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*RESEARCH ARTICLE*

# Importance Of Big Data: Pakistan's Struggle With Big Data Governance

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**Abstract**
The digital information landscape and the Internet of Things (IOT) have become the new vitality of society, and the word "data" which is often used interchangeably, has become essential to human existence in the modern world. Artificial intelligence (AI) in data analytics, IoT services, and human action sensors all highlight how important technology is in forming our cyber spectrum. In the age of surveillance capitalism, this study will highlight Pakistan's heavy reliance on data and examine the country's need for a strong big data governance framework. It highlights the absence of a cohesive national framework while pointing out privacy and data management shortcomings. In order to safeguard and use big data for advancements in both economics and security, it also promotes the creation of a central data management system and strict data protection regulations.

**Keywords**: Artificial intelligence, Big Data, Socio-Economic landscape, cyber spectrum, Data governance

## Introduction

Traditionally, state businesses relied on manual data analysis exercises carried out by individuals, which often used to produce inaccurate results and many problems remains unsolved due to limited capacity of human data analysts and lack of modern data vision automation technologies. However, the advent of big data, cloud computing, and now AI have altered the landscape of data analytics completely. Consequently, statecraft has become more sophisticated and data-driven. The use of big data in various stat crafts is expected to continue to evolve and expand in the coming years, as governments and organizations seek to leverage the power of data to make more informed and effective decisions.

Big Data is a term used in analytics involves processing and analysing large and complex data sets using advanced tools and techniques. This allows for the identification of patterns, trends, and insights that would be difficult or

impossible to detect using traditional methods. In the context of statecraft, big data analytics can be used to analyse and interpret data from various sources, including government databases, social media platforms, and sensor networks.

The most prominent attributes of Big Data are referred as 3Vs i.e. **Volume** (Amount of Data), **Variety** (Type or format of Data) and **Velocity** (Data generation/processing speed). It is evident that all 3 Vs demands installation of specialized hardware and software solutions to generate, sort, clean, store, manage, retrieve, share large amount of data as and when required.[i]

Big data plays a crucial role in e-governance by enabling governments to analyse data trends,improve decision- making, and customize services to meet citizen's needs. It acts as a catalyst for trust, efficiency, and innovation within the public sector. By harnessing big data analytics, governments can enhance service delivery, engage with the public more effectively, and streamline governmental processes. This technology expands the horizons of e-governance, making administrative reforms tangible and enhancing the overall governance ecosystem.

Pakistan is 5$^{th}$ largest country in the world in terms of population is having a unique set of socio-economic challenges. Shirking resources and growing populations are impeding national progress and creating new issues like growing clusters of unemployed, under privileged and socio-economically backward masses.[ii] In this context, it is critical for country's economic and social viability to adopt data driven policy frameworks for all the statecraft particularly those related to governance, public services, economy, commerce and trade.

**Relevance of Big Data in Pakistan's Socio-Economic landscape**

Big data has become increasingly relevant in Pakistan's economic and social landscape, driven by advancements in contemporary technologies such as artificial intelligence (AI), machine learning, and cloud computing. These technologies enable the collection, processing and analysis of vast datasets, which is crucial for informed decision-making in sectors like agriculture, healthcare, and finance. In a country like Pakistan, Adoption of big data offers a way to improve operational efficiency and strategic planning for both public and private sectors where data collection has often been fragmented.Within the economic sphere, big data has the potential to greatly improve the productivity of sectors like banking, retail, and manufacturing. Businesses can streamline operations, cut costs, and boost productivity by evaluating supply chain data, consumer behaviour, and market trends. Real-time data analysis is becoming crucial for innovation in Pakistan's expanding digital economy, which is being driven by the country's increasing use of mobile devices and fintech innovations.[iii] Businesses can better customise products, optimise workflows, and compete in international markets recognitions to the insights gleaned from big data.

Big data has the ability to help Pakistan with some of its most urgent social issues. Predictive analysis, for example, can enhance disease surveillance and management in the healthcare industry, assisting policymakers in addressing public health emergencies like the spread of infectious diseases. Big data in education can be used to better allocate resources and evaluate learning outcomes, resulting in more equitable access to high-quality education. Big data can also be used by the government to plan cities more effectively, especially in developing areas with high infrastructure demands like Karachi and Lahore.

Pakistan has initiated various e-governance initiatives ushering automation and improved services model. Though these initiatives offer a quick and efficient service delivery by various departments to public but at strategic policy level enormous data generated daily by these systems is either wasted or not utilized to improve services, tracking socio-

economically challenged clusters of masses, accountability, crime detection, and transparency.

Overall, the absence of data-driven policies in governance can lead to inefficiencies, inequities, and challenges in addressing the diverse needs of a large population. Implementing data-driven policies is crucial for improving governance, enhancing service delivery, and fostering transparency and accountability in countries like Pakistan. There are number of reasons due to which the importance of data and its exploitation through Big Data, cloud computing, and AI has not fully realized. These challenges range from comprehension to skill gap to privacy issues to out dated system technology in the existing automation and e-governance models.

## Pakistan's Big Data landscape

The big data landscape in Pakistan is currently in its beginning stages but is expanding quickly. Some industries are starting to comprehend the potential of big data, while others are trailing behind because of infrastructure and regulatory issues. Big data is being used more and more in industries like retail, telecom, and finance as a result of the rise of digitalisation. However, sectors such as healthcare, education, and agriculture remain significantly underutilized in terms of big data integration. Below is a structured analysis, including a **comparative table** of sector-wise adoption and key initiatives.

| Sector | Key Applications | Challenges |
|---|---|---|
| **Telecom** | Customer behavior analytics, Network optimization Personalized marketing | Data privacy concerns |
| **Finance** | Fraud detection, Credit wallet analytics (100M+ users) | Lack of unified regulatory framework |
| **Retail** | Demand forecasting, Inventory management | Limited digital payment penetration |
| **Healthcare** | Paper-based records dominate, Weak real-time disease surveillance | No centralized health data infrastructure |
| **Education** | Minimal student performance tracking, Resource allocation gaps | Fragmented data systems |
| **Agriculture** | Rare use of IoT/sensor data, No predictive analytics for crops | Poor rural internet connectivity |
| **Government** | - NADRA biometric database (100M+ records) - Digital census (2023) | Bureaucratic inefficiencies |

Pakistan's financial and telecom sectors are leading the way in leveraging big data for operational efficiency and customer engagement. For example, telecom operators such as Jazz, Telenor, and Zong use data analytics to understand customer patterns, optimize network performance, and design personalized payment campaigns. The state Bank of Pakistan (SBP) has also pushed for digital payment solutions and fintech expansions, which are heavily reliant on data-driven insights. However, in financial sector, banks and fintech companies use big data to assess creditworthiness, manage risks and prevent fraud. The emergence of mobile wallets, with over 100 million users as mentioned above provides massive amounts of transactional data. This data is used to tailor financial products to underserved communities, facilitating financial inclusion. According to Pakistan Telecommunication Authority (PTA), the country's internet user base has crossed 124 million, creating a huge reservoir of data for service optimization.

In realistic converse, Pakistan's healthcare sector is far behind in the adoption of big data. Despite the growing need for prognostic healthcare models, real-time disease surveillance, and improved patient management, the use of data remains largely unstructured. Public health systems frequently keep their records on paper, which makes gathering data ineffective and challenging to analyse. The lack of a comprehensive data infrastructure was revealed through the COVID-19 pandemic by how difficult it was to monitor infection rates in real-time and

distribute resources. Equally, data-informed models have yet to be embraced fully by the education sector. There is a lack of large-scale data on the distribution of resources and performance of students. This lag makes it rigid for decision-makers to correct imbalances and drive educational outcomes.

One of the major issues in Pakistan's big data ecosystem is the weak laws to protect data. The nation is at risk of data privacy and security due to the increasing levels of financial and personal data being collected. The nation must make substantial improvements in the digital infrastructure. Access to high-speed internet is still limited in rural regions, and data centres lag behind in meeting level standards with the rest of the world. The lack of infrastructure prevents efficient storage, processing, and analysis of large data volumes.

In addition, several government-initiated programs aimed at modernizing data gathering, governance, and service delivery have driven the use of big data in Pakistan's key sectors. The digital census and the National Database and Registration Authority (NADRA) are among the most prominent examples. These efforts show the government leveraging big data for better citizen services, policymaking, and governance.

NADRA is an integral part of Pakistan's big data infrastructure. One of the world's largest citizen databases, NADRA has more than 100 million biometric and demographic records. These data are used for social welfare schemes, electoral rolls, security, and identification checks alongside the issuance of Computerised National Identity Cards (CNICs). In order to heighten transparency and heighten the services of the public, NADRA introduced smart cards and real-time data analysis in recent years. For example, the Ehsaas Program, an important social protection program, utilizes NADRA data to ensure targeted support is delivered to those who are eligible for it, thus reducing fraud and inefficiencies. The government can analyse trends and patterns in unemployment, poverty, and demographics through the use of an enormous quantity of data it has collected, enhancing the effectiveness of social safety net programs.

Another significant government initiative using big data is Pakistan's first digital census to be held in 2023, under the guidance of the Pakistan Bureau of Statistics (PBS). Over 240 million individuals are expected to have their information gathered by the digital census, which will help policymakers in resource allocation, infrastructure development, and urban planning. The information will also assist in electoral processes and provide insights to the private sector for targeted company expansion.

Additional government initiatives, like the digitization of land and healthcare records by the Punjab Information Technology Board (PITB), illustrate the ability of big data to drive administrative effectiveness. The Safe Cities Project in Lahore utilizes surveillance cameras and data analysis to track crime and traffic, illustrating how technology can enhance public safety.

**Global Frameworks in Data sharing & Data governance**

Countries like Malaysia, Kenya, and Brazil have implemented data governance strategies that balance technological advancements with data privacy and regulation. Pakistan can learn from these experiences while adapting them to its socio-economic and legal landscape. Following are the several frameworks from developing & developed countries:[iv]

1. **Ghana Open Data Initiative (GODI)**

   Ghana Open Data Initiative (GODI) was started in January 2012 by the National Information Technology Agency (NITA) in partnership with the Web Foundation (WF), to make Government of Ghana data available to the public for re-use. It Promotes transparency, enables civic tech and policy.[v]

2. **DHIS2 (Africa)**

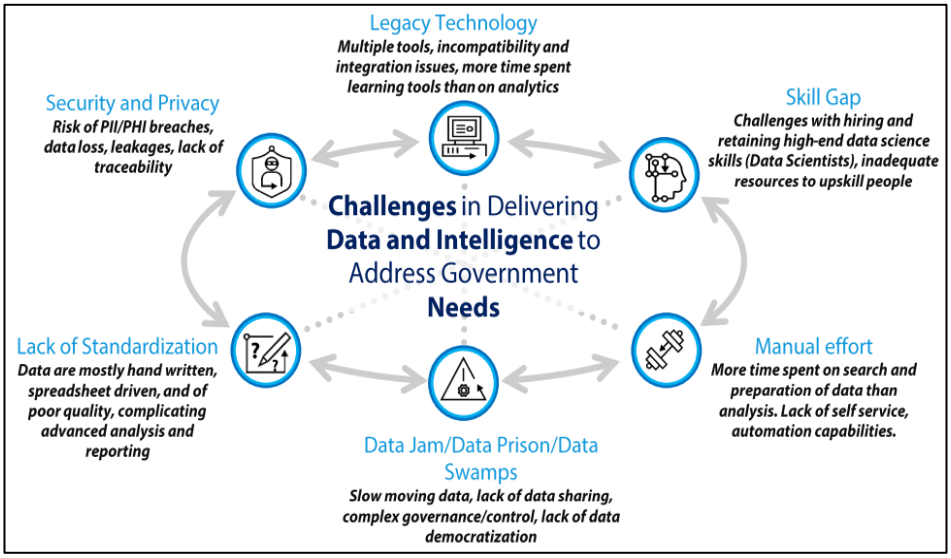
DHIS2 (District Health Information Software 2) is a widely used open-source, web-based platform for data collection, management, and analysis in health systems. It's particularly prevalent in Africa, with over 90% of African countries using it as a national-scale health information system. It strengthens health data, widely adopted for planning.[vi]

3. **NDSAP (India)**

The NDSAP (National Data Sharing and Accessibility Policy) in India is a government initiative that promotes open data access and sharing. It aims to make non-sensitive data, generated using public funds, available for lawful commercial and non-commercial use. It is an open government data, improved accessibility and innovation.[vii]

4. **U.S. & U.K Open Government Data Portals**

These government's official open data portals provide access to public sector datasets, aiming to improve government transparency, accountability, and citizen engagement. These portals provide access to datasets from major organizations.[viii]




**Challenges in Adopting big data Practices in Pakistan**

- Pakistan lacks the infrastructures that are needed to accommodate big data, such as data centers, cloud services, and high-speed internet, which are important for storing and processing data at a large scale.
- Pakistan is faced with erratic and incomplete data gathering, which hinders the use of big data. Most government departments and private sectors are not digitally mature to capture, hold, and update correct data sets.
- There is a dearth of data science, analytics, and big data technology professionals. Higher education institutions are just starting to introduce specialized courses, and there is not much availability of advanced training.
- Pakistan has not yet comprehensively developed its data protection legislation. The absence of proper guidelines for data privacy and usage can result in unwillingness by the business and organizational sectors to embrace complete big data strategies.
- Deploying solutions for big data entails major expenditure on infrastructure, software, and human resources. Most organizations, especially government agencies, are not willing to spend the necessary resources because of cost constraints.
- Data in Pakistan is often fragmented across different government departments and private entities. Lack of coordination and data sharing practices limit the ability to create unified, actionable insights.
- Big data systems are vulnerable to cyber-attacks. Pakistan's current cybersecurity infrastructure is still developing, making it challenging to protect large-scale data from breaches and other cyber threats.[ix]
-

**Strategic Appraisal for strengthening Big Data Governance in Pakistan**

Pakistan doesn't yet possess a data governance framework, national data strategy, national data ecosystem, and innovative data

technologies. In this regard, the following strategy is recommended: -

- **Establishing National Data Management Coordination Office**

  To begin with, Pakistan needs a national level central office for bringing in all involved stakeholders both in public and private sectors to join hands in implementing Data driven practices using Big Data technologies. Each ministry can implement Big Data services; the proposed office will provide general guidelines for all ministries to implement data related measures so that dream of data driven policy making can be achieved.[x]

**Implementation Measures**

- Ministry of Planning Development & Special Initiatives (MOPDSI) must spearhead the Data management coordination efforts because in the end this ministry is responsible for future planning of the country and it will be in need to approve development projects based on data analytics.
- To enhance transparency and avoid any political biases, proposed office must act as independent national body.
- Appropriate amendments to be introduced in constitution for its establishment.
- Proposed office must be comprised on representative of all stakeholders including private sector members, technology and legal experts, and academics.

- **Establishing Data Regulatory Governance Framework**

  First assignment for proposed coordination office must be to liaison with Ministry of law to introduce legal framework for data management by establishing data regulatory bodies at national and provincial levels. To meet set objectives this practice will require a major revision of existing disconnected data related SOPs among and within various departments.[xi]

**Implementation Measures**

- Pakistan should launch a Data Regulatory Governance Framework at national level with relevant constituent bodies like; Pakistan Telecommunication Authority (PTA), National Centre for Cyber Security (NCCS), Punjab Information Technology Board (PITB), Pakistan Space & Upper Atmosphere Research Commission (SUPARCO), etc. to combine and preserve structured data for futuristic automation.
- Ministry of Law along with MOPDSI to review existing legal provisions related to data handling.
- New provisions for data currency to be introduced as legal framework for National Data Management system.
- All departments to adopt data related SOPs based on this new legal framework to ensure uniform implementation of national data management framework across all the departments.
- The following table shows the regulations in different regions over the period of time with the key features of the laws.

| Regulation | Region | Year | Key Features |
|---|---|---|---|
| **GDPR** (General Data Protection Regulation) | EU | 2018 | Enhanced privacy rights, global adoption, high penalties |
| **CCPA** (California Consumer Privacy Act) | California, USA | 2020 | Consumer rights, precedent for US privacy laws |
| **DPA** (Data Protection Act) | Kenya | 2019 | Improved awareness, implementation challenges |
| **LGPD** (Lei Geral de Proteção de Dados) | Brazil | 2020 | Similar to GDPR, strong consent requirements |
| **POPI** (Protection of Personal Information Act) | South Africa | 2021 | Comprehensive rights, accountable processing |
| **PIPL** (Personal Information Protection Law) | China | 2021 | Strict data localization, extraterritorial reach |
| **PDPB** (Personal Data Protection Bill) | Pakistan | 2023 | First comprehensive law, aligns with global standards |

- **Data Ownership at National Level**

  Pakistan needs to take ownership of indigenous data. Global tech giants for capital

surveillance regulate the econometrics of Big Data. Both public and private sectors in Pakistan have large portfolios but lack sufficient coordination of Big Data and privacy issues in order to protect the data currency, Pakistan must develop a Centralized National Data Management and Surveillance system to enhance the efficiency and ownership of Big Data. This is the final strategic goal of the entire Big Data strategy and is critical for national security as well.[xii]

**Implementation Measures**

- Federal government must initiate a national data program with the strategic goal of keeping Pakistan's data on Pakistani data warehouses.
- To prevent legal issues about data privacy and protection, compliance with data protection legislation and best practices for data security is essential. Rules, regulations, and policies for handling big data at the national level under a central pool need to be implemented.
- Like the National Incubation Center, there is a need to establish a 'Big Data Industry' under a public-private partnership to cope with future trends of emerging technologies.
- Initially, Pakistan must focus on data domicile and data privacy requirements. Pakistan is not a small market by any measure. Government must negotiate with Tech giants to open offices in Pakistan.
- HEC through NCBC, Planning and IT ministries along must chart out a long term strategic vision to keep Pakistan's data local using 'Made in Pakistan' technologies.
- Based on these guidelines, ministry of planning with collaboration of HEC must identify HR requirements in various disciplines of related hardware and software technologies.
- Cabinet must declare it a strategic program with ensured funding.

➢ **Mechanism to Establish Framework for Big Data Governance**

- Comprehensive mechanisms to securely share and safeguard the integrity, confidentiality, and availability of massive organizational datasets with robust encryption protocols must be deployed to secure sensitive information, ensuring that only authorized entities have access.
- Stringent privacy regulations to govern the collection, storage, and utilization of big data, thereby establishing clear guidelines for responsible data management entities and advanced threat detection and prevention systems.
- There must be annual appraisal of required HR in various aspects of proposed National Data Management System.
- A performance approach based on clearly defined Key Performance Indicators (KPIs) should be adopted to evaluate the outcome of various stakeholders.
- Performance must be evaluated in short, mid and long term prospective after defining achievable milestones for each term.
- MOPDSI must hold responsible the stakeholders who miss their KPI targets.

- Evaluation process, once initiated, must continue without interruption.


**Big Data Ownership and Future Course**

In Nutshell, Pakistan is among top populated developing nations in the world who are facing unique challenges ranging from growing population, shrinking resources, climate change, and worsening security situation. In such circumstances, it is only natural to consider most optimal resource management policy. World's most successful economies are following data driven policies for optimal resource management. Pakistan unfortunately failed to adopt this model because of its comprehension challenge about the value of data in modern e-governance model, resource management, service delivery mechanisms, transparency, automation, economy and security.

Six government ministries of Pakistan including Ministry of Information Technology (MOIT), Ministry of Planning, Development and Reforms, National Database Registration Authority (NADRA), Ministry of Finance, Revenue and Economic Affairs, PTA and Ministry of Interior proposed a draft for the activation of big data industry in August 2016. Unfortunately, after many long years, since its inception there has been no visible action by government to active Big Data incubation across Pakistan except an initiative by HEC in 2018 when Higher Education Commission of Pakistan (HEC) in collaboration with 11 universities took Pakistan's first R&D initiative in Big Data and Cloud Computing and established National Centre for Big Data and Cloud Computing (NCBC) with an aim to develop novel Big Data solutions for various Pakistan specific requirements including taking ownership of Pakistan's public data from big tech giants Ministry of Planning Development & Special Initiatives (MOPDSI) is the largest stakeholder in data driven policy making in the country as it approves national development projects. Almost every government face criticism of having political

biases on approval of certain projects as existing method of project approval is not strictly based on data analytics and insights. The Planning Commission of Pakistan undertakes research studies and state policy development initiatives for the growth of national economy and the expansion of the public and state infrastructure of the country in tandem with the Ministry of Finance.

Similarly, MoIT is another big stakeholder in Pakistan related to data and its services along with national institutions like NADRA and FIA. Police, Power Distribution Companies, Surveillance systems, Hospitals etc. are all generating different kind of data on daily basis. This data driven approach requires embracing the latest data sciences innovations like Big Data, cloud computing and AI analytics so that data generated by national database management systems (NADRA, FIA), security apparatus (Safe City Cameras), social media and telecommunication networks can be collected, cleaned, categorized in a single national data management framework.

The ownership of big data is another critical aspect of global big data market. Whoever has the ownership of data holds significant economic and security leverage. In order to have the ownership of Pakistan's public data, it is critical to adopt a whole of nation approach. No single ministry will be able to implement it. This must be pursued as strategic projects as important as country's non-conventional deterrence projects. To begin with, NCBC's scope must be expanded and it must be declared as national level project instead of currently HEC's initiative. Recently, Pakistan's "One Nation One Vision" for 2025 advocates for modernization and institutional reform of the creation of a competitive knowledge economy and the public sector.[xiii]

The ability to store, manage, and utilise vast, unstructured, and heterogeneous data has become a pivotal aspect of modern digital capital, surpassing industrial innovations. Big data governance has evolved rapidly during the last 1 to 1.5 decade globally and its market is evolving at exponential rate which is in fact so high that many developed countries are struggling to keep pace with it. Big Data offers enormous opportunities in modern age ranging exploiting data currency. Major first world nations are harvesting benefits of Big Data while many developing nations are embracing it to overcome their governance challenges. A novel strategy has been proposed in this paper to overcome Pakistan's various governance and economic challenges stemming from lack of key data insights and their proper utilization which is only possible by embracing Big Data technologies.

Conclusively, Pakistan has not been fully equipped to capitalise on this innovation despite realizing its potential due to which Pakistan also lacks to adopt data driven policy mechanism in order to strategically manage resources, identify problem clusters, and enhance national productivity. Consequently, Pakistan's big data governance landscape is hindered by outdated methods, leading to poor assessment of socio-economic issues, inefficient resource allocation and ineffective policy implementation. While e-governance systems in various departments like; NADRA, FIA, and other utility based services have improved citizen service delivery, but adequately contribute at the policy level whereas the generation of big data is not utilised for future planning or innovation. The lack of centralised big data management strategy across public and private sectors is also encompassed with insufficient data compilation and concerns related to privacy concerns, further pose situation in the realm of cyber security and international surveillance from the big data giants. Ultimately, Pakistan reliance on global tech giants for data sharing results in economic and security concerns due to their unavoidable control, as the tech based

corporations exert in Pakistan's digital realm. By embracing this perspective and adopting forward-thinking strategies, Pakistan can effectively navigate the data revolution, unlocking its full potential for societal advancement and economic prosperity.

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**Reference**


[i] Nasir, Jamal Abdul. "Big Data Prospects and Challenges for Pakistan." *The Nation*, https://www.nation.com.pk /15-Sep-2021/big-data-prospects-and-challenges-for-Pakistan, Accessed on 12 September 2024.

[ii] International Monetary Fund, https://www.imf.org/external/pubs/ft/fandd/2007/09/view.html Accessed on 14 September 2024.

[iii]Toward Big Data and analytics governance: Redefining Structural Governance Mechanisms https://www.researchgate.net/publication/348675261 Toward big data and analytics governance redefining structural governance mechanisms, Accessed on 20 September 2024.

[iv] https://www.pewresearch.org/short-reads/2018/06/04/how americans-have-viewed-government-surveillance-and-privacy-since-snowden-leaks/ Accessed on 22 October 2024.

[v]https://www.opengovpartnership.org/members/ghana/commitments/GH0019/ Accessed on 26 October 2024.

[vi] https://dhis2.org/ Accessed on 26 October 2024.

[vii] https://www.india.gov.in/national-data-sharing-and-accessibility-policy Accessed on 28 October 2024.

[viii] https://data.gov/open-gov/

[ix] https://zahid.quarto.pub/posts/data-government, Harnessing Data Analytics for Effective Governance in Pakistan: A Support, Not a Substitute. Accessed on 30 October 2024.

[x] Pas (2019) Big Data Challenges and opportunities, Pakistan Advertisers Society. Available at: https://pas.org.pk/6375-2/ Accessed on 02 November 2024.

[xi] Digital Regulation Platform. Available at: https://digitalregulation.org/navigating-data-governance-a-guiding-tool-for-regulators, Accessed on 15 December 2024.

[xii] UNESCAP, Available at: https://www.unescap.org/sites/default/d8files/event-documents/Malaysia-data-governance-profile.pdf, Accessed on 05 January 2025

[xiii] https://pu.edu.pk/downloads/Pakistan-Vision-2025.pdf, Pakistan Vision, One vision-One Nation, 2025, Accessed on 08 February, 2025.

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*RESEARCH ARTICLE*

# Pakistan's Foreign Policy For Climate Resilience: Navigating Complex Interdependence And Environmental Security

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**Abstract**

Pakistan, one of the most climate-vulnerable nations, faces escalating challenges from glacial melt, flooding, and extreme weather, necessitating a robust integration of climate resilience into its foreign policy. This study examines how Pakistan leverages its foreign policy to address these challenges, drawing on the theoretical frameworks of complex interdependence and environmental security. Employing a qualitative case study approach with content and case study analyses, the research explores Pakistan's bilateral and multilateral engagements, climate finance, technology transfer, and soft power initiatives. Findings reveal significant progress in partnerships with China, advocacy at COP27, and afforestation projects, yet geopolitical tensions with India, institutional inefficiencies, and dependency on external support pose barriers. The study proposes a Climate Diplomacy Framework, South-South cooperation, SAARC revitalization, and diversified partnerships to enhance resilience. These insights contribute to the literature on climate diplomacy and offer policy recommendations for climate-vulnerable nations navigating global governance.

**Keyword:** revitalization, diplomacy, global governance, Foreign Policy, Environmental Security

## 1. Introduction

Pakistan's acute vulnerability to climate change, marked by devastating floods, glacial melt, and intensifying heatwaves, poses existential threats to its socioeconomic stability and national security (Eckstein et al., 2021). Ranked among the top ten most climate- vulnerable nations, Pakistan faces challenges that transcend national borders, necessitating international cooperation to secure resources, technology, and expertise (World Bank, 2022). Historically, Pakistan's foreign policy has prioritized security and geopolitical concerns, particularly its rivalry with India and partnerships with China and the United States (Rizvi, 2019). However, the growing salience of climate change as a non- traditional security issue demands a reorientation toward climate diplomacy, leveraging bilateral and multilateral engagements to enhance resilience (Dalby, 2009).

This study investigates how Pakistan integrates climate resilience into its foreign policy, addressing a critical gap in the literature on South Asian climate diplomacy. Guided by the theoretical frameworks of complex interdependence (Keohane & Nye, 2011) and environmental security (Dalby, 2009), it examines Pakistan's diplomatic strategies, including partnerships with global powers, advocacy in multilateral forums, and soft power initiatives like the Billion Tree Tsunami (Qamar, 2022). The research employs a qualitative case study approach, analyzing policy documents, international agreements, and peer-reviewed literature to assess Pakistan's efforts and challenges (Yin, 2018). Key research questions include: How does Pakistan leverage its foreign policy to address climate vulnerabilities? What are the barriers to effective climate diplomacy? And how can Pakistan enhance its role in global and regional climate governance?

The study is structured as follows: the Literature Review establishes the theoretical and empirical context; the Methodology outlines the research design; the Climate Vulnerability and Policy Context section details Pakistan's challenges and domestic policies; the Analysis and Challenges/Opportunities section evaluates diplomatic strategies; the Discussion synthesizes findings and implications; and the Conclusion summarizes key in- sights and future directions. By offering a comprehensive analysis, this study contributes to the literature on climate diplomacy and provides actionable policy recommendations for Pakistan and other climate-vulnerable nations

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## 2. Literature Review

### 2.1 Theoretical Framework

Climate diplomacy and environmental security provide critical frameworks for analyzing how nations address climate change through international relations. Climate diplomacy involves leveraging diplomatic strategies to negotiate climate policies, secure funding, and facilitate technology transfers, often through multilateral platforms like the Paris Agreement (Betsill & Stevis, 2015). This approach is particularly relevant for Pakistan, which faces severe climate impacts, including floods and glacial melt, that transcend national borders (Eckstein et al., 2021). Environmental security, conversely, frames climate change as a threat to national stability, encompassing issues such as water scarcity, food insecurity, and displacement (Dalby, 2009). For Pakistan, these threats are amplified by its socioeconomic vulnerabilities and geopolitical complexities, making environmental security a pressing concern.

The theory of complex interdependence, developed by Keohane and Nye (2011), offers a robust lens for understanding transboundary climate cooperation. This theory posits that states are interconnected through multiple channels; economic, environmental, and social, creating incentives for cooperation even among adversaries. In Pakistan's context, complex interdependence is evident in its reliance on the Indus River, a shared resource with India governed by the Indus Waters Treaty (Akhtar, 2020). Climate- induced changes, such as glacial melt and altered precipitation patterns, exacerbate water scarcity, necessitating cooperative management despite historical tensions. Climate diplomacy thus serves as a vital tool for Pakistan to navigate these interdependencies, secure environmental security, and access international support for resilience-building. By applying these theoretical lenses, this study situates Pakistan's foreign policy within a broader framework of global environmental governance.

## 2.2 Existing Studies

The scholarly literature on Pakistan's foreign policy has traditionally focused on security and geopolitical dynamics, particularly its relations with India, Afghanistan, and major powers like China and the United States (Rizvi, 2019). However, a growing body of research examines the intersection of foreign policy and climate resilience, reflecting the increasing salience of climate change as a non-traditional security threat. For instance, Mustafa et al. (2017) argue that environmental diplomacy is essential for Pakistan to address interconnected challenges of climate change, energy security, and water scarcity. They emphasize that integrating development with environmental factors and peacemaking can lead to sustainable outcomes in South Asia, highlighting the role of diplomacy in resolving conflicts related to environmental security.

Global climate diplomacy trends, particularly the Paris Agreement and Conferences of the Parties (COP) frameworks, provide a backdrop for understanding Pakistan's engagement in international climate governance. As a signatory to the Paris Agreement, Pakistan has committed to reducing greenhouse gas emissions and enhancing resilience through its Nationally Determined Contributions (Government of Pakistan, 2016). How- ever, the literature reveals a significant gap in linking these commitments to Pakistan's foreign policy strategies. Studies such as those by Kugelman (2020) and Qamar (2022) focus on domestic adaptation measures, such as the Billion Tree Tsunami and disaster management, but often overlook the international dimensions of these efforts. For example, while Pakistan has advocated for climate finance at COP27, its broader diplomatic strategies for securing resources and technology remain underexplored (Ali et al., 2024). Comparative analyses of climate diplomacy in other contexts, such as Chinas role in global climate governance (Kopra, 2019), highlight the potential for nations to leverage diplomacy for both national and global benefits. This study aims to fill this gap by analyzing how Pakistan's foreign policy can be harnessed to enhance climate resilience.

## 2.3 Regional Context

Pakistan's approach to climate resilience must be contextualized within the South Asian region, where neighboring countries face similar, yet distinct, climate challenges. India has emerged as a leader in climate diplomacy, leveraging its economic and technological capabilities to spearhead initiatives like the International Solar Alliance (Saran, 2018).

This initiative demonstrates how climate diplomacy can advance national interests while contributing to global climate goals. Bangladesh, another climate-vulnerable nation, has gained international recognition for its innovative adaptation strategies, particularly in coastal protection and disaster management (Hassan, 2019). These examples highlight the potential for South Asian nations to play significant roles in global climate governance.

In contrast, Pakistan's climate diplomacy has been less prominent, despite its acute vulnerability to climate impacts, such as the 2022 floods that displaced millions and caused significant economic losses (Eckstein et al., 2021). Internal challenges, including political instability, economic constraints, and the lingering effects of conflict, have hampered Pakistan's ability to prioritize climate diplomacy (Kugelman, 2020). Transboundary issues, particularly water sharing, are central to Pakistan's climate resilience. The Indus River, vital for Pakistan's agriculture and economy, is

governed by the Indus Waters Treaty with India, which has been a source of both cooperation and tension (Akhtar, 2020). Climate change exacerbates these tensions, as altered precipitation patterns and glacial melt affect water availability downstream. Regional platforms like the South Asian Association for Regional Cooperation (SAARC) offer opportunities for collaborative action, but political rivalries have often stymied progress (Mustafa et al., 2017). Pakistan must navigate these complexities to foster meaningful cooperation with its neighbors on shared environmental challenges.

## 3. Methodology

This study employs a qualitative research design to investigate how Pakistan leverages its foreign policy to enhance climate resilience, focusing on its diplomatic strategies in bilateral and multilateral contexts. Qualitative methods are well-suited for exploring com- plex, context-specific phenomena like climate diplomacy, which require in-depth analysis of policy processes and stakeholder interactions (Creswell & Poth, 2018). By combining content analysis and case study approaches, the study aims to provide a nuanced under-standing of Pakistan's efforts to secure international cooperation, funding, and technology transfers for climate resilience. This section outlines the research design, data sources, methods, and analytical framework, ensuring a rigorous and transparent approach suit- able for addressing the research questions.

### 3.1 Research Design

A qualitative case study approach forms the backbone of this research, enabling an in-depth exploration of Pakistan's climate diplomacy within its unique geopolitical and environmental context (Yin, 2018). Pakistan is selected as the primary case due to its high vulnerability to climate change, as evidenced by its ranking on the Global Climate Risk Index (Eckstein et al., 2021), and its strategic position in South Asia, which necessitates transboundary cooperation. The case study design allows for a detailed examination of specific diplomatic engagements, providing insights into the interplay of domestic policies, regional dynamics, and global climate governance. This approach is complemented by a comparative perspective, analyzing Pakistan's strategies relative to other South Asian nations, such as India and Bangladesh, to contextualize its efforts and identify best practices.

### 3.2 Data Sources

The study draws on both primary and secondary data sources to ensure a comprehensive and credible analysis. Primary data include official policy documents, such as Pakistan's Nationally Determined Contributions (NDCs) under the Paris Agreement (Government of Pakistan, 2016), statements from the Ministry of Foreign Affairs and Ministry of Climate Change, and texts of international agreements, such as the Indus Waters Treaty. These documents provide direct evidence of Pakistan's climate diplomacy objectives and commitments. Secondary data encompass peer-reviewed journal articles, reports from international organizations like the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Environment Programme (UNEP), and policy analyses from reputable think tanks, such as the Stimson Center and the Sustainable Development Policy Institute (SDPI). These sources offer critical insights into global climate diplomacy trends and regional environmental challenges (Betsill & Stevis, 2015; Mustafa et al., 2017). To ensure currency and relevance, data collection prioritizes

materials published after 2015, with a focus on post-2022 sources to capture the impact of recent climate events, such as the 2022 Pakistan floods (Ali et al., 2024).

### 3.3 Methods

The study employs two primary methods: content analysis and case study analysis. Con- tent analysis is used to systematically examine textual data from policy documents, government statements, and international agreements. This method involves coding texts to identify recurring themes, such as references to climate finance, technology transfers, and regional cooperation, following established qualitative protocols (Krippendorff, 2018). For example, statements from Pakistan's delegations at Conferences of the Par- ties (COP) meetings are analyzed to assess the country's advocacy for climate resilience. Content analysis ensures a structured approach to understanding how climate resilience is articulated in Pakistan's foreign policy discourse.

Case study analysis complements content analysis by focusing on specific instances of Pakistan's climate diplomacy. Three cases are selected for their significance: (1) green initiatives under the China-Pakistan Economic Corridor (CPEC), which highlight bilateral cooperation on renewable energy and sustainable infrastructure; (2) Pakistan's advocacy in the UNFCCC and COP frameworks, particularly its role in Loss and Damage discussions; and (3) transboundary water management under the Indus Waters Treaty with India, which exemplifies the challenges of regional cooperation. These cases are analyzed using a process-tracing approach to map the causal mechanisms linking diplomatic strategies to outcomes, such as securing climate finance or fostering regional agreements (George & Bennett, 2005).

### 3.4 Analytical Framework

To guide the analysis, the study develops a framework based on three pillars of climate diplomacy: funding, technology transfer, and capacity building. This framework draws on existing literature, which identifies these pillars as critical for effective climate resilience strategies in vulnerable nations (Nakhooda et al., 2016). Each pillar is operationalized through specific indicators: (1) funding includes access to international climate finance mechanisms, such as the Green Climate Fund; (2) technology transfer encompasses agreements for sharing renewable energy or adaptation technologies; and (3) capacity building involves training programs and institutional strengthening supported by international partners. The framework assesses the extent to which Pakistan's foreign policy integrates these pillars, evaluating their effectiveness in enhancing climate resilience. By applying this framework to the selected case studies, the study identifies strengths, challenges, and opportunities in Pakistan's climate diplomacy.

### 3.5 Limitations

The qualitative approach, while rich in depth, has limitations. The reliance on publicly available documents may overlook internal policy deliberations, potentially limiting in- sights into decision-making processes. Additionally, the focus on Pakistan as a single case may restrict generalizability, though comparative references to India and Bangladesh mitigate this concern. To address these limitations, the study triangulates data from multiple sources and incorporates a comparative perspective to enhance robustness (Yin, 2018). Ethical considerations, such as ensuring transparency in data use and avoiding bias in case selection, are addressed by adhering to rigorous academic standards.

## 4. Pakistan's Climate Vulnerability and Policy Context

Pakistan's acute vulnerability to climate change, coupled with its complex geopolitical landscape, necessitates a robust integration of climate resilience into its foreign policy. This section examines Pakistan's climate challenges, their socioeconomic impacts, and the domestic policy framework that shapes its response. It then situates these efforts within the broader context of Pakistan's foreign policy, traditionally dominated by security and geopolitical concerns, to highlight the emerging role of climate as a non-traditional security issue. By analyzing these dimensions, this section provides the foundation for understanding how Pakistan's foreign policy can address climate resilience through inter- national cooperation

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### 4.1 Climate Challenges

Pakistan ranks among the most climate-vulnerable nations globally, consistently placed in the top ten of the Global Climate Risk Index due to its exposure to extreme weather events and environmental degradation (Eckstein et al., 2021). The country faces a trifecta of climate-related challenges: glacial melt in the Himalayas, recurrent flooding, and intensifying droughts and heatwaves. The Hindu Kush-Karakoram-Himalaya (HKH) region, often referred to as the "Third Pole," contains glaciers that feed the Indus River, Pakistan's primary water source for agriculture and domestic use (Immerzeel et al., 2020). Accelerated glacial melt, driven by rising temperatures, threatens long-term water security, with projections indicating a potential 3040% reduction in glacial volume by 2050 (Lutz et al., 2014). This depletion not only reduces water availability but also increases the risk of glacial lake outburst floods (GLOFs), which have caused significant damage in northern Pakistan (Ashraf et al., 2017).

Flooding represents another critical challenge, exemplified by the catastrophic 2022 floods that inundated one-third of the country, displaced over 8 million people, and caused economic losses estimated at $30 billion (Ali et al., 2024). These floods, attributed to unprecedented monsoon rains exacerbated by climate change, devastated agricultural lands, infrastructure, and livelihoods, particularly in Sindh and Balochistan (World Bank, 2022). Concurrently, droughts and heatwaves have intensified, with temperatures in cities like Jacobabad reaching 51řC in 2022, posing severe risks to human health and agricultural productivity (Khan & Munawar, 2023). These climate impacts are compounded by Pakistan's geographic and socioeconomic vulnerabilities, including its dependence on agriculture, which accounts for 19% of GDP and employs 42% of the workforce (Pakistan Bureau of Statistics, 2023).

The socioeconomic consequences of these climate challenges are profound. Rural com-munities, which constitute 63% of Pakistan's population, face heightened food insecurity and displacement due to crop failures and water scarcity (FAO, 2022). Urban areas, mean- while, grapple with infrastructure strain and increased migration from climate-affected regions, exacerbating social tensions (Kugelman, 2020). These impacts underscore the urgency of integrating climate resilience into national and international policy frame- works, as domestic efforts alone cannot address the scale and transboundary nature of the crisis.

### 4.2 National Climate Policies

Pakistan has developed a suite of domestic policies to address its climate vulnerabilities, with the National Climate Change Policy (NCCP) of 2021 serving as the cornerstone. The NCCP outlines strategies for mitigation

and adaptation, emphasizing renewable energy, afforestation, and disaster risk reduction (Government of Pakistan, 2021). Key initiatives include the Billion Tree Tsunami, which planted over 1 billion trees to com- bat deforestation and enhance carbon sequestration, and the Ten Billion Tree Tsunami, an expanded program targeting broader ecological restoration (Qamar, 2022). These ef- forts have garnered international recognition, positioning Pakistan as a proactive actor in climate adaptation.

Institutionally, the Ministry of Climate Change (MoCC) leads policy implementation, coordinating with provincial governments and international partners. The MoCCs Cli- mate Change Authority, established under the 2017 Climate Change Act, oversees the integration of climate policies into sectoral plans, such as agriculture and water management (Government of Pakistan, 2017). Pakistan's updated Nationally Determined Contributions (NDCs) under the Paris Agreement commit to reducing greenhouse gas emissions by 50% by 2030, with 15% from domestic resources and 35% contingent on international support (Government of Pakistan, 2021). These commitments highlight the critical role of external financing and technology transfers, necessitating a strong foreign policy dimension.

Despite these efforts, domestic policies face significant challenges. Limited institutional capacity, inadequate funding, and coordination gaps between federal and provincial authorities hinder effective implementation (Ali et al., 2024). For instance, while the NCCP emphasizes adaptation, only 6% of Pakistan's national budget is allocated to climate-related activities, far below the needs estimated at $10 billion annually for adaptation and mitigation (World Bank, 2022). These constraints underscore the importance of international cooperation, as Pakistan's domestic resources alone are insufficient to address its climate vulnerabilities.

### 4.3 Foreign Policy Context

Pakistan's foreign policy has historically been shaped by security and geopolitical imperatives, particularly its rivalry with India, relations with Afghanistan, and strategic partnerships with China and the United States (Rizvi, 2019). The China-Pakistan Economic Corridor (CPEC), a flagship project of Chinas Belt and Road Initiative, exemplifies this focus, prioritizing infrastructure and economic development (Hussain, 2020). However, the growing salience of climate change as a non-traditional security issue is prompting a reorientation of Pakistan's foreign policy. Climate impacts, such as water scarcity and extreme weather events, intersect with traditional security concerns, particularly in the context of transboundary resources like the Indus River (Akhtar, 2020).

The Indus Waters Treaty (IWT), signed in 1960 with India, remains a cornerstone of Pakistan's foreign policy concerning water security. The treaty allocates the eastern rivers (Sutlej, Beas, Ravi) to India and the western rivers (Indus, Jhelum, Chenab) to Pakistan, with provisions for cooperation on water management (Sinha, 2021). However, climate- induced changes, such as glacial melt and erratic monsoons, strain the treaty's framework, as both countries face competing demands for water (Mustafa et al., 2017). Tensions over Indias upstream dam projects, such as the Kishanganga and Ratle hydroelectric projects, have led to disputes, highlighting the need for climate-informed diplomacy to sustain the IWTs efficacy (Akhtar, 2020).

Pakistan's engagement with global powers also shapes its climate diplomacy. The United States and the European Union

provide climate finance and technical assistance, with the U.S. Agency for International Development (USAID) supporting projects like the Pakistan Water Management Initiative (USAID, 2023). China, through CPEC, has invested in renewable energy projects, such as the Quaid-e-Azam Solar Park, aligning economic cooperation with climate goals (Hussain, 2020). However, these partnerships are often constrained by geopolitical considerations, such as U.S.-China rivalry, which complicates Pakistan's ability to secure consistent support (Kugelman, 2020).

Multilateral platforms, such as the United Nations Framework Convention on Climate Change (UNFCCC) and the South Asian Association for Regional Cooperation (SAARC), offer additional avenues for Pakistan's climate diplomacy. Pakistan's advocacy for Loss and Damage funding at COP27 reflects its push for global accountability on climate impacts (Ali et al., 2024). However, SAARCs effectiveness is limited by India-Pakistan tensions, which have stalled regional climate initiatives since the 2016 summit cancellation (Mustafa et al., 2017). These dynamics underscore the challenge of aligning Pakistan's traditional foreign policy priorities with the imperatives of climate resilience.

## 5. Analysis of Pakistan's Climate Diplomacy and Challenges and Opportunities

Pakistan's foreign policy for climate resilience represents a critical pivot from its traditional security-centric approach, necessitated by the country's acute vulnerability to climate change. This section analyzes Pakistan's climate diplomacy through its bilateral and multilateral engagements, climate finance and technology transfer efforts, and use of soft power, drawing on the theoretical framework of complex interdependence (Keohane & Nye, 2011). It then evaluates the challenges hindering effective climate diplomacy and identifies opportunities for enhancing Pakistan's role in global and regional climate governance. By examining these dimensions, this section elucidates how Pakistan navigates geopolitical complexities to address climate challenges and proposes pathways for strengthening its diplomatic strategies.

### 5.1 Bilateral Engagements

Pakistan's bilateral climate diplomacy is most prominently illustrated through its partner- ship with China under the China-Pakistan Economic Corridor (CPEC), a flagship project of Chinas Belt and Road Initiative. CPEC includes green initiatives, such as the Quaid- e-Azam Solar Park, which generates 1,000 MW of renewable energy, and hydropower projects like the Karot Hydropower Project, contributing to Pakistan's goal of achieving 30% renewable energy by 2030 (Hussain, 2020). These projects reflect Chinas role as a key partner in providing technology and financing for sustainable infrastructure, aligning economic cooperation with climate resilience objectives. However, the environmental impact of CPECs fossil fuel-based projects, such as coal plants, has drawn criticism for undermining Pakistan's mitigation commitments (Ali et al., 2024).

Engagements with the United States and the European Union (EU) also play a significant role. The U.S. Agency for International Development (USAID) supports initiatives like the Pakistan Water Management Initiative, which enhances water conservation and agricultural resilience (USAID, 2023). The EU has provided funding for disaster risk reduction and adaptation projects, including 12.5 million for post-2022 flood recovery (European Commission, 2022). These partnerships offer technical expertise and financial

support, but their scope is limited by geopolitical dynamics, such as U.S.-China rivalry, which can constrain consistent aid flows (Kugelman, 2020).

Relations with India, a critical neighbor due to shared water resources, are fraught with challenges. The Indus Waters Treaty (IWT), signed in 1960, governs water sharing but faces strain from climate-induced changes, such as glacial melt and erratic monsoons (Sinha, 2021). Disputes over Indias upstream dam projects, like the Kishanganga and Ratle hydroelectric projects, highlight the need for climate-informed diplomacy to sustain the IWTs efficacy (Akhtar, 2020). Despite occasional technical dialogues, political tensions often impede robust cooperation, limiting progress on transboundary water management.

### 5.2 Multilateral Engagements

Pakistan's multilateral climate diplomacy is primarily channeled through the United Nations Framework Convention on Climate Change (UNFCCC) and Conferences of the Par- ties (COP) frameworks. At COP27, Pakistan played a pivotal role in advocating for the establishment of a Loss and Damage fund, reflecting its position as a climate-vulnerable nation seeking compensation for irreversible climate impacts (Ali et al., 2024). Pakistan's updated Nationally Determined Contributions (NDCs) commit to a 50% reduction in greenhouse gas emissions by 2030, with 35% contingent on international support, under- scoring the importance of multilateral platforms for securing resources (Government of Pakistan, 2021).

The South Asian Association for Regional Cooperation (SAARC) offers potential for regional climate cooperation, but its effectiveness is hampered by India-Pakistan tensions, which have stalled summits since 2016 (Mustafa et al., 2017). Initiatives like the SAARC Thimphu Statement on Climate Change (2010) outline shared goals, yet implementation remains limited due to political rivalries. Pakistan's participation in other forums, such as the Asia-Pacific Climate Change Adaptation Forum, provides additional avenues for collaboration, though these are less focused on South Asian-specific challenges.

### 5.3 Climate Finance and Technology Transfer

Access to climate finance is critical for Pakistan, given its limited domestic resources. Pakistan has secured funding from mechanisms like the Green Climate Fund (GCF) and Adaptation Fund, with projects like the GCF-funded Glacier Lake Outburst Flood Risk Reduction receiving $37 million (Green Climate Fund, 2023). However, Pakistan's total climate finance inflows, estimated at $2 billion annually, fall far short of the $10 billion needed for adaptation and mitigation (World Bank, 2022).Bureaucratic delays and stringent donor requirements often hinder access to these funds (Nakhooda et al., 2016). Technology transfer is equally vital, with Pakistan seeking renewable energy technologies and early warning systems for disaster preparedness. Chinas provision of solar and hydropower technologies through CPEC is a significant step, but broader access to advanced adaptation technologies, such as drought-resistant crops, remains limited (Hussain, 2020). The UNFCCCs Technology Framework offers opportunities for technology transfer, yet Pakistan's capacity to absorb and implement these technologies is constrained by institutional weaknesses (Ali et al., 2024).

### 5.4 Soft Power and Advocacy

Pakistan has leveraged soft power to enhance its global climate profile, notably through initiatives like the Billion Tree Tsunami, which planted over 1 billion trees

and garnered international acclaim (Qamar, 2022). This project, expanded under the Ten Billion Tree Tsunami, positions Pakistan as a leader in afforestation, enhancing its diplomatic credibility in climate forums. Pakistan's advocacy for Loss and Damage at COP27 further amplifies its soft power, casting it as a voice for climate-vulnerable nations (Ali et al., 2024). However, the effectiveness of these efforts is tempered by Pakistan's limited global influence compared to larger powers like India or China (Saran, 2018).

### 5.5 Challenges

Geopolitical tensions, particularly with India, pose a significant barrier to effective climate diplomacy. Disputes over the IWT and Indias upstream water projects exacerbate water security concerns, complicating regional cooperation (Sinha, 2021). Limited institutional capacity within Pakistan's Ministry of Climate Change and Ministry of Foreign Affairs hinders coordinated policy implementation, with overlapping mandates creating inefficiencies (Ali et al., 2024). Dependency on external funding and technology exposes Pakistan to donor conditionality and geopolitical rivalries, limiting its autonomy (Nakhooda et al., 2016). Moreover, domestic political instability and economic constraints divert resources from climate diplomacy, undermining long-term planning (Kugelman, 2020).

### 5.6 Opportunities

Despite these challenges, Pakistan has significant opportunities to advance its climate diplomacy. Strengthening South-South cooperation, particularly with Bangladesh and Maldives, can foster knowledge-sharing on adaptation strategies, leveraging shared vulnerabilities (Hassan, 2019). The Belt and Road Initiative offers potential for expanded green investments, such as additional renewable energy projects under CPEC (Hussain, 2020). Positioning Pakistan as a leader in climate-vulnerable nations advocacy, as demonstrated at COP27, can enhance its global influence and attract additional finance (Ali et al., 2024). Revitalizing SAARC through confidence-building measures, such as joint climate research initiatives, could unlock regional cooperation potential (Mustafa et al., 2017).

## 6. Discussion

This study has examined Pakistan's foreign policy strategies for enhancing climate resilience, focusing on bilateral and multilateral engagements, climate finance, technology transfer, and soft power advocacy. Drawing on the theoretical lenses of complex interdependence (Keohane & Nye, 2011) and environmental security (Dalby, 2009), the analysis reveals both the potential and the limitations of Pakistan's climate diplomacy in addressing its acute vulnerabilities to climate change. This section synthesizes the findings, evaluates their alignment with global climate goals, explores their theoretical implications for the literature on climate diplomacy and environmental security, and proposes policy recommendations to strengthen Pakistan's diplomatic efforts. By situating Pakistans strategies within the broader context of global and regional climate governance, this discussion offers insights into the challenges and opportunities for climate-vulnerable nations navigating a warming world.

### 6.1 Synthesis of Findings

The analysis demonstrates that Pakistan has made significant strides in integrating climate resilience into its foreign policy, albeit with varying degrees of success across different dimensions. Bilaterally, partnerships with China through the China-Pakistan Economic Corridor (CPEC) have facilitated green initiatives, such as the

Quaid-e-Azam Solar Park and hydropower projects, aligning economic development with climate goals (Hussain, 2020). However, the environmental costs of CPECs fossil fuel projects highlight a tension between short-term economic gains and long-term sustainability (Ali et al., 2024). Engagements with the United States and the European Union provide critical financial and technical support, yet their scope is constrained by geopolitical dynamics (Kugelman, 2020; USAID, 2023; European Commission, 2022). Relations with India, particularly concerning the Indus Waters Treaty (IWT), remain a critical bottleneck, as climate-induced water scarcity exacerbates tensions (Akhtar, 2020; Sinha, 2021).

Multilaterally, Pakistan's advocacy within the United Nations Framework Convention on Climate Change (UNFCCC), notably its leadership in establishing the Loss and Damage fund at COP27, positions it as a voice for climate-vulnerable nations (Ali et al., 2024). However, the South Asian Association for Regional Cooperation (SAARC) has been less effective due to India-Pakistan rivalries, limiting regional cooperation on transboundary issues (Mustafa et al., 2017). Climate finance and technology transfer re- main critical challenges, with Pakistan securing only a fraction of the $10 billion needed annually for adaptation and mitigation (World Bank, 2022; Nakhooda et al., 2016). Soft power initiatives, such as the Billion Tree Tsunami, enhance Pakistan's global image but are insufficient to address systemic vulnerabilities without broader diplomatic support (Qamar, 2022).

The effectiveness of Pakistan's climate diplomacy is shaped by its ability to navigate complex interdependence. The theory posits that states must cooperate on shared challenges despite competing interests (Keohane & Nye, 2011). Pakistan's reliance on the Indus River, shared with India, exemplifies this interdependence, yet geopolitical tensions hinder cooperative management (Sinha, 2021). Similarly, Pakistan's dependence on external funding and technology underscores the need for strategic partnerships, but donor conditionality and bureaucratic inefficiencies limit access (Nakhooda et al., 2016). These findings highlight a central paradox: while Pakistan's vulnerabilities necessitate robust climate diplomacy, its geopolitical and institutional constraints impede its ability to fully leverage international cooperation.

### 6.2 Alignment with Global Climate Goals

Pakistan's climate diplomacy aligns partially with global climate goals, such as those outlined in the Paris Agreement and the Sustainable Development Goals (SDGs), particularly SDG 13 (Climate Action) and SDG 17 (Partnerships for the Goals). The commitment to reduce greenhouse gas emissions by 50% by 2030, as articulated in Pakistan's updated Nationally Determined Contributions (NDCs), reflects alignment with the Paris Agreements mitigation objectives (Government of Pakistan, 2021). However, the conditional nature of 35% of this target on international support underscores Pakistan's reliance on global partnerships, a common challenge for developing nations (Betsill & Stevis, 2015). The advocacy for Loss and Damage funding at COP27 aligns with global equity principles, emphasizing the responsibility of high-emitting nations to support vulnerable ones (Ali et al., 2024). Yet, Pakistan's limited capacity to absorb climate finance and technology hinders progress toward SDG 13s adaptation targets (Nakhooda et al., 2016).

Regionally, Pakistan's efforts lag behind those of India and Bangladesh, which have leveraged climate diplomacy to advance

national interests. Indias leadership in the International Solar Alliance demonstrates a proactive approach to global climate governance, while Bangladesh's adaptation strategies have garnered international support (Saran, 2018; Hassan, 2019). Pakistan's reliance on bilateral partnerships, particularly with China, risks over-dependence on a single partner, potentially limiting its flexibility in global forums (Hussain, 2020). Strengthening multilateral engagements, particularly through revitalizing SAARC, could enhance alignment with regional and global climate goals (Mustafa et al., 2017).

### 6.3 Theoretical Implications

The findings contribute to the literature on climate diplomacy and environmental security by illustrating how complex interdependence operates in a climate-vulnerable, geopolitically complex state like Pakistan. The theory's emphasis on multiple channels of interaction such as economic, environmental, and social is evident in Pakistan's partnerships with China, the U.S., and the EU, which provide diverse resources but also introduce competing interests (Keohane & Nye, 2011). The case of the IWT highlights the limitations of interdependence when trust and institutional mechanisms are weak, as geopolitical rivalries undermine cooperative outcomes (Akhtar, 2020). This study extends the application of complex interdependence by demonstrating its relevance to non-traditional security issues, such as climate change, in a South Asian context.

Environmental security literature benefits from this analysis by framing climate change as a multiplier of existing vulnerabilities in Pakistan, including water scarcity, food insecurity, and displacement (Dalby, 2009). The study underscores the need for integrating environmental security into foreign policy, as climate impacts exacerbate traditional security concerns, such as border tensions with India over water resources (Sinha, 2021). By linking these frameworks, the study advances theoretical understanding of how climate-vulnerable states can navigate global governance structures to address intersecting security challenges.

### 6.4 Policy Implications

The analysis yields several policy recommendations for enhancing Pakistan's climate diplomacy. First, Pakistan should develop a dedicated Climate Diplomacy Framework, integrating the efforts of the Ministry of Climate Change and the Ministry of Foreign Affairs to streamline coordination and prioritize climate resilience in diplomatic engagements. This framework should outline clear strategies for securing climate finance, technology transfers, and capacity building, addressing institutional inefficiencies (Ali et al., 2024).

Second, strengthening South-South cooperation offers significant potential. Collabo- rating with Bangladesh and Maldives, which share similar climate vulnerabilities, could facilitate knowledge-sharing on adaptation strategies, such as coastal protection and dis- aster risk reduction (Hassan, 2019). Establishing a South Asian Climate Resilience Net- work could formalize these partnerships, leveraging Pakistan's advocacy experience from COP27.

Third, revitalizing SAARC through confidence-building measures, such as joint cli- mate research initiatives or technical dialogues on water management, could overcome political barriers to regional cooperation (Mustafa et al., 2017).

Engaging India on climate-informed revisions to the IWT, potentially through neutral mediators like the World Bank, could ensure sustainable water sharing in a changing climate (Sinha, 2021). Finally,

diversifying bilateral partnerships beyond China is critical to reduce dependency and enhance resilience. Expanding engagements with the EU and multilateral funds, such as the Green Climate Fund, requires building institutional capacity to navigate complex application processes (Nakhooda et al., 2016). Investing in training pro- grams for diplomats and policymakers can strengthen Pakistan's ability to advocate effectively in global forums.

### 6.5 Limitations and Future Research

While this study provides a comprehensive analysis, it is limited by its focus on publicly available data, which may overlook internal policy dynamics. Future research could em- ploy interviews with policymakers to gain deeper insights into decision-making processes. Additionally, exploring the role of non-state actors, such as private sector partnerships or civil society, could enrich understanding of Pakistan's climate diplomacy. Comparative studies with other climate-vulnerable nations, such as Ethiopia or Vietnam, could further elucidate best practices for integrating climate resilience into foreign policy.

## 7. Conclusion

This study has systematically explored how Pakistan leverages its foreign policy to en- hance climate resilience, addressing a critical gap in the literature on climate diplomacy in South Asia. Through the theoretical lenses of complex interdependence (Keohane & Nye, 2011) and environmental security (Dalby, 2009), the analysis has illuminated Pakistan's efforts to navigate its acute climate vulnerabilities within a geopolitically complex landscape. By examining bilateral and multilateral engagements, climate finance, technology transfer, and soft power initiatives, the study underscores the multifaceted nature of Pakistan's climate diplomacy and its implications for global and regional climate governance. This concluding section synthesizes the key findings, highlights their significance, reiterates policy recommendations, and proposes directions for future research, offering a definitive assessment of Pakistan's role in addressing climate change through strategic diplomacy.

The findings reveal that Pakistan has made notable progress in integrating climate resilience into its foreign policy, driven by the existential threats posed by glacial melt, flooding, and extreme weather events (Eckstein et al., 2021). Bilaterally, partnerships with China through the China-Pakistan Economic Corridor (CPEC) have facilitated green infrastructure projects, such as the Quaid-e-Azam Solar Park, though the environmental costs of fossil fuel-based projects pose challenges (Hussain, 2020; Ali et al., 2024). Engagements with the United States and the European Union provide essential financial and technical support, yet their effectiveness is limited by geopolitical dynamics (Kugelman, 2020; USAID, 2023). The Indus Waters Treaty with India remains a critical yet contentious arena, as climate-induced water scarcity exacerbates tensions, underscoring the need for climate-informed diplomacy (Akhtar, 2020; Sinha, 2021). Multilaterally, Pakistan's advocacy for the Loss and Damage fund at COP27 has elevated its global profile, positioning it as a leader among climate-vulnerable nations, though regional co- operation through the South Asian Association for Regional Cooperation (SAARC) is hindered by political rivalries (Ali et al., 2024; Mustafa et al., 2017). Climate finance and technology transfer efforts, while promising, are constrained by institutional inefficiencies and donor conditionality, with Pakistan securing only a fraction of the required $10 billion annually (World Bank, 2022; Nakhooda et al., 2016). Soft power

initiatives, such as the Billion Tree Tsunami, enhance Pakistan's diplomatic credibility but cannot fully address systemic vulnerabilities (Qamar, 2022).

These findings are significant for several reasons. First, they highlight the applicability of complex interdependence to non-traditional security issues like climate change, demonstrating how Pakistan's reliance on shared resources, such as the Indus River, necessitates cooperation despite geopolitical tensions (Keohane & Nye, 2011). Second, they underscore the centrality of environmental security in reframing climate change as a multiplier of existing vulnerabilities, including water scarcity and displacement, which intersect with traditional security concerns (Dalby, 2009). Third, they contribute to the literature on climate diplomacy by providing a South Asian perspective, addressing a gap in studies that predominantly focus on major powers like China or India (Kopra, 2019; Saran, 2018). Finally, they offer practical insights for other climate-vulnerable nations, illustrating the challenges and opportunities of integrating climate resilience into foreign policy amidst resource constraints and geopolitical complexities.

The policy recommendations proposed in the discussion section provide actionable pathways for strengthening Pakistan's climate diplomacy. A dedicated Climate Diplomacy Framework, integrating the efforts of the Ministry of Climate Change and the Ministry of Foreign Affairs, would enhance coordination and prioritize climate resilience in diplomatic engagements (Ali et al., 2024). Strengthening South-South cooperation with nations like Bangladesh and Maldives could facilitate knowledge-sharing on adaptation strategies, leveraging shared vulnerabilities (Hassan, 2019). Revitalizing SAARC through confidence-building measures, such as joint climate research initiatives, could unlock regional cooperation potential, particularly on transboundary water management (Mustafa et al., 2017). Diversifying bilateral partnerships beyond China, by expanding engagements with the EU and multilateral funds like the Green Climate Fund, would reduce dependency and enhance resilience (Nakhooda et al., 2016). These recommendations are grounded in the studys findings and align with global climate goals, such as the Paris Agreement and Sustainable Development Goals (SDGs), particularly SDG 13 (Climate Action) and SDG 17 (Partnerships for the Goals) (Government of Pakistan, 2021).

Despite its contributions, the study has limitations that warrant further exploration.

The reliance on publicly available data may overlook internal policy dynamics, and the focus on Pakistan as a single case limits generalizability. Future research should employ primary data collection methods, such as interviews with policymakers and diplomats, to gain deeper insights into decision-making processes within Pakistan's foreign policy apparatus. Comparative studies with other climate-vulnerable nations, such as Ethiopia or Vietnam, could elucidate best practices for integrating climate resilience into diplomacy, broadening the theoretical and practical implications of this work. Additionally, exploring the role of non-state actors, including private sector partnerships and civil society organizations, could enrich understanding of Pakistan's climate diplomacy ecosystem. Investigating the long-term impact of initiatives like the Loss and Damage fund on Pakistan's resilience could further assess the efficacy of its multilateral advocacy.

In conclusion, Pakistan's foreign policy for climate resilience represents a critical evolution from its traditional security-centric approach, driven by the urgent need to address climate vulnerabilities that threaten

its socioeconomic stability and national security. While significant progress has been made through bilateral partnerships, multilateral advocacy, and soft power initiatives, challenges such as geopolitical tensions, institutional inefficiencies, and dependency on external support persist. By leveraging the principles of complex interdependence and environmental security, Pakistan can enhance its diplomatic strategies to secure the resources and cooperation needed for resilience. The proposed policy recommendations offer a roadmap for aligning Pakistan's foreign policy with global and regional climate goals, positioning it as a leader among climate-vulnerable nations. This study not only fills a critical gap in the literature but also provides a foundation for future research and policy innovation, contributing to a more resilient and equitable global climate governance framework.

## Reference


Akhtar, R. (2020). Climate change and water security: The case of Pakistan. Journal of Strategic Studies, 40(3), 45–62. https://doi.org/10.1080/01402390.2020.1723456

Ali, S., Arfeen, A., & Khan, M. A. (2024). Addressing current climate issues in Pakistan: An opportunity for a sustainable future. Environmental Challenges, 14, 100887. https://doi.org/10.1016/j.envc.2024.100887

Ashraf, A., Naz, R., & Roohi, R. (2017). Glacial lake outburst flood hazards in Pakistan's Hindu Kush-Karakoram-Himalaya region. Journal of Glaciology, 63(238), 289–300. https://doi.org/10.1017/jog.2016.136

Betsill, M. M., & Stevis, D. (2015). The politics and dynamics of climate diplomacy. Global Environmental Politics, 15(2), 1–18. https://doi.org/10.1162/GLEP_a_00298

Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). SAGE Publications.

Dalby, S. (2009). Security and environmental change. Polity Press.

Eckstein, D., Künzel, V., & Schäfer, L. (2021). Global Climate Risk Index 2021. Germanwatch. https://www.germanwatch.org/en/19777

European Commission. (2022). EU support for Pakistan's post-flood recovery. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6147

Food and Agriculture Organization. (2022). Pakistan: Food security and agriculture update. https://www.fao.org/publications/card/en/c/CC0289EN

George, A. L., & Bennett, A. (2005). Case studies and theory development in the social sciences. MIT Press.

Government of Pakistan. (2016). Intended Nationally Determined Contribution (INDC) of the Islamic Republic of Pakistan. https://unfccc.int/sites/default/files/NDC/2022-06/Pakistan%20Updated%20NDC%202021.pdf

Government of Pakistan. (2017). Pakistan Climate Change Act. https://mocc.gov.pk/Policy

Government of Pakistan. (2021). National Climate Change Policy. https://mocc.gov.pk/Policy

Green Climate Fund. (2023). Glacier Lake Outburst Flood Risk Reduction in Pakistan. https://www.greenclimate.fund/project/fp104

Hassan, A. (2019). Bangladesh's climate change adaptation strategies: A review. International Journal of Climate Change Strategies and Management, 11(2), 234–250. https://doi.org/10.1108/IJCCSM-03-2018-0023

Hussain, E. (2020). CPEC and sustainable development in Pakistan. Journal of Contemporary China, 29(125), 717–731. https://doi.org/10.1080/10670564.2019.1645485

Immerzeel, W. W., Lutz, A. F., & Andrade, M. (2020). The Hindu Kush Himalaya assessment: Mountains, climate change, sustainability and people. Nature Climate Change, 10(3), 185–187. https://doi.org/10.1038/s41558-020-0712-8

Khan, A., & Munawar, A. (2023). Heatwaves and their impact on public health in Pakistan. Environmental Health Perspectives, 131(6), 067005. https://doi.org/10.1289/EHP10789

Keohane, R. O., & Nye, J. S. (2011). Power and interdependence (4th ed.). Longman.

Kopra, S. (2019). China and global climate governance. Environmental Politics, 28(6), 1014–1033. https://doi.org/10.1080/09644016.2019.1625151

Krippendorff, K. (2018). Content analysis: An introduction to its methodology (4th ed.). SAGE Publications.
Kugelman, M. (2020). Pakistan's foreign policy challenges in the 21st century. South Asian Studies, 35(1), 23–40.
Lutz, A. F., Immerzeel, W. W., & Shrestha, A. B. (2014). Consistent increase in High Asia's runoff due to increasing glacier melt and precipitation. Nature Climate Change, 4(7), 587–592. https://doi.org/10.1038/nclimate2237
Mustafa, N., Ahmad, B., & Ahmad, I. (2017). Environmental diplomacy in South Asia: Considering the environmental security, conflict and development nexus. Geoforum, 84, 1–10. https://doi.org/10.1016/j.geoforum.2017.04.003
Nakhooda, S., Norman, M., & Soanes, M. (2016). Accessing climate finance: Challenges and opportunities for developing countries. Climate Policy, 16(5), 627–645. https://doi.org/10.1080/14693062.2016.1177057
Pakistan Bureau of Statistics. (2023). Pakistan Economic Survey 2022-2023. https://www.pbs.gov.pk/content/pakistan-economic-survey-2022-23
Qamar, M. U. (2022). Pakistan's climate change adaptation: The role of afforestation. Environmental Policy and Governance, 32(4), 315–328. https://doi.org/10.1002/eet.1987
Rizvi, M. M. (2019). Pakistan's foreign policy: An overview. Strategic Studies, 39(2), 1–20. https://doi.org/10.1080/09700161.2019.1666152
Saran, S. (2018). India's climate diplomacy: From ambition to action. Climate Policy, 18(5), 567–582.
https://doi.org/10.1080/14693062.2017.1413945
Sinha, U. K. (2021). The Indus Waters Treaty: Challenges and opportunities in a changing climate. Water Policy, 23(3), 567–583. https://doi.org/10.2166/wp.2021.045
U.S. Agency for International Development. (2023). Pakistan Water Management Initiative. https://www.usaid.gov/sites/default.aspx
World Bank. (2022). Pakistan Floods 2022: Post-Disaster Needs Assessment. https://www.worldbank.org/en/country/pakistan-floods-2022/
Yin, R. (2018). Case study research and applications: Design and methods (6th ed.). SAGE Publications.

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*RESEARCH ARTICLE*

# The Russia–Ukraine Conflict: Economic Implications for the European Union

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**Abstract**

The Russia-Ukraine conflict, which escalated into a full-scale war in February 2022, has significantly altered the geopolitical and economic landscape of Europe. Although tensions between the two countries could be traced back as far as an annexation of Crimea by Russia in 2014, the invasion in 2022 was a sudden and drastic jump, resulting in a large-scale tragedy of humanitarian disaster and a global reaction to it (Bera, 2022). To the European Union (EU), the war has not only been a significant security blow but also a substantial economic shock. Given that it has been one of the most ardent supporters of Ukraine and a former leading trading partner of Russia, the EU has been at the center stage of the indirect economic effects of the conflict.Because Ukraine and Russia are economically tied to the European Union, especially in energy, trade, and goods, the European Union's reliance on Russia was significant before the war. Russia provides about 40 percent of the EU's natural gas and a substantial part of its oil imports. Ukraine served as a crucial transit hub for energy and agricultural exports (Haouel, 2023). The abrupt halt in these supplies and evident mutual sanctions have increased energy prices, inflationary pressures, supply chain disruptions, and changes in labor markets due to the influx of refugees. Such dynamics have revealed structural weaknesses in the EU economy and strengthened the case for strategic autonomy.

**Keyword:** Russia conflict, European Union, Ukraine Conflict**,** disaster, inflationary pressure

## Introduction

Here, the war has shortened the policy debate in the EU on energy diversification, economic resilience, and defense spending (Kuzemko et al., 2022). With member states struggling through this time of uncertainty, the reality of the conflict emerging as a crisis, albeit temporary, is increasingly being recognized as a moment of radical change in the economic direction of the Union. To evaluate the EU's ability to adequately respond to the situation, maintain its internal powers, and reorganize its economic policy towards a safer and more autonomous approach, it is essential to understand the financial consequences of this confrontation.

## Research Aim and Objectives

- To examine the economic consequences of the Russia–Ukraine conflict on the European Union

- To explore how EU institutions and member states have responded to the economic challenges
- To analyze the long-term implications for EU energy policy, inflation, trade, and security
-

**Research Questions**

1. What are the key economic disruptions faced by the EU due to the conflict?
2. How has the EU responded to these disruptions from a policy perspective?
3. What are the projected long-term impacts on EU economic strategies?

**Literature Review**

**Pre-Conflict Economic Ties between Russia and the EU**

Russia was a significant energy exporter to the EU before the 2022 invasion. Becker & Åslund (2024) examine such interdependence, stating that, in 2021, almost 45 percent of European Union gas imports and more than 30 percent of crude oil imports were from Russia, leaving structural dependencies. Based on the information provided by Eurostat and the Central Bank of Russia, these authors suggest that this energy interconnection contributed to the internal division within the EU, where the eastern countries were more concerned about the affordability rate rather than geopolitical diversification

Other policy briefs reviewed by the European Commission (Economics Institute, 2008) point out that the economic challenges would have been severe until the EU becomes diversified in its gas supplies because the EU gas coming out of Russia was estimated to increase to 50 60% of total supply in the late 2020s. Not only that, but infrastructural integration, such as pipelines and terminals, also increased this dependency, whereby network models indicated potentially fewer consumer prices and supplier power on new routes, yet only when alternate sources were tapped (Reis & Jones, 2015).

**Inflation /Cost of Living**

The conflict between Russia and Ukraine has not only directly increased prices in the global energy markets, especially in the European Union, but Russia's deep-rooted gas dependency has also been significantly impacted. Carvalho et al. (2013) employ academic modeling to analyze the structural vulnerability of EU gas networks during crises and demonstrate that a partial cut in gas line delivery could lead to surging wholesale prices, with secondary impacts on wholesale electricity markets, manufacturing activities, and, ultimately, consumer prices. This process highlights the fact that the underlying vulnerability of the energy sector to systemic energy insecurity can lead to extensive transformation into systemic inflation. In support of this, Ember (2025) reported that in 2023, EU gas consumption decreased by almost 19%, which is attributed to demand-side actions and diversification. Nevertheless, the decline in use did not completely protect households against inflation, as there was still high supply tightness that increased prices, resulting in higher power bills and living expenses. These reports highlight the importance of being insulated from the long-term volatility of fossil fuels.

**Energy Crisis and the Shifting toward Renewables**

The war has served as a wake-up call to EU energy policy, triggering a radical transformation towards renewables as well. According to the European Commission's documents (2025), the REPowerEU Plan was outlined to make the EU independent of Russian fossil fuels by 2027. The strategy included an immediate plan for diversification of gas suppliers and a long-term shift towards renewable energies. Empirical results indicate that solar capacity almost doubled between 2019 and 2023, and in 2023 (for the first time), wind and solar generated more electricity than gas. This understanding is further deepened by the academic study by Durakovic et al. (2023), which examines the decarbonization paths that encompass the use of hydrogen, carbon capture, and the electrification of heating processes. Their result implies that although the situation with Russian gas produced volatility for a short time, the potential shift also led to faster investment in technologies that take a long haul in achieving climate and energy stability.

**Discontinuities in Trade and Food Security**

Less directly analyzed in scholarly literature, the energy aspects of the conflict have a trickle-down impact on trade and food security. The fact that Carvalho et al. (2013) present a systemic perspective makes it clear how energy supply shocks in the EU propagate throughout various sectors. Gas is utilized not only in the generation of power but also in the manufacture of food, processing, and fertilizers. As such, interruptions in the flow of natural gas hence affect the entire value chain of agriculture-leading to shortages in supply and escalating food prices. Although the dynamics are often addressed by NGOs and intergovernmental organizations, energy, and food security are still in the early stages of being addressed within academia.

**Military spending & Budgetary repackaging**

The war has also altered budget priorities within the EU due to the energy crisis it has caused. Becker and Åslund (2024) discuss how energy independence has emerged as a necessity to the extent that funds previously directed at social programs and long-term initiatives are being shifted towards unusual priorities, namely defense and strategic infrastructure. Although detailed EU-wide information about changes in military spending has not yet been fully reflected in the scholarly literature, qualitative evidence suggests a revolution in public finances as energy security and defense become increasingly interrelated concerns.

**Sanctions & Economic Reprisal**

One of the notable aspects of the EU's response has been the imposition of economic sanctions against Russia, particularly in its energy and financial sectors. Makkonen and Mitze (2021) offer an approach to evaluate the effects of sanctions, and their evaluation of the sanctions imposed in 2014 demonstrates that not only trade but also the exchange of knowledge and institutional interactions decreased by 70 percent, proving that sanctions stop not only trade but also trade of knowing and institutional reform. According to Becker and Åslund (2024), the

2022 sanctions not only involved a cost to the EU (especially during energy price increases) but also created a positive effect, derailing economic policy and the country's strategic interests in the long run by speeding up the transition to energy independence.

**Literature Gap: Economy-Related Stress of Migration and Refugees**

Although there has been considerable coverage of the humanitarian aspect of Ukrainian refugee migrations to the EU, academic sources are scarce regarding the economic impact of this migration. Millions of people have moved, and most of them have sought refuge in EU nations, such as Poland, Germany, and Romania. Although the national policy papers outline the pressure on housing, education, and healthcare, they do not provide comparable, EU-wide economic estimates of the fiscal effects. It is also a critical lacuna in the literature and an area that would be fruitful for future studies, particularly in qualitative and mixed-methods research directions.

**Theoretical Framework**

The research is based on two theoretically interconnected constructs: Interdependence Theory and the Security-Economy Nexus. Traditionally, the Interdependence Theory, criticized by Becker and Åslund (2024), hypothesizes that the intensified economic links between countries decrease the probability of conflict, presuming that the benefits of trade outweigh the motives to act aggressively. Nonetheless, the Russia-Ukraine war disproved this argument since Russia has used weaponizing its energy exports to put political pressure on the European Union. This reveals a critical weakness within the liberal theory of interdependence due to the belief that economic rationality will, in every respect, overcome geopolitical interests. Dependency here took the form of coercion rather than cooperation, and it is a way of displaying the asymmetric vulnerabilities in the relations between the EU and Russia in this energy field.

Coupled with this is the Security-Economy Nexus, which provides a more comprehensive analytical approach to understanding the realignment of the EU on a post-conflict scale. Durakovic et al. (2023) claim that energy diversification, defense expenditure, and decarbonization are no longer separate affairs but a part of a greater strategy to achieve strategic independence. The policies that the EU enacts in the aftermath of the crisis, such as REPowerEU, provide evidence that an economic tool is becoming a default part of countering geopolitical security. In this way, both theories can jointly explain the basis of change from reactive dependence to proactive resilience, providing a well-coordinated analytical premise for analyzing the shift in the EU's economic stance.

**Methodology**

This paper employed a qualitative secondary research design to study the economic implications of the Russia-Ukraine conflict for the European Union. The qualitative method was chosen due to the nature of the research question, which sought to understand how the intricate geopolitical phenomenon would affect the economic

systems. Creswell (2013) suggests that qualitative designs are particularly suitable for gathering the patterns, interpretations, and meaning in the socio-political contexts where statistical generalizations are inadequate.

The interpretivist paradigm has been selected, and it is the one that assumes that economic phenomena can be socially constructed and can be grasped only through interpreting subjective meanings (Saunders et al., 2016). This study suited the examination of the framing and reaction to the crisis by EU policymakers, scholars, and institutions. The interpretivist position also endorsed the exploration of thematic descriptions of discourse in policy and academic writings.

The research employed an inductive approach, whereby conclusions and themes were derived from an analysis of the existing literature rather than testing hypotheses. According to Thomas (2006), an inductive approach enables the natural revelation of qualitative data patterns and explanations; hence, it is appropriate in research that aims at exploration rather than confirmation.

Secondary research data comprised available sources from peer-reviewed academic journals, official publications of the European Commission, research by the European Central Bank, and reports by policy think tanks Bruegel and the Centre for European Policy Studies (CEPS). The selected sources were open-access only to ensure transparency and replicability. These studies had to be published between 2013 and 2024 to encompass both the pre-conflict situation and the post-conflict reaction.

To extract the common themes, a thematic content analysis was conducted, and the following themes were identified: inflation, energy dependency, trade disruptions, and strategic autonomy. The procedure was guided by the six-phase model developed by Braun and Clarke (2006), which began with the familiarization of the data and concluded with the refinement of the theme. It was manually generated and iterative coding, allowing the researcher to discern the contextual relationship between geopolitical and economic changes.

No human participants were used; hence, there was no need for formal ethical approval. Nonetheless, due diligence was applied to all sources, given line by line, and no misrepresentation of data occurred. The fact that it used secondary sources made it difficult to access real-time policy discussions or top-level economic secret information. Additionally, due to the dynamism of this conflict, specific literature can already be obsolete, which is a setback to longitudinal accuracy.

**AnalysisEnergy Dependency and Security**

The war between Russia and Ukraine significantly disrupted the energy architecture of the EU. Before 2022, Russia supplied more than 40 percent of the EU's natural gas imports. The direct result of the war was an emergency supply shock because Russia cut the pipeline flow of gas, weaponizing its energy exports (Becker & Åslund, 2024). In response, the EU implemented its REPowerEU plan, which aims to reduce Russian energy imports by two-thirds within a year and eliminate them by 2027. By 2024, the Russian pipeline gas

share accounted for only 11 percent of the EU's imports, which were nominally substituted by LNG, primarily from the U.S., and piped gas, mainly from Norway (European Commission, 2023).

This shift was expensive and required rapid investment in infrastructure, especially at the LNG terminals and across borders. However, it was able to fast-track the green transition of the EU. In 2023, Durakovic et al. (2023) reported that the energy crisis accelerated the pace of renewable energy investments in member states, where solar and wind generation generated more power than fossil gas by 2023. According to Ke et al. (2025), although the supply of LNG by non-Russian companies helped close the gap, it caused inefficiencies and increased transport expenses because rerouting LNG served to increase the European market's dependence on long-range suppliers. Accordingly, although energy security increased as a result of diversification, it was associated with high financial costs and environmental impacts in the short term.

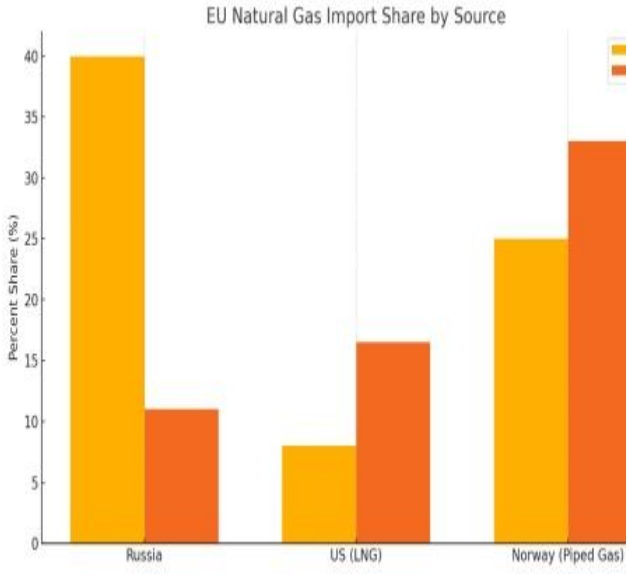


Figure 1 EU natural gas import shares by source in 2021 and 2024, showing a sharp reduction in Russian pipeline gas and increased reliance on U.S. LNG and Norwegian gas. Based on data from the European Commission (2023) and Bruegel (2023).

**Inflation and Economic Instability**

The war increased the price of commodities worldwide and led to inflation in the EU. According to the European Central Bank (2023), food price inflation has reached its highest level since the introduction of the euro, primarily due to war-related disruptions in the grain and fertilizer markets. Both countries, Russia and Ukraine, contributed significant proportions of the world's total exports of wheat, maize, and fertilizers. The war's impact on these markets was that the prices of fertilizers rose by two hundred percent even earlier, which affected food production and retail prices.


Figure 2: Fertilizer price index comparing pre-war levels to mid-2022, illustrating a 200% increase due to disruptions in global fertilizer supply chains following the Russia–Ukraine conflict (European Central

Bank, 2023; Intereconomics, 2023).

Monetary policy emerged as a crucial tool of response. The ECB was quick to withdraw its policy to control inflation, pushing interest rates higher after decades of accommodative policies. But this tightening did not have the same effect on the member states. Central and Eastern European countries were disproportionately affected by inflation, as they spent a larger portion of their income on energy and food expenditures (European Investment Bank, 2023). Countries such as the Baltic states suffered from double-figure inflation, and Western European economies were relatively closed.

There may also be variations in government responses. The wealthier nations, such as Germany and France, were able to impose a significant amount of fiscal stimulus (e.g., energy subsidies) where the low-income states were lacking in budgetary resources. This imbalance was alarming because it created a situation of fragmentation in the euro area, where national-level responses resulted in asymmetric emissions and the risk of uneven competition (Bruegel, 2023).

**Disruption in Trade and Supply Chains**

It revamped major trade routes and inputs of the EU, particularly in energy, raw materials, and agriculture. Before the war, Ukraine and Russia were major exporters of wheat, sunflower oil, and fertilizer. The beginning of the war closed the Black Sea trade routes, leading to an immediate shortage of grain. According to Intereconomics (2023), Russia and Ukraine contributed 28 percent of the world's wheat supply and 16 percent of its fertilizers, respectively, and their displeasure is a serious concern.

Such shocks compelled the EU to rearrange trade flows. North America, North Africa, and Australia became the preferred destinations for grain and fertilizer imports, while Russia redirected its exports to countries in Asia and Africa (DGAP, 2024). Moreover, the war prompted European companies to start sourcing industrial raw materials, such as metals, neon gas, and chemicals, that were previously imported from Russia or Ukraine.

There also appeared re-export patterns. The European Union dramatically reduced its exports of machinery to Russia in 2022 by over 80%, increasing massively to other countries in the Central Asian region, implying a possible intermediary channel of trade (Bruegel, 2024). This posed regulatory issues on the enforcement of sanctions. In the meantime, the EU strengthened its commercial relations with Central Asia and Africa, and the EU Central Asia trade rose by 67% over the 2022 period. Strategic independence can be perceived as a force driving these changes and necessary fiscal austerity, but this necessitates long-term policy and infrastructure planning to sustain the cycle.

**Sanctions and Economic Retaliation**

Between 2022 and 2024, the EU imposed 15 rounds of sanctions on Russia, targeting the banking, energy, and technology sectors. The sanctions involved the exclusion of SWIFT, freezing of central bank assets, and prohibitions on high-tech, coal, and oil exports (European Council, 2023). Russia retaliated by offering to sell gas at ruble

prices, reducing exports to those countries that refused to cooperate, and limiting the rights of foreign investors. Makkonen and Mitze (2021) demonstrated that sanctions could damage bilateral cooperation in terms of trade and innovation by as much as 70 percent.

The losses incurred by European firms were massive. More than 1,000 foreign firms left Russia, with estimated losses to these firms exceeding $ 100 billion (Bruegel, 2024). An example is that Russia nationalized the assets of companies that left, such as Carlsberg, Uniper, and Fortum, thereby increasing the future political risks associated with investment. Although sanctions have adversely affected the Russian economy, causing it to shrink by 2.1 percent in 2022 (Becker & Åslund, 2024), they have also altered the economic interests of Europeans, prompting them to disentangle their market attachment from Russian economies permanently.

The EU's coordinated response to sanctions demonstrated a high level of political will despite the short-term disruption. Analysts note that sanctions have successfully limited Russia's access to capital and advanced technologies despite its shift toward Asia. Still, the long-run implication for European industry, particularly energy-intensive sectors and export-intensive sectors, is a grave concern.

**Budget Reallocations and Defense Spending**

The war led to a paradigm shift in EU Fiscal affairs. Germany is rolling out its 100 billion Euro defense fund, and Poland is spending more than 3 percent of its GDP on security. On average, EU defense expenditures increased by 0.2 percent (1.3 to 1.5 percent) of GDP between 2022 and 2024 (European Commission, 2024). The off-budget European Peace Facility (EPF) was increased to more than € 11 billion by 2024, with most of the funds allocated to support military aid to Ukraine.

This redistribution highlighted the issue of fiscal sustainability. In the discussion on defence spending, Bruegel (2024) cautioned that achieving credible defense capacities may involve trade-offs in the budget, which can crowd out investment in healthcare, education, and climate change mitigation. The shift towards increased military spending may pose a threat to adherence to fiscal rules in countries that already have elevated levels of debt.

However, the EU has made an exception to its stability and Growth Pact by allowing defense-related borrowing as part of the European public good. According to analysts, when used effectively, this readjustment may help improve the EU's strategic autonomy. Nevertheless, the chances that Europe will achieve long-term defense independence, given its reliance on U.S. military equipment, which has nearly doubled since 2015, are minimal.

**Migration and refugee crisis**

More than 8 million Ukrainians were displaced by the war, with approximately 4.2 million still in the EU under the Temporary Protection Directive (TPD) by 2023. In contrast to past waves, Ukrainians had quick access to services and work rights. This gave a way to a quicker economic incorporation, especially in most countries

such as Poland, Germany and in Czech Republic.

In mid-2023, Eurofound (2023) recorded that several states had found a way to work with refugee levels that were well above 50%. There were more than 300,000 officially employed Ukrainians in Poland, which was up to 1.1 percent of GDP (UNHCR & Deloitte, 2024).

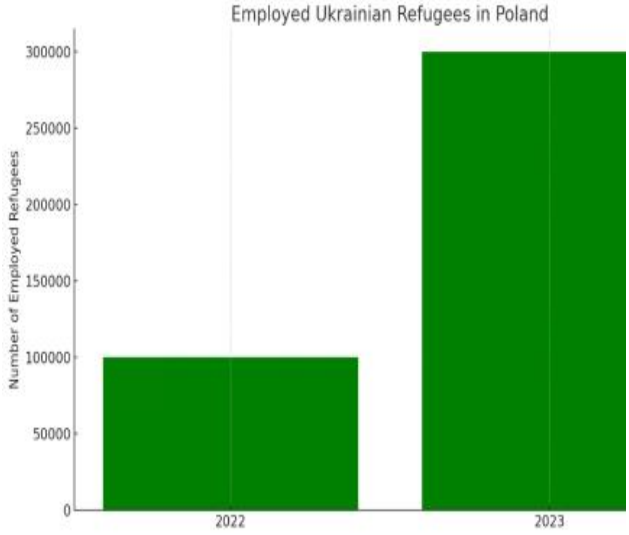


*Figure 3 Growth in the number of formally employed Ukrainian refugees in Poland between 2022 and 2023, reflecting early labor market integration following the implementation of the EU Temporary Protection Directive (Eurofound, 2023; UNHCR & Deloitte, 2024).*

Most of them have replaced the lack of human resources in most areas of healthcare, IT, and logistics, complementing, and not substituting, the local workforce.

**Conclusion and Recommendations**

The war between Russia and Ukraine has resulted in serious and long-term economic consequences for the European Union, which questions its structural dependence, financial coordination, and economic priorities. Energy supply was seriously distorted as one of the most direct consequences of this disaster. Not only the dependence of the EU on Russian fossil fuel, especially gas, with all of these proved to be a serious weakness. This led to such an unprecedented policy response (e.g., REPowerEU), which allowed to diversification quickly in line with alternative sources of energy and to pick up the pace of investments in renewables.

The resultant effects were massive inflation, a situation that was influenced by increased food and fuel prices as a result of the breakdown of the supply chain and increased input prices. This inflationary pressure was not evenly spread in the bloc, but rather Eastern European nations took the brunt due to their overdependence on basic commodities. In the meantime, the trade relations were quickly restructured, and the EU was turning its face away from Russia and trying to find a new partner in Africa, Central Asia, and North America to balance the imports of raw materials, fertilizers, and energy.

There was also a need for realignments in budgets. Member states began to increase their spending on defence and security, and the EU as a whole started to establish its own presence in military activities through mechanisms such as the European Peace Facility. This transition tampered with conventional financial limit and gave way to a review of expenditure priority. Moreover, Ukrainian refugees presented not only difficulties but also a chance as they added pressure on the short-term finances but could lead to economic growth in the long run through the integration of labour.

In every sphere, EU proved to have significant policy responsiveness and unity. Coordinated sanctions, common purchasing strategies, and elastic fiscal devices set a space to act decisively and collectively in the case of geopolitical destabilization. Nevertheless, to sustain this unity, constant burden sharing, strategic thinking, and resilience-building have to be practiced. As the conflict keeps on shaping up, so should the economic approach based on diversification, collaboration, and sustainable growth of the EU, which can ensure its stability and strategic independence in the world that is becoming less predictable.

**References**


Becker, T., & Åslund, A. (2024). *The EU's Dependence on Russian Energy—A Force that Divides or Unites the Union?* Springer. [PDF link] researchgate.net+1link.springer.com+1

Becker, T., & Åslund, A. (2024). *The EU's Dependence on Russian Energy—A Force that Divides or Unites the Union?* Springer.

Bera, R. K. (2022). Putin's Dilemma: Weighing the Risk of Defiance. Available at SSRN 4092044.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative research in psychology, 3(2), 77-101.

Bruegel. (2023). *Europe's Energy and Economic Resilience Post Ukraine Invasion*. Retrieved from https://www.bruegel.org

Carvalho, R., et al. (2013). *Resilience of Gas Networks During Conflicts*. arXiv. https://arxiv.org/abs/1308.5839

Carvalho, R., et al. (2013). *Resilience of natural gas networks during conflicts*. *arXiv*. arxiv.org

Cresswell, J. (2013). Qualitative inquiry & research design: Choosing among five approaches.

DGAP. (2024). *Geoeconomic Shifts: The EU's Trade Pivot Post-Ukraine*. Retrieved from https://dgap.org/en/research

Durakovic, G., et al. (2023). *Decarbonizing Without Russian Gas*. arXiv. https://arxiv.org/abs/2306.11864

Durakovic, G., et al. (2023). *Decarbonizing European energy in absence of Russian gas*. *arXiv*. arxiv.org

Eurofound. (2023). *Labour Market Integration of Ukrainian Refugees*. https://www.eurofound.europa.eu

European Central Bank. (2023). *Economic Bulletin Issue 5/2023*. https://www.ecb.europa.eu

European Commission. (2023). *REPowerEU Plan and Energy Statistics*. https://energy.ec.europa.eu

European Commission. (2025). *REPowerEU Plan*. [online PDF] ft.com+12commission.europa.eu+12energypolicy.columbia.edu+12

European Investment Bank. (2023). *War in Ukraine: Economic Outlook and Investment Dynamics*. https://www.eib.org

Haouel, C. (2023). Assessment of the Impact of Russia's war on Ukraine on EU and UK oil and gas imports and their Energy Supply Security. In Proceedings of the Central and Eastern European eDem and eGov Days 2023 (pp. 166-177).

Intereconomics. (2023). *Russia's Role in Fertilizer and Food Supply Chains*. https://www.intereconomics.eu

Ke, X., et al. (2025). *LNG Network Shifts Following the Russia–Ukraine War*. arXiv. https://arxiv.org/abs/2501.06789

Kuzemko, C., Blondeel, M., Dupont, C. and Brisbois, M.C., 2022. Russia's war on Ukraine, European energy policy responses & implications for sustainable transformations. Energy Research & Social Science, 93, p.102842.

Makkonen, T., & Mitze, T. (2021). *Geopolitical conflicts and knowledge flows*. *arXiv*. arxiv.org

Makkonen, T., & Mitze, T. (2021). *Sanctions and Knowledge Flows*. arXiv. https://arxiv.org/abs/2104.11730
Reis, B., & Jones, C. (2015). *European Union gas market development*. *arXiv*. energypolicy.columbia.edu+15arxiv.org+15reuters.com+15
Saunders, M.N.K., Lewis, P. & Thornhill, A. (2019) Research Methods for Business Students. 8th Edition, Pearson, New York.
Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. American journal of evaluation, 27(2), 237-246.
UNHCR & Deloitte. (2024). *Economic Contributions of Ukrainian Refugees in Poland*. Retrieved from https://www.unhcr.org
Wójtowicz, P. (2024). *EU Energy Sovereignty in the Wake of the Russia–Ukraine War*. *Studia Europejskie*, 3(95), 45–61.

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*RESEARCH ARTICLE*

# Foreign Lobbying: A Case Study Of China's Lobbying For Pakistan'sentry Into BRICS

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**Abstract**

Shortly after the BRICS Summit 2023 in Johannesburg, Indian news channels claimed China to be lobbying for Pakistan's entry into BRICS, however, without sufficient substantial or theoretical evidence. This study, thus aims to determine the extent to which this claim might hold ground. Moreover, this paper aims to provide a comprehensive framework to analyze and validate international lobbying from the Chinese side in accordance with its foreign policy behavior. For this purpose, the rational policy model of foreign policy analysis has been bridged with a conceptual framework that projects lobbying on the international level. This paper follows a causal design and derives its supporting material from primary, secondary, and tertiary sources. Moreover, this paper establishes that to counter west dominated global system, China has to have an increased influence in BRICS; the addition of Pakistan into BRICS serves as a favorable option in this regard. Thus, it is in the ultimate interest and capability of China to lobby for Pakistan's entry into BRICS.

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**Keyword:** BRICS , lobbying, foreign policy , Pakistan'sentry , projects lobbying, global system,

**Introduction:**

In August, it was claimed by Indian publications and news outlets that China has been lobbying for BRICS expansion, especially in relation to the Pakistani membership, however, this claim lacked any sufficient evidence. The aforementioned claim came soon after the 2033 BRICS Summit in Johsehberg. With Pakistan having formally applied for BRICS membership, the focal point of this study remains to specifically determine the extent to which claims about China lobbying for Pakistan are true. Thus, this paper is guided by the research question, "To what extent the Indian claim regarding China's lobbying for Pakistan's entry into BRICS might hold grounds with reality?" An educated guess to

this question is: Pakistani entry into BRICS serves to enhance China's influence in the global political arena, thus China has been lobbying for Pakistan's entry into BRICS. The increased Chinese influence in global politics is the dependent variable, and lobbying for Pakistan is the independent variable. This paper thus, utilizes the rational policy model of foreign policy and bridges it with the conceptual framework of lobbying to justify China's lobbying for Pakistan as a rational choice of foreign policy; that would in turn contribute to an increased Chinese influence in world politics. This study thus aims to provide a comprehensive framework to explain the process of international lobbying; to test, validate, or negate the claim regarding Chinese lobbying for Pakistan; and justify it according to China's foreign policy. This paper starts with reporting the contemporary intra-BRICS dynamics in relation to expansion agendas, identifies China's aspirations for domination, and the sustenance and performance of BRICS despite inherent differences in the member states. Secondly, it provides a comprehensive framework for analyzing lobbying, projecting it on an international level, and aligning it with foreign policy. Thirdly, the conceptual framework is applied to the case under discussion. Lastly, the limitations within the research and areas for future research have been highlighted.

**Literature Review:**

China has been advocating for BRICS expansion for quite a long time, however, these have efforts been marred because expansion requires a unanimous vote from all existing members. Recent BRICS expansion has triggered several queries and presumptions from both within the BRICS and from the Western media. The recurring themes of these presumptions and predictions mostly constitute claims about China trying to contradict the Western world or the degree of efficiency BRICS may provide in its conduct. However, more recently an Indian news outlet claimed that China had been lobbying to arrange BRICS membership for Pakistan.

**Recent Expansion in BRICS:**

In August 2023 Saudi Arabia, United Arab Emirates, Ethiopia, Egypt, and Iran were admitted to the BRICS following a unanimous agreement among the five sitting members; other countries hoping for admittance however, such as Turkey could not secure BRICS membership on the formerly mentioned grounds. In the past as well as in present times, ambiguity and confusion have been persistent regarding the efficiency of this institution based on the following argument: the internal differences and conflicting ideologies of the member states.

Moreover, China's advocacy of BRICS expansion has also been challenged by India numerous times. However, with the BRICS chairmanship to be accorded to China and South Africa in the upcoming years, BRICS expansion has been inevitable. Moreover, the diplomatic pressure due to requests made by different countries aspiring to be BRICS members to the Indian Prime Minister Narendra Modi also played a key role in recent BRICS expansion- it was publicly acknowledged while naming Iran, as Iranian Prime Minister Ebrahim Raisi has been claimed to be lobbying at numerous fronts for its membership into BRICS. This might be the reason India had the largest list of candidates for admission when the delegations arrived in Johannesburg. It was called a "bit of a surprise" by one of the BRICS member's officials. The addition of Ethiopia to BRICS signals economic conditions to hold low significance for BRICS membership, though settling for

Ethiopian membership had a dramatic backdrop.

**China's Quest for International Domination:**

According to Dov S. Zakheim, China's assertion for BRICS expansion, the pursuit of its worldwide economic objectives, and military aggressiveness in East and Southeast East Asia signals the will of China to replace the United States as the global economic epicenter; especially after the American decision to downgrade global south and Middle east.

Xi has been presenting BRICS as a way for the global south to have a stronger voice in global affairs; the admission of Iran into BRICS has also been regarded as an anti-western and non-democratic approach. Margaret Myers, the director of the Asia and Latin America program at the Inter-American Dialogue called BRIC expansion as historic as it has signaled an attempt to reshape the west-led global order. Beijing has been lobbying in BRICS for years. Moreover, Xi while addressing a press conference called BRICS expansion as historic and that it reflected the determination of BRICS countries for unity and cooperation with broader developing countries. Moreover, BRICS is seen by Beijing as a potential counterweight to G7. It has also been called the G7 of the non-western world, and the BRICS leaders have called for greater representation of emerging markets and economies in the UNSC and the IMF. These are Xi's statements in which he had repeatedly criticized America and the West.

BRICS represents a smaller proportion of a larger conflict going on between Western capitalism and the so-called market-oriented communism of China, to bring down the West's economic dominance; and the Middle East is the area of competition as identified by Eric Mandel. **A**dditionally, Sarit Zehavi, CEO of the Alma Research Center maintains that China is converting its economic power in the Middle East to political influence that will cultivate a military foothold, systematically and strategically. Moreover, according to Sadanand Dhume BRICS expansion represents an attempt to reshape the global world order marked by countering the US and its allies.

BRICS is considered to be a byproduct of American rivalries in the East i.e., with China and Russia. Moreover, it has been equated with the Cold War competition between the USA and USSR. China has been assembling nations aiming to be free of American influence, Russia has been utilizing BRICS to circumvent the European sanctions ensuring economic and diplomatic survival, and Iran has been benefiting from sanction-resistant trade from China and military modernization through Russia. Jamshidi- political deputy for Iran's prime Ministry has called it a strategic victory for Iran. Moreover, Iran has been taking advantage of two significant initiatives of BRICS: a development bank that competes with the World Bank and a Contingent Reserve Arrangement designed to compete with the International Monetary Fund**.** Investment of $1 trillion in BRI has been countered by the G7 by creating a partnership for Global infrastructural investments with a goal to raise six hundred billion dollars for infrastructural development in poor countries; specifically focusing on clean energy, digital connectivity, health, and gender equality.

China has also signaled Africa's industrial development and agricultural modernization after sideline meetings during the BRICS summit under the wish of African countries. Furthermore, Xinhua News Agency also reported China's intent on expanding African agricultural imports and helping Africa's food sufficiency. According to

Parks, China has already started moving towards African industrialization while simultaneously downgrading the frequency of infrastructural projects. In 2009, he reported, China had issued grants of eighty-eight billion US dollars for infrastructural projects, while in 2021 infrastructural projects amounted to twenty-four billion US dollars. Moreover, David Monyae, director of the Centre for China Africa studies at the University of Johannesburg, calls Chinese ambitions of African
industrialization to be backed up by the movement of factories into Africa due to over capacitation in China, and good progress of industrial zones in Ethiopia and Kenya.

**Cohesion in BRICS Despite Internal Differences:**

Almost all BRIC members have different modes of governance and societal freedoms. According to the Freedom House, China and Russia are not at all free societies; Brazil and South Africa are free societies; and India has been ranked as partially free. These differences in domestic structure in the aforementioned states highlight a difference that is supposed to have complications, according to Western scholarship; and further expansion is supposed to complicate it further. BRICS is so far neither a union nor a military union at least completely.

However, the most prominent similarity among all countries is the trade relationship with China. Trade relations between Brazil and China are quite well. China's commitment to spending six hundred billion dollars for the development of a complex in Brazil's Bahia province, which can produce electric and hybrid vehicles is the manifestation of such healthy diplomatic relations. Moreover, in 2022, nineteen billion US dollars were invested by China in such similar complex in Sao Paulo. Argentina became a member of the Belt and Road Initiative in February 2022; and China is the second largest trading partner of Argentina, second to only Brazil. Chinese assistance to Argentina includes various military and financial aid. Selling of military aircraft and ground systems to Argentina, and provision of critical financial assistance in repaying the IMF loans in 2018 is the practical representation of Argentina's dependence on China. Moreover, it had been agreed in April 2023 that Argentina could pay for Chinese imports in Chinese currency i.e., Yuan rather than the US dollar. China also holds the position of a major trading partner with the three new members of the BRICS from the Middle East i.e., Saudi Arabia, United Arab Emirates, and Iran. Saudi Arabia has been a member of the Belt and Road Initiative for five years. Moreover, in June a deal worth ten billion US dollars featuring Chinese investments in mining, electric vehicles, and renewables was signed. Additionally, China has been Saudi Arabia's Largest trading partner in 2022, worth one hundred and six billion US dollars. This amount is twice the trade between America and Saudi Arabia. China's trade with the United Arab Emirates is approximately of similar magnitude to Saudi Arabia, as the United Arab Emirates is also a member of the Belt and Road Initiative. China has established approximately six thousand companies in the United Arab Emirates, and is the third largest trading partner of the United Arab Emirates; the largest trading partner is the US and the second one is India. In the case of Iran, China is the second largest investor, second to Russia which has invested heavily in Iran's Military modernization. Moreover, China has been the largest trading partner of Iran since the last decade. Additionally, China has signed a two-and-a-half-decade trade and military agreement with Iran. China's investment in Egypt has increased

by 317 percent since 2017, though it is not on the list of top five investors in Egypt. However, China has become a leading exporter to Egypt its second largest trading partner; the largest trading partner is United Arab Emirates. A similar pattern can be identified in the case of Ethiopia. Though China does not hold a spot in Ethiopia's major trading partners, the magnitude of China's imports from Ethiopia has significantly increased from 2022. Moreover, China has been the largest foreign investor in Ethiopia, accounting for sixty percent of all foreign investment within the country. India, though being a major opponent of China in both intra-BRICS and international politics is heavily dependent on its trade with China. In 2023-2022 China was the second largest trading partner with India. Several announcements regarding trade with South Africa have been made after the BRICS summit in 2023. These announcements include deals to buy South African products worth approximately two and a half billion US dollars; plans to increase South African beef and agricultural import; the donation of Chinese energy equipment worth 8.9 billion US dollars; and a separate grant of 226.9 billion US dollars to help South Africa cope up with its energy crisis. On December 18th, the China-Russia trade has surpassed 200 billion dollars.

The aforementioned literature neither provides nor allows a comprehensive explanation of Chinese lobbying for Pakistan's admission into BRICSC, nor do they justify it being consistent with Chinese foreign policy behavior. Lobbying has been addressed in the existing literature as an intra-state process; it lacks international projection and addressing in operational terms. Additionally, the literature remains largely devoid of any kind of evidence to test, validate, or negate the claim of Chinese lobbying for Pakistan. This study thus bridges the rational policy model of foreign policy and the conceptual model of lobbying having international projection to address the aforementioned gaps.

**Methodology:**

This paper follows a causational research design, as it aims to identify a cause-effect relation between China's alleged attempts to lobby in favor of Pakistan, and its effects on China's international standing. The data for this purpose has been gathered from primary secondary and tertiary sources, and this research primarily lies on qualitative data. The primary resources include journal articles, secondary resources include online news outlets and tertiary sources such as encyclopedias and dictionaries have been used in order to develop a background understanding of certain phenomena. Tertiary sources have primarily helped in the development of the conceptual framework of lobbying mentioned in the upcoming sections

**Framework:**

In the Rational Policy Model of foreign policy, the policy is essentially guided by the national interest and the key actor in policy formation is the government. The government is a single rational decision-maker. The policy-making essentially follows the following process:

- Identification of national interest; usually reflected by the decision maker.
- All possible options are identified.
- Cost-benefit analysis is conducted to filter out the most favorable policy option
- Adoption of the best policy option and its subsequent implementation.

Given the dynamics of BRICS; lobbying is to be the most favorable option. Lobbying exerts its influence on both domestic and international levels, however, in its essence, it bridges international and domestic levels of international politics. Domestic influence is generated by grassroots lobbying, direct

lobbying, and electoral lobbying. The aforementioned processes may or may not accompany each other. Direct lobbying offers the shortest path toward a decision as it engages interest groups and policymakers on a much more straightforward level and ensures direct communication between the interest groups and policymakers. Direct lobbying is more effective in influencing short-term policy outcomes, however grassroots level lobbying and electoral lobbying are done for long-term goals and relatively more important political problems. Two approaches can be evident in international lobbying.

In the first approach, the interest group (Primary Government) might lobby in the secondary State to influence the secondary government, as mentioned in the following flow chart. The influence might be in terms of monetary benefit, or it might be a persuasive rhetoric usually rooted in shared benefits or shared grievances.

**Primary Government → Secondary State → Secondary Government → Desired Policy**

In the second-tier approach, the interest group (Primary Government) can lobby a secondary government to influence the tertiary government, as mentioned in the following flow chart. The influence might be in terms of monetary benefit, or it might also be a persuasive rhetoric usually rooted in shared benefits or shared grievances. This approach is more feasible within international organizations

**Primary Government → Secondary Government → Tertiary Government → Desired Policy**

The aforementioned approaches are directly dependent on the nature of government. Democratic government allows more space for the lobbying process as compared to an authoritarian

**Results and Discussion:**

China's dissatisfaction with the existing international order and its subsequent measures to influence change in the international arena guide its intra-BRICS conduct. Given the nature of the state of Pakistan as a Chinese ally, it offers a way out for China from the Malaccan dilemma and energy crisis if CPEC succeeds. The addition of Pakistan into BRICS serves as a favorable option for China. Since China functions majorly as a financier for developing countries within the BRICS it already exercises a certain degree of influence on the BRICS. The monetary superiority gives China an edge and makes lobbying for Pakistan highly probable.

**A Changed Global Order as Chinese Interest**

China has been highly critical of the West-led international order and at numerous times has shown its intent to replace or at least modify the West-led international political order. Xi has repeatedly criticized US hegemony , however, it has maintained the rhetoric that China itself is not in pursuit of hegemony. Opposition to international political order having its roots in Western political thought and the primacy of Western interest is primarily driven by China's perception of Western interference in the Chinese sphere of influence i.e., the South China Sea and the inefficiency of global institutions in maintaining global affairs. Thus, expanded BRICS stands as a tool for enhancing the Chinese interest in countering Western global domination. This is however coupled with other states' interests and projected globally under the rhetoric of unity and cooperation of broader developing countries. Moreover, BRICS expansion represents China as a way to turn a loose economic coalition into a geopolitical counterweight to G7. By positioning BRICS

as the primary platform to project global south grievances against the Western economic institutions, China has called for greater representation of developing countries on important international forums such as the UN Security Council and IMF.

**Identification of Possible Options for China**

Rationales for overthrowing the Western-dominated international system can be categorized into direct confrontational and gradual progressive approaches. Attempts to overthrow an international system have been historically military-centric however in contemporary times direct military confrontation with the West to get grievances addressed does not appear to be a rational option for China. Moreover, a direct confrontational approach is also problematic for China given its geopolitical landscape and most of its neighbors being Western allies. The gradual progressional option features achieving economic integration and challenging the international financial institutions. This is to be achieved primarily through BRICS and BRI. BRICS expansion offers a wider range of intraregional cooperation and opportunities for challenging the international institutions; given the already present grievances of developing states regarding the western institutions. The addition of Pakistan to BRICS- which is a crucial member of the Belt and Road Initiative as it hosts CPEC, the flagship project of BRI- ensures not only the domination of geopolitical space by China but also serves as a crucial step in having a greater say in BRICS.

**Pakistan: The Best Option for BRICS Expansion**

The diplomatic relations between Pakistan and China have been quite fine lately; these relations have transcended from geostrategic partnership to economic and strategic interdependence. The epicenter of Chinese interest in Pakistan is the CPEC, which is one of the six corridors under BRI and is also known as the flagship project of BRI. CPEC collectively represents a way out for China by neutralizing the effects of growing anti-China alliances in the Indo-Pacific region and ensuring a decreased dependence on the straits of Hormuz and Malaca.

Pakistan is one of the few Chinese neighbors that lacks anti-China sentiments and is not a part of any anti-China alliance. With rapid economic, military, and technological growth come challenges to energy security. Despite importing large volumes of petroleum and gas from Russia, seventy percent of oil and gas is imported by China from the Middle East. Moreover, sixty percent of this imported petroleum and gas passes through the Strait of Malaca. Additionally, Chinese clashes in the South China Sea and with its neighbors; and Chinese attempts to extend influence into the Pacific region have triggered US containment policy for China, and India has joined as its comprehensive ally. Thus, QUAD, AUKUS, and I2U2 represent the geostrategic alliances against China. Furthermore, any conflict in the Pacific might disrupt eighty percent of the Chinese oil imports and critical mineral imports from the Middle East and Africa respectively, and Chinese exports to India and Europe. CPEC (Pakistan) provides a possible alternative to the Strait of Malacca, thus solving the Chinese energy crisis rooted in the Malaccan dilemma. Moreover, Pakistan being a Chinese ally also opens roots towards central Asia giving China an edge over geopolitical space.

**Lobbying for Pakistan in BRICS**

Having established the addition of Pakistan in BRICS as a Chinese interest, lobbying for Pakistan in BRICS appears to be the favorable option and it follows two

approaches. The first approach acknowledges events that signal China's ability to influence BRICS (outside-in approach), and the second one acknowledges the BRIS's capacity to be influenced by China (inside-out approach).

The first approach is enforced by China's position as a financer in BRICS and most of the other countries being the recipients. Chinese investment in countries as mentioned in the previous sections puts them heavily under Chinese influence. Moreover, China utilizes a two-pronged strategy that features establishment and maintenance of alliances with developing countries, and international financial institutions. Both of the developments are backed up by China's monetary capabilities and its potency as a financer; its large human capital and sense of its efficient utilization; and the BRICS states' need for investments. China has a large amount of investable funds, a domestic overcapacity that can be projected outside by locating demands abroad for capacity absorption. China while simultaneously ensuring its national interest fills the infrastructural gaps across the developing nations, and pushes for reforms in the global financial system; as China has made infrastructural development a prioritized form of foreign direct investment in Africa, Asia, and Latin America.

Moreover, China holds a leading power in NDB and AIIB; this in turn allows China to direct its funds towards China's projects. Furthermore, to leverage the Multilateral Development Banks that allow emerging powers to mitigate their dependence on the US dollar, China aims to use AIIB and NDB to promote the internationalization of its currency. Additionally, linking BRICS to BRI by China under the rhetoric of "China willing to share her fruits" again puts China in a higher position in BRICS as compared to the other members. Accordingly, the Chinese Discourse on reforming the international system has been adopted by most of the countries of BRICS as a common discourse. Though China has extensively utilized the rhetoric of utilizing the power of emerging economies; the clubbing of China within BRICS holds maximum importance. BRICS without China appears to be the League of Nations without the USA or worse. This primacy of China resides against the backdrop of China being the second largest economy, a nuclear power, and holding the largest foreign reserves.

The first approach adopted by China accounts for the first-tier approach of lobbying that features interest groups (China) making investments in the BRICS countries, or propagating anti-Western rhetoric, and thus influences the secondary government for its desired policy. In the second approach, China lobbied with secondary governments to put diplomatic pressure on some third countries to ensure BRICS expansion. It has been reported that certain other countries have been lobbied by China to put diplomatic pressure on India which Prime Minister Narendra Modi eventually gave up.

Thus, China's increased influence in BRICS, the ability of BRICS to be influenced by China, and Pakistan's formal application for admittance into BRICS especially given its regional position signal China's support for accommodating Pakistan within BRICS through lobbying.

**Limitations**

No study is ever perfect; as there are always some degree of limitations either in data gathering or during the analysis. This study though carefully conducted and present might have certain limitations due to lack of experience (being students), lack of time, lack of financial capabilities as most of the international journals require subscriptions,

and lack of accessible data due to the presence of China in the research as data regarding China political conduct is seldom available to open sources given the nature of government in China. Thus, data regarding contemporary Chinese actions has been primarily gathered through online news sources. These sources being secondary and tertiary may be subject to flawed or incomplete information.

**Conclusion:**

The extent to which claims China's lobbying efforts to secure BRICS membership for Pakistan hold ground is implicit in China's national interest. Pakistan's position as a Chinese ally, a route to expand the Chinese stronghold in the geopolitical space, a way out from the Malaccan dilemma and subsequent energy security, makes it a favorable candidate for BRICS, keeping China's interest in consideration. Moreover, the aforementioned characteristics of Pakistan further supplemented by its presence in BRICS alleviates China's position both within BRICS and within the global arena. This makes lobbying for Pakistan a favorable policy option for China. Thus, it can be predicted that China might be lobbying for Pakistan's entry into BRICS. With China's position as a financer and the position of other BRICS states as the receivers, China has an upper edge in BRICs. This position is further strengthened by China's hold in dictation of NDB and AIIB by directing their funds towards the projects of its interest. Moreover, given the democratic nature of states like India, it becomes easy for China to lobby and influence them indirectly. Thus, based on these arguments, and with Pakistan's formal application for securing membership in BRICS, it is highly probable that China has been lobbying for Pakistan's entry into BRICS.

**Reference**


[1] Kamran Yousaf, "Will Pakistan Join BRICS?," The Express Tribune, last modified August 23, 2023, https://tribune.com.pk/story/2432182/will-pakistan-join-brics.

[1] Abid Hussain, "Pakistan Seeks BRICS Membership, Despite India Roadblock," Al Jazeera, last modified November 24, 2023, https://www.aljazeera.com/news/2023/11/24/pakistan-seeks-brics-membership-despite-india-roadblock.

[3] Dov S. Zakheim, "BRICS expansion is all about China," The Hill, last modified September 2023, https://thehill.com/opinion/international/4181614-brics-expansion-is-all-about-china/.

[4] Devirupa Mitra, "How BRICS Was Expanded: The Inside Story of Twists and Turns," The Wire, last modified September 2, 2023, https://thewire.in/world/brics-expansion-inside-story.

[5] Zakheim, "BRICS expansion all about China"

[6] "China's Blueprint for an Alternative World Order," Financial Times, last modified August 22, 2023, https://www.ft.com/content/8ac52fe7-e9db-48a8-b2f0-7305ab53f4c3

[7] Christopher Philips, "Is an Expanded BRICS a Threat to the West?," Al Majalla | The Leading Arab Magazine, last modified September 1, 2023, https://en.majalla.com/node/298626/politics/expanded-brics-threat-west.

[8] "Xi Says BRICS Expansion Historic, New Starting Point for Cooperation," Xinhua – China, World, Business, Sports, Photos and Video | English.news.cn, last modified August 24, 2023, https://english.news.cn/20230824/3ef5ba9ff40b48de9917707a7f938394/c.html#:~:text=Xi%20says%20BRICS%20expansion%20historic%2C%20new%20starting%20point%20for%20cooperation,-

Source%3A%20Xinhua&text=JOHANNESBURG%2C%20Aug.,starting%20point%20for%20BRICS%20cooperation.

[9] Christopher Philips, "Is an Expanded BRICS a Threat to the West?," Al Majalla | The Leading Arab Magazine, last modified September 1, 2023, https://en.majalla.com/node/298626/politics/expanded-brics-threat-west.

[10] Eric Mandel, "China-dominated BRICS is a threat to US interests in the Middle East," The Hill, last modified September 14, 2023, https://thehill.com/opinion/international/4201304-china-dominated-brics-is-a-threat-to-us-interests-in-the-middle-east/.

[11] Yaakov Lappin, "China: Transforming Its Economic Strength into Middle East Political and Military Influence," Alma Research and Education Center, last modified September 5, 2023, https://israel-alma.org/2023/09/05/china-transforming-its-economic-strength-into-middle-east-political-and-military-influence/.

[12]Sadanand Dhume, "Wsj.com," Wsj.com, last modified September 17, 2020, https://www.wsj.com/articles/this-group-of-nations-is-a-few-brics-short-of-a-load-11600363751.

[13]Mandel, "China-dominated BRICS threat to US interests in Middle East."

[14]"Iran, Egypt, Saudi Arabia Among 6 Countries to Join the BRICS Alliance," CBC, last modified August 24, 2023, https://www.cbc.ca/news/world/brics-expansion-plans-1.6945994.

[15]Mandel, "China-dominated BRICS threat to US interests in Middle East."

[16] Michael Martina and Carien du Plessis, "China's Xi pledges to support Africa's industrialisation at BRICS," Reuters.com, last modified August 25, 2023, https://www.reuters.com/world/chinas-xi-pledges-support-africas-industrialisation-brics-2023-08-24/.

[17] Zakheim, "BRICS expansion all about China"

[18] Zakheim, "BRICS expansion all about China."

[19] Virusha Subban, "South Africa and China: Trade relations grow stronger," Global Compliance News, last modified September 9, 2023, https://www.globalcompliancenews.com/2023/09/09/south-africa-and-china-trade-relations-grow-stronger/.

[20] "China-Russia Trade Tops $200bn a Year Ahead of Schedule," Nikkei Asia, last modified December 8, 2023, https://asia.nikkei.com/Economy/Trade/China-Russia-trade-tops-200bn-a-year-ahead-of-schedule

[21] Philips, "Is Expanded BRICS Threat to West?"

[22]"'Hegemonism Not in China's DNA': Xi Calls for BRICS Expansion," Al Jazeera, last modified August 23, 2023, https://www.aljazeera.com/economy/2023/8/23/hegemonism-not-in-chinas-dna-xi-calls-for-brics-expansion.

[23]Philips, "Is Expanded BRICS Threat to West?"

[24] "Nabila Jaffer, ""The Factor of Gwadar Port in Growing Interdependence between Pakistan and China,"" Focus, March 2023, 02, http://irs.org.pk/Focus/FMar23.pdf."

[25] Bas Hooijmaaijers, "China, the BRICS, and the limitations of reshaping global economic governance," THE PACIFIC REVIEW 34, no. 01 (August 2021): 09, https://doi.org/10.1080/09512748.2019.1649298

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*RESEARCH ARTICLE*

# Navigating Fintech Landscapes: A Comparative Analysis Of Pakistan, China, And Turkey

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**Abstract**

This research paper offers a comparative analysis of the fintech ecosystems in Pakistan, China, and Turkey, focusing on their contributions to financial inclusion and the interplay between technological advancements and regulatory frameworks. It evaluates Pakistan's fintech landscape, identifying significant growth driven by mobile banking and regulatory support, and contrasts this with China's status as a global fintech leader, characterized by the widespread adoption of mobile payments and a regulatory approach that balances innovation with stability. Turkey's fintech ecosystem is explored through its advancements in mobile banking and digital wallets, supported by inclusive financial and regulatory initiatives. The study employs a comparative research design, utilizing secondary data from various sources to highlight the differences and similarities across these countries. Findings indicate that while Pakistan and Turkey are progressing towards broader financial inclusion and regulatory adaptability, China leads in fintech innovation, setting a benchmark for a cashless society. The paper concludes by emphasizing the transformative potential of fintech in promoting economic growth and financial security, advocating for a nuanced understanding of technology's role within different economic and regulatory environments.

**Keywords:** Fintech ecosystem, Pakistan’s fintech market, China’s fintech, Turkish fintech, fintech regulations

## Introduction:

Innovative technologies are becoming increasingly important in all aspects of human existence, including banking. The use of digital technologies is currently serving a critical role in capital diversification. Technology-based funding over the Internet is a novel type of financing that is gaining traction in social networks (Soni et al. 2022). Over the last decade, financial technology (Fintech) has been the

most often used phrase in the financial sector. Fintech is quickly expanding.

The goal of financial inclusion is to offer unbanked persons simple access to the regulated financial system at a reasonable cost. It has been established that financial inclusion reduces poverty and inequality. As a result, financial inclusion is critical for financial growth as well as for long-term economic development (Noreen et al., 2022). Financial inclusion is critical to long-term economic growth because it increases the possibility of saving, thriving investment, better consumption, and higher living standards (Makina, 2019).

However, fintech is greater in developed nations and lower in less-developed countries (Berg et al., 2020). Makina discovered that 96% of adults in economically prosperous nations have financial accounts, compared to only 65% in less-developed countries. According to Demirguc-Kunt et al. over half of the unbanked adult population is concentrated in seven countries: Pakistan, India, Africa, Bangladesh, Mexico, and Indonesia.

**Objectives:**

1. Evaluate Pakistan's fintech ecosystem's current status and review existing conditions
2. disparities, distinctive elements, and success factors.

**Methodology :**

This study adopts a comparative research design to analyze and contrast the fintech ecosystems in Pakistan, China, and Turkey. Comparative research is a suitable approach for identifying both commonalities and differences within the fintech sectors of these countries (Baber,2020). For this purpose, secondary data was collected from various sources, including academic articles, government reports, industry publications, and financial institutions' annual reports. These sources provide historical context and foundational information regarding the fintech landscapes in the selected countries.

**Pakistan’s Fintech Ecosystem**

The first aim of this study is to conduct a comprehensive review of Pakistan's contemporary fintech landscape. To accomplish this objective, the following section of the study undertakes a comprehensive exploration, encompassing the historical development, an assessment of regulatory frameworks, and a thorough examination of the financial inclusion initiatives championed by Pakistan's regulatory authorities. This multifaceted approach seeks to provide a comprehensive understanding of the dynamic fintech ecosystem in Pakistan.

**Historical Development:**

The historical development of Pakistan's fintech ecosystem is marked by several key milestones and trends that have shaped the industry over the years.

**Mobile banking:**

3. In Pakistan, cell phone penetration is comprehensively.

Compare fintech advancements in Pakistan, China, and Turkey, identifying regional high. Mobile phones and other small handheld devices have grown commonplace in the twenty-first century, coupled with Wi-Fi links to the internet (Jalil & Sabir,2019). According to the Pakistan Telecommunication Authority, more than 74% of Pakistan's population uses a mobile phone annually, placing Pakistan seventh among the world's top mobile phone users. With the increased interest and ratio, in 2008, SBP permitted commercial and microfinance banks in Pakistan to collaborate with mobile network operators for the purpose of providing agent-based banking services, also known as branchless banking, to individuals who lack access to official bank branches in the nation. This was done in order to take advantage of the increased teledensity and growing use of

mobile phones in the country (Javed & Khan, 2022).

**Easypaisa:**

In response to the SBP initiative, mobile banking has advanced significantly in Pakistan. In 2009, One of Pakistan's first mobile wallet services, Easypaisa, was introduced by Telenor Microfinance Bank. Users were able to carry out a variety of financial operations using Easypaisa, such as bill payments, mobile top-ups, and money transfers (Younas & Kalimuthu, 2021). The same year, the SBP granted United Bank Limited (UBL) a license to test the viability of its "UBL Omni" mobile money service. Five banks were offering mobile money services in Pakistan as of the end of December 2012, and five more were piloting the rollout of their mobile money services. Although now mostly used for money transfers, mobile money has received a positive response from the market in Pakistan (Sultana, 2014).

**Regulatory Framework Development:**

The Government of Pakistan, and in particular the State Bank of Pakistan (SBP), has shown strong leadership in promoting financial inclusion as a policy priority. The regulations allowed for several models of branchless banking, by which banks could offer services through a network of agents. The new regulations set out the ground rules for entry into and participation in the branchless banking market. These greatly improved the possibility that financial services would be accessible on an affordable basis to millions of people who had been unbanked or underserved (Settle, 2022).

The new regulations gave banks and their partners the confidence to invest in rolling out services. As services were rolled out, a number of issues that were still holding back sector development came to light. In response to these, the SBP revised its branchless banking regulations (Zahid et al., 2021).

SBP implemented the International Bank Account Number (IBAN) standard in the country. This was done with the aim of bringing account code standardization and efficiency in the processing of payments for domestic as well as cross-border transactions. The IBAN enables electronic validation of account numbers and routing, provides a unique identifier for bank accounts, and uses a check digit mechanism to verify accuracy. The implementation of the IBAN standard in Pakistan has not only improved payment processing efficiency, eliminating delays in credit transfers, and reducing errors in remittance-related transactions but also provided an enabling cross-border transaction system for Pakistan’s growing fintech industry (Ahmed, S. 2022).

**Expansion of Digital Banking:**

Digital-only banks like Easypaisa, operated by Telenor Microfinance Bank, expanded their services to include online account opening, digital lending, and savings products (Manzoor et al., 2021).

Customers have the flexibility to transfer funds seamlessly between various types of pre-registered accounts, encompassing current accounts, savings bank accounts, loan limit accounts, and debit card accounts, within their BB (branchless banking) accounts. Notably, this system extends its convenience beyond BB account holders, permitting transfers to individuals without BB accounts. Moreover, non-BB account holders are empowered to transfer funds to other non-BB account holders. The accessibility of BB services further extends to deposits and withdrawals, facilitated through bank branches, automated teller machines (ATMs), and authorized agent locations. (Manzoor et al., 2021). A noteworthy utility is the ability for customers to utilize their BB accounts for the convenient settlement of utility bills. In

addition, financial institutions, particularly Microfinance Banks (MFBs), may employ BB accounts for the efficient disbursement of loan amounts to borrowers who maintain BB accounts, thus streamlining the borrowing process. Furthermore, borrowers may conveniently service their loan repayments directly from the same BB accounts they utilized for loan applications.

**Peer-to-Peer (P2P) Lending:**

The State Bank of Pakistan (SBP) has been implementing Pakistan's first instant payment system, Raast, to offer instant, reliable, and free person-to-person (P2P) payment services. The first phase of Raast, Raast Bulk Payments, was launched in 2021 and is currently live. The second phase of Raast, Raast P2P, was launched in 2022 and enables users to send and receive funds instantly using their International Bank Account Number (IBAN) or their Raast ID. Initially, users can use their registered mobile numbers as their Raast ID and link it to any of their bank accounts for convenient P2P payments (Khan & Jaffar, 2021).

The SBP believes that the launch of Raast P2P will provide a convenient and hassle-free digital fund transfer service to customers and will also provide an efficient and enabling payment infrastructure that will pave the way for the digitization of the economy and the promotion of digital financial services in Pakistan (Bokhari, 2022).

**Fintech Investment:**

: SECP has introduced a concept paper for Digital Asset Management Companies (AMCs). The aim of this concept is to enable asset management services digitally, from launching of Collective Investment Schemes (CIS) to online account opening and redemption of units. Digital AMCs have the potential to increase investor penetration in the mutual fund sector and spur innovation and competition. They can also become drivers of financial inclusion by reaching the currently un-served low-income strata (Niazi, 2023).

The SECP is currently testing the Digital AMC model in a sandbox testing environment. If successful, it will be rolled out to the public in the near future. Here are some of the key points of the concept paper:

- Digital AMCs will be allowed to distribute units of mutual funds online.
- They will be subject to the same regulations as traditional AMCs, but with some additional requirements to ensure that they are operating in a safe and secure manner.
- The SECP is working with industry stakeholders to develop a framework for addressing the critical regulatory challenges that need to be addressed before Digital AMCs can be launched.

The SECP believes that Digital AMCs have the potential to revolutionize the mutual fund industry in Pakistan and make it more accessible to a wider range of investors.

**Regulatory Framework:**

Pakistan had been actively working on developing regulatory frameworks to govern the fintech ecosystem in the country. Regulatory frameworks are essential to ensure consumer protection, promote innovation, and maintain the stability and integrity of the financial sector. Here are some key aspects of the regulatory frameworks for the fintech ecosystem in Pakistan:

**State Bank of Pakistan (SBP) Regulations:**

The State Bank of Pakistan (SBP) is the country's central bank and the primary regulator overseeing the fintech sector. The SBP has introduced several regulations and guidelines to govern various aspects of fintech, including digital banking, electronic money institutions, and payment systems (e Rehman et al., 2022)

**Electronic Money Institutions:**

The State Bank of Pakistan (SBP) under Payment Systems and Electronic Fund Transfers Act, 2007, has issued regulations to allow non-banking entities to become Electronic Money Institutions (EMIs). This is being done in order to promote innovation in the payments industry and financial inclusion in the country. Traditionally, payment instruments in Pakistan have been issued by banks. However, new technological innovations are now enabling non-banking entities to deliver innovative and efficient payment services to consumers at much lower cost. The SBP believes that EMIs can play a significant role in the development of the payments ecosystem in Pakistan by offering convenient, cost-effective, interoperable, and secure digital payment products and services to end users (Mazhar & Rehman, 2021).

The EMI Regulations aim to remove entry barriers for non-banking entities by providing them a guiding as well as an enabling regulatory framework for the establishment and operations of EMIs in Pakistan. These regulations also address potential risks in order to ensure consumer protection in line with the legal framework of the country while promoting digital payments and financial inclusion (Sultan et al., 2023)

**Payment Systems and Payment Service Providers (PSPs):**

The State Bank of Pakistan (SBP) issued regulations for Payment System Operators (PSOs) and Payment Service Providers (PSPs) in 2014. These regulations are applicable to the players interested in becoming licensed operators in Pakistan for payment systems. Interested players can be granted licenses under PSOs and PSPs for the development of an electronic platform with the capability to clear, process route and switch electronic transactions (Rana et al., 2023)

PSOs manage and operate payment systems, while PSPs offer payment-related services to businesses and individuals using electronic platforms for clearing, processing, and routing electronic transactions. PSOs and PSPs can form agreements with banks, financial institutions, and merchants to provide authorized services. Transactions are settled among parties through designated commercial banks approved by the SBP. Importantly, PSOs and PSPs are strictly forbidden from accessing or holding consumer funds. Entities registered under PSOs and PSPs regulations are authorized to act as facilitators of electronic payment systems, including payment gateways, clearing houses, and ATM switches (Rana et al., 2023).

**Regulatory Sandboxes:**

The Pakistan FinTech Sandbox is a regulatory initiative launched in 2019 by the Securities and Exchange Commission of Pakistan (SECP) to foster financial technology innovation. The sandbox provides a controlled environment for startups and FinTech firms to test their revolutionary solutions without immediate regulatory constraints (Baloch et al., 2023)

The primary objectives of the Pakistan FinTech Sandbox are to (Ali & Abdullah, 2020).

- Encourage financial innovation
- Enhance financial inclusion
- Ensure consumer protection
- Facilitate regulatory compliance

The sandbox typically runs for 6 to 12 months, allowing participants to test their innovations within a time-bound period. The SECP closely oversees sandbox activities to ensure adherence to regulations, and firms have access to a controlled testing environment that simulates real-world conditions with reduced risk. Since its inception, the Pakistan FinTech Sandbox has hosted over 30 fintech firms, exploring a diverse array of innovations across various sectors. These include digital payment solutions, peer-to-peer lending platforms,

blockchain-based services, and digital remittance platforms (Jeník & Duff, 2020)

**Anti-Money Laundering (AML) and Counter-Terrorism Financing (CTF):**

The SECP ensures that FinTech companies comply with the country's Anti-Money Laundering (AML) and Combating the Financing of Terrorism (CFT) laws. The Anti-Money Laundering Act, of 2010 is the main legislation to deal with counter-terrorism financing in Pakistan. It has a preventive legal framework that works under the Financial Monitoring Unit (FMU) at the State Bank of Pakistan. The law also provides for the offense of money laundering, a robust enforcement regime, and a self-contained regime for Regulators and Self-Regulated Bodies (SRBs) (Siddique et al., 2022).

The law requires elaborate compliance and management arrangements to be made by all, especially the Designated Non-Financial Business and Professions (DNFBPs). The Federal Board of Revenue is responsible for ensuring that DNFBPs, such as real estate agents, dealers in precious metals and stones, and FBR-supervised accountants comply with anti-money laundering and counter-financing of terrorism obligations (Mirza, 2022)

**Financial Inclusion Initiatives:**

Pakistan's road towards complete financial inclusion has been dynamic and ever-evolving, supported by the coordinated efforts of its regulatory agencies. Pakistan gradually began to comprehend the critical part that financial inclusion plays in encouraging economic growth, alleviating poverty, and fostering social development over time. The nation has put in place a number of programs aimed at removing obstacles that have historically kept a sizeable percentage of its population out of the formal financial system. Some of the prominent initiatives are:

**National Financial Inclusion Strategy (NFIS):**

In order to increase the population's access to financial services, Pakistan announced its National Financial Inclusion Strategy (NFIS) in 2015. The goal of the NFIS was to remove obstacles to financial inclusion including restricted access to banking services, a lack of financial knowledge, and regulatory restrictions (Ali et al., 2019).

**Agent Banking:**

To increase access to financial services in underserved areas, the SBP adopted agent banking laws. In remote and rural areas, this enables commercial banks to designate independent agents to offer fundamental banking services like deposits, withdrawals, and bill payments (Waleed & Ali, 2020).

**Microfinance and Microcredit:**

Microfinance institutions (MFIs) have received support from Pakistani regulatory authorities to provide financial services to low-income people and small companies. Small loans for business owners in rural and underserved areas have largely been provided by microcredit and microfinance programs (Shafique & Siddique, 2020).

**Financial Literacy and Education:**

Financial literacy and education are fundamental components of any comprehensive financial inclusion strategy. The State Bank of Pakistan (SBP) in Pakistan understands how crucial it is to give the populace the information and abilities required to make wise financial decisions. The SBP has started a number of initiatives and programs aimed at promoting financial literacy to meet this objective. These initiatives play a critical role in enabling people to take control of their money, use official financial services, and take a more active role in the nation's economic development (Noor et al., 2020).

**Credit Guarantee Schemes:**

In order to improve small and medium-sized businesses (SMEs) access to financing, the Pakistani government has put in place credit guarantee schemes. By reducing the risk involved with lending to underserved parts of the population, these programs function as safety nets for lenders. These efforts encourage financial institutions to offer credit to SMEs and individuals who might not otherwise be able to because they provide guarantees or insurance on a part of the loans. This not only promotes financial inclusion by enabling a wider range of borrowers to access the capital essential to begin or grow their businesses, but it also boosts economic growth by encouraging entrepreneurship and business development (Ali et al., 2020).

**China's Fintech Ecosystem**

The fintech ecosystem in China has developed into a thriving and quickly changing environment where technologically enabled financial innovation is changing how financial services are acquired and provided. China has developed into a fertile field for fintech startups and established businesses alike because of a steadily increasing number of techno-savvy customers and an increased emphasis on digitalization. This ecosystem has undergone dramatic changes in recent years

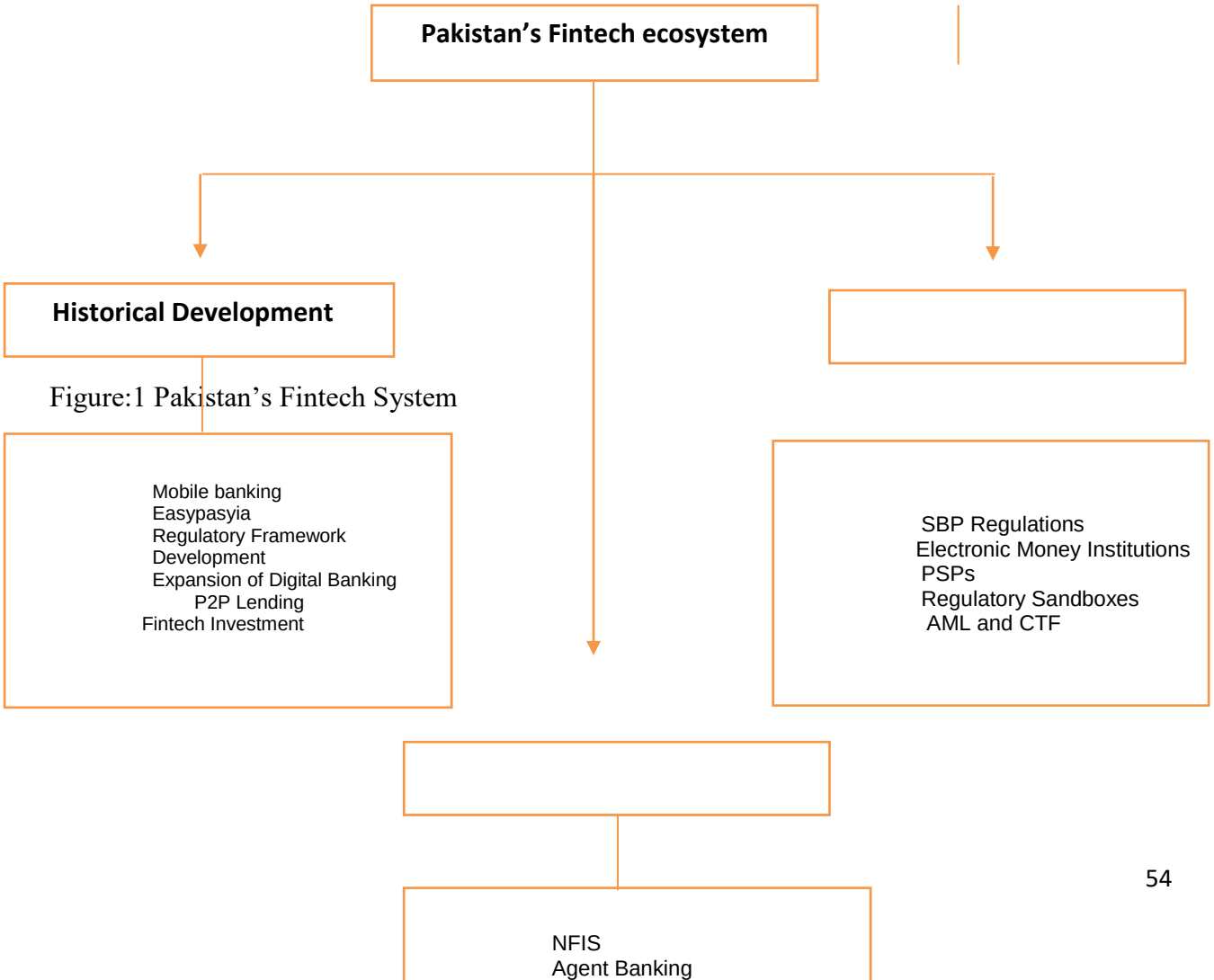


Figure:1 Pakistan's Fintech System

across several segments. The following section of the study undertakes a comprehensive exploration, encompassing the historical development, an assessment of regulatory frameworks, and a thorough examination of the financial inclusion initiatives championed by China's regulatory authorities.

**Early Foundations:**

In the early 2000s, the foundation for China's fintech ecosystem was created, as Internet banking and digital payments started to gain popularity. The 2004 founding of Alipay by the Alibaba Group was crucial in the development of electronic payments. It began as an online payment platform and eventually developed into a full-service provider of financial services (Lin & Xie, 2014)

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**Regulatory Framework:**

As the Chinese government began directing consideration to fintech, regulatory frameworks were created to monitor the industry. Early in the 2010s, the People's Bank of China (PBOC) published laws to control platforms for peer-to-peer lending and third-party payment processors (Hsu & Li, 2019).

**Proliferation of Mobile Payments:**

The growth of the third-party mobile payment sector in China has shifted in favor of diversification. The high penetration rate of mobile phones and the quick growth of mobile Internet both support the further growth of mobile payment. Cash and credit payments started to be replaced by mobile payments, which were principally encouraged by Alipay and WeChat Pay. The way Chinese consumers perform purchases and transfer money has altered as a result of mobile payments' simplicity, convenience, and quick adoption. In the third quarter of 2015, Alipay accounted for 68.4% of China's third-party mobile payment market (Mu et al., 2017).

**Peer-to-Peer (P2P) Lending:**

**:** Peer-to-peer (P2P) lending over the Internet has become a popular way to get loans in the credit market. It is described as peer-to-peer unsecured funding between lenders and borrowers through digital channels without the involvement of financial institutions. In order to address the small-loan needs of people and small-to-medium enterprises (SMEs), which frequently have trouble obtaining financing from traditional lending institutions, this form of lending marketplace is intended to augment traditional bank lending (Bachmann, et al., 2011).

Since the launch of the inaugural Chinese peer-to-peer lending site, ppdai.com (2007), this lending sector has experienced amazing growth and is now the biggest in the world. China News reported that the industry has over 2600 platforms as of the end of 2015, with total revenues exceeding 982.3 billion yuan, or $149 billion, up significantly from 253 billion yuan in 2014. The tremendous demand from people, households, small businesses, and microenterprises for access to Chinese finance, as well as the availability of funds from retail investors, have been the main drivers of this rapid expansion (Tao, et al., 2017; Stern, et al., 2017).

**Regulatory Frameworks:**

As the fintech industry in China has expanded quickly over the years, consequently has the regulatory environment. The government has taken a number of measures to manage potential hazards and strike a balance between innovation and stability. The legal frameworks controlling the Chinese fintech sector are evaluated as follows:

**Key Regulatory Authorities:**

The People's Bank of China (PBOC), China's central bank, serves as the key regulatory body in charge of regulating fintech in the country. The PBOC plays a central role in setting and implementing policies related to digital payments, digital currencies, and other financial services.

The PBOC, China's national central bank, unveiled a three-year fintech development plan in September 2019 with the intention of enhancing the standard of financial services, strengthening regulation of technology-driven innovations, and reducing financial risks. The strategy outlines the following six tasks and priorities (Albastaki, et al., 2020).

1. The need to improve the strategic application of fintech, advance forward-looking design, pinpoint fintech development trends, and prioritize coordinated planning, systematic arrangement optimization, and talent development.
2. Determining appropriate fintech applications, significant discoveries that will spur development, and effective regulation and control of significant generic technologies.
3. Improving the effectiveness and quality of financial services through cost-cutting measures, channel diversification, and financing service optimization to benefit Chinese consumers and promote the sound and long-term growth of the real economy.
4. Improving technological capabilities to reduce financial risks, balance security and development appropriately, use fintech to recognize, reduce, and address cross-market, cross-industry, and cross-regional financial risks, and tighten up the controls on cyber-security risks and the protection of financial data.
5. Improving financial regulation to be "more professional, unified, and penetrating" by creating a set of core regulatory standards, investigating cutting-edge management techniques for fintech, and facilitating integrated statistics for the financial industry. and
6. Increasing fundamental support for fintech while enhancing the ecosystem, streamlining pertinent governance structures, and adopting the proper actions in the areas of technology, rules and legislation, credit services, standards, and consumer protection.

**Third-Party Payment Processors:**

In 2010, the PBOC established the initial set of rules governing third-party payment processors. Payment processors like Alipay and WeChat Pay were compelled to obtain licenses and adhere to anti-money laundering and user identification verification standards as a result of this legislation. The emergence of third-party payments has substantially accelerated the growth of Internet commerce and made money transfers between buyers and sellers more safe, effective, practical, and affordable (Jin, et al., 2007).

**Internet Finance:**

With the support of the State Council and the CPC Central Committee, the People's Bank of China and nine other ministries in the Chinese central government released the Guidelines for Promoting the Healthy Development of Internet Finance in July 2015. The Guidelines reflect that compared to traditional financial institutions; Internet finance has developed a completely new financial business model. In order to promote Internet finance innovation and foster its healthy development, the Guidelines outline a number of regulatory strategies. The Guidelines also set the rules governing various forms of online finance (Xie, et al., 2016).

**Personal Information Protection:**

Data has been used more and more extensively in the Internet platform economy since the emergence of the information society and the rapid growth of the digital economy. However, a number of data-related challenges have surfaced, with

big data killing becoming a prominent and heated topic in recent years. The People's Republic of China's Personal Information Protection Law, which was recently put into effect, expressly forbids the killing of big data from the standpoint of safeguarding personal information and is anticipated to govern the killing of big data.

The Personal Information Protection Law's regulatory function is in three phases (Cao & Yang, 2023).

Personal information collection stage: The Personal Information Protection Law's Article 6 states that "excessive collection of personal information shall not be allowed" and that "the collection of personal information must be confined to the minimal range of processing purposes.", In order to collect personal information, the "minimum principle" must be followed.

Personal information processing stage: In accordance with Article 7 of the Personal Information Protection Law, "the principles of openness and transparency shall be observed in the processing of personal information, the regulations for processing personal information must be made public, and the purpose, method, and scope of processing shall be clearly stated." For the processing of personal information, the "principle of openness and transparency" has been developed.

Personal information application stage: The law's article 24 states that "when taking automated decisions by means of personal information, fair, transparency, and just results will be certain, and irrational differential handling shall not be applied to individuals on transaction terms such as transaction prices".

**Financial Inclusion Initiatives**

In order to increase access to financial services and promote economic development, China has implemented a number of financial inclusion programs. These programs have as their main focus communities that are underserved and unbanked, rural areas, and small and micro-sized businesses. Here is a detailed analysis of some of China's most important financial inclusion initiatives:

**Rural Credit Cooperatives (RCCs):**

RCC growth has been encouraged by China's regulatory bodies and the People's Bank of China (PBOC) in order to offer financial services in rural areas. To help farmers and small enterprises in rural areas, these cooperatives provide lending, savings, and insurance products (Nan, et al., 2019).

**Credit Reporting Systems:**

Credit reporting systems are electronic tools and databases that gather, process, and share information about people and businesses' finances and creditworthiness. These systems record information about a person's or an organization's history of borrowing and repayment, giving insights into their creditworthiness. Credit reporting systems have been established by regulatory bodies and private sector businesses to promote responsible lending, improve risk assessment, and increase financial inclusion by enabling lenders and fintech firms to make knowledgeable decisions when providing loans, credit, and several financial services to a broad spectrum of users, subsequently facilitating the development and expansion of China's rapidly developing digital finance landscape (Krause, et al., 2023).

**Central Bank Digital Currency (DCEP):**

China's fintech ecosystem is centered on Central Bank Digital Currency (DCEP), which highlights the nation's innovative work in digital finance. DCEP is a government-backed digital currency created and administered by the People's Bank of China (PBOC) with the aim of enhancing traditional cash. It aspires to increase the effectiveness, security, and openness of financial transactions while giving the central bank a tool for managing and

monitoring the money supply. The widespread adoption of DCEP is expected to revolutionize the way money is exchanged, with a focus on mobile payments, international trade, and financial inclusion. This is because it gives people and businesses access to quick, simple, and dependable digital payment options while also supporting the government of China's larger fintech and economic objectives (Shen & Hou, 2021).

**Financial Education and Literacy:**

easily accessible alternative to traditional banking for both consumers and small enterprises. Such as Akbank's Axess Credit and KrediPay. These platforms have made it possible for borrowers and private investors to communicate directly, frequently offering attractive interest rates and streamlining the financing process. P2P lending has thus filled a crucial need in the Turkish financial ecosystem, increasing access to credit and investment opportunities while supporting the nation's financial services industry's rising use of fintech solutions (Purkayastha & Tuzlukaya, 2020).

**Digital Wallets:**

Digital wallets have significantly changed the nature of financial transactions and improved customer convenience in Turkey's fintech sector. Users can now quickly and securely make payments both online and in person because of the popularity of services like BKM Express and Papara. Digital wallets have advanced the adoption of digital financial services in Turkey by providing a smooth and cashless payment experience. They have also been crucial in lessening the reliance on conventional banking practices, increasing the accessibility of financial transactions for a wider demographic, and enhancing Turkey's reputation as a center for cutting-edge fintech solutions (Aydin & Burnaz, 2016).

**Regulatory Frameworks:**

An evaluation of the regulatory frameworks within Turkey's fintech ecosystem reveals a complex and evolving landscape. The Turkish government has recognized the importance of fostering fintech innovation while also ensuring consumer protection and financial stability.

**Regulatory Authorities:**

Several significant institutions, notably the Banking Regulation and Supervision Agency (BRSA), the Capital Markets Board (CMB) (Sayın, 2017), and the Central Bank of the Republic of Turkey (CBRT), are principally in charge of overseeing regulatory compliance in the Turkish fintech sector. These organizations are essential in regulating a variety of fintech practices, such as banking, payment services, and capital markets (Gergin, 2018).

**Banking Regulation:**

Fintech businesses that provide banking and payment services are subject to rules and regulations set forth by the BRSA. It enforces criteria for capital sufficiency for fintech companies as well as steps to protect the security of transactions and client data.

In order to control the principles and institutions relating to the corporate governance of banks, the BRSA published a regulation (Gergin, 2018).

- Establishing corporate values and strategic goals for the Bank is necessary.
- The Bank's authorities and obligations must be precisely stated and carried out.
- The board of directors' members should have independent qualifications, be aware of the corporate governance role they have taken on, and be able to carry out their responsibilities well. They should also be able to evaluate the actions of the bank independently.
- They ought to be aware of the corporate governance responsibilities they have taken on and possess the skills necessary to perform senior management duties well.

- It is crucial to utilize the work of the Bank's inspectors and independent auditors.
- Wage policies must be in line with the bank's moral principles, business objectives, and internal checks and balances.
- Corporate governance transparency.

Banks must adhere to the rules

.

**Payment Services:**

To maintain the safety and integrity of payment systems, the payment services industry is subject to stringent regulation. Payment service companies must apply for licenses from the BRSA, which includes following rules pertaining to anti-money laundering (AML) and countering the financing of terrorism (CTF) (Degerli, 2019).

**Crowdfunding Regulations:**

The Capital Markets Board (CMB), which is responsible for regulating crowdfunding in Turkey, has established a formal framework for both reward- and equity-based crowdfunding schemes. These rules aim to promote innovation, make it easier for new and small enterprises to acquire finance, and safeguard investors' interests. By encouraging the development of crowdfunding platforms and upholding transparency and accountability, they have helped Turkey's fintech ecosystem become more vibrant and inclusive by enabling a variety of entrepreneurs and projects to obtain funding from a larger pool of investors (Karabulut, 2022).

**Regulatory Sandboxes:**

Regulatory sandboxes have also been implemented in Turkey, enabling financial entrepreneurs to test their avant-garde goods and services in a supervised setting. This promotes innovation while maintaining financial stability (Bayram et al., 2022).

**Financial Inclusion Initiatives:**

Turkey's regulatory authorities have actively promoted financial inclusion initiatives to ensure that a broader segment of the population has access to affordable and convenient financial services. These initiatives aim to reduce financial disparities, enhance economic stability, and improve the overall well-being of the Turkish people.

**Banking for All (Herkes İçin Bankacılık):**

The Banking Regulation and Supervision Agency (BRSA) and banks collaborated on this essential project. It attempts to make banking services more accessible to underserved and unbanked groups (Karapinar & Dogan, 2015). This initiative's essential components include:

- Banks are required to provide low-cost or free basic banking services, such as savings and payment accounts, to people who meet specific requirements.
- Financial education programs are set up to help consumers, particularly those who are new to banking, become more financially literate.
- Promoting mobile banking services will increase access to financial services for those who do not have access to physical bank locations.
- 

**Turkish Postal Services (PTT) and Financial Services**:

In order to bring financial services to isolated and rural locations where conventional banks might not be present, the Turkish Post and Telegraph Corporation (PTT) is essential. Basic financial services like account opening, money transfers, and payment services are available at PTT branches (Cetin, 2021).

**Microfinance and Small Business Support:**

Regulatory authorities have facilitated the development of microfinance institutions (MFIs) and non-bank financial institutions (NBFIs) to provide small loans and financial services to micro-entrepreneurs, small business owners, and low-income individuals (Dinçer et al., 2022).

**Electronic Payment Systems:**
Promoting electronic payment systems, such as debit cards and mobile wallets, to facilitate transactions and payments for individuals who may not have access to traditional banking services. This also includes the use of prepaid cards for various financial transactions (ETİ, 2022).

**Promotion of Cooperative and Village Development Banks:**
Regulatory authorities encourage the establishment and support of cooperative and village development banks to serve local communities and meet their financial needs (Fidan & Nurdun, 2008).

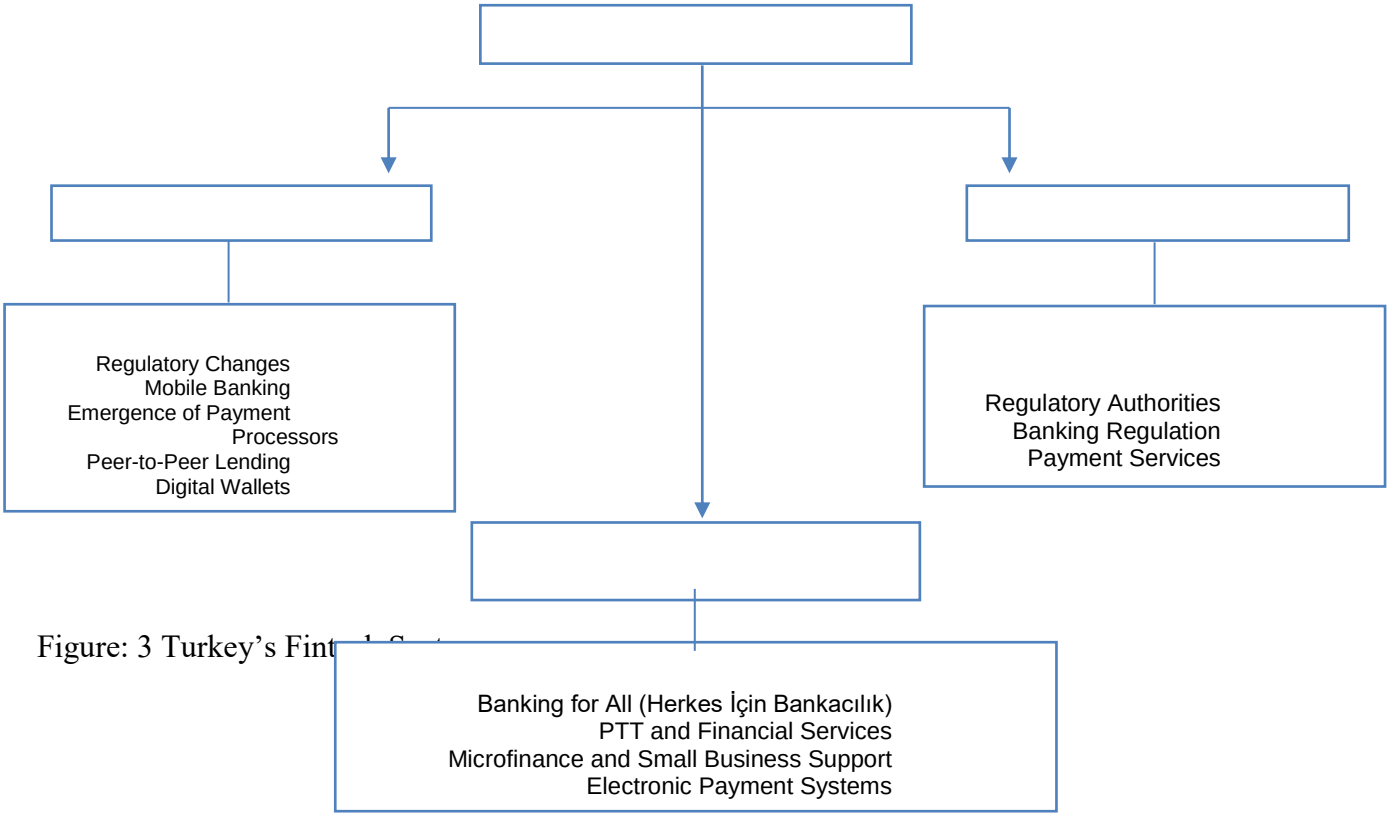


Figure: 3 Turkey's Fint[illegible]

**Conclusion:**

In order to pursue financial innovation and inclusion, Pakistan, China, and Turkey each have distinct fintech ecosystems that reflect their respective trajectories and ambitions. By embracing digital financial services and building a legislative environment that fosters innovation while upholding strict security standards, Pakistan has made impressive gains. Through efforts like agent banking and microfinance programs, the commitment to financial inclusion has increased access to financial services, providing a more inclusive financial future for its population. On the other side, China has quickly developed into a global fintech powerhouse, propelled by innovative firms like Alipay and WeChat Pay, resulting in a society that is almost entirely cashless. While an emphasis on personal data protection and financial education illustrates its dedication to maintaining both privacy and financial literacy, its regulatory structure aims to strike a balance between innovation and stability. The Turkish fintech sector, in comparison, exhibits a well-balanced strategy that has developed over time, making financial services more easily available and practical through mobile banking and electronic payment methods. Financial inclusion is emphasized in programs like the "Banking for All" project as well as other programs where regulatory bodies have played a crucial role in regulating various fintech features. Together, these three nations demonstrate the various ways that fintech is transforming their economies. They all have the same objective of fostering economic growth and improving the financial security of their citizens.

**References**


Ahmed, S. (2022). The Public Financial Management in Context of New Global Environment—A Case of Pakistan. In Effective Public Administration Strategies for Global" New Normal" (pp. 157-176). Singapore: Springer Nature Singapore.

Albastaki, Y. A., Razzaque, A., & Sarea, A. M. (Eds.). (2020). Innovative strategies for implementing FinTech in banking. IGI Global.

Ali, H., & Abdullah, R. (2020). Fintech and financial inclusion in Pakistan: an exploratory study. Enhancing Financial Inclusion through Islamic Finance, Volume I, 159-192.

Ali, H., Ahmad, I., & Kamaruddin, B. H. (2020). Efficiency performance of smes firms: A case study of islamic financing guarantee scheme of credit guarantee corporation. Malaysian Journal of Consumer and Family Economics, 24, 120-134.

Ali, N., Fatima, K., & Ahmed, J. (2019). Impact of financial inclusion on economic growth in Pakistan. Journal of Managerial Sciences, 13(3), 166-174.

Aman, T., Shah, N., Hussain, A., Khan, A., Asif, S., & Qazi, A. (2015). Effects of mobile phone use on the social and academic performance of students of a public sector medical college in khyber pakhtunkhwa Pakistan. KJMS, 8(1), 99-103.

Atas, A. H., & Çelik, B. (2019). Smartphone use of university students: Patterns, purposes, and situations. Malaysian Online Journal of Educational Technology, 7(2), 59-70.

Aydin, G., & Burnaz, S. (2016). Adoption of mobile payment systems: A study on mobile wallets. Journal of Business Economics and Finance, 5(1), 73-92.

Baber, H. (2020). Financial inclusion and FinTech: A comparative study of countries following Islamic finance and conventional finance. Qualitative Research in Financial Markets, 12(1), 24-42.

Bachmann, A., Becker, A., Buerckner, D., Hilker, M., Kock, F., Lehmann, M., ... & Funk, B. (2011). Online peer-to-peer lending-a literature review. Journal of Internet Banking and Commerce, 16(2), 1.

Balo ch, A., Abro, I. A., & Ghouri, Z. (2023). THE RISE OF

CRYPTOCURRENCY ADOPTION IN PAKISTAN: THE LEGAL LANDSCAPE. Pakistan Journal of International Affairs, 6(3).
Bayram, O., Talay, I., & Feridun, M. (2022). Can FinTech promote sustainable finance? Policy lessons from the case of Turkey. Sustainability, 14(19), 12414.
Berg, T., Burg, V., Gombović, A., & Puri, M. (2020). On the rise of fintechs: Credit scoring using digital footprints. The Review of Financial Studies, 33(7), 2845-2897.
Bokhari, H. (2022, October). Digital Financial Inclusion of the Informal Sector: The case of Raast Platform in Pakistan. In Proceedings of the 15th International Conference on Theory and Practice of Electronic Governance (pp. 161-166).
Cao, Y., & Yang, M. (2023). Legal regulation of big data killing:--From the perspective of "Personal Information Protection Law". Journal of Education, Humanities and Social Sciences, 7, 233-241.
Cetin, V. R. (2021). Regulation of Postal Sector in Turkey. The Regulation of Turkish Network Industries, 327-343.
Degerli, K. (2019). Regulatory challenges and solutions for fintech in Turkey. Procedia Computer Science, 158, 929-937.
Demirguc-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2018). The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution. World Bank Publications.
Dinçer, H., Yüksel, S., Çağlayan, Ç., & Ubay, G. G. (2022). Developing Strategies to Improve Microfinance System in Turkey with Fuzzy Logic. In Microfinance to Combat Global Recession and Social Exclusion: An Empirical Investigation (pp. 81-95). Singapore: Springer Nature Singapore.
e Rehman, Z., Akhtar, R., & Shah, S. A. (2022). The Impact of Fintech on Banks with Historical, Contemporary and Future Perspective with Legal Perception. Journal of Development and Social Sciences, 3(3), 108-116.
ETİ, H. S. (2022). Effect of the Covid-19 Pandemic on Electronic Payment Systems in Turkey. Sosyal Bilimler Metinleri, 2022(2), 142-165.
Fidan, H., & Nurdun, R. (2008). Turkey's role in the global development assistance community: the case of TIKA (Turkish International Cooperation and Development Agency). Journal of Southern Europe and the Balkans, 10(1), 93-111.
Gergin, B. (2018). Corporate Management in Banking System: Investigation of Industrial Development Bank of Turkey of the CMB Compliance with Corporate Governance Principles. Journal of Industrial Policy and Technology Management, 1(1), 27-40.
Hsu, S., & Li, J. (2019). China's Fintech Explosion: Disruption, Innovation, and Survival. Columbia University Press.
Jalil, J., & Sabir, S. (2019). Mobile phone usage and distraction in learning sessions. Pakistan Armed Forces Medical Journal, (1), 54-59.
Javed, A., & Khan, Z. (2022). Marketing strategies for highly volatile emerging markets: an empirical study from Pakistani cellular industry. International Journal of Emerging Markets, 17(3), 812-831.
Jeník, I., & Duff, S. (2020). How to build a regulatory sandbox. A Practical Guide for Policy Makers, https://www. cgap. org/sites/default/files/publications/2020_09_ Technical_Guide_H ow_To_Build_Regulatory_Sandbox. pdf.
Jin, Y., Song, W., & Zhang, J. (2007). On Developing China's Third Party Payment. In Integration and Innovation Orient to E-Society Volume 1: Seventh IFIP International Conference on e-Business, e-Services, and e-Society (I3E2007), October 10–12, Wuhan, China (pp. 578-585). Springer US.
Karabulut, Ö. (2022). Possibility of Crowdfunding Applications Through Participation Banking (Doctoral dissertation, Marmara Universitesi (Turkey)).

Karapinar, A., & Dogan, I. C. (2015). An Analysis on the Performance of the Participation Banks in Turkey. Accounting and Finance Research, 4(2), 24-33.
Khan, I., & Jaffar, K. H. (2021). Searching for the Binding Constraint to Digital Financial Inclusion in Pakistan: A Decision Tree Approach. CGD Policy Paper 218.
Krause, T., Chen, M., Wassermann, L., Fischer, D., & Grossklags, J. (2023). China's corporate credit reporting system: A comparison with the United States and Germany. Regulation & Governance, 17(3), 755-771.
Lin, R., & Xie, J. (2014). Understanding the adoption of third-party online payment: An empirical study of user acceptance of Alipay in China.
Makina, D. (2019). The potential of FinTech in enabling financial inclusion. In Extending financial inclusion in Africa (pp. 299-318). Academic Press.
Manzoor, R., Javed, A., Ahmed, V., & Rauf, A. (2021). Digital Financial Services in Pakistan: Opportunities, Challenges and Suggestions. Journal of Finance & Economics Research, 6(2), 1-16.
Mazhar, U., & Rehman, F. (2021). Monetary policy in a developing country: A case of Pakistan. Asian Journal of Management Cases, 18(2), 144-155.
Mirza, A. M. Financial Action Task Force (FATF) & Pakistan: Commitments, Compulsions & Challenges. IPRI Journal, 22(1).
Mu, H. L., & Lee, Y. C. (2017). Examining the influencing factors of third-party mobile payment adoption: a comparative study of Alipay and WeChat Pay. The Journal of Information Systems, 26(4), 247-284.
Nan, Y., Gao, Y., & Zhou, Q. (2019). Rural credit cooperatives' contribution to agricultural growth: evidence from China. Agricultural Finance Review, 79(1), 119-135.
Niazi, S. M. Investment Policies in Pakistan: A Critical Analysis of Investor Protection under Securities and Exchange Commission of Pakistan. Journal of Law & Social Studies (JLSS), 5(3), 564-573.
Noor, N., Batool, I., & Arshad, H. M. (2020). Financial literacy, financial self-efficacy and financial account ownership behavior in Pakistan. Cogent Economics & Finance, 8(1), 1806479.
Noreen, M., Mia, M. S., Ghazali, Z., & Ahmed, F. (2022). Role of government policies to fintech adoption and financial inclusion: A study in Pakistan. Universal Journal of Accounting and Finance, 10(1), 37-46.
Noreen, M., Mia, M. S., Ghazali, Z., & Ahmed, F. (2022). Role of government policies to fintech adoption and financial inclusion: A study in Pakistan. Universal Journal of Accounting and Finance, 10(1), 37-46.
Onay, C., & Öztaş, Y. E. (2018). Why banks adopt mobile banking? The case of Turkey. International Journal of Electronic Finance, 9(2), 95-120.
Purkayastha, N. N., & Tuzlukaya, Ş. E. (2020). Determination Of The Benefits And Risks Of Peer-To-Peer (P2p) Lending: A Social Network Teory Approach. Copernican Journal of Finance & Accounting, 9(3), 131-143.
Rana, A. A., Zulfiqar, F., & Masuad, S. (2023). The Legal and Regulatory Framework for Cryptocurrency and Fintech in Pakistan: Challenges and Policy Recommendations. Available at SSRN 4426294.
Sayın, H. B. (2017). The Authorized Capital System in the Context of Measures to be Taken on the Capital Market. CURRENT PERSPECTIVES IN SOCIAL SCIENCES, 33.
Settle, A. (2022). The financial inclusion agenda: for poverty alleviation or monetary control?. Review of International Political Economy, 29(3), 928-954.
Shafique, O., & Siddique, N. (2020). The impact of microcredit financing on poverty alleviation and women empowerment: An empirical study on Akhuwat Islamic

microfinance. PalArch's Journal of Archaeology of Egypt/Egyptology, 17(8), 548-562.
Shen, W., & Hou, L. (2021). China's central bank digital currency and its impacts on monetary policy and payment competition: Game changer or regulatory toolkit?. Computer Law & Security Review, 41, 105577.
Siddique, M. A., Nobanee, H., Atayah, O. F., & Bayzid, M. K. (2022). Anti-money laundering and counter-terrorism financing disclosure by money exchange providers in the GCC countries. Journal of Money Laundering Control, 25(4), 833-842.
Soni, G., Kumar, S., Mahto, R. V., Mangla, S. K., Mittal, M. L., & Lim, W. M. (2022). A decision-making framework for Industry 4.0 technology implementation: The case of FinTech and sustainable supply chain finance for SMEs. Technological Forecasting and Social Change, 180, 121686.
Stern, C., Makinen, M., & Qian, Z. (2017). FinTechs in China–with a special focus on peer to peer lending. Journal of Chinese Economic and Foreign Trade Studies, 10(3), 215-228.
Sultan, M. F., Asim, M., Khan, R. A., & Shaikh, S. (2023). Fintech an Opportunity or Opportunity Missed by Developing Sides of the World: A Special Emphasize on Fintech Use and Prospects in Pakistan. In Financial Inclusion Across Asia: Bringing Opportunities for Businesses (pp. 109-116). Emerald Publishing Limited.
Sultana, R. (2014). Mobile Financial Services (MFS) Business and Regulations: Evolution in South Asian Markets. Available at SSRN 2524220.
Tao, Q., Dong, Y., & Lin, Z. (2017). Who can get money? Evidence from the Chinese peer-to-peer lending platform. Information Systems Frontiers, 19, 425-441.
Waleed, A., & Ali, T. (2020). The Impact of Branchless Banking on Promotion. Journal of Finance, Accounting and Management, 11(1), 53-64.
Xie, P., Zou, C., & Liu, H. (2016). The fundamentals of internet finance and its policy implications in China. China Economic Journal, 9(3), 240-252.
Yay, G. G., & Yay, T. (2012). The Structure and Regulation of Turkish Banking System: 2000-2010. Regulation and competition in the Turkish banking and financial markets, 49.
Younas, W., & Kalimuthu, K. R. (2021). Telecom microfinance banking versus commercial banking: a battle in the financial services sector. Journal of Financial Services Marketing, 26, 67-80.
Zahid, M., Rahman, H. U., Ullah, Z., & Muhammad, A. (2021). Sustainability and branchless banking: The development and validation of a distinct measurement scale. Technology in Society, 67, 101764.
ZHang, H., & Xiong, X. (2020). Is financial education an effective means to improve financial literacy? Evidence from rural China. Agricultural Finance Review, 80(3), 305-320.
Zülfükar, C. (2021). Transformation in consumption behavior and payment preferences of consumers (in different generations) with Covid-19 pandemic (Master's thesis, Işık Üniversitesi).

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