

# The FDI-Economic Growth Nexus: A Human Resource Management Perspective—The Case of the ICT Sector in Sub-Saharan Africa



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**Abstract** How can foreign direct investment (FDI) in Sub-Saharan Africa better benefit host economies? Here, we consider the role of human resource management, taking the information and communications technology (ICT) sector as a case study. Our concern is to assess how human resource management can contribute to the success of FDI in the ICT sector in Sub-Saharan Africa in terms of human capital development and economic development. The paper thus provides a human resource management perspective on the FDI-economic growth nexus in that empirical context.

**Keywords** Economic growth · Foreign direct investment · Information and communication technology · International human resource management · Sub-Saharan Africa

## 1 Introduction

In the last decades, the information and communications technology (ICT) sector has witnessed a substantial growth both globally [1] and in African countries [2]. Empirical evidence suggests a strong positive relationship between the development of the ICT sector, foreign direct investment (FDI), and economic growth [1, 3]. The causality behind the positive relationship between ICT and FDI may vary across countries, with Gholami et al. [4] finding that investments in ICT increase FDI flows in developed countries, whereas increasing FDI flows increase ICT investment in developing countries. Studies addressing the human dimension of ICT sector development have focused on ICT use and access rather on its implications for human capital development, with a few exceptions [5]. Even then, however, little attention has been given to the role of human resource management (HRM) in the interplay between

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FDI, ICT, and economic development. Rapid population growth and urbanization in many African countries offer good reasons to conduct HRM research and identify how organizations can better contribute to human capital development in African countries, particularly in the less developed economies.

The aim of this paper is to understand how human resource management can contribute to the success of FDI in the ICT sector within Sub-Saharan African (SSA) countries, both in terms of human capital development and economic development. It is based on a review of the academic and professional literature, analysis of secondary data, and a few semi-structured interviews with practitioners and experts in the domain. The interviews were conducted face to face during the Mobile 360 GSMA conference that took place in Dar El Salam, Tanzania, on July 2017. Experts include chief strategy officers and managing directors of foreign MNCs investing in the SSA ICT sector. We thus first review the general context of FDI in Africa, addressing trends, policies and institutions, as well as outcomes. Then, we focus on the specific features that characterize FDI in Sub-Saharan countries in the ICT sector. Finally, we offer an HRM perspective on the interplay between FDI, ICT, and economic development in the African context. Accordingly, we outline opportunities for future research.

## 2 FDI in Africa

### 2.1 FDI Trends

Africa is often called ‘a rising star’ [6], ‘the continent of the future’ [7], ‘a hopeful continent’, ‘the China of tomorrow’ [8], and has one of the fastest growing economies in the world [9]. Its GDP grew at an average rate of 4.9% per year between 2000 and 2008. However, between 2010 and 2015, the growth rate dropped to 3.3% [10]. This is apparently due to a general decrease of FDI in Africa following the political uncertainty that emerged after the Arab Spring revolution in Tunisia, Egypt and Libya. Uncertainty in North Africa redirected some of the FDI injection towards SSA countries, even though Morocco was the second-largest FDI recipient economy [2]. Growth in Sub-Saharan Africa is expected to pick-up to 3.4% in 2019, rising to an average of 3.7% in 2020–2021 [11]. According to UNCTAD data [12], FDI inflows to Africa, at \$54.1 billion, remain at about a tenth of those of developing Asia, at \$540.7 billion. FDI flows to Africa dropped 21% between 2016 and 2017, notably because of weak oil prices and repercussions from the commodity bust, with flows to diversified exporters remaining more resilient, which points to the need for proactive policy to enhance structural economic transformation, beyond the focus on economic growth [13].

Since the 1980s, many governments in Sub-Saharan Africa have introduced structural adjustment programs under the influence of the World Bank and International Monetary Fund, with the expectation of stabilizing the economy and setting the

bases of sustainable economic growth [14]. Measures such as financial and trade liberalization and the privatization of state-owned companies were expected to attract Foreign Direct Investment (FDI) in various sectors. Indeed, FDI flows have always been responsive to various factors such as exchange rates—considered as a barrier to capital movements [15–17]—or low production costs, as well as low-income levels.

FDI inflows vary across African sub-regions [18]. In 2017 [13], the African continent had a FDI inward stock of \$866.8 billion, with the majority distributed across North Africa (\$275.1 billion) and Southern Africa (\$235 billion). West Africa had a FDI inward stock of \$186.3 billion, whereas the stock in Central Africa was \$87.8 billion and East Africa \$82.6 billion. FDI also varies across industry sectors. In recent years, it has broadened beyond the earlier focus on extractive industries such as coal, oil, and natural gas, which accounted for about 13.3% of FDI investments in 2016 [2]. Prominent sectors now include real estate, hospitality, and construction at 40.6%, transport and logistics at 13.4%, and clean tech at 9.5%, with technology, media, and telecommunications at 3.4%.

The factors influencing foreign direct investment in Africa are interrelated and complex, including the origin of investments, post-colonial effects, culture, democracy, sectors, and policies. Indeed, changes in FDI flows not only depend on the economic and political situation of the investor country and the development stage of each economic sector per se. They are also impacted by the economic policies of recipient countries, particularly those related to creating a favorable and attractive investment climate [19], such as fostering the privatization of several sectors [20]. In recent years, such policies have differed from the reforms adopted during the 1990s, which primarily addressed poverty reduction rather than economic growth.

## ***2.2 FDI Policies and Institutions***

Asiedu [21] has noted that since the African economy—because of its highly diverse regional characteristics—is different from other emerging economies, successful policies to attract investors to Sub-Saharan Africa should be specific to the African market. According to Darley [22], the fact that the United Kingdom and France are among the top five investing countries shows that until now investments in SSA countries are mostly based on ‘colonial ties’ rather than ‘strategic motivations.’ The United States joined the ranking of top investors in Africa in 1996 [23] after major efforts coming from the African American community. The ‘rising superpower’ of Chinese multinational companies in some of the poorest African countries explain the connotation of Chinese investments in Africa as a new form of colonialism.

To attract foreign direct investments in SSA countries, Malikane and Chitamba [24] suggest firstly strengthening the democratic institutions and the governance structure. There are challenges regarding the quality and comparability of FDI data, notably because of the lack of information and transparency about the implemented policies to attract FDI [25]. In addition to macroeconomic fundamentals, factors such as geopolitical uncertainty and risk aversion can have an important influence on

investor sentiment [2]. Some of the specific factors that appear to enhance FDI inflows towards Sub-Saharan economies are for instance conflict resolution for a more stable political environment [26], a predictable and consistent policy and macroeconomic environment; the successful implementation of privatization; efforts in regional integration, aggressive investment promotion; good infrastructural facilities and sound human capital development [25].

The fluctuation of FDI flows thus partly reflects different investment strategies at firm level, with a differing impact of globalization on both emerging and developed markets. Multinational corporations' (MNCs) entry strategies rest on the foreign market entry mode (e.g., acquisitions, joint ventures or Greenfield expansions), the appropriate timing and location such as low-cost production countries [27]. FDI strategies can be classified as market-seeking, efficiency-seeking, or resource-seeking [16]. The latter can be further distinguished into natural-resource seeking and strategic-asset seeking, with natural-resource seeking strategies not creating value added activities. Market-seeking strategies substitute exporting and consist on responding to the demand of local or adjacent markets. Efficiency-seeking and strategic-asset seeking are quite similar strategies as they both create assets in the host economy. Efficiency-seeking investments aim to enhance economies of scale by exploiting cross-border specialization through the relocation of manufacturing activities abroad. Asset-seeking involves acquiring competitive advantages through for instance R&D capabilities available in the host countries [28]. Asset-seeking investment motives have also been labeled as knowledge-seeking asset augmenting or resource augmenting [29–32]. MNCs choose their strategies depending on the industry sector and macro-economic factors such as market size or exchange rates [33].

In this regard, it is interesting to study how the choice of the host country and the investment strategies change depending on the origin of the investor. FDI inflows categories to Sub-Saharan African economies are split into two clusters according to the origin of the foreign direct investment: south-south FDI inflows particularly originated from South African—considered as intra-African investment [34]—Chinese and Indian MNCs, and north-south FDI inflowing mainly from Western countries such as European countries and the United States. In contrast to Western countries, China's investment strategy in SSA economies remains on a project-by-project basis [35]. Further, according to Gu [36], Chinese FDI into SSA focus particularly on the mining, infrastructure and technology sectors with less regard to issues such as corruption, crime and bureaucracy [36]. On the other hand, Western Economies' investments depend on a “general policy” basis. For instance, the US investment in Sub-Sahara Africa was for the most part resource-driven in mining and extractive industries rather than manufacturing [34].

### 2.3 *FDI Outcomes*

FDI has a complex relationship with economic growth. Over the last decades, world FDI flows have risen much faster than world gross domestic product (GDP) and world trade [37], especially within developed countries [38]. It is thus natural to wonder if FDI positively affects economic growth in host countries and/or if it effectively substitutes or complements domestic investment. Already back in 1993, Oxleheim considered that FDI had become the prime engine to foster growth and facilitate internationalization of formerly sheltered areas during the 1980s. In addition, according to the OECD [39] foreign direct investment is a catalyst for economic development within developing and transition countries, beyond bringing social and environmental benefits. However, research disagrees on the existence of a direct relationship between FDI and economic growth [40].

Contrary to the period prior to the mid-1980s, the focus of research on endogenous growth in international economies has shifted from quantitative to qualitative issues: whereas earlier attention went to the effects on physical capital accumulation and based on the marginal productivity of capital, there has since been increasing focus on knowledge accumulation. This untraditional non-competitive approach encompasses technological externalities and human capital accumulation through knowledge spillovers such as labor training, skills acquisition, alternative management practices, and organizational arrangements [41, 42].

There is evidence to suggest that FDI contributes to productivity and income growth [43], GDP growth [44], and poverty reduction [45]. Inward FDI reinforces cross-border transactions and integrates the host economy within global trade flows. Openness to international trade is thus one of the determinants of FDI attraction. We know that for instance in Singapore and in Ireland local suppliers managed to become global exporters thanks to FDI spillovers [45]. According to the OECD [39], technology transfers are the most important of MNCs' externalities in the recipient economy. Liang [46] further argues that the diffusion of technology and know-how to local firms is more effective in the presence of (a) strong industrial and vertical linkages between local firms and investors, (b) high firm's absorptive capacity (in terms of new technologies' adoption), and (c) low geographic distance between domestic firm and the source of knowledge (the FD Investor).

FDI can also contribute to human capital development. It can do so directly, either through measures such as training and learning on-the-job that can subsequently lead to developed employees moving to domestic firms or becoming entrepreneurs, or indirectly through government policies efforts to upgrade human capital to attract foreign investments. FDI may also influence competition in the host country, and thus contribute to sustainable economic growth by improving productivity and efficiency [45]. To synthesize, FDI seems to impact on economic growth through five main aspects: trade, technology, human capital, competition and domestic firms [39, 41].

FDI can however also harm the host economy through several negative effects. To attract foreign direct investment, governments can introduce reforms and provide incentives to MNCs such as favorable taxation or tax exemptions [43, 44, 47], and

this at the expense of local firms. In addition, by reducing domestic firms' market share and providing high quality labor, FDI can hamper growth and competitiveness of domestic investments and firms in the short-term [46]. Furthermore, FDI inflows can bring inappropriate social and cultural norms to the host economy [47].

Hence, because of mechanisms leading to both positive and negative effects at the same time, the FDI-Growth nexus remains ambiguous [44]. Accordingly, to ensure a positive impact and maximize the benefits from FDI, both foreign investors and local actors need to collaborate, ideally on the basis of common objectives, such as diffusing MNCs' knowledge in the host country, implementing effective policies to develop national strategic sectors, and creating technology-oriented educational programs to improve the technological capabilities of human capital and the absorptive capacity of domestic firms. With the advent of digitization [48], MNCs are particularly well placed to help develop the local digital technology capability of FDI recipient countries, as we discuss next.

### 3 The Importance of ICT

#### 3.1 FDI in the ICT Sector

Since the digital age, Information and Communications Technology (ICT) has been key to globalization, with the global economy being reshaped and shifted from an industrial to an information and communication-based system. This shift and the spread of the Internet has affected the flow of foreign direct investment, and thus its determinants, with factors attracting FDI flows in the past decades no longer being significant nowadays [4].

The development of ICTs has helped to make them more affordable, and thus to rapidly widen access to them in developing countries, as well as to raise economic productivity by enhancing technological upgrading and innovation within firms [49]. In this regard we can say that FDI in the ICT sector can contribute to each of the 17 Sustainable Development Goals (SDGs) of the 2030 UN Agenda for sustainable development [50].

Ketteni et al. [3] have suggested that there is a positive interaction between FDI and ICT investments that enables productivity and economic growth, and thus improving country performance. Other studies, however, show no direct correlation between economic development and the development of the ICT sector. ICT-based FDI picks up local firms' absorptive capacities of spillovers. Thus, ICT-based FDI seem to foster growth only if host countries offer an adequate level of human capital, financial resources and technological infrastructure [40]. Within least developed countries, including in SSA, FDI can contribute to the development of technological infrastructure and of human capital to ensure the base of absorptive capacity needed for FDI in the ICT sector to be worthwhile.

There are obstacles, however, to FDI growth in the ICT industry. Many developing countries are afraid of opening their economies to foreign investments in critical industries such as telecommunications because of its impact on national sovereignty (e.g. national security, social stability and economic development). In terms of control, the ownership of the ICT sector in developing countries ranges from state monopolies to foreign ownership, with the wave of privatization since the 1980s contributing to a shift from the former to the latter [51]. Foreign direct investors have contributed to technological spillovers, an increase of competition in the market, and the improvement of telecommunication infrastructures [52]. This phenomenon has attracted the interest of researchers in terms of impact on access and use of ICTs as well as on economic growth. A few studies have focused on the democratic impact that FDI in ICT can have in developing countries.

Interviews with key informants highlighted that FDI in the ICT sector of SSA came in response to the liberalization of the sector about two decades ago. Several informants considered that the foreign investment boom began in the early 2000s in response to the liberalization of the telecom sector, led by big operators such as Airtel, MTN, Orange and Vodacom. Two informants noted that:

«2000–2001, when the liberalization of the telecom sector arrived in sub-Saharan Africa, the first thing was big operators investing in Africa.» (Expert 1)

«In the early boom of mobile technology in the region, between 2000 and 2002, there was a big boost of foreign investors thanks to the friendly investment environment.» (Expert 2)

Key informants agreed that a significant, optimum and sustainable market structure should rest on stable political and economic environment, and thus on investor friendly regulations. Moreover, as Sub-Saharan African countries progressively become experienced and mature markets, mobile operators have to go beyond the role of voice and data providers, to turn into a catalyst of growth by investing in the mobile financial market, content, energy and e-commerce.

These findings seem part of a larger change in FDI motives in developing countries. Over the past decades, FDI motives in developing countries have shifted from natural resources seeking and railways building to knowledge-intensive activities [45] and market-seeking [27] FDI in developed countries has become increasingly resource-seeking, in contrast with the earlier focus on seeking markets [53].

To conclude we can consider that the spillover effects and infrastructure level improvements that took place thanks to the wave of liberalizations in the ICT sector, start to represent a sufficient base to justify FDI in the ICT sector and to expect potentially positive effects on the development of societies as well as on the overall economic growth of SSA countries. In the next sections, we will thus focus on the specificities and determinants of FDI in the ICT sector within Sub-Saharan African countries.

### ***3.2 Trends, Policies, and Challenges Related to the ICT Sector***

In the 1990s, apart from a few countries such as Ethiopia, most African countries developed ICT policy frameworks either by adopting existing international standards or by introducing specific national policies through their government agencies. Over the past decade, ICT regulation reforms were introduced in Africa, however they differed from country to country based on the social, economic, and political context, as well as on internal and external market forces. The impact of these reforms also differed.

The telecom sector in particular is facing several challenges: administrative difficulties, high infrastructure costs and the scarcity of local talents. Despite the progress achieved after the spectrum liberalization in the African continent, when expanding in a new country, telecom companies have to collaborate with governments and regulators to purchase licences and negotiate taxes. Informants revealed that when dealing with African governments, their organizations faced difficulties to find agreements in terms of connectivity and territory coverage.

Furthermore, an informant revealed that for his organization, infrastructure investment is considered as a real estate investment. Thus, as soon as they implement the infrastructure they sell it. Moreover, several of the interviewed experts agreed that there is a need to share the burden between telcos, governments and donors to reduce infrastructure costs and provide mobile broadband to people in rural areas. Indeed, network deployment can be not profitable due to the scattering of populations and their low consumption. For this reason, telecom companies have to collaborate with institutions such as the World Bank or the African Development Bank through equity models. This was highlighted by two participants:

«IFC is the private bank of the World Bank. While the World Bank lends to governments, the IFC lends to private companies. In the telecom, they have a model through companies' equity or private equity funds... which works quite well.» (Expert 1)

«Then, we do a lot of collaboration with the GSMA to open-up new areas ... we believe strongly in providing mobile broadband to people, which will significantly change their lives.» (Expert 3)

The development and support of ICT policies have contributed to ICT development, as captured for instance by the penetration rates of mobile and fixed telephone and declining communication costs. Mobile phone development can further contribute to financial inclusion, notably in terms of number of deposits and loans per head, which favors economic growth. The positive correlation between mobile phone penetration and financial inclusion has been found to be significant in growth regression analyses. Although the rollout of mobile banking is still at its early stage, the evidence suggests that in countries where such financial services are available, the joint impact of financial inclusion and mobile phone diffusion on growth is stronger. Given the low coverage of banks in African countries, by facilitating the provision of cost-effective financial services, mobile phone diffusion can potentially boost financial inclusion. Even though the challenges and security concerns posed by mobile



banking need to be addressed, policies promoting ICT adoption in the banking sector could improve mobile banking. Previous experiences in Kenya, Zambia, and South Africa have illustrated how mobile financial services can help reduce the infrastructure gap and thus the lack of access to financial services [54].

Despite the fear and resistance to initiate an independent regulatory system, some African countries have opened-up the ICT sector to foreign investments. It is worth recalling here that the concentration of foreign direct investments in Africa is no longer oriented to the primary sector but rather to services and manufacturing [18, 25]. In 2014, SSA countries such as South Africa, Nigeria and Kenya doubled their foreign investments' projects in the telecommunication industry with a focus on mobile phone and data traffic, "opening up opportunities to supply education, banking and health care via internet, adding to the sector's appeal" [55]. As a result, during the first decade of this century the average growth of the Kenyan ICT sector reached 20% a year, accounting for 24% of GDP growth.

More generally, the growth rate of mobile telecoms in Africa averaged 42% between 2006 and 2008, the rate lowered though to 21% from 2009 to 2011. In 2015, mobile technologies and services generated 6.7% of Africa's GDP. Recently, 94 mobile phone operators launched the 4G LTE services (high-speed wireless standard for mobile phones and data terminals) in 42 countries [56]. However, it is not clear or obvious whether these new technologies are going to impact development and even are going to be adopted by communities. Considering that SSA countries are anyhow still among the least performing and least connected of all, FDI appears to be one of the main reasons why the ICT sector experienced such a rapid growth in some specific countries. The other drivers most probably being the high consumption rates and the truly "vital" function of mobile services [55].

To better understand the effective impact of FDI in the ICT sector on economic growth in SSA, it is critical to explore the potential spillover effects that can stem from the practices chosen by MNCs to implement their FDI strategies. In the next sections, we will thus particularly focus on the implementation of human resource management (HRM) practices which we assume can directly impact on human capital development, one of the basic conditions to improve the absorptive capacity of the country, catalyze further FDI and thus engender economic growth.

## **4 A Human Resource Management Perspective**

### ***4.1 Human Resource Management in Context***

MNCs face several challenges when they operate abroad. In Africa one of the most important challenges is represented by the weak domestic skill base and the lack of managerial capabilities [57]. The problem worsened after the deregulation trend and the opening of markets to international competition [58]. Brain drain has become a concern for the continent, too. For instance, Asia Pacific and the Middle Eastern

regions have been attracting African skilled workers and professionals in response to the need for talent triggered by globalization. Major reforms in the human capital formation system, encompassing education, training and health systems are necessary to produce a sufficient stock of skilled workers in the near future [58].

Apart from the lack of skills and managerial capabilities, cultural differences represent another major challenge for foreign investors in Africa. According to Horwitz [59], African indigenous culture systems are characterized by high collectivism and group solidarity tendencies. HRM practices such as team working based on group behavior and norms are efficient, especially if performance management is linked to group-oriented rewards systems [60]. Giving feedback on performance has also to be done in a certain way when operating in Africa. In this perspective, academics [61] suggest the use of a team-based feedback that is not confrontational. In the specific case of Mozambique, employees were afraid to give their views and opinions directly to their superior, a phenomenon that might be explained by the long history of autocratic but paternal management.

Some studies found that the relationship between applicant and the current employees influenced selection decisions [62, 63]. Workforces rely more on word of mouth and internal recruitment with a tendency to favor relatives above outside applicants [61]. MNCs need to consider these trends when implementing recruitment and selection policies to employ the most qualified person.

Furthermore, scholars have highlighted that multinational companies from developed economies tend to implement in their African subsidiaries practices that they apply in their home country, without enough consideration of the local specificities [64]. For instance, Sartorius et al. [61] have noted the tendency of contract-focused HRM programs based on merit, authority, and individualism which totally clash with the collectivist-humanist culture of local African employees. In addition to the frustration that might arise among employees, this can become detrimental to the development of indigenous local African-style HRM practices [65]. It has also been highlighted that MNCs from emerging markets—mainly Chinese and Indian firms—import home-country practices, too, tending to invest in economies with low wage and labor standards, and insufficiently considering local skills gaps. This mirrors the common trend of relying on expatriates, a practice that engenders several challenges in terms of overall HR management. The capacity of emerging market MNCs to use labor substitutability strategies is with some variation, a characteristic of MNCs HR policy in African countries [59].

## ***4.2 FDI and International Human Resource Management***

International human resource management (IHRM) practices can represent a critical factor for the success of FDI. If chosen and applied appropriately, they can for instance positively impact on wages and income distribution; the diffusion of knowledge and technology, or the emergence of entrepreneurs, represent further potential indirect spillovers [37].

The relation between FDI, employment and wages in SSA has been the object of numerous studies. As the African labor force is rapidly growing, there is a strong need for job creation to decrease both unemployment and underemployment [66]. FDI can bring solutions to this issue of high political relevance by directly creating new job opportunities and/or better skilled jobs [67]. Coniglio et al. [66] suggested that foreign investments generate a higher amount of jobs compared to domestic ones. Yet attracting foreign investments of MNCs that adopt a low-income entry strategy—as it is the case of Nigeria, for instance—can harm employment practices. This effect, combined with the neglect of international labor standards, may lead to nonstandard forms of employment—casual, contract and outsourced workers—and to exacerbated unemployment.

With respect to wages, FDI can positively impact income levels by offering wage premiums. This depends, however, on the origin of investment. For instance, according to Coniglio et al. [66], Southern investments such as those of Chinese holdings are usually generating low wages, even lower than domestic firms' wages, and thus attracting blue-collar workers, whereas Northern or Western investments are more likely to offer premium wages and skilled job opportunities.

As FDI in Africa is growing, rivalry among competing investors is increasing, too. For foreign MNCs to succeed, and thus to engender positive effects in the economic system of the host company, they have to effectively manage their investment. One of the critical success factors when investing in a foreign country is related to how investors manage their human resources. In this regard, various studies have considered which among the convergent, divergent, and hybrid approaches to HRM practices would be most appropriate in the African context [14]. This question is extremely important considering the highly diverse cultural characteristics of the African continent [68] that may easily lead to misunderstandings, conflicts, missed goals, and thus jeopardize the FDI. In this regard, research needs to focus on the influence of culture on HRM practices implemented by foreign investors.

While considering the indirect effects of FDI, several externalities such as knowledge and technology transfer appear to increase human capital development, and thus the economic growth of host countries. Effective human resource practices such as training and continuous learning within MNCs can contribute to the spread of knowledge and technology to local firms. It is though unclear whether foreign companies invest enough in training, or if they rather restrict access to training out of fear of labor turnover [37]. This can depend on the country from which the foreign investment originated, as we already mentioned. Gomes et al. [65], for instance, noted that Indian MNCs invest less in training than European ones.

As HRM practices of foreign owned companies can vary according to the country of origin, the effects of FDI can also vary. To ensure human capital development, and thus economic growth, policy makers must pay attention to the different HRM practices that MNCs put in place and try to incentivize those firms that enhance skilled jobs creation and training programs.

### 4.3 *The Promise of Good IHRM Practices*

Nowadays HRM is expected to play a strategic role by implementing HR strategies and practices in accordance with the corporate and business strategy of an organization, and thus ensuring a competitive advantage [69–71]. In the 21st century, it is essential for organizations to be able to operate globally [70] as worldwide economies are becoming progressively integrated [72], MNCs need thus to effectively manage people across international boundaries. In order to transfer competencies and capabilities across their subsidiaries, MNCs look for appropriate policies and implementation practices [73]. In this regard, international HRM appears to be crucial and much more complex than domestic HRM. Indeed, HR managers have to deal with varying cultural and legal issues and thus adopt different approaches to HRM practices according to different country contexts [72]. IHRM in the context of multinational companies refers to several policies and practices serving to attract, recruit, select, train, develop, compensate, evaluate and retain the right talents to fill into international assignments.

Recruitment and selection are among the main HR functions and play essential roles in the performance of MNCs, as «talent has become a precious resource fought over by competitors in a global war for talents» [74]. According to Tarique et al. [72], recruitment involves the research and the attraction of qualified applicants to create a candidate pool from which employers could hire for open positions.

Training and Development (T&D) are defined as planned activities designed to promote the acquisition of knowledge and the development of skills and attitudes [75]. To ensure effective T&D, not only opportunities to learn and practice but also timely diagnostic feedback about employees' performance need to be provided [76]. At the international level, companies might fail to achieve the required T&D objectives because they simply transfer a program conceived at headquarters to another country, without taking cultural specificities into account [72]. Accordingly, on the one hand, leveraging organizational capabilities worldwide offers competitive advantage for MNCs [77]. On the other hand, local firms can benefit from spillover effect of T&D programs in the host countries. MNCs can play an important role in developing managerial competence within the local workforce; yet they may also lead to brain drain from host countries to investing countries [78]. Thus, investments in workforce development through training are often seen as a primary mechanism for national economic development [79].

Finally, employee retention is an important HR issue encompassing the practices aiming at enhancing job satisfaction and intention to stay over a long period in the organization. Retention of employees is valuable to organizations' knowing that they spend money on recruitment and training but also, because losing the best individuals is something they aim to avoid, to maintain a competitive advantage [80]. To reduce turnover and foster retention, organizations can influence organizational commitment and job satisfaction [81] through training, challenging work, opportunities for advancement, high compensation package, and learning opportunities [82, 83]. Good relationships between employees and supervisors can also positively affect

talent retention. Adding to that, scholars have found that work-life balance practices along with a supportive organizational culture [84, 85] and flexible working opportunities [86] improve job satisfaction and reduce intention to leave. In addition, MNCs are attracting talents from diasporas [87]. Studies suggest that Diaspora members are more skilled than locals as they are able to push technology and knowledge transfer and promote institutional reforms in their countries. They can be thus highly valuable for higher positions within MNCs [88, 89].

## 5 Toward A Research Agenda

The first objective of this paper was to understand the interplay between FDI and economic growth in the ICT sector. At this stage, the literature review on the FDI-economic growth nexus demonstrates both positive and negative impacts depending on several factors such as the country of origin of the FD Investor, host-country characteristics such as openness to international trade, absorptive capacities and technological capabilities of the local human capital. This supports the view that the HRM practices applied by the FD investor can be a critical factor for both the success of the investment and for its impact on economic growth in the host-country. Indeed, such practices can contribute not only to bridge knowledge and cultural differences but also to develop the absorptive capacities and technological capabilities needed to catalyze further investments, and thus engender growth. The second objective was to understand more clearly the HRM challenges related to FDI in Sub-Saharan countries to suggest the most appropriate approach to African HRM for enabling economic development. We identified three main issues that involve choices in terms of HRM: the employment and wage levels, the convergence or divergence of HRM practices, and the knowledge and technological transfer. However, research in this field remains limited and a literature review could not allow us to fulfill our second objective.

To get a deeper understanding of the HRM challenges related to FDI in SSA countries, it is thus necessary to conduct an empirical study of the HRM practices adopted by different foreign MNEs in their foreign subsidiaries. We believe that case studies will be the most suitable method to apply for this purpose [59]. A major question is about the extent to which MNCs consider the potential externalities of their investments on human capital competencies and absorptive capacities [3]. Within the ICT sector, the telecommunications sector seems of particular interest since investments in this field are directly related to government decisions on information and communication policies and thus can have an impact on the economic development of the country. Considering the influence that the country of origin of the foreign investor can have, we need to consider two regional clusters of foreign subsidiaries: the cluster representing recipients of north western FDI and that including recipients of south FDI. The study will be based on in depth interviews with FDI representatives both at the headquarters of the foreign MNCs and at the African subsidiaries. Representatives will include persons in charge of the development and implementation

of FDI strategies as well as of HRM. The main questions to be addressed are the following:

- Which HRM practices do foreign MNCs apply and how can those practices contribute to the success of FDI in SSA countries?
- What are the spillover effects that HRM can engender in the host country and how?
- Do FDI driven ICT improvements have an impact on human capital development and how?
- Do FDI spillover effects have a positive impact on access and use of ICT, and thus create a more informed society, in the host country?

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## References

1. ITU: Measuring the Information Society Report (2016)
2. Ernst & Young: EY's Attractiveness Program Africa: Connectivity Redefined (2017)
3. Ketteni, E., Kottaridi, C., Mamuneas, T.P.: Information and communication technology and foreign direct investment: interactions and contributions to economic growth. *Empirical Econ.* **48**(4), 1525–1539 (2015)
4. Gholami, R., Lee, S.Y.T., Heshmati, A.: The causal relationship between information and communication technology and foreign direct investment. *World Econ.* **29**(1), 43–62 (2006)
5. Asongu, S.A., Le Roux, S.: Enhancing ICT for inclusive human development in Sub-Saharan Africa. *Technol. Forecast. Soc. Chang.* **118**(May), 44–54 (2017)
6. Taylor, I.A.N.: Is Africa rising? *Brown J. World Aff.* **21**, 143–161 (2014)
7. French Government. <http://www.gouvernement.fr/en/africa-is-the-continent-of-the-future>. Last accessed 02 May 2018
8. The Economist: A hopeful continent. <http://www.economist.com/news/special-report/21572377-african-lives-have-already-greatly-improved-over-past-decade-says-oliver-august> (2013). Last accessed 01 May 2017
9. Deloitte: The future of Telecoms in Africa: the “blueprint for the brave” (2014)
10. McKinsey Global Institute: Lions on the Move II: Realizing the Potential of Africa's Economies (2016)
11. World Bank: Africa's Pulse: An Analysis of Issues Shaping Africa's Economic Future. Washington, DC (2018)
12. UNCTAD: Foreign Direct Investment: Inward and Outward Flows and Stock, Annual, 1970, 2015. Geneva (2017)
13. UNCTAD: World Investment Report 2018. Geneva (2018)
14. Kamoche, K., Debrah, Y., Horwitz, F., Muuka, G.N. (eds.): *Managing Human Resources in Africa*. Routledge, London (2004)
15. Hymer, S.H.: *The International Operations of National Firms: A Study of Direct Foreign Investment*. Massachusetts Institute of Technology, Cambridge, MA (1976)
16. Oxelheim, L.: *The global race for foreign direct investment: prospects for the future*. Springer-Verlag, Berlin (1993)

17. Yan, G., Li, S., Lin, Y.Q., Li, J.: Real effective exchange rate and regional economic growth in China: evidence from provincial Data. *China World Econ.* **24**(6), 43–63 (2016)
18. Anyanwu, J.C., Yaméogo, N.D.: Regional comparison of foreign direct investment to Africa: empirical analysis. *Afr. Dev. Rev.* **27**(3), 345–363 (2015)
19. UNCTAD: Economic development in Africa: rethinking the role of Foreign Direct Investment. Geneva (2005)
20. Wei, Y., Balasubramanyam, V.N.: Foreign direct investment: six country case studies. Edward Elgar, Cheltenham, UK (2004)
21. Asiedu, E.: On the determinants of foreign direct investment to developing countries: Is Africa different? *World Dev.* **30**(1), 107–119 (2002)
22. Darley, W.K.: Increasing Sub-Saharan Africa's share of foreign direct investment: public policy challenges, strategies, and implications. *J. Afr. Bus.* **13**(1), 62–69 (2012)
23. UNCTAD: The World Investment Report. Geneva (2002)
24. Malikané, C., Chitambara, P.: Foreign direct investment, democracy and economic growth in Southern Africa. *Afr. Dev. Rev.* **29**(1), 92–102 (2017)
25. Olatunji, L.A., Shahid, M.S.: Determinants of FDI in Sub-Saharan African countries: a review of the evidence. *Bus. Econ. Res.* **5**(2), 22–34 (2015)
26. Ezeoha, A.E., Ugwu, J.O.: Interactive impact of armed conflicts on foreign direct investments in Africa. *Afr. Dev. Rev.* **27**(4), 456–468 (2015)
27. Estrin, S., Meyer, K.E. (eds.): *Investment Strategies in Emerging Markets*. Edward Edgar, Cheltenham, UK (2004)
28. Narula, R., Dunning, J.H.: Industrial development, globalization and multinational enterprises: new realities for developing countries. *Oxf. Dev. Stud.* **28**(2), 141–167 (2000)
29. Chung, W., Alcacer, J.: Knowledge seeking and location choice of foreign direct investment in the United States. *Manage. Sci.* **48**(12), 1534–1554 (2002)
30. Narula, R., Zanfei, A.: *Globalization of Innovation: The Role of Multinational Enterprises*. DRUID, Copenhagen Business School, Department of Industrial Economics, Department of Business Studies and Strategy/Aalborg University (2003)
31. Meyer, K.E., Wright, M., Pruthi, S.: Managing knowledge in foreign entry strategies: a resource-based analysis. *Strateg. Manag. J.* **30**(5), 557–574 (2009)
32. Meyer, K.E.: What is “strategic asset seeking FDI”? *Multinational Bus. Rev.* **23**(1), 57–66 (2015)
33. Sethi, D., Guisinger, S.E., Phelan, S.E., Berg, D.M.: Trends in foreign direct investment flows: atheoretical and empirical analysis. *J. Int. Bus. Stud.* **34**, 315–326 (2003)
34. Ntembe, A., Sengupta, S.: The contribution of US Foreign direct investments to economic growth in Sub-Saharan Africa: evidence from panel data. *J. Northeastern Assoc. Bus. Econ. Technol.* **19**, 55–71 (2016)
35. Ado, A., Su, Z.: China in Africa: acritical literature review. *Crit. Perspect. Int. Bus.* **12**, 40–60 (2014)
36. Gu, J.: China's private enterprises in Africa and the implications for African development. *Eur. J. Dev. Res.* **21**(4), 570–587 (2009)
37. Farole, T., Winkler, D.: *Making Foreign Direct Investment Work for Sub-Saharan Africa: Local Spillovers and Competitiveness in Global Value Chains*. World Bank, Washington, DC (2014)
38. Markusen, J.R., Venables, A.J.: Foreign direct investment as a catalyst for industrial development. *Eur. Econ. Rev.* **43**(2), 335–356 (1999)
39. OECD: *Foreign Direct Investment for Development: Maximizing Benefits, Minimizing Costs*. Paris (2002)
40. Gönel, F., Aksoy, T.: Revisiting FDI-led growth hypothesis: the role of sector characteristics. *J. Int. Trade Econ. Dev.* **25**(8), 1144–1166 (2016)
41. de Mello, L.R.: Foreign direct investment-led growth: evidence from time series and panel data. *Oxford Econ. Pap.* **51**(1), 133–151 (1999)
42. Grossman, G.M., Helpman, E.: Globalization and growth. *Am. Econ. Rev.* **105**(5), 100–104 (2015)

43. Borensztein, E., De Gregorio, J., Lee, J.W.: How does foreign direct investment affect economic growth? *J. Int. Econ.* **45**(1), 115–135 (1997)
44. Moura, R., Forte, R.: The effects of foreign direct investment on the host country's economic growth: theory and empirical evidence. *Singapore Econ. Rev.* **58**(03), 1350017 (2009)
45. Velde, D.W.T.: *Foreign Direct Investment and Development: An Historical Perspective*. Overseas Development Institute, London (2006)
46. Liang, F.H.: Does foreign direct investment improve the productivity of domestic firms? Technology spillovers, industry linkages, and firm capabilities. *Res. Policy* **46**(1), 138–159 (2016)
47. Mah, J.S.: Foreign direct investment inflows and economic growth: the case of Korea. *Rev. Dev. Econ.* **14**(4), 726–735 (2010)
48. Arthur, W.B.: The second economy. *McKinsey Q.* **4**, 90–99 (2011)
49. ITU: *SDG Mapping Tool* (2017)
50. ITU: *Fast-forward progress: leveraging tech to achieve the global goals* (2017)
51. World Bank: *Africa's ICT Infrastructure: Building on the Mobile Revolution*. Washington, DC (2011)
52. Lin, C.H.: Role of foreign direct investment in telecommunication industries: a developing countries' perspective. *Contemp. Manage. Res.* **4**(1), 29–42 (2008)
53. Napshin, S., Brouters, L.E.: Intermediary products: FDI strategies, imports, exports, and trade balances in developed economies. *Thunderbird Int. Bus. Rev.* **57**(4), 311–322 (2015)
54. Andrianaivo, M., Kpodar, K.: *ICT, financial inclusion, and growth: evidence from African countries*. Int. Monetary Fund, Washington, DC (2011)
55. Ernst & Young: *EY's attractiveness survey Africa 2015: making choices* (2015)
56. Balancing-act: *Afrique: 94 opérateurs mobiles ont lancé des services 4G-LTE dans 42 pays*. <http://www.balancingact-africa.com/news/telecoms-fr/40459/afrique-94-oprateurs-mobiles-ont-lanc-des-services-4g-lte-dans-42-pays> (2017)
57. Sydhagen, K., Cunningham, P.: Human resource development in sub-Saharan Africa. *Hum. Resour. Dev. Int.* **10**(2), 121–135 (2007)
58. Cooke, F.L., Wood, G., Horwitz, F.: Multinational firms from emerging economies in Africa: implications for research and practice in human resource management. *Int. J. Hum. Resour. Manage.* **26**(21), 2653–2675 (2015)
59. Horwitz, F.: Human resources management in multinational companies in Africa: a systematic literature review. *Int. J. Hum. Resour. Manage.* **26**(21), 2786–2809 (2015)
60. Horwitz, F.: Evolving human resource management in Southern African multinational firms: towards an Afro-Asian nexus. *Int. J. Hum. Resour. Manage.* **23**(14), 2938–2958 (2012)
61. Sartorius, K., Merino, A., Carmichael, T.: Human resource management and cultural diversity: a case study in Mozambique. *Int. J. Hum. Resour. Manage.* **22**(9), 1963–1985 (2011)
62. Carmichael, T., Rijamampianina, R.: *Managing Diversity in Africa*. In: Luiz, J. (ed.) *Managing Business in Africa: Practical Management Theory for an Emerging Market*, pp. 161–187. Oxford University Press, Cape Town (2007)
63. Dimba B., K'obonyo P.: Influence of culture on strategic human resource management (SHRM) practices in multinational companies (MNC) in Kenya: a critical literature review. In: *Working Paper*. College of Humanities and Social Sciences, University of Nairobi, Kenya (2007)
64. Wood, G., Mazouz, K., Yin, Y., Cheah, J.: Foreign direct investment from emerging markets to Africa: the HRM context. *Hum. Resour. Manage.* **53**, 179–201 (2014)
65. Gomes, E., Sahadev, S., Glaister, A.J., Demirbag, M.: A comparison of international HRM practices by Indian and European MNEs: evidence from Africa. *Int. J. Hum. Resour. Manage.* **26**(21), 2676–2700 (2015)
66. Coniglio, N.D., Protta, F., Seric, A.: Foreign direct investment, employment and wages in Sub-Saharan Africa. *J. Int. Dev.* **27**(7), 1243–1266 (2015)
67. Javorcik, B.S.: Does FDI bring good jobs to host countries? *World Bank Res. Obs.* **30**(1), 74–94 (2015)
68. Kamoche, K., Siebers, L.Q., Mamman, A., Newenham-Kahindi, A.: The dynamics of managing people in the diverse cultural and institutional context of Africa. *Pers. Rev.* **44**(3), 330–345 (2015)



69. Storey, J.: *Human resource management: a critical text*. Thomson, London (2001)
70. Brewster, C., Sparrow, P., Harris, H.: Towards a new model of globalizing HRM. *Int. J. Hum. Resour. Manage.* **16**(6), 949–970 (2005)
71. Boxall, P.: Mutuality in the management of human resources: assessing the quality of alignment in employment relationships. *Hum. Res. Manage. J.* **23**(1), 3–17 (2013)
72. Tarique, I., Briscoe, D., Schuler, R.: *International Human Resource Management: Policies and Practices for Multinational Enterprises*, 5th edn. Routledge (2016)
73. Farndale, E., Scullion, H., Sparrow, P.: The role of the corporate HR function in global talent management. *J. World Bus.* **45**(2), 161–168 (2010)
74. Cheese, P., Thomas, R. J., Craig, E.: *The Talent Powered Organization: Strategies for Globalization, Talent Management and High Performance*. Kogan Page Publishers (2007)
75. Salas, E., Tannenbaum, S.I., Kraiger, K., Smith-Jentsch, K.A.: The science of training and development in organizations: what matters in practice. *Psychol. Sci. Publ. Interest* **13**(2), 74–101 (2012)
76. Salas, E., Cannon-Bowers, J.A.: The science of training: a decade of progress. *Annu. Rev. Psychol.* **52**, 471–499 (2001)
77. Nohria, N., Ghoshal, S.: *The Differentiated Network. Organizing Multinational Corporations for Value Creation*. Jossey-Bass Publishers, San Francisco (1997)
78. Cox, A., Warner, M.: Whither ‘training and development’ in Vietnam: learning from United States and Japanese MNCs’ Practice. *Asia Pacific J. Hum. Resour.* **51**(2), 175–192 (2013)
79. Aguinis, H., Kraiger, K.: Benefits of training and development for individuals and teams, organizations, and society. *Annu. Rev. Psychol.* **60**, 451–474 (2009)
80. Poudel, H.: A plea to Nepali Diaspora: an urge for homecoming. *Repositioning* **1**(1), 73–80 (2016)
81. Allen, D.G., Bryant, P.C., Vardaman, J.M.: Retaining talent: replacing misconceptions with evidence-based strategies. *Acad. Manage. Perspect.* **24**(2), 48–64 (2010)
82. Steel, R.P., Griffeth, R.W., Hom, P.W.: Practical retention policy for the practical manager. *Acad. Manage. Exec.* **16**(2), 149–162 (2002)
83. Govaerts, N., Kyndt, E., Dochy, F., Baert, H.: Influence of learning and working climate on the retention of talented employees. *J. Workplace Learn.* **23**(1), 35–55 (2011)
84. Cegarra-Leiva, D., Sánchez-Vidal, M.E., Cegarra-Navarro, J.G.: Work life balance and the retention of managers in Spanish SMEs. *Int. J. Hum. Resour. Manage.* **23**(1), 91–108 (2012)
85. Tlaiss, H.A., Martin, P., Hofaidhllaoui, M.: Talent retention: evidence from a multinational firm in France. *Empl. Relat.* **39**(4), 426–445 (2017)
86. Idris, A.: Flexible working as an employee retention strategy in developing countries: Malaysian bank managers speak. *J. Manage. Res.* **14**(2), 71–86 (2014)
87. Bücker, J.: Cultural intelligence as a key construct for global talent management. In: Al Ariss A. (ed.) *Global Talent Management*, pp. 65–78. Springer
88. Contractor, F.J.: “Punching above their weight” the sources of competitive advantage for emerging market multinationals. *Int. J. Emerging Mark.* **8**(4), 304–328 (2013)
89. Kshetri, N.: The Diaspora as a change agent in entrepreneurship-related institutions in Sub-Saharan Africa. *J. Dev. Entrepreneurship* **18**(03) (2013)