focus on balancing planning and the market in economic regulation. In particular, carbon accounting requires infrastructure to accumulate, process, and utilize consumer data in data centers. Supercomputers play a major role in this infrastructure, but artificial intelligence requires algorithmic models and specialized calculation methods. The main reason the digital economy's information policy is incomplete is the lack of a definitive economic model for carbon accounting in open sources. Factors preventing finalization of the model include determining environmental economic value, measuring economic activity entropy, assessing carbon market failure, determining environmental carrying capacity, providing the fundamental argument for relevant regulations, and establishing the functional infrastructure of the accumulation regime. Nevertheless, the legal framework for information policy takes the carbon footprint into account.

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The Weaponization of Trade: Developing a Vulnerability Index to Economic Sanctions

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Abstract

This study develops an index to measure trade vulnerabilities by considering various factors related to international trade and investment, such as export and import structures, current and potential trade partners, and sectoral dependency levels. Vulnerability to sanctions has become increasingly important amid rising trends of economic coercion, trade wars, and sanctions. It is especially crucial for developing countries to identify risks and vulnerabilities associated with international trade. The resulting index can be used to track changes in a country's vulnerability over time or to compare countries, allowing for the ranking of their vulnerability to potential sanctions from specific partners. This study contributes to assessing vulnerabilities to trade and investment sanctions by providing a quantitative measure.

Keywords: Trade Weaponization, Vulnerability Index, Economic Coercion

1. Introduction

Does international trade diminish the likelihood of conflicts and contribute to global security? A few decades ago, the prevailing view was that globalization and trade played a significant role in promoting international peace. It was argued that international trade prevents conflicts by increasing the costs through complex networks and high levels of economic interdependence. While economic interdependence did make conflicts more costly, in the past decade it has become a strategic weapon rather than a stabilizing force for global security (Abdullahi, Ibrahim, & Mahmud, 2025; Drezner, 2024). Interconnectedness has provided states with greater capacity to exert economic coercion. Exploiting economic dependencies has emerged as a widely used foreign policy tool to influence or pressure vulnerable states.

Globalization and financialization are facing a structural crisis, leading to major shifts in the global order. The world is currently going through a fragile transitional period. The existing hegemonic system is declining and global political landscape is moving toward a more multipolar world. The traditional global economic system is fragmenting as influence of a new and dynamic actors are growing. In this era of redistribution of power, many countries are now competing to turn economic connections into tools for pressure and control. They use economic ties as strategic weapons in this new phase of rivalry. As a result, international trust has weakened (Wu & Ma, 2025; Fouskas & Gökay, 2018).

Economic sanctions were primarily imposed on countries at the periphery of the global economy. However, as shown in Figure 1, since 2014 great powers are increasingly sanctioning one another (Drezner, 2024). The imposition of large-scale sanctions on Russia, export controls on semiconductor chips targeting China, and increasing instances of trade retaliation reflect a broader trend toward de-globalization, geoeconomic fragmentation and disintegration (Wu & Ma, 2025).

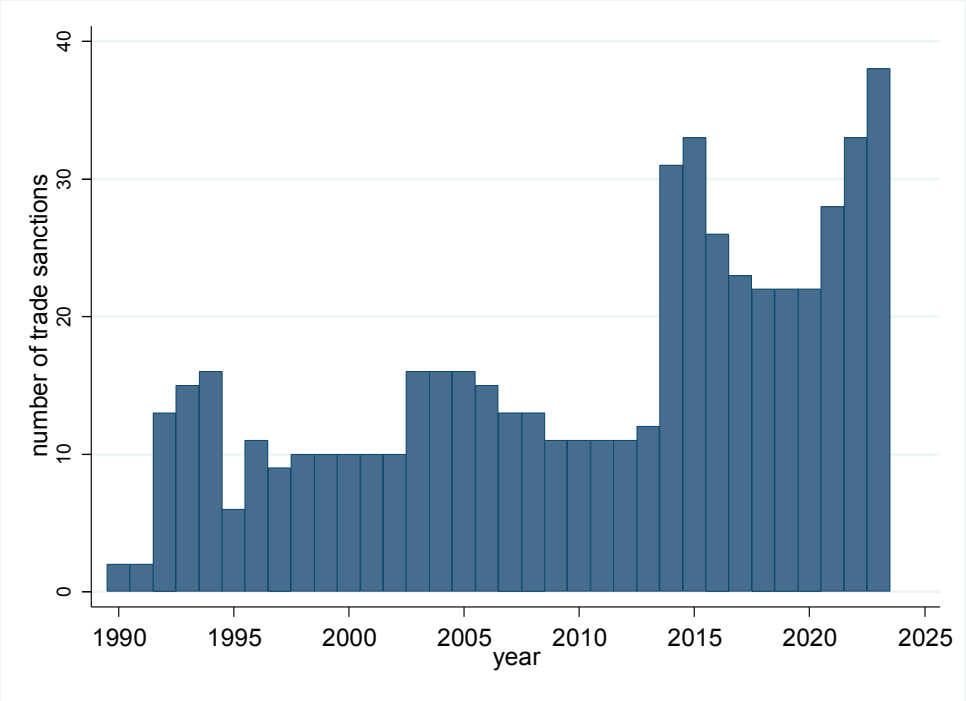

Figure 1: Sanctions between top 20 economies ranked by total trade volume, 1990-2023

Source: The Global Sanctions Database (Syropoulos, Felbermayr, Kirilakha, Yalcin, & Yotov, 2024) and UN Comtrade Dataset

2. Developing Vulnerability Index

Numerous scholars have developed metrics to assess vulnerabilities in international trade. However, most of these studies focus on a country's exposure to broad external shocks such as natural disasters, climate change, or socio-political instability, rather than specifically examining vulnerabilities to another state through trade and investment channels. For example, UNCTAD (2019) introduced an Economic Vulnerability Index for small economies, while the Commonwealth Secretariat (2021) developed a similar measure for aid allocation purposes. Closer to the focus of this study, Askari et al. (2005) evaluated the vulnerability of target countries to the United States to help design more targeted and cost-effective sanctions. More recently, Pourshahabi et al. (2024) proposed the Indirect Vulnerability Index which captures

how interconnected trade and FDI networks can create indirect economic vulnerabilities. Their analysis includes the case of U.S. vulnerability to China via third countries such as Vietnam. Building on these approaches and incorporating additional factors identified in the literature, this study offers a more comprehensive index to assess state-specific vulnerabilities in trade and investment relations. Equation 1 outlines the general expression for the export vulnerability index.[1]

Equation 1 $$V(\text{Export}) = \sum_{i=1}^{n} (A_i \times B_i \times (1 - C_i) \times w_i)$$

where A_i represents ability of other markets, B_i represents the share of commodity i exports to the sanctioning country in total exports of commodity i by target country. C_i represents the sanction costs to the sanctioning country whereas W_i represents the importance of the sector for the target (share in GDP). After calculating the indices for export sanctions, import sanctions, and FDI sanctions, we normalize the indices and combine them using the quadratic mean. Then, the aggregate vulnerability index is obtained by combining the direct and indirect vulnerability indices.

Sanctioning Country	Year	Description of Trade Sanction
USA	1975	export_complete, import_complete
USA	1976	export_complete, import_complete
USA	1977	export_complete, import_complete
USA	1978	export_complete, import_complete
USA	2018	export_partial, import_partial
USA	2019	export_partial, import_partial
USA	2020	export_partial, import_partial
USA	2021	export_partial, import_partial
USA	2022	export_partial, import_partial
USA	2023	export_partial, import_partial

Table 1: Trade sanctions imposed on Türkiye over the last 50 years

Source: The Global Sanctions Database (Syropoulos, Felbermayr, Kirilakha, Yalcin, & Yotov, 2024)

3. Discussion and Conclusion

How should countries organize their trade relationships to avoid being threatened by more powerful nations? This study creates a vulnerability index that provides a comprehensive evaluation of a country's vulnerability to possible sanctions by another country. It takes into account vulnerabilities related to export sanctions, import sanctions, and capital flow (FDI) restrictions, as well as indirect vulnerability through third countries. The index provides a

1 Detailed formula of the indices will be provided in full article.

straightforward tool for policymakers to quickly identify weaknesses in international trade. For example, an analysis focusing on Türkiye reveals which countries possess greater sanctioning power, the forms these sanctions may take, and whether Türkiye is vulnerable to sanctions of the country directly or indirectly through intermediary countries. After constructing the index, this study investigates Turkey's vulnerability to economic sanctions. Table 1 shows that over the past 50 years, Turkey has been sanctioned by only one country, namely the United States. Therefore, we focus on Turkey's vulnerability to sanctions imposed by the U.S., both directly and indirectly through other countries.

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Economic & Geo-Political Challenge for Small Economies

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Abstract

This paper represents a work in progress that reflects upon the critical determinants of the economic growth performance of small economies during the recent decades of globalisation and the current and potential future challenges arising from the threat of global retrenchment through renewed protectionism along with the consequences of increasing geo-political reconfiguration.

In spite of relative research neglect, there is a plethora of small economies, both sovereign and non-sovereign – however defined - present in the global economy. Of some 195 sovereign states in the World Bank's dataset, half of the world's sovereign states have populations below 8.5 million while the most populous state in the lowest quartile has around 2 million. Nevertheless, the analytical focus of both mainstream Economics and International Relations in dealing with so-called 'small' or 'small open' economies is on those states that feature in the 2nd size quartile (8.7-30 million) and, occasionally, even in the top quartile (greater than 30 million). This paper is primarily concerned with those economies in the lowest two quartiles and especially those with populations below around 5 million – some 73 sovereign states. It should be noted that there exist some 70 additional inhabited non-sovereign territories, all of which have populations that would place them in the lowest size quartile. It should be noted therefore that many large-scale growth analyses of global datasets suffer from severe truncation at the lower end, so omitting valuable insights into the growth process.

The economic performance of small economies however, generally conforms far more closely to many of the principal criteria advocated by mainstream economic theory – comparative advantage and economic growth – as a direct consequence of the constraints imposed by the small size of their populations. This contrasts with the relatively poor relative performance of many larger economies. The empirical evidence indicates that small economies have been among the major beneficiaries of the globalisation process, especially since decolonisation accelerated post-1960 through export-led growth in spite of their limited populations and labour forces. The latter factors constrain the scale and extent of their domestic productive activity giving rise to highly asymmetric patterns of production (narrow) and consumption (broad) forcing them to operate highly open trade policies – both functional and structural – and therefore highly exposed to the health of the global economy with high growth volatility. At the same time, they suffer from a high degree of concentration in terms of both exports and export markets. This high exposure to global economic conditions means that small economies can be regarded as a global 'early warning system' for fundamental changes in economic and geo-political conditions.

The paper takes as its starting point an empirical review of the growth impacts of the 2008 Global Financial Crisis and COVID-19 pandemic, especially in the light of their general specialisation in two major affected sectors of economic activity – offshore financial services and tourism – and the very substantial impacts of these phenomena on their growth. It then considers two ongoing sector-specific threats to the continued growth of small economies

i. Mass tourism dependence and the implications for of carbon taxes and other environmental legislation for medium- and long-haul air travel and effects on the domestic economy, especially employment.

ii. Increasing legislation against tax havens/tax competition and more stringent tax transparency from the OECD and EU threatening the existence and profitability of offshore financial centres.

The global economic environment is also undergoing upheaval with three critical emerging trends that have potentially important future implications for the survival of small economies:

i. Inward-looking nationalist retrenchment (e.g., unilateral protectionism by the US) is challenging the post-war international regulatory superstructure, notably side-stepping the WTO rules on trade. Given their dependence upon international trade, this represents an existential threat to continued prosperity through export-led growth in small economies.

ii. The post-war Pax Americana, is (temporarily?) at an end and the UN, WTO and other global institutions (e.g., UNESCO) are being weakened/undermined. Increasing nationalism (and Mercantilist policies) together with assertive emerging powers (e.g., China) competing to fill the vacuum left by the US retreat are leading to a geo-political reconfiguration of global relationships. Small economies are highly exposed to increasing risks of strategic encroachment and conflict.

iii. Small economies are negligible contributors to global heating and climate change, they are highly exposed to its effects – rising sea-levels, loss of low-lying territory, fresh water lenses and bio-diversity as well as greater susceptibility to increasingly severe weather events.

Iran's Foreign Policy and CPEC: Navigating Sanctions and Strategic Barriers

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Abstract

Iran's foreign policy, constrained by comprehensive U.S. sanctions, regional hostilities, and economic vulnerabilities, has increasingly turned toward strategic partnerships with non-Western powers. The China-Pakistan Economic Corridor (CPEC), a flagship initiative of Beijing's Belt and Road Initiative (BRI), presents Tehran with a critical opportunity to enhance its economic resilience, diversify trade and energy routes, and strengthen its regional influence. This article examines the alignment of Iran's involvement in CPEC with its broader foreign policy objectives, analyzing both the transformative potential and significant impediments posed by geopolitical and economic barriers. It argues that while CPEC offers Iran mechanisms for sanctions evasion, increased connectivity, and strategic depth, its successful integration hinges on navigating U.S. secondary sanctions, managing complex relations with Pakistan and China, and mitigating security risks. A critical new factor is Iran's full membership in the Shanghai Cooperation Organization (SCO), which provides a multilateral platform to potentially mitigate these barriers by promoting alternative financial mechanisms, legitimizing connectivity projects, and formalizing security cooperation. The study concludes that CPEC represents a calculated gamble in Iran's foreign policy strategy—one that could either bolster its economic autonomy through strategic diversification or deepen its dependence on Beijing amid escalating great power competition.

Keywords: Iran, China-Pakistan Economic Corridor (CPEC), Belt and Road Initiative (BRI), U.S. Sanctions, Shanghai Cooperation Organisation (SCO), Foreign Policy

1. Introduction

Iran's foreign policy operates within an exceptionally constrained geopolitical environment defined by interconnected crises that systematically limit its strategic options. The most immediate challenge stems from the U.S.-led sanctions regime, which has dramatically reduced Iran's vital oil exports and paralyzed its financial sector (Katzman, 2023). Compounding these economic pressures, Iran confronts an increasingly coordinated coalition of regional adversaries, including Israel and Gulf Arab states (Cordesman, 2022). These external threats converge with profound structural vulnerabilities within Iran's domestic political economy, including persistent inflation exceeding 40% and a collapse in foreign direct investment.

In response to this multidimensional pressure, Tehran has pursued a strategy of asymmetric diplomacy that combines an Eastern orientation with regional alliance-building. The cornerstone of this approach is the expanding "Comprehensive Strategic Partnership" with China,

formalized through a 25-year cooperation agreement (Ehteshami & Horesh, 2022). Within this strategic context, the China-Pakistan Economic Corridor (CPEC) emerges as a potentially transformative opportunity, offering Iran mechanisms for sanctions circumvention, energy export diversification, and enhanced geoeconomic positioning. However, meaningful CPEC integration confronts formidable obstacles, including U.S. secondary sanctions and regional opposition (Malik, 2020; Pant & Passi, 2022). This article examines whether Iran can leverage its recent full membership in the Shanghai Cooperation Organisation (SCO) to overcome these barriers and transform CPEC into an operational component of its sanctions resistance strategy.

2. Iran's Strategic Calculus and Pathways

Iran's strategic engagement with CPEC represents a calculated response to its economic isolation. As the holder of the world's second-largest natural gas reserves, Iran views CPEC as a vital conduit to revive its crippled energy sector, particularly through the long-stalled Iran-Pakistan gas pipeline. The corridor offers sophisticated sanctions-evasion mechanisms, including yuan-denominated settlements through China's Cross-Border Interbank Payment System (CIPS) and oil-for-infrastructure barter arrangements (Zhao, 2023). Geopolitically, Iran's CPEC involvement constitutes a fundamental pillar of its "Look East" doctrine, reinforced by its SCO membership. This provides an institutional framework to advance infrastructure projects and facilitates strategic alignment with Pakistan through coordinated port development between Gwadar and Chabahar.

Security dimensions have acquired greater significance following Iran's SCO accession. The SCO's Regional Anti-Terrorist Structure (RATS) offers a formal platform for intelligence-sharing, enhancing Iran's capability to monitor militant groups in Balochistan. However, these strategic advantages confront substantial implementation hurdles, including persistent Chinese caution regarding secondary sanctions and Pakistan's complex balancing act.

Depending on how Iran manages these challenges, several scenarios could unfold:

- Best-Case Scenario: Successful sanctions evasion and regional integration through deepened ties with China and Russia, utilizing SCO frameworks for financial transition and complementary port development.
- Worst-Case Scenario: Escalating U.S. pressure leading to deeper isolation, limited engagement from Chinese and Pakistani partners, and a loss of diversified trade routes.
- Middle-Ground Scenario: Limited but strategic gains through incremental progress on projects like the Iran-Pakistan pipeline and informal trade mechanisms within SCO and BRICS frameworks, allowing Iran to endure sanctions without full relief.

Table 1. Key Strategic Factors in Iran›s CPEC Engagement

Factor	Opportunity	Challenge
Economic/Financial	Yuan-based trade, barter deals, BRI investment	U.S. secondary sanctions, currency depreciation
Geopolitical	SCO membership, strategic partnership with China	Rivalry between Chabahar (India) and Gwadar (China)
Security	Intelligence sharing via SCO RATS	Baloch insurgent activities, risk of sabotage

3. Discussion and Conclusion

Iran's involvement in CPEC represents both a strategic opportunity and a significant geopolitical gamble. It offers a potential economic lifeline to circumvent U.S. sanctions and integrate into Eurasian connectivity networks, aligning with Iran's "Look East" doctrine (Ehteshami & Horesh, 2022). However, this promise remains tempered by substantial challenges. U.S. secondary sanctions continue to deter partners (Malik, 2020), and regional rivalries, particularly between the Chabahar and Gwadar ports, could undermine Iran's corridor ambitions (Pant & Passi, 2022).

Iran's capacity to transform CPEC into a strategic advantage now hinges on its ability to leverage its multilateral engagements. The country must demonstrate economic resilience by implementing alternative financial mechanisms, potentially facilitated through BRICS. Simultaneously, Tehran must maintain expert diplomatic balancing, leveraging its SCO membership to manage relations with both China and India. Security stability must be achieved through enhanced cooperation with Pakistan and China, utilizing the SCO's RATS to safeguard critical infrastructure.

Ultimately, CPEC's success for Iran depends on effectively navigating three interconnected challenges: establishing reliable sanction-resistant financial channels, maintaining strategic flexibility among competing powers, and ensuring robust physical security for transnational infrastructure. Should Tehran successfully manage this complex equation, CPEC could emerge as the cornerstone of its post-sanctions economic future. However, strategic missteps could transform the corridor into another flashpoint in Iran's challenging foreign relations—trapped between unrelenting U.S. pressure, intensifying regional rivalries, and persistent economic vulnerabilities.

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Financial Market Resilience as Economic Security: Institutions, Openness, and Crisis Heterogeneity in a Multipolar World

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Abstract

We conceptualize economic security as a market's capacity to absorb, adapt to, and recover from severe shocks. Building on this idea, we construct a Market Resilience Index (MRI) that combines (i) maximum drawdown, (ii) time to recovery, and (iii) post-recovery dynamics over standardized 250-trading-day windows. Using daily equity indices for a broad set of advanced and emerging economies from 2000–2024, we evaluate five representative episodes—Dot-com, the Global Financial Crisis, the 2013 Taper Tantrum, COVID-19, and the 2022–2023 global inflation–tightening cycle. We then study how institutional capacity (World Bank Governance Indicators, WBGI), central bank independence (CBI; de jure index), economic freedom (Heritage EFI), financial market structure (market capitalization/GDP; turnover), and capital account openness (Chinn–Ito KAOPEN) jointly relate to resilience.

Pre-event (three-year) averages of institutional measures are associated with higher MRI in pooled event-fixed-effects regressions, with the strongest relationships during policy-driven shocks (Taper, Inflation–Tightening). Preliminary event-specific estimates suggest that CBI and broad governance are complementary: legal/operational monetary autonomy appears to matter more in environments with stronger rule of law and government effectiveness. Results are robust to alternative liquidity proxies and to measuring institutions at levels vs. pre-event averages. We interpret the findings as evidence that credible, rules-based institutions and market depth underpin economic security, especially when shocks transmit through the policy channel. Implications follow for macro-prudential design and the sequencing of reforms in emerging markets.

Keywords: Global shocks; market resilience; economic security; institutional capacity; central bank independence

1. Introduction

How do institutions shape economic security in a world of recurrent crises and policy conflicts? We reconceptualize economic security as the absorptive capacity of financial systems, observed through a Market Resilience Index that synthesizes drawdown magnitude, recovery speed, and post-recovery momentum. Using an event-study design for 38 national equity markets across five major crises from 2000 to 2024, we examine whether institutional capacity such as governance quality, monetary autonomy, and economic freedom, together with financial structure and openness explains cross-market heterogeneity in resilience. The framework tests shock-contingent institutional effects by contrasting growth-driven and

policy-driven episodes. The findings inform macro-prudential design and the coordination of central banks in multipolar financial systems.

2. Data and Methodology

Data. Daily closing prices for national equity indices (local currency) cover 2000–2024 for a broad set of developed and emerging markets. Institutional covariates include: (i) WBGI components (rule of law, control of corruption, government effectiveness, regulatory quality, voice and accountability, political stability) and their average; (ii) CBI (de jure index of central bank independence); and (iii) EFI (overall score). Market-structure and openness covariates include market capitalization/GDP, turnover ratio, and KAOPEN. All institutional variables are three-year pre-event averages to mitigate simultaneity and reporting noise; pre-event realized volatility uses a 60-trading-day window.

Events and windows. We analyze five episodes with clean anchors: Dot-com (2000), GFC (2008–2009), Taper (2013), COVID-19 (2020), and Inflation–Tightening (2022–2023). For each event and market, we compute:

(i) Maximum drawdown from the 60-day pre-event peak to the event-window trough;

(ii) Time-to-recovery to surpass the pre-event peak (censored at 250 days if not recovered);

(iii) Post-recovery overshoot at day 250 (0 if recovery incomplete).

We standardize components and form MRI as a transparent composite (higher = more resilient).

Empirical design. Our baseline is a pooled OLS with event fixed effects:

$$R_{m,e} = \alpha + \beta_1 CBI_{m,pre} + \beta_2 WBGI_{m,pre} + \beta_3 EFI_{m,pre} + \gamma' X_{m,pre} + \varepsilon_{m,e}$$

where X includes market depth, turnover, KAOPEN, and pre-event volatility. We also report event-specific regressions to assess heterogeneity by shock type. Standard errors are clustered by country. We treat results as associational given plausible omitted factors; the lag structure and event fixed effects strengthen causal interpretation but do not fully identify causal effects.

3. Empirical Strategy

Pooled patterns. Pre-event governance quality (WBGI) and central bank independence (CBI) are positively associated with MRI after controlling for market structure and openness. Market depth is consistently positive; higher pre-event volatility is associated with weaker resilience. EFI (overall) adds marginal explanatory power once WBGI is included, but its legal/rights and openness components can matter in variants (to be reported in the paper).

Event heterogeneity. Associations are strongest in policy-driven episodes (Taper 2013; Inflation–

Tightening 2022–2023), consistent with a mechanism where policy credibility and rules-based governance dampen drawdowns and shorten recoveries when the shock is transmitted through expectations of policy. In growth-driven shocks (Dot-com, GFC), governance remains relevant, while the marginal role of CBI is smaller. Preliminary interactions suggest complementarities: CBI effects rise with rule-of-law capacity, consistent with institutional ecosystems rather than single levers.

Robustness. Results are similar when: (i) institutions are taken at t0 levels vs. three-year averages; (ii) turnover is replaced by value-traded/GDP; (iii) the MRI weighting emphasizes drawdowns/time-to-recovery. Event-specific samples are smaller; we therefore treat those patterns as indicative but informative.

4. Discussion and Policy Implications

Our evidence supports an institutional view of economic security: markets situated in credible, predictable, rules-based regimes exhibit higher resilience across diverse crises. Two implications follow. First, monetary autonomy works best where legal capacity and governance are strong—reform complementarities matter. Second, market depth and openness, while not substitutes for institutions, amplify resilience by improving risk-sharing and the speed of price discovery. For emerging markets, a pragmatic sequencing is to bolster rule of law and government effectiveness, then entrench central bank autonomy, while deepening markets and maintaining transparent openness.

5. Conclusion

We propose and implement a transparent MRI that captures key dimensions of market-level economic security. Across major global episodes since 2000, institutions and depth are systematically related to resilience, with the sharpest effects in policy-driven shocks. The results highlight the value of institutional credibility and market development as first-order stabilizers in a multipolar world subject to recurrent crises.

6. Appendix: Table 1

Table 1: Summary Statistics of Resilience Components by Shock Episode

Episode	Stat	DD (%)	τ (days)	ν (%)
COVID19	Mean	27.5	85	46.0
	Median	25.0	59	20.4
	P10–P90	17.9–33.8	32–177	8.6–43.3
DotCom	Mean	-643.4	65	1261.3
	Median	-7.4	0	95.0
	P10–P90	-2761.6–90.5	0–250	0.0–5051.7
GFC	Mean	42.0	119	7.2
	Median	41.8	165	0.0
	P10–P90	28.8–54.3	4–201	0.0–13.0
InflationHikes	Mean	23.1	174	34.8
	Median	22.1	250	0.2
	P10–P90	11.6–34.9	6–269	0.0–36.3
TaperTantrum	Mean	18.2	113	5.9
	Median	16.9	143	0.0
	P10–P90	10.2–28.9	8–150	0.0–7.3

Notes: DD = maximum drawdown from the pre-shock peak to the event-window trough; τ = trading days to recover to the pre-shock peak (censored at 250 if unrecovered); ν = post-recovery overshoot (0 if unrecovered). Statistics are computed within each event across available markets.

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From Greed to Grievance: Rethinking Conflict Forecasting in the Age of AI

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Abstract

This study compares economic-based and social-based approaches within the literature and practice of conflict forecasting. The comparison is structured around two dimensions. The first is the descriptive aspects of the theoretical frameworks. Second, the models' practical applicability for analytical purposes, specifically the predictions made through the models and their alignment with actual outcomes. Collier & Hoeffler, Fearon & Laitin, and Hegre & Sambanis are examined as representative economic-based models, while Azar, Gurr, and Cederman are taken as key figures representing social-based approaches. The study identifies the strengths and weaknesses of each model type in terms of developing academic theory and guiding policymakers.

According to the two main comparisons we made, economic models stand out for standardized data and their applicability across geographical regions and time periods. Social models, however, are more effective in explaining micro-level dynamics, small-scale regional conflicts, and the role of group identities. The paper argues that integrating these approaches creates stronger forecasting frameworks and discusses the increasing prominence of recently developed hybrid models. Hybrid and AI-assisted models combine structural and social indicators through computational methods. Their higher predictive performance and capacity to operate on near-real-time data provide significant analytical advantages.

Keywords: Conflict Forecasting, International Conflict, Conflict Early Warning Systems, Artificial Intelligence, Peace Economics

1. Introduction

The costs of armed conflicts are substantial. Therefore, forcasting is of vital importance in order to avoid conflict, or, if it is inevitable, to manage it. Conflict forecasting is an applied field of research whose primary goal is to develop models capable of creating the most reliable predictions possible. However, these studies cannot be claimed to entirely free from subjectivity, since every research project begins with a fundamental question asked by the human mind. This question primarily comes as "What is conflict?" in our field. The answer to this question determines the framework, while further questions "What are the causes of conflict?" and "What are the conditions that create these causes?" defines the key variables of the model.

The origins of the conflict forecasting can be traced back to Quincy Wright (1942) and Lewis

Richardson (1960), both of which fall into the category of economic models. Models based on social variables begin notably with Edward Azar's and Ted Gurr's works in 1970s. Chronologically, economic models emerged earlier, while the emphasis on socially based models increased after the Cold War, as new types of conflicts became more frequent. In recent years, the artificial intelligence revolution and advances in big-data processing have led to the rise of hybrid models. The GDELT Project, developed by Schrodt and Leetaru, now enables data flow and analysis that are near-real-time. The aim of this article is to examine this shift in approaches by classifying them into economically based and socially based models.

2. Table and Figure

Table 1 offers a comparative overview of the descriptive features of economic and social models.

Table 1. Descriptive Features of Economic vs. Social Conflict Prediction Models

Features	*Economic-Based Models*	*Social-Based Models*
Main Assumptions	Economic variables shape stability and can trigger rebellion or civil war	Identity-based grievances and relative deprivation drive violence, and protracted conflict
Main Variables	GDP per capita, inflation, unemployment, trade, state capacity, natural resources	Ethnic/religious fractionalization, group-based inequalities
Typical Datasets	World Bank, IMF, Polity IV	MAR, UCDP/PRIO datasets, Event Data
Methodologies	Large-N regression, cross-national econometric modeling, structural approaches	Event data analysis, group-level modeling
Strengths	Quantifiable, comparable across countries and time, standardized and reliable	Captures identity grievances, identity conflicts, sensitive to early warning signals
Limitations	Macro-level focus risks missing local triggers, economic variables change slowly	Harder to quantify, subjectivity in coding grievances, standardization is limited
Use Cases	Forecasting long-term civil war risk, explaining macro trends	Explaining persistence of protracted social conflict and escalation of identity-based violence

(Azar, 1990; Gurr,1993; Ward et. al. 2013; Collier & Hoeffler, 2004; Cederman et. at., 2011; Fearon & Laitin, 2003; Hegre & Sambanis, 2006)

Table 2 presents a comparative assessment of the criteria relating to the practical utility of economic and social models.

Table 2. Practical Utility of Economic vs. Social Conflict Prediction Models

Criteria	*Economic-Based Models*	*Social-Based Models*
Predictive Accuracy	Strong in long-term structural forecasts, weaker for short-term triggers	Explains persistence and escalation of group conflict, forecasting precise onset is challenging
Explanatory Power	Clear, testable economic logic	Rich in social/identity theory, highlights micro-dynamics and grievances
Data Availability	High	Medium-low
Policy Relevance	Structural reforms	Conflict prevention
Timeliness	Low	Medium

(Azar, 1990; Gurr,1993; Ward et. al. 2013; Collier & Hoeffler, 2004; Cederman et. at., 2011; Fearon & Laitin, 2003; Hegre & Sambanis, 2006)

3. Discussion and Conclusion

The comparison of economic and social-based models shows that each has its strong and weak points, thus, claiming one is superior becomes largely intuitive. Hybrid models leveraging both types' strengths could improve performance. The ultimate aim in conflict forecasting is to achieve predictions as close to reality as possible. developing the most comprehensive and practical model should take precedence over theoretical constraints. This encourages social scientists to adopt computational thinking and collaborate with engineering-oriented researchers.

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Green Jobs and Decent Work: An Econometric Evaluation for Türkiye and the European Union

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Abstract

The transition to alow-carbon and resource-efficient economy is transforming production-systems and labour markets worldwide. The International Labour Organization (ILO), together-withUNEP, IOE, and ITUC (2008), defines *green jobs* as employment that contributes to environmental preservation or restoration while ensuring decent work conditions. This dual objective environmental sustainability and social justice forms the cof strategies aligned with the *European Green Deal* and *Sustainable Development Goal 8 (SDG 8)*, which promotes inclusive and sustainable growth with full and productive employment (European Commission, 2019; UNEP, 2023). However, significant structural differences remain: while EU countries benefit from strong institutions and developed green industries, Turkiye continues to face challenges such as high informality, low unionization, and uneven enforcement of labour standards (ILO, 2023; OECD, 2022; TÜİK,2023).

This study investigates whether the green transition enhances employment security across Turkiye and EU member states. Using panel data from 2005–2022, it explores the relationship between renewable energy consumption, CO_2 emissions, and environmental taxation, and key labour indicators unemployment and informality while controlling for GDP per capita andinflation.

Theoretical and Empirical Background

The *ILO's Decent Work Agenda* (ILO, 1999) emphasizes four pillars employment creation, social protection, rights at work, and social dialogue which also underpin green transition strategies. Evidence from the European Environment Agency (EEA, 2023) shows that employment in environmental goods and services sectors (EGSS) increased from 2.1% to 3.1% of total employment between 2010 and 2022, illustrating that the green economy can simultaneously advance job creation and environmental goals.

Empirical findings across Europe confirm these synergies. Bowen et al. (Bowen & Kuralbayeva, 2015), in a Grantham Institute study, found that low-carbon investments in renewable energy and energyefficiencyyieldnetemploymentgains.Streimikis(2024)highlightsthatinstitutionalquality and social dialogue are decisive in determining the scale and quality of green job creation in EU memberstates.

In Turkiye, research by Çetin and Eğrican (2011)estimated substantial employment potential

from solar energy investments, while Gözkün and Orhangazi (2025) projected that ambitious-renewable energy expansion scenarios could increase national employment by up to 3.8%. However, both studies also note that these benefits depend heavily on labour market regulation and formalization capacity.

Data and Methodology

This research employs a static panel econometric approach (Baltagi, 2021) covering Turkiye and 15 EU countries (Germany, France, Italy, Spain, Poland, Greece, Sweden, Denmark, the Netherlands, Finland, Czechia, Hungary, Austria, Portugal, and Romania) over 2005–2022.

Dependent Variables:

- *Unemployment rate (% of labour force)* – ILOSTAT,Eurostat
- Informal employment (% of total employment) – ILO,TÜİK

Independent Variables:

- *Renewable energy consumption (% of total energy use)* – World Bank(WDI)
- *CO_2 emissions per capita (metric tons)* –OECD
- *Environmental tax revenue (% of GDP)* –Eurostat

Control Variables:

- *GDP per capita (PPP, constant 2017 USD)* – WorldBank
- *Inflation (CPI, %)* – OECD Statistics

The econometric specification is expressed as:

$$EMPSEC_{it} = \beta_0 + \beta_1 GREEN_{it} + \beta_2 CO2_{it} + \beta_3 ENVTAX_{it} + \beta_4 GDP_{it} + \beta_5 INF_{it} + \mu_i + \epsilon_{it}$$

where $EMPSEC_{it}$ represents employment security in country *i* and year *t*. Fixed and random effects

models are compared using the Hausman test, and robust standard errors are applied to correct for heteroskedasticity.

Expected Findings

Drawing on the reviewed literature, renewable energy expansion is expected to have a **negative association with unemployment**, indicating that green investments contribute to job creation (Bowen & Kuralbayeva, 2015; Dell'Anna, 2021). Environmental tax revenues are anticipated to support employment stability by providing fiscal space for retraining and transition programs (OECD, 2022). Declining CO_2 emissions are likely to correlate with higher job quality and formal employment, particularly in EU countries with established social protection systems (Streimikis, Mura, L., Simanavicius, & Delibaci, 2024).

For Turkiye, positive but weaker effects are expected, consistent with evidence that structural labour market constraints such as informality and skills mismatch limit the diffusion of decent greenjobs(Çetin&Eğrican,2011;ILO,2023). These differences underline the role of governance, labour institutions, and fiscal policy in shaping green employmentoutcomes.

Policy Implications

To ensure that environmental transformation generates not only more jobs but also *better* jobs, coherent integration of environmental and labour policy is essential. Governments should expand social protection systems to include workers in temporary or emerging green sectors and invest in vocational and green skills aligned with the European Skills Agenda (European Commission, 2023). Revenues from environmental taxes can fund re-skilling and job transition programs, supporting a just transition (OECD, 2022).

Moreover, strengthening tripartite social dialogue between governments, employers, and unions is critical for aligning labour rights with sustainability objectives (ILO, 2023). For Turkiye, aligning the national Green Deal Action Plan (T.C. Ticaret Bakanlığı, 2022) with the EU's *Just Transition Mechanism* would enhance institutional capacity and employment resilience during the green transition.

Conclusion

This study contributes to comparative analyses of green transitions by linking environmental performance with employment security across Turkiye and the EU. It highlights that while green sectors can generate significant job opportunities ,achieving decent and stableemployment requires complementary institutional reforms, active labour policies, and robust socialprotection.

By providing empirical evidence on how environmental and labour indicators interact, this research supports ongoing policy debates on integrating *decent work* principles into the global green economy. The findings will offer policy makers practical insights to ensure that the path toward net- zero emissions also advances social inclusion and sustainable employment.

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Investigating the Economic Dimensions of the Subsidy Targeting Plan in the Field of Energy Using System Dynamics

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Abstract

Iran's long-standing policy of maintaining heavily subsidized energy prices has caused significant economic distortions, including excessive consumption, inefficiency, large fiscal deficits, and persistent fuel smuggling. Although these untargeted subsidies aimed to provide social benefits, they have proven to be inefficient and inequitable. This study develops a System Dynamics (SD) model to evaluate pathways for converting energy price subsidies into direct household cash transfers under the Subsidy Targeting Law. The model incorporates three feedback loops: inflation-subsidy (R1), cross-border price gap-induced smuggling (R2), and consumption-demand-efficiency (B1).

We simulate four policy scenarios based on the speed of price adjustment (abrupt vs. gradual) and the duration of cash transfers (maintained vs. phased-out). Results highlight a trade-off between fiscal stability and social equity. Abrupt conversion leads to faster fiscal consolidation and eliminates smuggling, but causes short-term inflation spikes. Gradual conversion smooths the inflation shock and protects low-income households, though it delays fiscal stabilization. A hybrid strategy, starting gradually and completing with decisive reform, balances economic stability and social equity.

Our findings emphasize the importance of indexing cash transfers to inflation to preserve their real value (≈40% reduction in poverty impact without adjustment). The SD framework offers a transparent, evidence-based tool for policymakers to design adaptive subsidy reforms.

Keywords: Energy subsidy reform, System dynamics, Cash transfers, Inflation, Energy demand, Fuel smuggling

1. Introduction

The long-standing policy of subsidizing energy prices in Iran has resulted in substantial economic inefficiencies, distorted energy markets, and significant fiscal imbalances. These subsidies, while originally intended to safeguard social welfare by keeping energy costs artificially low, have inadvertently promoted excessive energy consumption, inefficiency, and resource misallocation. As energy prices remain below global benchmarks, the demand for energy has escalated, exacerbating national budget deficits as the government struggles to cover the growing cost of subsidies.

Moreover, the persistent gap between domestic and international energy prices has created a lucrative opportunity for fuel smuggling, which further exacerbates the fiscal burden while undermining the integrity of the energy market. Despite various policy attempts, these inefficiencies have remained unaddressed due to the lack of a comprehensive dynamic framework

that can account for the complex interdependencies among energy prices, inflation, consumption patterns, and smuggling activities.

Previous studies on energy subsidy reforms in Iran have predominantly employed static models or partial-equilibrium approaches, which fail to capture the feedback loops and time delays inherent in the energy-economic system. These models overlook the non-linear interactions that are critical to understanding the long-term impacts of subsidy reforms. To bridge this gap, we propose the use of System Dynamics (SD) modeling as a methodological framework. This approach allows for a deeper understanding of the co-evolution of key variables—such as inflation, subsidy outlays, energy demand, and smuggling—and facilitates the exploration of different reform scenarios through dynamic simulations.

Our study aims to develop a System Dynamics model that integrates these feedback mechanisms and provides a more comprehensive tool for evaluating the potential impacts of energy subsidy reforms. By simulating various policy scenarios, we assess how different approaches to subsidy removal might influence macroeconomic stability, fiscal sustainability, and social equity. This dynamic framework provides policymakers with actionable insights into the most effective strategies for restructuring energy subsidies while mitigating adverse social and economic consequences.

2. Tables and Figures

Figure 1. Core causal loop diagram (Vensim-style) with loop polarities R1 (inflationary), R2 (smuggling), and B1 (consumption).

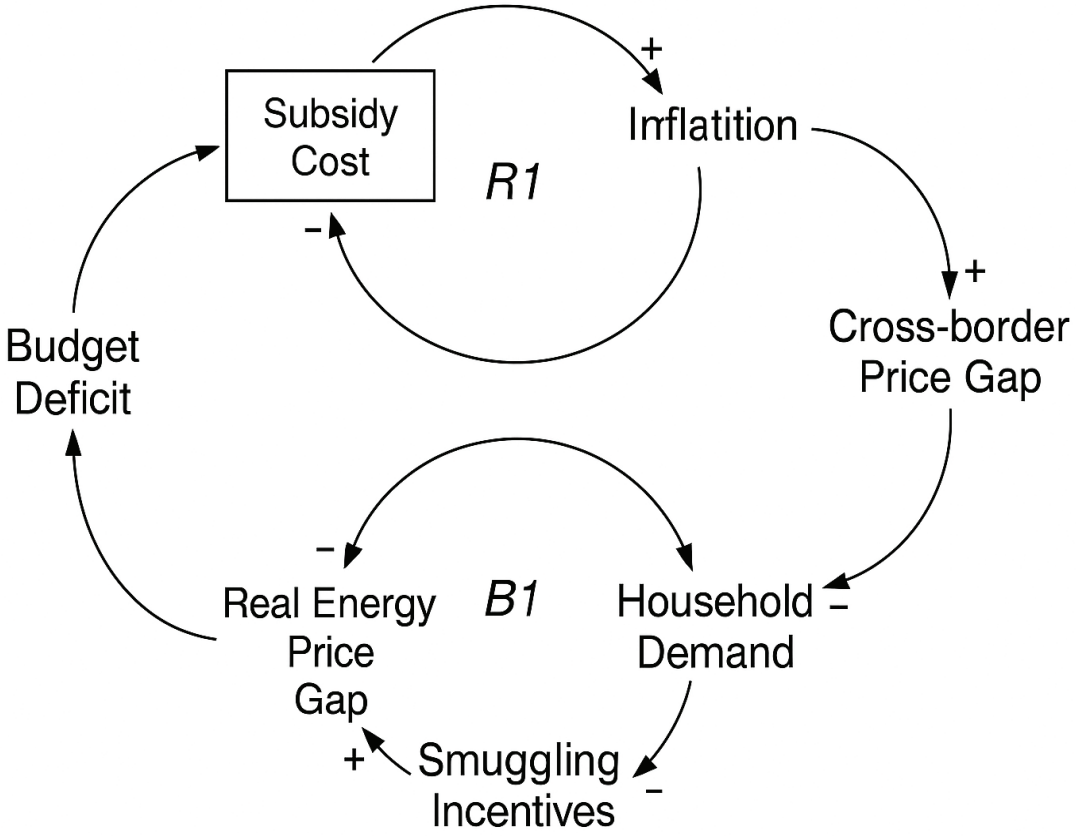

Figure 2. Scenario comparison (Abrupt-Maintain, Abrupt-Phase-out, Gradual-Maintain, Gradual-Phase-out) for inflation, income (bottom deciles), fuel consumption, and smuggling index over 20 years.

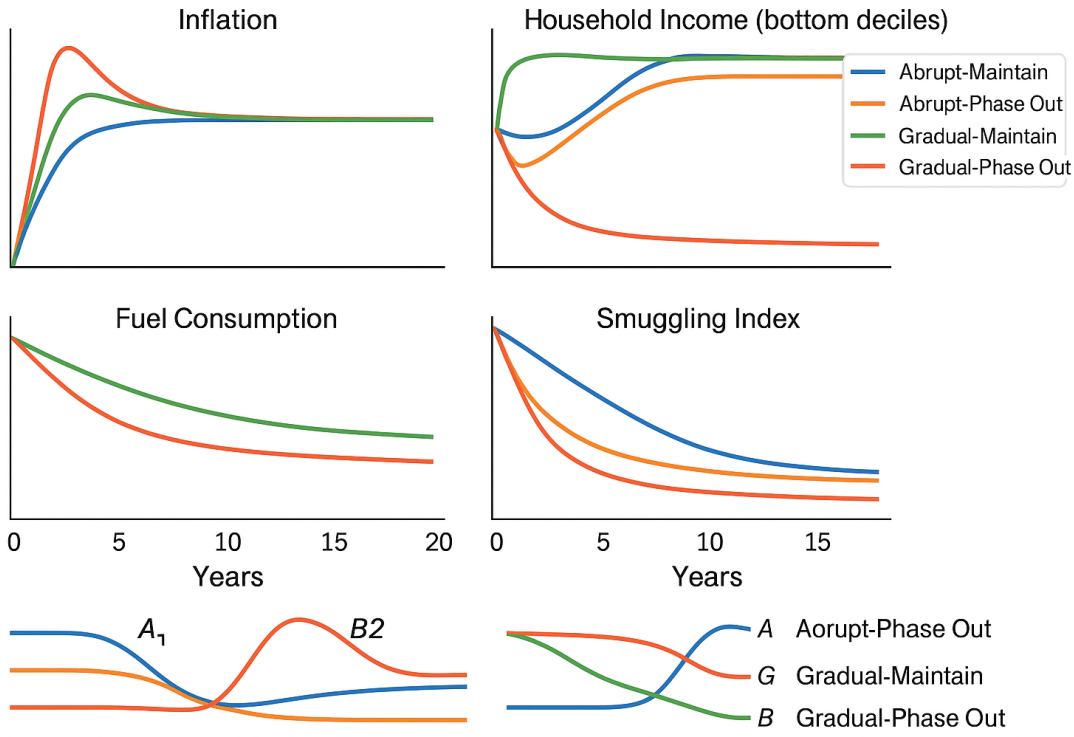

Table 1. Scenario design and directional effects

Scenario	Price Adjustment	Transfers	Short-run effect	Long-run effect
A. Abrupt–Maintain	Abrupt	Maintained	Inflation spike; smuggling ↓↓↓	Stabilization ↑; consumption ↓
B. Abrupt–Phase-out	Abrupt	Phased-out	Inflation spike; smuggling ↓↓↓	Stabilization ↑; equity risk
C. Gradual–Maintain	Gradual	Maintained	Inflation smoothing; equity ↑	Converges to lower consumption
D. Gradual–Phase-out	Gradual	Phased-out	Moderate volatility	Slower stabilization; equity risk

Note: ↑ / ↓ indicate relative change; equity refers to protection of bottom deciles.

3. Discussion and Conclusion

The simulation results reveal a clear **stability–equity frontier,** where policy approaches differ significantly in their impact on both macroeconomic stability and social equity. **Abrupt reform** strategies close the energy price gap quickly and curb smuggling incentives effective-

ly; however, they lead to a short-term inflationary shock, which can disproportionately harm vulnerable populations. On the other hand, **gradual reforms** spread adjustment costs over a longer period, thereby offering greater protection to low-income households, but at the expense of prolonging fiscal pressure and delaying fiscal stabilization.

Our analysis indicates that a **hybrid strategy,** which begins with gradual reforms to minimize social disruption and gradually transitions to more decisive measures, strikes the best balance between stability and equity. This approach allows for earlier stabilization than purely gradual reforms, while still maintaining stronger equity outcomes compared to an abrupt one-time shock. This finding is consistent across a wide range of plausible assumptions about price and income elasticities, confirming the robustness of the hybrid strategy.

One of the major risks identified in our simulation is the **erosion of transfer real value** due to inflation, which can significantly undermine the poverty-reducing effects of cash transfers (≈40% in recent years). Therefore, policy design must ensure that cash transfers are either **indexed to inflation** or frequently adjusted to maintain their real value. Furthermore, the implementation of subsidy reforms should involve **credible price adjustment paths, automatic indexing rules** for cash transfers, and strong **anti-smuggling enforcement** mechanisms to prevent the recurrence of cross-border price gaps and fuel diversion.

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Getting Old Before Getting Rich: A Non-Western Case for Demographic Change and for Mandatory Long-Term Care Insurance in Türkiye

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Abstract

Türkiye is undergoing a profound and rapid demographic transformation, characterized by a declining fertility rate and a steadily aging population. The window of opportunity is closing down to the country fast. Reviewing the recent data, this paper argues that this demographic shift represents an existential threat to the nation's economic stability, welfare sustainability, policy cohesion, as well as to social fabric. Unlike many Western nations that aged gradually after achieving economic maturity, Türkiye faces the challenge of "getting old before getting rich," compressing the timeline for effective policy response.

This paper proposes urgent establishment of a mandatory, premium-based Long-Term Care Insurance (LTCI) system as a strategic imperative via comparing different care regimes in Europe. The paper ventures that such a pre-funded, contributory model would mobilize private resources alongside public oversight, ensuring sustainable financing for elderly care, alleviating the burden on future state budgets, and fostering a formal care economy, and more importantly, could contribute to collapse of the intergenerational solidarity system.

Keywords: Political Economy of Aging, Demographic Transition, Türkiye, Long-Term Care Insurance, Familialism, Fiscal Sustainability, Non-Western Aging

1. Introduction

Türkiye is undergoing a profound and rapid demographic transformation, characterized by a declining fertility rate and a steadily aging population. As the fertility rate declined to 1.48 by 2024, way below the golden ratio of 2.1, the window of opportunity is closing down to the country fast. change Via decline in fertility, increase in the elderly population and a critical diminishing of the young and working age population the Turkish demographic change constitutes an impending crisis.

Reviewing the recent data and statistical determinants of this change, this paper argues that this demographic shift represents an existential threat to the nation's economic stability, welfare sustainability, policy cohesion, as well as to social fabric, as moving from a demographic dividend to a period of significant risk. Unlike many Western nations that aged gradually after achieving economic maturity, Türkiye faces the challenge of "getting old before getting rich," compressing the timeline for effective policy response and rendering Western

models of social welfare only partially instructive.

The probable devastating outcomes of this demographic change is sharpened by several socioeconomic changes of the country: The traditional family-based elderly care system, long the cornerstone of social support, is eroding due to urbanization, changing family structures, expectations of Generation-Z and increased female labour force participation. This creates a critical care deficit for the growing elderly population which exceeded 9.1 million, expected to exceed 25 million by 2075 according to base scenarios. Concurrently, the existing public systems, specifically retirement regime and elderly care system which is relying upon highly on informal care, are fiscally ill-equipped to handle the escalating demand for care, pensions, and healthcare services, portending a future macroeconomic crisis. If not taken precautions, this crisis has a risk of devastating not the Turkish welfare regime but also macroeconomic balance and implement exterem budgetary constraints.

2. Table and Figure

The following table shows the main determinants of the forthcoming aging crisis of Türkiye according to the latest demographic data and scenarios (TurkStat, 2024).

Table 1. Key determinants of demographic change of Türkiye (base scenario) (TurkStat, 2025).

Determinant	2025	2035	2050	2075	2100
Total Population (million)	85.8	89.9	93.7	88.2	76.8
Median Age	33.5	39.3	44.8	51.5	52.2
Elderly population (65+, %)	10.6 (*2024)	15.4	23.1	31.7	33.6

3. Discussion and Conclusion

Evidences are showing that Türkiye is undergoing a profound and rapid demographic transformation, characterized by a declining fertility rate and a steadily aging population and, as the pace is accelarating, the window of opportunity is closing down to the country fast. Unlike many Western nations that aged gradually after achieving economic maturity, Türkiye faces the challenge of "getting old before getting rich," compressing the timeline for effective policy response.

Classical policy proposal in Türkiye for coping with this change are supporting increase of population renewal rate, implementing active aging policies, promoting in-family care, incentivising active labour force policies and strengthening the state-owned care model of nursing homes (*huzurevleri*). However, these ad-hoc, secondary level precautions are chronically insufficient and overdue in the face of the crisis ahead, as the window of opportunity have already narrowed to almost a decade, and the current public sector investments are insufficient for coping with even for the existing elderly population. In addition, the increase of retirees up to 17 million as of 2025, underlines that Türkiye's care problem is related and mingled with the

social security regime's sustainability and coverage.

This paper contends that ad-hoc solutions are insufficient. It proposes the establishment of a mandatory, premium-based Long-Term Care Insurance (LTCI) system as a strategic imperative via comparing different care regimes in European welfare regimes. The paper ventures that such a pre-funded, contributory model would mobilize private resources alongside public oversight, ensuring sustainable financing for elderly care, alleviating the burden on future state budgets, and fostering a formal care economy, and more importantly, could contribute to collapse of the intergenerational solidarity system of social security system.

The paper is framed through the theoretical lens of the political economy of aging, which illuminates the fiscal and structural pressures that Türkiye's rapid demographic shift imposes on its emergent welfare state. This is complemented by the life course perspective to elucidate how the erosion of traditional familial support systems creates profound vulnerabilities for individuals at a societal level, compounding the existential nature of this threat. Together, these theories provide a robust foundation for evaluating the necessity of a premium-based care insurance model as an institutional corrective.

By proactively instituting this premium-based insurance, Türkiye can mitigate the devastating socio-economic consequences of its demographic change, transforming a looming threat into an opportunity. As a contribution to the scholarly literature, this analysis offers a critical case study for non-Western, middle-income countries navigating towards similar demographic pressures. By evaluating the approaching Turkish aging crisis and proposing policy solutions this paper contributes to the literature of the political economy of aging and as well as to the social policy literature of non-Western welfare regimes and their political economic bargaining within the current structural constraints.

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Macroprudential Policies as Instruments of Economic Security

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Abstract

Following successive global financial crises, heightened financial integration, volatile capital flows, and deepening geopolitical tensions have rendered it necessary to reassess the notion of economic security not only within the confines of international trade or defense but also through the lens of financial stability and macroeconomic resilience. This study examines, from a theoretical perspective, how macroprudential policies (MPPs) function as tools of economic security. Through a synthesis of the literature, it is argued that MPPs should be conceptualized not merely as mechanisms for smoothing credit and asset market cycles, but as instruments that serve broader "economic security" objectives such as ensuring the continuity of payment systems, mitigating external vulnerabilities, and securing the financing of strategic sectors.

Rather than employing an empirical model, the study proposes a four-function typology—Preventive, Protective, Deterrent, and Resilience-Building—and discusses the specific purposes, instruments, and governance requirements associated with each. Additionally, policy design principles are introduced by taking into account the distinct challenges posed by the digital economy, shadow banking, and emerging markets. The paper further underscores the importance of coordination with monetary policy, fiscal policy, and capital flow management, offering governance recommendations for implementing MPPs through an economic security lens. Within this framework, reconceptualizing MPPs as instruments that extend beyond financial stability toward safeguarding economic security provides policymakers in today's multipolar and vulnerability-prone environment with a strategic framework for decision-making.

Keywords: Macroprudential policies, economic security, financial stability, capital flows, digital finance.

1. Introduction

Since the early decades of the 21st century, deepening financial integration and the acceleration of capital flows have increased national economies' dependence on external financing, short-term debt, and global liquidity conditions. In such an environment, external shocks and vulnerabilities have come to threaten economic security not only within the financial sector but also in terms of the balance of payments, government borrowing, and the financing of critical infrastructure. Particularly after the 2008 global financial crisis, alongside conventional monetary and exchange rate policies, the role of macroprudential policies (MPPs) in safeguarding the financial system gained prominence.

However, in the current global context, these instruments must be reconsidered through the lens of economic security: that is, MPPs should be viewed not merely as mechanisms for moderating financial cycles but as a comprehensive policy framework aimed at ensuring the continuity of financing for strategic sectors, reducing dependency on external funding sources, and strengthening resilience against systemic vulnerabilities. This study explores how such a theoretical reframing can be constructed, identifies the guiding principles for policy design, and discusses how new domains of risk—such as those emerging in the digital economy—can be integrated into the scope of macroprudential policy.

2. Typology and Policy Instruments

The following section presents a typology that conceptualizes the functioning of macroprudential policies (MPPs) across four distinct levels, each corresponding to a specific dimension of their role in ensuring economic security:

Level	Objective	Key Instruments
Preventive	To limit the accumulation of vulnerabilities before a shock occurs	Countercyclical capital buffer (CCyB), credit growth restrictions, loan-to-value (LTV) and debt-to-income (DTI) limits
Protective	To contain contagion and prevent the spread of shocks during crises	Liquidity buffers (LCR/NSFR), foreign currency liquidity requirements, high-quality liquid asset (HQLA) pools denominated in local currency
Deterrent	To mitigate speculative capital inflows and short-term foreign exchange risks	Open FX position limits, leverage caps, additional requirements for short-term external borrowing
Resilience-Building	To ensure long-term systemic adaptation and infrastructural robustness	Oversight of shadow banking and non-bank institutions, payment system backups, stress testing, macro-data surveillance systems

This typology demonstrates how macroprudential policies can be situated within a broader 'economic security' framework rather than confined to a toolkit for merely correcting the credit–debt cycle. The selection and timing of policy instruments should be calibrated to country-specific vulnerabilities, the structure of external financing, monetary/credit dynamics, and the prevailing global risk environment (CGFS, 2012; FSB-IMF-BIS, 2011; IMF IPF, 2023; Claessens, Ghosh & Mihet, 2013).

Policy Design Principles

Instrument–objective matching and sector-specific risk targeting. The type of systemic risk targeted by the macroprudential tool (e.g., credit growth, leverage, maturity/currency mismatches, asset-price cycles) should be explicitly defined; transmission channels and expected welfare effects must be articulated in advance. Under the BIS umbrella, the CGFS proposes criteria and decision trees that operationalize tool selection and calibration for national authori-

ties; this framework particularly emphasizes differentiated implementation for sector-specific risks (housing, consumer, SME) (CGFS, 2012; FSB, IMF, & BIS, 2011).

Dynamic adjustability. Countercyclical calibration requires timing the activation and deactivation of buffers with thresholds sensitive to credit growth, asset prices, and external balance indicators. Joint FSB–IMF–BIS reports and the IMF's Integrated Policy Framework (IPF) recommend recalibrating macroprudential tools over time in light of global financial conditions and country-specific frictions (FSB, IMF, & BIS, 2011; IMF, 2020).

Leakage management (shadow banking and cross-border channels). Owing to regulatory arbitrage, risks may migrate to non-bank intermediaries and cross-border structures. Expanding the regulatory perimeter, broadening data coverage, and deepening reporting at the micro level are therefore critical for tool effectiveness. Empirical findings indicate that the impact of macroprudential instruments is context-dependent and that leakage risks must be managed due to inter-institutional spillovers (Claessens, Ghosh, & Mihet, 2013).

Policy-mix coordination. Designing and coordinating monetary policy, fiscal policy, capital-flow management, and foreign-exchange liquidity tools within the macroprudential framework reduces goal conflicts (e.g., the credit-tightening–growth trade-off). The IMF-IPF systematizes such coordination by accounting for country-specific external conditions and financial frictions (IMF, 2020).

Transparent governance and accountability. A clear mandate, independent or semi-independent institutional arrangements, and regular ex-ante/ex-post impact assessments enhance the legitimacy and effectiveness of the macroprudential framework (FSB, IMF, & BIS, 2011; BIS, 2018).

Data infrastructure and stress testing. Micro-level data should render maturity/currency mismatches, counterparty concentrations, and inter-sectoral contagion channels visible; the calibration of liquidity standards (LCR/NSFR) and high-quality liquid asset (HQLA) pools should be linked to regular stress tests (BCBS, 2013, 2014).

Digitalization and Emerging Risk Domains

Digital platforms, crypto-assets and the stablecoin ecosystem, together with cloud-based financial infrastructures, have introduced an operational and cyber-resilience dimension into the macroprudential framework. The rapid scaling of large technology companies (BigTech) in financial services heightens risks of concentration and dependency, while a disruption affecting critical third parties could trigger systemic consequences for payment/settlement functions (BIS, 2023). Accordingly, within the scope of macroprudential policy it is recommended to: (i) expand the systemic perimeter to include BigTech and new intermediaries; (ii) implement operational-resilience principles—redundancy, recovery, exit strategies, and regular drills/tests; and (iii) establish convergence in cyber-incident reporting and reciprocity principles for cross-border data/IT dependencies (BCBS, 2021; FSB, 2023). In this way, macroprudential pol-

icy strengthens the economic-security dimension by targeting infrastructure-driven systemic risks alongside financial vulnerabilities (BIS, 2023).

Implementation Dimensions for Emerging Economies

In emerging economies (EEs), the economic-security function of macroprudential policy is more critical due to dependence on external finance, currency substitution, and shallow domestic markets. Three axes stand out in practice:

Limiting foreign-currency borrowing and building FX liquidity buffers. Open foreign-exchange position limits, additional requirements for short-term external debt, and strengthening the local-currency repo/collateral ecosystem via central bank–market infrastructure bolster defenses against sudden stops (CGFS, 2012; BIS, 2018).

Long-term local-currency borrowing and collateral depth. Implementing liquidity standards such as the LCR/NSFR and diversifying HQLA pools in local currency support the continuity of credit allocation during shocks (BCBS, 2013, 2014).

Policy-mix coordination and leakage management. In line with the IMF-IPF, country-specific calibration of monetary–macroprudential–capital flow management tools; expansion of the shadow-banking perimeter; and containment of transmission channels through comprehensive data coverage all enhance effectiveness (IMF, 2020; Claessens et al., 2013).

Within this framework, the macroprudential strategy should be conceived not merely as pre-crisis cycle smoothing but as an economic-security architecture that also targets strategic autonomy and post-shock recovery capacity (FSB, IMF, & BIS, 2011; BIS, 2018).

3. Discussion and Conclusion

The central proposition of this study is to reframe macroprudential policies (MPPs) from a set of instruments used solely in the name of "financial stability" into a framework anchored in "economic security." Economic security encompasses dimensions such as the continuity of payment systems, the financing of strategic sectors, resilience to external shocks, and the robustness of financial infrastructure (FSB, IMF, & BIS, 2011; BIS, 2018). For both advanced and emerging economies, this reframing offers policymakers a more strategic vantage point; in particular, under the dominance of the global financial cycle—when policy autonomy may narrow—the role of MPPs becomes stronger (Rey, 2015; IMF, 2020).

For example, when credit expands excessively, the risks extend beyond a potential "debt crisis" to include economic-security dimensions such as funding squeezes in strategic sectors, difficulties in sustaining external debt, and disruptions in payment systems. In such cases, preventive MPP tools (e.g., the countercyclical capital buffer) come into play, while protective liquidity standards (LCR/NSFR) and deterrent limits on leverage/open FX positions are crucial for steering global capital flows and managing balance-sheet vulnerabilities (BCBS, 2013, 2014; CGFS, 2012; Claessens, Ghosh, & Mihet, 2013). Resilience-oriented instruments and market-in-

frastructure regulations, in turn, help strengthen systemic architecture by sustaining continuity in payment/settlement functions (BIS, 2018).

Among the key considerations for implementation are the timing of instruments, the necessity of coordination, and the strength of governance structures. The absence of policy-mix coordination or weaknesses in data can reduce the effectiveness of MPPs; accordingly, it is recommended that monetary policy, macroprudential tools, and capital-flow management measures be co-designed with attention to country-specific frictions and external conditions (FSB et al., 2011; IMF, 2020). The emergence of new risks in the digital economy and shadow banking necessitates an expansion of the traditional MPP perimeter; here, operational–cyber resilience principles, dependency on critical third parties, and appropriate supervisory–regulatory tools for the BigTech ecosystem come to the fore (BCBS, 2021; BIS, 2023).

For emerging economies, exposure to foreign-currency borrowing and external shocks makes the economic-security function of MPPs even more critical. In this regard, depth in local-currency borrowing, domestic financial market infrastructure, and data transparency should be strategic priorities; in addition, country-sensitive calibration is advised for instruments such as FX liquidity buffers, open FX position limits, and additional requirements on short-term external debt (CGFS, 2012; Claessens et al., 2013; IMF, 2020). In sum, the economic-security perspective on MPPs provides a holistic policy framework that (i) safeguards the continuity of critical financial functions, (ii) sustains the financing of strategic sectors, and (iii) enhances adaptive capacity against external shocks (FSB et al., 2011; BIS, 2018; BIS, 2023).

In conclusion, the typology, design principles, and policy recommendations presented in this study offer a conceptual foundation for reconfiguring macroprudential policies within the context of “economic security.” In a multipolar, fragile, and interdependent financial world, it is essential for policymakers to cultivate a vision that reaches beyond financial stability. Future research should support this theoretical framework with country case studies, comparative segmentation, or quantitative assessments.

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