COMILLAS
UNIVERSIDAD PONTIFICIA

Facultad de Ciencias Económicas y Empresariales
ICADE

Comparative analysis of the long-term effects of extractive colonial institutions: The Case of the Belgian Congo and the Dutch Indies

TRABAJO FIN DE GRADO

Autor: María García Álvarez
Director: Covadonga Meseguer Yebra

ABSTRACT

This thesis analyzes why the Belgian Congo and the Dutch Indies, two former colonies with extractive colonial pasts, followed sharply different development trajectories post-independence. The study, framed within debates on the roots of global inequality, adopts a comparative historical political economy approach that combines literature review, historical indicators, and process tracing to examine how colonial extraction was institutionally organized in each case and how those legacies influenced postcolonial state capacity. The main argument is that extractive colonialism was not institutionally homogeneous. On one hand, in Congo, extraction was organized around coercion, mining enclaves, restricted land rights, weak fiscal reach, and the limited formation of an indigenous elite. On the other hand, in the Dutch Indies, extraction, despite also being coercive, embedded a more diversified export-oriented agricultural economy, with deeper bureaucratic penetration, greater fiscal reach, and selective investments in education and welfare through the Ethical Policy. These differences led to distinct institutional inheritances after independence. Indonesia entered the postcolonial period with a more functional administrative structure and a small, educated elite that supported long-run growth and economic diversification. By contrast, the Democratic Republic of Congo inherited an enclave economy with weak institutional foundations, which contributed to rent dependence, economic decline, and political fragility. The thesis concludes that postcolonial divergence is best explained by the differences in the institutional organization of extraction, which interacts with the global economy and post-independence leadership, rather than by the mere existence of extractive rule.

Key Words: extractive colonial institutions; Belgian Congo; Dutch Indies; postcolonial development; comparative historical political economy.

RESUMEN

Esta tesis analiza por qué el Congo Belga y las Indias Orientales Neerlandesas, dos antiguas colonias con un pasado colonial extractivo, siguieron trayectorias de desarrollo distintas tras la independencia. El estudio, enmarcado en los debates sobre las raíces de la desigualdad global, adopta un enfoque de economía política comparada que combina revisión bibliográfica, indicadores históricos y análisis de procesos para examinar de qué manera se organizó la extracción en cada caso y cómo dichos legados influyeron en la capacidad institucional poscolonial. El argumento principal es que el colonialismo extractivo no fue institucionalmente homogéneo. Por un lado, en el Congo, la extracción se organizó en torno a la coerción, los enclaves mineros, la restricción de los derechos sobre la tierra, un escaso alcance fiscal y la formación limitada de una élite indígena. Por otro lado, en las Indias Orientales Neerlandesas, la extracción, a pesar de que también fue coercitiva, propició una economía agrícola más diversificada y orientada a la exportación, con una mayor penetración burocrática, alcance fiscal e inversiones selectivas en educación y bienestar a través de la Política Ética. Estas diferencias dieron lugar a distintas herencias institucionales tras la Independencia. Indonesia entró en el periodo poscolonial con una estructura administrativa más funcional y una pequeña élite educada, lo que impulsó el crecimiento a largo plazo y la diversificación económica. Por el contrario, la República Democrática del Congo heredó una economía de enclave con fundamentos institucionales débiles, lo que contribuyó a la dependencia de rentas, declive económico y fragilidad política. La tesis concluye que la divergencia poscolonial se explica por las diferencias en la organización institucional de la extracción, que interactúa con la economía global y con el liderazgo posterior a la independencia, más que por la mera existencia de un dominio extractivo.

Palabras clave: instituciones coloniales extractivas; Congo Belga; Indias Orientales Neerlandesas; desarrollo poscolonial; economía política comparada.

Table of Contents

1. Introduction *6*

2. Theoretical and conceptual framework *11*

3. Results and empirical analysis *17*

3.1. Extractive colonialism: historical overview 17

A) The Congo case: The Free State rule and Leopold II 18

B) The Indonesian case: The Dutch East India Company and the Cultivation System 19

3.2 Inherited institutions and immediate effects 21

A) The case of Congo: mining enclaves, weak taxation, minimal education, and excluded elites. 21

B) The case of Indonesia: colonial bureaucracy, partial investments, and educated elites. 23

3.3 Congo–Indonesia comparison 25

4. Discussion of the long-term effects *33*

5. Conclusion *38*

6. Appendix *41*

7. Bibliography *43*

List of Figures

Figure 1. *Map of the Belgian Congo, c. 1908* 7

Figure 2. *Map of the Netherland Indies, c. 1902* 8

Graph 1. *GDP per Capita in Indonesia and the Democratic Republic of Congo, 1950-2010 (PPP-Adjusted)3* 17

List of Tables

Table 1. *Colonial economic and institutional differences between the Belgian Congo and the Dutch Indies* 26

Table 2. *Area under main cash crops, 1958 ('000 hectares)* 27

Table 3. *Area cultivated by peasant households per agricultural worker, 1934 and 1958 (in hectares)* 28

Table 4. *Hectares of food crops per thousand people, 1958* 29

Table 5. *Production of food crops, 1958 (kg per capita)* 29

Table 6. *Budgetary revenues and expenditures per capita, c. 1938, African colonies and Indonesia (pounds)* 30

Table 7. *Budgetary and trade indicators: Netherlands Indies and the Belgian Congo, 1937* 31

Table 8. *Divergence in growth: GDP per capita (2000 $US)* 33

Table 9. *Structures of production: Sectoral composition of GDP (%)* 34

Table 10. *Composition of merchandise exports (%)* 34

1. Introduction

During the first half of the twentieth century, approximately one-third of the world's population lived under European colonial rule, a fact that continues to influence debates on global inequality and development (Rodney, 1972). Many of the world's poorest countries today were integrated into European empires until the mid-twentieth century. This has sustained the belief that colonial institutions and policies have left economic, social, and political distortions that have endured in the post-independence era.

Part of the critical literature argues that colonial rule prioritized metropolitan interests at the expense of the welfare and autonomy of indigenous communities, thereby creating institutional legacies that have weakened postcolonial state capacity and undermined long-run development (Mamdani, 1996). Another strand of literature highlights the developmental aspects of colonial integration, including the diffusion of capitalist methods of production, the integration into the global markets, and selective investments in infrastructure, health, and education, which have raised living standards and productivity in some colonial contexts (Warren, 1980; Ferguson, 2002). However, despite decades of research, the debate has not reached a single explanation for why some former colonies have achieved greater growth than others.

In the discussion, one of the most influential contemporary frameworks is that of Acemoglu and Robinson (2012). Their central argument is that long-term development outcomes depend on whether political and economic institutions are inclusive or extractive. Inclusive institutions distribute political power widely, create incentives for innovation and investment, and protect property rights. By contrast, extractive institutions concentrate political and economic power in the narrow elites. However, critics stress that institutions do not operate in a vacuum. Geography, disease, and access to trade routes (Gallup, Sachs, & Mellinger, 1998), cultural factors such as civic engagement and population trust (Putnam, 1993; Fukuyama, 1995), and the political economy of resource dependence (Auty, 1993; Sachs & Warner, 1995) can interact with institutions, constraining policy choices and shaping incentives.

This paper is situated within the ongoing debate. It uses a comparative case study to examine why some countries with similar extractive colonial pasts have diverged so sharply in economic growth after independence. The Belgian Congo, today the Democratic Republic of Congo, and the Dutch Indies, today Indonesia, are compelling cases because they apparently share a similar colonial past yet exhibit striking postcolonial divergence. Both Belgium and the Netherlands built extraction-intensive empires centered on a single major colony: the Congo for the former and the Dutch East Indies for the latter. Their colonies were among the most profitably exploited in the modern era, which was done through forced concessions and resource extraction, particularly of rubber, oil, tin, and copper, with prominent fiscal returns in the home country (Frankema & Buelens, 2013). Colonial extraction in these contexts encompassed multiple processes such as forced cultivation, trade monopolies, and labor coercion, which had effects on political and socioeconomic structures that would persist post-independence. Nonetheless, extraction in each colony was organized around different institutional structures, which ultimately contributed to the divergence observed after independence. At the same time, both countries are similar in that they lie in the tropics, are endowed with commodities, and inherited states shaped by centralized colonial governments with outward-oriented economies.

Figure 1. Map of the Belgian Congo, c. 1908

Source: Britannica Editors (2025).

Figure 2. Map of the Netherland Indies, c. 1902

Source: Britannica Editors (2025).

Despite their similarities, their trajectories diverged sharply after independence, especially after the late 1960s. At the time of independence, Congo's GDP per capita was higher than Indonesia's. Still, by the early twenty-first century, Indonesia had achieved significant growth and transformation, while the Democratic Republic of Congo experienced institutional breakdown and economic collapse (Frankema & Buelens, 2013). This contrast makes the comparison compelling and challenges the interpretation that extractive institutions are uniform and produce similar outcomes.

Accordingly, the research title that guides this study is "Comparative analysis of the long-term effects of extractive colonial institutions: The Case of the Belgian Congo and the Dutch Indies". The paper aims to analyze and compare the long-term effects of extractive colonial institutions in the Belgian Congo and Dutch Indies and to account for their divergent paths after independence, focusing on their economic, social, and political development.

Additionally, the paper has a series of specific objectives. First, to provide context for the establishment of extractive colonial systems under Dutch and Belgian rule, highlight the institutional legacies they left behind, and examine how institutions shaped labor, taxation, education, and governance policy during colonial times. Secondly, to analyze the immediate effects of these legacies in the post-independence Democratic Republic of Congo (DRC) and Indonesia. Thirdly, to compare the long-term development outcomes between the two cases. Fourthly, to assess whether it is colonial legacies alone that can help explain these differences or whether other factors (resource dependence, leadership, etc.) could have played a significant role. Finally, the paper engages with the broader debate on country inequality between countries by arguing that extractive colonial regimes should not be treated as institutionally homogeneous. In the context of this study, the Belgian Congo and the Dutch Indies were both extractive, but extraction was organized through different institutional configurations, and this variation helps explain the different postcolonial outcomes.

In terms of methodology, this paper adopts a comparative historical political economy approach, using comparative and historical methods to analyze the long-term effects of colonial extractive institutions across different contexts. The objective is not just to describe the trajectories of the Belgian Congo and Dutch Indies, but rather to identify the common and divergent patterns in the long term. Following a most-likely-cases design, both cases apparently displayed comparable starting conditions, including commodity endowments, outward-oriented colonial economies, a tropical location, and strongly extractive colonial rule, but diverged significantly after independence. This logic allows the isolation of the institutional mechanisms that contributed to the distinct development outcomes.

In line with this, the comparative analysis aids in evaluating how variations in the degree of extraction and investment, and differences in institutional organization, conditioned later results. The paper will focus on a literature review but will also utilize historical data such as production statistics, investment, GDP per capita, and education enrollment. Process tracing is a central methodological tool used to reconstruct the causal sequence linking colonial institutional formation to late-colonial inheritances, immediate post-independence conditions, and long-run outcomes. In this way, process tracing allows the paper to follow how specific mechanisms were established, reproduced, transformed, and transmitted over time. The comparison criteria that will be considered are production structure, fiscal policy and work systems, education and elites, governance post-independence, and social and economic development, including statistical indicators. The purpose is therefore to identify not only the way in which both cases were extractive but how extraction operated and through which institutional channels it shaped later development.

Finally, there are some challenges to studying the links between colonial extraction and long-term economic development. First, the institutions imposed by colonial administrations have been subject to change, either due to colonial policy reforms or to shifting responses from indigenous groups. Thus, casting extractive colonial institutions as a time-invariant indicator is problematic. Secondly, short-term consequences may differ substantially from long-term consequences, but the latter are hard to isolate as the number of control variables increases over time. Finally, the dependency on secondary sources and the potential Eurocentric bias in historiography pose limitations to the study.

Therefore, the historical approach aims to combine the systematic analysis of practices and institutions in the era of colonial extraction with the dynamic evolution of extractive institutions, local responses, and developmental consequences, taking historical change into account.

The study's academic and contemporary relevance is twofold. Firstly, it contributes to the ongoing debate about the roots of global inequality by analyzing how the extractive-and-inclusive institutions framework helps explain post-independence divergence. Secondly, it relates to the current policy discussions on development and state-building in resource-rich countries. If colonial legacies matter in specific mechanisms, then development strategies should aim to improve those, rather than focus only on short-term growth or technical reforms that disregard deeper constraints. At the same time, Indonesia's relative economic success suggests that even under authoritarian rule and corruption, sustained development can be achieved in a context of administrative capacity, human capital investments, and production diversification.

The paper is organized into three main sections: Section 2 situates the study within the broader theoretical debate; Sections 3 and 4 present the historical evidence and comparative analysis of the cases studied; and the final section summarizes the findings.

2. Theoretical and conceptual framework

During the first half of the twentieth century, around one-third of the world's population lived under European colonial rule (Rodney, 1972). Many of the world's poorest countries were part of European empires in the past. Thus, there is a strong belief that colonial policies and institutions have shaped the long-run development of their economies for the worse. Historical literature has demonstrated that colonial exploitation led to widespread impoverishment because colonial powers prioritized their own political and economic interests at the expense of the subjected communities and bequeathed distorted institutions to the overseas territories, which have undermined their prosperity and political stability in the post-colonial era (Rodney, 1972). Even though the ideological blanket covering the colonial legacy debate has been gradually pulled away, scholarly opinions on the root causes of poverty in former colonies have not converged.

To unpack these disparities, it is necessary to explore the broader theoretical frameworks scholars have developed to explain why some societies have achieved sustained prosperity, while others remain trapped in subdevelopment. These explanations range from institutional and geographical to cultural approaches, providing complementary perspectives on how both initial conditions and colonial legacies have influenced long-term development trajectories.

Acemoglu and Robinson (2012) proposed one of the most influential frameworks for explaining global inequality, the institutional hypothesis. They argue that the variation in institutions between societies is crucial to explaining differences in national economic prosperity in the modern world. Economic institutions provide the engine of economic growth, as they enable individuals to start businesses and engage in trade by creating incentives to commit long-term investments, adopt new technologies, and improve their knowledge and skills through education (Acemoglu & Robinson, 2012). In turn, the effectiveness of economic institutions is shaped by political institutions that determine how political power is spread across society.

Acemoglu and Robinson (2012) classify institutions as being either inclusive or extractive. On the one hand, inclusive institutions are those that encourage and enable most of the population to participate in economic activities in a secure and free manner. In this context, barriers to entry for new businesses and ideas are removed, and the economic playing field is leveled. Inclusive institutions are pluralistic; that is, political power is widely distributed rather than concentrated in a few hands.

On the other hand, extractive institutions are designed to benefit a few, privileged elites. This system is not conducive to economic growth because it fails to provide the necessary incentives for individuals to generate wealth, such as secure property rights and access to credit and capital. Furthermore, the elite focuses on protecting and maintaining their own power, even when it is not in the majority's interest. Thus, they may be inclined to maintain the *status quo* rather than embrace new technologies or innovations that could threaten their position of power. For instance, during the nineteenth century, while Western Europe was investing in developing steam railways, absolutist regimes such as Russia opposed the new technology in fear that it would threaten the feudal and agrarian system that granted them power (Acemoglu & Robinson, 2012).

In line with this theory, European colonizers transplanted different institutional systems depending on the feasibility of settlement and extraction. Colonies where Europeans faced higher mortality rates tended to develop extractive institutions designed to exploit local labor and natural resources to the benefit of the colonizing powers. These colonies include the Spanish *encomiendas*, the Belgian Congo, and the Dutch Indies. In contrast, colonies with lower settler mortality experienced large-scale European settlement, during which European home institutions, including the rule of law, property rights, and checks on power, were replicated. This system was created in countries such as the United States, Australia, and New Zealand (Acemoglu et al., 2001). The inequality hypothesis is useful in explaining why some countries with similar geographies or characteristics have different incomes. Nonetheless, it has limitations as it does not help explain why countries with extractive colonial pasts have diverged economically post-independence, as is the case with the Democratic Republic of Congo and Indonesia. Moreover, the authors rapidly dismiss other hypotheses, creating a false dichotomy, whereas a combination of multiple theories could help explain cross-country economic inequality.

A second line of explanation is the geographical or ecological hypothesis, which is proposed by Gallup, Sachs, and Mellinger (1998). Their main argument is that geographical and ecological factors, such as location, climate, disease environment, and access to the sea, play direct and indirect roles in shaping a country's long-term economic performance. Their hypothesis rests on three key patterns found from their study. Firstly, tropical regions are systematically poor. That is, most high-income countries lie outside the geographical tropics, as these face heavy disease burdens, high transportation costs, and lower agricultural productivity, all of which impede industrialization. Secondly, coastal countries, specifically those within 100km of a navigable sea or river, exhibit a higher GDP per capita and population density than landlocked or interior regions. Thirdly, landlocked countries, with a few exceptions such as Switzerland, are poor because of limited access to global markets, dependence on neighboring nations' infrastructure, and higher transportation costs. In line with this, it is estimated that each additional 1,000km distance from the coast reduces a nation’s income by around 1%, while being landlocked further depresses GDP by approximately 20% (Sachs et al., 1998).

Building on this framework, the authors present distinct mechanisms linking geography to development. Tropical diseases, particularly malaria, are identified as major impediments to productivity and growth. Diseases affect economic growth by reducing life expectancy, school attendance, labor productivity, and discouraging foreign investment. Their regression model shows that tropical countries with high malaria incidence grew at 1.3 percentage points per year slower than non-tropical countries from 1965 to 1990 (Sachs et al., 1998). Moreover, agricultural output in tropical climates is constrained by heat, poor soils, and pests. The study estimates that agricultural productivity in tropical regions is 30 to 50% lower than in temperate zones, after controlling for inputs. Thus, tropical economies rely heavily on subsistence agriculture, while temperate regions transitioned earlier to industry and services. Finally, a country's geographical position determines transportation costs, which in turn affect industrialization and trade. Coastal regions with access to navigable rivers and ports enjoy lower trade costs and are more integrated into the global markets. In contrast, inland economies face high costs for both importing and exporting goods. Nearly all successful developing countries after 1965, such as the Asian Tigers, based their growth on export-oriented manufacturing and were located within 100km of the coast (Sachs et al., 1998).

In line with these mechanisms, cross-country regressions and spatial datasets revealed robust empirical links between geography and both the level and growth of GDP per capita. Some of the key findings include the tropical location and malaria prevalence being highly negatively correlated with income and growth. Moreover, the share of tropical land, malaria index, and distance from core economies help explain over 60% of the variation of global income per capita (Sachs et al., 1998).

This hypothesis offers valuable insights into the divergent post-colonial outcomes of the Belgian Congo and the Dutch Indies. The Congo's geography exemplifies many of the features Sachs et al. (1998) identified as detrimental to development. The country lies almost entirely within the tropical rainforest belt and has a high incidence of tropical diseases, including malaria and yellow fever. Moreover, its landlocked interior had limited access to the Atlantic, making integration into global trade networks difficult. In contrast, the Dutch Indies, situated in humid tropics but with fertile volcanic soils, and its location along major maritime trade routes provided more favorable conditions for global economic integration.

However, the hypothesis has been strongly criticized, particularly by Acemoglu and Robinson (2012). One of its limitations is that it does not help explain divergent outcomes among countries with similar environments, such as North and South Korea or East and West Germany. Moreover, geography is historically constant, whereas economic prosperity changes. Once-poor regions such as Japan have become rich, while some geographically favored regions such as Venezuela remain poor. Finally, the colonial experience shows that geographic characteristics indirectly shape institutions. For instance, high European settler mortality led to extractive institutions, while easier climates led to settler colonies (Acemoglu et al., 2001).

The third dominant framework is the cultural hypothesis. Weber (1904) argued that inner-worldly asceticism, which involves disciplining one's occupation as a calling, and rationalized behavior such as investing, saving, and bookkeeping, favored the emergence of modern capitalism. He posits that such behaviors are culturally embedded in the Protestant community despite not being theological *per se*. Fukuyama (1995) expanded upon the cultural hypothesis and claims that differences in generalized trust explain why some societies sustain large, complex productive organizations while others rely on kin and family networks. High-trust societies can scale cooperation, while low-trust ones pay a "transaction-cost tax" on growth. Putnam's (1993) study in Italy adds civic-association mechanisms: norms of reciprocity, dense networks, and participation predict policy effectiveness and government performance, thereby leading to better development outcomes. He observed that regions in Italy with stronger traditions of social trust and civic engagement attained higher economic performance and more effective governance. More recent literature observed that "culture," typically defined as customary beliefs and values transmitted across generations, influences preferences for cooperation, family ties, and trust, and most importantly, interacts bidirectionally with formal institutions that shape development paths (Alesina & Giuliano, 2013). In line with the academic literature, high trust reduces monitoring and enforcement costs and improves collective action capacity for public goods. Moreover, strong pluralistic family norms can substitute for impersonal cooperation, which is detrimental to scaling, thereby lowering generalized trust and civic engagement. Finally, some cultures are more work-oriented and sustain a long-horizon behavior, complementing the institutional rise of the modern bureaucracy.

This hypothesis has multiple limitations. Firstly, culture and institutions can co-evolve; this means that geography, shocks, and policy can shift both. Inferring that a particular culture can lead to growth without credible identification risks reverse causality. Moreover, culture poses measurement problems because it is proxied by surveys, historical instruments, or immigrant persistence, all of which are imperfect methods. At the same time, cultural approaches are often criticized for overusing Eurocentric baselines, elevating certain virtues that co-evolved with European institutions and markets and then reading them back as universal prerequisites. This ignores that alternative pathways to growth exist. Finally, over-culturizing outcomes can naturalize inequality or lead to an ineffective social engineering of values. Thus, the takeaway would be to target institutional complements, such as transparency and inclusive civic engagement, that enhance the returns to generalized trust, rather than trying to teach culture directly.

Finally, Auty (1993) and Sachs and Warner (1995) propose the "resource curse" hypothesis, the paradox that countries rich in natural resources tend to experience higher poverty, slower economic growth, and weaker institutions compared to resource-poor countries. This may arise from several interrelated mechanisms. Firstly, large resource rents can foster corruption, institutional decay, and rent-seeking. Revenues are frequently captured by political elites rather than funding public goods. Moreover, resource prices are volatile due to fluctuations in global demand. Such volatility exposes mineral economies to boom-bust cycles that undermine long-term development planning and fiscal discipline. The "*Dutch Disease*" is another mechanism at play, whereby mineral booms can appreciate the domestic currency and raise wages, which damages the competitiveness of agriculture and manufacturing. The crowding-out effect inhibits the diversification to other industries and leaves resource-rich countries vulnerable when resource prices fall.

However, mixed or inconclusive empirical support has been found on several of the hypothesis's main arguments. Even though price stability poses challenges, stabilization funds used in Norway or Chile can offset fiscal fluctuations (David & Tilton, 2005). Additionally, some degree of volatility may even encourage efficiency and reform. When it comes to the "Dutch Disease", structural adjustment following resource booms may be beneficial if resources are allocated to more productive sectors. Evidence of permanent deindustrialization is limited and largely relies on additional assumptions about manufacturing productivity (David & Tilton, 2005). Finally, when it comes to governance, institutional quality is the key differentiator. Where property rights and fiscal discipline prevail, and resource rents are properly invested, natural resources can promote development and industrialization, as has historically occurred in the United States and Germany, and more recently in Norway, Canada, and Australia.

Overall, natural resource wealth is neither a curse nor a blessing. Instead, it is a development opportunity whose outcome depends on the quality of governance, institutional strengths, and policy choices. Effective management of rents obtained through mineral exploitation can transform subsoil assets into sustained growth, while mismanagement can lead to instability, inequality, and dependency.

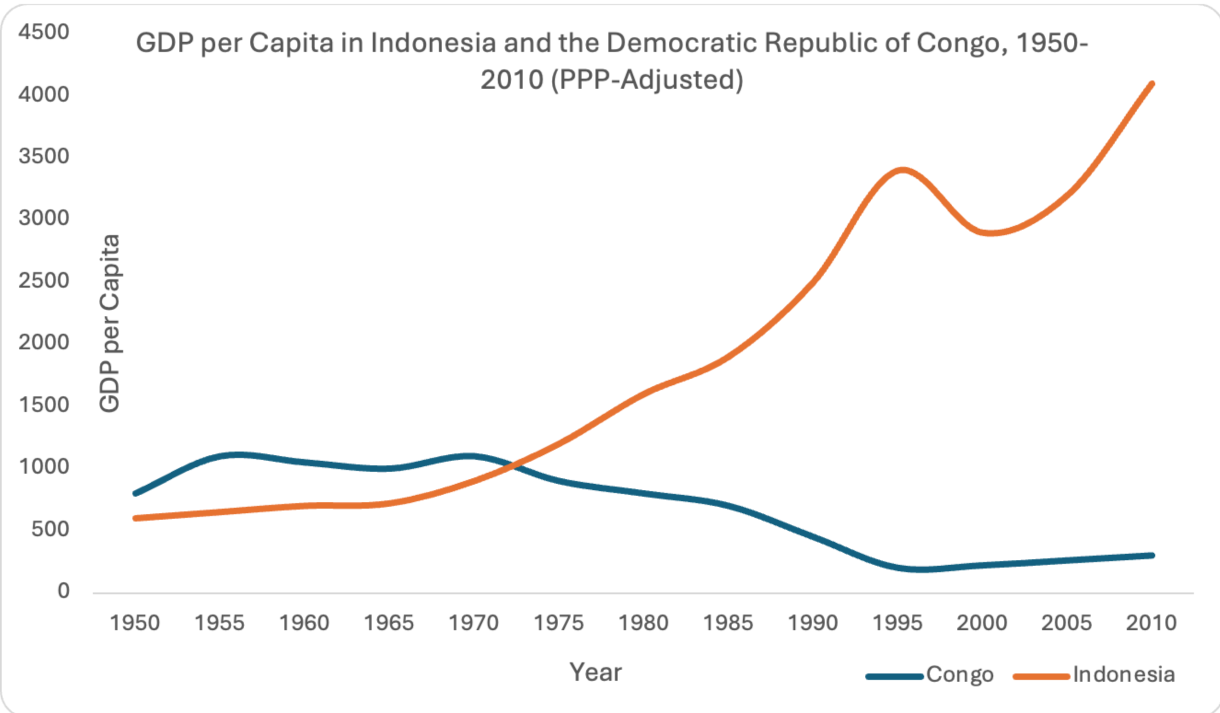
The point of departure in this paper is the belief that colonial legacies have been shaped by the interaction among the policies set by the colonial powers, local policy practices, and the indigenous institutional response.

3. Results and empirical analysis

3.1. Extractive colonialism: historical overview

Extractive colonialism in the Belgian Congo and Dutch Indies emerged from the nineteenth-century context of European imperial expansion. Still, it took different institutional forms, which are relevant to explain their long-run divergence in development. The comparison is motivated by the striking post-independence economic gap. Around the time of independence, Congo's GDP per capita was approximately 20% higher than Indonesia's, however, by 2009 Congo's GDP per capita had fallen around 22% of its 1970 level, while the GDP per capita of Indonesia had risen to approximately six times its 1960 level and to around 17 times the level of Congo (Heston et al., 2011).

Graph 1. GDP per Capita in Indonesia and the Democratic Republic of Congo, 1950-2010 (PPP-Adjusted)



Source: Data from Heston et al. (2011), Penn World Table version 7.0. Own elaboration.

European imperialism was directly connected with the structural transformation of northwestern Europe. The industrialization process reshaped the global political economy, as growing European demand for raw materials and markets intensified incentives to acquire overseas territories and reorganize local economies around export production (Booth, 2013). The case of the Dutch Indies illustrates the coexistence of extraction and selective investments. At the peak of forced cultivation in the 1850s, net profits from the forced cultivation of tropical commodities, known as the Cultivation System, contributed to up to 52% of the Dutch state tax revenue and made up almost 4% of the Dutch GDP (Frankema & Buelens, 2013). In contrast, the Congo case highlights how an extractive regime can be built around monopoly rights and violence, especially in a commodity boom, which in this case was rubber, producing unequal asset ownership patterns that have persisted into the late colonial period.

A) The Congo case: The Free State rule and Leopold II

The Congo is an example of extractive institutions in the *longue durée*[1], in which precolonial commodity trade interacted with shifts in political authority. External trade dynamics and the Atlantic slave trade eliminated earlier systems of checks and balances, producing political fragmentation and making the territory more vulnerable to external conquest (Exenberg & Hartmann, 2013).

In this context, Belgium was a late entrant into the colonization of Africa and would likely not have become a colonial power without the ambitions of King Leopold II. In 1878, Leopold II commissioned Henry Morton Stanley to explore the Congo and arrange treaties, presenting an independent Congo Free State (CFS) as a humanitarian project based on free trade (Broadhead, 1979). In practice, however, King Leopold's rule created a predatory institutional architecture around the state monopoly, where power was concentrated in the authority. Exenberg and Hartmann (2008) describe the CFS as "a private venture of the king, shaped by monopoly capitalism and brutal violence" (page 24). This was facilitated by the fact that coercive extraction was not alien to the region, which the slave and ivory trade had marked in the past.

Rubber quickly became central to the regime because it could be extracted quickly during a global boom. Creutzberg (1975) and Barlow (1978) document that rubber exports rose from zero in 1887 to over 5,000 tons in 1902, exceeding Indonesian rubber exports at the time and reflecting the intensity of CFS extraction. This system of acquisition was

[1] The *longue durée* refers to a historical approach that prioritizes deep, long-term structural approaches over short-term events. It emphasizes how the slow changing of social, economic and environmental factors shape historical outcomes over centuries rather than years (Braudel and Wallerstein, 2009).

accompanied by the introduction of the *impôt indigène*[2], a tax levied on rubber and sometimes on food and ivory, which increased production requirements. Additionally, there was compulsory labor on public projects, resulting in unpaid work for about 24 days a month (Edgerton, 2002). Indeed, the violent wild-rubber regime shaped the region's subsequent trajectory. The “red rubber” scandal, where thousands of Africans died because of the imposition of the forced collection of wild rubber, was one of the main factors that pushed Belgium to take over the Congo from King Leopold II in 1908 (Harms, 1975).

Early on, the Belgian administration formally dismantled the forced cultivation system and commercial monopsonies. However, institutional persistence endured, and wartime pressures during World War I led to renewed forced cultivation by decree in 1917, whereby villages were compelled to collect designated crops, and prices were fixed by authorities (Clarence-Smith, 2013).

The depth of the structural inequality generated under these institutions is captured by the distribution of assets and income in the latter times of the colonial period. In 1958, Europeans made up 1% of the population but received 45% of the wages and held 95% of capital assets. Moreover, they accounted for 82% of enterprises and 70% of material output (Peemans, 1968). Thus, Africans were integrated into export production under constrained rights and coercive recruitment, while Europeans controlled the enterprises and capital.

B) The Indonesian case: The Dutch East India Company and the Cultivation System

Extractive institutions in Indonesia evolved over a longer period and combined state coercion, corporate monopoly, and intermediary governance. Under the Dutch East India Company, known as VOC and founded in 1602, extraction was initially enforced through a monopoly in the spice islands, paired with a monopsony on purchases and a monopoly on sales in the Dutch Republic (Gerdelblom et al., 2013). The profit logic can be illustrated with the example of nutmeg. In the early seventeenth century, 600 pounds of nutmeg could be purchased for 120 guilders and sold for approximately 1200 guilders in Europe, providing an enormous profit margin (Fasseur, 1992). As a result of the brutal methods utilized to enforce the monopoly and disease, the Moluccan population in the spice islands decreased from 150,000 in the early

[2] The “native tax”, *impôt indigène* in French, in the Belgian Congo was a colonial tax established by decree in 1910 for the African populations. Its purpose was to finance the colonial administration and encourage forced labor. It was often collected violently by local chiefs in exchange of commissions (Moeller, 1936).

seventeenth century to around 100,000 by the end of the eighteenth century (Gonggripj, 1949).

The apex of state-led extraction occurred under the Cultivation System in the nineteenth century. Bosma (2007) describes its formal design, in which peasants set aside one-fifth of their land for export crops at fixed prices; however, in practice, official crop quotas often exceeded that share. The system was widely implemented, and by 1840, about 57% of Java's population worked under it (Booth, 2013). As a result, export revenues grew rapidly. Exports of coffee and sugar rose from 22.9 to 73.2 million guilders[3] in the period 1833-1869, while total exports grew from 33.3 to 92.4 million guilders (Fasseur, 1992).

Institutionally, the Cultivation System deepened the state's penetration into rural society and strengthened the power of local authority figures as they gained a share of the proceeds (Thee, 2013). Tax farming was an important component. From the mid-1820s onward, tax farm revenues contributed around a quarter of total colonial government revenue, while taxes on opium farms alone contributed over 138.5 million guilders per decade during 1866-1895 (Claver, 2006).

By the early twentieth century, the ideology of the Dutch Indies shifted from overt extraction to a welfare-oriented rhetoric under the Ethical Policy. Justification for exploitation gradually receded and was replaced with concerns over living standards, health, and prosperity for the general population (Ricklefs, 2008). Even though the Ethical Policy did not end extraction, it rebalanced institutional and ideological thinking, which is relevant to the comparative framework, as it suggests a contrasting colonial logic to that of the Congo, where the Free State's violent coercion left a legacy of fear and constraint in rural production systems.

[3] The quantities are provided as yearly averages.

3.2 Inherited institutions and immediate effects

A central point in the comparative literature on colonial legacies is that "extractive" regimes shaped the institutional composition of the post-colonial state with respect to control over land and labor, fiscal capacity, and elite formation. Thus, in the Belgian Congo and the Dutch Indies, the immediate post-independence effects reflected inherited structures that constrained or enabled early state-building and economic policy. In the case of Congo, the institutions inherited a weakened state and limited development. In contrast, Indonesia inherited a more functional administrative framework and a better-prepared elite, even if both systems were fundamentally extractive. In this context, "immediate effects" refers to the institutional conditions at the time of sovereignty and their short-term consequences for political and economic institutions and policies.

A) The case of Congo: mining enclaves, weak taxation, minimal education, and excluded elites.

At the later stages of the colonial state, the Congolese economy was organized around enclave production, especially mining. Lacroix (1967) characterizes Congo's colonial industrialization as large-scale but structurally narrow. In 1960, industrial production amounted to approximately 14% of GDP, with Léopoldville, the capital region, containing more than a quarter of industrial activity, a disproportionate rate. The pattern was tied to export-oriented mining and cash-crop processing rather than a diversified domestic manufacturing structure.

Institutionally, this implied that the colony bequeathed a modern island economy, with large firms and infrastructure clustered around mining, while the rural economy remained outside productive public investment (Buelens & Cassimon, 2009). This configuration amplified post-independence vulnerability, as political contestation over mining rents could destabilize the fiscal base.

A second constraint after independence was the limited fiscal capacity beyond a narrow set of revenue instruments. Pre-independence, there was a cash-tax system, but the tax base remained thin. A core driver of this was structural. Congo had low import levels, which meant that customs taxation, an easy early modern revenue source, was weak (Gardner, 2012). In 1897, customs receipts amounted to 0.01 Belgian Francs (BEF) per capita, rising to 0.76 BEF per capita by 1912, but this remained a small figure relative to the scale of the administration (Gardner, 2012).

Moreover, the Belgian Congo's fiscal yield was low even when compared to other African colonies. In 1912, government revenue was 4.87 BEF per capita, far below colonies such as Southern Rhodesia (25.20 francs per capita) and the Gold Coast (20.66 francs per capita) (Fetter, 1983). The immediate post-colonial effect is that a state with limited, broad-based taxation tends to rely on rents and politically coercive instruments for revenue, which undermines the stable provision of public goods, especially when there is competition among elites to control those rents (Gardner, 2013).

Thirdly, land tenure institutions were designed to secure colonial control over land for state purposes and for European companies. Even though colonial legislation formally recognized ownership rights, in practice, they were defined restrictively to villages and cultivated fields. At the same time, all remaining land was declared "vacant" and placed under state control (Lentz, 2006, p. 35).

Comparatively, the result was that the rural economy was left institutionally marginalized. By the early 1960s, in Congo, only around 1% of the geographic area was under smallholder cultivation, while 5% was reserved for private companies and settlers. This contrasts sharply with the Dutch Indies, where smallholders cultivated around 63% of the land (Central Bureau of Statistics, 1963b, as cited in Booth, 2013).

The immediate effect was that after independence, the country faced contested land rights and weak incentives for rural productivity growth. Thus, the institutional framework was conducive to peasant distrust and to the limited mobilization of rural surplus for development.

Fourthly, Congo's labor institutions combined coercive enforcement mechanisms with nominal wage labor. In this context, taxes were not only fiscal tools but also labor instruments. The state, by creating cash obligations, pushed Africans into wage labor (Houben & Seibert, 2013). Punishment and violence shaped popular memory, and wage work would come to be perceived as "slavery" (Rodney, 1981). This is relevant to the immediate post-independence period, as early governments inherited a labor market marked by asymmetric bargaining power and a history of coercion. Such a legacy complicated efforts to implement taxation, mobilize labor for public works, and negotiate productivity-enhancing reforms without being perceived as coercion.

Finally, Congo's educational expansion was impressive at the primary level but was vertically constrained, especially in the formation of African Elites. Mission schools expanded rapidly, with the number of foreign missionaries growing from 500 in 1908 to 7,205 in 1957, and school enrollment increased from 46,000 in 1908 to 1,718,931 in 1957 (Frankema, 2013).

However, this institutional arrangement did not generate a robust cohort of secondary and tertiary school graduates. Two main causes may be attributed to this. Before 1940, per capita expenditure on education in Congo remained below US$0.10, while in the Dutch Indies it was at least five times higher during 1910-1940 (Frankema, 2011). Secondly, the outcome in Congo proved to be weaker, with an adult literacy rate of 31.3% in Congo and 42.9% in Indonesia in 1961 (UNESCO, 1965).

The absolute scale of advanced training at the time of independence in 1960 was low, with only 423 tertiary students and 56 in STEM fields, and an overrepresentation of European citizens (UNESCO, 1965). More importantly, segregation policies restricted Africans from attaining access to higher ranks in the military, business management, and education, and higher education for Africans was deemed unnecessary (Stengers & Vansina, 1985).

The immediate consequence was acute, as the leadership staffing was drawn disproportionately from mission schools rather than a technocratic class. The scarcity of highly educated classes shaped the early state's effectiveness and its ability to bargain with foreign firms. Moreover, its ability to design and implement complex fiscal and industrial policies was limited (Dunkerley, 2009).

B) The case of Indonesia: colonial bureaucracy, partial investments, and educated elites.

Indonesia's inherited institutions differed in two main aspects. The colonial state established earlier and deeper bureaucratic regimes and governed a densely populated agrarian society through intermediaries. The construction of the Great Post Road, approximately 1,000 km long, demonstrates administrative capacity and coercive mobilization, while expanding access to communications and territorial integrity (Thee, 2013). Raffles'[4] land-rent reforms illustrate early fiscal and administrative ambitions, with peasants expected to pay two-fifths of their annual harvest as rent or tax (Houben, 2002). In the short term, this meant that Indonesia inherited more extensive administrative routines for taxation, public works, and governance, even if they were embedded in inequality.

When it comes to fiscal extraction, Dutch fiscal capacity relied heavily on tax farming and the use of Chinese intermediaries, reflecting a model of governance that negotiated with local social structures (Wahid, 2013). Tax farming produced a large share of state revenue for most of the nineteenth century, accounting for around one-fifth to one-quarter of total colonial revenue (Reid, 1993). In the period 1886-895, tax farming revenue accounted for 228.4 million guilders, of which 22.7% came from the opium farm (Mellegers, 2004). By the 1910s, that share had fallen to 2.9%, reflecting institutional change and the end of tax farming as the system modernized (Mellegers, 2004)[5]. The intermediary system was socially costly and extractive, but at the same time implied a broader administrative penetration of the local society than in Congo. The immediate effect was that Indonesian governments could draw on previous practices even as they attempted to dismantle colonial intermediaries.

In contrast to Congo's limited social spending, the Dutch combined extraction with development initiatives under the Ethical Policy, which aimed to improve welfare by focusing on health, education, and safety. The interventions remained modest and incremental (Marpaung et al., 2024). The Policy responded to population pressure in Java, with about 30 million people in 1900, and expanded public works departments. Yet, these investments produced additional fiscal burdens, as public debt rose to 94% of export earnings by the early 1920s (Booth, 2013).

From the perspective of inherited institutions, the partial investments were important as they created bureaucratic departments and planning routines. Foreign direct investment, despite being biased toward exports, managed to complement the latter industrial policy. For instance, in 1933, 2 million guilders in equity capital for manufacturing consumer goods such

[4] The French and British Interregnum in the Dutch Indies took place between 1806 and 1816, when it was transferred back to the Dutch. The British appointed Raffles as liutenant governor of Java in 1811 and he continued Danendels' (the previous governor) reform agenda by transforming the corrupt colonial administration inherited from the VOC into a more rational and reliable bureaucracy (Houben, 2002).
[5] The complete dataset is presented in Appendix A.

as soap and margarine were allocated to Lever's Zeep factory in Batavia (Lindblad, 2013). Thus, even if colonial investment priorities were not designed to maximize Indonesian welfare, they left behind a more robust administrative process than in the Congo case.

Finally, even if education remained limited in mass terms, it produced an educated stratum. Adult Indonesian literacy was only 7.4% in the 1930 census, with a Dutch-language literacy remaining limited at 0.32%, evidence that schooling remained unequal and restricted (Thee, 2013). Nonetheless, Frankema (2013) stresses that opportunities for Indonesian children to follow a Western curriculum across all levels of education enabled the emergence of a small intellectual class that proved crucial for national leadership and post-colonial capacity building. The contrast with Congo is visible in elite formation, as Indonesian leaders such as Sukarno and Hatta had received university education, and colonial universities were pathways to administration and politics. This contrasts with the Congo mission-based system and restricted access to higher education, which limited the technocratic depth of early leaders.

The immediate effect is reflected in the expansion of education after independence, with primary enrollment increasing from below 20% in 1940 to 80% in 1962, indicating a greater capacity to mobilize mass education than in Congo (Frankema, 2013).

Overall, the Congo inherited an enclave export economy organized primarily around mining, a narrow and weak fiscal apparatus, land, and labor institutions designed to mobilize coerced labor and appropriate "vacant" land, and a schooling system that produced very few highly educated Africans. These factors combined yield post-independence constraints on administrative competence, legitimacy, and fiscal extraction, thereby limiting development. In contrast, Indonesia inherited a more robust bureaucracy, a greater fiscal reach, and selective investments in population welfare, which produced an educated elite capable of sustaining post-colonial governance, despite the persistence of inequality and the extractive intent of colonial rule.

3.3 Congo–Indonesia comparison

This section examines the colonial institutional foundations that explain the divergent post-independence trajectories of the Belgian Congo and Dutch Indies. The contrast lies in the distinct ways that extraction was organized through production structures, labor regimes, fiscal institutions, educational investment, and administrative reach. The table below summarizes the main dimensions of comparison and their implications for long-term development.

Table 1. Colonial economic and institutional differences between the Belgian Congo and the Dutch Indies

Dimension	Belgian Congo	Dutch Indies	Comparative implication
Colonial production structure	The economy was organized around mining and enclave extraction.	The economy included a more diversified export-agricultural base.	Indonesia entered independence with a broader productive base, while Congo remained vulnerable to rent capture.
Role of smallholder agriculture	Smallholders were present but much more limited in export agriculture.	Smallholders were central in export agriculture.	Smallholder based exports in Indonesia diffused cash income and stimulated local markets.
Rural commercialization	Market integration often took place through coercive mechanisms, including compulsory cultivation and labor pressure.	Rural producers were more deeply connected to export markets through a more monetized agrarian economy.	Indonesia developed a broader rural commercialization, while Congo's countryside remained weaker.
Industrial pattern before independence	Industry contributed about 14% of GDP but was heavily tied to mining enclaves.	Manufacturing contributed around 15% of GDP, with a broader productive base.	Congo's industrialization was more vulnerable to postcolonial predation.
Fiscal capacity	Lower fiscal reach, with heavy dependence on trade taxes.	Higher fiscal reach, with more reliance on direct taxation.	Indonesia inherited stronger administrative penetration and a broader taxable base.
Revenue composition	Direct taxation only about 11% of revenue.	Direct taxation around 38.5% of revenue.	Fiscal institutions in Indonesia were better suited to long term governance beyond enclaves.
Labor regime	Coercive labor remained central, with the *cultures obligatoires* continuing between 1917 and 1960.	Coercive labor existed, but in core regions it was later phased out.	Congo's labor regimes weakened state trust and smallholder incentives.
Education system	Strong expansion of primary education, but weak investment in higher education.	Mass education remained limited, but spending was higher, and some Indonesians reached secondary and tertiary education.	Congo lacked a technocratic elite, while Indonesia produced a small, educated stratum.
Elite formation	Indigenous elite formation remained shallow.	University-educated nationalists and professionals emerged, including future political leaders.	Indonesia possessed a stronger postcolonial administrative and policy capacity.
Administrative inheritance	State penetration outside extractive zones remained shallow.	Bureaucratic structures reached more deeply into society and largely survived independence.	Indonesia inherited stronger organizational continuity.
Overall outcome	Weak state capacity, rent dependence, institutional fragility, and economic collapse	Greater policy capacity, stronger state continuity and sustained growth after the mid-1960s.	Authoritarian leadership did not produce similar outcomes because inherited institutions differed profoundly.

Source: Own elaboration.

A first contrast between the Belgian Congo and Dutch Indies lies in the composition of production and the way that extraction was organized. At the time of independence, Indonesia's colonial economy had a more diversified base of export agriculture, rooted in smallholder cultivation, while the Congo's production structure was organized as enclaves, with weaker smallholder participation (Booth, 2013; Table 2).

Table 2. Area under main cash crops, 1958 ('000 hectares)

Crop	Smallholder	Estate
Belgian Congo		
Sugar	0.9	4.8
Palm oil	59.2	119.7
Sesame	17	n.a.
Cotton	339.4	0.1
Urena and punga	9.8	n.a.
Coffee	18.8	76.8
Rubber	10	48
Cocoa	0.1	15.4
Total	455.2	264.8
Total per capita (hectares)	0.03	0.01
Indonesia		
Sugar	43.3	52.1
Palm oil	n.a.	104.5
Tea	60.1	74.3
Coffee	198.9	47.1
Rubber	1301.50*	498.2
Cloves/nutmeg	33.4	n.a.
Pepper	33.4	n.a.
Coconut/areca	1706.7	n.a.
Kapok	220.1	9.5
Tobacco	178.3	7.6
Total	3775.7	793.3
Total per capita (hectares)	0.04	0.01

*Estimated hectarage

Sources: Belgian Congo (1960: 90-1); Central Bureau of Statistics (1963b: 74-83) as cited by Booth (2013)

By 1958, the total land under major cash crops in the Belgian Congo was approximately 720 thousand hectares, compared to 4,569 thousand hectares in Indonesia (Booth, 2013; Table 2). The composition of this agriculture underscores the divergence. While the Congo had 58 thousand hectares under rubber, Indonesia had 1,799.7 thousand hectares, with Indonesian rubber predominantly smallholder-based (1,301.5 thousand hectares), whereas in the Congo, smallholder rubber accounted for only 10 thousand hectares.

The difference is important because smallholder export booms tend to diffuse cash income and stimulate demand for services and local manufacturing. By 1930, in Java, around one-third of the indigenous labor force was employed outside agriculture, indicating occupational diversification under late colonial rule (Booth, 2013). Congo, by contrast, was less conducive to broad-based rural commercialization. It had a large territory and low population density, and integration into markets usually occurred through coercive channels such as compulsory cultivation (Houben & Seibert, 2013).

Agrarian intensification further distinguishes the cases. In Java, the cultivated area per agricultural worker was smaller than in Congo, with 0.35 hectares in 1934 in the former and 0.83 hectares in 1934 in the latter (Booth, 2013; Table 3). However, this points to Java's more intensive smallholder agriculture and tighter land-labor ratios. In 1958, Indonesia devoted more land to rice, with 76.7 hectares per 1,000 people, while the Congo's food-crop area was dominated by roots, with 48.9 hectares per 1,000 people (Booth, 2013; Table 4). Production per capita shows the same pattern of specialization: Indonesia produced 168.4 kg per capita of paddy rice, while the Congo produced 616.8 kg per capita of roots and tubers (Booth, 2013; Table 5). These patterns align with the different paths of commercialization. While the Dutch late colonial policy increasingly linked smallholders to export markets, the Belgian corporate practice constrained smallholders and reinforced extractive enclaves (Booth, 2013; Clarence-Smith, 2013).

***Table 3*.** Area cultivated by peasant households per agricultural worker, 1934 and 1958 (in hectares)

Year	Measure	Belgian Congo (hectares)	Java (hectares)
1934	Cultivated area per male worker	0.76	1.09
	Cultivated area per worker	0.35	0.83
1958	Cultivated area per male worker	1.17	0.86
	Cultivated area per worker	0.43	0.65

Sources: Belgian Congo (1960: 90-1); Central Bureau of Statistics (1963b: 74-83) as cited by Booth (2013). Area cultivated refers to the harvested area of all crops grown by smallholders.

Table 4. Hectares of food crops per thousand people, 1958

Crop (hectares per 1,000 people, 1958)	Belgian Congo	Java	Indonesia
Cassava	45.1	18.1	14.7
Sweet potatoes	3.5	5.1	4.9
All root crops	48.9	27.5	n.a.
Corn	25.2	35.5	29.7
Rice	11.6	74.0	76.7
Other cereals	59.2	n.a.	n.a.
All cereals	96.0	109.6	106.4
Fruit	16.5	n.a.	n.a.
Peanuts	19.6	4.8	3.6
Other beans	8.5	n.a.	n.a.
Soybeans	n.a.	9.0	6.5
All nuts	28.1	19.5	n.a.

Sources: Belgian Congo (1960: 90-1); Central Bureau of Statistics (1963b: 74-83) as cited by Booth (2013).

Table 5. Production of food crops, 1958 (kg per capita)

Crop (kg per capita, 1958)	Belgian Congo	Java	Indonesia
Paddy rice	13.6	161.0	168.4
Corn	24.9	33.9	28.9
Other cereals	4.5	n.a.	n.a.
Fresh cassava	590.7	136.6	123.8
Other tubers	26.1	29.5	34.1
Peanuts	13.2	3.2	2.5
Other peas/beans	5.4	n.a.	n.a.
Soybeans	n.a.	6.4	4.6
Bananas	141.9	n.a.	n.a.

Sources: Belgian Congo (1960: 90-1); Central Bureau of Statistics (1963b: 74-83) as cited by Booth (2013).

The significance of these choices is seen during the early 1930s price collapse. Congo’s rubber output fell to 100 tonnes per year, while Indonesia still produced 250,000 tonnes per year, which accounts for approximately one quarter of world output. By 1959, Congo's production had reached 40,000 tons, which was lower than Indonesia’s 700,000 tons (Baulkwill, 1989). The mechanism for this divergence is institutional, while Congo’s earlier coercive legacy and policy constraints limited African smallholder entry and scale into the market, Indonesia developed a durable smallholder network (Clarence-Smith, 2013).

Industrial patterns also differed. Between 1913 and 1939, manufacturing in the Dutch Indies contributed to 15% of GDP. In the Congo, meanwhile, the industrial segment was 14% of GDP but was anchored in mining and proved vulnerable to rent predation after independence (Buelens & Cassimon, 2013). The "enclave industrialization" in Congo became central to its later deindustrialization (Abbeloos, 2013).

When it comes to the fiscal and labor systems, the Dutch Indies raised and spent more per person than the Belgian Congo in the late 1930s. In 1938, Congo's budget revenues were \$0.48 per capita and expenditures \$0.51 per capita, compared with \$0.76 and \$0.85 per capita, respectively, in the Dutch Indies (Booth, 2012; Table 6). The composition and purpose of the expenditure deepened the difference. Congo devoted 33.2% of expenditure to capital outlays, versus 10.9% in the Indies, and had a higher debt-service burden, being 33.8% of total expenditure in Congo versus 16.1% in the Indies (Booth, 2013, Table 7). The Indies relied more on direct taxation, which accounted for 38.5% of revenue compared to 11% in Congo, consistent with deeper administrative penetration and a broader taxable base (Booth, 2013). Overall, Congo's fiscal strength was compatible with extraction because the state could finance administration and infrastructure around export nodes without entering fiscal contracts with indigenous populations.

Table 6. Budgetary revenues and expenditures per capita, c. 1938, African colonies and Indonesia (pounds)

Country	Revenues (pounds per capita, c.1938)	Expenditures (pounds per capita, c.1938)
Kenya	1.12	1.15
Northern Rhodesia	1.16	1.03
Gold Coast	0.98	0.88
Netherlands Indies	0.76	0.85
Angola	0.67	0.67
Uganda	0.50	0.54
Belgian Congo	0.48	0.51
Sudan	0.43	0.40
Nigeria	0.34	0.34

Sources: Naval Intelligence Division (1944); Creutzberg (1976) as cited by Booth (2013).

Table 7. Budgetary and trade indicators: Netherlands Indies and the Belgian Congo, 1937

Indicator	Belgian Congo (1937)	Netherlands Indies (1937)
Exports per capita (pounds)	1.66	1.61
Budget expenditures per capita (pounds)	0.48	0.82
Budget revenues per capita (pounds)	0.35	0.76
Trade taxes as % of exports and imports	4.40	5.30
Trade taxes as % of total revenues	30.30	17.10
Debt service as % of total expenditures	33.80	16.10
Debt service as % of total exports	9.70	8.10
Total debt as a ratio of budget expenditures	9.30	2.80
Exports as a ratio of imports in 1929	0.74	1.35
Exports as a ratio of imports in 1937	2.19	1.89

Sources: Naval Intelligence Division (1944); Creutzberg (1976) as cited by Booth (2013).

When it comes to labor institutions, fiscal extraction is linked to production outcomes. In Java, the state labor region was compulsory from 1830 to 1870. Still, it was phased out thereafter, whereas in Congo, the *cultures obligatoires*[6] began in 1917 and continued until the end of colonial rule in 1960 (Vanderlinden, 2016). In Congo, coerced labor dominated before 1908, and despite an attempt to build wage labor afterwards, it reverted with the start of World War I (Houben & Seibert, 2013). In the Indies, there was a parallel coercive regime in the Outer Islands that involved indentured "*coolie*[7]" labor, with about 250,000 *coolies* employed in Sumatra in 1919 (Lindblad, 1999). However, the sequencing differed. While the Indies moved toward a labor-abundant and increasingly monetized economy, in Congo, labor shortages, coercive recruitment, and reliance on taxation to push people into wage labor prevailed, thereby weakening smallholder incentives (Houbert & Seibert, 2013).

When it comes to education, the expansion of primary education in Congo concealed the institutional weakness of elite formation. In Congo, education was mission-based, and enrolments expanded rapidly at the primary level. Nonetheless, the Belgian state invested

[6] The *cultures obligatoires* in the Belgian Congo was a colonial policy that forced Congolese villages to grow specific crops, specifically export cash crops, under administrative coercion (Vanderlinden, 2016).
[7] *Coolies* refers to plantation workers, often from Asian origin, employed in serfdom conditions under the Dutch Indies system. They worked under the Coolie Ordinance (1880) laws which allowed physical punishment and labor exploitation for workers under minimum wages (Lindbland, 1999).

little in higher education, with per capita education spending in Congo at below US$ 0.10, while the Dutch spent five times as much (Frankema, 2013). The educational profile maps onto elite capacity. Van der Veur (1969) argues that while Dutch educational achievements were scarce in absolute terms, some Indonesians acquired professional training in medicine, engineering, and law and entered government service, thereby creating sufficient trained personnel for the state to formulate and implement development projects under Suharto post-Independence. This institutional condition was absent in Congo, and the limited formation of the indigenous elite amplified the risk that governance would rest on narrow patronage networks post-independence.

Another key comparative point is that colonial institutions shaped the organizational inheritance of the postcolonial state. In Indonesia, the administrative structures reached deeply into the indigenous society and remained largely intact after independence (Booth, 2013). At the same time, transitions toward a development-oriented approach took place in a longer period in Indonesia than in Congo, where development was compressed into a shorter window (Hill, 2000).

These institutional contrasts conditioned how the post-independence regimes translated power into policy. Mobutu and Suharto are often grouped as autocratic and corrupt. Nonetheless, their economic policy effectiveness diverged sharply; Indonesia avoided institutional breakdown and achieved growth after the mid-1960s, while the Congo experienced an economic and institutional collapse (Frankema & Buelens, 2013).

4. Discussion of the long-term effects

The long-term effects of extractive colonial institutions become visible when the way in which the Democratic Republic of Congo and Indonesia entered the 21st century is observed. They had different capacities for social provision, macroeconomic stability, and structural transformation. Even though both territories experienced regimes oriented toward extraction, the ways this took place left different political, economic, and institutional inheritances. These legacies defined how post-1960 authoritarianism, globalization, and commodity cycles were navigated and explain why the gap became so large in the twenty-first century (Frankema & Buelens, 2013). The growth divergence after 1970 is the empirical evidence of the comparison. Indonesia's GDP per capita multiplied by approximately 7.3, while Congo's GDP per capita contracted by 1.4% per year. By 2010, Indonesia's GDP was 17 times Congo's (Heston et al., 2011). World Bank indicators show that while Congo started richer in 1960 with a GDP per capita of $325 versus Indonesia's $201 (in 2000 US$), by 2010 Indonesia reached $1,444 in GDP per capita while Congo fell to $104 (Abbeloos, 2013, Table 8).

Table 8. Divergence in growth: GDP per capita (2000 $US)

Country	*1960*	*1965*	*1970*	*1980*	*1990*	*2000*	*2010*
Indonesia	201	196	233	390	592	773	1144
Congo	325	319	332	260	210	87	104

Source: World Bank Development Indicators 2012 as cited by Abbeloos (2013).

The divergence reflects different development paths, as seen in the structural transformations in both countries. Indonesia's share of agriculture fell from 50.9% in the period 1960–70 to 14.8% in 2001–10, and industry expanded to 47.1%, with manufacturing reaching 28% (Abbeloos, 2013, Table 9). Meanwhile, Congo's structure moved in the opposite direction. The share of agriculture increased from 19.9% to 47.3% in the same periods, while manufacturing remained small, even decreasing from 7.8% to 5.8% (Abbeloos, 2013, Table 9). Thus, Congo became more than 47% dependent on the primary sector, undergoing deindustrialization. Institutionally, this is consistent with an enclave trajectory in Congo, characterized by dependence on the extraction of primary materials and limited diffusion into productivity growth (Buelens & Cassimon, 2013).

Table 9. Structures of production: Sectoral composition of GDP (%)

Period	Country	Agriculture	Industry	Manufacturing	Services
1960–70	Indonesia	50.9	14.8	9.1	34.2
	Congo	19.9	35.2	n.a.	44.9
2001–10	Indonesia	14.8	47.1	28	38.2
	Congo	47.3	24.7	5.8	27.9

Source: World Bank Development Indicators 2012 as cited by Abbeloos (2013).

The composition of exports mirrors the same logic. Indonesia shifted toward manufacturing, as exports in this sector increased from 1.3% in 1960 to 47.5% during 2001-2010. Meanwhile, Congo increased its mineral dependence, with ores and fuels rising from 74.9% in 1960 to 83.4% in the period 2001-10, while the exports of manufacturing goods fell to 3.2% (Abbeloos, 2013, Table 10). As seen, Congo's dependence on ores and fuels increased, while Indonesia shifted toward a more diversified, skill-intensive export structure as manufacturing grew in importance. This is relevant to development, as diversified exports tend to stabilize revenues and expand the tax base by deepening linkages to domestic employment. In contrast, mineral extraction tends to intensify rent contests and volatility.

Table 10. Composition of merchandise exports (%)

Period	Country	Agriculture	Food	Ores and fuels	Manufacturing
1960–70	Indonesia	33.1	20.0	45	1.3
	Congo	3.9	13.7	74.9	7.5
2001–10	Indonesia	5.2	13.0	34.3	47.5
	Congo	8.2	3.9	83.4	3.2

Source: World Bank Development Indicators 2012 as cited by Abbeloos (2013).

Another comparative element is inequality and resource dependence. Inequality in Congo has historical roots. In 1958, there was still an extreme late-colonial concentration of income and assets, with Europeans, who made up 1% of the population, receiving 45% of wages and owning 95% of capital assets. Additionally, they accounted for 82% of enterprises and 70% of material output (Exenberg & Hartman, 2013). This mechanism is crucial for understanding the 21st-century condition: when skills, ownership, and assets are concentrated in an exclusionary and extractive economy, the politics of the post-independence period tend to revolve around who will control the rents rather than around building a broad social contract. As seen, Congo's dependence on ores and fuels rose, while

Indonesia moved toward a more diversified and skill-intensive export structure with a growing importance of the manufacturing industry. This is relevant in developmental terms, as diversified exports tend to stabilize revenues and expand the tax base by deepening linkages to domestic employment. Meanwhile, mineral concentration intensifies rent contests and volatility.

A third key comparative insight from the study is that authoritarianism alone does not predict economic collapse. Mobutu and Suharto both similarly used coercive patronage methods, but the economic outcomes were sharply different. It is important to note that both leaders became known for self-enrichment controlled by power, patronage, and military dominance, and received Western support during the anti-communist struggle (Frankema, 2013). Nonetheless, Suharto combined the extraction of rents with sustained macroeconomic growth and improvements for much of the population, with his policies contributing to structural transformation and rapid poverty reduction (Glassburner, 1971). In Congo, however, Mobutu's "Zairianization" and radicalization transferred foreign and Belgian business assets to politically connected elites, thereby undermining productive capacity and accelerating rent-seeking dynamics (Schatzberg, 1997). In Indonesia, the New Order of Suharto prioritized "economic capacity building", pursuing food security, industrial upgrading, and the assembly of technocratic expertise (Marks & van Zanden, 2012). Abbeloos (2013) cautions against reducing the comparison to personality alone, as the two regimes faced different political and economic starting points in 1965 that shaped incentives and feasible strategies.

The distinction is useful to interpret the legacies of corruption in the 21st century. In the Congo, corruption was intertwined with economic fragmentation and state weakening, which fed into the long-run collapse. However, by 2010, the Congolese economy was largely unrecorded, partly due to state collapse and the legacy of the civil war (Kabulo et al., 2024). In Indonesia, while corruption persisted, the state retained enough coherence to deliver long-run transformation. Later, democratization created a "messy, democratic, corrupt state" rather than a total breakdown (Abbeloos, 2013, citing Hill, page 107).

Fourthly, global integration must be considered to analyze the 21st-century perspective. Both countries remained highly exposed to international commodity markets in terms of volume, but with distinct consequences. Abbeloos (2013) highlights that both were at the mercy of global commodity prices and capital, but Congo was more exposed to volatility than Indonesia. Congo's resource dependence led to a context in which external shocks and foreign interests could reshape the domestic political economy. For instance, foreign interest in the country increased from 2003 amid high copper prices, suggesting a neocolonial dynamic in which external demand and capital flows concentrate on subsoil rents rather than domestic capability building. Indonesia's path toward globalization was different. Initially, oil revenues underwrote national development and redistribution, but after the fall of oil prices in the 1980s, the state pursued investment and trade liberalization (Lindblad, 2015). These measures and growing foreign direct investment inflows from Japan and Asian newly industrializing economies from 1989 onward into labor-intensive manufacturing diversified the economy away from primary exports. Nonetheless, Indonesia suffered severely in the 1997 crisis, with its GDP contracting by around 15% in 1998, but then recovered in the 2000s (Fazaalloh, 2024). However, the main institutional difference is that Indonesia converted global integration into manufacturing upgrading, while Congo's integration remained concentrated in minerals.

Another key element is human capital, as it is a key channel through which colonial legacies are transformed into long-run development capacity. Congo's late-colonial system systematically constrained access to higher education, producing a thin elite and weaker administrative capacity in the post-colonial era. In the early 1960s, adult literacy was 31.3% in Congo versus 42.0% in Indonesia (Van der Veur, 1969; Dunkerley, 2009). Even decades later, tertiary education enrollment remains higher in Indonesia, with 0.2% enrollments in 2010 for DRC and 1.5% in Indonesia, underscoring the depth of the Congo's human capital constraint (Frankema, 2013).

When it comes to poverty, Hill (2000) emphasizes the consensus that the Suharto-era policies support structural transformation and the rapid reduction of urban and rural poverty rates. Additionally, oil revenues and a strong central state helped keep regional inequality and social deprivation relatively in check, with improvements in physical and social infrastructure. In the case of Congo, the evidence is indirect, with deindustrialization, a war economy, and institutional collapse implying severe and persistent poverty pressures rather than sustained social progress.

Finally, a comparative balance is that the Belgian Congo and the Dutch Indies shared "extractive" similarities, including coercion, elite-biased appropriation of surplus, and an external orientation. However, they differed in the institutional bundles that survived into independence.

On the one hand, Indonesia's deeper administrative penetration into bureaucracies, fiscal routines, and some Western education tracks, and its longer colonial timeline, created a more robust platform that later authoritarian developmentalism could exploit. On the other hand, Congo's colonial political economy, organized around mining enclaves and concessions and marked by limited elite formation, increased the likelihood that postcolonial regimes would become predatory rather than developmental (Akitoby, 2004; Frankema & Lindblad, 2006).

This reinforced a key theoretical point: colonial institutions are not the sole factor in diverging economic and development paths. Incentives, interests, and the political-economic context conditioned Mobutu's and Suharto's decisions. Similarly, international capital and global commodity cycles had an effect, and thus resource dependence interacted with institutional capacity rather than determining outcomes (Abbeloos, 2013).

The comparison suggests several policy implications. First, it is crucial to develop fiscal capacity and legitimacy. Congo's dependence on mineral rents made broad taxation difficult, but the fiscal contract is crucial for stable public goods. Strengthening transparency and the revenue flows for administration purposes is therefore an institutional need. Secondly, resource rents must be converted into capabilities. Indonesia's experience suggests that developmental investment and rent extraction can coexist when the state channels rents into increasing rural productivity and food security, infrastructure, and human capital. Thirdly, education quality and elite formation must be prioritized. Frankema's (2013) evidence suggests that vertical constraints on education create bottlenecks for policy capacity. For Congo, improving the quality of secondary and tertiary education is crucial to the country's capacity, not just a social-sector measure. Finally, production and exports must be diversified. The stark differences in export composition between the two cases underscore the need to build an industrial policy that goes beyond mining and raw materials.

5. Conclusion

This paper set out to address a central question in the debate on global inequality and colonial legacies: why did two former colonies with broadly extractive pasts and apparently comparable starting conditions diverge so sharply economically after independence? The study argued that the answer lies not simply in the existence of extractive colonial rule, but rather in the distinct institutional forms through which extraction was carried out in each case. In this sense, the Belgian Congo and the Dutch Indies were both extractive colonies but were not institutionally equivalent, and this variation explains the different postcolonial trajectories.

The historical analysis demonstrated that colonial extractions took different forms in each case. In Congo, especially under the CFS and later Belgian rule, extraction was organized around violence, concessionary control, mining enclaves, coerced labor, restricted land rights, and a very limited formation of indigenous elites. In the Dutch Indies, coercion was also a key mechanism, especially under the VOC, the Cultivation system, and different forms of indentured labor. However, extraction was combined with a more diversified agricultural export base, broader fiscal routines, deeper bureaucratic penetration, and, in the colony's later period, selective investments in education and welfare. As a result, the Dutch colonial state left behind a more extensive institutional apparatus than the Belgian regime in Congo.

The difference between the two cases was already visible in the immediate legacy of independence. Congo entered the postcolonial period with a narrow export structure centered on enclaves, a weak fiscal apparatus, labor institutions marked by coercion, and an education system that failed to produce a technocratic stratum. Indonesia, by contrast, inherited stronger administrative routines, an integrated smallholder agriculture system, greater fiscal reach, and an important educated elite that staffed the postcolonial state. The comparative evidence supports one of the paper’s main claims: not all extractive systems were the same, and the crucial issue was how extraction was embedded in the economic state.

The long-term results confirm the significance of these institutional differences. While Congo was wealthier at the time of independence, its trajectory after 1970 was marked by deindustrialization, increasing mineral dependence, and institutional erosion. Indonesia followed a different path of transformation, with the expansion of industry and manufacturing and the diversification of exports away from primary commodities through trade liberalization. By 2010, the income gap between the two countries had become dramatic, with Indonesia far ahead in GDP per capita and policy capacity. The findings reinforce the argument that colonial legacies mattered not as a deterministic destiny, but as structured inheritances that shaped each state's ability to diversify, tax, govern, and, ultimately, pursue development.

The comparison also clarifies the role of postcolonial leadership and the international environment. Mobutu and Suharto were both authoritarian leaders associated with corruption, patronage, military dominance, and Western support, but their regimes did not produce similar economic outcomes. This is relevant because it reveals that authoritarianism alone cannot explain either collapse or growth. Indonesia's state was able, even if imperfectly, to convert rents and global integration into agricultural support, industrial upgrading, and broader development gains. Congo, by contrast, remained more vulnerable to rent capture and external shocks because the inheritance of the colonial rule was more exclusionary and less socially embedded. Ultimately, resource dependence and global market integration were crucial, but interacted with the existing institutional capacities rather than substituting them.

Theoretically, the study contributes to the existing literature by refining the extractive and inclusive framework. The central conclusion is that extractive regimes can be internally differentiated. Not all extractive regimes generate the same development possibilities, because they vary in fiscal reach, production structures, and administrative penetration. The Congo-Indonesia comparison thus suggests that the long-run divergence emerged from the interaction between colonial institutional configurations, postcolonial political choices, and the constraints and opportunities of the world economy. This also carries a contemporary implication. In resource-rich states such as the Democratic Republic of Congo, the development strategy cannot rely on short-term growth measures. Instead, they must address deeper issues such as human capital formation, fiscal capacity, and production diversification.

Finally, future lines of research follow from these findings. Firstly, subnational comparisons may be carried out, given the difference in industry and population density. In that line with this, studies comparing Java to the Outer Islands in Indonesia, and the mining enclaves to the agrarian provinces in Congo, may reveal whether the extractive legacy behaves uniformly throughout the country. Secondly, the feedback loop between institutions and conflict may be studied. The relationship between institutional weakness and conflict, and, in turn, how civil conflict entrenched extraction may be enlightening for the debate at hand. Thirdly, broadening the comparative set by adding additional country cases is useful for testing generalizability. A broader study design, including more countries, can help separate general trends from case-specific shocks.

Overall, this paper shows that the long shadow of colonialism remains central to the analysis of development, but that its effects can only be understood by examining institutional variation across time and space.

6. Appendix

Appendix 1. The composition of tax farming revenue in Java, 1851–1900 (in thousand guilders)

Revenue source	1851–60	1861–70	1871–80	1881–90	1891–1900
Opium farm	72,708	107,818	148,775	187,763	185,603
Salt farm	51,227	59,984	67,730	75,241	87,907
Cattle slaughter farm	4,948	6,487	8,055	11,197	14,108
Pig slaughter farm	1,204	716	521	591	546
Pawn shop farm	2,911	3,122	126	9,016	10,824
Liquor farm	1,741	2,247	1,882	1,059	1,764
Gambling farm	2,415	2,407	2,631	9,334	8,018
Other farms	5,503	6,674	16,972	25,114	26,361
Other leases & licenses	10,719	6,105	6,876	13,777	13,018
Total	153,376	195,560	253,568	333,092	348,149

Source: Mellegers (2004)

Appendix 2. Declaración de Uso de Herramientas de Inteligencia Artificial Generativa en Trabajos Fin de Grado

ADVERTENCIA: Desde la Universidad consideramos que ChatGPT u otras herramientas similares son herramientas muy útiles en la vida académica, aunque su uso queda siempre bajo la responsabilidad del alumno, puesto que las respuestas que proporciona pueden no ser veraces. En este sentido, NO está permitido su uso en la elaboración del Trabajo de Fin de Grado para generar código porque estas herramientas no son fiables en esa tarea. Aunque el código funcione, no hay garantías de que metodológicamente sea correcto y es altamente probable que no lo sea.

Por la presente, yo, María García Álvarez, estudiante del Doble Grado en ADE y Relaciones Internacionales de la Universidad Pontificia Comillas al presentar mi Trabajo Fin de Grado titulado " Comparative analysis of the long-term effects of extractive colonial institutions: The Case of the Belgian Congo and the Dutch Indies ", declaro que he utilizado la herramienta de Inteligencia Artificial Generativa ChatGPT u otras similares de IAG de código sólo en el contexto de las actividades descritas a continuación

1. Metodólogo: Para descubrir métodos aplicables a problemas específicos de investigación.
2. Constructor de plantillas: para diseñar formatos específicos para secciones del trabajo.
3. Generador previo de diagramas de flujo y contenido: para esbozar diagramas iniciales.
4. Sintetizador y divulgador de libros complicados: para resumir y comprender literatura compleja.
5. Corrector de estilo literario y de lenguaje**:** Para mejorar la calidad lingüística y estilística del texto.

Afirmo que toda la información y el contenido presentados en este trabajo son producto de mi investigación y esfuerzo individual, excepto donde se ha indicado lo contrario y se han dado los créditos correspondientes (he incluido las referencias adecuadas en el TFG y he explicitado para qué se ha usado ChatGPT u otras herramientas similares). Soy consciente de las implicaciones académicas y éticas de presentar un trabajo no original y acepto las consecuencias de cualquier violación de esta declaración.

Fecha: 9 Marzo 2026

Firma:

7. Bibliography

Acemoglu D. and Robinson. J. (2012). Why Nations Fail: The Origins of Power, Prosperity, and Poverty. Crown Publishing Group.

Acemoglu D., Johnson S., & Robinson J. (2001). The colonial origins of comparative development: An empirical investigation. American Economic Review, 91:1369– 1401,

Akitoby, B. & Cinyabuguma, M. (2004). "Sources of Growth in the Democratic Republic of the Congo: A Cointegration Approach," *IMF Working Paper*, 04 (114).

Alesina A., Giuliano P. (2013). Culture and Institutions. National Bureau of Economic Research. https://www.nber.org/papers/w19750

Alpers, E. A. (1975). *Ivory and Slaves: Changing Pattern of International Trade in East Central Africa*, Berkeley: University of California Press.

Anstey, R. (1966). *King Leopold's Legacy: The Congo Under Belgian Rule, 1908–1960*, Oxford: Oxford University Press.

Assenova, V. A., & Regele, M. (2017). Revisiting the effect of colonial institutions on Comparative Economic Development. *PLOS ONE*, *12*(5). https://doi.org/10.1371/journal.pone.0177100

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, 996–1027.

Austin, G. (2010). "African economic development and colonial legacies," *Revue Internationale de Politique de Développement*, 1(1): 11–32.

Austin, G. (2010). "African Economic Development and Colonial Legacies," *International Development Policy Series*, 1: 11–32.

Auty, R., & Warhurst, A. (1993). Sustainable development in mineral-exporting economies. *Resources Policy*, *19*(1), 14–29. https://doi.org/10.1016/0301-4207(93)90049-s

Barlow, C. (1978). *The Natural Rubber Industry*, Kuala Lumpur: Oxford University Press.

Baulkwill, W. J. (1989). "The history of natural rubber production," in C. C. Webster and W. J. Baulkwill (eds.), *Rubber*, Harlow: Longman.

Birdsall et al. (1997). *Education, Growth and Inequality*, Washington, D.C.: Inter-American Development Bank and Johns Hopkins University Press.

Boomgaard, P. & van Zanden, J.L. (1990). *Changing Economy in Indonesia XI. Population Trends, 1795–1942*, Amsterdam: Royal Tropical Institute.

Booth, A. (1989). “The state and economic development in Indonesia: the ethical and New Order eras compared,” in R.J. May and W.J. O’Malley (eds.) *Observing Change in Indonesia. Essays in Honour of J.A.C. Mackie*, Bathurst: Crawford House Press.

Booth, A. (1998). *Indonesian Economic Development in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities*, London: Macmillan.

Booth, A. (1998). *Indonesian Economic Development in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities*, London: Macmillan.

Booth, A. (2013). *Varieties of exploitation in colonial settings: Dutch and Belgian policies in Indonesia and the Congo.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development (*pp. 60–87). Routledge.

Bosma, U. (2007). The cultivation system (1830-1870) and its private entrepreneurs in colonial Java. *Journal of Southeast Asian Studies, 38*(2), 275-291. doi:https://doi.org/10.1017/S0022463407000045

Braudel, F., & Wallerstein, I. (2009). History and the Social Sciences: The Longue Durée. *Review (Fernand Braudel Center)*, *32*(2), 171–203. http://www.jstor.org/stable/40647704

Britannica Editors (2025, December 19). Dutch East Indies. Encyclopedia Britannica. https://www.britannica.com/place/Dutch-East-Indies

Britannica Editors (2025, October 30). Belgian Congo. Encyclopedia Britannica. https://www.britannica.com/place/Belgian-Congo

Broadhead, S. H. (1979). “Beyond Decline: The Kingdom of the Kongo in the Eighteenth and Nineteenth Centuries,” *The International Journal of African Historical Studies*, 12: 615–50.

Buelens, F. & Marysse, S. (2009). “Returns on investments during the colonial era: the Case of the Belgian Congo,” *Economic History Review*, 62: 135–66.

Buelens, F., & Cassimon, D. (2013). *The industrialization of the Belgian Congo.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development* (pp. 229–250). Routledge.

Callego, F.A. & Woodberry, R. (2010). “Christian Missionaries and Education in Former African Colonies: How Competition Mattered,” *Journal of African Economies*, 19: 294–329.

Castryck, G. (2007). "Whose History is History? Singularities and Dualities of the Public Debate on Belgian Colonialism," in L. Csaba (ed.), *Europe and the World in European Historiography*, Pisa: Pisa University Press.

Central Bureau of Statistics (1963b) *Statistical Pocketbook of Indonesia 1963*, Jakarta: Central Bureau of Statistics.

Clarence-Smith, W. (2013). Rubber cultivation in Indonesia and the Congo from the 1910s to the 1950s. In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development* (pp. 60–87). Routledge.

Claver, A. (2006). "Commerce and Capital in Colonial Java: Trade, Finance and Commercial Relations between Europeans and Chinese, 1820s–1942," PhD Thesis, Vrije Universiteit Amsterdam.

Clement, P. (2013). *The land tenure system in the Congo, 1885–1960: Actors, motivations, and consequences.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development* (pp. 88–108). Routledge.

Creutzberg, P. (ed.) (1975). *Changing Economy in Indonesia, Volume 1: Indonesia's Export Crops 1860–1940*, The Hague: M. Nijhoff.

Creutzberg, P. (ed.) (1976). *Changing Economy in Indonesia, Volume 2: Public Finance, 1816–1939*, The Hague: M. Nijhoff.

Currie, T. E. (2013). Inequality and Institutions: A Review Essay on *Why Nations Fail* by Daron Acemoglu and James A. Robinson. *Cliodynamics* 4: 153–161.

Dick, H. et al. (2002). *The Emergence of a National Economy. An Economic History of Indonesia, 1800–2000*, Leiden: KITLV Press.

Dunkerley, M.E. (2009). "Education Policies and the Development of the Colonial State in the Belgian Congo, 1916–1939," PhD thesis, University of Exeter.

Edgerton, R. B. (2002). *The Troubled Heart of Africa: A History of the Congo*, New York: St. Martin's Press.

Exenberger, A. & Hartmann, S. (2008). "The Congo and World Market Integration: A Dark History of Recurring Exploitation," in H. Marques, E. Soukiazis, and P. Cerqueira (eds.), *Perspectives on Integration and Globalisation*, Münster: Lit.

Fasseur, C. (1992). *The Politics of Colonial Exploitation. Java, the Dutch and the Cultivation System*, Studies on Southeast Asia, Ithaca, NY: Cornell University Press.

Fazaalloh, A. M. (2024). FDI and economic growth in Indonesia: A provincial and sectoral analysis. *Journal of Economic Structures*, *13*(1). https://doi.org/10.1186/s40008-023-00323-w

Ferguson, N. (2002). *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power*, New York: Basic Books.

Fetter, B. (1983). *Colonial Rule and Regional Imbalance in Central Africa*, Boulder, Colo.: Westview Press.

Fieldhouse, D.K. (1999). *The West and the Third World: Trade, Colonialism, Dependence, and Development*. Malden, Mass.: Blackwell.

Frankema, E. (2013). *Colonial education and post-colonial governance in the Congo and Indonesia.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development* (pp. 153–177). Routledge.

Frankema, E., & Buelens, F. (2013). Colonial Exploitation and Economic Development. *Routledge explorations in economic history*. https://doi.org/10.4324/9780203559406

Frankema, E.H.P. (2010). “Raising Revenue in the British Empire, 1870–1940: How Extractive Were Colonial Taxes?”, *Journal of Global History*, 5: 447–77.

Frankema, E.H.P. (2011). “Colonial Taxation and Government Spending in British Africa, 1880–1940: Maximizing Revenue or Minimizing Effort,” *Explorations in Economic History*, 48: 136–49.

Frankema, E.H.P. & Lindblad, J.T. (2006). “Technological Development and Economic Growth in Indonesia and Thailand since 1960,” *ASEAN Economic Bulletin*, 23: 303–24.

Fukuyama F. (1995). Trust: The social virtues and the creation of prosperity. Free Press Editorial.

Gallup, J. L., Sachs, J., & Mellinger, A. (1998). *Geography and Economic Development*. National Bureau of Economic Research. https://doi.org/10.3386/w6849

Gardner, L. (2013). *Fiscal policy in the Belgian Congo in comparative perspective.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development,* (pp. 130–152). Routledge.

Gardner, L.A. (2012). *Taxing Colonial Africa: The Political Economy of British Imperialism*, Oxford: Oxford University Press.

Gelderblom, O., de Jong, A., & Jonker, J. (2013). The Formative Years of the Modern Corporation: The Dutch East India Company, VOC, 1602–1623. *The Journal of Economic History*, *73*(4), 1050–1076. https://doi.org/10.1017/s0022050713000879

Glassburner, B. (1971). *Indonesian Economic Policy after Sukarno*, Ithaca, NY: Cornell University Press.

Gonggrijp, G. (1949). *Outline of an Economic History of the Dutch East Indies*. Haarlem: De Erven F. Bohn, N.V.

Grier, R.M. (1999). "Colonial Legacies and Economic Growth," *Public Choice*, 98: 317–35.

Harms, R. (1975). "The end of red rubber: a reassessment," *Journal of African History*, 16, 1, 73–88.

Hill, H. (2000). *The Indonesian Economy*, Cambridge: Cambridge University Press.

Hill, H. (2007). "The Indonesian economy: growth, crisis, and recovery," *The Singapore Economic Review*, 52(2): 137–66.

Houben, V. (2002). "Java in the nineteenth century: consolidation of a territorial state," in H. Dick H, V.J.H. Houben, J.T. Lindblad, and K.W. Thee (eds.) *The Emergence of a National Economy. An Economic History of Indonesia, 1800–2000*, Crow's Nest, NSW: Allen & Unwin.

Houben, V., & Seibert, J. (2013). *(Un)freedom: Colonial labor relations in Belgian Congo and the Netherlands Indies compared.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development* (pp. 178–192). Routledge.

Johnson, H.B. (1967). "The Location of Christian Missions in Africa," *Geographical Review*, 57: 168–202.

Kabulo, J., Hubert, T., Mufungizi, I., Bongeli, R., & Diakondua, R. (2024). Local transformation of natural resources for the socio-economic development of DR Congo: Assets, challenges, and Perspectives. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4675031

Lacroix, J.L. (1967). *Industrialisation au Congo. La transformation des structures économiques*, Paris: Mouton.

Landes D. (1998). The Wealth and Poverty of Nations: Why some are so rich and some so poor. WW Norton and Co Editorial.

Lentz, C. (2006). "Land rights and the politics of belonging in Africa: an introduction," in R. Kuba and C. Lentz (eds.), *Land and the Politics of Belonging in West Africa*, Leiden and Boston: Brill.

Lindblad, J. T. (2013). *Manufacturing and foreign investment in colonial Indonesia.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development* (pp. 211–228). Routledge.

Lindblad, J. T. (2015). FOREIGN DIRECT INVESTMENT IN INDONESIA: FIFTY YEARS OF DISCOURSE. *Bulletin of Indonesian Economic Studies*, *51*(2), 217–237. https://doi.org/10.1080/00074918.2015.1061913

Lindblad, J.T. (1999) "Coolies in Deli: labor conditions in Western enterprises in East Sumatra, 1910–1938," in V. Houben et al., *Coolie Labor in Colonial Indonesia. A Study of Labor Relations in the Outer Islands, c.1900–1940*, Wiesbaden: Harrassowitz Verlag.

Maddison, A. (2010). "Historical Statistics: Statistics on World Population, GDP, and Per Capita GDP, 1–2000 AD," www.ggdc.net/maddison/

Mamdani, M. (1996). *Citizen and Subject. Contemporary Africa and the Legacy of Late Colonialism*, Princeton, NJ: Princeton University Press.

Marks, D. & van Zanden, J.L. (2012). *An Economic History of Indonesia, 1800–2010*, London: Routledge.

Marpaung, A., Harifin, H., Zebua, I., & Sinaga, R. (2024). The impact of the Ethical Policy on the development of education in early 20th-century Indonesia. *Warisan: Journal of History and Cultural Heritage*, *5*(2), 208–214. https://doi.org/10.34007/warisan.v5i2.2389

Mellegers, J. (2004). "Government Revenue in the Netherlands East Indies," online dataset available at www.cgeh.nl/indonesian-economic-history (accessed 25 November 2010

Moeller, A. (1936). La Politique Indigene de la Belgique au Congo. *Journal of the Royal African Society*, *35*(140), 233–240. http://www.jstor.org/stable/717329

Naniuzeyi, M. E. (1999). The state of the state in Congo-zaire. *Journal of Black Studies*, *29*(5), 669–683. https://doi.org/10.1177/002193479902900506

P. Englebert. Pre-colonial institutions, post-colonial states, and economic development in tropical Africa. Political Research Quarterly, 53:7 36, 2000.

Pakenham, T. (1992). *The Scramble for Africa. The White Man's Conquest of the Dark Continent from 1876–1912*, New York: Avon Books.

Peemans, J.-P. (1968) *Diffusion du progrès économique et convergence des prix. Le cas Congo-Belgique, 1900–1960*, Louvain: Éditions Nauwelaerts.

Putnam R. (1993). Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press. https://doi.org/10.2307/j.ctt7s8r7

Putterman, L. & Weil, D.N. (2010). “Post-1500 Population Flows and the Long Run Determinants of Economic Growth and Inequality,” *Quarterly Journal of Economics*, 125: 1627–82.

Reid, A. (1993). “The Origins of Revenue Farming in Southeast Asia,” in J. Butcher and H. Dick (eds.) *The Rise and Fall of Revenue Farming: Business Elites and the Emergence of the Modern State in Southeast Asia*, New York: St. Martin’s Press

Ricklefs, M.C. (2008). *A History of Modern Indonesia since c. 1200*, Basingstoke: Palgrave Macmillan.

Rodney, W. (1972). *How Europe Underdeveloped Africa*, London: Bogle-L’Ouverture Publications.

Rodney, W. (1981). *How Europe Underdeveloped Africa*, Washington: Howard University Press (rev. edn published in 1981 by Vincent Harding, William Strickland and Robert Hill).

Schatzberg, M. G. (1997). “Beyond Mobutu: Kabila and the Congo,” *Journal of Democracy*, 8: 70–84.

Stengers, J. & Vansina, J. (1985). *King Leopold’s Congo, 1886–1908*, Cambridge: Cambridge University Press.

Thee, K. W. (2013). *Colonial extraction in the Indonesian archipelago: A long historical view.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development* (pp. 41–59). Routledge.

UNESCO (1965) *Statistical Yearbook 1964*, Paris: UNESCO.

van der Veur, P.W. (1969). *Education and Social Change in Colonial Indonesia. Progress and Procrastination in Education in Indonesia prior to World War II*, Athens: Ohio University Press.

Vanderlinden, J. (2016). THE BELGIAN CONGO BETWEEN THE TWO WORLD WARS. *Royal Academy for Overseas Sciences*.

Wahid, A. (2013). *In the shadow of opium: Tax farming and the political economy of colonial extraction in Java, 1807–1911.* In E. Frankema & F. Buelens (Eds.), *Colonial exploitation and economic development* (pp. 109–129). Routledge.

Warren, B. (1980). *Imperialism: Pioneer of Capitalism*, London: New Left Books.

Weber M. (1904). The protestant work ethic and the spirit of capitalism. Taylor and Francis e-Library was published in 1994.