



FOREIGN DIRECT INVESTMENT IN THE DIGITAL ECONOMY: EMERGING TRENDS AND ECONOMIC IMPLICATIONS

A. Baji Babu¹, Prof. R. Sivarama Prasad²

¹Research Scholar, Department of Commerce and Business Administration, Acharya Nagarjuna University

²Research Supervisor, Department of Commerce and Business Administration, Acharya Nagarjuna University

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ABSTRACT

The foreign direct investment environment has experienced the structural change in the international environment which is instigated by the burgeoning growth of the digital economy. This article is a review of how the digitalization is altering the trend of FDI, its impact on the host country, and policy frameworks of not only advanced economies but also emerging economies. We are reporting on three observable trends based on the analysis of data on the 72 countries between the years 2005 and 2024 (i) strong shift to intangible-asset-intensive FDI software, cloud infrastructure, e-commerce and fintech (ii) the dislocation of the investment activity to the more conventional determinants of location (i.e., labour cost and physical infrastructure) (iii) growing digital FDI absorption capacity between the digitally advanced and digitally more backward economies. We argue that these trends necessitate a radicalization of the FDI theory and policy due to the inapplicability of the traditional tools of investment promotion, regulation and impact measurement, to a mobile, light-footprint and complex form of capital in the organization structure. We propose a Digital Investment Readiness Index (DIRI) and show that it has an empirical predictive power of digital FDI attractiveness across the sample.

KEYWORDS: Digital FDI Intangible assets Platform economy Digital infrastructure Technology spillovers Data governance Investment policy.

1. INTRODUCTION

Total FDI inflows in the world reached USD 41 trillion by the close of 2024, but that investment has evolved nearly to the point of being unrecognisable compared to the capital flows that drove the development economics debates of the 1970s and 1980s. The construction of factories, assembling of cars, or mining of minerals are the past forms of FDI; today more and more of the investment flows across countries is intangible in nature: software codebases, algorithms, brand name, proprietary data repositories, and capacity of cloud servers. The digital economy anchor companies of hyperscale cloud providers, global e-commerce platforms, fintech conglomerates, and social media companies are now some of the largest sources of outward FDI despite their remarkably small physical presence.

This policy change presents intellectual and policy problems that the available literature in FDI is yet to resolve. Classical FDI theory was developed upon the assumption of tangibility mobility of capital, physical location specificity as well as observable productivity spillovers. These assumptions do not augur well with the economic fact of a company that has to cater 300 million consumers in 40 countries via one cloud based platform running on three data centres. These are the common weaponry of investment promotion agencies, tax breaks and special economic zones and industrial land and they are most unneeded in the case of a digital-native business, whose most valuable asset is its data and code, which can be copied around the world with virtually no marginal cost.

This article contributes to the literature on the developing digital FDI literature in four aspects. We then give a detailed taxonomy of digital FDI modalities, splitting the latter into infrastructure-type digital investment (data centers, subsea cables, cloud regions), platform investment (e-commerce, ride-hailing, streaming services), and embedded digital FDI (the digital transformation of traditionally physical industries such as manufacturing, finance, and retail). Second, we record stylized empirical facts of the geographic dispersion, sectoral composition, and temporal development of digital FDI by a new data set of UNCTAD investment information and information technology expenditure accounts and venture capital data bases. Third, we establish and confirm a Digital Investment Readiness Index (DIRI) which is a synthesis of 18 indicators on four dimensions, namely, connectivity infrastructure, digital human capital, regulatory environment, and data governance and demonstrate that DIRI is a powerful predictor of digital FDI attraction. Fourth, we examine the economic consequences of digital FDI in host countries and look at employment, tax revenue, productivity, and innovation in some details.



1.1 Literature Review.

Yao (2025):

Yao (2025) empirically tested the connection between the development of the digital economy and foreign investment in the countries of the Middle East. The research has concluded that FDI inflows are greatly advanced by the digital infrastructure, innovation, and human capital. It further determined financial development to be another important mediating channel in which digitalization attracts foreign capital. The results indicate that the more powerful the governance is in a country, the greater the benefits of digital-induced FDI inflows.

Mai (2025):

The article by Mai (2025) examined the effects of digital transformation on the inflows of FDI in Vietnam through panel data. The analysis has found out that digital transformation makes a country much more attractive to foreign investors due to the increase in transparency, the lower costs of operations, and institutional efficiency. It has also highlighted how policy support and digital readiness increases the benefits of FDI.

Supriyanto et al. (2025):

Supriyanto et al. (2025) examined how FDI contributes to economic growth in Indonesia by means of digitalization. The research concluded that digitalization is a good mediating variable of FDI and economic growth. It came to a conclusion that FDI in itself cannot ensure growth unless digital preparedness, infrastructure, and development of human capital support it. One of the key limitations was identified as the differences in digital capacity, based on the region.

Digital Economy Trends Report (2025):

The recent trend reports on the world (2025) indicate that the digital economy is increasingly taking up significant influence in determining the global flows of investments. The report emphasizes the growth in FDI in AI, cloud computing as well as platform based industries which are being influenced by the speed at which technology is being adopted and globalization. It further highlights the significance of regulatory systems and online policies in drawing viable digital investments.

Zhang & Wang (2024):

Zhang and Wang (2024) performed a bibliometric and systematic review of the literature on digital transformation, which revealed that the two areas of research interest are investment and financial outcomes. The research indicates that digital transformation has a significant impact on the decision-making process of firms regarding level of investment, allocation of capital, and financial performance. It also puts into perspective the increased incorporation of digitalization into international investment strategies

1.2 Research Gap

Available literature on Foreign Direct Investment (FDI) has been laid heavily on the conventional, physical investments that occur due to the influence of some factors which include; labor cost, physical infrastructure, and market size. But as the digital economy rapidly develops the essence of FDI has changed radically to the intangible resources of data, algorithms, and digital platforms. Even with this change, there are a number of significant gaps in the existing body of research.

To begin with, the mainstream FDI paradigms, mostly the OLI (Ownership–Location- Internalization) paradigm does not provide an adequate explanation of the dynamics of digital FDI because the theories are based on the following assumptions: physical capital and location dependency. Theoretical adaptation is not done sufficiently to explain platform-based, portable, and mobile-based digital investments.

Second, empirical studies on digital FDI are still scarce especially on how to differentiate between various types of digital investments which include infrastructure, platform-based, and embedded digital investments. Digital FDI flows are underestimated and misrepresented given the absence of standardized classification and measurement frameworks.

Third, although previous research recognizes the role played by digital infrastructures and human capital, there is a deficiency in the combination of these two variables to form a universal index in forecasting digital FDI attractiveness. The lack of generally agreed composite indicators leaves a gap in determining the readiness of countries.

Fourth, the current research is partial in terms of informing about the economic impact of digital FDI as it pertains to the quality of employment opportunities, taxation issues, and productivity spillovers. Countries do not have holistic multi-dimensional analysis.

Lastly, it lacks sufficient research on policy change especially in data governance, digital tax, and competition regulation that is the most important in the management of digital FDI in developed and developing economies.



1.3 Research Objectives

Primary Objective

To examine the new trends and economic implications of Foreign Direct Investment in the digital economy in different countries.

Specific Objectives

- To investigate the shift in FDI patterns between the conventional physical investments to digital and intangible assets investment.
- In order to come up with a holistic taxonomy of digital FDI, it will be classified into infrastructure-based, platform-based, and embedded digital investments.
- To create and test a Digital Investment Readiness Index (DIRI) to quantify and forecast the attractiveness of the country towards digital FDI.
- To examine the main factors of the digital FDI such as digital infrastructure, human capital, regulatory frameworks, and data governance.
- To assess the economic impacts of digital FDI on host nations in employment, productivity and tax revenue.
- To evaluate the weaknesses of the conventional FDI theories and put forward the theoretical extensions that are applicable in the digital economy.
- To analyse the policy issues and regulation surrounding digital investment, such as data regulation, taxation and competition policy.
- To determine differences in digital FDI allocation among advanced and developing economies and the difference in the causes..

2. FDI THEORY IN THE AGE OF DIGITALIZATION: A CRITICAL REVIEW

2.1 Traditional Structures and their shortcomings.

The prevailing theoretical approach to explain FDI is still the eclectic Ownership advantages, Location advantages, and the benefits of Internalization over arm-length transactions in the intersection of firm-specific advantages of Ownership and host-country Location Dunning (1981) paradigm. The flexibility of the paradigm is its permanence: the three pillars of the paradigm have all been expanded and improved over forty years to fit in new phenomena.

However the flexibility of digital FDI pushes it to the limits. The digital companies of ownership have overwhelmingly intangible benefits: network effects, data ownership, superiority of algorithms, and lock-in. These benefits are not merely non-rivalous to consume, but in most instances are reinforcing, that is, the bigger the platform the more users, the more data it has, the more it can produce better algorithms, and thus acquire more users. Conventional indicators of firm specific advantage, including R&D intensity or number of patents, only represent a small part of competitive assets of digital firms.

The location benefits in the digital economy are also restructured. The classical location theory placed a lot of focus upon factor expenses (labor, energy, land), access to markets, and agglomeration advantages. Latency needs, the cost of data centers energy, fiber optic density, regulatory laxity regarding flows of data and the size of the digitally active consumer base have become critical location determinants in the case of digital FDI. The conventional FDI gravity variables, GDP, distance, colonial connection, and the like, which predominate the empirical literature, are poor proxies to these factors.

The internalization explanation - why companies invest and not licence needs to be re-evaluated as well. In the case of digital platforms, licensing is hardly feasible since the fundamental object is a living software ecosystem, which cannot be essentially disaggregated into organizational competences to create and sustain it. However, simultaneously, digital companies do not always engage in full FDI by establishing themselves in hybrid forms that combine low legal presence and high level of market penetration; thus making it difficult to align such operations under the conventional FDI accounting systems.

2.2 Theoretical Perspectives in the Emerging Processor.

There have arisen a number of theoretical approaches that seek to fill the loopholes in the OLI paradigm in the digital realm. Cantwell and Mudambi (2005) model of competence creation subsidiary foresaw some characteristics of digital investment in that the model focused on the generation of knowledge over knowledge exploitation as an FDI motive. In the case of digital companies, the market-serving investment is not as significant as satellite R&D labs, startups acquisition, and technology cluster innovation hubs.

A more manageable approach to the dynamics of digital FDI is platform economics and the two-sided market theory (Rochet and Tirole, 2003; Parker and Van Alstyne, 2005). The nature of platform-type digital FDI is defined by high network externalities, multi-sided pricing, and competitive winner-take-all markets that generate highly concentrated market structures. These characteristics have far-reaching consequences to the way we estimate the welfare of inward digital FDI: a platform dominating the market leadership of a host country can create consumer surplus of colossal proportions as it reaps monopsony rents off the local suppliers and evades tax payments via transfer pricing.



Horizontal digital FDI, in which companies duplicate their digital services across various markets, is best explained by the knowledge capital model of Markusen (2002) and its extensions by Helpman, Melitz, and Yeaple (2004) than by capturing the value-chain fragmentation that defines the much physical-sector FDI. Carr, Markusen and Maskus discovered that knowledge capital intensive, measured by R&D and skilled labor intensive, is a major determinant of FDI even in traditional industries; this is expected to be even stronger in digital-native firms (2001).

3. TAXONOMY OF DIGITAL FDI AND DATA SOURCES

3.1 A Three-Part Taxonomy

We suggest a typology of digital FDI based on the three analytically distinct modalities based on the type of major asset, type of investment structure, and the type of host-country engagement.

Type I: Digital Investment in infrastructure.

Type I digital FDI includes investment in the physical and software infrastructure of the digital economy: data centers, hyperscale cloud computing areas, submarine telecommunications cables, and mobile network infrastructure. The type of investment is somewhat traditional in format, the sort of capital-intensive, place-based, and has a visible economic effect in the form manageable through construction jobs, energy consumption (demand), and continued operation. This is one of the rapidly expanding types of greenfield FDI in the world as the major hyperscale cloud providers (Amazon Web Services, Microsoft Azure, Google Cloud, Alibaba Cloud) have made more than USD 500 billion of announced global data center investment as at 2027.

Type I investment can be found in regular FDI accounting systems and is to some extent policy-legally manageable: it can be made by use of traditional policy tools like land grants, energy subsidies, and tax exemptions. Nevertheless, it also brings up issues of concentration of market power, demands of energy and water resources, and how far the data processed by the local infrastructure can be subjected to the jurisdiction of the host country.

Type II: Digital Service Investment and Platform.

Type II digital FDI entails the overseas growth of digital platforms and ecosystems of services, such as e-commerce marketplaces, ride-hailing and delivery platforms, streaming media service providers, social networks, fintech platforms, and SaaS enterprise software suppliers. This category of investment is qualitatively distinct compared to Type I because in this case, the investment is largely asset-light physically: the major investment is in software localization, content acquisition, integration of payment system, and regulatory compliance, and the underlying technological infrastructure is usually offshored.

The measurement of type II investment is problematic due to some substantial portion of the economic value created is arguably recognized in the jurisdiction other than the host market and a proportionate portion of the profit is captured. The so-called virtual FDI, in which a foreign company attains high penetration in the market with a minimum of registered investment, has gained increasing interest among statisticians and tax authorities, and is one of major gaps in the conventional accounting of FDI.

Type III: Embedded digital FDI.

Type III digital FDI A digital transformation of the historically physical-based investment such that FDI in manufacturing, agriculture, logistics, finance, and retail sectors now incorporate the digital capabilities as a fundamental value generation element. The car assembly plant nowadays is as much a software development and data analytics office as a metal-bending one; the local subsidiary of a foreign bank is creating competitive advantage mainly with its algorithmic credit-scoring and mobile banking as much as its network of branches.

The most important in aggregate volume, though least investigated in the context of digital-economy, is type III investment, which falls under sectoral investment data instead of being defined as a specific digital category. It is analytically important yet practically difficult to disaggregate the digital aspect of physical-sector FDI, necessitating the application of survey-based measures of the intensity of digital at the firm or facility level.

3.2 Data Construction and Sample Construction.

We conduct our empirical study based on five main sources of data. In 2005, UNCTAD released the World Investment Report giving aggregate bilateral stock and flow of FDI in 72 countries between 2005 and 2024. Digital-sector FDI is determined by harmonizing the UNCTAD sectoral FDI statistics with the ISIC Rev. 4 digital economy codes, and this is supplemented by fDi Markets green field investment data and cross-border M&A data collection by Refinitiv Eikon. PitchBook and Crunchbase are the sources of venture capital and private equity investment in digital sectors as a predictive of future FDI conversion. The regulatory and infrastructure data are based on the ITU Global connectivity report, the world bank Doing business database, the freedom of the press freedom on the net index and the OECD Digital Government Index.



4. THE EMPIRICAL LANDSCAPE OF DIGITAL FDI

4.1 Growth and Geographic Distribution

Digital FDI has increased about 2.3 times faster than total FDI in the 2010-2024 period, while starting with 14 percent of total world FDI flows in 2010, it is projected to increase to about 31 percent in 2024. This has been a lopsided expansion in terms of geographic locations. Between approximately 50 percent of inward and outward digital FDI is concentrated in advanced economies, specifically the United States, the United Kingdom, Ireland, Singapore, and the Netherlands, which is their concentration of data center and cloud infrastructure headquarters and the specific appeal of these locations to such investment.

Digital FDI absorption has been very concentrated among the emerging markets. The largest digital FDI flows to the Global South are in China, India, Brazil, Indonesia and Mexico there being the vast consumer base of digital products and in China and India because of the local talent pools of software engineers. The least developed countries and Sub-Saharan Africa continue to rank very low in terms of digital FDI despite the soaring development of mobile internet penetration with structural obstacles such as intermittent power supply, low bandwidth, inadequate digital regulatory frameworks and lack of digitally proficient labour forces hampering investment appeal.

Table 1: Digital FDI Inflows by Region, 2010–2024 (USD Billion, Annual Average)

Region	2010–13	2014–17	2018–21	2022–24
North America	148.4	214.7	312.5	401.3
Europe	119.2	187.3	264.8	318.6
East & SE Asia	89.7	148.6	228.4	291.7
South Asia	12.4	31.8	67.3	98.4
Latin America & Carib.	18.6	38.4	71.2	94.8
Middle East & N. Africa	8.9	22.7	44.6	67.3
Sub-Saharan Africa	3.4	9.1	18.7	28.4
Rest of World	6.8	14.2	27.4	39.1
Global Total	407.4	666.8	1,034.9	1,339.6

Sources: UNCTAD World Investment Report (2024); fDi Markets; Refinitiv Eikon; authors' calculations. Digital FDI defined as investment in ICT services, digital platforms, software, fintech, and data infrastructure sectors.

4.2 Sectoral Composition and Investment Type

Cloud and data center infrastructure has become the fastest-growing subsector since 2018 in digital FDI; fueled by the scale-out approach of the major hyperscale vendors and the accelerated pace of enterprise cloud adoption during the pandemic. The e-commerce and marketplace platforms are the ones that comprise the highest count of digital FDI in terms of number of investment projects, and this implies the rise of regional and international platform entrants in the emerging markets. Fintech FDI has experienced an especially rapid growth in Africa and Southeast Asia, where mobile-first financial services have been discovered to have markets unexploited by traditional banking infrastructure.

There is a significant difference in the sectoral composition of digital FDI across the three types of investments. Type I (infrastructure) takes about 38 percent of digital FDI in value terms but just 12 percent in the number of projects, which indicates high average capital intensity. Type II (platform and services) has 44 percent value and 71 percent of the number of projects. The rest of the 18 percent by value is used by Type III (embedded digital in traditional sectors) that is certainly understated given the difficulty in classifying it.

Table 2: Digital FDI by Investment Type and Mode of Entry, 2024 (Percentage of Total Digital FDI)

Investment Type	Greenfield	M&A	Reinvestment	VC/PE*
Type I – Infrastructure	68%	21%	11%	N/A
Type II – Platform/Services	31%	39%	18%	12%
Type III – Embedded Digital	44%	41%	15%	N/A
Total Digital FDI	46%	34%	16%	4%

* VC/PE included where investment meets threshold for FDI (10%+ ownership stake). Sources: fDi Markets; Refinitiv; PitchBook; authors' calculations.

4.3 Departure from Traditional Location Determinants

Another remarkable aspect of digital FDI is that it is decoupled, to some extent, to the classic location determinants that prevail in estimations of physical-sector FDI based on the gravity model. Table 3 shows the findings of a gravity model estimation by separating the digital and non-digital FDI. The coefficient of bilateral geographic distance as a canonical variable of the variables of the gravity



model, which is a proxy of the transaction costs, is significant and negative with both types but has a significantly smaller value with digital FDI, which is expected because of the lower transportation and communication costs associated with digital providing services. Key determinant of traditional efficiency-seeking FDI such as the coefficient on host-country manufacturing wage is not statistically significant in digital FDI.

In contrast, the variables that are digital specific, such as broadband penetration, digital skills index, quality of data protection regulation, as well as the size of the online consumer market are large, positive, and highly significant in the digital FDI equation. The most standardized coefficient of the digital FDI specification is the digital skills index, which is the proportion of the working-age population possessing more than basic digital skills, which highlights the fact that the most critical and useful location factor in digital investment is human cognitive capital, rather than physical infrastructure or low-skilled labour.

Table 3: Gravity Model Results — Digital vs. Non-Digital FDI

Variable	Non-Digital FDI	Digital FDI	Difference	p-value
Log GDP (origin)	0.782***	0.814***	+0.032	0.241
Log GDP (host)	0.691***	0.728***	+0.037	0.198
Log bilateral distance	-0.614***	-0.298***	+0.316	0.000
Common language	0.341**	0.487***	+0.146	0.012
Host mfg. wage (log)	0.218**	0.041	-0.177	0.003
Broadband penetration	0.189**	0.573***	+0.384	0.000
Digital skills index	0.221**	0.681***	+0.460	0.000
Data protection index	0.094	0.412***	+0.318	0.000
Online market size (log)	0.317***	0.692***	+0.375	0.000
Observations	18,420	18,420	—	—
R ²	0.612	0.714	—	—

Robust standard errors clustered by country pair. *** $p < 0.01$, ** $p < 0.05$. All specifications include origin, host, and year fixed effects. Full set of controls available from authors on request.

5. The Digital Investment Readiness Index (DIRI)

5.1 Framework and Construction

We would suggest a composite measure of the Digital FDI readiness of a country in the form of Digital Investment Readiness Index (DIRI). The index gets built on four dimensions, each having a series of sub-indicators, synthesized via principal components analysis to create dimension scores, which are further averaged in equal measures to form the composite DIRI score.

The four dimensions are: (i) Connectivity Infrastructure, which reflects physical and logical basis of digital economic activity; (ii) Digital Human Capital, which reflects the availability of skills needed by digital investors; (iii) Regulatory Environment, the extent of the legal and regulatory environment of digital investment and operation; and (iv) Data Governance, the level of the maturity of data protection and data flow across borders and cybersecurity.

Table 4: DIRI Dimensions, Sub-Indicators, and Data Sources

Dimension	Weight	Sub-Indicators (n)	Primary Sources
Connectivity Infrastructure	25%	Fixed broadband penetration; mobile broadband speed; data center density; energy reliability; latency to major exchange points (5 indicators)	ITU; Ookla; Cloudflare
Digital Human Capital	25%	Share w/ above-basic digital skills; ICT graduates per 1,000 workers; STEM tertiary enrollment; English proficiency index; software developer density (5 indicators)	OECD; UNESCO; EF EPI
Regulatory Environment	25%	Ease of cross-border data flows; e-commerce legal framework; cybercrime legislation; IP protection index; investment openness score (5 indicators)	OECD; World Bank; BSA
Data Governance	25%	Data protection law quality; data localization restrictiveness (inverted); government data sharing index; cybersecurity maturity; digital ID infrastructure (5 indicators)	Freedom House; WEF; UN e-Gov

DIRI scores are rated between 0 and 100 and calculated in 128 countries in the years 2012, 2015, 2018, and 2024, which provides the opportunity to analyze digital investment readiness in the long term. Convergent validity tests (correlation with known digital



economy composite indices like the IMD Digital Competitiveness Ranking and the Network Readiness Index) and predictive validity tests (regression of digital FDI per capita on DIRI scores) are used to test the validity of the index.

5.2 Predictive Validity and Country Scores.

DIRI has high predictive validity: one standard deviation higher in the composite score is linked to a 68 percent rise in digital FDI per capita in the next two years, conditional on market size, total FDI openness, and region fixed effects (coefficient 0.621, $p < 0.01$, $N = 398$). The Regulatory Environment and Digital Human Capital dimensions explicitly demonstrate the strongest predictive power, and the weakest one is the one of the Connectivity Infrastructure that alludes to the fact that the latter dimension is less likely to be binding on digital investment choices in middle-income economies because the level of basic connectivity has already increased significantly since 2015.

The top DIRI scores in 2024 will be registered in Singapore (87.4), Denmark (85.9), South Korea (84.2), the Netherlands (83.7) and the United States (82.6) among the 72 countries in our FDI analysis sample. The smallest scores are registered in Chad (14.2), Niger (16.8), Central African Republic (17.1) and Sierra Leone (19.3). Africa has the highest within intra-regional difference with South Africa (61.4), Kenya (54.7), and Rwanda (53.2) on top of a continent with heterogeneity represented by the median score of 31.6.

6. ECONOMIC IMPLICATIONS FOR HOST COUNTRIES

6.1 Employment: Quantity, Quality, and Displacement

Digital FDI has heterogeneous employment impacts by country of host nation and type of investment. Type I infrastructure investment creates direct construction jobs which are massive in the short term and mote in the long term since data center operational workforces are small in comparison with the amount of capital invested in them. An average hyperscale data center with 200300 full-time operational workers can constitute a USD 1200 billion capital investment, a ratio of employment to investment significantly lower than in a traditional manufacturing FDI.

Labor market effects of type II platform investment are more complicated. On the demand side, digital platforms provide direct jobs in local operations, content moderation, coordination of logistics, and customer service, but many of these jobs are non-standard contractual, such as gig work, agency contracts, zero-hours arrangements, which do not offer effective protections to workers. Platform entry on the supply side reinvigorates the labor markets that exist in the industries of platform competition, with ride-hailing platforms affecting labor employment in taxi, e-commerce platforms affecting work in traditional retail, and fintech platforms affecting bank networks.

Our panel results in negative net employment effects which are positive in average but small in size and highly dependent on host country labor market institutions. The positive employment multipliers of digital FDI are associated with countries with flexible labor markets and with effective vocational training systems; whereas the negative net employment impacts are found to be lower and somewhat negative in those countries with rigid formal labor markets and low digital skills supply, which is in line with the complementary relationship between digital FDI and digital human capital observed in the gravity model.

6.2 Mobilization of Taxation and Revenue.

The most controversial economic implication of digital FDI is, perhaps, associated with the taxes. The digital business models facilitate profit shifting by transfer pricing of intangible assets, the strategic IP holding company structures, and the apportioning of income of market jurisdictions to low-tax booking corporations. According to OECD estimates, BEPS (Base Erosion and Profit Shifting) in the digital economy causes corporations in countries to lose USD 1200 billion of corporate tax income every year, which is 49 percent of world corporate income taxes.

The Two-Pillar Solution of OECD/G20 Inclusive Framework, which was announced in 2021 and is still being gradually implemented as of 2024, is the most substantial multilateral answer so far. The Pillar One reallocation rules have the objective of redistributing taxing rights over residual profits of the largest multinationals to market jurisdictions and the Pillar Two Global Minimum Tax of 15 percent aims at providing a minimum on effective tax rates. To developing countries, the fiscal impacts are also ambivalent: the redistribution of taxing rights under Pillar One can bring about a new source of revenue of the digital FDI, yet the 15 percent minimum percentage is much lower than most of the statutory rates of most developing economies that have employed competitive corporate tax regimes as a means of attracting investment.

Based on the combination of firm-level financial data, with an effective tax rate paid by digital MNEs on income born to the markets in developing countries of about 7.3 percent, according to our estimates, rather than about 26.4 percent in the same jurisdiction, which is the median statutory corporate tax rate. The tax gap is an important development finance problem that multilateral reform of taxation has not fully solved.



6.3 Digital Age productivity Spillovers.

The conventional FDI spillover theory is based on the assumption that there are three ways in which the entry of foreign firms increases domestic firm productivity, which are demonstration effects, labor movement, and rivalry. All the 3 channels work in the digital FDI realities though with altered dynamics. The effects of demonstration of digital investment are possibly greater as techniques of production based on software are susceptible to imitation compared to proprietary hardware methods. Nevertheless, data network effects and platform lock-in can make digital markets less contestable, making competitive pressures less effective as a spillover instrument.

Empirical results of our study determine existence of positive and statistically significant productivity spillovers of Type I and Type III digital FDI on local firms in related upstream and downstream industries, as observed in the conventional linkages of spillovers channels in the traditional FDI literature. Type II platform investment has a positive spillover on downstream service industries (delivery, logistics, content creation) and a negative spillover on direct competitors in the domestic platform, as expected given the competitive displacement effects recorded in e-commerce literature.

Domestic digital absorptive capacity moderately determines the magnitude of the digital FDI spillovers. Companies that have more than median digital skills within their employee base show productivity spillovers of digital FDI that are on average 2.7 times higher than what is found in digitally laggard domestic firms. The policy implication of this finding is that the policy must invest in digital workforce development as a pre-condition to the reaping of the productivity benefits of digital FDI.

7. KEY FINDINGS

The paper indicates that Foreign Direct Investment (FDI) has been changed enormously in the digital economy moving away the traditional physical investments and moving on to intangible assets, which are technology-oriented, including data, software, and online platforms. Among the most important insights is that the rate of digital FDI is increasing significantly at a faster pace than the general FDI, which suggests its rising prevalence in the total investment flows around the world.

The study also concludes that the conventional factors influencing FDI like labour cost and geographical distance have started losing their influence in the digital environment. Rather, the digital-specific factors, including broadband penetration, data governance frameworks, and size of online consumer market all have critical influence in drawing online FDI. Among them, the most important determinant would be digital human capital.

The other significant discovery is the level of imbalance in the distribution of digital FDI among nations. The strong economies remain in control because they have superior digital infrastructure and regulatory environments whereas emerging economies such as India and China are enticing investment because of huge digital market and talent pool. But, least developed nations are far too far behind given structural difficulties like a low connection system and a weak institutional setup.

Another observation of the study is that digital FDI has ambiguous economic effects. Although it has a positive effect on productivity and innovation due to the transfer of knowledge, the effect on employment is smaller and more uneven as it usually leads to the creation of non-standards or gig employment. Moreover, digital FDI is also a grave threat to the taxation system since multinational companies use digital business models to transfer income and evade tax payments.

Lastly, the results affirm that Digital Investment Readiness Index (DIRI), which is proposed, is a high predictor of the capability of a country to absorb a digital FDI, with regulatory environment and digital human capital as the strongest factors.

7.1 Recommendations

The paper proposes that the governments ought to re package their investment policies so that it matches up with the demands of the digital economy. Conventional investment promotion measures centered on infrastructure and tax incentives do not suffice as the countries have to give more emphasis on the development of the digital infrastructure such as the high-speed internet, data centers, and energy-sufficient systems.

One suggestion is to invest in digital human capital to a great extent through upgrading education, technical training, and digital skill development programs. Because digital skills are the most vital variable in determining digital FDI, enhancing the workforce will go a long way in enhancing the attractiveness of a country in relation to investment.

It should also be noted that the study suggests that clear data governance frameworks, based on balance and transparency should be developed. The nations must not go to the extremes in localizing data, but afford to protect and maintain privacy of data since regulatory predictability is paramount in drawing in digital investors.

Governments should be actively involved in international processes like the OECD/G20 to facilitate the elimination of profit shifting and equitable taxation of digital multinational business. Revenue loss can be minimized by strengthening domestic tax systems and implementing digital taxation systems.

Also, the policymakers are advised to update the competition regulations to adapt to the digital platform dominance and eliminate monopolies but retain innovation and foreign investments.



It is also implied by the study to increase institutional capacity through the creation of dedicated digital investment promotion agencies having expertise in the field of technology, regulatory facilitation, and cross-sector coordination.

Lastly, the developing nations must aim at enhancing their Digital Investment Readiness through infrastructural, skill, and governance gaps mitigation to diminish the digital gap and be able to generate a greater degree of digital FDI.

8. CONCLUSION

Digitization of the global economy is redefining foreign direct investment in virtually all its various aspects: what is being moved, where is being selected, what markets are being served, what employment is being generated, what taxes are being paid, what spillovers are being created. This article has reported these changes in a sample of 72 countries in 2005-2024, formulated a new taxonomy of digital FDI modalities, created and tested Digital Investment Readiness Index, and discussed implications of digital FDI on host-country employment, fiscal revenues, and productivity.

Several findings stand out. The fact that digital FDI is not tied to traditional location factors especially labor costs and geographic location is a structural change compared to the classical FDI geography and opens up new possibilities of digitally enabled yet geographically peripheral economies competing to attract high-quality investment. Tax gap relating to business models that are digital is one of the major threats on public finance in developing countries, and multilateral reform has not fully addressed it. And the productivity spillovers of digital FDI, though they may be great, are highly contingent on the domestic digital absorptive capacity, suggesting that the payoffs to digital human capital investment are complementary with (and in other cases predetermined by) the payoffs to digital FDI attraction.

The implications of the policy are consequential. The investment promotion institutions also need basic modernization in order to fulfill their mandate in a digital economy. Investment policy and social policy Data governance frameworks simultaneously represent a false choice between openness and protection and should be substituted with evidence-based regulation design. Competition policy needs to change to support the platform market dynamics without necessarily preclosing the benefits of the platform-mediated economic activity.

The current analysis has some gaps that should be filled in the future research. Type III embedded digital FDI has not been sufficiently measured; it is desirable to develop harmonized survey instruments to determine the digital intensity of investment in the physical sector. Distributional impact of digital FDI - its impact on wage inequality, regional concentration, and survival of the small firm, should be considered more systematically. And the dynamical influences of digital FDI on the long-run industrial structure and innovation potential are a fruitful field of study as longer series of high-quality data on the digital economy become accessible.

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Conflict of Interest

The authors declare no conflicts of interest.