

Neocolonialism

Resource extraction and the global distribution of wealth

Master Thesis

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Abstract

Literature on postcolonial economic development consists of a considerable variation of school of thought. One of the theories, that of neocolonialism, has not seen as much academic consideration as the rest. This while recent developments in postcolonial economic development have increased the focus on the role of historical colonialism in present-day unequal economic development. This, along with other perspectives on global inequality, have some conceptual ties to the neocolonial thesis. In addition, due to developments such as the Chinese belt-and-road initiative, the term has seen a resurgence in the media. For these reasons, this thesis aims to re-evaluate neocolonialism as an explanation for the global distribution of wealth. It does so with a statistical analysis of the idea that the continuation of colonial-era economic relations, centered around resource extraction, could explain the current global distribution of wealth. Statistical analysis shows that the neocolonial model is not very good at explaining resource dependency, but the same model does explain GDP variance.

Definitions

Metropole: “Home city” in the Roman Empire - in contrast to the conquered provinces. used first to refer to the city of Rome; later for the entire Italian peninsula. This term is used to distinguish between “Coloniser” and “colonised.” For example, the United States was a colony to the British metropole. Later, it became a metropole of its own, with colonial possessions in the Pacific and the Carribean.

Postcolonial: Refers to the period from decolonisation to present-day; the era in which colonial empires were no longer a significant factor in global political economy.

Neocolonial: Refers to postcolonial economic relations that are similar to colonial economic relations in function and outcome.

Resource dependency: Refers to the degree to which an economy is dependent on the extraction and export of natural resources.

I - Introduction

Within both the studies of economics and geography, the unequal geographical distribution of wealth or economic activity is a problem that is easily observed. The causes for the geographical differences in this regard, however, have been the subject of much debate for as long as the study of geography has existed. Already in the seminal geographical work *Geographica*, Greek philosopher Strabo (ca. 20 C.E./2014) attempted to explain the poverty of Iberia, despite its natural riches, as following:

Those who assert that there are more than a thousand cities existing in Iberia seem to me to be led into this by calling large villages "cities." The territory is not naturally capable of having many cities because of its poor land, remoteness, and wildness. Also, the life and activities of those [living there] – excluding those living on the coast of Our [Sea] – do not suggest this. They are fierce and live in villages – as do most of the Iberians – and the cities cannot easily tame them, as the majority of them live in the woods to the detriment of their neighbors.

Strabo (ca. 20 C.E./2014)

Adam Smith's *The Wealth of Nations*, the seminal work for contemporary economics, too, was written through the lense of geographical differences, and particularly the differences between countries as forces in the geographical distribution of wealth. Nonetheless, the answer to the question of what makes one country poorer than another has remained elusive.

In more recent years, the central question posed by "the wealth of nations" has had to incorporate the remaining existence of geographic differences in wealth in the postcolonial world. A number of explanations, such as dependency theory (Chase-Dunn, 1975; Bornschier & Ballmer-Cao, 1979) and the *reversal of fortune* thesis (Acemoglu et al., 2001; 2002), put the historical colonialism that defines the current postcolonial era front and center as an explanation for the current situation.

The term "neocolonialism" has also been employed at times to explain postcolonial economic development. Coined by philosopher Jean-Paul Sartre (Fatouros, 1965), this term has been used by some academics as a general framework that states wealthy countries exercise economic control over poor countries.

Ever since the introduction of the Chinese Belt and Road initiative, the term has seen a resurgence in the West. Van Mead (2018), for example, speaks of a "new type of colonialism" practiced by China in Africa. Van Mead echoes former U.S. Secretary of State Hillary Clinton's description of the Belt and Road initiative as a "new" kind of "colonialism" (Reuters, 2011) - a "neocolonialism" if you will. Meanwhile, this concept has been used so often in relation to western countries that commentators such as Rao (2000) have complained that the term is overused decades ago already, describing it as a "bite-sized, tokenist" phrase, used "without attention to its specific meanings".

That the phrase has been so overused, according to Rao (2000), in reference to western countries without proper attention to its supposed meaning, while the same concept has seen a seemingly unrelated resurgence leveling the same accusation towards China, with a similar lack of attention to its supposed meaning, calls for a proper evaluation of what neocolonialism entails and what role it plays in economic development and the global distribution of wealth. Consequently, the contribution of this thesis consists of two major parts:

- 1) Deriving a definition of neocolonialism from the economics of historical colonialism
- 2) Testing to what degree such neocolonialism is responsible for unequal economic development.

Consequently, this thesis aims to put the economic mechanism of “paleo”colonialism front and center in its analysis of global inequality in economic development. In order to do so, it builds upon the semantically basic and clear assumption that neocolonialism entails *the continuation of colonial-era economic relations* - avoiding the aforementioned “tokenist” use of the phrase.

Whereas previous analyses have mostly focussed on measurements such as GDP to explain inequality, this analysis will put the extraction of resources and the resulting reliance on low complexity, low value added economic activity front and center in its analysis. It does so by using a *resource dependency score* as its dependent variable. Consequently, this novel approach means that statistical analysis will reflect the proposed colonial relations between rich countries and poor countries. This analysis will not only include underdeveloped countries, but also developed countries - following from the idea that a colonial economic relationship not only causes underdeveloped countries to remain underdeveloped, but also causes developed countries to remain developed. In other words, one would expect an inverse effect on rich countries.

Consequently, this thesis examines the present-day application of the proposed economic mechanism of colonialism, rather than its theorised economic consequences. This approach is unique in that it attempts to account for a reversed effect between developed and underdeveloped economies: the same mechanism that keeps poor countries poor, keeps rich countries rich.

Most literature on postcolonial economic development can be divided into frameworks that centre macroeconomic factors; frameworks that centre historical colonialism; frameworks that centre the performance of local institutions; and frameworks that centre the influence of global institutions. These frameworks all implicitly or explicitly relate poor economic performance to resource extraction: dependency theory finds that dependence on natural resources is caused by foreign direct investment in mining operations (Chase-Dunn, 1975); the neoclassical framework finds that dependence on natural resources is caused by private business being crowded out of the market (Meier & Steel, 1987); the Reversal of Fortune theory finds that resource dependency is caused by the lingering effects of extractive colonialism on local institutions (Acemoglu et al., 2001).

These will be further discussed in the next chapter. These frameworks serve as the basis for the following research questions:

Investigating neocolonial relationships is done through the following research questions:

- Does the framework of neocolonial economic relations explain the extent to which an economy relies on the extraction of natural resources?
- Does the framework of neocolonial economic relations explain the global distribution of wealth?

With the following subquestions:

- To what extent do global macroeconomic factors affect economic performance or resource dependency?
- To what extent do past global institutions affect economic performance or resource dependency?
- To what extent do present global institutions affect economic performance or resource dependency?
- To what extent do local institutions affect economic performance or resource dependency?
- Can resource dependency be considered a proxy for economic performance?

In these questions, historical colonialism is considered as a “past global institution”.

II - Theoretical framework

As described in the introduction, there is a large amount of literature on unequal economic development. Particularly in the postcolonial era, the discrepancy in economic outcomes poses a problem. In the nominally level playing field of the postcolonial global economy, continued inequality has increased the importance of this question.

In this section, the literature on postcolonial political economy and economic development will be analysed by school of thought and point in time, in addition to other findings relevant for the statistical analysis of this paper. As stated in the introduction, this thesis builds upon a semantically basic and clear interpretation of neocolonialism, as being *the postcolonial continuation of colonial economic relations*. In order to investigate this question, first, we must come to a working explanation for colonial economic relations.

2.1: The economics of colonialism

Colonialism has existed in one form or another since time immemorial; the Phoenicians and the Greeks already established dozens of colonies around the mediterranean that dominated the region (Sommer, 2007), and even still in the late middle ages such practices were continued by trade powers such as Venice and Genoa (Phillips, 1990).

In the early modern period, more traders started to compete for the lucrative luxury goods trade in the mediterranean, which was dominated by Venice, Genoa, the Ottoman empire and the Mamluk sultanate (Phillips, 1990). Portuguese and Dutch traders started buying these luxury goods directly from the source - the East Indies - establishing forts and trading posts along the way (Phillips, 1990; O'Brien, 2000). As this practice expanded into the newly discovered New World, extraction started to enter into the equation. Spanish and Portuguese treasure fleets bringing masses of silver and gold back to Europe are a recognisable narrative of early modern colonialism. From that point onwards, the extraction of tradable resources only strengthened; production of cash crops such as tobacco and sugar rapidly expanded in Spanish and Portuguese colonies, even outside the New World. (Phillips, 1990).

Considering these developments, it can be said that early colonialism consisted of transporting raw materials, as well as manufactured goods, from markets with ample supply of these goods to the European markets, where this supply was more limited. The most notable example of this type of trade is the trade in spices. The economic logic would simply have consisted of buying goods in places with low market rates and selling them in places with high market rates. Colonies would initially function as little more than rest stops in between these markets, and as a means to exert influence over trade routes (O'Brien, 2000). Carribean sugar plantations and Spanish silver fleets, then, were early examples of extraction as a crucial aspect of modern colonialism.

After the European foundation of sea-bound trade routes to the far-east and the New World, the industrial revolution can be seen as another watershed moment in the development of colonial economics. The industrial colonial empire looked quite different from anything seen before. Austin (2014) presents an interesting look at the logic and economics of this type of colonialism at its height: the late 19th, early 20th century. It posits that in Africa, colonial rule resulted in public investment in industries that were not attainable to pre-colonial governments. The intensification of the farming of cash crops and mining operations emerged through colonial investments. These resources would then be exported to satisfy industrial demand in the metropole. Subsequently, industrial products from the

metropole would be sold in the colonies. Austin (2014) specifically mentions the example of West African handloom weavers using imported industrially produced yarn from England to weave cloth.

A similar colonial economic system can also be observed in British India. Roy (2002) identifies three main features of British colonialism in India (table 2.1):

Table 2.1: Economic features of British colonialism in India, derived from Roy(2002)

Feature	Relation	Example
Structural features	Structure of the colonial economy	Reliance on resources and labour-intensive industry
Global features	Structure of the global economy	Open economy, creating an export market for British goods
Colonial features	Codified British-Indian colonial relations	Indian government pays Britain to cover the cost of administration

As an example, we can point at the farming of cotton and dyes in India, the industrial production of cloth from these raw materials in Britain, and the sale of the cloth in India as well as the rest of the world. A generalisation of these principles into a *system of colonial economic relations* would result in something like the following:

Colonial investment results in an export-focussed economy capable of greater productivity than the pre-colonial economy. This productivity mostly entails the export of cash crops and mined resources, meant to satiate industrial demand in the metropole. The raw resources, from cocoa to coffee to copper, are processed into manufactured goods in the industrialised economies of the metropole. This results in a large supply of cheap, competitively produced manufactured goods, able to price cottage industries out of local markets.

Subsequently, the global economy and international trade become significant factors in these colonial production chains. Raw materials are obtained cheaply from colonies, processed in an efficient industrial economy, and competitively sold on markets across the world - including the colony.

The economic motivation behind this late colonialism, then, would entail control over supply chains and raw resources to ensure the satiation of metropolitan industrial demand, as well as control of international markets to sell the manufactured goods that the metropolitan economy produced. Control over supply chains and international markets, then, entailed unhindered trade between the colony and the metropole, with little interference from tariffs and protectionism. This system was achieved and enforced through coercion and the application of military force.

It should still be noted that this is a highly generalised framework for colonial economics. There would be significant differences between colonies. One of these differences, as described by Acemoglu et al. (2001), is that some colonies were meant for settlement rather than the extraction of resources. Austin (2008) further expands on this by arguing that even this distinction was not a simple binary. Additionally, some colonies, according to Austin(2014), did not increase productivity despite

colonial investment and others, still, simply had soil that was too poor to farm cash crops in any significant amount.

Another interesting perspective on the economics of colonialism is given by Lenin (1917/2008), applying a sort of marxian proto-world-systems approach to the global economics of colonialism. In *Imperialism: The highest stage of capitalism*, Lenin (1917/2008) argues that one of the driving forces of colonialism is the reinvesting of domestic profits. He observed how much of the Russian industrialisation was financed by French capital, rather than domestic Russian capital. Subsequently, he argued that Russia was one of a number of "semi-colonial states", which relied on investment from industrialised nations for industrialisation. The profits made through these investments would not stay in these "semi-colonial states". Other examples were German investments in Brazil and British investments in (then) Persia. Conceptually, this puts the economics of colonialism into Marxian terms, and shows similarities with the later concept of neocolonialism as an economic process. Notably, this analysis posits that colonial investments result in industrialisation rather than resource extraction.

Squaring the circle between Austin (2008), Roy (2002) and Lenin (1917/2008) leads us to a working definition of the economic geography of colonialism. In the economic geography of colonialism, different links in the production chain are distributed across a colonial empire. In this colonial production chain, the most efficient and profitable economic activity takes place in the highly industrialised metropole, while the more simple activities, such as farming and mining, take place in the colony. At the same time, the domestic colonial cottage industry is put under pressure by metropolitan exports. Overall, this entails a transfer of wealth from the colony to the metropole.

2.2: 1960s: The neocolonial framework

The analysis of Lenin (1917/2008) can be taken to serve as the conceptual connection between the economics of colonialism and postcolonial explanations for unequal economic development. There is a continuity between Lenin's (1917/2008) analysis regarding the relation between colonialism and capitalism on one hand, and postcolonial development studies on the other. Perhaps, neocolonialism as a concept ultimately finds its origin in Lenin's (1917/2008) aforementioned analysis of the economics of late colonialism, particularly in his description of *semi-colonial states*. These states were not integrated into the political structure of colonialism (did not exhibit the *colonial features* described by Roy, 2002), but still exhibited the same economic characteristics observed in economies that were (did exhibit the *structural features* and *global features* described by Roy, 2002). Here, we can think of colonialism as a global institution that these "semi-colonial states" were only partially subjected to.

When the institution of colonialism started to lose its footing after the second world war, this line of thinking became the foundation for the theses of both neocolonialism and dependency theory. The term neocolonialism was originally coined by socialist philosopher Jean Paul Sartre, in his analysis of the Algerian independence war (Fatouros, 1965). He argued that the economic relation between Algeria and France would not change much, even after political independence. This analysis was not particularly detailed, but still sparked the interest of many academics and commentators.

Most notably, it was expanded upon by Ghanaian postcolonial politician Kwame Nkrumah's book *Neo-Colonialism, the last stage of Imperialism* (1965), taking cues from Lenin (1917/2008) in more than its title alone. In Nkrumah's analysis, the economic relations between former colonies and former colonisers remain the same. Notably, in keeping with the theme of resource extraction, he argues that the prices for raw materials declined while the prices for manufactured goods increased.

Applied to the economic framework of colonialism proposed previously, this means an increase in the value added in the metropolitan economy. In this regard, it makes sense to see neocolonialism as the continuation of colonial economic relations. According to Nkrumah, this situation was maintained and enforced as the price of raw materials decreased while the price of manufactured goods increased; interest rates for loans increased; and debts were used to gain influence.

Referring back to the proposed economics of colonialism, we can see some more parallels that draw up the continuity between “paleo”colonialism and neocolonialism.

For one, the lack of access to finance capital is proposed as a limiting factor for domestic investment and development. Similar to the colonial framework, lack of access to finance capital limits the potential for advanced, capital intensive economic activity. Intensification, then, can only occur through foreign investment. In the “paleo”colonial economy, this came in the form of colonial investments.

The pattern of production chains also remains similar: capital intensive, high value-added economic activity takes place in the former metropole. The inputs for this activity are provided by the former colony, and the products of this economic activity are, in part, sold in the former colony.

The role of international organisations such as the IMF is also commonly used to explain the persistence of this system. A particularly interesting example is the analysis of Smith (1977), who argues that natural resources played a significant role in the proliferation of neoclassical economic systems. In particular, Smith argues that the fear for resource cartels was a reason for promoting the liberalisation of recently decolonised economies. Particularly given the role that OPEC played in the 1973 oil crisis (Hammes & Willis, 2005; Smith, 1977), it is not far-fetched that developed economies would be concerned about the availability of natural resources in a postcolonial world. These enforcement mechanisms can be framed as global institutions that came to replace the global institution of formal colonialism; coercion no longer occurred through military means, but economic means (though some, such as Harvey (2007) argue that military coercion is still a significant factor).

When comparing these proposed neocolonial economic phenomena to “paleo”colonial economic characteristics of British India described by Roy (2002), we can say that the colonial features disappeared while the structural features and global features remained, similar to what Lenin (1917/2008) described as *semi-colonial states*, except without the prediction that these states, too, would eventually see formal colonisation.

The dissolution of many of the world’s colonial empires in the 1960s led to the expectation that the newly independent countries would see rapid development. When this didn’t happen, academics started looking for solutions in what can be described as the postcolonial discussion about economic development.

2.3: 1970’s: Dependency theory and neoclassical economics

The 1970s saw a lively academic debate in terms of unequal development, involving “dependency theory” and a neoclassical approach. Put briefly, dependency theory puts global economic processes of a world system at the centre of its explanation, similar to Wallerstein (See, for example, Wallerstein, 1974). Conversely, the neoclassical approach puts markets and local institutions at the centre of its explanation.

The thesis of dependency theory proposes that reliance on foreign capital is the main inhibitor in postcolonial industrial development, with access to financial capital acting as leverage. The dependency thesis has seen considerable academic examination. Particularly in the 1970s, this

explanation was popular in academics. Most of the work in this field consists of examining the role of influence caused by financial dependence (Chase-Dunn, 1975; Kentor, 1998) and influence of multinational corporations (Bornschier & Ballmer-Cao, 1975; Tausch, 2011) in the global distribution of wealth. In this field, study mostly consists of quantitative analysis of cross-national samples, investigating the consequences that financial dependence and multinational corporations have for economic development and internal inequality.

Because the dependency perspective ultimately stems from a World Systems approach to inequality, integration into this global system - or globalisation - is found to negatively affect a country's economic performance or internal inequality.

Once again, we can see some common features between dependency theory and the neocolonial framework. Foreign economic influence is considered to be related to poor economic performance. However, there is a significant difference. In the dependency framework, foreign direct investment has universally negative effects. However, when we consider the economics of colonialism established previously, we can see that this direct investment is related to an increase in productivity - implying that the presence of foreign direct investment is preferable over absence of foreign direct investment.

In addition, in the World System of dependency theory, the adverse effects apply to advanced economies as much as they do to underdeveloped economies. Multinational corporations are the overall beneficiaries of this world system. In contrast, in the neocolonial framework, the concentration of advanced economic activity in the (post)colonial metropole implies that in a neocolonial system, the effects on advanced economies are inverse.

Roughly at the same time as (and maybe as a consequence of) the 1973 Oil Crisis, the Bretton Woods system definitively ended (Hammes & Willis, 2005). With that, the Keynesian paradigm also ended according to some commentators such as Harvey (2007), helping to usher in the neoliberal or neoclassical paradigm. This new paradigm was marked by a reliance on neoclassical microeconomic equilibrium models that assumed perfect competition. Consequently, any inefficiency or underperformance in economic terms could only be attributed to interference in markets. Because the neoclassical analysis of regional inequality employs equilibrium models, it predicts a long-term convergence of local economies (Pike et al., 2017). This is exemplified by Thomas Friedman's "The World is Flat" (2005), which argues that globalisation and technological advances make world markets more interconnected and have fewer differences between them, causing a convergence in economic performance. This encapsulates the neoclassical perspective well: in the nominally level playing field of the postcolonial world economy, lack of economic performance can only be attributed to internal factors.

Another consequence of the utilisation of equilibrium models is that economic underperformance is attributed to market interference. A telling example of this is a World Bank analysis on African underdevelopment (Meier & Steel, 1987), which puts the cause of this underdevelopment at an over-reliance on the public sector and overregulation of the economy, crowding private industry out of the market. Consequently, underdevelopment in Africa is attributed to the performance of local institutions, which fail to create an environment in which private business can flourish in spite of the aforementioned postcolonial level playing field. This being the perspective of the World Bank, as well as other institutions such as the IMF, itself became an explanation for unequal economic development.

2.4: International institutions

A problem that is rather common in the application of microeconomic models, as stated, is the limited ability to account for external factors. Therefore, it is apt to consider the conclusions found by the neoclassical approach in regards to institutions in a broader context. This brings us to the role of international institutions such as the World Bank and IMF. Dependency theory and the neocolonial framework often see these international institutions - rather than local institutions - as the upholders of the present situation (Owusu, 2003). For instance, authors in the dependency framework blame IMF or World Bank loan conditions for creating economic systems in developing economies that can not protect their own interests. Meanwhile, from the perspective of these international organisations themselves, it is rather obvious that they would only loan to countries under certain conditions. Most significantly, these include an economic system that is capable of sustainable growth, according to the framework operated under by these organisations. Consequently, the economic thought adhered to by these organisations can affect local institutions and global trade, as argued by Smith (1977) and Owusu (2003).

This economic thought can change over time. Consequently, loan conditions have also changed over the years. Ahmed & Sukar (2018) identify three different “phases” of IMF loan conditions. These can be said to correspond to paradigms of economic thought. The first phase, according to Ahmed & Sukar (2018), corresponded to the Keynesian paradigm; the IMF was founded specifically to enforce the Bretton Woods system. In this framework, loans were meant to maintain the system’s fixed exchange rate between currencies. Consequently, the primary takers of IMF loans were countries that were involved in the Bretton Woods system. This phase lasted from the second world war until the ‘70s oil crises and “stagflation”, when the fixed exchange rate became too expensive to maintain (Hammes & Willis, 2005; Ahmed & Sukar, 2018).

The second phase, corresponding to the neoclassical paradigm, starts after this point. The IMF started to concern itself more with development, where the granted loans were meant to facilitate structural economic reform according to the contemporary neoclassical paradigm. This second phase is characterised by liberalisation, privatisation and deregulation, and can also be recognised in the “economic shock therapy” applied in former Soviet bloc countries - carried out with help from the IMF (Marangos, 2002). This phase lasts until either the 1997 Asian financial crisis or the 2008 global recession. Governments’ budget deficits caused by these crises once again caused a shift in economic thought; in this third phase, the IMF started to focus on fiscal balance and budgets more so than structural economic reform (though it can be argued that austerity policy requires some structural reforms). This paradigm can be characterised as the “austerity paradigm”. The Austerity paradigm can be interpreted as a shift meant to protect creditors from derelict payments by saddling governments with even more cheap debt, and demanding austerity policy in return. However, it can also be interpreted as an essential move to prevent a string of bankruptcies. The logic behind either perspective is explained by the following excerpt from former Greek finance minister Varoufakis’ memoirs regarding the 2014 Eurocrisis (Varoufakis, 2017):

“If Greece lost its capacity to meet its repayments, German banks faced another loss that would require of Mrs. Merkel another cheque for anything between €340 billion, and €406 billion, but consummate politician that she is, the chancellor knew she would be committing political suicide were she to return to the Bundestag to request such an amount.”

Using this sentiment, the logic behind the austerity paradigm can be explained by the fear of an extensive ripple effect caused by the insolvency of debt-laden national governments, considering the historical safety of government bonds.

All considered, we can move to the conclusion that the interpretation of good standards and practices by the IMF and other international organisations could have considerable influence on local institutions and the economic structure of countries that rely on these organisations. We can also see some practical examples of this:

Owusu(2003), for example, describes how many African countries, including African cross-national organisations, operated under the premise of dependency theory in the years following independence. These countries started operating under the IMF-mandated free market premises as a result of pressure by the IMF. This free trade approach was also applied during the era of colonialism (Global colonial features in Roy, 2002), where it was part and parcel of the economic system. This system provided cheap raw materials and a low-tariff export market (Roy, 2002; Austin, 2008; 2014). Reluctance on the part of former colonies to embrace this system is indeed no surprise . Eventually, however, this system was adopted by many former colonies as a result of pressure from the IMF (Owusu, 2003) . The aforementioned “economic shock therapy” is another example of the influence of organisations such as the IMF on local institutions (Marangos, 2002).

Ultimately, this can be taken to mean that local institutions continued to be affected by global institutions in the postcolonial era. On this basis, it can be argued that there is a relation between global institutions and global economic consensus. Similar interactions can also be observed at other times in history, such as the theory of mercantilism and its influence on political economy and trade (O’Brien, 2000). Colonialism or imperialism, then, would be the mechanism through which various peoples were forcibly integrated into the international economic institution of colonialism, created by Western European countries. This forced integration is still seen today according to Harvey (2007), employing the American 2003 invasion of Iraq and the Chilean 1973 coup as examples.

In this light, the economics of “paleo”colonialism can be considered as a global institution affecting local economic institutions and economic performance, either for the better or the worse. An example of this is presented by Huillery (2009), who finds that the effects of public investments made by colonial governments in infrastructure such as education are still observable today.

2.5: Reversal of Fortune theory

The finding of Huillery (2009) is not the only connection found between colonial institutions and current economic performance. In fact, Acemoglu et al. (2001, 2002) proposed a comprehensive theory explaining present-day inequality in terms of development along the lines of colonial institutions. In its application, it functions as a dependency theory inspired modification of neoclassical economics, or a hybrid between the two (table 2.2): colonialism acts as a historical exogenous factor, affecting local institutions (and thereby economic performance) to this day.

Table 2.2: Reversal of Fortune as a synthesis between the liberal approach and dependency theory

Dependency Theory	Liberal approach
Exogenous causes	Endogenous causes
Macro scale	Micro scale
World Systems Theory	Classical economic models
Global institutions	Local institutions

The contributions entail an analysis of present-day economic performance as a function of colonial experience - particularly the difference between settler colonialism and extractive colonialism.

The framework in which this is examined is interesting; it looks at the performance of local institutions, and how this performance may be related to historical colonialism. Particularly the consideration of expropriation risk appears to be rooted in the neoclassical approach to the role of local institutions in economic performance. Crucially, however, it does not treat these institutions as if they exist in a vacuum. Instead, colonialism as a global institution is treated as an exogenous historical cause for present-day performance of institutions. This view of institutions as semi-rigid products of their environment can also be recognised in, for example, evolutionary economic geography (Boschma & Frenken, 2006). Other work delves deeper into the relation between institutions, economics, and democracy: Acemoglu & Robinson (2008) further expand on their ideas by looking into the relation between the persistence of institutions and democracy - as one would expect a frequent shift in institutions would be observed in many democracies. They argue for a difference between *de facto* power - wielded by economic elites - and *de jure* power - wielded by (democratically elected) governments. When the economic elites have more power than the rest of the citizens, economic institutions form according to the interests of the economic elites. This control of economic institutions can continue even if democracy is introduced, which Acemoglu & Robinson (2008) call *Captured Democracies*. How this system would work is demonstrated, according to Acemoglu & Robinson (2008), by the economy of the southern United States before and after the civil war. Before the civil war, the economy revolved around the production of cotton by means of slave labour. When slavery was abolished, however, the economic elite remained in place. As a result, the economic structure barely changed - despite the end of slavery. The rights of former slaves were still restricted, and oftentimes, they would end up working on the same plantation for their former owners.

This relation between economic elites and the functioning of economic institutions is also corroborated by other research. For example, Firmin-Sellers (2000) finds that the different colonial institutions produced by British colonial rule and French colonial rule in Ghana and Ivory Coast respectively have continued to leave their mark on politics in these countries. Specifically, French policy in Ivory Coast created a landed elite that preferred free market policy, while British policy in Ghana did not do so - resulting in fewer vested interests (or *de facto* power) that could oppose Kwame Nkrumah's reforms. The previously discussed findings of Huillery (2009) also apply here.

This also lends further credence to the idea that there is a significant difference between settler colonies and extraction colonies in the institutions that they create, as argued by Acemoglu et al. (2001): in settler colonies, there was much more concern for the rights of civilians than in extraction colonies, resulting in political institutions that were much more resilient to the influence of economic elites than in extraction colonies.

The balance between *de jure* power and *de facto* power in the analysis of democracy, economics, and institutions, as proposed by Acemoglu & Robinson (2008) becomes useful for the discussion at hand; who decides how economic institutions function, depends on who has economic power, what they want to do with it, and how much they are forced to compromise with the *de jure* holders of power. A similar analysis can be found in Dani Rodrik's Political Trilemma of the World Economy (see Rodrik, 2007), which argues there is a contradiction between the current global economic system and democracy, similarly under the assumption that the interests of the economic elite are contrary to the interests of the rest of the population -and therefore, in conflict with democracy. A functioning democracy, then, in the framework of Acemoglu & Robinson (2008), is able to curb the political power of the economic elite. This can be complicated by colonial history, where economic elites from the metropole or local elites were oftentimes handed the reins of power with little oversight. This is

how colonialism, economic institutions, and democracy are connected to one another. Colonialism entails foreign control over the local institutions; this would oftentimes entail an economic elite, whose primary concern was the extraction of natural resources for the sake of colonial production chains. This elite would retain power in the postcolonial era. Their lingering control over economic institutions, then, would hamper both democracy and economic development.

Other work on the connection between present-day economic performance and historical context is also offered by Feyrer & Sacerdote (2009), looking at an even greater variety of factors that define the colonial experience. They find a great divergence in colonial experience and present-day economic outcome. This, once again, means that plenty of exceptions to the framework at hand can be expected.

What is visible in all the viewpoints regarding postcolonial development is that, through one way or another, an underperforming economy fails to attain more complex economic activity. What this implies is a reliance on the export of raw materials and other less complex economic activity.

Criticism at the reversal of fortune theory is leveled by Austin (2008), arguing that Acemoglu et al. (2001, 2002) oversimplify history in their framework. Extraction and expropriation risk are considered proxies for one another, and a binary between settler colonies and extraction colonies is used. Also, Austin (2008) argues that extraction of natural resources is not necessarily unproductive. Rather, he argues that colonisation was accompanied by an increase in productivity.

2.6: Conceptual Framework

From all the perspectives on economic development discussed in this chapter, we can come to a conceptual framework that expresses the economic relationships shared between colonial economics and neocolonial economics (fig.2.1). From the starting point of the economics of colonialism, it is argued that colonial economic relations consist of the structural features, global features and colonial features as described by Roy (2002). In this colonial economic system, the different links of industrial production chains are distributed across the global colonial empire. In this production chain, the most advanced and profitable economic activities take place in the industrialised metropole. Simultaneously, the less advanced economic activities, such as the farming of cash crops and extraction of natural resources, take place in the colony. Consequently, economic activity in the metropole consists mostly of industrial production and the global export of cheap industrially produced goods, while economic activity in the colony consists mostly of farming and mining. The proposed hypothesis states that this situation remained more or less unchanged after decolonisation.

To argue for this hypothesis, different perspectives on postcolonial economic development were considered - namely, the neocolonial framework, the dependency framework, the neoclassical framework, and the reversal of fortune framework. Each of these frameworks brings useful concepts to the table. Most notably, of course, is that of neocolonialism. This hypothesis argues that colonial economic relations remained unchanged, mostly through economic pressure (Nkrumah, 1965; Smith, 1977). This, however, does not explain the full picture. How exactly this pressure is exerted remains quite unclear. This is where the other hypotheses can aid our understanding. Most directly, dependency theory presents the argument that conditional access to finance is the major culprit. Similar to the explanations of colonial economics provided by Austin (2008; 2014), postcolonial developing economies have limited access to finance capital necessary for capital-intensive economic activity. Access to such economic activity can therefore occur in return for influence - be they by international financial institutions (Chase-Dunn, 1975; Kentor, 1998) or multi-national corporations (Bornschiefer & Ballmer-Cao, 1979; Tausch, 2011). In other words, developing countries are dependent on developed countries for economic activity.

A counter-argument to the designation of external causes came in the form of neoclassical economics, replacing the fully “external causation” perspective with a fully “internal causation” perspective (Pike et al., 2017; Meier & Steel, 1987).

The most recent perspective, originating with Acemoglu et al. (2001; 2002) acts as a sort of consolidation, putting the cause for the functioning of local institutions at historical colonialism. The expansion on the functioning of these local institutions by considering them as the product of *de jure* power and *de facto* power (Acemoglu & Robinson, 2008) and their relation to colonialism can also be extended to the postcolonial economy: if *local* economic power can affect local institutions, then surely, one could also expect that *global* economic power can affect local institutions as argued by Owusu (2003). This would also explain how Ghana eventually did embrace the neoclassical framework, despite the absence of a strong economic elite in colonial Ghana as found by Firmin-Sellers (2000). This leads us to the present question: If we consider colonialism as an economic institution, affecting local and global economic structures, could we expect this process to continue, even after the “colonial features” of colonial economics as put by Roy (2002) disappeared?

The conceptual framework resulting from this consolidation consists of two parts: The (neo)colonial production chains on one part, and the factors that influence these production chains on the other. The production chains are indicated with filled arrows; the factors that influence the production chains are indicated with hollow arrows. The quantities of flows are visualised through the width of the filled arrows. The resulting model shows the production chains of two differently performing economies, and the hypothetical consequences of interaction in the global economy. The arrows around the outside represent the local economy. The size of the local economy is represented by the width of the arrows; the line gets wider as industries add value to the economy. The model for the colonial production chain is derived from the work on the economics of colonialism (Roy, 2002; Austin, 2008, 2014), under the assumption that the persistence of “paleo”colonial economic relations define neocolonial economic relations.

Conceptually, there is an inverse relationship between the developed economy and the underdeveloped economy in regards to resource dependency. Even though both economies extract natural resources, the underdeveloped economy is more reliant on this extraction than the advanced economy. Additionally, the export of these natural resources is particularly seen in the developing economy. The hypothetical reason for this is the lack of advanced domestic industry that can use this large output of natural resources. The advanced industrial economies, however, have a significant demand for these natural resources.

The factors that influence this relationship can be seen as a consolidation of various findings in economic development. Local institutions seen in the neoclassical framework for postcolonial economic development (Meier & Steel, 1987) still influence economic performance, but these local institutions, in turn, can also be influenced by global institutions as described by Acemoglu et al. (2001, 2002) in the form of historical colonialism. These postcolonial local institutions can be considered analogous to the structural features of the colonial economy described by Roy (2002). The role of a world system, its global institutions and the global market that is preferred in dependency theory (Owusu, 2003; Chase-Dunn, 1975; Kentor, 1998; Bornschier & Ballmer-Cao, 1975; Tausch, 2011), can be seen as analogous to the global features of colonialism of Roy (2002). Here, we can see the conceptual continuity between the colonial economic system and the neocolonial economic system: The retention of the economic characteristics of colonialism, while abandoning its codified political aspects. This conceptual continuity can be described as the crux of the neocolonial thesis.

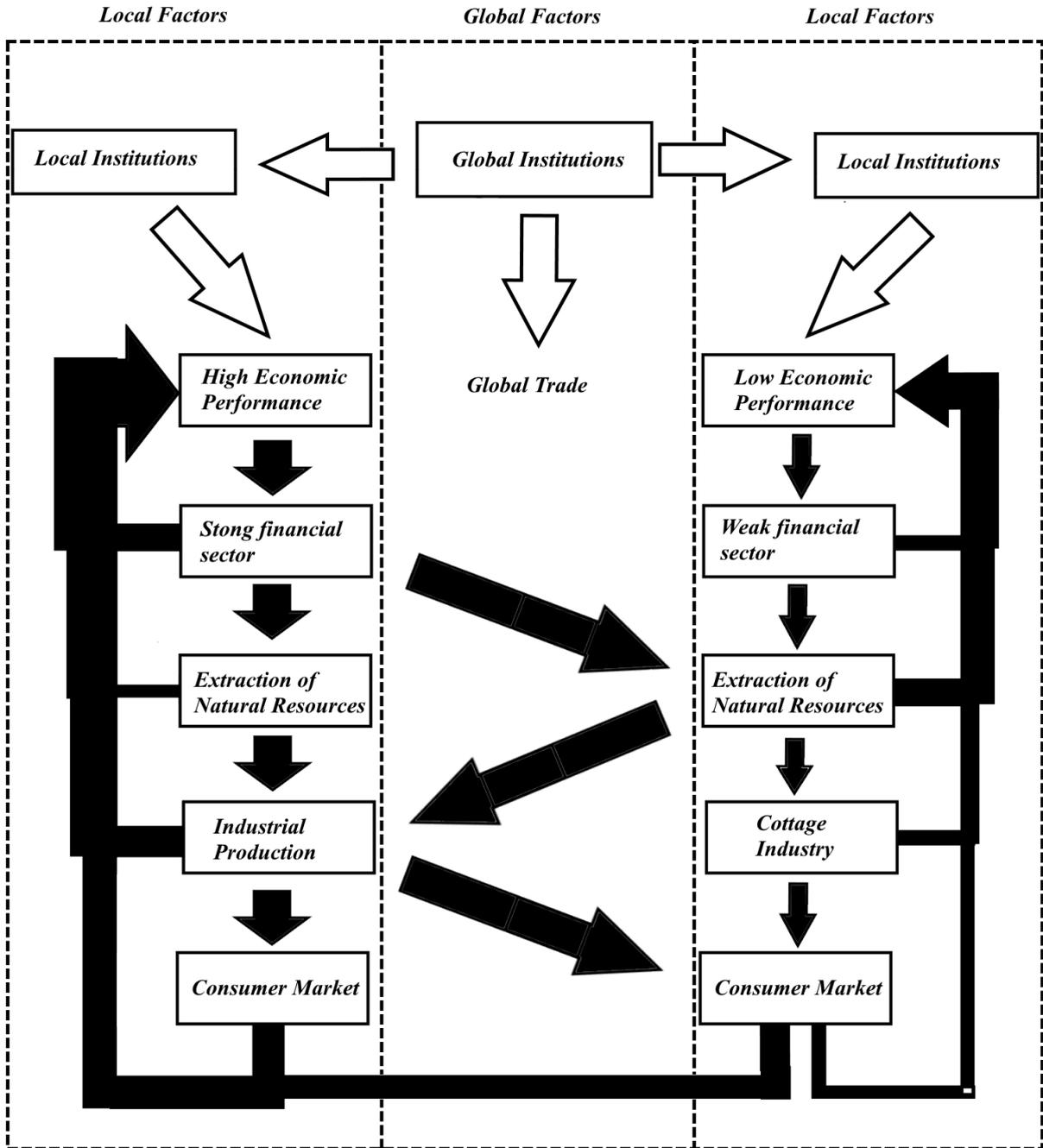


Fig. 2.1: Conceptual Framework

This conceptual framework also reveals how *reliance on natural resources* could be a logical measurement for neocolonialism. After all, it is the most significant point of contact between developed economies and underdeveloped economies in this framework. FDI from developed economies is used for the intensification of natural resource production, and the export of these resources is responsible for a significant portion of the underdeveloped economy's total economic activity. Additionally, this export implies that the natural resources can be processed into goods more efficiently abroad than in the local economy, indicating lack of complex economic activity.

2.7: Concluding remarks

All the perspectives on colonialism and postcolonial economic development discussed here are very different in their treatment of the problem. Primarily, whether the cause for uneven economic development is internal to the country in question, caused by external factors or even a world system, or some sort of hybrid in which path-dependent institutions have been affected by historical global institutions. However, these perspectives also share something in common that is quite significant.

All imply a reliance on the export of natural resources; more advanced forms of economic activity are not attainable to underdeveloped economies, be it due to the performance of internal institutions or the influence of external actors or factors.

Additionally, the *reversal of fortune* theory occupies a peculiar position in the discussion between the role of *global* institutions vis-a-vis *local* institutions; it primarily focuses on the present role of local institutions, but insists that these are caused by colonialism - or *past global institutions* (we can arguably treat the system of colonialism as a global economic institution). This begs the question: If the past influence of historical global institutions can still be observed today, then what to say of more recent global institutions?

It is also noteworthy that the distribution of different perspectives on postcolonial economic development through time corresponds with the phases of IMF policy argued by Ahmed & Sukar (2018). This strengthens the theoretical expectation that global economic institutions and the associated paradigms in economic academia affect global economic relations.

Dependency theory finds that dependency on natural resources is caused by foreign direct investment in mining operations (Chase-Dunn, 1975); the neoclassical framework finds that dependence on natural resources is caused by private business being crowded out of the market (Meier & Steel, 1987); the Reversal of Fortune theory (Acemoglu et al., 2001) finds that resource dependency is caused by the lingering effects that extractive colonialism has on local institutions.

III - Methodology

3.1: Operationalisation

In the same vein of other work in the field of postcolonial economic development and global wealth distribution (Acemoglu et al., 2002; Bornschier & Ballmer-Cao, 1979; Feyrer & Sacerdote, 2009; Tausch, 2010), testing the hypotheses is done through quantitative analysis, comparing different countries. Various macro-economic indicators and other measurements are used to predict the economic performance of different countries. A similar method is used to the theoretical assumption flowing from the theoretical framework presented in the previous chapter. This supposes that a neocolonial economic relation entails lack of complex economic activity and a reliance on the export of raw materials. This reliance then serves as a proxy for poor economic performance, with the opposite being true for well performing economies.

Using different countries as units is associated with some statistical bias issues. For one, the degree to which variance in outcome is caused by a dynamic set of conditions particular to that country is always an unknown quantity. One solution for this is to select a sample of countries that are comparable in as many ways as possible. Feyrer & Sacerdote (2009) solve this problem by using small ocean island nations as its study units. A consequence of this approach, however, is that it becomes questionable to what degree the analysis is applicable to the rest of the world. Conclusions are very reliable for colonial island states, but this reliability quickly diminishes when applied to other contexts.

Considering the hypotheses of this thesis involve a dynamic that affects both developed economies and underdeveloped economies, the aim of the statistical analysis is to analyse a cross section of all countries. The aim therefore is to maximise the amount of cases analysed. This will also diminish possible statistical bias issues.

3.2: Variables

Resource Dependency

As put in the theoretical framework, the idea that neocolonialism as a concept revolves around the extraction of natural resources is rather common (Nkrumah, 1965; Smith, 1977). Indeed, this extraction of natural resources can be considered the crucial economic characteristic of “paleo”colonialism (Austin, 2014; Roy, 2002). In the theoretical framework, the hypothetical reason for this extraction was also considered. The financial investments flowing from developed economies to underdeveloped economies that are considered crucial in dependency theory (Chace-Dunn, 1975; Kentor, 1998) are a driving force for intensification of resource extraction in colonial economics (Austin, 2014). As a result, the extraction of natural resources is responsible for a relatively large amount of economic activity in the underdeveloped economy. The amount of advanced economic activity undertaken in the developed economy, utilising the resources extracted from the underdeveloped economy, means that the relationship between economic development and resource extraction is inverse. Theoretically, a higher dependency on natural resources in the neocolony is associated with a decreased dependency on natural resources in the neometropole.

Consequently, it is justified to use dependency on natural resources as a dependent variable. GDP per capita as an expression of wealth is the traditional dependent variable for economic development studies seen in, for example, Acemoglu et al. (2001; 2002) and Feyrer & Sacerdote

(2009). Within the neocolonial framework, however, there is a theoretical expectation that resource dependency functions as a proxy to wealth and economic performance.

Log GDP per capita

Employing GDP as a second dependent variable functions mostly as a control test. Differences in outcomes between the resource dependency model and the GDP model can expose ways in which the resource dependency model might fall short as a framework to explain actual wealth. It can also present clues as to how the model can be improved.

The distribution of GDP per capita among countries is exponential; therefore, the natural logarithm for GDP per capita is used as a second dependent variable.

Macroeconomic indicators

The macroeconomic variables included express various ways in which a country's economy is connected to a *world system* that impacts economic development

GDP % of GNI

GDP expresses the total wealth of a country, or the complete yearly value added of all economic activity in a country. GNI also expresses sources of income outside of the country. Theoretically, this expresses the amount of value added that occurs outside of a country, but still flows to the country in question. As such, the expectation is that advanced economies have a lower GDP as % of GNI, while developing economies have a higher GDP as % of GNI.

FDI % of GDP Average

FDI is often theorised to negatively affect the performance of an economy, in particular in dependency theory. FDI is used as a proxy for foreign financial influence in these studies (see Tausch, 2010). Within the neocolonial framework used in this thesis, FDI flows do not necessarily lead to foreign influence, but an intensification of, and therefore reliance on, the extraction of natural resources.

Another theoretical expectation is that this will apply to developing economies more than developed economies, as there is sufficient finance capital available in developed economies so that local economic activity does not require foreign investment. It should be noted that this assumption can be challenged: reduced restrictions on the free movement of capital can mean that foreign direct investment in developed economies does not come at a premium and therefore can be competitive with local investment.

Globalisation

Globalisation is also often used in World Systems Theory derived work. In a world system, globalisation represents the degree to which a country is integrated into this world system. Once again, the expectation here is that globalisation entails the degree to which a country is involved in the global flows of capital and resources that make up the crucial global production chains of the neocolonial thesis.

Colonial experience

Colonial history

Colonial history is expressed in a simple binary dummy variable, distinguishing whether a country had a history as a colony or not. Other research tries to account for a greater variety in colonial experience. Acemoglu et al. (2001;2002) do so through settler mortality rate, using it as a proxy to differentiate between settler colonies and extractive colonies. Feyrer & Sacerdote (2009) use an even more intricate method, including time as a colony, which colonial empire the colony was ruled by,

environmental factors, and the use of slaves. They take great effort to avoid any statistical bias coming from the differences between countries. Consequently, their sample consists of island states. Applying this methodology in this thesis is not a realistic option; while the results may be accurate for colonised island states, it may not be representative for colonialism as a whole. It can be the case that island colonies exist independently of the other types of colonial experience distinguished by Acemoglu et al. (2001, 2002) - settler colonies and extraction colonies.

In this paper, however, colonial experience is highly simplified because the sample is limited, and includes a significant number of countries that were never colonised according to the definition employed. Further splitting up the sample into different types of colonial experience would therefore yield fewer cases per category, and make the results less reliable.

Years of independence

To compensate for this, *years of independence* is added as a continuous variable. This acts as a proxy to colonial experience, applicable to both colonies and countries that were never colonised. In addition, it acts to include the influence of past colonial institutions. From the perspective that institutions are semi-rigid and path-dependent, one can expect that the lingering effect of historic institutions would diminish over time. Additionally, it can be argued that there is a pattern in when a country gains independence that can be considered as a proxy for colonial experience; colonies with more or less similar experiences gained independence around the same time. For example, many South American countries gained independence through the Bolivarian independence movements in the 19th century; the Portuguese colonial empire dissolved in the 1970's with Salazar's death; the French and British colonial empires dissolved in the 1950s and 1960s.

The year "0" is used as a cutoff point, under the assumption that it is extremely unlikely for history going back that far to have a significant impact on present-day economic performance.

International institutions

IMF loan conditions can be seen as a proxy for the overall political economical ideas concerning the global economy, as argued in the theoretical framework. Additionally, these loan conditions can be seen as a tool to enforce adherence to these ideas as argued by Harvey (2007) and Owusu(2003). Consequently, these dummy variables are expected to express the degree to which a country is influenced by global economic institutions. From this, it can be extrapolated what effect a "phase" or "paradigm" of global economic institutions has had on present-day economic development or resource dependency. A possible issue here is a selection bias, as different IMF phases show different tendencies of who to lend to (Ahmed & Sukar, 2018). From the summary statistics, for example (table 3.1), it becomes clear that the IMF issued loans to relatively few countries in the first phase. Meanwhile, in the second phase, when the IMF was more concerned with economic development, it issued far more loans. There is a likely bias here, with phase 1 loans possibly being issued to wealthier countries, and phase 2 loans may have aimed at poorer countries.

Whatever the case may be, this is still a useful way to consider IMF loan conditions. If the loan conditions did what they were supposed to do (to improve the economic structure of a country), we could expect to see a positive effect on present-day economic performance.

Local democratic institutions

Democratic institution scores

A functioning democracy can be seen as a proxy for local institutional performance. The components of this variable have been based on Acemoglu & Robinson (2008); it includes equal distribution of resources, freedom of expression, free and fair elections, and corruption. Equal distribution of resources functions as a proxy for the political power of economic elites vis-a-vis the rest of the

population, under the assumption that institutions run by economic elites would result in a further concentration of wealth and resources. Altogether, the performance of local democratic institutions can be taken to express the degree to which political and economic institutions serve to protect the existing economic elite.

3.3: Data

Data consists of a collection of World Bank data (World Bank, 2020), IMF lending data (IMF, 2021) as well as a collection of indices (KOF, 2020; OEC, 2019; V-DEM, 2020). These are combined into a single dataset. The resulting dataset consists of: GNI, GDP, value of external debt, FDI as percentage of GDP, the Economic Complexity Index (ECI), rents from natural resources as percentage of GDP, ores and metals as percentage of total exports, colonial history, years of independence, KOF economic globalisation index, various subindices of the Democracy Index (equal distribution of resources; corruption; freedom of expression; free and fair elections), and 3 IMF loan dummies (one for each phase as described by Ahmed & Sukar, 2018).

Colonial history and years of independence were compiled by hand on the basis of Wikipedia, as these are relatively uncontroversial facts and small deviations or inaccuracies are not expected to have a significant impact. Years of independence was established by subtracting the year of independence from 2018, with 0 as the minimum.

What constitutes “colonialism” for the colony variable, depends on a quite strict interpretation. Considering the definition of the economics of colonialism as global production chains spanning a colonial empire, the definition is restricted to only overseas colonial empires rather than contiguous “traditional” empires. For example, the U.S.A. and Ghana count as former colonies; Bulgaria and Ukraine do not.

The IMF dummies were compiled by hand from the website of the IMF (2021) by observing whether a country has received an IMF loan in a given phase. The cut-off points for these phases are derived from Ahmed & Sukar (2018) - the first one being 1973, at the time of the first oil crisis. This moment in time is also used by Harvey (2007) and Hammes & Willis (2005) as a watershed moment in terms of economic thought. The second cutoff point is less clear. Ahmed & Sukar (2018) identify two distinct points in history in which the IMF’s approach was adjusted - in 1997 and 2008. These two moments in time coincide with the Asian economic crisis and the global financial crisis. This indicates that there was no clear single cutoff point. As a compromise, the year 2000 was chosen as the second cutoff point.

Including these variables as dummies is not the ideal option. These variables would say more if they accounted for the amount of loans actually taken. However, correcting for the size of population or the size of the economy is not a straightforward task - precisely because of the changes in policy by the IMF. In the first phase, the IMF gave out loans in USD under the Bretton Woods system. In the second phase, however, the IMF switched to *Special Drawing Rights* and its *Basket of Currencies*, where the weighing of each currency is constantly adjusted. This makes correcting for inflation, size of economy, weight of *Special Drawing Rights* currencies and exchange rates over periods of roughly 30 years practically impossible.

For the FDI variable, in order to correct for possible shocks in FDI from year to year, the average FDI as a percentage of GDP is used. The FDI average represents the average of all available data from 2013 to 2018.

The most significant limiting variable in terms of data availability is the Economic Complexity Index; for this reason, all data is from 2018 - the year in which the data availability for the Economic Complexity Index was greatest. The dataset was limited to only the countries that have

values for this ECI. The decision for this was made in order to limit the amount of data that had to be entered by hand, given the ECI is such a crucial variable in this analysis. Consequently, the sample is identical for both models.

Resource dependency

We can think of a plethora of different measurements that express the degree to which an economy relies on the extraction and export of natural resources. The most relevant of these include:

-Economic complexity: In order to identify how much an economy consists of more advanced processes. An economy that is advanced but still exports natural resources is likely not to be all that dependent on those natural resources

-Rents from natural resources as % of GDP: How much of the economy consists of money made through raw resources extraction.

-Exports of raw materials as % of total exports: How much of the economic relations with the rest of the world consists of the export of raw materials. This can be used to identify the global trade aspect of the colonial economy. This value is derived from World Bank statistics, through the sum of ore exports percentage of total exports and fuel exports percentage of total exports. This approach has two caveats. The first caveat is that it does not include agricultural exports - and therefore is blind to the cash crop export of the colonial economy. The second caveat is that the World Bank data for fuels includes refined fuels, the production of which can be considered as a complex economic activity..

Table 3.1: Descriptive Statistics

Variable sets	Variable	Obs	Mean	Std. Dev.	Min	Max
Resource Dependency	GDP per capita	100	18735.08	21357.51	503.3187	82818.11
	ECI	100	0.9368694	0.5804405	0.1167	2.7537
	Rents	100	6.075798	9.608862	0.1269486	54.91636
	Ores Export	100	7.807333	13.19163	0.1661699	77.42262
	Fuel Export	99	15.95089	23.98805	0.0000492	94.14774
	Resources Export	100	24.31201	28.32087	0.2753495	94.99547
	Resource Score	100	-3.94E-09	1.298682	-1.601062	4.941589
Macroeconomic Indicators	GDP % of GNI	99	104.8872	8.446951	75.72223	144.9407
	FDI average	100	4.41134	6.936961	-2.412172	41.65467
	Globalisation	99	60.46414	16.8883	20.05	92.47
Colonial Experience	Colony Dummy	100	1.61	0.4902071	1	2
	Years of Independence	99	244.2121	382.7188	25	2018
Global institutions	IMFdummy1	100	0.31	0.4648232	0	1
	IMFdummy2	100	0.66	0.4760952	0	1
	IMFdummy3	100	0.51	0.5024184	0	1
Democratic Institutions	Eqresource	99	0.6509899	0.2694907	0.045	0.986
	Corrupt	99	0.4273333	0.2967199	0.002	0.939
	Expression	99	0.6855253	0.2822126	0.021	0.987
	Election	99	0.6330707	0.3074468	0	0.976
	Democracy	99	2.89E+09	1.71192	-4.003399	2.361445

3.4: Statistical analysis

Now that the variables necessary to operationalise the concepts presented in the conceptual framework have been identified, the next step is to identify the statistical methods necessary to test the hypotheses.

Principal Component Analysis

In order to use a dependent variable that properly expresses an actual *dependence* on natural resources, multiple variables that express different aspects of resource dependency can be used. The variables discussed previously have particular weaknesses in expressing resource dependency. Export of natural resources as percentage of total exports fails to account for economic activities that do not include export; rents from natural resources as percentage of total GDP fails to account for one of the most crucial elements of the neocolonial framework - the export of these resources. Economic Complexity (OEC, 2020) is also an important factor, as it expresses the degree to which an economy relies on simple economic activities or advanced economic activities. The theoretical expectation here is that advanced economic activity is less attainable to neocolonial economies, either due to foreign economic influence in the dependency framework or due to the performance of local institutions in the liberal framework.

In order to reduce these variables into a single dependent variable, principal component analysis is utilised. Principal component analysis can reduce a large dataset to a more manageable number of variables (Mehmetoglu & Jakobsen, 2017b); in this case, it is reduced to just a single variable in order to use it as a dependent variable. Considering the theoretical relatedness of the concepts behind these variables, it is expected that a single underlying factor can be used to express *resource dependency*. Subsequently, the resulting Eigenvectors are used to predict a Resource Dependency Score (RDS).

A similar process is used for the expression of the democratic institutions' subindices. Here, too, the variables are theoretically intertwined. In this case, the principal component analysis is used to avoid possible issues with collinearity that would be caused by including all variables pertaining to democracy separately.

Model specification

The operationalisation of the concepts that make up the neocolonial thesis results in the following two statistical models:

$$R_i = \beta_R + \beta_{RM_i} + \beta_{RF_i} + \beta_{RP_i} + \beta_{RL_i} + \epsilon_i \quad (1)$$

$$(\log)W_i = \beta_W + \beta_{WM_i} + \beta_{WF_i} + \beta_{WP_i} + \beta_{WL_i} + \epsilon_i \quad (2)$$

In which R_i stands for Resource Dependency Score R in country i ; W_i stands for wealth expressed in Gross Domestic Product per capita in country i ; M stands for a vector of macroeconomic factors in country i ; F stands for a vector of former global institutions in country i ; P stands for a vector of present global institutions in country i ; L stands for a vector of local institutions in country i ; and ϵ_i is the error term.

Analysis consists of multiple Ordinary Least Squares (OLS) regression in which both models are tested and compared to one another. (Mehmetoglu & Jakobsen, 2017a)

In both cases, the OLS regression is also applied to each conceptual grouping of variables individually. This is done to consider each research question independently and compare them to the full model, as well as to get a sense of the robustness of the full model.

3.4: Hypotheses

RDS model

Macroeconomic factors

H0: there is no significant relationship between the selected macroeconomic variables and current resource dependency.

H1: There is a significant relationship between the selected macroeconomic variables and current resource dependency.

Past global institutions

H0: There is no significant relationship between the selected global institutional variables and current resource dependency.

H1: There is a significant relationship between the selected past global institutional variables and current resource dependency.

Present global institutions

H0: There is no significant relationship between the selected present global institutional variables and current resource dependency.

Local institutions

H0: There is no significant relationship between the selected local institutional variables and current resource dependency.

GDP model

Macroeconomic factors

H0: there is no significant relationship between the selected macroeconomic variables and current wealth.

H1: There is a significant relationship between the selected macroeconomic variables and current wealth.

Past global institutions

H0: There is no significant relationship between the selected global institutional variables and current wealth.

H1: There is a significant relationship between the selected past global institutional variables and current wealth.

Present global institutions

H0: There is no significant relationship between the selected present global institutional variables and current wealth.

Local institutions

H0: There is no significant relationship between the selected local institutional variables and current wealth.

IV - Results & Analysis

This chapter presents the results from the OLS regressions for all GDP model specifications and RDS model specifications as laid out in the previous section, and analyses them. In addition, the differences between the GDP model and the RDS model are analysed. To start off, the results of the principal component analyses are presented, demonstrating that this choice is appropriate for the statistical analysis of the hypotheses. The distribution of the resulting variables is shown in the maps in the appendix.

4.1 Principal Component Analyses

The eigenvalues for the resource dependency variables show that reducing the variables in question to a single component can be considered appropriate, as one rule of thumb for the number of components to reduce the data to is to use the components with eigenvalues higher than 1 (comp1 = 1.68657). However, table 4.1 shows that the second component has an Eigenvalue of 0,96. Consequently, it could also be justified to consider this component. Furthermore, the difference between the eigenvalues of the components show a near linear relation between the components, though it does curve downwards slightly after the first component. Consequently, reducing the variables in question to a single component can be justified, but could result in some reliability issues. For example, it could indicate that the inverse relation between economic complexity and resource extraction is not as significant as the theoretical expectation. However, since the aim is to use this component as a dependent variable, the variables are reduced to a single component nonetheless.

The results for the eigenvectors for this single component (table 4.2) correspond to the theoretical expectations: increased economic complexity is associated with lower resource dependency (Eigenvector of -0,24), while rents and exports are associated with higher resource dependency (Eigenvectors of 0,69 and 0,68 respectively).

These Eigenvectors are used to predict *resource dependency scores* for each case, resulting in a geographic distribution of *resource dependency scores* presented in fig.4.1

Table 4.1: RDS pca Eigenvalues

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	1.68657	0.727187	0.5622	0.5622
Comp2	0.959387	0.605348	0.3198	0.882
Comp3	0.354039	.	0.118	1

Table 4.2: RDS pca Eigenvectors

Variable	Comp1	Unexplained
Economic Complexity	-0.2386	0.904
Rents	0.6895	0.1981
Resource Export	0.6838	0.2113

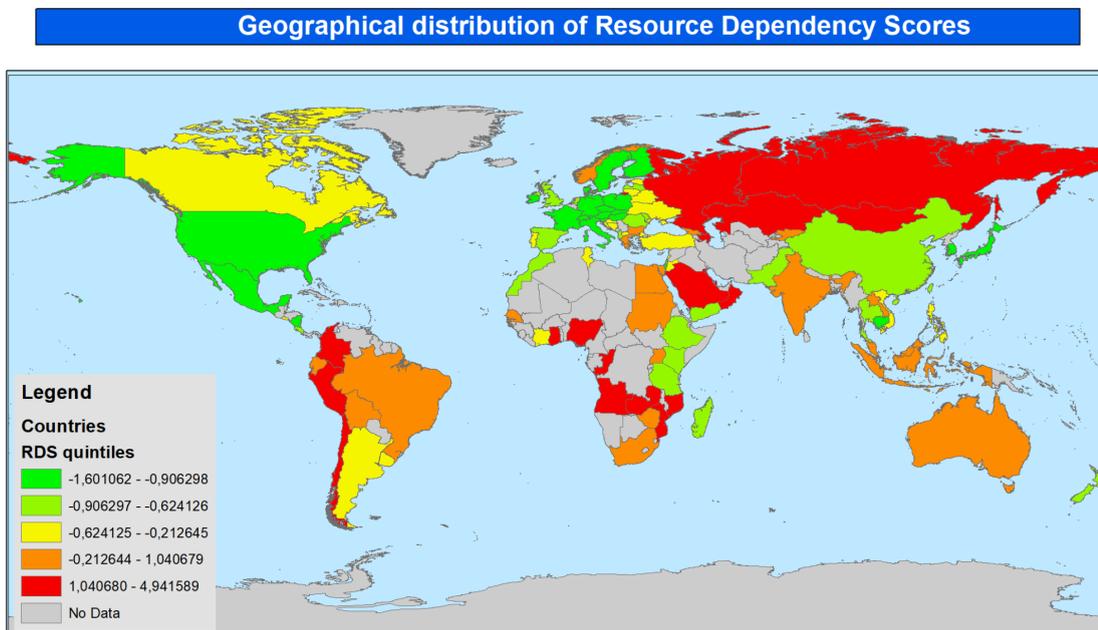


Fig. 4.1: Geographical distribution of Resource Dependency Scores

The principal component analysis for the democratic variables does not show the same issues as the analysis of the resource dependency variables. The Eigenvalue for the first component is well above 1 (comp1 = 2.93067), as opposed to the Eigenvalues of the other components (Table 4.3). In addition, the difference between the eigenvalues of the different components is much greater. Consequently, a single component is appropriate here. This is to be expected, since variables expressing different aspects of democratic governance are likely to be highly related to one another. In this case, the Eigenvectors again correspond to theoretical expectations; corruption detracts from the democracy score (Eigenvector of -0,52), while equal distribution of resources, freedom of expression, and free elections add to the democracy score (Eigenvectors of 0,47; 0,46; 0,54 respectively; table 4.4).

Table 4.3: Democracy pca Eigenvalues

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	2.93067	2.21054	0.7327	0.7327
Comp2	0.720134	0.501948	0.18	0.9127
Comp3	0.218187	0.087178	0.0545	0.9672
Comp4	0.131009		0.0328	1

Table 4.4: Democracy pca Eigenvectors

Variable	Comp1	Unexplained
Eqresource	0.4736	0.3427
Corrupt	-0.5167	0.2176
Expression	0.4626	0.3728
Election	0.5429	0.1363

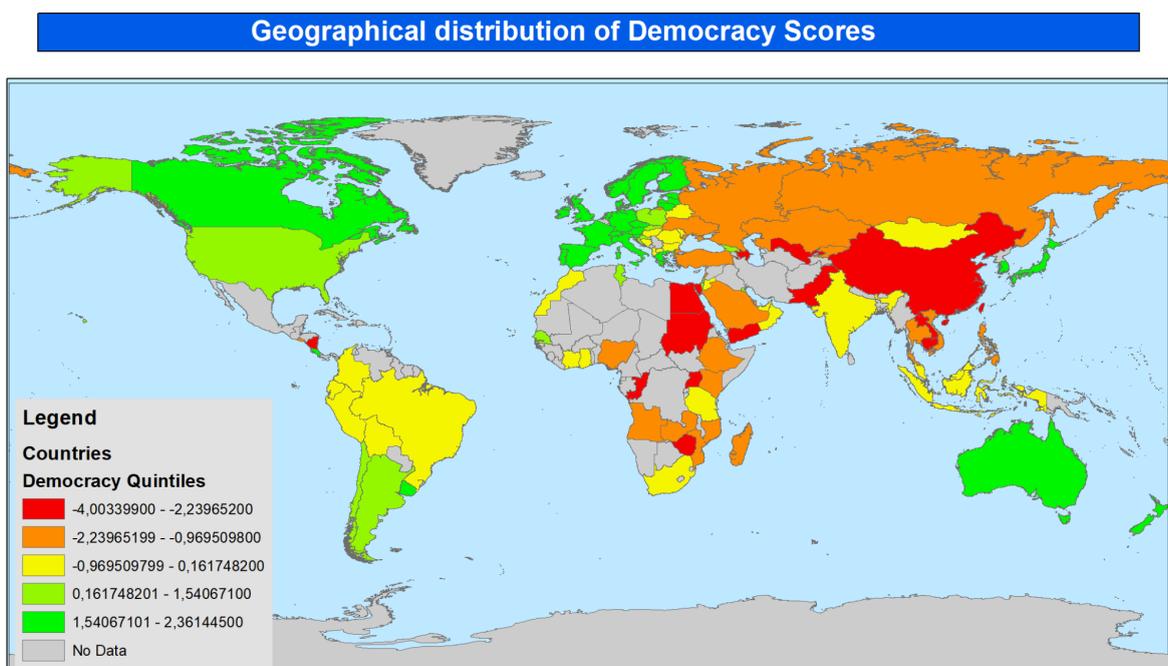


Fig. 4.2: Geographical distribution of Democracy Scores

4.2: Resource dependency model

The following section lays out the results for the different models using the Resource Dependency Scores as dependent variables.

4.2A: RDS Model 1 - Macroeconomic Variables

The outcomes for the Resource Dependency Score OLS regressions show some interesting results.

Starting with the regression for just the macroeconomic variables (Table 4.5 model 1), we can see that this model alone already has a decent explanatory value (R-Squared = 0,24). GDP as a percentage of GNI shows a highly significant ($P < 0,01$) positive correlation with resource dependency; the higher the GDP as a percentage of GNI, the higher a country's RDS. This is in accordance with the theoretical expectations.

Foreign Direct Investment is shown to negatively correlate with RDS, also in accordance with theoretical expectations. However, this correlation is insignificant.

The role of globalisation in this is against the theoretical expectation. Within the neocolonial framework, as well as in the dependency framework, there is an assumption of a global system which plays a role in economic development. However, this model shows a highly significant ($P < 0,01$) negative correlation (coefficient of -0,025): the more integrated an economy is in the global economic system, the lower the resource dependency score is predicted to be. Considering this globalisation would theoretically benefit advanced economies and disadvantage underdeveloped economies, globalisation would be expected to have no statistically significant relation to resource dependency.

4.2B: RDS Model 2 - Colonial Experience

The model for colonial experience (Table 4.5 model 2) only shows one significant correlation ($P < 0,1$), being the colony dummy. Only considering the colonial experience variables, countries that have a history as a colony have a Resource Dependency Score that is 0,5 points higher than countries that were never colonised. The years of independence don't have a significant relation with resource dependency. This model only explains 9% of the variance, (R-Squared = 0,09).

4.2C: RDS Model 3 - Global Institutions

Considering the outcomes for the IMF dummies model (Table 4.5 model 3), we can see that there is no significant relationship with resource dependency for any of the variables ($P > 0,1$). Additionally, this model only explains 3,5% of the variance in resource dependency scores. (R-Squared = 0,035)

4.2D: RDS Model 4 - Democratic Institutions

The democratic institutions pca score model (Table 4.5 model 4) does show a highly significant correlation ($P < 0,01$). This variable alone explains 16% of the variance in resource dependency (R-Squared = 0,16)

4.2E: RDS Model 5 - Full Model

Hypotheses full RDS model

Macroeconomic factors:	H1 rejected
Global past institutions:	H1 rejected
Global current institutions:	H1 rejected
Local institutions:	H1 not rejected

For global institutions, past and present, as well as macroeconomic factors, the hypotheses are rejected. Even though in some cases there is a significant relationship, the relationship is inverse of what was expected.

Considering the full model (Table 4.5 model 5), we can see that there are only two variables that show a significant relation with the RDS in both the corresponding conceptual group model and the complete model. These variables are GDP as % of GNI and the democracy score. These show coefficients which are similar between their conceptual group model and the full model.

In addition, FDI average as % of GDP and IMF dummy 2 show a significant relation to RDS in the full model, but not in their corresponding conceptual group models; globalisation and the colony dummy have a significant relationship with RDS in the conceptual group model, but not in the full model. This means that these results are less robust than those previously mentioned. Overall, the R-squared for the full model is 0,38. This is quite good for what is being tested, as its explanatory value is similar to that found in the work of Acemoglu et al. (2001, 2002) and Feyrer & Sacerdote (2009).

The model predicts that GDP to GNI rate, history as a colony and Phase 1 IMF loans are associated with a higher resource dependency. FDI, globalisation, independent years, Phase 2 and 3 IMF loans, and democracy are associated with a lower resource dependency.

Interestingly, the regression model shows that having loaned from the IMF during the second phase is significantly correlated with a lower dependency on natural resources today. Given the analyses of Smith(1977) and Nkrumah (1965), one would expect that adherence to global institutions would be associated with an increased dependency on natural resources - particularly the global institutions of the neoclassical era. While this still could have been the case at the time, the results show that these countries are less likely to depend on natural resource extraction today. It is also interesting that GDP as a percentage of GNI is positively correlated to present-day resource dependency; the higher GDP is compared to GNI, the more dependent a country is on natural resources. This is in line with expectations: a country for which foreign sources of wealth contribute significantly to the economy, are theoretically expected to be on the *developed economy* side of the equation.

An unexpected result in the full model is the lack of significant correlation between resource dependency and colonial experience. This could be the product of the methodology; a cross section of all countries, not just former colonies, means that less variety in colonial experience can be included in the model.

Additionally, again contrary to expectation, foreign direct investment is negatively correlated with resource dependency. This is an indication that foreign investment to intensify the production of natural resources is a limited framework at least. Rather, it appears that foreign investment helps countries to move away from a dependency on natural resources, as FDI shows significant negative correlation with resource dependency in the full model. This could be an indication that foreign direct investment is presently used to move away from resource dependency in the same way colonial investments were used to move away from the previous indigenous economic structure as put by Austin (2014)

Table 4.5: Regression table for RDS models 1 through 5

		(1)	(2)	(3)	(4)	(5)
		Resource Dependency Score	Resource Dependency Score	Resource Dependency Score	Resource Dependency Score	Resource Dependency Score
Macroeconomic Variables	GDP % of GNI	0.072 (0.016)***				0.082 (0.018)***
	FDI Average (% of GDP)	-0.007 (0.019)				-0.041 (0.024)*
	Globalisation	-0.025 (0.007)***				-0.011 (0.010)
	Colonial Experience		0.502 (0.291)*			0.443 (0.301)
	Years of Independence		-0.001 (0.0004)			-0.0004 (0.0003)
Global institutions	IMF dummy 1			-0.261 (0.286)		0.016 (0.284)
	IMF dummy 2			-0.213 (0.309)		-0.605 (0.272)**
	IMF dummy 3			0.470 (0.288)		-0.178 (0.266)
Democratic Institutions	Democracy				-0.301 (0.071)***	-0.236 (0.092)**
	Constant	-6.101 (1.670)***	-0.662 (0.532)	-0.018 (0.235)	0.010 (0.121)	-7.864 (2.053)***
	Observations	99	99	100	99	97
	R Squared	0.2376	0.0914	0.0353	0.1573	0.3885

Standard errors in parentheses. * significant at 10%; ** significant at 5%; ***significant at 1%.

4.3: Log GDP per Capita model

The following section lays out the results for the different models using Log GDP per capita as dependent variables.

4.2A: GDP Model 1 - Macroeconomic Variables

In the case of the GDP model, the result for the *Macroeconomic Variables* specification (Table 4.6 model 1) shows significant correlation with GDP per capita for FDI average ($P < 0,1$). The correlation between FDI and GDP is predicted to be negative. The relation between GDP and Globalisation is significant as well ($P < 0,05$), though the relation is predicted to be inverse to the theoretical expectation, which is that integration into a globalised system negatively affects GDP. This model alone has an R-Squared value of 0.58.

4.2B: GDP Model 2 - Colonial Experience

The Colonial Experience specification (Table 4.6 model 2) has an R-Squared value of 0,17 and predicts that former colonies have significantly lower ($P < 0,01$) GDP per capita today than countries that have never been colonised. This is again in line with the theoretical expectation. Years of independence, however, does not show a significant relation with GDP.

4.2C: GDP Model 3 - Global Institutions

The Global Institutions specification (Table 4.6 model 3) explains 0.49 of the variance in GDP. It shows that having loaned money from the IMF after 1973 is negatively associated with present-day GDP. From these phases, the third phase is predicted to affect GDP more negatively than the second phase ($P < 0,01$ in both IMF phases after 1973). IMF loans in phase one show no significant correlation with present-day GDP.

4.2D: GDP Model 4 - Democratic Institutions

The Democratic Institutions specification (Table 4.6 model 4), similar to in the RDS model, is shown to significantly correlate to GDP ($P < 0,01$). This specification again shows a decent explanatory power with an R-Squared value of 0,58.

4.2E: GDP Model 5 - Full Model

Hypotheses GDP model

Macroeconomic factors: H1 not rejected

Global past institutions: H1 rejected

Global present institutions: H1 not rejected

Local institutions: H1 not rejected

The full GDP model (Table 4.6 model 5) shows that GDP to GNI ($P < 0,1$), globalisation, ($P < 0,01$) all IMF dummies ($P < 0,05$; $P < 0,01$; $P < 0,01$; respectively), and democracy ($P < 0,01$) are significantly correlated to GDP per capita; the model has a strong explanatory power with an R-Squared value of 0,83. None of the variables for colonial experience show statistically significant correlations ($P > 0,1$). Overall, in this model, GDP to GNI, globalisation, independent years, IMF loans during Phase 1 and democratic institutions all contribute positively to current GDP per capita. FDI, history as a colony and IMF loans during phases 2 and 3 are associated with lower current GDP per capita

This model's correlation between GDP as percentage of GNI and log GDP per capita is not in line with theoretical expectations. It is possible that this is due to recent changes in the global economy; remittances are included in the GNI figure, meaning that these extractive flows of wealth are no longer one-way streets. It could in fact be the poorer countries that rely on these flows more so than developed economies. Within the framework that states macroeconomic factors express what the global economy looks like, with authors like Tausch (2010) previously concluding that integration

into this global economic system as measured by globalisation negatively affects the distribution of wealth within countries, we can come to the conclusion that this global system does actually likely benefit the performance of a national economy as a whole.

The GDP model shows no significant correlation between the colonial experience variables and present-day GDP, possibly due to the same reasons speculated upon for the RDS model.

The global institutions variables, however, do show interesting results. Particularly IMF phase 2 is associated with a decreased GDP per capita today. In terms of global institutions, it appears that the Bretton Woods system and the Keynesian paradigm are positively correlated with current economic performance, while the subsequent systems are negatively correlated with current economic performance.

From the second phase onward, it can be said that the postcolonial era was definitively underway. That IMF loans from this onwards are negatively associated with present-day economic performance, lends credence to the idea that the IMF serves as a global institution maintaining a global economic system in which underdeveloped economies are kept in their place, as some researchers and analysts have already argued before (Harvey, 2007; Smith, 1977; Owusu, 2003). It should be noted, however, that this correlation does not necessarily entail causation. It may well be the case that the policy was simply ineffective, considering that IMF policy started to be more concerned with the performance of underdeveloped economies than before (Ahmed & Sukar, 2018). The summary statistics in chapter III also support this: of all the cases, 31% took IMF loans during phase 1, while 66% and 51% took IMF loans during phase 2 and 3 respectively (table 3.1). In the end, this makes it difficult to conclude which side is right. Did the IMF and other NGOs start lending money to poor countries to keep them in check, or did they do so to help them grow? Either way, assuming good faith, it does show that these approaches were not very effective in achieving significantly greater economic performance.

Once again, the democracy variable shows a great significance in predicting economic performance, indicating that the role of local institutions in facilitating complex economic activities cannot be overlooked when it comes to questions of economic development.

Table 4.6: Regression table for GDP models 1 through 5

		(1)	(2)	(3)	(4)	(5)
		Log GDP per Capita				
Macroeconomic Variables	GDP % of GNI	-0.002				0.028
		(0.012)				(0.010)***
	FDI Average (% of GDP)	-0.026				-0.020
		(0.014)*				(0.013)
	Globalisation	0.064				0.026
		(0.006)**				(0.006)***
Colonial Experience	Colony Dummy		-0.883			-0.146
			(0.290)***			(0.168)
	Years of Independence		0.001			0.0003
			(0.0004)			(0.0002)
Global institutions	IMF dummy 1			0.016		0.387
				(0.218)		(0.158)**
	IMF dummy 2			-1.126		-0.720
			(0.235)***			(0.151)***
	IMF dummy 3			-1.180		-0.534
				(0.219)***		(0.148)***
Democratic Institutions	Democracy				0.612	0.282
					(0.052)***	(0.051)***
	Constant	5.609	10.337	10.414	9.073	5.387
		(1.286)***	(0.529)***	(0.179)***	(0.089)***	(1.142)***
	Observations	99	99	100	99	97
	R Squared	0.5884	0.1733	0.4922	0.5855	0.8265

Standard errors in parentheses. * significant at 10%; ** significant at 5%; ***significant at 1%

4.4 Synthesis

Between the two models, the most consistent result is the beneficial role of democratic institutions. In all model specifications, this variable shows a significant correlation with a lower dependency on natural resources and a greater GDP per capita. This appears to be the single most robust result in the entire analysis. Here, too, the direction of the relation remains up for debate. Are well-functioning institutions a luxury only afforded to richer countries? Particularly the role of corruption is relevant in evaluating this relationship. Is corruption a function of underpaid public servants? Could it be the case that corruption hinders the establishment of more complex economic activities? Is it the result of how political power is distributed, as put by Acemoglu & Robinson (2008)? Hypothetically speaking, the neoclassical, the *reversal of fortune*, and the dependency viewpoints would all have different explanations for this relationship. In the case of the neoclassical approach, corruption would be a result of local institutions failing to curb corruption; in the case of dependency approach, it would be the result of foreign economic influence; in the *reversal of fortune* approach, it would be the result of the local economic (formerly colonial) elite.

The biggest difference between the RDS model and GDP model in terms of outcomes is the degree to which global institutions are predicted to be a relevant factor. The RDS model leaves only a small role for IMF loans. Of particular interest is the negative relation here: having loaned from the IMF between 1973 and 2000 is correlated with a significantly lower dependency on natural resources today. Meanwhile, this same variable is significantly correlated with a lower GDP per capita today.

This distribution suggests the perspective that global financial institutions play a significant role in enforcing particular economic systems, as suggested by Owusu(2003). Smith (1977) and Harvey (2007), is warranted. The first IMF phase/economic paradigm can not definitively be regarded as postcolonial - and postcolonial phases/paradigms subsequently fail to aid development. International institutions could even be considered along the lines of *de facto* power presented by Acemoglu & Robinson (2008), as the proposed policy of these institutions can be in conflict with *de jure* power of a nation - as exemplified by the adoption of free market policy by African countries (Owusu, 2003) or the adoption of austerity policy by Greece (Varoufakis, 2017)

The full models also show a large difference in model fit (R-squared). Whereas the model explains 38,9% of the total variance in RDS, the same model explains 82,7% of the variance in GDP. There is also a noteworthy discrepancy between the two models in terms of theoretical expectations. How can value added from outside the local economy (GDP as % of GNI) be correlated with both lower resource dependency and lower GDP per capita? One possible explanation is a shift in neocolonial economic relations. It is well possible that new economic phenomena (such as the previously discussed remittances) cause this variable to be more vague than expected.

As previously mentioned, differences in local conditions between countries could be a cause for statistical bias issues. For this reason, it can be useful to analyse cases in which outcomes vary significantly from the model's predictions. These are presented in table 4.7. For both models, the three most significant positive and negative discrepancies in predicted values and actual values are presented. In addition, the two cases for which both models are very reliable are also presented. The discrepancies are also presented in figs. 4.3 & 4.3. The most striking case here is the republic of the Congo; this case conforms with almost all the proposed expectations of a neocolonial relationship based on the extraction of natural resources. GDP is almost 50% higher than GNI, indicating that a significant amount of wealth is extracted. It has a history as a colony and has been independent for a relatively short amount of time. The country has taken IMF loans in phases 2 and 3, but not in phase 1. It has poorly functioning democratic institutions, a high dependency on natural resources, and a low GDP.

On the opposite end of the spectrum, we can see that the two significant oil exporters in the list (Kuwait and Qatar) perform better than the model predicts. They are more dependent on natural resources than the model predicts, but also have a much higher GDP than predicted. This, too, lends credence to the analysis of Smith (1977), as it appears to suggest that exporting cartel resources invalidates the relation between resource dependency and economic performance. The map showing GDP discrepancies (fig. 4.4) show that all the gulf states bar Oman, as well as Russia, have both a higher resource dependency and a higher GDP than the models predict.

On the whole, the difference between the two models indicates that resource dependency can not be considered as a reliable proxy for economic performance or GDP. However, the explanatory value of the GDP model does indicate that the neocolonial framework could be useful. The difference could mean that neocolonial relations have different characteristics nowadays. One of these could be *remittances*. This can blur the phenomenon of value added by firms operating abroad, as the more recent mechanism here is money being sent back by immigrants. This could indicate that in the present-day economy, there are countries that don't so much rely on the extraction of natural resources as they do on remittances. These remittances would reduce the GDP to GNI rate, and thus blur what international flows of wealth look like. If this is the case, it could be interpreted as a redistribution of wealth from developed to underdeveloped, partially cancelling out the reverse phenomenon

Table 4.7: Largest discrepancies and best fits for RDS and GDP models

	Country	GDP % of GNI	FDI Average	Globalisation	Colony	Years of Independence	IMF Phases	Democracy	Resource Dependency Score	log GDP per capita	RDS Discrepancy	GDP Discrepancy
RDS												
higher	Zambia	105.114	4.392	51.850	yes	54	2; 3	-1.434	2.417	7.324	2.052	-0.372
	Congo, Rep.	144.941	31.356	52.830	yes	58	2; 3	-2.686	4.942	7.855	2.158	-0.099
	Kuwait	101.194	0.178	67.130	yes	56	none	0.452	4.682	10.434	4.296	0.573
RDS												
Lower	Cambodia	109.401	11.842	62.690	yes	65	2	-3.172	-1.137	7.321	-2.005	-0.681
	Ireland	131.826	37.644	86.190	yes	96	3	2.039	-1.180	11.272	-1.7312	0.865
	Pakistan	100.031	0.737	26.980	yes	71	1; 2; 3	-2.346	-0.791	7.301	-1.398	0.201
GDP												
Higher	Turkey	89.921	1.654	52.360	no	719	1; 2; 3	-1.972	-0.513	9.154	0.816	1.239
	Qatar	112.032	0.225	74.440	yes	140	none	-1.501	2.996	11.096	1.385	1.263
	Argentina	94.041	1.520	27.260	yes	202	1; 2; 3	0.856	-0.458	9.362	0.267	1.496
GDP												
Lower	Mozambique	108.924	22.883	49.710	yes	43	2; 3	-1.508	1.883	6.221	1.925	-1.133
	Uganda	102.789	2.712	49.800	yes	56	1; 2; 3	-2.240	-0.139	6.647	-0.612	-1.122
	Madagascar	104.903	3.968	38.570	yes	58	2;3	-1.785	-0.671	6.268	-1.267	-0.980
Best Fit												
	Sweden	98.221	1.615	81.320	no	495	none	2.1593	-1.082	10.908	0.015	0.025
	Japan	95.158	0.448	64.010	no	1618	none	1.972	-1.496	10.575	0.003	-0.071

Geographical distribution of RDS discrepancies

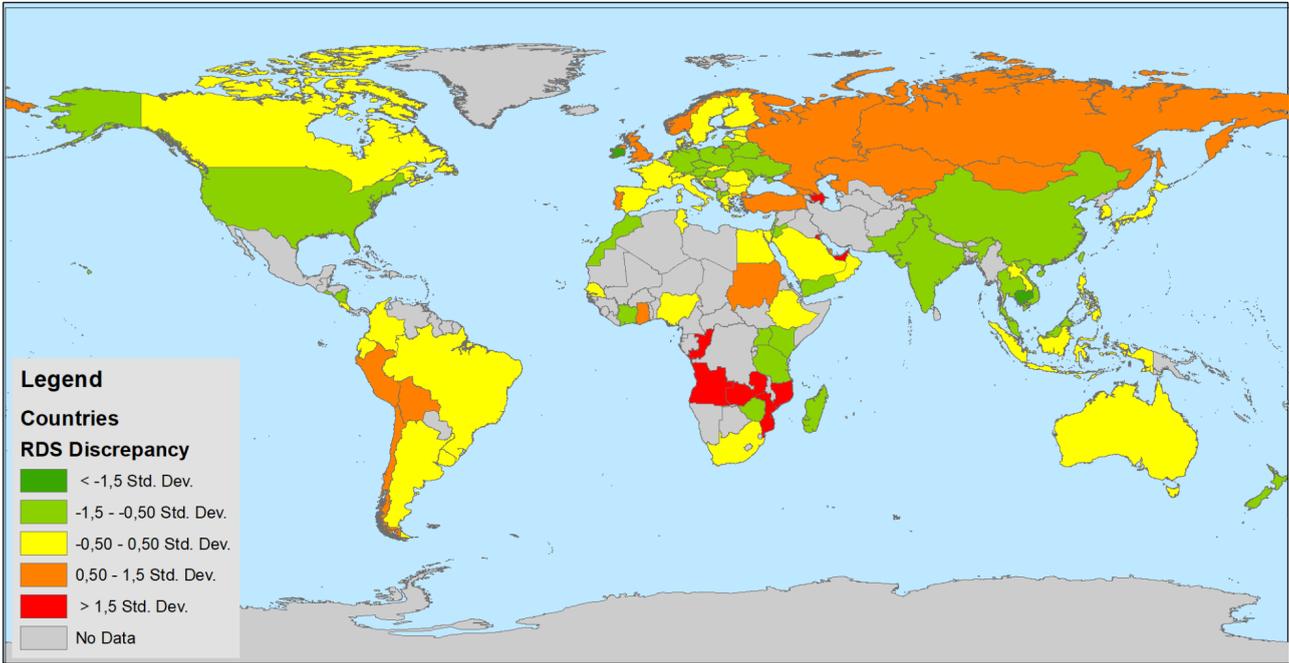


Fig. 4.3: Geographical distribution of RDS discrepancies

Geographical distribution of GDP discrepancies

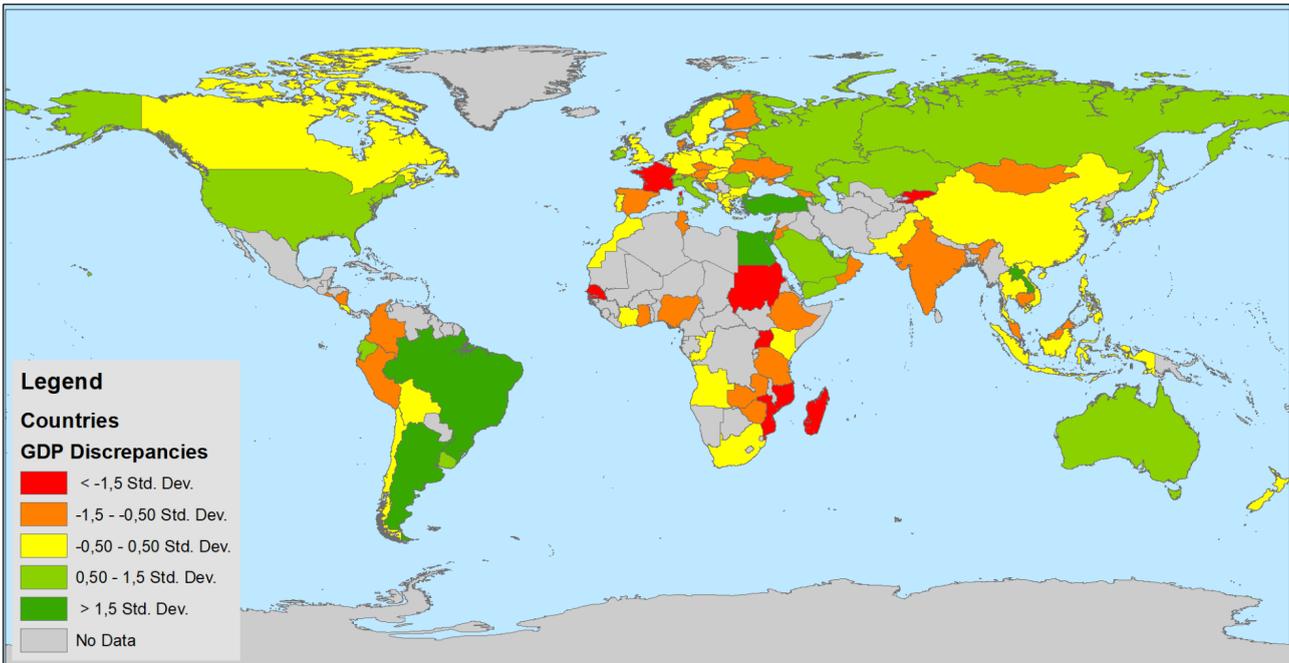


Fig. 4.4: Geographical distribution of GDP discrepancies

V - Conclusion & Discussion

5.1: Discussion

A significant finding regarding the thesis of neocolonialism, in terms of resource extraction, is that resource dependency does not reliably function as a proxy for economic performance. However, the reason for the discrepancy between the GDP model and the RDS model is unknown.

The lack of significant results for colonial experience could be due to the method used to measure it. More distinction in terms of colonial experience is needed to yield more useful results. However, as stated, doing so with a dataset that also includes colonisers and other countries that were never colonised is not straightforward.

Another cause of unreliability could be the internal and external factors not included in the model skewing the results. For example, the communist economic world completely collapsed in the 1990s. These countries already started off as rather poor when they entered the global capitalist system, but its application of economic shock therapy (Marangos, 2002) arguably means they embraced this system more than perhaps any other country. Plenty of these countries have been independent for quite a long time, but only have been a part of the capitalist global system for 3 decades. This means they have had less time to adjust their economies than former colonies, but were also more affected by global institutions than anyone else. There are also many other factors particular to these countries that could affect economic performance. For example, EU membership was an option for many former communist bloc countries that was not available to former colonies (the only exception being Ireland).

The role of geographic distance could also play a role. With larger distances between countries, economic relations need to be more profitable for the advanced economy to justify the maintenance of economic ties.

A severe shortcoming of this thesis is its failure to properly account for colonial experience. As stated, this is likely a consequence of this thesis casting a wide net in terms of cases. Consequently, a possible strategy for further identifying the role of colonial experience could be done with case studies that look at the colonial experience of one nation, and how this relates to the neocolonial concepts brought forward in this thesis.

In terms of explanations for the discrepancy between the GDP model and the RDS model, it could be the case that this discrepancy did not exist in the first decades of the postcolonial era, but that it has been increasing over time. If this is the case, there could be an economic process similar to the proposed neocolonialism that is shifting away from the dichotomy between resource dependency and industrial production, instead moving towards more advanced forms of economic activity than industrial production.

Literature on the knowledge economy and localised innovation systems indicates that the highly localised creation of knowledge is the most advanced, complex and productive economic activity in the modern economy (Porter, 2000; Boschma, 2005), replacing the manufacturing of manufactured goods.

Consequently, a system similar to neocolonialism, that is not centered around a dichotomy between resource extraction and industrial production, could still be in place. Such a system could revolve around intellectual property rights and the knowledge economy rather than the industrial economy. There are indications that intellectual property rights might constitute a redistribution of wealth away from economies without strong knowledge creation - and towards economies with strong knowledge creation. For example, Raiser et al. (2017) argue that the premium on the intellectual

property of renewable technologies would entail a flow of wealth towards the advanced knowledge economies, where these technologies were developed. As far as it is understood today, the establishment of a competitive localised knowledge economy with localised knowledge spillovers is highly dependent on local institutions (Boschma, 2005), and is difficult to attain. This would make the position of the local knowledge economy similarly difficult to attain as the industrial economy in the past - if not more difficult.

The definition of (neo)colonialism used in this thesis assumes a distinction between the colonial *resource economy* and the metropolitan *industrial economy*, based on the economics of colonialism as described by Austin (2014) and Roy (2002). This can be described as a *two-tier system*. However, we could also consider the introduction of a *third tier* in the form of the *knowledge economy*. Knowledge economies design the products; industrial economies manufacture the products; and resource economies deliver the raw materials. In such a relationship, it could be either the case that the industrial economy and the resource economy both have a colonial relationship with the knowledge economy. It could also be the case that the knowledge economy has a neocolonial relationship with the industrial economy, which in turn has a neocolonial relationship with the resource economy. This would explain activities that could be described as neocolonial resource extraction on the part of industrial economies such as China.

In order to investigate such a possibility, key concepts of the international knowledge economy such as intellectual property rights, patents, and brain drain could replace the concepts of resource rents and resource exports. There have already been some findings that point into the direction of economic relations that are similar to the neocolonial relations presented in this paper, except built around knowledge creation rather than resource extraction: Collins and Rhoads (2010) find that global institutions (World Bank in this case) greatly affect education policy in Uganda and Thailand - most notably, the liberalisation of this sector. This indicates that global institutions could still enforce such an economic system as they are argued to have in the past by Owusu (2003) and Harvey (2007). Perhaps, the role of international economic institutions could even be explained along the lines of Acemoglu & Robinson (2009), with international institutions taking on the role of the *economic elite* (representing developed economies), being in conflict with the *de jure* power of developing economies.

If this relationship would exist, it is up for debate whether it could still be described as “neocolonial”. The economic activity is very different from the “paleo”colonial economy, but hypothetically still yields similar results in terms of economic development, through similar mechanisms.

Taking these shifts in what entails “advanced economic activity” into account, it may not be appropriate to characterise the industrialisation of developing nations as “catching up”. Rather, it could be the case that they are “advancing” at the same pace or even at a slower pace than advanced economies. The industrialisation of developing economies should perhaps be seen as a phenomenon similar to the intensification of resource extraction during the colonial era described by Austin (2014). It increased productivity and economic performance (not in all cases), but it did not increase productivity and economic performance relative to advanced economies, and did not do much to advance the condition of the local inhabitants. Going by the findings in the *reversal of fortune* theory (Acemoglu et al, 2001; 2002; Acemoglu & Robinson, 2008), it actually did the opposite.

In summary, in the global economy, economic performance and productivity are not absolute terms, but relative. The economies that we call underdeveloped today are highly advanced compared to, for example, the economy of medieval Venice.

Unifying these speculations with a progressive view of the economy could mean that there is a constant movement towards ever more complex economic activities, requiring ever more complex and intricate local conditions. Economies that are left behind would have to make do with “outdated”, less complex forms of economic activity. This would also explain how, in absolute terms, wealth and development have been increasing in developing countries, but in relative terms, inequality has also increased.

5.2: Conclusion

Neocolonialism is theorised to be a global economic system, maintaining a situation in which poor countries remain poor, while rich countries grow richer. It entails the geographical concentration of wealth through the geography of production chains and value added, where most of the value added in the production chain is localised in advanced economies. This paper has observed some conceptual continuities between key findings regarding postcolonial economic development and the economic history of colonialism, and proposed a neocolonial model on this basis. In this model, the neocolonial economic relationship is seen as a product of local institutions, global institutions, and macroeconomic factors. Statistical analysis of the proposed model shows that using resource extraction as a key explanatory concept for economic development can be useful, but lacks explanatory power when compared to the effect the proposed neocolonial relationship has on actual wealth.

The results reaffirm the importance of local institutions in economic performance found by Acemoglu et al. (2001; 2002), but not the relation to colonial history. In addition, the influence of global institutions and macroeconomic factors is much greater on overall economic performance as a whole than it is on resource dependency. A significant contribution is the inclusion of the influence that international institutions wield, utilising IMF loan policy eras or “phases” as a proxy. Here, results show that IMF policy after 1973 has not been effective in improving economic performance. A key takeaway is that the soft power of global institutions continues to affect economic performance, arguably replacing the hard power that characterises “paleo”colonialism. Particularly the role of global institutions in enforcing the free trade policy that characterises both the economics of colonialism and phase 2 IMF loan policy (1973-2000) is noteworthy here.

Overall, the RDS model presented in this thesis is not a poor model at all. However, the discrepancy with the GDP model also presented is striking.

In conclusion, we can say that neocolonial relations culminating in resource extraction is a useful concept, but by no means exhaustive, and certainly not enough to explain the global distribution of wealth. Results indicate that a similar process that does not hinge on resource dependency and industrial production could be occurring, but more conclusive statements require additional research.

References

- Acemoglu, D., Johnson, S. & Robinson, J.A. (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. *Economic Review*, 91(5), pp. 1369-1401
- Acemoglu, D., Johnson, S. & Robinson, J.A. (2002). Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution. *The Quarterly Journal of Economics*, 117(4), pp. 1231-1294.
- Acemoglu, D. & Robinson, J.A. (2008). "Persistence of Power, Elites, and Institutions". *American Economic review*, 98(1), pp. 267-93.
- Ahmed, S. & Sukar, A. (2018). A Critical Evaluation of IMF History and Policies. *Management and Economics Journal*, 4(1), pp. 60-66.
- Austin, G. (2008). The 'Reversal of Fortune' Thesis and the Compression of History: Perspectives from African and comparative economic history. *Journal of International Development*. 20. Pp. 996-1027
- Austin, G. (2014). The Economics of Colonialism in Africa. In C. Monga & J.Y. Lin (eds.), *The Oxford Handbook of Africa and Economics: Volume 1: Context and Concepts*/ Oxford: Oxford University Press.
- Bornschiefer, V., & Ballmer-Cao, T. (1979). Income Inequality: A Cross-National Study of the Relationships Between MNC- Penetration, Dimensions of the Power Structure and Income Distribution. *American Sociological Review*, 44 (3), 487-506.
- Boschma, R.A.(2005). Proximity and innovation: a critical assessment. *Regional studies*, 39(1), 61-74.
- Boschma, R.A. & Frenken, K. (2006) Why is economic geography not an evolutionary science? Towards an evolutionary economic geography. *Journal of Economic Geography* (6)3. Pp. 273-302
- Chase-Dunn, C. (1975). The Effects of International Economic Dependence on Development and Inequality: A Cross-National Study. *American Sociological Review* 40(6). pp. 720-738
- Fatouros, A.A. (1965). Reviewed Work: Sartre on Colonialism. *World Politics*, 17(4). Pp. 703-719
- Feyrer, J. & Sacerdote, B. (2009). Colonialism and modern income: Islands as natural experiments. *The Review of Economics and Statistics*, 91(2), pp. 245-262
- Firmin-Sellers, K. (2000). Institutions, Context, and Outcomes: Explaining French Rule and British Rule in West Africa. *Comparative Politics* 32(3). Pp. 253-272.
- Friedman, T. L. (2005). *The world is flat : a brief history of the twenty-first century* (1st ed.). Farrar, Straus and Giroux
- Hammes, D. & Willis, D. (2005). Black gold: The end of Bretton Woods and the oil-price shocks of the 1970s. *Independent Review*, 9(4), pp.501–511.
- Huillery, E. (2009). History Matters: The Long-Term Impact of Colonial Public Investments in French West Africa. *American Economic Journal: Applied Economics*, 1 (2), pp. 176-215.

- IMF (2021). IMF Lending Commitments. Retrieved 04-2020 from <https://www.imf.org/external/np/fin/tad/extarr1.aspx>
- Kentor, J. (1998). The long-term effects of foreign investment dependence on economic growth, 1940–1990. *American Journal of Sociology*, 103 (4). pp. 1024–1046.
- KOF (2020). KOF Globalisation Index. Retrieved 28-10-2020 from <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>
- Lenin, V.I. (2008). *Imperialism: The highest stage of capitalism*. (T. Delaney & K. Goins, eds.) Marxists Internet Archive. Retrieved from: <https://www.marxists.org/archive/lenin/works/1916/imp-hsc/imperialism.pdf> (Original work published 1917)
- Meier, G. & Steel, W. (1987) (Eds.). *Industrial Adjustment in Sub-Saharan Africa*. (Washington, DC: World Bank, 1987).
- Marangos, J. (2002). The Political Economy of Shock Therapy. *Journal of Economic Surveys*, 16(1). Pp. 42-76
- Mehmetoglu, M. & Jakobsen, G. (2017a). Multiple Regression. In M. Mehmetoglu & G. Jakobsen, *Applied Statistics using STATA* (pp. 67-82)
- Mehmetoglu, M. & Jakobsen, G. (2017b). Exploratory Factor Analysis. In M. Mehmetoglu & G. Jakobsen, *Applied Statistics using STATA* (pp. 270-289)
- Nkrumah, K. (1965). *Neocolonialism, the last stage of imperialism*. Retrieved from: <https://www.marxists.org/subject/africa/nkrumah/neo-colonialism/>
- O'Brien, P. (2000). Mercantilism and Imperialism in the Rise and Decline of the Dutch and British Economies 1585-1815. *De Economist*, 148(4). Pp. 469-501
- OECD (2019). Country rankings (ECI). Retrieved 11-6-2020 from <https://oec.world/en/rankings/eci/hs4/hs92?tab=table>
- Owusu, F. (2003). Pragmatism and the Gradual Shift from Dependency to Neoliberalism: The World Bank, African Leaders and Development Policy in Africa. *World Development*, 31(10). pp. 1655-1672.
- Phillips, C.R. (1990). The growth and composition of trade in the Iberian empires, 1450-1750. In Tracy, J.D. (ed.), *The Rise of Merchant Empires* (pp. 34-87). Cambridge: Cambridge University Press.
- Pike, A., Rodríguez-Pose, A., & Tomaney, J. (2017). Concepts and Theories of Local and Regional Development. In A. Pike, A. Rodríguez-Pose, & J. Tomaney, *Local and Regional Development*. Routledge.
- Porter, M.E. (2000). Location, Competition, and Economic Development: Local Clusters in a Global Economy. *Economic Development Quarterly* (14)1. Pp. 15-34.
- Raiser, K., Naims, H. & Bruhn, T. (2017). Corporatization of the climate? Innovation, intellectual property rights, and patents for climate change mitigation. *Energy Research & Social Science*, 27, pp.1-8

Rao, N. (2000). “Neocolonialism” or “Globalization”? Postcolonial Theory and the Demands of Political Economy. *Interdisciplinary Literary Studies*, 1(2). Pp. 165-184.

Reuters (2011, June 11). Hillary Clinton warns against “New Colonialism” in Africa. Retrieved 30-06-2021 from <https://www.reuters.com/article/us-clinton-africa/clinton-warns-against-new-colonialism-in-africa-idUSTRE75A0RI20110611>

Rodrik, D. (2007) “The Inescapable Trilemma of the World Economy”, *Dani Rodrik’s Weblog*. Obtained from: https://rodrik.typepad.com/dani_rodriks_weblog/2007/06/the-inescapable.html

Roy, T. (2002). Economic History and Modern India: Redefining the Link. *Journal of Economic Perspectives*, 16(3). Pp. 109-130.

Smith, T. (1977). Changing configurations of power in North-South Relations since 1945. *International Organization* 31(1). Pp. 1-27

Sommer, M. (2007). Networks of Commerce and Knowledge in the Iron Age: The Case of the Phoenicians. *Mediterranean History Review* 22(1). pp. 97-111

Strabo (2014). Book 3 - Iberia. *The Geography of Strabo*. (D.W. Roller, Trans.). Cambridge: Cambridge University Press. (Original work published ca. 20 CE)

Tausch, A. (2010). Globalisation and development: the relevance of classical “dependency” theory for the world today. *International Social Science Journal* , 61: 467-488. doi: 10.1111/j.1468-2451.2011.01786.x

Van Mead, N. (2018, July 31). China in Africa: win-win development, or a new Colonialism? The Guardian. Obtained from: <https://www.theguardian.com/cities/2018/jul/31/china-in-africa-win-win-development-or-a-new-colonialism>

Varoufakis, Y. (2017) PART ONE: Winters of our Discontent. In Y. Varoufakis, *Adults in the Room: My battle with Europe’s deep establishment*. Penguin Random House, London.

V-DEM (2020). Country-Year: V-DEM Core. Obtained 29-03-2021 from <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>

Wallerstein, I. (1974). The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis. *Comparative Studies in Society and History* 16(4). Pp. 387

World Bank (2020). World Bank Open Data. Obtained from: <https://data.worldbank.org/>