



UNIVERSITY OF LEEDS

This is a repository copy of *Foreign Direct Investment to Africa: Is There a Colonial Legacy?*.

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/160172/>

Version: Accepted Version

Article:

Glaister, KW orcid.org/0000-0003-1165-108X, Driffield, N and Lin, Y (2020) Foreign Direct Investment to Africa: Is There a Colonial Legacy? *Management International Review*, 60 (3). pp. 315-349. ISSN 0938-8249

<https://doi.org/10.1007/s11575-020-00415-w>

© Springer-Verlag GmbH Germany, part of Springer Nature 2020. This is an author produced version of an article published in *Management International Review*. Uploaded in accordance with the publisher's self-archiving policy.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Foreign Direct Investment to Africa: Is There a Colonial Legacy?

Keith W. Glaister¹

Nigel Driffield²

Yupu Lin³

1 Leeds University Business School University of Leeds Leeds LS2 9JT UK

2 Warwick Business School University of Warwick Coventry CV4 7AL UK

3 Aston Business School University of Aston Birmingham B4 7ET UK

Foreign Direct Investment to Africa: Is There a Colonial Legacy?

Abstract

To provide new understanding of the effect of historical ties in the field of international business, through the lens of institutional theory and the concept of the liability of foreignness, we examine how prior colonial relationships influence inward FDI from former colonisers to their former colonies in Africa. With an estimation based on a balanced panel of annual observations from 2001 to 2012, we find that prior colonial ties are positively related to inward FDI from colonisers to former colonies. However, there is substantial heterogeneity in colonial relationships, with the nature of British colonialism more likely to exhibit the colonial relationship in explaining inward FDI. Moreover, there is ambiguity associated with the influence of the time period of colonization and the time period of independence on inward FDI. We report a negative relationship between the period a country was a colony and FDI from the coloniser and a U-shape relationship between the period of independence and FDI from the coloniser. Our findings indicate that the nature and influence of colonial ties on FDI from colonisers are more nuanced and complex than previously considered.

Keywords: Colonisation; Inward FDI; Africa; Institutional theory; Liability of foreignness.

Introduction

Jones and Khanna (2006: 453) appealed for the field of international business to evolve ‘from the relatively uncontroversial idea that 'history matters' to exploring how it matters’ One way of exploring how it matters is to investigate historical ties, which are ‘historical relations between specific pairs of countries that have been developed intentionally (formal ties) or have evolved naturally over time (informal ties)’ (Makino and Tsang, 2011: 546). Historical ties establish an institutional framework (North, 1990) within which relationships between associated countries occur. Makino and Tsang (2011) point out that in prior research identification of key factors affecting FDI flows has overlooked the effects of relational factors that have been historically developed between countries. Accordingly, this paper seeks to "bring history back into international business" (Jones and Khanna, 2006) by examining the question: *how* do the colonial ties between European colonisers and their African colonies influence the flow of FDI between metropole and colony countries? From a theoretical and practical perspective this is an important question. We seek to unpack the ‘how’ by examining the influence of colonial ties on FDI, exploring the heterogenous effects of colonisers, and examining the consequences of the duration of the colonial period and the length of time since independence on FDI. These elements of the coloniser-colony relationship have not been investigated in prior literature.

In contrast to most other emerging markets, Africa is a suitable context for this study because of the nature and relatively recent experience of colonization of African countries (Ellis et al., 2018). Nunn (2007: 158) characterizes Africa’s history by two events, the slave trade and colonial rule and asks, ‘Why do these events, which ended years ago, continue to matter today?’ One answer lies in the nature of the institutions imposed by the colonisers that persist today (Acemoglu et al., 2001). Colonial institutions shape current institutions and consequently affect the accountability

of the government, democratic competition, property rights protection, prevention of corruption, and rule of law (Mizuno and Okazawa, 2009). The long-lasting effects of colonisation, such as, the widespread use of the coloniser's language, similar institutional structures, and business practices (Liou and Rao-Nicholson, 2017), can reduce the 'costs of foreignness', and consequently increase the possibilities of investment (Lundan and Jones 2001).

Although the formal institutions present in a developing country may be a legacy of its former coloniser, we argue that a country's colonial history also generates informal institutions that may be hard to overcome by a firm from the former coloniser. Further, we argue that the changes in the nature of FDI to developing countries, for example, from resource seeking to market seeking, will exacerbate the liability of foreignness (LOF) (Zaheer, 1995) related to past colonial ties. Understanding this offers a more complete perspective on the nature of the host-home country relationship, and the nature of institutions in this setting.

Institutional legacies are also related to LOF through country-of-origin (COO) effects, where MNEs face an additional difficulty resulting from the different treatment that foreign companies receive from local stakeholders because of their "foreignness" (Mezias, 2002). COO refers to the MNE's home country and represents the background/history of the organization to host country stakeholders. This reflects the perception that countries, like firms, have brand equity (Kim and Chung, 1997). This identity can play a significant role in foreign markets location (Moeller et al., 2013). The image of the MNE may be damaged by the past acts of the country-of-origin of the organization. Where the perception of the company is dramatically influenced by the host country this is an added burden of the LOF. Even though an individual company itself may not have 'earned' the adverse reputation, all companies from the same home country may suffer this negative effect. Hence a stigma may be attached to the MNE, its products, brands and employees.

In effect country image summarizes consumers' beliefs about product attributes and directly affects their attitude toward the brand (Han, 1989). Moeller et al. (2013) argue that COO is the anchor point for the international strategic actions of the MNE and suggest that COO plays an important role in determining whether an MNE has the potential to succeed in a host country environment. Importantly, Moeller et al. (2013) conclude that the management of the MNE should be aware of potential resistance to accept the MNE and its products and must develop a proactive set of strategies to address the negativism of host country stakeholders. Such resistance may be particularly acute for MNEs whose home country is a former coloniser of the host country.

Another important factor lies in recognizing that the colonial experience was not homogeneous, but varied in nature between the European colonisers, with the differential experience ultimately impacting on inward FDI. Moreover, the historical relationship could vary from being favourable to being hostile. The character of the historical relationship is likely to effect economic exchanges between two countries, including FDI (Chowdhury and Maung, 2018). We explore these issues in what follows.

Few prior studies have examined historical ties and in particular whether the historical relationship between two nations is important for FDI. Makino and Tsang (2011) examine ties between France and Vietnam and their effect on FDI, Kedia and Bilgili (2015) examine links between Russia and former Soviet Republics to investigate the effect of institutional distance between home and host countries on the percentage of shares acquired in target companies. Chowdhury and Maung (2018) consider how historical ties between home and host countries contribute to the total number of cross-border mergers and acquisitions (CBMAs) from colonies to colonisers. The papers by Makino and Tsang (2011) and Kedia and Bilgili (2015) are narrowly focused on historical ties

between two nations, whereas Chowdhury and Maung (2018) consider CBMA data from 37 ex-colonies (including for example, USA, Canada, Australia and ten African countries).

We consider FDI from former colonisers (six countries) to their former African colonies (49 countries). George et al. (2016) point out that scholars in various fields have regularly considered colonial legacies a source of Africa's ongoing difficulties and that the examination of the enduring effects of Africa's institutional legacies is an underexplored area. To the best of our knowledge prior studies of African inward FDI do not specifically refer to colonial ties as a determinant of FDI. We find the expected overall positive effect on inward FDI of prior colonial ties, although this finding varies with the coloniser given that the experience of colonization was heterogeneous. Further, we highlight the potential ambiguity of colonial ties, in the sense of acting both to encourage and to discourage FDI from the coloniser. We report a negative relationship between the period of time a country was a colony and the extent of inward FDI from the coloniser. We also show that following independence the detrimental effect of colonization on FDI from the coloniser eventually dissipates.

The paper is organised as follows. The next section provides a review of the literature structured to include a brief overview of the colonial development of Africa, the delineation of institutional theory which serves as our theoretical lens, and consideration of how the liability of foreignness affects the legitimacy of an MNE in a foreign institutional environment. We then develop the study's hypotheses based on the implications of colonial ties for FDI. We next set out the research methods. Findings are then presented, followed by discussion and conclusion, including limitations and suggestions for future research.

Literature Review

Colonial development of Africa

The period from the sixteenth to the nineteenth century represents the era in which almost all parts of the world came to be dominated to some degree by the large European powers of Britain, France, the Netherlands, Spain, Austria-Hungary, and Russia (Iammarino and McCann, 2013: 250). The majority of the commercial activities of these states were dominated by economic and trading relations primarily contained within their individual colonial systems. In effect the leading European countries sought to increase their trade by acquiring colonies and using tariffs and war to prevent other countries from trading with them. Allen (2011) argues that colonies were acquired for both economic and strategic reasons. In the expectation that ‘they would supply tropical products to the imperial power and be a market for its manufactures, as well as providing places for its citizens to settle and profitable investments for its bourgeoisie. In addition, empires were regarded as civilizing missions that would spread Christianity and raise native culture to the standard of Europe’ (Allen, 2011:102-103). By the turn of the twentieth century, for instance, the British Empire spanned about one quarter of the globe, resulting in a two-way flow of trade, with Britain importing raw materials from its colonies and exporting finished and semi-finished goods. As Ferguson (2004: xxv) notes ‘The British Empire began as a primarily economic phenomenon, its growth powered by commerce and consumerism.’ Up to the early twentieth century, many British, French and Dutch commercial enterprises had multiple facilities and operations scattered across all their respective empires as well as across their home countries. Yet up until this period, as noted, the economic engagement was dominated by exporting and importing operations, rather than by actual direct investment in each other’s economies (Findlay and O’Rourke, 2007).

As part of the colonisation process, in the late nineteenth century, during the so-called ‘Scramble for Africa’, the European powers divided the continent into political partitions at the Berlin Conference of 1884-85. ‘Within twenty short years after 1880, ... ten thousand African tribal kingdoms were transformed into just forty states, of which thirty-six were under direct European control. Never in human history had there been such drastic redrawing of the map of a continent’ (Ferguson, 2004: 222). By 1905, the control of almost all of Africa was claimed by Western European governments, the only exceptions being Liberia (which had been settled by African American former slaves) and Ethiopia (which had successfully resisted colonisation by Italy). The greatest number of colonies in Africa was held by Britain and France, but Germany, Portugal, Belgium, Italy and Spain also had colonies. Following the First World War, Germany lost her colonies to the other European powers. Somalia was jointly colonised by Britain and Italy, and Namibia was effectively controlled by South Africa. The list of former colonies and their colonisers on which this paper is based, together with the dates of colonisation and independence, are shown in the Appendix.

Institutional Theory

Greve and Rao (2014: 28) note that ‘The link between history and the present, is supplied by institutional legacies that span large swaths of time.’ We draw on institutional theory, to examine the impact of historical ties expressed through a former colonial relationship on inward FDI from colonisers to their former colonies in Africa. The focus is on *how* institutions matter, and the extent to which they influence strategic choice (Peng, 2003) as regards FDI decisions.

Tonoyan et al. (2010: 804) note that ‘Economic activities cannot be analysed without consideration of the formal and informal institutional context in which they occur.’ As Peng (2002) emphasises

‘Since no firm can be immune from institutional frameworks in which it is embedded, there is hardly any dispute that institutions matter.’ Institutions are ‘the rules of the game of a society’ (North 1995: 54) or, more formally, ‘the humanly devised constraints that structure political, economic and social interaction’ (1991: 97). Scott (1995:33) defines institutions as “cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior.” Peng et al. (2009) note that North's scheme of distinguishing between formal and informal institutions is complementary to Scott's concept of regulative, normative, and cognitive supportive pillars.

Institutions are composed of formal rules, such as, statute law, informal constraints, for example, norms of behaviour, and the enforcement characteristics of both. Formal institutions embody structures of codified and explicit rules and regulations that shape interaction among members of a society, and which establish the economic and legal constraints of a country (North, 1990). Informal institutions include socially sanctioned norms of behavior and codes of conduct, which are embedded in culture and ideology (Scott, 1995; Salomon and Wu, 2012). North (1990) suggests that in situations where formal constraints fail, informal constraints will come into play to reduce uncertainty and provide constancy to organizations.

The formal institutions particularly important to managers include regulatory, political, and economic institutions. These formal institutions represent an established order within which businesses operate (Holmes et al., 2013). Informal institutions or constraints are captured in routines, customs, traditions, and culture (North, 1992). According to Holmes et al. (2013: 533) ‘Understanding formal institutions, ... requires understanding the logic and rationale underlying the solutions societal members develop, and this logic and rationale are embodied in the society’s informal institutions.’

Institutions have an impact on the cognitive and ethical considerations that shape human judgment and behaviour (North, 1990; Scott, 1995). They affect organizational behaviour by constraining and determining which actions are acceptable and supportable within and between organisations (Tonoyan et al., 2010) and reduce uncertainty and transaction costs for economic transactions (Davis & North, 1971). Holmes et al. (2013) argue that the presence of legitimate and recognized institutions to oversee business behaviour is critical for long-term wealth creation and so institutions both impose constraints and provide opportunities. More explicitly, Peng (2002: 252) argues that ‘any strategic choice that firms make is inherently affected by the formal and informal constraints of a given institutional framework’.

North (1991: 97) maintains that ‘institutions evolve incrementally, connecting the past with the present and the future; history in consequence is largely a story of institutional evolution in which the historical performance of economies can only be understood as a part of a sequential story.’ In this way, “[h]istory matters. It matters not just because we can learn from the past, but because the present and the future are connected to the past by the continuity of a society’s institutions” (North, 1990: vii). Boettke et al. (2008: 332) propose that “institutional ‘stickiness’—the ability or inability of new institutional arrangements to take hold where they are transplanted—is central to understanding how history matters for institutions.

Where MNE managers have discretion in allocating investment, FDI decisions reflect their evaluation of the potential available in a country conditioned by the assistance and constraints presented by the country’s institutional environment (Pajunen, 2008). More specifically, investment will be directed to those countries where the institutional environment facilitates MNEs in leveraging their firm-specific advantages and accessing local resources (Dunning, 1998). Consequently, institutions have an important influence on firms’ international strategies and

performance (Peng, Sun, Pinkham, & Chen, 2009; Peng, Wang, & Jiang, 2008; Holmes et al., 2013).

The liability of foreignness

Institutional theory is traditionally concerned with how an organisation may establish legitimacy in the setting of a particular institutional environment. Hymer (1976) first posited that firms establishing operations abroad face certain unavoidable costs that firms operating in their own home environment do not. It is now generally accepted that MNEs face an initial disadvantage when operating in foreign countries compared to local firms (Mezias, 2002; Zaheer and Mosakowski, 1997; Salomon and Wu, 2012). This ‘liability of foreignness’ stems from unfamiliarity of the environment, associated with cultural, political, and economic differences, and from the need for coordination across geographic distance, which is worsened by a lack of legitimacy in the host country (Zaheer, 1995). These disadvantages generate additional costs to foreign firms that a local firm would not incur, such as, coordination costs and transaction costs, the relative importance of which will vary by firm, industry, host and home country. In general, it would be expected that compared to local firms a foreign firm would be at a competitive disadvantage, which would adversely impact its financial performance and probability of survival (Zaheer and Mosakowski, 1997).

Institutional distance refers to the extent of dissimilarity between host and home institutions (Kostova, 1996). Institutional distance hinders a foreign firm’s understanding of the host country market, for instance, reducing the ability to relate to customers and work with suppliers. Similarly, it is difficult for local organisations to comprehend foreign firms (Salomon and Wu, 2012). Consequently, the liability of foreignness increases as institutional distance increases and so

foreign firms from institutionally distant countries are perceived as less legitimate and the more difficult it is for them to establish legitimacy in the host country (Kostova and Zaheer, 1999).

Kostova and Zaheer (1999: 68) point out that foreignness presents challenges to legitimacy because of the lack of information about the MNE on behalf of the host environment; the use of stereotypes and different standards in judging foreign firms; and the use of MNEs as targets for attacks by interest groups in the host country. This means that a critical issue faced by MNEs involves the establishment and maintenance of organizational legitimacy, i.e., the acceptance of the organization by its host environment, which is vital for survival and success. It will be easier for an MNE to understand and adjust to the legitimacy requirements of a country that is institutionally similar to its home country than of one that is institutionally distant (Kostova and Zaheer, 1999). Kostova and Zaheer (1999: 76) also note that 'Historically shared perceptions about certain countries or regions in a particular host country can also influence the legitimacy of any firm from that country'.

The essential argument is that organisations are governed by a series of values, which in turn become norms and potentially routines and which therefore govern behavior. The importance in this context is that, at the macro level, national institutions and legal structures have a history, as does language and culture. Colonization by European nations of Africa has greatly influenced institutional development in Africa, as well as the adoption of European languages. This has also influenced systems of corporate governance, as well as the role of government in business, and responses to corruption.

Formal institutions foster certain expectations in terms of firm behaviour, with the greater the familiarity with this in a home country setting, the lower the liability of foreignness through a reduction in institutional distance. LOF signifies that foreign MNEs, compared to host country

domestic firms, are at a disadvantage because they are less familiar with local knowledge, laws, language, etc. However, historical ties between home and host countries can reduce the degree of LOF, offering investing MNEs from the former coloniser advantages not available to other foreign MNEs. For instance, Ellis et al. (2018) argue that Africa's recent colonial history can create a sense of familiarity for some foreign investors, especially those headquartered in the UK and France. In the context of historical ties and FDI, historical ties reduce the uncertainty associated with economic exchanges between two countries and increase the trust between the parties involved. This helps investors obtain legitimacy in host countries. Further, historical ties may promote an enduring interaction which can help develop a strong social relationship between two countries (Chowdhury and Maung, 2018).

In summary, when an MNE decides to make a foreign direct investment, it enters a new host country environment that presents unique challenges stemming from institutional differences between the MNE's home country and the host country (Calhoun, 2002). The MNE must adapt to the host country culture, learn new ways of conducting certain functions and also satisfy multiple legitimacy requirements and expectations (Zaheer, 1995). This creates tensions between the MNE and a particular host country and ultimately 'institutional distance leads to higher costs and risks because of lack of understanding of the institutional order, inability to simultaneously adjust to institutional requirements in multiple countries, challenges in establishing external legitimacy, and increased internal and external complexity' (Kostova et al., 2019, online). This is especially the case where MNEs move from a more institutionally developed home environment, where formal institutions can be relied on, to institutionally less developed host countries, which requires adopting new strategies. However, MNEs from a former coloniser country may be at an advantage in a former colony country where the institutional conditions are predicated on a colonial

relationship because this will create a greater understanding of the legitimate action the MNE may undertake and reduce the uncertainty and costs of coping with the host country institutions. On the other hand, MNEs from the former coloniser may be at a disadvantage given the negative associations of the period of colonisation. Consequently, LOF may vary both geographically and temporally. So, although institutional distance may matter, what is also important is developing a focus on the home and host country context (Harzing and Pudelko, 2016: 27) and in the specific historical context of this paper, the former colonial experience. We seek here to combine these perspectives, and to explore this within the setting of whether previous colonial ties influence FDI decisions.

Hypothesis Development

The implications of the colonial relationship for FDI

Historical ties, as evinced by a prior colonial relationship, lead to the development of formal ties between countries. Here, we do not imply that two countries are affiliated through a formal relationship contract, such as a free trade agreement, rather the formal tie comes through similarity of formal institutional arrangements following the colonial experience (Makino and Tsang, 2011). Such formal ties can promote greater trust between nations (Rangan and Sengul, 2009) and greater trust is likely to make host nations more receptive to FDI from metropole nations (Guiso et al. 2009). An important formal tie is the nature of legal arrangements between nations. La Porta et al. (1998: 1115) recognising that laws in different countries ‘are not written from scratch, but rather transplanted – voluntarily or otherwise –’ emphasize the importance of the identity of the coloniser and legal origin on current institutions. Klerman et al. (2011: 380) point out that the reason almost all legal systems of the world belong to either the common law or the civil law is that the European powers imposed their legal systems on their colonies. ‘Consequently, “legal origin” is almost

perfectly congruent with “colonial history” understood as the identity of the dominant colonizing power. This is echoed by Young (1994: 283) who emphasizes that institutions set up by the colonists persisted long after the colonial regime ended: ‘although we commonly described the independent polities as ‘new states’, in reality they were successors to the colonial regime, inheriting its structures, its quotidian routines and practices, and its more hidden normative theories of governance’. In this respect, ‘colonial institutions matter because they influenced the development of later institutions’ (Jones, 2013: 182). Further, as noted, North (1990) argued institutions matter because they define the rules of the game in a society and thus determine the payoffs associated with both productive and unproductive activities.

As well as formal ties between nations, informal ties evolve as a result of, amongst other factors, colonisation (Makino and Tsang, 2011). These ties take the form of cultural, ethnic, and social relations, which shape shared values, norms, and cultural beliefs, and narrow the gap in expectations and understanding between countries. For instance, research shows that prior colony-coloniser relations strengthen the social relations between countries and play a significant role in facilitating bilateral trade and investment (Ghemawat, 2001; Frankel and Rose, 2002). Thus, for a firm from an ex-coloniser to be successful in a former colony, it must steer through the potentially unstable formal institutional environment of the host market, and manage the informal institutions, for example, through interpersonal networks and cultural understanding (Hoskisson et al., 2000).

If, as the prior literature discussed above suggests, a colonial relationship explains FDI decisions, then this will manifest itself in higher levels of FDI stocks of former colonisers, which are themselves a key driver of FDI inflows from colonisers. We argue that even allowing for this, the colonial relationship confers on the firm a country specific advantage (Rugman, 2010), through

familiarity of institutions and environment, in terms of leveraging its firm specific advantage into new markets.

This discussion is reflected in the first hypothesis.

H1: Colonial ties will be positively and significantly related to inward FDI, controlling for past FDI stock.

The heterogeneous impact of colonisation

The impact of colonization by different colonisers was not homogeneous, the failure to recognize this means that the estimation of “coloniser effects” in previous studies may be biased (Lee and Schultz, 2012). The colonial histories of African countries were diverse (Zoogah et al., 2015). The British, French, and Spanish had very different colonial philosophies, with the French and Spanish more centralized than the British who adopted a decentralized approach, (Grier, 1997). Collier (1982) summarizes the situation as follows, ‘The French introduced common legal, political and administrative institutions through French Africa, while the British were more institutionally flexible, seeking to preserve and accommodate diverse ethnic traditions, identities and institutions’ (Collier, 1982: 81; quoted in Brown 2000: 30).

Being a colony of the British, rather than another country, significantly affected legal institutions (the British imposed common-law systems, other European powers introduced (French) civil-law systems) later financial development, and economic performance (La Porta et al. 1998; 2008). For instance, La Porta et al. (1998) find that along a variety of dimensions, common-law countries provide the best legal protections to shareholders, in contrast French civil-law countries provide the worst legal protections to shareholders. Similarly, common-law countries give creditors strong legal protections against managers, while the civil-law countries give creditors the weakest protections. Also, protection of property rights is strong in common-law countries whereas it is the

weakest in the civil-law countries. Other studies have found that common-law is associated with lower formalism of judicial procedures (Djankov et al. 2003) and greater judicial independence (La Porta et al. 2004) than civil-law. La Porta et al. (2008) note that these indicators are associated with better contract enforcement and greater security of property rights. Former British colonies perform better on average than their French counterparts in terms of economic growth (Grier, 1999; Bertocchi and Canova, 2002). Faster economic growth has also been shown to attract FDI inflows (e.g., Choi, 20004; Mohamed and Sidiropoulos, 2010; Kandil, 2011).

In general, Britain engaged in institutional development, or the imposition of governance and institutions to a greater extent than the other imperial powers. Equally, the colonial language has survived in the indigenous population to a greater extent. A common language reduces transaction costs and facilitates business exchanges (Doh et al., 2009). The languages of the colonisers, the British in particular, were imposed as the most prestigious languages and came to dominate administrative and mercantile structures of each colony (Phillipson, 1992). In addition, Britain has in general retained strong links with its ex-colonies, through the Commonwealthⁱ and other diplomatic ties.

Accordingly, we maintain that being from Britain confers a greater country level advantage to the firm than being from one of the other European colonial powers. Consequently, building on the first hypothesis, we again argue that prior colonial ties remain important even after controlling for past investments, and develop our second hypothesis:

H2: Britain is more likely to exhibit the colonial relationship in explaining inward FDI to former colonies than the other European colonisers, controlling for past FDI stock.

The duration of the colonial period

We explore the importance of the depth of the colonial relationship, by examining first the length of the colonial period and then the length of the period of independence. Our variable, *The length of the colonial period*, measures the length of the colonial period by subtracting the date of independence from the date of colonisation. However, *a priori* it is difficult to determine the expected sign of the coefficient. A longer period of colonization may be more favourable on average than a shorter one because it allows the coloniser to establish suitable institutions, such as educational facilities and infrastructure in the colony, that would be conducive to FDI post-independence (Grier, 1999). As noted, several effects of prolonged colonial rule may be enduring, and may in time lead to the continuation of economic activity on a voluntary basis (Kleiman, 1976). Grier (1999) reported that the length of colonization is positively and significantly correlated with economic growth over the 1961-1990 period, i.e., the longer the colony was held by the mother country, the better it did economically in the postcolonial era. The caveat is that the colonisers may have sought to retain the longest those colonies that performed the best economically (Grier, 1999).

Conversely, the nature of the colonial experience may result in enmity towards the coloniser by the colonies, such that historical ties do not always produce economic relations that are positive (Makino and Tsang, 2011). The resulting problematic associations may produce significant social, and economic costs, that persist long after the conflict has been resolved (Alfaro et al., 2008) and which hinder economic relationships. For instance, there can be negative effects because of the colonial history associated with perceived status differences between representatives of firms from the former coloniser and host country stakeholders which may generate hostility (Liou and Rao-Nicholson, 2017), there may also be animosity because of past labour exploitation and resource depletion (Jones, 2013; Nunn, 2007). As a result, the colonial history may exacerbate the negative

impacts of institutional distance and increase the LOF (Liou and Rao-Nicholson, 2017), including a negative effect on FDI flows.

The LOF resulting from previous colonial relationships may become more important, with tacit sources of LOF resulting from previous colonial ties (Calhoun, 2002). Traditionally, FDI into developing countries has been efficiency seeking FDI or resource seeking FDI, however, this is changing to encompass greater levels of market seeking FDI. It is, therefore, necessary to reconsider the character of LOF in this setting. Host country consumers are likely to be more hostile to firms from the coloniser, associating colonisation with an unwanted period in the country's history, such that the stronger the colonial relationship, the greater the LOF associated with market seeking FDI.

When seeking to develop an understanding of the nature of the relationship between colonisation and subsequent resistance or hostility to the colonial power within the former colony, it is necessary to consider the different drivers of LOF in more detail. Slangen and Beugelsdijk (2010) and Luo and Mezas (2002) show that institutional hazards have greater impact on vertical (natural resource-seeking) FDI than on horizontal (market-seeking) FDI. With resource-seeking FDI, MNEs usually need to obtain approval from the host country government to acquire foreign natural resources. However, MNEs in natural resource industries frequently face difficulties in obtaining such approvals, for example, because the government may fear that national security would be threatened (Globerman and Shapiro, 2009; Henisz et al., 2014). Such discrimination costs may be particularly high when resource-seeking by foreign firms are considered unfavourably by local stakeholders. In the case of market-seeking FDI, where the goal is to sell products in the host country, differences in product demands between the home and host markets become the major concern of MNEs. Such differences mean that MNEs need to adjust their products to accommodate

the differences. Consequently, product adaptation costs are especially important in market-seeking FDI (Zhou and Guillen, 2016). Over time, with greater levels of market seeking FDI, product adaptation costs will become more prominent. These costs are likely to be exacerbated in countries where there are negative perceptions of products arising from FDI from former colonisers.

The prior literature explores how firms may overcome the LOF (Zaheer, 1995; Zaheer and Mosakowski, 1997; Yildiz and Fey, 2012), focusing on organizational practices to overcome institutional distance. However, we argue that this may be particularly difficult for market seeking FDI, because the informal institutions engendering a LOF for firms from the former colony outweighs the benefits associated with reduced institutional distance. Further, we expect the LOF to increase with the extent of the colonial relationship. In this setting, therefore, there are competing forces in explaining FDI location decisions, that cannot be divorced from FDI motives.

Although there is ambiguity associated with the expected sign of the coefficient, our theoretical position is informative. We have competing effects, based on the predictions from both internalisation theory and institutional theory. A standard transaction costs approach would predict a positive relationship, as the longer the colonial period the lower the institutional distance. However, the institutional theory approach suggests that norms, particularly hostility to the colonial power, will increase with the length of the colonial period. As we wish to test the effect of the length of the colonial period on FDI, for exploratory purposes we posit that the greater the length of the colonial period the less the extent to which firms from the European coloniser are welcome to engage in FDI by the former colonies. This is reflected in the following hypothesis.

H3: There will be a negative relationship between the length of the time period the country was a colony and the extent of inward FDI flow from the former coloniser.

The time period since independence

It might be presumed that the longer the period of time the former colony has been an independent country the weaker will be the influence of the colonial relationship and therefore the less the extent of FDI from the coloniser, i.e., the time period of independence will be negatively associated with FDI from the colonial power. However, it is necessary to develop a more nuanced view of the nature of the ongoing relationship, which is likely to produce both negative and positive effects on FDI from the coloniser, depending on the extent to which the colonial tie exhibits a history of antagonism or cooperation (Acemoglu et al., 2001). Consequently, as with the length of the colonial period, it is difficult to determine *a priori* the expected sign of the coefficient on the length of the period of independence.

The character of the decolonisation process may have an enduring negative effect on FDI. In some countries decolonization was peaceful and orderly, in other cases independence was achieved only after a protracted struggle with decolonisation contested militarily. Where independence came after long periods of struggle, the relationship between the colonial power and the colony was problematic, which at least initially, would not be conducive to FDI. For instance, the violence sometimes associated with the independence process, through destroying part of the physical capital stock, is likely to have affected economic developments in the post-colonial era (Bertocchi and Canova, 2002). However, the negative effects of the military struggle for independence on FDI should not be overstated, as Kleiman (1976: 466) notes, most of the colonies attained their independence ‘on the whole through moral suasion rather than the use of force’. Nevertheless, other negative effects of colonization should not be ignored. Corruption, distorting government

policies, political instability and ethnic conflict, which affect the economic environment of many African countries, can also be seen as a legacy of the colonial era.

Moss et al. (2004) note that although much of the ideological resistance to FDI by African countries has faded, in relative terms they still have not attracted much FDI. In part this is because of lingering skepticism toward foreign investment, which is entrenched in the history, ideology, and politics of the post-independence period. Independence occurred in many African countries in the late 1950s and 1960s, which means that some recent and ‘current leaders and employees in African firms were born during colonial rule or shortly after independence and, thus, have personal recollections of the experience’ (Ellis, 2018: 249) with the colonial past prompting negative perceptions. Such lingering effects of the colonial experience, for instance, foreign companies in Africa are often thought of as agents of imperialism and exploitation, and African governments may be worried about creeping neo-colonialism from the former coloniser, has produced a skepticism that has created a number of direct and indirect barriers to foreign investment that impede greater FDI inflows (Moss et al. (2004). The overall effect is that, despite the trend of investment liberalization throughout much of Africa, there are still substantial enduring biases against foreign investment in many countries. From their study of the acquisition of African firms by foreign firms, Ellis et al. (2018: 268) suggest that ‘colonial ties may hurt any business exchange in Africa where perceived quality, trust, and cooperation between firms (e.g., in alliances, supply chain transactions, entrepreneurial finance, etc.) are critical.’

These historical and political issues fueled the belief that African nations needed to take control of their economies after independence, a view that has had an enduring effect on FDI. Although explicit legal restrictions on foreigners have largely been eliminated, limitations still occur. For instance, Angola’s private investment law, passed in August 2015, discourages investors from

repatriating profits within the first several years of their investments by imposing higher taxes on dividends and profits. Investors face severe constraints in sending remittances abroad as profits and dividends repatriation are not prioritized for foreign exchange allocation in the restrictive Central Bank auction process (Export.gov 2017).

In contrast to these negative forces on FDI from former colonisers, there may be an enduring effect of colonisation that sustains FDI from the former coloniser. As previously noted, in general, colonial influence persisted in its effect on institutions after political independence (Acemoglu et al., 2001; Bertocchi and Canova, 2002: 1864). Further, in many instances there have been strong ties between the former colonial powers and their ex-colonies (Brysk et al., 2002). Countries that were once integrated within the same colonial system often have institutional, linguistic and cultural similarities that facilitate the emergence of international institutions across them. For example, the Community of Portuguese Speaking Countries (the Lusophone Commonwealth), is an intergovernmental organization mostly of former colonies of Portugal. The prime objectives involve political and diplomatic cooperation between member states. Such strategic relations between nations can play an essential role in perceptions of investors that their investments will benefit from protection if challenges arise (Pal, 2017). Similarly, Lundan and Jones (2001: 103) identify a "Commonwealth effect" on the process of internationalization, whereby 'the widespread use of the English language, coupled with similarity in institutional structures, legal systems, and business practices within the Commonwealth can lower the 'costs of foreignness', and consequently increase the possibilities for intra-Commonwealth trade and investment'. Further, colonial past and political alliances are major determinants of foreign aid (Alesina and Dollar, 2000), with the percentages of national foreign aid programmes targeted to respective ex-colonies greatly exceeding the OECD average level of aid to these destinations (Brysk et al., (2002). Such

positive associations post-independence is likely to militate in favour of FDI by the former colonisers.

The nature of the historical ties post-independence may, therefore, produce both negative effects and positive effects on FDI from colonisers to former colonies. This supports the contention of Zaheer (2002) that LOF is not immutable but that LOF is an inherently dynamic concept. Zaheer (2002) emphasises that not all sources of LOF can be expected to continue unchanged indefinitely. LOF can increase, for example, a change in the host environment can lead to a fall in legitimacy of MNEs from particular home country, and decrease, for example, if the MNE increasingly aligns itself to the institutional conditions of the host country and becomes less of an outsider (Zaheer, 2002).

We argue that the sum of the effects of the process of decolonization and the subsequent post-colonial association is likely to produce a U-shaped relationship on FDI from the coloniser to the former colony: Following independence, when the deleterious effect of being a colony is a recent experience, there will be a negative effect on inward FDI from the former coloniser, which is likely to persist for some time. However, the perception of harmful consequences of colonization will tend to erode over time and continuing strong ties post-independence will eventually promote a positive effect on FDI from the former coloniser. This argument is reflected in the following hypothesis.

H4: The time period of independence will be characterised initially by a negative effect on FDI from former colonisers, which will eventually be replaced by a positive effect on inward FDI from former colonisers.

Models and Estimation

Our underlying model concerns the variations in inward FDI between countries, relating FDI to a series of time invariant effects, including natural resources, and relative country size. We include a measure of the bilateral stock of FDI in a given country, in order to distinguish between the extent to which past colonial links matter in explaining FDI stocks, compared with them explaining flows today. Any historical colonial links, that are no longer important in explaining inward FDI, may nevertheless explain variations in FDI stock. Developing this, we then seek to explain variations in inward FDI, given variations in FDI stock, by relating inward FDI to a series of economic variables, as follows:

$$\text{Inflow FDI}_{it} = \alpha_0 + \alpha_1 \text{Instock FDI}_{it-1} + \alpha_2 \text{GDP Growth}_{it-1} + \alpha_3 \text{GCF}_{it-1} + \alpha_4 \text{GDPHOME}_{it-1} + \alpha_5 X_{it-1} + \mu_{it} \quad (1)$$

$$\text{Inflow FDI}_{it} = \beta_0 + \beta_1 \text{Instock FDI}_{it-1} + \beta_2 \text{GDP Growth}_{it-1} + \beta_3 \text{GCF}_{it-1} + \beta_4 \text{GDPHOME}_{it-1} + \beta_5 X_{it-1} + \beta_6 \text{Colonial Relation}_i + \mu_{it} \quad (2)$$

$$\text{Inflow FDI}_{it} = \theta_0 + \theta_1 \text{Instock FDI}_{it-1} + \theta_2 \text{GDP Growth}_{it-1} + \theta_3 \text{GCF}_{it-1} + \theta_4 \text{GDPHOME}_{it-1} + \theta_5 X_{it-1} + \theta_6 \text{COLONY}_i + \mu_{it} \quad (3)$$

$$\text{Inflow FDI}_{it} = \lambda_0 + \lambda_1 \text{Instock FDI}_{it-1} + \lambda_2 \text{GDP Growth}_{it-1} + \lambda_3 \text{GCF}_{it-1} + \lambda_4 \text{GDPHOME}_{it-1} + \lambda_5 X_{it-1} + \lambda_6 \text{COLONY}_i + \lambda_7 \text{RP}_{it-1} + \lambda_8 \text{IP}_{it-1} + \lambda_9 \text{IP}^2_{it-1} + \mu_{it} \quad (4)$$

Where, $\text{Instock FDI}_{it-1}$ measures the stock of FDI in the host country of investment pair i at time $t-1$; GDP Growth_{it-1} measures the gross domestic product growth of African country in investment pair i at time $t-1$; GCF_{it-1} measures gross capital formation of African country in investment pair i at time $t-1$; GDPHOME_{it-1} measures the GDP of the home country in investment pair i at time $t-1$.

The control variables therefore include the standard vector of variables. The error term comprises

$$\mu_{it} = \gamma_i + \eta_t + \varepsilon_{it}^{ii}.$$

It is important to note here that this specification is very restrictive in terms of testing our hypotheses. The importance of past investments in explaining current FDI will be captured by the stock variable. This is essentially a feature of history, and as such, the additional variables capture the additional propensity for a home-host link to foster FDI, given the level of FDI that has historically taken place.

The vector X_{it-1} contains a number of additional control variables which are specified as either host or home country: institutional quality measured by the length of time it is estimated to start a business in the country; other forms of investment, in this case the three international transfer variables, FDI as a percentage of GDP, ODA (official overseas aid) as a percentage of GDP and REM (Remittances) as a percentage of GDP; international trade as a percentage of GDP; per capita GDP growth; population growth; and natural resource as a percentage of GDP; and bilateral net aid flows. These variables are standard in models seeking to explain variation in inward investment penetration (Driffield and Munday, 2000) ⁱⁱⁱ.

The units of the variables in the raw data are measured as follows: inflow, instock, GCF, net aid flow and GDP are in millions of US dollars, time of business starting is in days. However, the units of the variables have been eliminated in our standardized analysis process.

The Colony vector takes various forms in order to capture several aspects of the colonial relationship. Our second model therefore captures a former bilateral colonial relationship as a dummy variable, seeking to explore whether inward FDI is greater where there existed a former colonial tie. It is important to note here that by construction, these different models place different demands on the data, and by necessity involve different samples of the population of pairwise relationships. Models 1 and 2 are estimated on the full sample. In model 2, we use the ex-colonial relationship dummy, which indicates 1 if there was such a colonial relationship, 0 otherwise. Thus,

the sample is divided into FDI from the former colonisers to their respective former African colonies and that from other source countries to 49 African countries. The second subsample obviously includes those FDI links from the former colonisers to their non-ex-colonies.

In model 3, we explore the colonial relationship in more detail by examining specific former colonisers. The COLONY vector is changed to dummies of UK, France, Italy, Belgium, and Iberia (due to the low number of colonies that Spain and Portugal had in Africa, this group is combined and labelled 'Iberia'). As these variables are a simple decomposition of the colony variable discussed above, the data still incorporate the full sample of pairwise FDI flows. The country dummies are denoted as 1 if the former coloniser in the FDI link is Britain, France, etc. respectively, 0 otherwise. These dummies divide the sample into FDI from the specific former coloniser to its corresponding ex-colonies and that from other source countries to 49 African countries. Model 3 (and Model 4) also include a Bilateral Investment Treaty (BIT) dummy variable between the home and host countries. In the context of our study this is an important control variable. As the literature on BITs shows (Neumayer and Spess, 2005; Egger and Pfaffermayr, 2004), the importance of BITs to the firm is the signal that both it has a degree of support from its home government in protecting its property rights, but also that it has recourse to arbitration at the investor-state dispute settlement (<https://www.iisd.org/investment/dispute/>). It may be argued that such assurances are more important where there is either a degree of enmity between the host and home country governments, or a degree of unfamiliarity.

In Model 4, we seek to capture the importance of the length of time of colonial rule and the length of time since independence. RP_{it-1} is the period of colonial rule; IP_{it-1} is the period since independence; IP^2_{it-1} is the period since independence squared. By definition this only applies to the country pairs where there was a colonial relationship. This is the only model therefore where

all of our country pairs in the sample are colonial-linked pairs. As a result, the sample drops dramatically as it is confined to a set of country pairs that include the former colonisers and their respective former African colonies.

The operational definition of the variables is shown in Table 1.

[Insert Table 1 Here]

Data

The core data used in this study are taken from the World Bank's World Development Indicators (WDI). Our dependent variable is inward FDI to countries in Africa. The bilateral FDI statistics including inward FDI flow and inward FDI stock, and the net bilateral aid flows from the development assistance committee (DAC) donors are from UNCTAD. The data concerning the colonial relationship between the former colonial countries in Africa and the former colonial powers in Europe is collected from the 'Index of Possessions and Colonies' in World Statesman (www.worldstatesmen.org), which includes the period of colonial rule and the period since independence.

We construct a balanced panel of annual observations from 2001 to 2012, which contains almost the entire sample of African countries from the WDI. We start with the full set of FDI source countries, but then subsequently explore the importance of the nature of the colonial relationship, which by definition reduces the sample size. The colonial relationships are provided in the Appendix.

Model Estimation

Descriptive statistics are provided in Tables 2 and 3 along with correlation coefficients, which are not suggestive of a multicollinearity problem. All VIFs are well below the threshold considered to suggest bias in the estimators, as shown in Table 4.

[Insert Table 2 here]

[Insert Table 3 here]

[Insert Table 4 here]

There are a number of econometric considerations to be taken into account with this estimation. The first is potential endogeneity, which in turn informs the choice of estimator. The most likely candidates are that FDI influences growth, or gross capital formation, rather than the other way around. Standard endogeneity tests confirm that these variables can be treated as at least weakly exogenous. In addition, there is a related specification question. It is well understood within the applied FDI modelling literature that while FDI decisions are made with respect to forward looking expectations, they are also made with respect to information at the time. On the basis that there is then a lag between the decision and the investment, we tested various models using different lag length. Clearly, this does not impact on treatment of the colony variables as they are time invariant, but the control variables indicate that a lag of one year is appropriate. This also removes the prospect of endogeneity. In addition, we carried out the usual specification tests, for issues such as omitted variable bias, and included other controls in alternative specifications, such as labour costs, and other measures of human capital, which were insignificant and did not add to the explanatory power, or to any inferences regarding the variables of interest. In the analysis the data are clustered by dyadic relationship following Cameron and Miller (2015).

Results

Table 5 illustrates the marked differences between FDI flows and stocks between country pairs with a colonial relationship, and those without a colonial relationship. It is notable that the colonial relationship appears important in explaining past FDI flows, however, we seek to move the debate on, and ask whether, controlling for this, such relationships still matter.

[Insert Table 5 here]

Table 6 reports the results for the various model specifications. In Model 1, Model 2 and Model 3, which are based on the same sample, the following control variables are significant with the expected signs: FDI inward stock, Gross Capital Formation, GDP per capita growth, FDI as a percentage of GDP, remittances as a percentage of GDP, Time of Business Starting, GDP of home country, ODA as a percentage of GDP, Population growth, and International trade as a percentage of GDP. Table 6 reports the standardised coefficients respectively for each model.

[Insert Table 6 here]

Model 1, the baseline model, is typical of FDI gravity models. This presents the results for all possible bilateral relationships in the data. Model 2 tests whether, controlling for all other factors, the colonial relationship is significant in explaining the variation in bilateral FDI flows. As indicated above, this is a very restrictive test, as we control not only for FDI into the country in general, but also the stock of FDI from a given source country, which is by some margin the most significant factor. Because the variables are standardised the reported estimates cannot be interpreted as elasticities. However, some interesting features stand out, for example, for every \$1million of FDI stock a country has from a given source country, that would be expected to increase inflows of FDI by some \$50,000. This illustrates the importance of history in our model,

which is an important feature of an appropriately specified gravity model and highlights the fact that we are explaining FDI flows after controlling for this.

The coefficient on Ex-colonial Relationship is as expected positive and significant ($p < 0.10$), consequently, we have support for H1 that colonial ties are positively and significantly related to inward FDI.

Model 3, which replaces the colonial dummy with a series of country level colonial power dummies, shows that the variable for the UK is positive and significant ($p < 0.01$). This finding supports H2, which argues that the UK is more likely to exhibit the colonial relationship in explaining FDI flows than the other colonisers. Using the marginal effects estimated at the mean, the results show that if the country was a former colony of Britain, then that is expected to increase FDI from Britain by some \$570m per year, *ceteris paribus*. Although the coefficient for France is also positive and significant ($p < 0.01$), it is noticeable that the coefficient for Britain is almost seven times larger than that for France, indicating the stronger relationship for the UK. It may also be noted that the coefficients for Italy, Belgium and Iberia are negative and significant ($p < 0.1$ and < 0.01 respectively). On average however, if a country had been colonised by another European country, that would now be expected to increase FDI from that country by just under \$1m a year. These findings highlight the importance especially of the British and French colonial relationships in explaining inward FDI. When controlling for history (through the FDI Inward Stock variable), as well as for other relationships such as aid and remittances, both Britain and France are much more likely to invest in their former colonies than elsewhere in Africa. These relationships clearly bestow a degree of country level advantage on Britain and France when it comes to investing in their former colonies. Taken together, these results highlight some important findings in terms of the nature of the relationship between (developed) home countries, and (developing) host countries

in explaining FDI flows. Earlier literature has focused on a number of proxies for the strength or longevity between two countries, using measures such as remittances or aid flows. Our results nuance these relationships, examining the importance of colonial ties, as well as more modern institutional arrangements. For example, Model 3 also shows that along with colonial relationships, the coefficient of Bilateral Investment Treaty is positive and significant, while the coefficient of net aid flows is not significant. This suggests that institutional links between countries are more important in explaining FDI flows than relationships hitherto characterised by diaspora effects. Model 4 shows the effect on FDI flows of the time period of colonization and the period of time since independence, for only those countries who have had a coloniser. As noted, by definition this reduces the sample size considerably, and Models 1, 2 and 3 are not directly comparable with Model 4 due to the fact they are estimated on different samples. The coefficient on Period of Colonial Rule is negative and significant ($p < 0.01$) providing support for H3, which posits that there will be a negative relationship between the length of time the country was a colony and the extent of inward FDI from the former coloniser. There is also support for H4, in that the coefficient on the variable Period Since Independence is negative and significant ($p < 0.01$), whereas the coefficient on the Period Since Independence Squared is positive and significant ($p < 0.01$). This indicates that although there was a negative impact on FDI inflow following independence, this negative effect declines and reverses over time. The significant coefficients on the time period since independence and the time period since independence squared implies that inward FDI to African ex-colonies from former colonisers initially decreases following independence, but then increases approximately 46 years after independence, as shown in Figure 1.

[Insert Figure 1 Here]

Robustness testing

A key contribution of this paper is to separate the importance of history from more obvious institutional or cultural ties. For this reason, we seek to control for the past stock of bilateral FDI, to allow for the fact that countries with higher stocks of inward investment may continue to attract such investment. The previous stock is one way of doing this, as by definition this captures all previous influences. However, an alternative is to seek to capture the FDI up to the end of colonisation and explain the importance of bilateral links since then. We therefore re-ran the model, replacing the lagged stock with value of FDI stock in 1980. The results are robust to this change in specification.

Heterogeneity of data is a major issue in empirical work employing cross-sectional country analysis. Fixed effect panel data estimation allows for the influence of country specific characteristics. For three equations, the random-effects estimator rejects the restriction of fixed effects. However, the coefficients could be biased due to the presence of serial correlation in the panel data. The standard ‘clustering’ algorithm is used to allow for this, with the most common approach, clustering on country pairs being our preferred option, given that we are seeking to explore pairwise relationships - see, for example, Petersen (2008). We also clustered on host country, and also different regions of Africa. Our results are robust to these alternatives, and the difference between the clustered and non-clustered standard errors is small. As one would expect, results without clustering have slightly smaller standard errors, so we report the results with clustering.

Discussion and Conclusion

Based on the prior colony-coloniser relationship between African and European countries, we consider the effects of the historically determined relational factors on FDI inflows from colonisers

to their former colonies. Using the lens of institutional theory, we show how the institutional framework established through historical ties conditions the relationship between related countries. Specifically, the historic colonial ties and resulting formal and informal institutional relationships by conditioning the liability of foreignness of the firms from coloniser countries in former colonies facilitates greater FDI flows from the coloniser. Essentially this comes about by mitigating the liability of foreignness experienced by the colonisers' MNEs. We thus contribute to institutional theory in recognising the importance of institutions developed through historic ties in helping determine the strategic choice of MNEs.

Current institutions having been shaped by colonial institutions underscores the endurance of historical ties and their effects on contemporary economic relationships. The positive prospects of FDI are a consequence of the reduced incidence of the costs of the liability of foreignness. In seeking to answer *how* colonial ties between European colonisers and their African colonies influence the flow of FDI between metropole and colony countries, we have reasoned that historical ties can reduce the degree of LOF, offering investing MNEs from the former coloniser advantages not available to other foreign MNEs. Relatively few prior studies have investigated whether the historic ties between two nations is important for FDI, and specifically in the context of African colonisation, consequently we make a new contribution to the literature, which is elaborated below.

The goal of the study was to examine empirically *how* colonial ties influence inward FDI from European colonisers to their former colonies in Africa. In achieving this goal, we make several contributions to the literature. First, we confirm the basic argument of the paper that prior colonial relationships lead to greater inward FDI. As far as we are aware this is the first study that specifically examines inward FDI from the European colonisers to their former African colonies.

This study therefore adds to understanding of FDI in Africa, a continent that ‘has remained essentially off researchers’ radar screen’ (Zoogah et al., 2015: 7).

Our evidence that the colonial legacy has an influence on FDI, suggests a path dependence effect of colonisation on FDI, and signifies that although institutions may be mutable (North (1995: 56) notes that ‘the formal rules can be changed overnight, the informal norms change only gradually’), their effects may endure. Consequently, we further add to the literature on how institutions matter in the context of historical ties. However, this contribution on its own offers too simplistic a view. It is necessary to nuance this broad finding by unpacking the nature of the colonial relationship. Our findings are nuanced through recognising two aspects of the historical tie. These nuanced aspects provide new perspectives on historic ties, which have been under researched in the international business literature.

First, the nature of the colonial experience dependent on the specific European coloniser. We acknowledge that the impact of colonisation on FDI by different colonisers was relatively heterogeneous, a feature which is not captured in studies which gauge the effect of colonisation by simply including a dummy variable for a prior colonial tie in empirical work. We demonstrate that the colonial relationship with Britain, the country which engaged in institutional development to a greater extent than the other imperial powers, drives inward FDI to its former colonies more than the prior colonial ties of the other European colonisers. In doing so we show that coloniser effects are not homogeneous and that future empirical work considering such effects should avoid treating all coloniser-colony relationships as being the same.

The second aspect of the colonial tie acknowledges the fact that a colonial relationship may be either beneficial or detrimental to the liability of foreignness of the colonisers’ MNEs, and indeed, over time both beneficial and detrimental characteristics may be experienced. The evolution of the

relationship thus conditions the extent to which the liability of foreignness is either elevated or alleviated by the historic tie. Consequently, we make a further contribution by unpacking the effect on FDI of both the length of the colonial period and the time period since independence. These aspects of the colonial relationship on inward FDI have not been examined in the prior literature. The effects of the length of the colonial period and the time period since independence on inward FDI to former colonies by the colonising countries is contentious, in the sense of acting both to encourage and to discourage FDI from the coloniser to the former colonies, resulting in uncertainty as to the expected sign on the respective coefficients. We find that the length of the colonial period has a negative effect on FDI flows from the coloniser, but that the period of independence has a U-shaped relationship, with the initial negative factors associated with the colonial history eventually being outweighed by the positive factors associated with the enduring relation between the respective countries. These are new contributions which add to our understanding of how historical ties effect FDI.

The implications of the study for practice largely hinge on the realisation by managers of MNEs from coloniser countries that the colonial heritage may provide an advantage in terms of the compatibility of formal and informal institutions between colonist and coloniser nations. This advantage of the colonial relationship can mitigate the liability of foreignness, such that the MNE from a former coloniser may face fewer coordination, transaction and other costs associated with the liability of foreignness compared to non-colonist MNEs. Perceiving this cost advantage may induce MNE managers to initiate or further engage in FDI. A caveat is necessary, however, because this positive view needs to be tempered by the actual experience of colonisation and the prevailing view of the colonial relationship by the colony country time at a particular point in time.

As previously noted, this may have been negative and therefore alienating for former colonist MNEs, although as again noted this effect tends to erode over time.

It is widely recognised that FDI into Africa is at suboptimal levels, and well below the levels needed for the continent to achieve the millennium development goals. Much of the explanation of this situation is founded on institutional quality or institutional distance. The colonial relationship offers both a specific view of institutional distance and also a unique lens through which to view the theoretical construct of LOF. With regard to the question of FDI to Africa, is there a colonial legacy? We show how colonial history illustrates both efficiency and legitimacy effects on FDI inflows. While colonial history established similar institutions, therefore enhancing efficiency in FDI, the length of colonial period and independence illustrates the legitimacy concerns against former colonisers. Our findings indicate that inward FDI to former colonies is positively associated with prior colonial ties, but the nature and influence of these historical ties surfaced in this study are more nuanced and complex than previously considered.

Limitations and Suggestions for future research

As with all studies, this paper has some limitations, which also provide opportunities for future research. While we have adopted institutional theory as the theoretical lens of the study, it would be useful for future research to consider other theoretical perspectives to better understand the effects of colonisation, including the length of the colonial period, and the time period since independence, as contingency factors on inward FDI. It may be necessary to draw on work in psychology, sociology, political science, or some other field, in order to achieve this.

It should be clear that this study has not developed a model that takes account of all influences determining FDI to countries in Africa. Rather it has focused on a coherent, yet limited, set of independent variables, because the main goal was to show the influence of prior colonial ties not to identify all possible predictors of FDI. Future studies could examine whether other variables are important in determining FDI to Africa in the context of former colonial ties besides the ones identified in this study. For instance, The British, French, and Spanish had very different colonial philosophies, with the British being more decentralised and flexible in their colonial approach, allowing colonies to adopt the institutions that best suited their situation, compared to the greater centralisation and bureaucratisation of the French and Spanish (Grier, 1999). The established governance framework is likely to be an important determinant of FDI especially for developing countries. Dysfunctional institutions and corruption by increasing the cost of doing business will diminish FDI activity, especially by Western MNEs (Desai et al., 2004); poor property rights protection increases the chance of expropriation of a firm's assets making FDI less likely (Blonigen, 2005). The effect of the resulting differences in established colonial institutions and customs on FDI would therefore be worthy of investigation.

The study does not take into account the uneven distribution of FDI inflow to Africa among the five sub-regions and countries of the continent. Unpacking the distribution of FDI inflows among the sub-regions and recipient countries by the former colonisers would provide a more nuanced understanding of the dynamics of FDI by the former colonisers. The study also does not take account of the different forms of FDI, which includes investment in cross-border mergers and acquisitions, reinvested earnings, greenfield investments and intracompany loans from parent firms. It would be fruitful to untangle the aggregate FDI figures in order to obtain a better perspective on the form of FDI arising from the former colonisers. This could be extended to

examine the extent to which the resource-seeking and market-seeking motives for FDI vary between former colonisers. It would be similarly useful to gain a better understanding of the sectoral distribution of the FDI, for instance, between the primary sector, manufacturing and services.

This study did not examine in detail the nature of decolonisation. Although it has been recognised that where the nature of separation between the colony and the coloniser is problematic this may negatively affect FDI from the coloniser, this has not been examined in detail. Further, the ongoing relationship between the former colony and coloniser has been largely neglected. A good relationship is expected to favour FDI and vice versa. Studies that consider in depth the nature of the separation and the ongoing relationship between the prior colony and the coloniser as determinants of FDI would make a useful contribution to the understanding of the determinants of FDI.

This study has considered the effect on FDI of colonial ties between European colonisers and countries in Africa. Our findings imply a complex relationship between former colonial ties and inward FDI from colonisers given that the experience of colonisation was heterogeneous and the effects of the length of the colonial period and the time period since independence on inward FDI to former colonies by the colonising countries is contentious. An obvious extension of this study is to consider these aspects of colonisation beyond the case of Africa. In particular, it would be useful to study the effect of the colonial relationship on FDI in the case of former colonies in Asia and the Americas.

Recently, FDI from former colonies has been going to the former coloniser. For instance, the acquisitions of British firms by Indian multinationals, the investments in key sectors of Spain by multinationals and the growing influence of Angolan investors over Portuguese companies (Pal,

2017). This aspect of the former colonial tie warrants greater investigation as a further development of the examination of the importance of historical ties.

References

- Acemoglu, D., S. Johnson and J.A. Robinson, J. A. (2001) The colonial origins of comparative development: An empirical investigation. *The American Economic Review*, 91(5): 1369-1401.
- Alesina, A., and Dollar, D. (2000) Who gives foreign aid to whom and why? *Journal of Economic Growth*, 5(1): 33-63.
- Alfaro, L, S. Kalemli-Ozcan and V. Volovych (2008) Why doesn't capital flow from rich to poor countries? An empirical investigation. *Review of Economics and Statistics*, 90(2): 347-368.
- Allen, R. C. (2011) *Africa in global economic history: A very short introduction*. Oxford University Press.
- Bertocchi, G. and Canova, F. (2002) Did colonization matter for growth? An empirical exploration into the historical causes of Africa's underdevelopment. *European Economic Review*, 46, 1851-1871.
- Blonigen, B. A. (2005) A review of the empirical literature on FDI determinants. *Atlantic Economic Journal*, 33, 383-403.
- Boettke, P., C. Coyne, and P. Leeson (2008) Institutional stickiness and the new development economics. *American Journal of Economics and Sociology*, 67(2), 331-358.
- Brown, D. S. (2000). Democracy, colonization, and human capital in sub-Saharan Africa. *Studies in Comparative International Development*, 35(1): 20-40.
- Brysk, A., Parsons, C. and Sandholtz, W. (2002). After empire: National identity and post-colonial families of nations. *European Journal of International Relations*, SAGE Publications and ECPR, 8(2): 267-305.
- Calhoun, M. A. (2002) Unpacking liability of foreignness: identifying culturally driven external and internal sources of liability for the foreign subsidiary. *Journal of International Management*, 8(3): 301-321.
- Cameron, A.C. and D.L. Miller (2015) A Practitioner's Guide to Cluster-Robust Inference. UC Davis, available at http://cameron.econ.ucdavis.edu/research/Cameron_Miller_JHR_2015_February.pdf
- Chaney, T. (2008) Distorted gravity: the intensive and extensive margins of international trade. *American Economic Review*, 98(4): 1707-21.
- Choi, C. (2004) Foreign direct investment and income convergence, *Applied Economics*, 36(10): 1045-1049
- Chowdhury, R. H. and M. Maung (2018) Historical ties between nations: How do they matter in cross-border mergers and acquisitions? *International Review of Economics & Finance*, 58: 30-48.
- Collier, R.B. (1982) *Regimes in tropical Africa*. University of California Press: Berkeley & Los Angeles.

George, G., C. Corbishley, J.N.O. Khayesi, M.R. Haas and L.Tihanyi (2016) Bringing Africa In: Promising Directions for Management Research. *Academy of Management Journal*, 59(2): 377-393.

Davis, L.E. and North, D.C. (1971). *Institutional change and American economic growth*. Cambridge: Cambridge University Press.

Desai, M. A., Foley, C. F. & Hines Jr., J. R. (2004). A multinational perspective on capital structure choice and internal capital markets. *Journal of Finance*, 59(6), 2451-2488.

Djankov, S., R. La Porta, F. Lopezde-Silanes and A. Shleifer (2003) Courts. *Quarterly Journal of Economics*, 118(2): 453–517.

Doh, J. P., K. Bunyaratavej and E.D. Hahn (2009) Separable but not equal: The location determinants of discrete services offshoring activities. *Journal of International Business Studies*, 40, 926–943.

Driffield, N.L. and Munday, M.C. (2000) Industrial performance, agglomeration, and foreign manufacturing investment in the UK. *Journal of International Business Studies*, 31(1):21-37.

Dunning, J. H. (1998) Location and the multinational enterprise: A neglected factor? *Journal of International Business Studies*, 29: 45-66.

Egger, P., and Pfaffermayr, M. (2004). The impact of bilateral investment treaties on foreign direct investment. *Journal of Comparative Economics*, 32(4): 788–804.

Ellis, K. M., B. T. Lamont, R. M. Holmes Jr., S. Ro, L. Faifman, K. DeGhetto and H.Parola (2018) Institutional determinants of ownership positions of foreign acquirers in Africa. *Global Strategy Journal*, 8, 242–274.

Export.gov (2017) www.export.gov/article?id=Angola-Foreign-Exchange-Controls. Accessed November 2017.

Ferguson, N. (2004) *Empire: How Britain Made the Modern World*. Penguin: London.

Findlay, R. & O'Rourke, K. H. (2007). *Power and plenty: Trade, war, and the world economy in the second millennium*. Princeton, NJ: Princeton University Press.

Frankel, J. and A. Rose (2002) An estimate of the effect of common currencies on trade and income. *Quarterly Journal of Economics*, 117(2): 437-466.

Ghemawat, P. (2001). Distance still matters: The hard reality of global expansion. *Harvard Business Review*, 79(8): 137-147.

Giuliano, P. and Ruiz-Arranz, M. (2009) Remittances, financial development and growth. *Journal of Development Economics*, 90(1): 144–152.

Globerman, S. and D. Shapiro (2009) Economic and strategic considerations surrounding Chinese FDI in the United States. *Asia Pacific Journal of Management* 26:163–183.

Greve, H. R., and H. Rao (2014) History and the present: Institutional legacies in communities of organizations. *Research in Organizational Behavior*, 34, 27–41.

- Grier, R. (1997). The effect of religion on economic development: A Cross national study of 63 former colonies. *Kyklos*, 50, 47–62.
- Grier, R. (1999). Colonial legacies and economic growth. *Public Choice*, 98(3/4): 317-335.
- Guiso, L., P. Sapienza and L. Zingales (2009) Cultural biases in economic exchange. *Quarterly Journal of Economics*, 124(3): 1095–1131.
- Han, C. M. (1989) Country image: Halo or summary construct? *Journal of Marketing Research*, 26(May): 222–229.
- Harzing, A.-W., and M. Pudelko (2016) Do we need to distance ourselves from the distance concept? Why home and host country context might matter more than (cultural) distance. *Management International Review*, 56(1): 1–34.
- Henisz, W.J., S. Dorobantu, L. Narley (2014) Spinning gold: the financial returns to stakeholder engagement. *Strategic Management Journal* 35(12): 1727–1748.
- Holmes, R. M., T. Miller, M.A. Hitt and M.P. Salmador (2013). The Interrelationships Among Informal Institutions, Formal Institutions, and Inward Foreign Direct Investment. *Journal of Management*, 39(2): 531–566.
- Hoskisson, R., L. Eden, C. Lau and M. Wright (2000). Strategy in emerging economies. *Academy of Management Journal*, 43, 449–467.
- Hymer, S. (1976) *The international operations of national firms*. Cambridge, MA: MIT Press.
- Iammarino, S. and McCann, P. (2013). *Multinationals and economic geography: Location, technology and innovation*. Cheltenham, UK: Edward Elgar.
- Jones, G. (1996) *The evolution of international business: An introduction*. London: Routledge.
- Jones, P. (2013) History matters: New evidence on the long run impact of colonial rule on institutions. *Journal of Comparative Economics*, 41(1): 181–200.
- Jones, G., and T. Khanna (2006) Bringing history (back) into international business. *Journal of International Business Studies*, 37(4): 453-468.
- Kandil, M. (2011). Financial flows to developing and advanced countries: Determinants and implications. *International Journal of Development Issues*, 10(1): 60-91.
- Kedia, B.L. and T. V. Bilgili (2015) When history matters: The effect of historical ties on the relationship between institutional distance and shares acquired. *International Business Review* 24(6): 921-934.
- Kim, C, and J. Chung (1997) Brand popularity, country image and market share: an empirical study. *Journal of International Business Studies* 28: 361–386.
- Kleiman, E. (1976) Trade and the Decline of Colonialism, *Economic Journal*, 86(3): 459-480.

Klerman, D. M., Mahoney, P. G., Spamann, H. and Weinstein, M. I. (2011). Legal origin or colonial history? *Journal of Legal Analysis*, 3(2): 379-409.

Kostova, T. 1996. Success of transnational transfer of organizational practices within multinational companies, PhD Dissertation, University of Minnesota.

Kostova, T. and S. Zaheer (1999) Organizational legitimacy under conditions of complexity: The case of the multi- national enterprise. *Academy of Management Review*, 24: 64-81.

Kostova, T., S. Beugelsdijk, W. R. Scott, V.E. Kunst, C. H. Chua and M. van Essen (2019) The construct of institutional distance through the lens of different institutional perspectives: Review, analysis, and recommendations. *Journal of International Business Studies*, online.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. W. (1998) Law and finance. *The Journal of Political Economy*, 106 (6): 1113-1155.

La Porta, R., F. Lopez-de-Silanes, C. Pop-Eleches and A. Shleifer (2004) Judicial Checks and Balances. *Journal of Political Economy*, 112(2): 445–70.

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The economic consequences of legal origins. *Journal of Economic Literature*, 46(2): 285–332.

Lee, A. and Schultz, K. A. (2012). Comparing British and French colonial legacies: A discontinuity analysis of Cameroon. *Quarterly Journal of Political Science*, 7(4): 365-410.

Liou, R. and R. Rao-Nicholson (2017) Out of Africa: The role of institutional distance and host-home colonial tie in South African Firms' post-acquisition performance in developed economies. *International Business Review* 26:1184–1195.

Lundan, S. M. and G. Jones (2001) The "Commonwealth effect" and the process of internationalisation. *World Economy*, 24(1): 99-118.

Luo, Y. and J. M. Mezas (2002) Liabilities of foreignness: Concepts, constructs, and consequences. *Journal of International Management* 8: 217–221.

Makino, S. and E. W.K. Tsang (2011) Historical ties and foreign direct investment: An exploratory study. *Journal of International Business Studies*, 42(4): 545-557.

Matyas, L. (1998). The gravity model: Some econometric considerations. *World Economy*, 21(3):397-401.

Mezas, J.M. (2002) How to identify liabilities of foreignness and assess their effects on multinational corporations. *Journal of International Management* 8(3): 265–282.

Mizuno, N and R. Okazawa (2009) Colonial experience and postcolonial underdevelopment in Africa. *Public Choice*,141, 405–419.

Moeller, M., M. Harvey, D. Griffith and G. Richey (2013) The impact of country-of-origin on the acceptance of foreign subsidiaries in host countries: an examination of the 'liability-of-foreignness'. *International Business Review* 22(1): 89–99.

- Mohamed, S. E. and M.G. Sidiropoulos (2010). Another look at the determinants of foreign direct investment in MENA countries: An empirical investigation. *Journal of Economic Development*, 35(2): 75-95.
- Moss, T. J., V. Ramachandran and M. K. Shah (2004) Is Africa's Skepticism of Foreign Capital Justified? Evidence from East African Firm Survey Data. *World Bank Center for Global Development*, Working Paper 41, June.
- Neumayer, E. and Spess, L. (2005). Do bilateral investment treaties increase foreign direct investment to developing countries? *World Development*, 33(10): 1567-1585.
- North, D. C. (1990) *Institutions, institutional change, and economic performance*. New York: Cambridge University Press.
- North, D.C. (1991) Institutions. *Journal of Economic Perspectives* 5(1): 97–112.
- North, D.C. (1992) Institutions, Ideology, and Economic Performance. *Cato Journal*, 11(3): 477-488.
- North, D.C. (1995) The New Institutional Economics and Third World Development in *The New Institutional Economics and Third World Development*, J. Harriss, J. Hunter, C. Lewis (Eds.) London: Routledge. Chapter 2: 49-57.
- North, D.C. (2005). *Understanding the process of economic change*. Princeton: Princeton University Press.
- Nunn, N. (2007) Historical legacies: A model linking Africa's past to its current underdevelopment. *Journal of Development Economics*, 83(1): 157–175.
- Pajunen, K. (2008) Institutions and inflows of foreign direct investment: A fuzzy-set analysis. *Journal of International Business Studies*, 39: 652-669.
- Pal, T. (2017) Recent trends in foreign direct investment in the global economy <http://blog.cei.iscte-iul.pt/?s=Timea+Pal>. Accessed November 2017.
- Peng, M. W. (2002) Towards an Institution-Based View of Business Strategy. *Asia Pacific Journal of Management*, 19, 251–267.
- Peng, M. W. (2003) Institutional transitions and strategic choices. *Academy of Management Review*, 28(2): 275-296.
- Peng, M. W., D.Y.L. Wang and Y. Jiang (2008) An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5): 920–936.
- Peng, M. W., Sun, S. L., Pinkham, B., & Chen, H. 2009. The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspectives*, 23(3): 63-81.
- Petersen, M.A. (2008). Estimating standard errors in finance panel data sets: Comparing approaches. *Review of Financial Studies*, 22(1): 435–480.
- Phillipson, R. H. L. (1992). *Linguistic imperialism*. Oxford: Oxford University Press.

Rangan, S., and Sengul, M. (2009) The influence of macro structure on the foreign market performance of transnational firms: The value of IGO connections, export dependence, and immigration links. *Administrative Science Quarterly*, 54(2): 229–267.

Rugman, A. (2010) Reconciling internalization theory and the eclectic paradigm. *Multinational Business Review*, 18 (1): 1-12.

Salomon, R. and Wu, Z. (2012) Institutional distance and local isomorphism strategy. *Journal of International Business Studies*, 43(4), 343-367.

Scott, W. R. (1995) *Institutions and organizations*. Thousand Oaks, CA: Sage.

Slangen, A. H. L. and S. Beugelsdijk, (2010) The impact of institutional hazards on foreign multinational activity: A contingency perspective. *Journal of International Business Studies*, 41(6): 980–995.

Tonoyan, V., R. Strohmeyer, M. Habib and M. Perlitz (2010) Corruption and Entrepreneurship: How Formal and Informal Institutions Shape Small Firm Behavior in Transition and Mature Market Economies. *Entrepreneurship Theory and Practice*, 34(5): 803-831

UNCTAD (2014). *World investment report. Investing in the SDGs: An action plan*. New York and Geneva: United Nations.

Yildiz, H. E. and C.F. Fey (2012). The liability of foreignness reconsidered: New insights from the alternative research context of transforming economies. *International Business Review*, 21(2): 269-280.

Young, C. (1994). *The African colonial state in comparative perspective*. New Haven CT: Yale University Press.

Zaheer, S. (1995) Overcoming the liability of foreignness. *Academy of Management Journal* 38(2): 341-363.

Zaheer, S. (2002) The liability of foreignness, redux: a commentary. *Journal of International Management*, 8: 351–358.

Zaheer, S. and E. Mosakowski (1997) The dynamics of the liability of foreignness: A global study of survival in financial services. *Strategic Management Journal*, 18(6): 439-463.

Zhou, N. and M. F. Guillen (2016) Categorizing the liability of foreignness: ownership, location, and internalization specific dimensions. *Global Strategy Journal*, 6: 309–329.

Zoogah, D.B., M.W. Peng and H. Woldu (2015) Institutions, resources, and organizational effectiveness in Africa. *The Academy of Management Perspectives*, 29(1): 7–31.

Figure 1 The Trend of Inward FDI in Former African Colonies since Independence

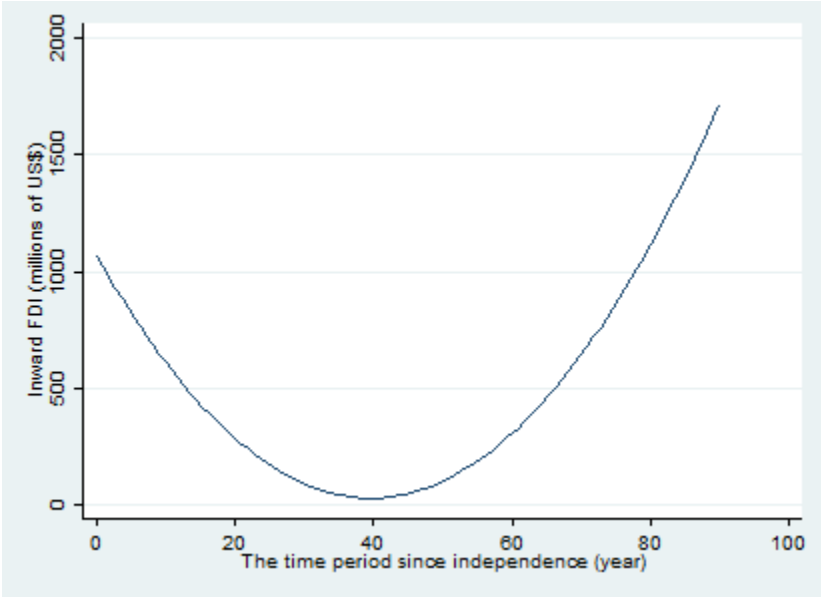


Table 1 Operational Definition of Variables

Variable	Operational Definition
FDI Inward Flow	The inflow of FDI to countries in Africa
FDI Inward Stock	The bilateral FDI stock which captures the propensity of one country to invest in another in the past
GCF	The gross capital formation of African country
GDP per capita Growth	The gross domestic product per capita growth of African country
FDI % GDP	FDI as a percentage of GDP
ODA % GDP	ODA (official overseas aid) as a percentage of GDP
REM % GDP	REM (Remittances) as a percentage of GDP
Population Growth	Population growth
Length of time needed to start a business	The length of time it is estimated to start a business in the country
International Trade % GDP	The international trade as a percentage of GDP
GDP of FDI Source Country	The GDP of the home country
Net Aid Flows	The bilateral net aid flows
Natural Resource % GDP	The natural resource as a percentage of GDP
Period of Colonial Rule	The period of colonial rule
Period since Independence	The period since independence
Period since Independence Squared	The period since independence squared
Bilateral Investment Treaty dummy	The dummy Bilateral Investment Treaty (BIT) between the home and host countries
Ex-colonial Relationship dummy	The dummy of a former bilateral colonial relationship
UK colonial dummy	The dummy that a former coloniser is the UK
France colonial dummy	The dummy that a former coloniser is France
Belgium colonial dummy	The dummy that a former coloniser is Belgium
Italy colonial dummy	The dummy that a former coloniser is Italy
Iberia colonial dummy	The dummy that a former coloniser is Spain or Portugal

Table 2 Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
FDI Inward Flow	14,964	24.07674	284.718	-3156.36	16791.74
FDI Inward Stock	14,964	213.6064	2070.401	-1527.28	80438.77
GCF	14,068	1.17E+10	1.88E+10	1.61E+07	8.17E+10
GDP per capita Growth	14,798	2.775668	6.404149	-62.21435	104.6576
FDI % GDP	14,964	4.068277	5.597085	-5.496736	64.3841
ODA % GDP ^{iv}	14,964	6.520849	7.35785	-0.251879	60.60922
REM % GDP ^v	14,964	2.847461	5.168059	0	59.31327
Population Growth	14,964	2.095381	0.952945	-2.628656	4.974578
Length of time needed to start a business	11,419	37.35691	36.59003	5	260
International Trade % GDP	14,849	78.38058	35.90643	20.96405	351.1057
GDP of FDI Source Country	14,363	1.22E+12	2.70E+12	2.73E+08	1.62E+13
Net Aid Flows	14,964	1.27E+07	6.95E+07	-9.82E+07	3.19E+09
Natural Resource % GDP	14,750	13.57546	15.32233	0.0039506	85.32464
Period of Colonial Rule	504	128.6429	118.4542	33	506
Period since Independence	504	54.7619	8.853505	37	81
Period since Independence Squared	504	3077.095	1016.633	1369	6561
Bilateral Investment Treaty dummy	14,964	0.3841219	0.4864032	0	1
Ex-colonial Relationship dummy	14,964	0.0336808	0.1804123	0	1
UK colonial dummy	14,964	0.0112269	0.105364	0	1
France colonial dummy	14,964	0.0152366	0.122497	0	1
Belgium colonial dummy	14,964	0.0016038	0.040017	0	1
Italy colonial dummy	14,964	0.0016038	0.040017	0	1
Iberia colonial dummy ^{vi}	14,964	0.0040096	0.063197	0	1

Table 3 Correlation between variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 FDI Inward Flow	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 FDI Inward Stock	0.47	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 GCF	0.12	0.15	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 GDP per capita Growth	-0.01	0.00	-0.03	1	-	-	-	-	-	-	-	-	-	-	-	-	-
5 FDI % GDP	0.00	-0.02	-0.16	0.15	1	-	-	-	-	-	-	-	-	-	-	-	-
6 ODA % GDP	-0.05	-0.07	-0.40	-0.02	0.08	1	-	-	-	-	-	-	-	-	-	-	-
7 REM % GDP	0.01	-0.02	-0.06	-0.01	-0.05	-0.04	1	-	-	-	-	-	-	-	-	-	-
8 Population Growth	-0.01	-0.05	-0.20	-0.02	0.10	0.54	-0.13	1	-	-	-	-	-	-	-	-	-
9 Time of Business Starting	-0.04	-0.03	-0.22	-0.03	0.02	0.20	0.04	0.20	1	-	-	-	-	-	-	-	-
10 International Trade % GDP	-0.03	-0.01	-0.21	0.10	0.39	-0.26	0.18	-0.44	0.15	1	-	-	-	-	-	-	-
11 GDP of FDI Source Country	0.08	0.10	-0.06	-0.01	0.05	0.07	0.01	0.08	0.05	0.03	1	-	-	-	-	-	-
12 Net Aid Flows	0.09	0.08	-0.01	0.00	0.00	0.10	0.01	0.09	0.04	-0.06	0.28	1	-	-	-	-	-
13 Natural Resource % GDP	0.02	0.00	0.15	0.08	0.06	-0.11	-0.14	0.25	0.24	0.02	0.08	0.05	1	-	-	-	-
14 Period of Colonial Rule	-0.01	0.01	0.00	0.06	0.23	0.31	0.09	-0.19	0.26	0.13	-0.55	-0.10	-0.21	1	-	-	-
15 Period since Independence	0.23	0.03	0.17	0.01	-0.20	-0.20	-0.06	0.15	-0.29	-0.31	0.34	0.06	0.20	-0.46	1	-	-
16 Bilateral Investment Treaty Dummy	0.06	0.06	0.15	0.00	-0.05	-0.14	0.01	-0.13	-0.08	-0.06	0.01	0.07	0.05	0.30	-0.07	1	-
17 Ex-colonial Relationship Dummy	0.14	0.17	-0.05	-0.02	0.02	0.06	0.01	0.04	0.05	0.00	0.05	0.24	0.03	.	.	0.09	1

Table 4 Collinearity Diagnostics

Variable	VIF	SQRT VIF	Tolerance	R-squared
FDI Inward Flow	2.52	1.59	0.3969	0.6031
FDI Inward Stock	2.69	1.64	0.3711	0.6289
GCF	3.14	1.77	0.319	0.681
GDP per capita Growth	1.08	1.04	0.9255	0.0745
FDI % GDP	1.51	1.23	0.6606	0.3394
ODA % GDP	2.32	1.52	0.4312	0.5688
REM % GDP	1.63	1.28	0.6125	0.3875
Population Growth	2.41	1.55	0.4148	0.5852
Time of Business Starting	1.36	1.17	0.7351	0.2649
International Trade % GDP	3.05	1.75	0.3279	0.6721
GDP of FDI Source Country	2.83	1.68	0.3533	0.6467
Net Aid Flows	1.12	1.06	0.8943	0.1057
Natural Resource % GDP	1.69	1.3	0.5903	0.4097
Period of Colonial Rule	1.88	1.37	0.533	0.467
Period since Independence	1.82	1.35	0.5498	0.4502
Bilateral Investment Treaty Dummy	1.71	1.31	0.5847	0.4153
Mean VIF	2.05			

Table 5 Comparison of FDI between Country Pairs with Colonial Ties and Country Pairs without Colonial Ties

	Variable	Obs.	Mean	Std. Dev.	Min	Median	Max
Country Pairs with Colonial Ties	FDI Inward Flow	504	234.22	879.38	-1050.83	5.6	8035.74
	FDI Inward Stock	504	2105.74	9247.02	0	36.59	80438.77
Country Pairs without Colonial Ties	FDI Inward Flow	14460	16.75	235.36	-3156.36	0	16791.74
	FDI Inward Stock	14460	147.66	1154.21	-1527.28	0	51193

Table 6 Regression Results^{vii}

Dependent Variable	Model 1		Model 2		Model 3		Model 4	
FDI Inward Flow	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
FDI Inward Stock	0.153**	0.016	0.143**	0.011	0.135**	0.014	0.368***	0.000
(t-1)	(0.0639)		(0.0560)		(0.0548)		(0.0914)	
GCF	0.0267*	0.055	0.0335*	0.055	0.0295*	0.069	0.850	0.400
(t-1)	(0.0139)		(0.0174)		(0.0162)		(1.010)	
GDP per capita Growth	0.0147**	0.046	0.0175**	0.019	0.0146**	0.045	-0.0668**	0.034
(t-1)	(0.00740)		(0.00742)		(0.00731)		(0.0315)	
FDI % GDP	0.0291**	0.021	0.0286**	0.023	0.0304**	0.014	0.0647	0.105
(t-1)	(0.0126)		(0.0126)		(0.0124)		(0.0399)	
ODA % GDP	-0.0274**	0.039	-0.0257*	0.054	-0.0202*	0.081	-0.0849	0.388
(t-1)	(0.0133)		(0.0133)		(0.0116)		(0.0982)	
Remittance % GDP	0.0255***	0.003	0.0227***	0.003	0.0192***	0.006	0.0688***	0.001
(t-1)	(0.00848)		(0.00776)		(0.00695)		(0.0213)	
Population Growth	-0.0242**	0.050	-0.0261*	0.059	-0.0222*	0.064	-0.0857**	0.047
(t-1)	(0.0123)		(0.0138)		(0.0120)		(0.0431)	

Time of Business Starting (t-1)	-0.0139*** (0.00495)	0.005	-0.0157*** (0.00520)	0.003	-0.0138*** (0.00503)	0.006	-0.0821 (0.0606)	0.175
International Trade % GDP (t-1)	-0.0475** (0.0198)	0.017	-0.0459** (0.0210)	0.029	-0.0485** (0.0232)	0.037	-0.0781*** (0.0286)	0.006
GDP of Home Country (t-1)	0.0417*** (0.0157)	0.008	0.0407*** (0.00840)	0.000	0.0372*** (0.00686)	0.000	-2.276* (1.241)	0.067
Net Aid Flows (t-1)	0.0637* (0.0346)	0.066	0.0459 (0.0373)	0.218	0.0482 (0.0363)	0.183	0.0187 (0.0273)	0.493
Natural Resource % GDP (t-1)	0.0211* (0.0122)	0.083	0.0169 (0.0111)	0.127	0.0211** (0.0102)	0.038	0.0182 (0.175)	0.918
Ex-colonial Relationship			0.132* (0.0755)	0.081				
Bilateral Investment Treaty (t-1)					0.0424*** (0.0123)	0.001	-0.149 (0.211)	0.480
Britain					0.193***	0.000	0.211***	0.000

	(0.0130)		(0.0321)	
France	0.0287***	0.000	0.124***	0.000
	(0.00685)		(0.0200)	
Iberia	-0.00405*	0.063	0.0924***	0.000
	(0.00218)		(0.00645)	
Italy	-0.00241***	0.000	-0.196***	0.000
	(0.000489)		(0.0443)	
Belgium	-0.00557*	0.072	0	
	(0.00310)		(.)	
Period of Colonial Rule			-0.360***	0.001
			(0.113)	
Period since Independence			-6.494***	0.000
			(1.075)	
Period since Independence Squared			8.025***	0.000
			(1.201)	

Constant	0.00970 (0.0225)	0.667	0.00874 (0.0168)	0.602	0.00655 (0.00670)	0.329	0.562 (0.768)	0.465
Mean of Dependent Variable	0.0132595		0.0132595		0.0132595		0.9621958	
SD of Dependent Variable	0.8890731		0.8890731		0.8890731		3.628362	
R-squared Within	0.0050		0.0052		0.0050		0.0184	
R-squared Between	0.5101		0.4157		0.4030		0.9775	
R-squared Overall	0.2635		0.2420		0.2528		0.6604	
Number of Observations	9076		9076		9076		315	
Number of Groups	1,117		1,117		1,117		38	
Clusters	132		132		132		5	

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix: Former European Colonisers and African Colonies included in the Analyses

France	Britain	Portugal	Belgium	Italy	Spain
Algeria (1830 -1962)	Botswana (1885-1966)	Angola (1575-1975)	Burundi (1916-1962)	Eritrea (1882-1941)	Equatorial Guinea (1885-1968)
Benin (1894-1960)	Egypt (1882- 1922)	Cape Verde (1642-1975)	Democratic Republic of Congo (1908-1960)	Libya (1911-1942)	
Burkina Faso (1895-1960)	Gambia (1816- 1970)	Guinea- Bissau (1687-1974)	Rwanda (1916-1962)		
Cameroon (1914- 1960)	Ghana (1621-1960)	Mozambique (1501-1975)			
Central African Republic (1893-1960)	Kenya (1888-1963)	Sao Tome & Principe (1470- 1975)			
Chad (1900-1960)	Lesotho (1888-1966)				
Comoros (1886-1960)	Malawi (1889-1964)				
Republic of Congo (1880-1960)	Mauritius (1810-1968)				
Cote d'Ivoire	Nigeria				

(1843-1960)	(1914-1960)				
Djibouti (1942-1946)	Seychelles (1794-1976)				
Gabon (1839-1960)	Sierra Leone (1787 -1961)				
Guinea (1849-1958)	South Africa (1806-1931)				
Madagascar (1896-1960)	Sudan (1898-1956)				
Mali (1880-1960)	Swaziland (1902-1968)				
Mauritania (1903-1960)	Tanzania (1916-1961)				
Morocco (1912-1956)	Uganda (1890-1962)				
Niger (1900-1960)	Zambia (1900-1964)				
Senegal (1817-1960)	Zimbabwe (1888- 1980)				
Togo (1914-1960)					

Tunisia (1881- 1956)					
-------------------------	--	--	--	--	--

Notes:

First date is date of colonisation, second date is date independence. We adopt 1980 – the founding of Zimbabwe - as the time of independence of Zimbabwe (Rhodesia) rather than its earlier UDI.

The study examines the former European colonies of Africa and so excludes Namibia (the former colony of South Africa) and also to avoid ambiguity excludes the joint British and Italian colony of Somalia. The countries of Ethiopia and Liberia did not experience European colonization and so are also excluded from the analysis. Data is not available for South Sudan.

In legal terms the political status of Botswana, Egypt, Lesotho, Swaziland and Zimbabwe was that of a British dependency and in the case of South Africa a dominion (see Bertocchi and Canova, 2002).

Footnotes

ⁱ Established in 1870, the Commonwealth is a voluntary association of 54 countries (formerly under British rule) including the UK. The Commonwealth aims to promote democracy, facilitate international negotiations between member countries and promote economic and social development (www.thecommonwealth.org).

ⁱⁱ As such the μ_i term includes the standard individual level heterogeneity that is a common problem with gravity models and is addressed using the fixed effects estimation. This is in itself a restriction of the more general γ_{it} term, and this restriction of fixed effects rather than random effects is tested using a Hausman test in the usual way.

ⁱⁱⁱ There are many variables that are added to the baseline gravity model in the literature, to test for example short run economic shocks, or the importance of infrastructure. We employed numerous other variables in our estimation, including inflation, differing measures of institutions, infrastructure, and exchange rates. These neither improved the specification or changed qualitatively any of our results. Our emphasis was to generate a parsimonious gravity equation, building for example on Matyas (1998) Chaney or (2008), and then to augment with our colonial variables of interest. To validate this, we performed standard variable addition tests, and the hypothesis that these variables may be excluded is not rejected.

^{iv} Net bilateral aid flows from DAC donors are the net disbursements of official development assistance (ODA) or official aid from the members of the Development Assistance Committee (DAC). Net disbursements are gross disbursements of grants and loans minus repayments of principal on earlier loans. ODA consists of loans made on concessional terms and grants made to promote economic development and welfare in countries and territories in the DAC list of ODA recipients.

^v The data available in the WDI for the variable migrant remittances are entitled ‘workers’ remittances, compensation of employees and migrant transfers’. Giuliano and Ruiz-Arranz (2009) use this measure and find that for some countries the inclusion of ‘compensation of employees’ (which is often payments to embassy staff, or the like) can bias the remittance data. We do not make these adjustments as they do acknowledge that the correlation pre- and post- adjustment remains at 0.92. In addition, we acknowledge that remittances through informal channels may be substantial.

^{vi} Due to the low number of colonies that Spain and Portugal had in Africa, this group is combined. The results however are not sensitive to this.

^{vii} The results in Table 6 are based on regressions using standardized data. We used both the standardized and unstandardized data to explore the lag length, and to compare inferences regarding the nature of the relationship between the durations of colonization and post-colonization and FDI. The estimations are consistent on this point. Unstandardized results are available from the authors on request.