

The Impact of Digitalization on FDI Inflows in Saudi Arabia



Hisham Jameel Bardesi

Associate Professor, Department of Economics, King Abdulaziz University, Jeddah, Saudi Arabia.

*Corresponding Author's Email:
hbardesi@kau.edu.sa

Article's History

Submitted: 1st July 2024

Accepted: 9th July 2024

Published: 16th July 2024

Abstract

Aim: This study investigated the impact of digitalization on foreign direct investment (FDI) inflows in Saudi Arabia.

Methods: The study identified critical digitalization and institutional factors and hypothesized their influence on FDI inflows to Saudi Arabia. Multiple linear regression analysis using the Ordinary Least Squares (OLS) method was conducted on data from 1997 to 2022, utilizing SPSS.

Results: The outcomes revealed that digital infrastructure and government policy positively and significantly explain the FDI inflows in Saudi Arabia. The null hypothesis was rejected, indicating that effective digitalization and supportive government policy contribute to FDI inflows.

Conclusion: The study concluded that internet access, mobile phone usage, and favorable government policies are key factors in attracting FDI inflows into Saudi Arabia.

Recommendations: Policymakers should prioritize developing and implementing comprehensive digitalization strategies and regulations to improve digitalization and business-related institutions, raise the standard of digital transformation, and improve the regulatory environment framework to encourage more inward FDI inflows.

Keywords: FDI, Saudi Arabia, digitalization, institutions, government policy, digital infrastructure.

INTRODUCTION

FDI drives economic growth, especially in emerging countries. Its importance stems from capital augmentation and technical, managerial, and skill improvements. Understanding FDI in emerging economies requires assessing numerous linked elements. This conceptual framework explains these key factors. Various studies have examined the relationship between FDI inflows and country-specific variables in developing countries. Still, few have explored the effect of digitalization, which is the application of digital technologies and infrastructures in business, economy, and society (Autio, 2017), on FDI inflows, especially in Saudi Arabia, relatively ample capital and scarce skilled labor.

The 1970s oil boom brought a surge in revenue for many countries, but a lack of skilled workers hampered their ability to invest these resources fully. FDI emerged as a potential solution. A prime example is Saudi Arabia, a major oil exporter, which actively promoted FDI inflows to close the gap between its vast financial resources and the expertise needed. This strategy aimed to diversify and expand their production base beyond oil, fostering long-term economic growth.

Furthermore, the importance of digitalization in attracting FDI to countries such as Saudi Arabia is growing. The Saudi Vision 2030 emphasizes the role of digitalization. An extensive digital infrastructure provides effective connectivity and smooth communication, which is vital for international businesses and indispensable in the information and communication technology (ICT), e-commerce, and fintech industries. Moreover, upgraded digital infrastructure streamlines firm operations, enhances government service accessibility, and facilitates online regulatory adherence. Establishing dependable data centers and cloud services is crucial for enabling remote work and indirectly enhancing industries such as education and healthcare.

The Saudi ICT sector was worth SAR154 billion in 2022, making it MENA's largest and fastest-growing digital economy (The Communications, Space, and Technology Commission (CST), 2024). Significant achievements include privatizing the ICT sector and many users on popular social media platforms, government measures to advance the digital ecosystem, new ICT rules, and infrastructure investments. Saudi Arabia has also prioritized cybersecurity and data governance, demonstrating its dedication to becoming a prominent digital economy in which "all economic activity reliant on or significantly enhanced by the use of digital inputs, including digital technologies, infrastructure, services, and data" (Lynn et al., 2022, p. 72).

A comprehensive analysis of foreign investment patterns provides a crucial framework for comprehending Saudi Arabia's economic development. Initially, multinational enterprises (MNEs) invested in resources-seeking FDI (vertical FDI) in Saudi Arabia for natural resources, gradually moving the economy towards the oil sector. To attract more foreign investment, Saudi Arabia enacted the Foreign Capital Investment Law (FCIL) in 1957 (then renewed in 1964) to provide investors with a generous tax exemption and full ownership of the subsidiary for MNEs to invest in Saudi Arabia.

Later, from the mid-1970s to the late 1980s, Multinational enterprises (MNEs) gradually changed their production base to participate in diversifying the economy. Due to the oil shocks of the 1970s and the need to stimulate the economy by developing other sectors, the Saudi government has again introduced new legislation (upgraded FCIL in 1979) to attract market-seeking FDI (horizontal FDI) to non-oil sectors (FCIL, 1979). Between the late 1980s and the mid-1990s, Saudi

Arabia entered into diversification and economic reforms to expand foreign investors' prominence and improve the business environment. Yet, no notable legislation was issued during this period to alter the direction of FDI inflows in quantity and quality.

Between the mid-1990s and the 2000s, Saudi Arabia started to demonstrate privatization, economic reforms, and deregulation, which were joined by the opening of various sectors to foreign investors when FDI inflows to the economy surged. FDI inflows surged due to the attempt of Saudi policymakers to expand the industry base and diversify the sectoral composition of the economy to reduce dependency on crude oil and redress the growing income indebtedness of the Kingdom, where several petrochemically related sectors received FDI to boost the production of related industries (UNCTAD, 1999).

Saudi Arabia initiated the first phase of reform and privatization in the late 1990s to enhance the investment climate, creating the Saudi Arabian General Investment Authority (SAGIA) in 1999. Infrastructure projects in the energy, transport, and telecommunication sectors were initiated to attract FDI, especially in the 2000s. Moreover, the new FCIL was adopted in 2000 with more favorable policies (FCIL, 2000). Later, in 2003, the Ministry of Communications and Information Technology (MCIT) was privatized and restructured to oversee ICT. In 2005, Saudi Arabia acceded to the WTO and joined the G20 in 2008 to increase investor confidence and attract more FDI.

Driven by Vision 2030, the Saudi government's 2016 economic restructuring strategy, the Kingdom launched a comprehensive reform process in the 2010s to establish itself as a digitalized country in all sectors. A key pillar of this transformation was implementing institutional changes and policy reforms that enhanced the economy, leading to substantial growth in attracting FDI. Upgraded ICT infrastructure played a prominent role in driving this upward trend. These reforms opened the economy to foreign investors by allowing 100 percent foreign ownership in certain sectors.

Moreover, the widespread availability of internet access, driven by the rapid advancement of internet technology, the proliferation of online services, and a shift in social behavior, has further enhanced Saudi Arabia's prominence. The utilization of digitalization within the Kingdom has seen significant development, marked by swift technological progress, the rise of innovative platforms, and its positive influence on society and business. In this respect, this has facilitated the growth of the digital economy, benefiting both the public and private sectors. In this transformed regard, Saudi Arabia's distinctive geographical position, robust digital infrastructure, and advantageous investment policies have made it an attractive choice for MNEs seeking opportunities globally.

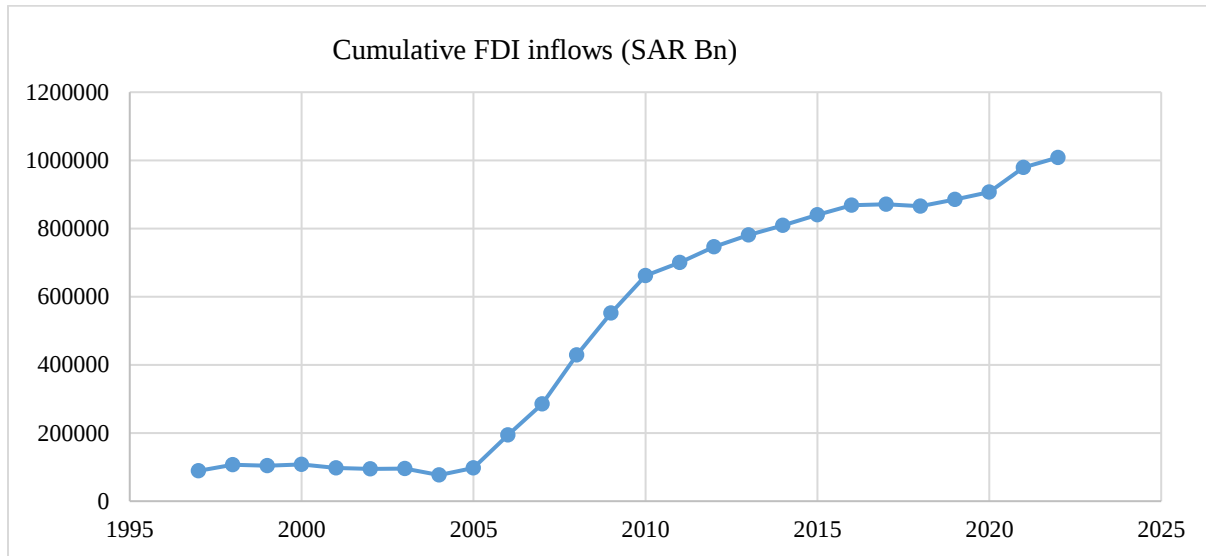


Figure 1: Cumulative FDI inflows.

Source: UNCTAD, World Investment Report (WIR) Various Years.

Study Objective

This study explored how digitalization can improve Saudi Arabia's attractiveness to FDI. It analyzed the effect of digital infrastructure factors (internet access, mobile phone users, etc.) and institutional factors (supporting government policies), subsequently attracting more FDI inflows in Saudi Arabia. The study used multiple linear OLS regression analysis methods to investigate how digital infrastructure factors and government policies affect FDI inflows to Saudi Arabia from 1997 to 2022.

Study Questions

The following questions were explored:

- Do the unique characteristics of digitalization factors impact FDI inflows to Saudi Arabia as other countries?
- Do the unique characteristics of institutional factors impact FDI inflows to Saudi Arabia as other countries?

LITERATURE REVIEW

Theoretical Framework

The ownership, location, internalization (OLI), or eclectic paradigm (Dunning, 1980) explains why MNEs invest in particular host countries. The second pillar of the OIL paradigm, the location-specific advantages, focuses on why some locations attract FDI based on factors such as government policy, economic variables, and cost of production. The location-specific advantage of the FDI includes the size of the market, the cost of labor, the level of infrastructure development, the incentives given by the different governments, the trade openness of the host countries, and other variables.

Dunning (1993) extended the eclectic paradigm of FDI, categorizing the location-specific advantages by identifying four motives for MNEs to invest abroad: market, resource, efficiency, or strategic asset-seeking FDI. Market-seeking FDI targets host countries' local marketplaces due to market size, growth, domestic structure, and infrastructure provision. Resource-seeking FDI seeks to appropriate domestically unavailable natural and human resources that may be costly at home. Efficiency-seeking FDI seeks to reduce manufacturing costs by shifting manufacturing plants to countries with lower labor costs and tax exemptions. Meanwhile, strategic asset-seeking FDI acquires new technologies and capabilities, often targeting countries known for their research and development intensity.

Moreover, Kinoshita and Campos (2003) have categorized the factors influencing location choice into three categories: (i) country-specific advantages, such as low-cost labor, a large domestic market, skilled labor, and adequate infrastructures; (ii) institutions, macroeconomic policies, and other policies that enhance the costs of doing business; and (iii) agglomeration economies that stem from the externalities occurring when locating near other foreign investors.

Resource-seeking FDI considers infrastructure development an important factor in allocating their investment abroad. However, based on the new advancements in ICT, which have significantly changed how they conduct business, Infrastructures are categorized into two types: (i) traditional or physical infrastructure (Roads, bridges, dams, ports, train lines, etc.); (ii) ICT infrastructure (internet user, mobile phone, broadband, fixed telephone, etc.,) which is major pillar of digitalization, and increasingly digital infrastructure is built on these technologies to enhance the safety, sustainability and efficiency of traditional infrastructure systems (Atkinson et al., 2016). The digital economy involves tangible products and intangible data and information flows. Therefore, the ICT telecommunication infrastructure is crucial in this economy (Tiong et al., 2022), aligning with the eclectic paradigm, where strong digital infrastructure based on robust digital infrastructure, a country-specific advantage factor, attracts FDI.

In summary, the factors that determine location are classified into three groups. The first includes advantages unique to a specific country, like cheap labor, a sizable domestic market, a highly skilled labor force, sufficient infrastructure, and easy market access. The second comprises institutions, macroeconomic policies, and other laws that support favorable business operations. The third is the consistent FDI pattern that agglomeration economies drive. Hence, based on the country-specific advantages and institutions, this paper investigates the importance of digitalization (digital infrastructure: internet users, mobile phone subscribers, etc.) and institutions (privatization, 2000 FCIL, reforms, and Vision 2030) on FDI inflows to Saudi Arabia.

Empirical Review

Building on existing research exploring the influence of country-specific advantages and institutions on FDI, this review focuses on factors relevant to the host country's digitalization and institutional environment. The ascendance of digitalization has underscored the value of digital infrastructure, such as internet users, mobile phones, broadband, fixed telephones, etc. Furthermore, measures of institutions related to governance legislation, regulations, reforms, Vision, etc., have a greater impact on the MNE's decision to invest overseas. Studies have explored the nuanced effects of digital infrastructure on FDI inflows, emphasizing the importance of digitalization in attracting FDI, particularly in the context of developing countries. Digitalization

applies digital technology and infrastructures in various aspects of businesses, the economy, and society (Autio et al., 2018). Digital Infrastructure is the most critical resource-seeking FDI factor, as it increases the efficacy of investments and boosts firm productivity by 7–10% (Grimes et al., 2010), attracting additional FDI.

A study by Kinoshita and Campos (2003) found that in 25 transition economies, institutions and infrastructures determined the location of FDI, surpassing the significance of other economic variables. Meanwhile, Pazienza and Vecchione (2009) used internet users to investigate the determinants of FDI and discovered a positive impact of the internet on FDI in Italy. Demirhan and Masca (2008) showed that telephone mainlines positively and significantly affected FDI flows in 38 developing countries.

Using factors such as digital business, e-commercial activities, and digital public services, Ha and Huyen (2022) showed that digitalization plays a critical role in promoting FDI inflows in both the short-term and long-term in European countries. They determined that digital transformation is an unavoidable process that must be adopted to overcome the problems posed by the COVID-19 pandemic and address the issue of delayed or insufficient foreign investments. Zhang et al. (2024) discovered a positive correlation in low-income cities where digitalization substantially attracts FDI in their investigation of the impact of digitalization on FDI inflows in 270 Chinese cities. Nevertheless, this impact is limited in high- and medium-income cities. Their findings underline the potential strategic role of digitalization as an instrument for economic growth, as incentives and the development of digital infrastructure could be essential for promoting FDI in lower-income regions.

In their study of Africa, Mensah and Traore (2024) found that the availability of fast internet connection stimulates FDI inflows in the service sectors. This effect is particularly prominent in the finance, technology, retail, and health services subsectors. The study also pointed out that access to complementary complex infrastructures, such as electricity and roads, further amplified internet connectivity's effects on FDI. This suggests that digital infrastructure can be pivotal in attracting FDI when supported by quality physical infrastructure and governance improvements. According to the Nguea (2020) study, communication infrastructure positively and significantly impacted FDI in the short and long term; this suggests that enhancing Cameroon's business climate through improved infrastructure is a key factor in luring FDI to the country.

Wadhwa and Reddy (2011) used Panel regression to illustrate that mobile subscribers and FDI were positively correlated in 10 Asian countries. Internet users had a negative association with FDI because developing countries first started utilizing the internet after 2000. They concluded that despite the negative relationship, it should be leveraged as an opportunity for future domestic investments in innovative technologies. According to Al-Sadiq (2021), e-government¹ could boost a country's locational advantages and attract more FDI. He evaluated this hypothesis using imbalanced panel data for 178 host countries. The result implied that e-government boosts FDI inflows.

Nur'ainy and Adipati (2018) investigated the ICT-related FDI factors using 25 Asian countries with FDI activity and a positive FDI value. The study found that law-making bodies, digital

¹ E-government is “the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners, and employees” (Silcock, 2001, p88)

content, and firm-level technology absorption might boost Asian FDI inflows. Improving education, internet use, and government ICT priorities could lower FDI flow to Asian countries. They concluded that the latest technology or mobile cellular pricing does not attract foreign investors. Furthermore, Huang (2023) examined how China's digital economy affects FDI inflows. The findings demonstrated that the digital economy positively impacts FDI inflows. The direct and intermediary effects make up the entire effect of the digital economy on FDI inflow. The digital economy has a significantly positive direct impact on FDI inflows. He also assessed the effect of environmental regulation, showing its significant regulatory role in inhibiting the inflows of FDI.

According to Hao and Fanhua (2021), the government considerably facilitated the entrance of foreign-funded firms. It improved the efficiency of foreign-funded enterprises by actively encouraging "Internet plus government affairs" and greatly streamlining the procedures. Hintošová and Bódy (2023) studied sustainable FDI in the digital economy and the role of developments in the digital economy in shaping the sustainability attributes, finding that Nordic, Visegrad Balkan, and Baltic countries showed more similarities when investigated through cluster analysis and that the theoretically advanced digital development may serve as an anchor for sustainable FDI.

In their study, Tiong et al. (2022) examined the role of ICT in FDI in Malaysia. The results demonstrated that mobile telephony plays a significant positive role in FDI. Furthermore, institutional variables significantly influence FDI. The results highlight the significance of ICT and the institutional framework, which, combined with the OLI paradigm, can help explain the factors affecting FDI in the new economy. Other research found that firm-level technology absorption directly affects FDI. Still, government prioritization of ICT does not directly affect FDI (Lee, 2017). Another study found that telephone lines as infrastructure significantly attracted FDI to Nigeria in the short run (Ogunjimi & Amune, 2019). Also, Asiedu (2002) discovered a favorable correlation between telephone lines and FDI.

Furthermore, Suh and Boggs's (2011) study emphasized the importance of communications infrastructure in luring foreign investment. They also suggested that investment inflows are influenced by technological infrastructure and human communication usage, but only for a limited period as market economies develop. Gholami et al. (2005) used the causality test, highlighting a causal relationship between ICT and FDI in developed but not developing countries, which indicates that a higher level of ICT investment leads to an increased inflow of FDI. Bellak et al. (2010) emphasized in the Southeast European countries study that there is a substantial opportunity to attract FDI by improving their institutional environment and infrastructure endowment.

Using a sample of 41 African countries, Bouchoucha and Benammou (2020) examined the impact of governance on the attractiveness of FDI to identify the institutional quality characteristics that influence this attraction. The empirical findings demonstrated that the quality of regulation, government efficacy, voice and accountability, and the ability to combat corruption are all positively connected with FDI attractiveness to African nations. Moreover, Wenje (2024) analyzed the effect of various infrastructure developments on FDI in Kenya and concluded that ICT infrastructure positively and significantly affected FDI inflows and that infrastructural development is a prerequisite for FDI.

A study of determinants of FDI in Middle East and Northern Africa (MENA) countries showed

that institutional variables significantly impacted the determinant FDI. At the same time, the infrastructure index was statistically insignificant across all specifications (Abdelgadir, 2010). The results of Fakher's study (2016) of Egypt indicated an insignificant positive relationship between ICT investments and FDI, and the result could be related to the weakness of the ICT infrastructure. Still, good governance may play a key role in supporting these FDI determinants. In their study on the determinants of FDI inflows to Gulf Cooperation Council (GCC) countries, Siriopoulos et al. (2021) discovered that the GCC block had met the basic requirements for governance quality concerning FDI. In addition, El-Awady et al. (2020) found a positive correlation between legislation and foreign investment laws and the amount of FDI Inflow in Saudi Arabia, suggesting that the studied variable is directly related to the volume of foreign investment.

METHODOLOGY AND DESIGN

The study applied two methods to explore the factors influencing the inflows of FDI into Saudi Arabia. Employing qualitative and quantitative research methods provided a comprehensive understanding of the role that government policies, digital infrastructure, and the business environment play in attracting FDI. Synthesizing methods offered the most robust, credible, and actionable findings to support policymakers, investors, and enterprise actions. The study used qualitative analysis due to its critical understanding of contextual and subjective factors. In this respect, the study searched to understand how government policy, digital infrastructure evolution, and the business environment enhance Saudi Arabia's attractiveness as a destination for FDI.

The study also utilized a structured quantitative approach using secondary data and multiple linear regression analysis via OLS to examine the relationships between independent variables representing digitalization and institutional factors (internet users, mobile phone subscribers, and government policy) and the dependent variable, FDI inflows in the relatively capital-abundant and skilled labor-short Saudi Arabian economy.

The study used OLS regression to build a macroeconomic demand model and estimate the coefficients of the predictors to assess the relationships between the dependent and independent variables. This method helped determine to what extent each predictor influences the dependent variable. The correlational design aimed to identify and quantify the strength and direction of these relationships. The robust statistical techniques, including correlation analysis, collinearity diagnostics, and residual analysis, ensured the reliability and validity of the findings. The data was drawn mainly from UNCTAD's World Investment Reports, government publications, and international databases. In addition, a dummy variable was used to assess the impact of reforms and government policies on FDI inflows. The dataset covered the period 1997 to 2022. The study employed SPSS for regression analysis and other relevant statistical tests.

FINDINGS

Descriptive Analysis

Saudi Arabia reformed and privatized the ICT sector in 2003, reconstructing the MCIT to supervise, implement policies, and construct ICT plans. To increase support for the ICT sector as a drive for diversifying the economy, Saudi Arabia has invested and attracted FDI in ICT to enhance the efficiency of the different sectors of the economy. Saudi Telecom expanded fast after privatization in 2003. Government assistance and foreign investment created a competitive telecom industry. The telecom industry is rapidly changing regarding technology, service delivery,

competition, and expansion of non-traditional telecom services. Saudi Arabia spent SAR 111.98 billion on ICT in 2014. Figure 3 shows that telecoms accounted for 65% of ICT spending. Saudi telecommunications spending climbed from SAR13.5 billion in 2001 to SAR71 billion in 2014. IT services are due to the investment in next-generation and 4G mobile networks, adopting electronic services (e-government, e-health, e-education, e-commerce, etc.), and information security spending (MCIT, 2014).

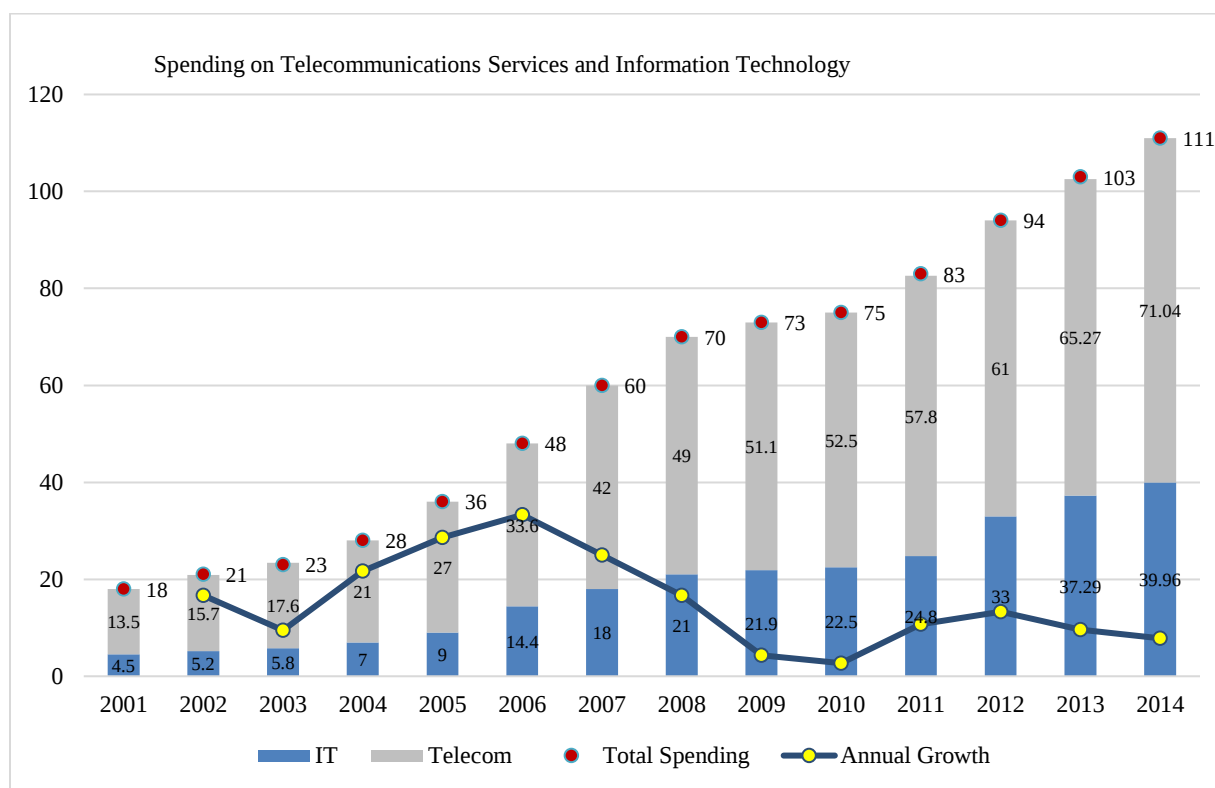


Figure 2: Spending on telecommunications service and information technology.

Source: ICT Indicators 2015, MCIT

STC, Mobily, and Zain KSA dominate the mobile market. Their capital investments increased by 13% CAGR² in four years, from SAR12 billion to SAR18 billion in 2020. The public and private sectors have invested SAR55 billion to expand and develop Saudi Arabia's digital infrastructure (MCIT, 2023). Spending on communication infrastructure development reached SAR 197 billion in 2022, up from SAR29 billion in 2001, with an average growth rate of about 9%.

² Compound Annual Growth Rate.

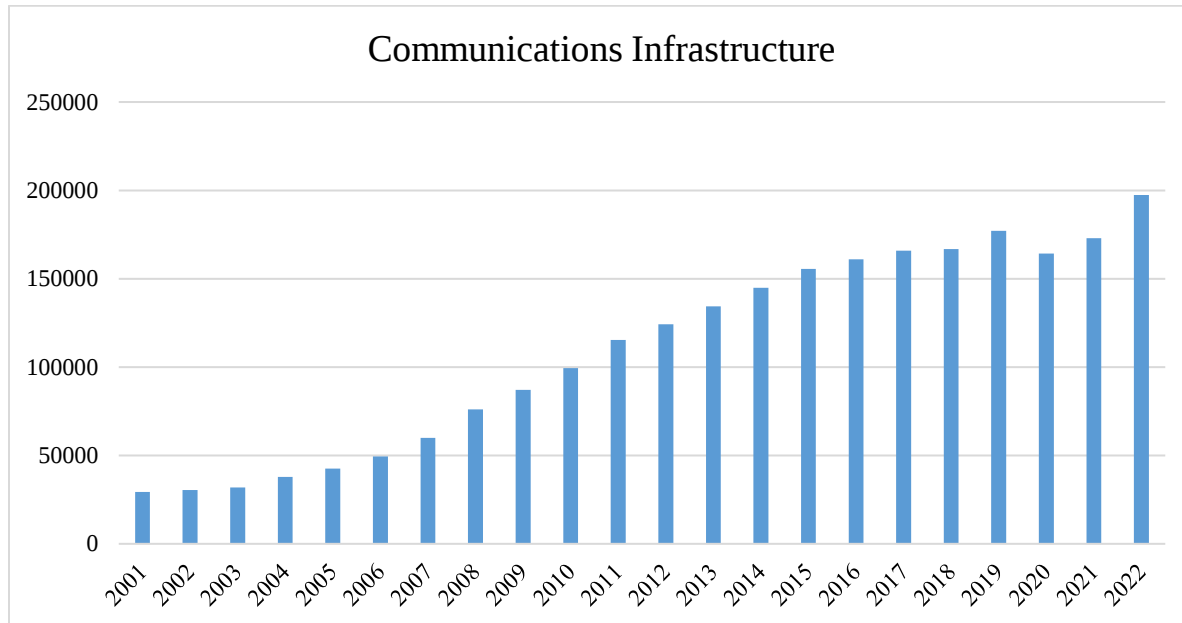


Figure 3: Communications infrastructure development.

Source: SAMA Annual Reports (2001-2022)

The ICT Strategy 2019-2023 is a component of MCIT's initiatives to establish a robust and technologically advanced digital infrastructure in line with Vision 2030. The government has allocated around SAR 120 billion for the ICT sector from 2019 to 2023, positioning the country as a global leader in government spending on ICT. This substantial investment has successfully improved digital government services, allowing the Kingdom to attain high rankings worldwide and regional benchmarks for digital government.

Digital transformation is one of the main enablers to achieving Saudi Vision 2030, as it is an integrated and practical strategy aimed at enabling and accelerating digital transformation efficiently and effectively. It developed through numerous initiatives to support and facilitate government entities in providing all government services digitally and in an easily accessible manner and improving quality of life. It currently provides nearly 6,000 government services digitally, representing over 97% of the total digital government services (DGA, 2023). This ICT infrastructure is essential for accelerating digital transformation in line with the objectives of Saudi Vision 2030, which include the creation of a digital society, digital governance, a thriving digital economy, and an innovative future for the Kingdom (MCIT, 2023, P16). The MCIT's strategic objectives include growing the ICT sector by 50%, Increasing the ICT sector's contribution to GDP by SAR 50 billion, and attracting foreign investment (MCIT, 2023).

The MCIT greatly contributed to Vision 2030. It creates world-class digital infrastructure and helps innovative talent capitalize on digital opportunities. These activities will help the MCIT attain economic sustainability, regional and worldwide leadership, quality of life, and quality work opportunities, which boost productivity and digital local content. It has established the ICT sector's sustainability and expansion as the digital economy's cornerstone. It has improved industry investment efficiency and promoted the adoption of new technology, which is projected to boost non-oil GDP, service exports, and digital transformation in other economic sectors (MCIT 2022).

In collaboration with the public and private sectors, the Digital Government Authority (DGA) was established in 2019, while the Absher electronic platform was released in 2010. Digital payments, digital certification services, and others were introduced first in 1990 and developed substantially in subsequent years. MCIT developed digital infrastructure, which underpins all digital services and enterprises. Fast internet over fixed and mobile communication networks, data centers, and other equipment, software, and hardware used to provide these services were included (MCIT, 2022).

Government support for digitalization has contributed significantly to its development. It has a crucial role in promoting sustainable economic growth, as MCIT investments have surpassed. These investments have led to the expansion of all industries and the advancement of Saudi Arabia in the global benchmark for mobile internet speeds (MCIT, 2022). The Saudi government's ICT spending from 2019 to 2023 is estimated to be SAR 120.15 billion, reflecting the field's growth, with huge investments in transformational initiatives in one of the most important and strategic sectors. In 2023, the Saudi government accounted for 36.4% of all IT spending in Saudi Arabia, ranking it the highest worldwide (DGA, 2024).

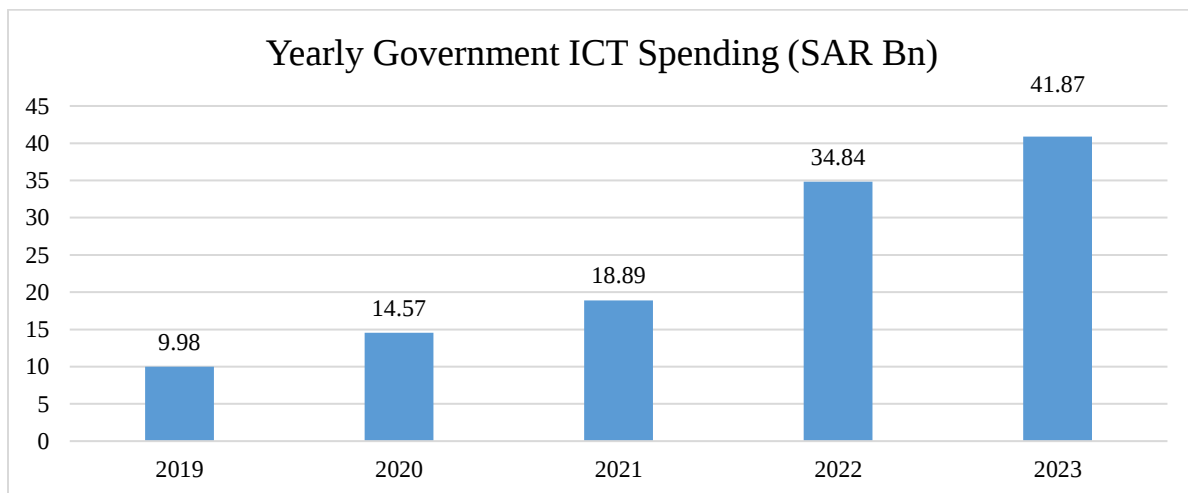


Figure 4: Yearly government ICT spending (2019-2023).

Source: Government ICT Spending Report in Saudi Arabia 2023, DGA 2024.

As shown in Figure 4, the government's spending on ICT increased by 20% to SAR 41.87 billion in 2023, compared to SAR 34.84 billion in the previous year. This investment aimed to improve the efficiency of digital government services and enhance beneficiaries' experience. It has also improved Saudi Arabia's standing in international indicators like the Global Competitiveness Report, which ranked Saudi Arabia 38 in 2019 on ICT adoption based on mobile-cellular telephone subscriptions, mobile-broadband subscriptions, fixed broadband internet subscriptions, fiber internet subscriptions, and internet users. Also, EGDI, GEMS, and GTMI showed good rankings for Saudi Arabia. Furthermore, it is a valuable asset to the digital economy, signifying a significant achievement in Saudi Arabia's digital transformation (DGA, 2024). Figure 5 shows that the cumulative FDI inflows in ICT increased from SAR 893 million to SAR7.2 billion between 2010 and 2022, with the highest (SAR16.4 billion) in 2019 and an average of SAR 4,695 billion. Foreign

corporations' knowledge boosted ICT investments and strengthened Saudi Arabia's position as an expanding digital economy (MITC, 2015).

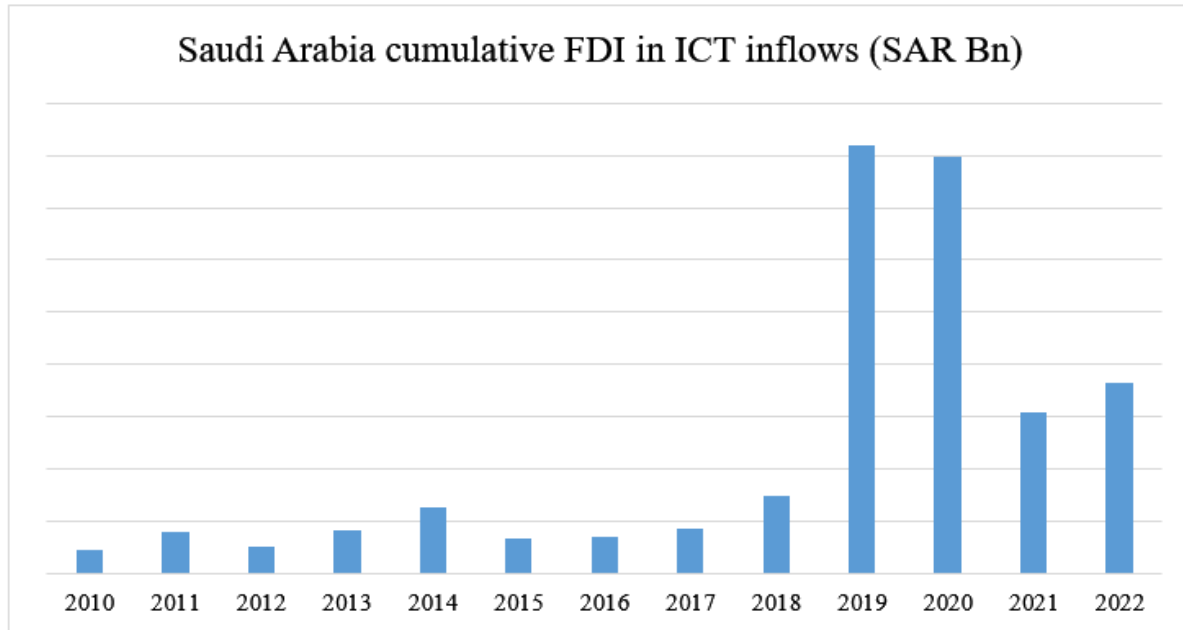


Figure 5: Saudi Arabia cumulative FDI in ICT inflows (SAR Bn).

Source: Transforming the ICT sector in Saudi Arabia through FDI, Arthur D. Little (2021)

FDI to Saudi Arabia is increasingly dependent on digital infrastructure. A robust digital infrastructure provides reliable connectivity and communication worldwide for IT, e-commerce, and fintech enterprises. The improved digital infrastructure supports online regulatory compliance, simplified commercial operations, and improved government services. It helps build trustworthy data centers and cloud services, enables remote work, and indirectly assists education and healthcare.

Internet Users

In the early 1990s, academia and government used the internet the most. The internet was introduced to Saudi educational, medical, and research institutions in 1994 and then to the public in 1999. By December 2000, Saudi Arabia had 200,000 internet users, rising to 16 million by 2013 and 24 million (74.9%) in 2016. In 2023, 98.5 percent of the population nationwide used the internet; Saudi Arabia was ranked 10th globally and 2nd within the G20 for mobile internet speed in 2020. High infrastructural investments in the late 1990s and early 2000s granted widespread fast broadband and internet connections (MITC, 2015). 3G and 4G altered mobile internet. Saudi Arabia has aggressively invested in 5G technology, improving internet penetration and connection. This digital infrastructure enhancement is intended to attract traditional and high-tech FDI to Saudi Arabia, boosting its economic diversification and growth.

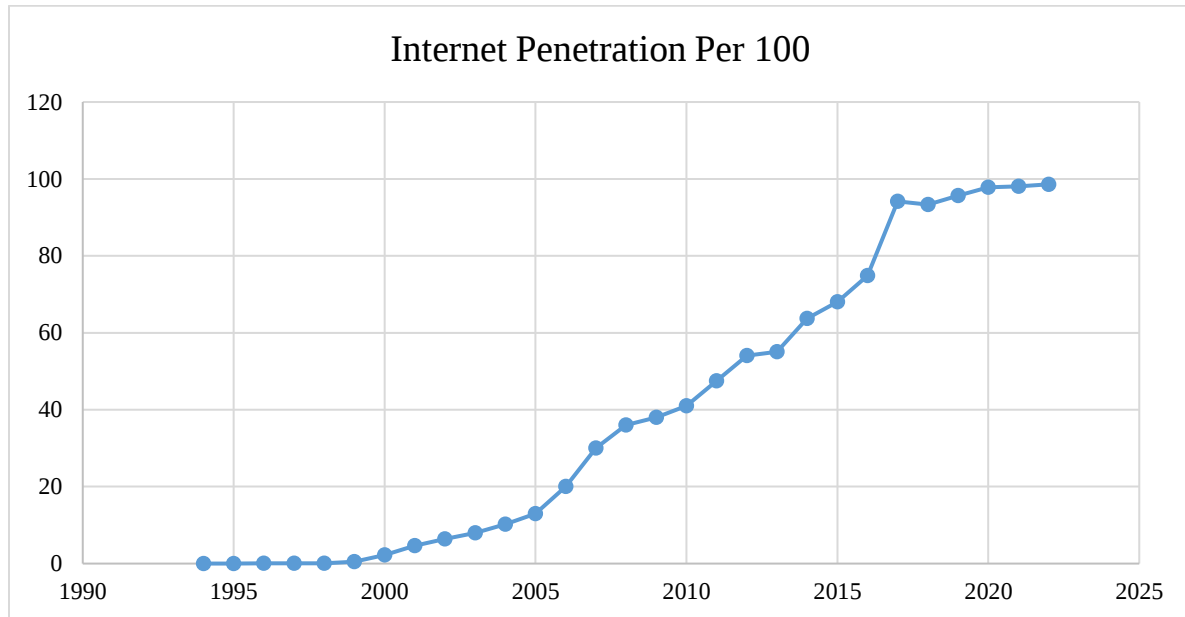


Figure 6: The Internet Penetration in Saudi Arabia during 2018-2022.

Source: CST reports

The average download speed for mobile internet in Saudi Arabia in 2022 reached 180.21 MB per second, with an improvement rate estimated at 85% compared to the same period in 2019, while the average download speed for fixed internet reached 107.80 MB per second in 2022, with an improvement rate estimated at 40% compared to the same period in 2019.

With a young population and strong internet penetration, technology use and ICT demand are rising. Saudi Arabia's telecom and ICT sectors benefit from projects aimed at diversifying the economy away from oil. Fiber infrastructure has helped the fastest development of internet services.

Mobile Phone Subscribers

The Saudi telecom market's mobile segment is growing fast due to smartphones and the internet, supporting the digital economy and Saudi Vision 2030. The CST and mobile phone providers worked to improve mobile phone quality and internet speed to satisfy the high demand because mobile data traffic has increased due to COVID-19-related online gaming, digital transactions, purchasing, and downloading. Additionally, the government has encouraged cashless transactions and boosted the e-commerce business. These factors have helped the mobile sector grow. Figure 7 shows the growth of subscribers from 2001 to 2022, which reached 48 million by 2022, with an average growth rate of 16% between 2001 and 2022.

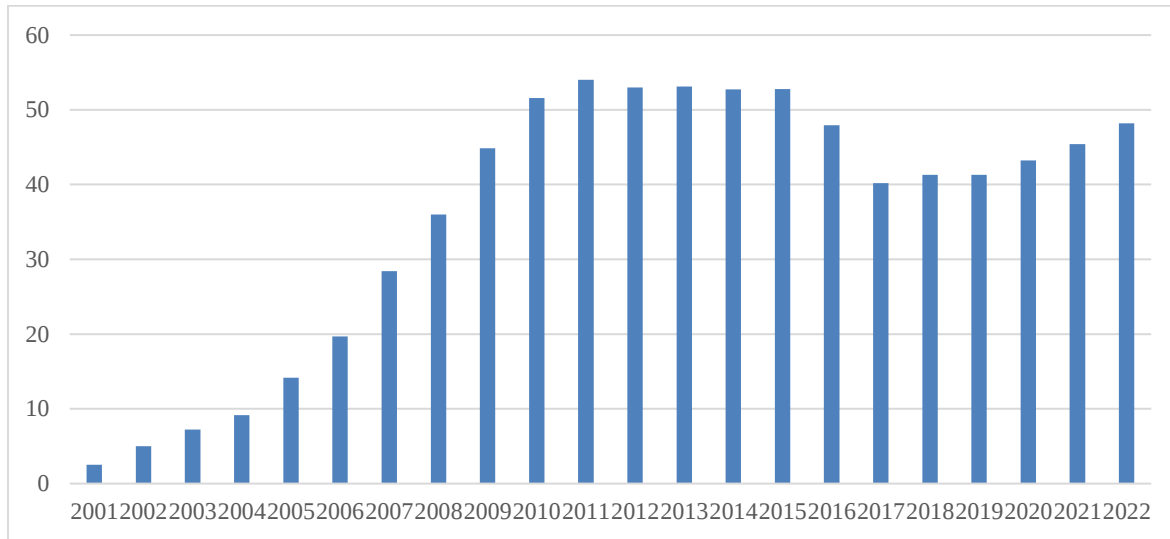


Figure 7: Mobile phone subscribers in Saudi Arabia (M).

Source: World Bank's World Development Indicators for the years 2001-2022

Institutional Environment

Historically known for its vast oil reserves, Saudi Arabia has been making concerted efforts to diversify its economy and attract FDI across various sectors. Implementing legislative reforms to enhance the institutional environment for attracting FDI inflow to the Saudi economy has resulted in a substantially favorable climate that encourages investment by upgrading laws and policies to attract more FDI inflow. For several decades, Saudi Arabia's main goals have been to attract more FDI and reduce dependence on the oil and gas industry by diversifying the Economy (Eissa & Elgammal, 2020). In this respect, the initial FCIL was introduced in 1956 and later revised in 1963. Implementing the 1979 FCIL took a more extensive approach to joint venture investment (Abdel-Rahman, 2002).

In the late 1990s, Saudi Arabia initiated institutions toward forging investment by reform and privatization to enhance the investment climate, created the SAGIA in 1999, and improved foreign investment law in the 2000 FCIL. A more open approach allowed joint ventures and entirely foreign-owned enterprises. The reforms have expanded the scope of foreign ownership in the economy to include 100% ownership in other sectors. Saudi Telecom expanded quickly after privatization in 2003. It is clear that in addition to providing an open investment climate and equitable treatment for investors, targeted privileges will be granted to foreign investors. These privileges typically include lower corporate and withholding tax rates, lower tariffs, reduced utility prices, and rolling back employment nationalization requirements for a specific period. (UNCTAD, 2023).

Furthermore, the 2000 FCIL allows entirely foreign-owned enterprises to be authorized, opening more enterprises to international investors and eliminating barriers to foreign ownership, dispute resolution, taxation, and asset protection. Equal treatment, protection, benefits, facilities, and the security of capital and profits are also guaranteed for international projects. It allows the free repatriation of money, investment returns, and income and the free transfer of capital for

investment purposes and all foreign currency legally earned. Asset seizures without a court warrant and unpaid property revocation are prohibited. The regulatory authorities have been consolidated and simplified to reduce individuals' bureaucratic challenges when engaging with the potentially unfamiliar Saudi environment (WTO, 2021). Foreign investor confidence increased due to the modifications to align the FCIL with global standards, followed by the accession to the WTO in 2005 and the Saudi 2030 Vision in 2016; foreign investment has substantially eased in the past two decades.

EMPIRICAL ANALYSIS

Study Hypotheses

Several digital infrastructure variables, including internet and mobile penetrations, government policies supporting digitalization, and attracting FDI inflows, are used to identify country-specific factors significantly influencing FDI inflows to Saudi Arabia. The model's hypotheses suggest that various country-specific factors attract FDI inflows to oil-exporting countries. These, in turn, are used to test the following assumptions about the determinants of FDI:

Digitalization: Digital infrastructure is the most important resource-seeking FDI factor because it reflects the firms' greater potential for productivity and competitiveness gains (Gestrin & Staudt, 2018). The digital infrastructure allows for efficient operations, global connectivity, and real-time communication, making it an attractive feature for MNEs looking to invest. Studies have used various ICT infrastructures such as (mobile-cellular telephone subscriptions, mobile-broadband subscriptions, fixed broadband internet subscriptions, fiber internet subscriptions, and internet users) as proxies of digital infrastructure (Demirhan & Masca, 2008; Pazienza & Vecchione, 2009; Wadhwa & Reddy, 2011; Suh & Boggs, 2011; Fakher, 2016; Ogunjimi & Amune, 2019; Nguea, 2020; Hao & Fanhua, 2021; Al-Sadiq, 2021; Tiong et al., 2022; Ha & Huyen, 2022; Hintošová & Bódy, 2023; Huang, 2023; Mensah & Traore, 2024; Zhang et al., 2024; Wenje, 2024; Asiedu, 2002). They found a positive relationship between internet users and FDI inflows. The hypotheses suggest that countries with better ICT infrastructure will draw more FDI due to the operational efficiencies and global integration it enables. Hence, the study hypothesizes that the relationship between internet and mobile phone penetrations and FDI inflows is as follows:

H1: A positive relationship exists between internet penetration and FDI inflows to Saudi Arabia.

H2: A positive relationship exists between mobile phone penetration and FDI inflows to Saudi Arabia.

Institutions: Favorable government policies motivate market-seeking FDI in which foreign firms serve the local market rather than pursue exports directly. For example, they guarantee equitable treatment, benefits (tax incentives, subsidies, and other supportive measures), and assurances for foreign projects. These policies aim to ensure the safe return of investments and profits and allow the free flow of capital in and out of the country. Many studies have demonstrated that a favorable institutional environment enhances a country's locational advantages and attracts more FDI inflows. (Kinoshita and Campos 2003; Bellak et al., 2010; Abdelgadir, 2010; Hailu, 2010; Fakher 2016, Lee 2017; Nur'ainy & Adipati, 2018; Bouchoucha and Benammou, 2020; El-Awady et al. 2020; Siriopoulous et al., 2021; Tiong et al., 2022; Huang, 2023; Mensah & Traore, 2024).

The study used a dummy variable to assess the impact of favorable government policies

(institutional factors) on FDI inflows. The dummy variable takes 0 from 1997-2006 and the value of 1 after that. The dummy variable is expected to have a positive effect on FDI inflows. Therefore, the study hypothesizes that the relationship between favorable government policies, mainly when introduced or improved, and FDI inflows is as follows:

H3: A positive relationship exists between the government policies proxy by dummy variable and FDI inflows to Saudi Arabia.

Each hypothesis seeks to elucidate the intricate dynamics among various factors that impact FDI inflows to Saudi Arabia. It comprehensively explains how digital infrastructure and institutional factors affect FDI inflows.

Study Model

The primary assumption underlying this formulation is that the explanatory factors cause engagement in a unidirectional manner. In addition, a collection of explanatory variables complying with the weak exogeneity assumption is utilized to explain the variation of FDI as an endogenous variable. The effect of independent variables on the FDI inflows was examined using multiple linear regression analysis, specifically OLS, with time series data from 1997 to 2022.

Thus, the study model established is outlined as follows:

$$FDI_t = \beta_0 + \beta_{1t} InP_{1t} + \beta_{2t} MoP_{2t} + \beta_{3t} Gp_{3t} + \mu_t \dots \dots \dots (1)$$

FDI: Foreign Direct Investment inflows (Percentage of FDI to GDP),

InP: Internet users per 100 (+),

MoP: Mobile phone Per 100 (+),

Gp: Dummy variable government policy (0 for 1994-2005, 1 for 2006-2022 (+).

β : Value of Variable coefficients.

it: time-serious data (i = 4, t = 1997-2022).

μ : Error term.

The model's explanatory variables are as follows:

Internet users' penetration and quantifying how digital infrastructure affects FDI inflow. FDI is expected to increase as internet penetration increases, assuming all other variables remain constant. As a result, the internet users coefficient is projected to be positive.

Mobile phone subscribers assess and quantify how digital infrastructure affects FDI inflow. FDI is expected to increase as mobile phone penetration increases, assuming all other variables remain constant. As a result, the mobile phone subscribers coefficient is projected to be positive.

The dummy variable assesses and quantifies how the institution affects FDI inflow. FDI is expected to increase as more favorable government policies are implemented, assuming all other variables remain constant. As a result, the coefficient is projected to be positive.

Empirical Results

Various alternatives were tried to improve the model specification to explain FDI inflows, but the specifications could have been better.

The correlation analysis in Table 1 shows the importance of digitalization (digital infrastructure: internet, mobile, and institutions: government policy) in attracting FDI in Saudi Arabia. Strong correlations between these factors suggest that internet and mobile penetration improvements, supported by favorable government policies, can significantly enhance Saudi Arabia's attractiveness to foreign investors.

Table 1: Correlation analysis.

		Internet	Mobile Phone	Gove. Policy
FDI inflows	Pearson Correlation	.886**	.943**	.897**
	Sig. (2-tailed)	.000	.000	.000

By performing regression analysis, Table 2 reveals a very high R^2 of 98.6, indicating that it explains most of the variance in the dependent variable (FDI). The regression analysis found that it best described the impact of digitalization (internet and mobile) on FDI inflows in Saudi Arabia. Digitalization contributes to the rise in FDI inflows, while institutional factors also have a significant role. In addition, the adjusted $R^2 = .984$ shows that the model explains 98.4% of the variation in the dependent variable (FDI inflows), indicating a good predictive value and confirming the strong explanatory power of the model. The standard error of the estimate (1.64) is relatively low, indicating a good fit for the model, which suggests that the model predictions are close to the actual one. In addition, the Durbin-Watson statistics=1.554 indicates no serial autocorrelation in the residuals of the regression model, and they are independent.

Table 2: Model summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-W
	.993a	.986	.984	1.63953	1.554
Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	
Predicted Value	6.4516	35.2250	22.5569	12.85011	
Residual	-2.65436	3.36566	.00000	1.53802	
Std. Predicted Value	-1.253	.986	.000	1.000	
Std. Residual	-1.619	2.053	.000	.938	

The residual statistics in Table 2 provide insight into the accuracy and performance of the regression model, highlighting the distribution and variability of both predicted values and residuals. The residuals are centered around zero, and their spread is not excessive.

Furthermore, Table 3 presents the outcomes of the analysis of variance (ANOVA) test of the regression model's overall significance. The result indicates that the multiple linear model is the most effective for estimating since the F statistic (511.91) is highly significant at (p-value = .000), indicating that the significance is less than 0.05. The results of the ANOVA confirmed that the explanatory variables (internet, mobile, and government policy) provide a good explanation of the variance in the FDI inflows. The results also show most of the variability in the dependent variable (FDI inflow) is explained by the model.

Table 3: ANOVA^a.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4128.131	3	1376.044	511.91	.000 ^b
	Residual	59.138	22	2.688		
	Total	4187.269	25			

Table 4 displays the coefficient values for each independent variable, including their significance and the impact of multicollinearity. The three predictors (internet, mobile, and the dummy variable for the government policy) are positively and statistically significant in predicting FDI inflows. Mobile per 100 has the strongest impact (0.534) on FDI inflows. Moreover, Table 4 shows the collinearity statistics. The variance inflating factor (VIF) was used to check for multicollinearity. The VIF values for all predictors are in Table 4, indicating no issue of multicollinearity, and the predictor variables are not highly correlated.

Table 4: Model Coefficients^a.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	6.447	.549		11.743	.000		
Internet per 100 (<i>InP</i>)	.127	.015	.355	8.719	.000	.387	2.587
Mobile per 100 (<i>MoP</i>)	.087	.008	.524	11.474	.000	.308	3.247
Government Policy (<i>Gp</i>)	5.271	1.299	.198	4.058	.001	.271	3.694

a. Dependent Variable: FDI

DISCUSSION

This study used empirical analysis to investigate the impact of digitalization on FDI inflow using the OLS method. According to the study's hypotheses, internet penetration, mobile penetration, and favorable government policies positively impact FDI inflow in Saudi Arabia.

As evidenced by the model estimation outcomes, all coefficients have signs consistent with the underlying theory. In other words, the results demonstrate that coefficients for all variables were statistically significant and had the predicted signs. During the study period, digitalization and FDI

inflows had positive effects. Thus, according to the model's results, it can be concluded that the predictors are all statistically significant ($p\text{-value} < 0.05$), contributing positively to the model and suggesting they have a meaningful impact on the FDI inflows. The standardized coefficients (Beta) indicate the relative importance of each predictor in the model. The mobile per 100 has the highest Beta value (.524), suggesting it is the most influential predictor, followed by internet per 100 (0.355) and government policy (.198). As a result, the regression model appears robust, with all predictors significantly contributing to explaining the variation in FDI inflows.

The (IoP) coefficient value indicates that internet's influence on FDI flows is significant at 1%. In particular, the coefficient from the model output indicates that a one-unit increase in internet is associated with a 0.127 unit increase, on average, in FDI inflows, assuming mobile phone and government policy variables are held constant.

The (MoP) coefficient value indicates that mobile phone's influence on FDI inflow is significant at 1%. In particular, the coefficient from the model output indicates that a one-unit increase in mobile per 100 is associated with a 0.087 unit increase, on average, in FDI inflows, assuming internet usage and government policy variables are held constant. The (Gp) coefficient value indicates that government policy's influence on FDI inflows is significant at 1%. This implies that a one-unit increase in government policy is associated with a 5.271 unit increase, on average, in FDI inflows, assuming that the internet and mobile phone variables are held constant.

All hypotheses are accepted based on the model's results. The results validate the present study's fundamental hypothesis, which shows a direct positive correlation between the increase in digitalization and institutional factors and overall FDI inflows in Saudi Arabia. Given the model's significance and the predictors' strength, the regression model is considered effective in explaining the FDI inflows. Furthermore, the provided statistics strongly suggest that the model performs very well.

CONCLUSION

This study examined how digitization and institutions affected FDI inflows in Saudi Arabia. As an oil-exporting country, Saudi Arabia has significantly invested in modernizing, digitizing, and reforming its economy to attract more FDI across various industries. Using the multiple linear regression analysis, the study tested the effects of institutions and digitization on FDI in Saudi Arabia between 1997 and 2022. The analyses and outcomes reveal that digitalization and institutional factors explain the FDI inflows to Saudi Arabia positively and significantly, highlighting that digital infrastructure (internet and mobile phone users) and favorable government policy attracted FDI to Saudi Arabia.

RECOMMENDATIONS

The study's results are useful for policymakers aiming to enhance FDI inflows. The findings offer policymakers crucial insights, underscoring the necessity of prioritizing the development and implementation of comprehensive digitalization strategies and regulations. Such strategies should encompass initiatives to boost digitalization quality across urban and rural areas while concurrently fortifying business-related institutions, such as those governing property rights and regulatory transparency. These coordinated efforts will cultivate a more conducive environment for FDI, ultimately fostering an upsurge in FDI inflows.

In brief, the outcomes deliver a detailed understanding of what motivates FDI inflows when digitalization and regulations are in place. Government policy and digitalization play a major part in determining the inflows of FDI. As such, the top-line policy implications of the results are far-reaching for governments, foreign investors, businesses, and the wider economy. Countries that sustain their economy's digitalization and institutional strength will likely attract more FDI inflows, contributing to an overall increase in economic growth, better social outcomes, and more competition and prosperity across the globe. The study's empirical findings add valuable insights to literature. It presents evidence of the impacts of digitization and institutional factors on FDI inflows in oil-producing countries.

Acknowledgment

This project was funded by the Deanship of Scientific Research (DSR) at King Abdulaziz University, Jeddah, Saudi Arabia, under grant No. (G: 524-120-1432). The author, therefore, acknowledges with thanks DSR for technical and financial support.

Funding Declaration

The author received financial support for the research from DSR at King Abdulaziz University, Jeddah, Saudi Arabia.

Conflict of Interest

The author declares no conflict of interest.

REFERENCES

- Abdelgadir, S. (2010). Another look at the determinants of foreign direct investment in MENA countries: An empirical investigation. *Journal of Economic Development*, 35(2), 75-95.
- Abdel-Rahman, A. M. M. (2002). The determinants of foreign direct investment in the Kingdom of Saudi Arabia. *Economic Research Forum*. <https://erf.org.eg/app/uploads/2017/05/0238.pdf>
- Al-Sadiq, A. (2021). The role of e-government in promoting foreign direct investment inflows. *IMF Working Papers*, 21(16). <https://doi.org/10.5089/9781513566795.001>
- Asiedu, E. (2002). On the determinants of foreign direct investment to developing countries: Is Africa different? *World Development*, 30(1), 107-119. [https://doi.org/10.1016/S0305-750X\(01\)00100-0](https://doi.org/10.1016/S0305-750X(01)00100-0)
- Atkinson, R., Castro, D., Ezell, S., McGuinn, A., & Newa, J. (2016). *Policymaker's guide to digital infrastructure*. Information Technology & Innovation Foundation.
- Autio, E. (2017). Digitalization, ecosystems, entrepreneurship and policy. *Government Analysis Assessment and Research Activities*.
- Autio, E., Nambisan, S., Thomas, L., & Wright, M. (2018). Digital affordances, spatial affordances, and the genesis of entrepreneurial ecosystems. *Strategic Entrepreneurship Journal*, 12(1), 72-95. <https://doi.org/10.1002/sej.1266>
- Bellak, C., Leibrecht, M., & Liebensteiner, M. (2010). Attracting foreign direct investment: The public policy scope for South East European countries. *Eastern Journal of European Studies*, 1(2).

- Bouchoucha, N., & Benammou, S. (2020). Does institutional quality matter for foreign direct investment? Evidence from African countries. *Journal of African Business*, 21(2), 123-144.
- Central Bank of Sri Lanka. (2014). *Annual report*. Central Bank of Sri Lanka.
- Demirhan, E., & Masca, M. (2008). Determinants of foreign direct investment flows to developing countries: A cross-sectional analysis. *Prague Economic Papers*, 2008(4), 356-369. <https://doi.org/10.18267/j.pep.337>
- Digital Government Authority (DGA). (2023). *Annual report*. Kingdom of Saudi Arabia.
- Dunning, J. H. (1980). Towards an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11(1), 9-31. <https://doi.org/10.1057/palgrave.jibs.8490593>
- Dunning, J. H. (1993). *Multinational enterprises and the global economy*. Addison Wesley Publishing Co.
- Eissa, M. A., & Elgammal, M. M. (2020). Foreign direct investment determinants in oil-exporting countries: Revisiting the role of natural resources. *Journal of Emerging Market Finance*, 19(1), 33-65.
- El-Awady, S., Al-Mushayqih, S., & Al-Oudah, E. (2020). An analytical study of the determinants of foreign investment in Saudi Arabia: Saudi Vision 2030. *The Business and Management Review*, 11(1).
- Fakher, A. (2016). The impact of investment in the ICT sector on foreign direct investment: Applied study on Egypt. *Review of Integrative Business and Economics Research*, 5(2).
- Foreign Capital Investment Code, Royal Decree M/4, (1979).
- Foreign Investment Law in the Kingdom of Saudi Arabia, Royal Decree M/1, (2000).
- Gelvanovska, N., Rogy, M., & Rossotto, C. (2014). National broadband policies and market development. *World Bank Publications*. https://doi.org/10.1596/978-1-4648-0112-9_ch2
- Gestrin, M. V., & Staudt, J. (2018). The digital economy, multinational enterprises, and international investment policy. OECD.
- Gholami, R., Lee, S.-Y., & Heshmati, A. (2005). The causal relationship between ICT and FDI. Research Paper 2005/026. Helsinki: UNU-WIDER.
- Grimes, P. W., Rogers, K. E., & Smith, R. C. (2010). High school economic education and access to financial services. *Journal of Consumer Affairs*, 44(2), 317-335. <https://doi.org/10.1111/j.1745-6606.2010.01171.x>
- Ha, L. T., & Huyen, N. T. T. (2022). Impacts of digitalization on foreign investments in the European region during the COVID-19 pandemic. *Development Studies Research*, 9(1), 177–191. <https://doi.org/10.1080/21665095.2022.2074863>
- Hailu, Z. A. (2010). Demand side factors affecting the inflow of foreign direct investment to African countries: Does capital market matter? *International Journal of Business and Management*, 5(5), 104-126.

- Hao, L., & Fanhua, H. (2021). Research on the impact of Internet development on FDI and its mechanism. *International Economic and Trade Exploration*, 37(09), 68-83.
- Hintošová, B. A., & Bódy, G. (2023). Sustainable FDI in the digital economy. *Sustainability*, 15(14), 10794. <https://doi.org/10.3390/su151410794>
- Huang, X. (2023). The influence of the digital economy on the inflow of foreign direct investment. *Frontiers in Business, Economics and Management*, 11(2).
- Kinoshita, Y., & Campos, N. (2003). Why does FDI go where it goes? New evidence from the transition economies. *William Davidson Institute Working Papers Series*.
- Lee, S. D. (2017). Effects of technology absorption and government prioritization of ICT on foreign direct investment. *Journal of Technology Transfer*, 42, 923-940.
- Lynn, T., Rosati, P., Conway, E., Curran, D., Fox, G., & O'Gorman, C. (2022). The digital economy and digital business. In *Digital Towns* (pp. 69-98). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-91247-5_4
- Mensah, J. T., & Traore, N. (2024). Infrastructure quality and FDI inflows: Evidence from the arrival of high-speed Internet in Africa. *World Bank*. <https://doi.org/10.1093/wber/lhad021>
- Ministry of Communications and Information Technology (MCIT). (Various Years). *Annual report*. Kingdom of Saudi Arabia.
- Nguea, S. M. (2020). The impact of infrastructure development on foreign direct investment in Cameroon. *HAL Archives Ouvertes*.
- Nur'ainy, R., & Adipati, N. M. (2018). Foreign Direct Investment (FDI) and information communication and technology (ICT) perspective: Empirical study in Asia. In 2018 *Third International Conference on Informatics and Computing (ICIC)* (pp. 1-6). Palembang, Indonesia. <https://doi.org/10.1109/IAC.2018.8780568>
- Ogunjimi, J. A., & Amune, B. O. (2019). Impact of infrastructure on foreign direct investment in Nigeria: An autoregressive distributed lag (ARDL) approach. *Journal of Economics and Sustainable Development*, 10(3), 123-134.
- Pazienza, P., & Vecchione, V. (2009). A preliminary investigation of the determinants of the FDI distribution in Italy. *Journal of Business Economics and Management*, 10(2), 99-107. <https://doi.org/10.3846/1611-1699.2009.10.99-107>
- Saudi Arabian Monetary Agency (SAMA). (Various Years). *Annual report*. Research and Statistics Department, Riyadh, Kingdom of Saudi Arabia.
- Silcock, R. (2001). What is e-government? *Parliamentary Affairs*, 54(1), 88-101. <https://doi.org/10.1093/pa/54.1.88>
- Siriopoulos, C., Tsagkanos, A., Svingou, A., & Daskalopoulos, E. (2021). Foreign direct investment in GCC countries: The essential influence of governance and the adoption of IFRS. *Journal of Risk and Financial Management*, 14(6), 264. <https://doi.org/10.3390/jrfm14060264>

- Suh, T., & Boggs, D. J. (2011). Communications infrastructure and traditional determinants of inward foreign investment. *Competitiveness Review: An International Business Journal*, 21(2), 205-223. <https://doi.org/10.1108/10595421111117470>
- The Communications, Space, and Technology Commission (CST). (2024). *The Saudi Internet Report 2023*. Kingdom of Saudi Arabia.
- Tiong, K. M., Cheng, M. Y., & Choong, C. K. (2022). The roles of ICT telecommunication infrastructure on foreign direct investment in Malaysia. *Asian Academy of Management Journal*, 27(2), 1-20. <https://doi.org/10.21315/aamj2022.27.2.1>
- UNCTAD. (Various Years). *World Investment Report*. United Nations.
- Wadhwa, K., & Reddy, S. S. (2011). Foreign direct investment into developing Asian countries: The role of market seeking, resource seeking and efficiency seeking factors. *International Journal of Business and Management*, 6(11), 219-226.
- Wenje, P. O. (2024). Effect of Infrastructure Development on Domestic Private Investment and Foreign Direct Investment in Kenya. *The International Journal of Humanities & Social Studies*, 12(4).
<https://www.internationaljournalcorner.com/index.php/theijhss/article/view/173592>
- World Trade Organization. (2021). *Trade Policy Review: Saudi Arabia* (WT/TPR/S/407). WTO.
https://www.wto.org/english/tratop_e/tpr_e/s407_sum_e.pdf
- Zhang, D. & Masron, T. A. & Lu, X. (2024). The impact of digitalization on foreign direct investment inflows into cities in China. *Cogent Economics & Finance*. 12.
<https://doi.org/10.1080/23322039.2024.2330458>

Copyright: (c) 2024 Hisham Jameel Bardesi.



Authors retain the copyright and grant this journal right of first publication with the work simultaneously licensed under a [Creative Commons Attribution \(CC-BY\) 4.0 License](https://creativecommons.org/licenses/by/4.0/). This license allows other people to freely share and adapt the work but must credit the authors and this journal as initial publisher.