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Colonial spectre and foreign investments concentration: Does African growth escape?

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Abstract

The concentration of foreign direct investment (FDI) on firms originating in the former colonizing country in the old African colony is the most advanced form of the control strategy that led to colonization. During colonization and 60 years later, this strategy succeeded in guaranteeing property rights' inviolability and the returns on investment of FDI from former metropolises. Yet, economic growth in Africa seems to be a miracle. This study aims to determine whether the impact of FDI differs according to the historical ties between the multinationals' home countries and host African countries and assess the sensitivity of economic growth to the decline in the prominence of FDI from the colonial powers. Data on 38 African countries between 2009 and 2018 are used to estimates a dynamic panel by the two-steps system GMM. Our study finds that the impact of FDI from the former metropolis on economic growth is negative, while the impact of FDI from other countries is positive. The political influences of the colonial powers and the incestuous relations between the host countries' political elites and the multinationals skew the competitive equilibrium and generate distortions that suck the expected benefits for growth. Our study also finds that the impact of FDI on growth strengthens as the country hosts foreign investors from the diverse origin. African countries should consider attracting more FDI from countries other than the former colonizer.

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1. Background

Studies are almost unanimous that the effect of foreign direct investment (FDI) on economic growth depends on the interaction between FDI, macroeconomic conditions, and host countries' institutions (Carbonell and Werner, 2018). Although Seidler (2011), as much as Acemoglu, Johnson, and Robinson (2001; 2002) show that African institutions are a colonial heritage, analyses of FDI effects in Africa have left little consideration to political and historical factors. However, international investment was the main reason for colonial rivalries, which fueled several international conflicts from the end of the 19th century until the first half of the 20th and partly presided over Bretton Woods'institutions' establishments. Then, when private negotiations failed to guarantee the inviolability of property rights of Western companies abroad, colonization appeared as the privileged instrument of gunboat diplomacy to subdue host countries and ensure returns on investments (Frieden, 1994).

Classical imperialism theories (Hobson, 1902; Lenin, 1916) argue that colonization guaranteed sheltered markets for the metropolitan country's investments in backward regions. Firms from colonizing countries were the first to settle in colonies where colonial security had succeeded (Makino and Tsang, 2011), especially in activities located on specific sites and generating a significant and rapid rent such as agriculture, logging and mining (Frieden, 1994). Colonial security also worked to provide monopoly profits to metropolitan firms through a discriminatory policy on the size and composition of foreign investment in the colonies. Thus, empirical studies show that the return on investment of the United Kingdom in its colonies was higher than in the territories controlled by other colonizers (Svedberg, 1982).

With the independence of the colonies from 1950, the western colonial administrations gradually withdrew from the management of the territories under their control, but before they made sure to keep control by shaping the institutions and signing treaties and conventions which guarantee their firms a relatively large monopoly for decades (Acemoglu, Johnson, and Robinson, 2001; Nyenti, 2017; Becker et al., 2015). Several decades after the end of formal colonization, foreign investment continues to be the main channel reflecting the link between the former colonizers and their former colonies (Fidrmuc and Fidrmuc, 2003; Head, Mayer and Ries, 2010). Because of its long and persistent influence, this historical link significantly determines the volumes and type of FDI (Che et al., 2015; Nyenti, 2017), just as it shapes confidence and attitudes of people towards foreign countries, which therefore influences FDI inflows (Guiso, Sapienza and Zingales, 2009).

Several arguments consider that weak economic growth and per capita incomes are among the multiple perverse effects of colonization, but little empirical evidence exists. Recently, Wang, Fidrmuc and Tian (2018) found that since Japanese colonization's intentions were distinct from those that motivated Western colonization, their impacts on countries were also different. Also, Wang and Luo (2020) find that in China, western colonization influence strengthens the positive effect of inward FDI on GDP by approximately 4 to 5%. In contrast, the Japanese colonization influence overturns such effect with a negative impact of around minus 20%.

The nature of western colonization that Africa experienced is the same as elsewhere. However, East Asia has become one of the most attractive FDI areas globally and achieves spectacular growth due to these FDI flows. On the other hand, Africa attracts 14 times less FDI than the countries of East Asia (UNCTD, 2019), and the episodes of positive growth are so rare that Rodrik (2018) wonders if African growth is a miracle. For more than 40 years, income growth and per

capita income in Africa has never exceeded the world average, and 16 of the 23 countries in the bottom quintile of the international distribution of the per capita income rate come from Africa and are all former colonies (Nyenti, 2017).

The few existing studies have focused on the impact that colonial laws and institutions would have on the link between FDI and growth. We consider that colonial laws and institutions' success would be to guarantee the firms of the old metropolis monopolistic profits identical to those provided by the formal colonial system that prevailed before independence. However, since independence, France has maintained significant control over FDI in several of its former colonies in Africa. In contrast, the origin of FDI has dramatically diversified in most former British and Belgian colonies. We thus suppose that the preservation of colonial monopolistic-profits requires the share of FDI inflows from the old colonizer to be the most important. Accordingly, we also assume that the propensity of colonization to influence the impact of FDI on economic growth in Africa depends on the degree of concentration of inwards FDI around the flows coming from the former colonizer.

Therefore, this article investigates how colonial control modulates foreign direct's investment impact on Africa's economic growth.

With this first part, this paper is organized around five sections. The second presents some anecdotal evidence as well as an overview of the existing empirical literature. The third describes the methodological approach. The fourth concentrates on the presentation and discussions of the empirical results, and the last is the conclusion.

2. Stylized facts and empirical evidence

2.1. Stylized facts on how colonization affect the FDI-Growth nexus

The competition to acquire rare raw materials and the search for outlets for Western and Asian products made the monopoly of colonial investment in the old colonies challenging to maintain.

During the last decade, France, unlike Great Britain, retained a firm hold on 10 of its former colonies (Figure 2). Indeed, FDI from France represents around 25% of the total received by Tunisia and the Central African Republic but is worth between 35% in Benin and 85.6% in Congo. The French quasi-monopoly is to exceptionally high degrees in the oil-exporting countries. Taking advantage of the privatizations recommended in the early 1990s by the structural adjustment programs, FDI from France has infiltrated almost all areas. A French firm controls nearly all the ports of the former French colonies. French investments dominate construction, rail transport, export agriculture (bananas, rubber, etc.), logging, telecommunications, finance and insurance. Some anecdotal evidence reveals that in Cameroon, tenders for the construction of road infrastructure legally obtained by Chinese companies were then withdrawn and retroceded without relevant explanations to a French firm whose offer represented a cost six times higher than that of the Chinese firm. From the beginning of the 1970s, France signed double taxation agreements with its former colonies, which gave it significant tax relief (Deloitte, 2019). Such privileges granted to the old metropolis create discrimination which dissuades other investors and explains why FDI in most countries is highly concentrated around a small number of investors (*Figure 3*).

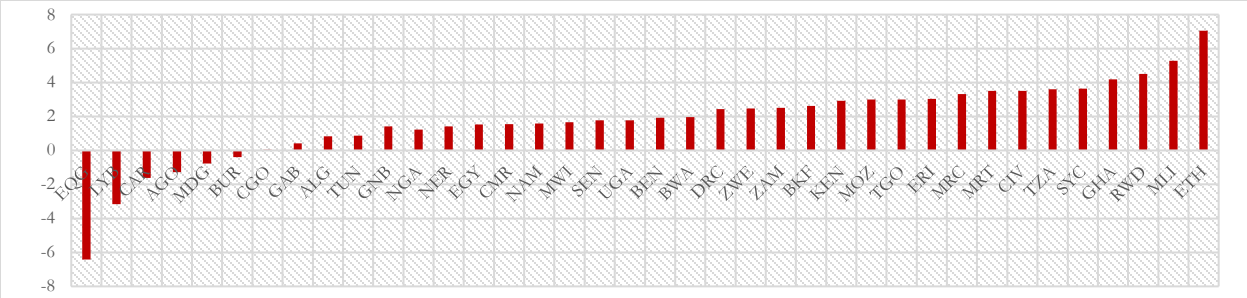

Figure 1. GDP per capita annual growth rate in Africa, 2009 to 2018. Source: Authors based on UNCTD

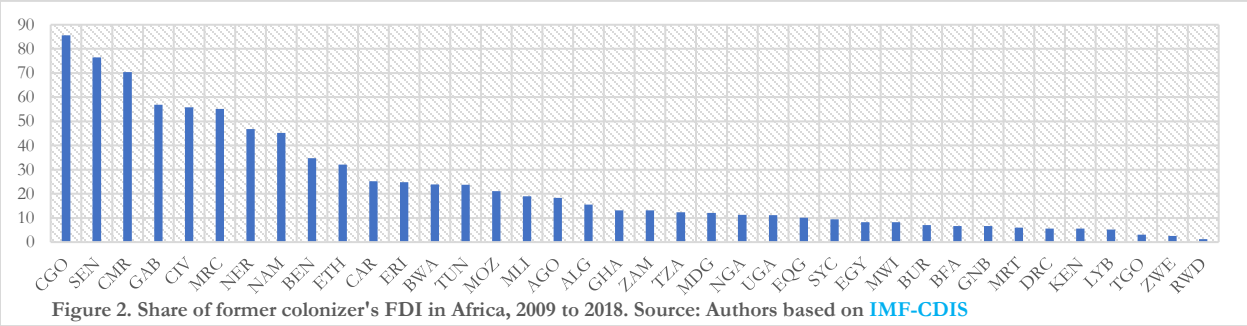

Figure 2. Share of former colonizer's FDI in Africa, 2009 to 2018. Source: Authors based on IMF-CDIS

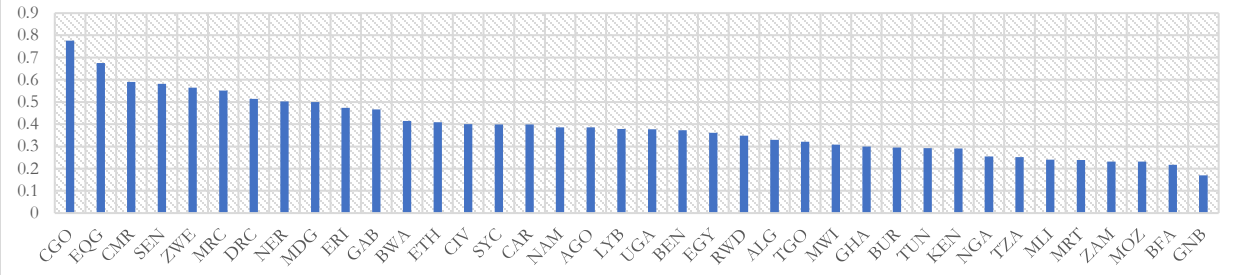

Figure 3. Degree of FDI concentration in Africa by investor countries, 2009-2018. Source: Authors based on IMF-CDIS

Note. This index is built following the formula of the normalized Herfindahl-Hirschmann index of market concentration of imports at the prod

The need for oil security has created fierce competition between G7 countries, which then use international aid as leverage with oil-rich countries such as Angola, Equatorial Guinea and Nigeria (Couharde et al., 2019). Nigeria, for example, the leading oil exporter in Sub-Saharan Africa, receives from the United States each year nearly $ 300 million in aid and provides an average of 8% of oil imports from the United States. Angola, the second oil-exporting country in Sub-Saharan Africa, receives prodigious amounts of aid each year from several developed countries (Couharde et al., 2019). FDI from the United States represents 60.6% of the total flows recorded by Equatorial Guinea, while Spain, the former metropolitan area, does not appear among this country's foreign investors (IMF, 2020). The result is the low share of FDI from the old metropolises in the host countries' total and an equal contribution between investors from different nations since the FDI concentration index is relatively flat and between 0.2 and 0.4. The same strategy is used by China in Africa, as observed in Tanzania (Li et al., 2013). Also, the massive endowment of the Democratic Republic of the Congo (DRC) in rare minerals such as Coltan, highly prized by the industries of electronic goods, creates an environment where it is quite tricky for Belgium keep any monopoly on investments.

The falls in mineral and oil prices in 2011 and 2014, respectively, led to a reversal of the positive growth observed between 2000 and 2010, especially in countries highly dependent on income from the export of these resources (UNCTD, 2019). With small exceptions, countries with a low share of FDI from the former colonizer have maintained positive average growth over the past decade (*Figure 2*). The same observation can be made for countries where FDI inflows are more homogeneous from one home-country to another (*Figure 3*).

The reduction in the relative share of the former colonizer in the total FDI received by a country inevitably increases the host country's capacity to make profitable decisions for the domestic economy. There are many shreds of evidence in Africa, one of which recalls Nigeria's sanctions on individual foreign firms operating in telecommunications for fraud and tax evasion. This action made it possible to recover income essential for growth. In a country under the control of the former colonizer, such a move will not be possible. Or it will give rise to blackmail by the foreign firm, through the massive dismissal of local employees, or else it will involve diplomatic action which may lead to sanctions such as the cessation of aid or the freezing of the host country's assets in the firm's home country. When FDI from the former metropolis is highly concentrated, the government tends to take several economically irrational decisions with the sole aim of preserving the interests of the firms of the former colonizers. For example, when the government decided to allow competition in Cameroon's cement production market, keeping the firm's profits from the former metropolis that previously operated as a monopoly forced the newcomer to align its prices.

The diversification of foreign investors is therefore essential to boost the competitive game and promote innovation. This diversification is necessary to allow states to defend their interests and make economically optimal choices. In African countries where the colonial hold is significantly reduced, such as in Nigeria, Uganda and Zambia, governments have been able to require multinational companies operating in oil and mineral extraction, to pay taxes due that these firms had attempted to evade. Next, the governments freely accepted arbitration from the Investor-state dispute settlement (ISDS).

2.2. The FDI-Growth nexus: a brief literature review

The question of whether FDI has an impact on economic growth has been the focus of three generations of studies (Bruno and Campos, 2013). The first generation saw three diverging trends emerge. The first pattern, which accounts for 50% of reviews, finds that FDI has a positive impact on economic growth (Olofsdotter, 1998; Sasi and Mehmet, 2015; Ylvije and Elezi, 2015; Olawumi and Olufemi, 2016; Mehdi, 2018; Khun, 2018; Onafowora and Owoye, 2019). In contrast, the second trend, bringing together 11% of studies, shows that FDI harms growth (Singer, 1950; Prebisch, 1968; Bos, Sanders and Secchi, 1974; Saltz, 1992; Mencinger, 2003; Carkovic and Levine, 2005; Herzer, 2012; Umit and Alkan, 2016; Olabode et al., 2019). Finally, the remaining 39% conclude that there is no effect (Hein, 1992; Singh, 1998; De Melo, 1999; Carbonell and Werner, 2018).

The second generation of studies is built around the argument that the differences observed in the first generation testify to the omission of a third factor that modulates the impact of FDI on growth. Lipsey and Sjoholm (2005) consider differences in absorption capacity, Blomstrom et al. (1994) focus on the level of economic development, Balasubramanyam et al. (1996) found that it is the degree of trade openness and exchange rate, Borensztein et al. (1998) show that it is instead the endowment in human capital. De Melo (1999), as much as Brewer and Young (2000), conclude

that everything relies on the degree of complementarity and substitution between FDI and private investment. Alfaro et al. (2004), as well as Suliman and Elian (2014), found that the level of financial development is critical, Loesse (2005) consider government policies, Busse and Groizard (2008) highlight infrastructure and business environment, Alfaro (2003) focus on the hosting sector. For other authors, the source of the discrepancies should be sought in the differences in methodologies (Carkovic and Levine, 2005), the type of FDI (Sjoerd et al., 2007) or the factors that convey the effect of FDI (Kamil and Bazoumana, 2018).

For the third generation of studies, the second generation's factors relate to the institutions' quality (Jude and Levieuge, 2016; Hoque et al., 2016).

A political/historical approach deriving from this current was recently formed on Acemoglu, Johnson and Robinson (2001), considering that institutions result from colonial legacy (Wang, Fidrmuc and Tian, 2018; Wang and Luo, 2020). These authors focused on the differences observed in FDI impact on GDP, between the Chinese provinces, according to their colonization experiences (Western or Japanese).

The specifics of China can hardly be transposed to Africa. The Chinese political system, military arsenal, weight on the United Nations Security Council, human and technological capital, and the size of its market that covers all of Africa gives it enough influence to act beyond the sphere of influence of the former colonizers. African countries do not have all of these advantages, and previous studies ignore the impact on the economic growth of the political forces underlying the historical link, which is colonization. We are trying to fill this gap by determining whether Africa's economic growth improves as the ancient metropolis's weight in FDI inflows decreases.

3. Material and Methods

3.1. Model specification

The empirical model used is a modified version of the model developed by Olawumi and Olufemi (2016) to assess the impact of FDI on growth in Africa. The international technology transfer is removed from the model and replaced by a variable measuring the economy's degree of openness (*Opens*). Next, two other variables are added to the model, including the level of inflation (*Infl*) as a proxy for macroeconomic stability and the Ibrahim Mo Governance Index (Inst) as a proxy for institutions' quality. The basic model looks as follows:

$$Growth_{it} = \varphi_0 + \varphi_1 Fdi_{it} + \varphi_2 Invest_{it} + \varphi_3 Hum_{it} + \varphi_4 Inst_{it} + \varphi_5 Opens_{it} + \varphi_6 Infl_{it} + \varphi_7 Growth_{it-1} + \varepsilon_{it} \quad (1)$$

Where *Growth* measures the level of domestic production, and ε_{it} is the error term. $Growth_{it-1}$ represents the lag of *Growth* for one period.

3.2. Data description

Model (1) is estimated using data from 38 African countries between 2009 and 2018. The IMF's *Coordinate Direct Investment Surveys* (CDIS, 2020) provides data on bilateral FDI flows between

2009 and 2018. From this database, we draw four variables that capture FDI in this study. The first variable directly produced by the CDIS gives each country's total FDI inflows per year. The values obtained are expressed as a percentage of GDP to measure FDI's total effect on growth. Due to the discrepancies noted in the literature, the expected effect is uncertain. According to historical correspondences, the bilateral FDI flows between the former metropolises and their former colonies are distinguished. Thus, we obtain the variable FDI_Colony, also measured as a percentage of the host country's GDP. Then, the value of FDI from former metropolises is subtracted from each former colony's total FDI flows. We thus obtain FDI flows from other countries partner (FDI_Other), also expressed as a percentage of GDP. The fourth variable related to FDI is an index of FDI concentration according to the relative weight and the number of home countries of FDI in a given host country. This index is built following the formula of the normalized Herfindahl-Hirschmann index of market concentration of imports at the production, provide by UNCTD. The FDI concentration index ($FDIc_{Index}$) is given according to the following formula:

$$FDI_{C_{Index}} = \frac{\sqrt{\sum_{i=1}^{N}\left(\frac{FDI_{i,j}}{FDI_j}\right)^2} - \sqrt{\frac{1}{N}}}{1 - \sqrt{\frac{1}{N}}}$$

N is the number of home countries of FDI inflows recorded for a given year; FDIi,j represents the inward FDI coming from country ***i*** to country ***j***; and $\boldsymbol{FDI_j}$ represents the total FDI inflows recorded by country ***j.*** We assume that there should be an inverse relationship between the FDI concentration index and growth in Africa.

This index tells us if a large share of FDI received in a country comes from a single country or distributed homogeneously between several countries. The index, therefore, takes a value between 0-1. The closer the value of the index is to 0, the more homogeneous the distribution is. We assume that in this case, the host country is under less pressure from the investors' home countries, and FDI is more likely to contribute to the host country's economic growth. We then assume that the opposite phenomenon occurs when the value of the index is close to 1. The average value of the index for each country is shown in *Figure 3*, and from year to year, the values of the index change with more or less significant amplitudes.

The logarithm of real GDP is used as a proxy of economic growth. We take the gross fixed capital formation as a GDP percentage to approximate domestic investment (*Invest*). According to the literature, the effect of domestic investment on growth should be positive. The degree of openness (*Opens*) is the ratio to GDP of the arithmetic average of the total exports and imports of goods and services. The expected effect is negative. These variables are provided by the World Investment Report (UNCTAD, 2019). Data on secondary school enrollment (Hum) comes from the World Development Indicator (World Bank, 2019a), and its effect on economic growth might be positive. The variable measuring the institutions should positively impact economic growth. The data underwent a logarithmic transformation to reduce the effects of quantities and to be able to interpret the estimated coefficients as elasticities.

3.3. Estimation process

There are risks that certain biases may affect the estimates and make the results irrelevant. The model to be estimated may suffer from simultaneity bias since FDI and growth can be co-determined and therefore affect each other simultaneously. Consequently, we introduce a *one*-year lagged growth model to mitigate the reverse causality between the GDP and inward FDI. Also, we proceed to the estimation using the Generalized Method of Moments. The Generalized Method of Moment (GMM) panel specification developed by Arellano and Bover (1995) and Blundell and Bond (1998) is usually adopted to overcome the issue of simultaneity bias. Moreover, this method is particularly appropriate to overcome the estimation problems introduced by dynamic endogeneity and unobservable heteroskedasticity bias. The GMM method produces unbiased and consistent estimates by employing valid internal instruments during estimation (Schultz et al., 2010). As specified by Roodman (2009), for the robustness of the coefficients estimated by the GMM estimator to be guaranteed, the number of instruments must be less than the number of cross-countries, and the p-value associated with the Hansen test must be lower than 0.6. Besides, this method is suitable for panel estimation whose individual dimension is larger than the time dimension. Using GMM estimator, the coefficients are assumed to be homogeneous and the fixed effects captured by the constant. Year Dummies are also fed into the estimates, as they control for time variations of the dependent variable across the panel. The estimates are made to determine the short and long-run coefficients. The long-run effects for the k^{th} parameter is computed as: $\varphi_k \div [1 - \emptyset]$.

Before estimating the model, the unit root test of Im, Pesaran, and shin (2003) examines the series's properties. This test is suitable to check for unit root's presence on a panel where heterogeneity is likely, as is the case for the panel made up of groups of countries.

Table I: *Unit root test of Im, Pesaran, and Shin (2003)*

Variables	In level		First difference		Order of integration
	Z-bar	P-values	Z-bar	P-values	
Growth	-3.004***	0.001	-	-	I(0)
FDI	-4.54***	0.000	-	-	I(0)
FDI_Colony	-3.78***	0.000	-	-	I(0)
FDI_Other	-4.79***	0.000	-	-	I(0)
$FDIc_{Index}$	-5.41***	0.000	-	-	I(0)
Investment	-1.80**	0.040	-	-	I(0)
Human capital	-2.80***	0.003	-	-	I(0)
Institutions	-4.62***	0.000	-	-	I(0)
Openness	-1.82**	0.030	-	-	I(0)
Inflation	-5.20***	0.000	-	-	I(0)

*p-value in parentheses: ***p<0.01; **p < 0.05*

All the variables are stationary at level, as it appears in Table I. Estimates are made to determine the effect of each of the four FDI variables on growth.

4. Empirical results

4.1. Historical tie: How do FDIs from former colonizers shape African growth?

In both the short and long-run, African economic growth describes a cumulative process. The level of growth observed in a given year positively impacts the level of growth in the following year (*Table II*). On average, a percentage change in the level of African growth in year t-1 leads to an increase in the economic growth of the current year of 0.866% in the short-run and 6.471% in the long-run, at a 1% significance level, *ceteris paribus*. This result aligns with endogenous growth theory lessons, especially since physical and human capital positively and significantly impact growth. It is the same for the FDI, which, being part of the physical capital, is, in the literature, widely considered conveying technologies and know-how.

Table II: *Comparative dynamics of the mitigated impact of FDI considering the historical ties*

Dependent variable: Economic Growth	*Dynamic panel-data estimation, two-step system GMM*					
	In the short-run			In the long-run		
	(1) Total FDI inflows	(2) FDI from the former colonizer	(3) FDI from other countries	(4) Total FDI inflows	(5) FDI from the former colonizer	(6) FDI from other countries
Foreign Direct Investment	0.036*	-0.024**	0.258***	0.267**	-0.175**	0.241***
	(0.082)	(0.021)	(0.005)	(0.037)	(0.022)	(0.006)
Domestic Investment	0.091**	0.083*	0.080***	0.679***	0.594**	0.744***
	(0.033)	(0.053)	(0.003)	(0.005)	(0.017)	(0.000)
Human capital	0.079**	0.233***	0.053**	0.588***	1.662***	0.495**
	(0.010)	(0.005)	(0.032)	(0.002)	(0.000)	(0.014)
Institutions	0.240***	0.183***	0.191***	1.780***	1.308**	1.785***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Inflation	0.041***	0.036***	0.032***	0.308***	0.260***	0.298***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Trade openness	-0.106***	-0.129***	-0.084***	-0.792***	-0.921***	-0.781***
	(0.003)	(0.001)	(0.000)	(0.004)	(0.000)	(0.000)
Lags1.(Economic Growth)	0.866***	0.860***	0.893***	6.471***	6.144***	8.340***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
No. of Obs.	342	342	342			
F Statistic	44459.27	58676.27	100385.82			
	(0.000)	(0.000)	(0.000)			
Groups/Instruments	38/22	38/22	38/24			
AR(2)	0.566	0.618	0.501			
Hansen Statistic	0.005	0.010	0.008			

*p-value in parentheses: ***p<0.01; **p < 0.05*

Overall, FDI positively impacts economic growth in Africa. However, even though the impact of FDI on economic growth becomes more intense in the long-run, these two variables exhibit an inelastic relationship, especially in the short-run. Indeed, everything else being equal, a percentage change in the total FDI inflows leads to an increase in the economic growth level of 0.036% in the short-run and 0.267% in the long-run, at 10% and 5% significance levels, respectively. These results are consistent with the findings of Mehdi (2018), Khun (2018) and, Onafowora and Owoye (2019). Indeed, Olawumi and Olufemi (2016) also find that in Africa, the effect of FDI on economic growth is positive but very low. Their results show that a 1% rise in FDI leads, at best, to a 0.12% increase in GDP in South Africa, 0.05% in Egypt, 0.03% in Nigeria, 0.02% in Kenya,

and elsewhere, the effect is almost insignificant. Olawumi and Olufemi (2016) conclude that South Africa is the only country in Africa that can make the most from FDI inflows due to its developed infrastructure network.

Instead, this study finds that the impact of FDI on economic growth relies on the historical ties between the host country and MNCs' home country. The dichotomous analysis of the impact of FDI on economic growth based on historical ties reveals a controversial trend. In line with the general trend, FDI inflows from countries other than the former metropolis positively impact economic growth. A percentage change in FDI inflows from countries other than the old metropolis leads to an increase in the level of economic growth of 0.258% in the short-run and 0.241% in the long-run, at a 1% significance level, *ceteris paribus*. These results are also consistent with the findings of Mehdi (2018), Khun (2018) and, Onafowora and Owoye (2019).

Conversely, FDI inflows from the colonial power harm economic growth. Everything else being equal, a percentage change in FDI inflows from the former colonizer leads to a decrease in the economic growth level of 0.024% in the short-run and 0.175% in the long-run, at a 5% significance level. These results are consistent with those of Wang and Luo (2020), which show that Japanese colonization negatively impacted China's economic growth, unlike Western colonization. These results are also consistent with the findings of Singer (1950), Prebisch (1968), Bos, Sanders and Secchi (1974), Saltz (1992), Mencinger (2003), Carkovic and Levine (2005) and, Herzer (2012). Indeed, they found that the growth effect of FDI is negative.

One of the most prominent factors explaining the mitigated impact of FDI considering the historical ties is that of the political influence resulting from colonization, as highlighted by Agrippah (1979), Svedberg (1982) and, In Song and Milner (2020). Indeed, the depth of the political sphere of influence of firms from colonial powers guarantees them profits but substantially reduces their propensity to generate externalities beneficial to the host country's entire economic system.

In countries with a rise in nationalism, astute leaders of foreign companies took an active part in their home countries in constitutional negotiations for independence favouring African nationalist leaders. For instance, this was the case in the British colonies. So, having gained by this subterfuge the confidence of the African nationalist leaders, the firms from the colonial power secured the agreements and the cooperation of those leaders to establish joint ventures on their territories (Agrippah, 1979). The real impact of these strategies initiated by multinationals in Africa lies in the emergence of bourgeois national elites involved in intimate collaboration with intense struggles to maintain effective control over their political and economic kingdoms. Thus, the post-independence years in Africa are characterized by establishing strong links between multinational companies and African ruling elites. The impressive success of firms from the metropolis lies in the weaving of the neocolonial web of dependence, including the purchase of existing productive enterprises and allies' culture and well-placed political contacts (Agrippah, 1979). Over the years, the logic has remained exploitative, consisting of using political means and relying on the State to obtain monopolies and internal channels, guaranteeing a profit for the invested capital. These practices cover extractive activities and telecommunications, media, transit, finance, trade, and especially construction. The propensity of FDI to contribute to African growth would depend significantly on the extent of the webs woven by MNCs connected with the elites holding power.

Over the years, multinationals remained major political actors whose economic dominance and large-scale transnational activities induce an undeniable influence on the political sphere (In Song

and Milner, 2020). In several African countries, the political elite, grateful to the colonial power for having been chosen to lead the country promoted to independence, agreed to ratify conventions conferring privileges on firms from the metropolis, sometimes over many decades. These privileges include both trade concessions, monopoly positions, as well as tax exemptions and reductions. In the former French colonies, especially in Central and West Africa, the MNCs from the colonial power have strengthened their position in favour of privatizations resulting from structural adjustment programs. These firms largely dominate the gambling industry, freight, telecommunications, rail transport, cash farming, construction and finance. The processes of granting licenses and approvals to these firms are usually biased to prioritize the companies having the anointing of their home country's heads of state. One of the most prominent examples is the controversial selection process of concessionaires for managing container port terminals across these two regions. Very often, the same group holds the monopoly across various industry sectors in the same country. By biasing the free competition rules, these political influences do not allow the establishment of the most efficient firms and local entrepreneurs' development. On the contrary, these firms from the old metropolis lead to an underutilization of labour. They like hiring local subcontractors to escape the charges attributable to the workers' social security. Their investments are also reduced to the minimum necessary to ensure the business's operation, favouring a rapid recovery of profits that are then repatriated, especially when they have an operating license for a limited period.

As several studies point out, these distortions explain why FDI harms economic growth. Indeed, Bos, Sanders and Secchi (1974), Singer (1950) and Prebisch (1968) find that, when the outflows of profits sent back by MNCs to the home country exceed the level of new investment for each year, FDI harms economic growth. Saltz (1992) shows that FDI is carried out with monopolization and transfer pricing in the third world. Consequently, it generates an underutilization of labour, leading to a shift in domestic consumption demand, causing stagnation in output level. Herzer (2012) shows that the impact of FDI on host countries' economic growth is negative when state intervention and the freedom to regulate business are compromised. Unfortunately, this compromise is an obvious consequence of the colonial powers' political influences and the webs woven with Africa's political elites. Another explanation for the negative impact of FDI on economic growth lies in FDI (Mencinger, 2003). When FDI is more oriented towards acquisitions, sales proceeds tend to be spent more on consumption and imports than improving production assets. As a result, the greater the inflow of FDI into a country, the higher its current account deficit and external debt. The concentration of FDI in trade and finance, especially in small host countries, tends to weaken the productivity spillovers while the increased efficiency of the acquired firm is more than offset by reducing ties economic with local businesses. Usually, FDI does not automatically increase competition as it might force small, emerging local competitors out of business. While foreign trade increased thanks to FDI, multinationals contributed more to imports than to exports. Finally, if FDI can support human capital formation, this type of spillover does not seem very relevant. In Central Africa, for example, the rail network transferred to multinationals from the colonial power through privatizations has never been renovated. These MNCs favour the transport of goods, and the smallest fringe is allocated to people's transport.

4.2. Is the controversial effect of FDI robust considering the time lag?

When the variable representing FDI is replaced in the model by its value delayed by one period, the results' trend remains in line with the first estimates.

Table III: *Impact of a one-period lag foreign direct investment (FDI) on economic growth*

Dependent variable: Economic Growth	*Dynamic panel-data estimation, two-step system GMM*					
	In the short-run			In the long-run		
	(1) Total FDI inflows	(2) FDI from the former colonizer	(3) FDI from other countries	(4) Total FDI inflows	(5) FDI from the former colonizer	(6) FDI from other countries
Lags1.(FDI)	0.018**	-0.046***	0.503***	0.065**	-0.199***	0.218***
	(0.012)	(0.003)	(0.000)	(0.011)	(0.002)	(0.000)
Domestic Investment	0.122***	0.209***	0.191***	0.449***	0.895***	0.829***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Human capital	0.114***	0.131***	0.125***	0.418***	0.562***	0.540***
	(0.002)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Institutions	0.579***	0.404***	0.351***	2.128***	1.731***	1.520***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Inflation	0.123***	0.059***	0.064***	0.454***	0.254***	0.276***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Trade openness	-0.190***	-0.119***	-0.140***	-0.698***	-0.511***	-0.605***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Lags1.(Economic Growth)	0.728***	0.766***	0.769***	2.677***	3.282***	3.329***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
No. of Obs.	342	342	342			
F Statistic	130723.63	197063.68	179392.61			
	(0.000)	(0.000)	(0.000)			
Groups/Instruments	38/31	38/34	38/35			
AR(2)	0.162	0.288	0.581			
Hansen Statistic	0.125	0.124	0.144			

*p-value in parentheses: ***p<0.01; **p < 0.05*

The overall effect of FDI on economic growth, captured by the lagged value, remains positive but becomes two and four times weaker in the short and long-run, respectively. The hypothesis that the impact of FDI on growth in Africa would depend on historical ties is confirmed. The impact of FDI from former colonizers is negative and grows over time. Indeed, everything else being equal, a percentage change in FDI from the former metropolis leads to a fall in economic growth for the following year of 0.046% in the short-run and 0.199% in the long-run, at a 1% significance level.

The impact of FDI from countries other than the colonial power remains positive and, therefore, in line with the results provided in Table II. This latter impact maintains a decreasing trend over time, but more pronounced such that the long-run effect is twice as small as the short-run one. Everything else being equal, a percentage change in FDI inflows from countries other than the former colonizer leads to a rise in economic growth for the following year of 0.503% in the short-run and 0.218% in the long-run, at a 1% significance level.

Therefore, evidence suggests that FDI inflows from countries other than the former colonizer induce a relatively higher economic growth level.

4.3. How sensitive is African growth to the diversification of FDI's sources?

Table III shows that the dynamics of African growth is sensitive to FDI concentration. Indeed, there is an inverse relationship between FDI concentration and economic growth in Africa.

Table IV: *Impact of FDI concentration on economic growth in Africa*

VARIABLES	(1) In the short-run	(2) In the long-run
FDI Concentration Index	-0.189***	-1.253***
	(0.000)	(0.000)
Domestic Investment	0.097**	0.647
	(0.024)	(0.108)
Human capital	0.665***	4.420***
	(0.001)	(0.008)
Institutions	0.406**	2.697**
	(0.018)	(0.022)
Inflation	0.039***	0.256***
	(0.003)	(0.007)
Trade openness	-0.473***	-3.142***
	(0.000)	(0.001)
Lags1.(Growth)	0.849***	5.645***
	(0.000)	(0.001)
No. of Obs.	304	
F Statistic	9315.29	
	(0.000)	
Groups/Instruments	38/35	
AR(2)	0.710	
Hansen Statistic	0.173	

*p-value in parentheses: ***p<0.01; **p < 0.05*

Everything else being equal, an increase in the level of FDI concentration by 1% leads to a fall in economic growth by 0.189% in the short-run, at a 1% significance level. Thus, the more a single country holds a large share of FDI inflows, the less FDI is beneficial to the host country's economic growth. The relationship between the level of concentration of FDI and economic growth in Africa is inelastic in the short-run and becomes elastic in the long-run. In the long-run, the impact is 6.6 times higher. Indeed, everything else being equal, a rise in FDI concentration of 1% in the long-run induces a decline in the economic growth of 1.253%, at a 1% significance level.

Conversely, if an African country successfully reduces the FDI concentration by 1%, it will increase its economic growth by 0.189% in the short-run and 1.253% in the long-run. Therefore, it is evident that the fall in commodity prices advanced to explain some African countries' slow growth (*Figure 1*) conceals the impact of FDI concentration. As shown in Figures 2 and 3, FDI concentration is relatively higher in resource-rich countries, including Congo, Equatorial Guinea, Cameroon, the Democratic Republic of the Congo, Niger, and Gabon. Some states, such as Senegal and Morocco, which do not depend on natural resources, have a high level of FDI concentration, mainly due to MNCs' strong presence from the former colonizer. Other countries, such as Nigeria, the first oil-exporting country in Sub-Saharan Africa, have a low FDI concentration level. Indeed,

Nigeria's significant oil wealth attracts investors from several countries who have established themselves with their respective countries' political support through the aid mechanism. For example, Canada, Australia, the United States, and China, which are not former metropolises, are nevertheless the most prominent investors in Africa's extractive industry.

5. Conclusion

International investment arrived in Africa with colonization and more than 60 years after independence; it remains the main link between the former colonizers and the old colonized. Despite the autonomy, the need formerly felt by the ancient metropolises to guarantee their investments and super-profits remains. Unfortunately, the existing literature has paid little attention to whether such a need would be antagonistic or not with the ambition to boost African growth through such investments. Based on the estimation of a dynamic panel by the system GMMs, this study shows that the immediate effect of FDI from the old metropolises hurts African growth. Our research also focuses on the primary mechanism of monopolistic-profits obtained by the former colonizers, which consisted of international investments. We find that to boost economic growth, African countries must substantially reduce the concentration of FDI. The colonial powers' political influences on the former colonies are damaging to the latter's economic growth. Likewise, the elites' compromise in privileged relations with multinationals from the colonial power weighs down the government's freedom to regulate their activities and derive the maximum economic growth from FDI. African countries should consider attracting more FDI from countries other than the former colonizers. Unfortunately, the lack of disaggregated data on bilateral FDI flows between the former colonizers and their old colonies does not allow us to compare their impact on growth during and after the colonial period.

REFERENCES

Acemoglu, D.; Johnson, S. and Robinson, J. A. (2002), "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution", *The Quarterly Journal of Economics,* 117(4), 1231-1294

Acemoglu, D.; Johnson, S. and Robinson, J. A. (2001), "The Colonial Origins of Comparative Development: An Empirical Investigation", *American Economic Review*, 91, 1369-1401.

Agrippah T. M. (1979), "Multinational Corporations and the Political Economy of Neo-Colonial Dependency in Africa" *Africa Today*, 26(1), 57-60.

Alfaro, L., (2003), "*Foreign Direct Investment and Growth: Does the Sector Matter?*", Harvard Business School.

Alfaro, L.A.; Chanda, S.; Kalemli-Ozcan and Sayek, S. (2004) "FDI and Economic Growth: The Role of Local Financial Markets", *Journal of International Economics*, 64, 113-134.

Arellano, M., and Bover, O., (1995), "Another Look at Instrumental Variables Estimation of Error-component Models", *Journal of Econometrics*, 68, 29-51.

Balasubramaniam, V.N.; Salisu, M. and Spasford, D. (1996), "Foreign Direct Investment and Growth in EP and IS Countries." *Economic Journal*, 106, 92 – 105.

Becker, S.O., Boeckh, K., Hainz, C. and Woessmann, L. (2015) "The Empire Is Dead, Long Live the Empire! Long-run Persistence of Trust and Corruption in the Bureaucracy", *Economic Journal,* 126(590), 40–74. doi:10.1111/ecoj.12220.

Blomström, M.; Lipsey, R. E., and Zejan, M. (1994), "*What explains growth in developing countries?*", In: Baumol, W., Nelson, R., Wold, E. (Eds), Convergence of Productivity: Cross-national Studies and Historical Evidence. Oxford University Press: Oxford, 243 – 259.

Blundell, R., and Bond, S., (1998), "Initial Conditions and Moment Restrictions in Dynamic Panel-data Models", *Journal of Econometrics*, 87 (1), 115-143.

Borenstein, E.; De Gregorio, J., and Lee, J.-W. (1998), "How does foreign direct investment affect economic growth?", *Journal of International Economics*, 45(3), 115-135.

Bos, H.C., Sanders, M. and Secchi C., 1974, Private Foreign Investment in Developing Countries: A Quantitative Study on the Macroeconomic Effects", Dardrecht: Reidel.

Brewer, T., and Young S., (2000), "*The Multilateral Investment Regime and Multinational Enterprises*", Oxford University Press.

Bruno, R.L., and Campos N., (2013), "Reexamining the conditional effect of foreign direct investment", IZA discussion paper no. 7458.

Busse, M., and Groizard, J.L., (2008), "Foreign Direct Investment, Regulations, and Growth", *The World Economy*, 31(7): 861-886.

Carbonell J.B. and Werner R.A. (2018), "Does Foreign Direct Investment Generate Economic Growth? A New Empirical Approach Applied to Spain", *Economic Geography*, 94(4), 425-456.

Carkovic, M., and Levine, R., (2005), "Does foreign direct investment accelerate economic growth? In *does foreign direct investment promote development?",* ed. T. H. Moran, E. M. Graham, and M. Blomström, 195–220. Washington, DC: Institute for International Economics.

Che, Y., Du, J. L. Lu, Y. and Tao, Z. G. (2015), "Once an Enemy, Forever an Enemy? The Long-Run Impact of the Japanese Invasion of China from 1937 to 1945 on Trade and Investment", *Journal of International Economics* 96: 182–198. doi: 10.1016/j.jinteco.2015.01.001.

Couharde, C., Karanfil, F., Kilama, E.G. and Omgbad, L.D. (2019), "The role of oil in the allocation of foreign aid: The case of the G7 donors", *Journal of Comparative Economics, 48(2), 363-383. doi: 10.1016/j.jce.2019.10.001.*

De Mello, L. R. (1999), "Foreign direct investment-led growth: Evidence from time series and panel data", *Oxford Economic Papers* 51 (1): 133–51. doi:10.1093/oep/51.1.133.

Deloitte. (2019), "*Guide to fiscal information*", Key economies in Africa 2019. Retrieved from https://www2.deloitte.com/za/en/pages/tax/articles/guide-to-fiscal-information-key-economies-africa-2019.html

Fidrmuc, J., and Fidrmuc, J., (2003), "Disintegration and Trade", *Review of International Economics,* 11(5): 811–829. doi:10.1046/j.1467-9396.2003.00419. x.

Frieden, J.A., (1994), "International Investment and Colonial Control: A New Interpretation", *International Organization,* 48(4), 559-593.

Guiso, L., P. Sapienza, and L. Zingales. (2009), "Cultural Biases in Economic Exchange?", *The Quarterly Journal of Economics,* 124 (3), 1095–1131. doi:10.1162/qjec.2009.124.3.1095.

Head, K., Mayer, T. and Ries, J. (2010), "The Erosion of Colonial Trade Linkages after Independence", *Journal of International Economics* 81 (1): 1–14. doi:10.1016/j. jinteco.2010.01.002.

Herzer, D., (2012), "How does foreign direct investment really affect developing countries' growth?", *Review of International Economics* 20 (2): 396–414.

Hobson, J. A. (1902), "Imperialism: A Study", James Pott & Company, New York.

Hoque M.E., Akhter T., and Yakob N.A. (2016), "Revisiting endogeneity among foreign direct investment, economic growth, and stock market development: Moderating role of political instability", *Cogent Economics and Finance*, 6(1), *149-311. doi: 10.1080/23322039.2018.1492311.*

Jude, C. and Levieuge, G. (2016), "Growth effect of FDI in developing economies: the role of institutional quality," *The World Economy*, 40(4), 715-742.

Kamil, M. and Bazoumana O. (2018), "Foreign direct investment and economic growth: Exploring the transmission channels," *Economic Modelling*, 72, 296-305.

Khun, S., (2018), "The Impact of Foreign Direct Investment on the Economic Growth in Cambodia: Empirical Evidence". *International Journal of Innovation and Economic Development,* 4(5), 31-38.

Lenin, V.I., (1916), "Imperialism, the Highest Stage of Capitalism", Progress Publishers, 1963, Moscow, Volume 1, 667-766.

Lipsey, R. and Sjöholm, F. (2005), "The impact of inward FDI on host countries: Why such different answers?" in T. Moran, E. Graham & M. Blomstr• om, eds, `*Does Foreign Direct Investment Promote Development***?**', Center for Global Development and Institute for International Economics, Washington DC, chapter 2, pp. 23-43.

Loesser, I. E. (2005), « *Investissements directs étrangers : déterminants et influences sur la croissance économique*. C.E.D, Université Montesquieu Bordeaux IV.

Mencinger, J., (2003), "Does foreign direct investment always enhance economic growth?", *Kyklos, International Review of Social Sciences* 56 (4), 491–508.

Mehdi B., (2018), "Foreign Direct Investment and Economic Growth: Evidence from Southern Asia", *Atlantic Review of Economics* – 2nd Volume – 2012.

Nyenti, E., (2017), "The Impact of Colonial Rule on Foreign Direct Investments: Regional Inequality in Cameroon", *Asian Journal of Multidisciplinary Studies*, 5(11) November 2017.

Olabode P. O., Oluwole O. A., and Aboyomi A. A. (2019), "Analysis of Foreign Direct Investment and Economic Growth in Nigeria: Application of Spatial Econometrics and Fully Modified Ordinary Least Square (FMOLS)", *Foreign trade review*, August 2019. *doi: 10.1177/0015732519851631*

Olawumi D. A. and Olufemi P. A. (2016), "Impact of foreign direct investment on economic growth in Africa", *Problems and Perspectives in Management*, 14(2-2), 289-297.

Olofsdotter, K. (1998), "Foreign direct investment, country capabilities, and economic growth", *Review of World Economics* 134 (3, 534–47.

Onafowora, O., and Owoye, O. (2019), "Public debt, foreign direct investment, and economic growth dynamics: Empirical evidence from the Caribbean", *International Journal of Emerging Markets*, 14(5), 769-791. *doi: 10.1108/IJOEM-01-2018-0050.*

Prebisch, R., 1968, Development Problems of the Peripheral Countries and the Terms of Trade, in: James D. Theberge, ed. Economics of Trade and Development. New York: John Wiley and Sons Inc.

Rodrik, D., (2018), "An African Growth Miracle?", *Journal of African Economies*, 2018, 1–18. doi: 10.1093/jae/ejw027

Roodman, D. M. (2009), "A note on the theme of too many instruments", *Oxford Bulletin of Economics and Statistics*, 71, 135–158.

Saltz, M. (1992), "The Negative Correlation between Foreign Direct Investment and Economic Growth in the Third World, Theory, and Evidence", *Revista Di science Economiche e commerciali*, 39(7), 617-633.

Sasi I. and Mehmet A. U. (2015), "Foreign direct investment and economic growth: A real relationship or wishful thinking?", *Economic Modelling*, 51, 200-213. *doi: 10.1016/j.econmod.2015.08.009*

Seidler, V. S., (2011), "*Colonial legacy and institutional development: the cases of Botswana and Nigeria***",** PhD thesis, WU Vienna University of Economics and Business.

Singer, H.W., 1950, The Distribution of Gains Between Investing and Borrowing Countries, *American Economic Review*, 40, 473-485.

Sjoerd, B., Smeets, R., and Zwinkel, R. (2007), "The impact of horizontal and vertical FDI on host country economic growth", *International Business Review*, 17, 452–472.

Svedberg, P., (1982), "The profitability of U.K. foreign direct investment under colonialism", *Journal of Development Economics*, 11 (3), 273-286. doi: 10.1016/0304-3878(82)90007-4

Umit, A.O. and Alkan, I.H. (2016), "The effects of foreign direct investments and economic growth on employment and female employment: A time series analysis with structural breaks for Turkey", *International Journal of Business and Economic Sciences Applied Research (IJBESAR)*, 9(3), 43-49.

UNCTAD, (2019), "*World Investment Report*" United Nations Conference on Trade and Development database

United Nations Development Programme (UNDP, 2017), "Taxing Multinationals is Pivotal to Finance Development.", Blog post. Available at: http://www.undp.org/content/ undp/en/home/blog/2017/ taxing-multinationals-is-pivotal-todomestic-resource-mobilizati.html

Wang, H. and Luo, Q. (2020), "How colonial legacy shapes the impact of inward FDI on GDP? Evidence from China", *Applied Economics Letters*, 27:9, 740-743, doi: 10.1080/13504851.2019.1644437.

Wang, H., Fidrmuc, J. and Tian, Y. (2018), "Growing against the Background of Colonization? Chinese Labor Market and FDI in a Historical Perspective", *International Review of Economics and Finance* forthcoming. doi: 10/1016/j.iref.2018.12.010.

Ylvije K. B. and Elezi O. (2015), "Foreign direct investment and economic growth in Albania", *Economics*, Vol. 3, No 2, 2015 ISSN 2303-5005.