The Pillars of Shared Prosperity: Insights From Elite versus State Extraction And From a New Instrument

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Santiago, Agosto de 2023

THE PILLARS OF SHARED PROSPERITY
INSIGHTS FROM ELITE VERSUS STATE EXTRACTION
AND FROM A NEW INSTRUMENT

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July 2023

Abstract

What are the origins of shared prosperity? By synthesizing the literature on development, institutions and state capacity, this paper develops a new instrumental variable (IV) approach to identify the pivotal mechanisms explaining cross-country income and inequality differences. Exploiting the interaction between climate zones (using latitude) and native state history faced by European colonizers as an IV, this research explains 70-80% of colonial settlements in 1900 and subsequent institutional and economic development. This novel IV strategy also addresses the flaws of previous attempts, suffering from measurement error, weak instrument bias, and narrow research frameworks. That is, to identify better the causality chains going from colonial institutions to current outcomes. The results support the *neoinstitutionalists'* thesis, stressing executive checks for development (by checking elite capture), but challenge the key role given to market over state institutions. Prosperity and equality appear chiefly driven by state capacity, rather than by market rules or property rights. Across Africa, Latin America, and Asia, despite convergence to more "pro-market" and "inclusive" economic systems in the 20th century, both underdevelopment and high elite extraction persist via a state capacity trap. In the Periphery, persistently limited executive checks have undermined forming the state's credible commitments to public probity necessary for building tax capacity. Then, this limits these nations 'ability to (I) support markets and private sector development via an ample public goods provision, and (II) check elite extraction via progressive taxes and transfers ensuring significant redistribution. These stand out as the two pillars of shared prosperity.

The third and last duty of the sovereign or commonwealth is that of erecting and maintaining those public institutions and those public works, which, though they may be in the highest degree advantageous to a great society, are, however, of such a nature that the profit could never repay the expense to any individual or small number of individuals.

The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state. (...) In the observation or neglect of this maxim, consists what is called the equality or inequality of taxation.

Adam Smith, Wealth of Nations (1776, book V)

I Introduction

The Periphery, i.e., Latin America, Africa, and Southern Asia, is on average not only 5 times poorer in GDP pc (PPP) than Western Offshoots, i.e., Australia, Canada, USA and New Zealand, but its income is also more unequally distributed.[1] That is an average 43 Gini index versus 33. Considering that the potential for inequality increases with nations' income: richer societies have more surplus (income above subsistence) to be concentrated by elites (Milanovic, Lindert and Williamson, 2011), this inequality difference is even more striking. Based on Milanovic (2013)´s Inequality Extraction Ratio (IER) for "modern" societies -that is the ratio between the actual and maximum feasible inequality for a certain level of income and subsistence-, elite extraction is roughly 30 percentage points higher in the Periphery than in Western Offshoots. In other words, the gap in terms of IER (elite extraction) is 3 times bigger than the Gini points difference.

Since the late 1980s, the *prescription* for tackling these large development and elite extraction gaps has been checking state intervention, freeing markets, and easing access to private property. Yet, as we shall see, while this "prescription" has been followed (there is a clear convergence toward pro-market institutions), significant Periphery-West development and inequality differences persist. Following the literature on the East Asian *Economic Miracle*, which studies the convergence process of these peripheral nations with the developed core, the *proven* key for convergence seems to lie in having states capable of guiding markets and privates toward shared prosperity (e.g., Wade 1990). By building on this "fact" and the growing research on state capacity, this paper explores the origins of shared prosperity, namely development with relative equality. To this end, a novel instrumental variable (IV) strategy and research framework are developed to identify better the key mechanisms explaining cross-country income and inequality levels.

This seems necessary given that previous attempts have overlooked some key pillars of prosperity. Building on Besley and Persson (2011), this paper argues that, by overstating market institutions, studies overlooked the role of state capacity (especially to raise revenue and provide public goods), welfare systems (its redistributive role), and disentangling extraction (by the state and from elites). To account for these, I apply a novel set of tools, including an enhanced IV identification strategy, a broader causal framework, and preciser extraction metrics to unblind the "treatment" received. That is, to assess whether a country undergoes income capture by elites, the state or both of them. Overall, these improvements should allow us to develop a more robust and thorough answer to some of the "big" questions of the field: (I)What drives comparative development and inequality levels? (II)What institutional mechanisms matter more in explaining such dynamics? And more precisely: (III)What is the role played by state and elite extraction?

To answer, I also developed a novel identification strategy exploiting European Colonization as a natural experiment of history to shed light on the pillars of prosperity.[2] By utilizing the interaction between climate zones (using latitude) and native state history as a new instrumental variable (IV), I explain 70 to 80% of colonial settlements and subsequent institutional and economic development. This new strategy also tackles the flaws of previous attempts that suffer from measurement error and weak instrument bias. The proposed Settler Potential IV not only offers a more robust identification than previous ones, like Acemoglu et al. (2001) Settler Mortality, but also a larger country coverage. This paper also applies a more thorough causal framework, which rather than focusing on a single set of institutions (e.g., property rights) and period (today), assesses several mechanisms through time. As such, thanks to an arguably better identification and research framework, I aim to disentangle the causal chains going from colonialism to current outcomes.

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[1]This corresponds to unweighted averages. See income and inequality sources in Figure 1 notes.

[2]Naturally, using colonization as a quasi-random experiment is not new. The novelty lies in synthesizing previous studies to develop a new research strategy (framework and instrument) for better identifying the causes of prosperity.

Overall, the IV results support the literature's emphasis on "executive checks" for development (via reducing elite extraction), but challenge the key role given to property rights and market forces. Comparative development and inequality appear primarily explained by state capacity levels, not by differences in market or property regulation. Across Africa, Latin America, and most of Asia, despite convergence to more "pro-market" and "inclusive" economic systems over the 20th century (especially since the 1980s following the fall of communism and the rise of market liberalism), both underdevelopment and inequality persist via a state capacity trap. In the Periphery, the persistence of limited executive checks has undermined the formation of the state's credible commitments to public probity needed to build extractive capacity, i.e., taxing citizens. Then, this limits countries' ability to (I) support markets and private sector development via an ample public goods provision, and (II) tackle inequality via robust taxes and transfers systems ensuring significant redistribution. These emerge as the two pillars of shared prosperity.

This paper also pioneers by documenting a pivotal trade-off between elite and state extraction I show that elite extraction and underdevelopment both originate in a weak state extraction and thus in-capacity to sustain public goods (growth) and welfare (equality). In a context of state fragility, elites typically end up with tax collection and spending privileges in exchange for allegiance. Then, a pro-elite extraction equilibrium of regressive and limited fiscality (low state extraction) with little public spending feeds into inequality and low income. Whereas, in a context of high state capacity, substantial state extraction, especially via direct taxes, allows for an ample public goods provision, and thus, for more opportunities and development. Direct taxes, in particular, by targeting income and profits that concentrate at the top, are key to routing elites´ income into public investments, from education to infrastructure. Thus, state capacity, not only promotes "inclusive" development (via public goods) but also, via more progressive taxes and generous welfare (tied to state revenue), directly checks inequality, i.e., it limits elite extraction.

Naturally, this does not mean that relatively high state extraction and elite one cannot coexist. This is the case in the so-called Semi Periphery, i.e., Argentina, Chile, Uruguay, and South Africa. These nations have historically developed relatively high checks on executive decision-making power (especially vis-à-vis the rest of the Periphery), which enabled them to achieve, to a certain extent, credible commitments to fiscal probity. This has allowed them to collect more revenue from citizens and provide better public goods than most Periphery states, explaining their greater development. However, given that they are still far behind Western Offshoots in terms of institutional oversight (i.e., checking elite capture), relatively high state extraction (taxation) coexits with elite extraction. The state is not fully protected from rent-seeking, eroding the credibility of commitments to probity (due to unchecked corruption), and thus, undermining state development and public goods quality. This helps explain why they lag behind Western nations.

Taken together, these results indicate that the autocratic, unequal, and underdeveloped cluster, identified by the *neoinstitutionalists* (Acemoglu et al.), is tied together by a state capacity trap. While the prevalence of limited executive checks has not stopped peripheral states from converging to market-oriented systems ensuring access to private property rights, it has impeded them from credibly committing to efficient spending. This commitment is crucial to extract substantial direct taxes from citizens, who in turn expect that such proceeds are invested in public goods and welfare. Then, by being unable to rely on direct taxes and transfers, states lacking capacity typically turn to more distortionary ways of raising revenue (taxing trade rather than people) and redistributing (via clientelism rather than social protection). All this then breeds high inequality and low income. Besley and Persson (2011) first theorized about this fiscal capacity poverty trap. Then, by building on it, this paper goes forward by being the first to empirically account for the limited-fiscal capacity, high-inequality, and low-growth equilibrium in the Periphery.

The rest of this paper is organized as follows. I first review the development literature, showing how this research aims to overcome its conceptual and empirical limits. Then, section 3 presents the new Settler Potential IV and the three-stages-empirical strategy (3SLS) used -going from colonial endowments to post-colonial institutions and current prosperity. It also develops how this strategy tackles endogeneity issues via the novel IV, avoids oversimplifying causality by bridging different historical periods, and compares to Acemoglu et al. settler Mortality IV strategy. Section 4 presents the data and framework used to comprehensively study institutional mechanisms. Section 5 applies the new strategy to the data and framework, showing how the new IV allows us to better identify: (I) European settlement patterns in 1900, (II) institutional development over the 20th century via such patterns, and (III) shared prosperity levels today. Section 6 discusses the empirical IV results. Section 7 concludes on the pillars of shared prosperity.

II   The lay of the land

II.1   The *neoinstitutionalist* consensus

Over the last decades, a new and influential line of economic research has reinvigorated the interest in one of the most fundamental questions of the discipline: what originates prosperity differences? Since the seminal work of North and Thomas (1973), scholars have turned toward how historical events and institutions can help us explain these prosperity gaps. In particular, since the "credibility revolution" in empirical economics in the 1990s (Angrist and Pischke 2010), historical development studies have focused on developing empirical strategies to causally identify how institutions explain development -going from financial to property rules (Nunn 2014). Thereby, while there still may be an open debate into which institutions matter more for development (e.g., Bardhan 2005), and on how credible really are these empirical strategies (e.g., Albouy 2012), the idea that institutions are a key pillar of prosperity is hardly controversial.

This literature has particularly studied the effects of European colonization of the world, namely one of the most far-reaching historical events. That is especially so since Engerman and Sokoloff's (ES 1994) seminal study of the "colonial origins" of comparative development. A thesis famously retaken and empirically developed by Acemoglu, Johnson and Robinson (AJR 2001, 2002, 2005). These *neoinstitutionalist* authors and follow-up studies, e.g. Easterly (2007) and Nunn (2008), have argued that "extractive" colonialism in Latin America, Africa, and India (linked to their tropical soils and/or high native development), led to the formation of "extractive" institutions. Namely, rules and practices that serve a small European elite, especially by limiting access to property rights. According to these studies, the post-colonial persistence of this institutionalized elite extraction has undermined equality and development in the Periphery.

Instead, North America, New Zealand, and Australia experienced less "extractive" colonialism. There, Europeans settled in larger numbers due to its benign settling conditions, e.g., temperate soils and little native presence, and imported their institutions. This led to more "inclusive" rules and practices that ensured broader access to political and property rights. Following ES and AJR, these institutions would then be the key to their lower elite extraction and greater prosperity levels. In turn, this literature has also stressed that colonialism led to an early emergence of "inclusive" institutions in Western Europe, where exposure to the Atlantic trade (inaugurated by colonization) expanded economic opportunities and fostered institutional change toward lower elite extraction (AJR 2005). Following the impact of these seminal studies, there is a consensus that institutions that check elite extraction are the key to development.

Thus, a trade-off between elite extraction and development is at the core of this new consensus. However, these studies have not directly identified this trade-off nor disentangled its mechanisms.

This paper then goes forward by being the first to document and study this relationship explicitly. While this trade-off is stressed by this literature, elite extraction *per se* is never directly measured. As we shall see, standard inequality metrics, like Gini coefficients, fail to account for institutional "extraction". That is especially true when comparing countries with very different income levels. Then, due to this, studies have not been able to identify which inequality-generating institutions (among the loose "extractive" cluster) actually drive extraction.

Thus, I apply more precise inequality metrics to better grasp extraction-development dynamics. In this line, using Milanovic et al. (2011) Inequality Extraction Ratio (IER), Figure 1 plots elite extraction and development across former colonies in 2010-18. Consistent with the literature, we observe a strong negative relation between elite extraction and human development. On one side, the Periphery shows high elite capture and underdevelopment. There, Human Development (HDI) is not only scarce (there is little income, education, and health) but also very unequally distributed. The inequality-adjusted HDI is used to better reflect this. On the other, Western Offshoots show significantly higher development and limited elite extraction. Yet, nothing tells us that the channels stressed by the *neoinstitutionalists* (e.g., property rights) explain this relation. Thereby, this paper expects to contribute by unblinding extraction and exploring its dynamics, aiming to identify the underlying causes of this "Great Divergence" in prosperity.

Figure 1: Development and Elite Extraction
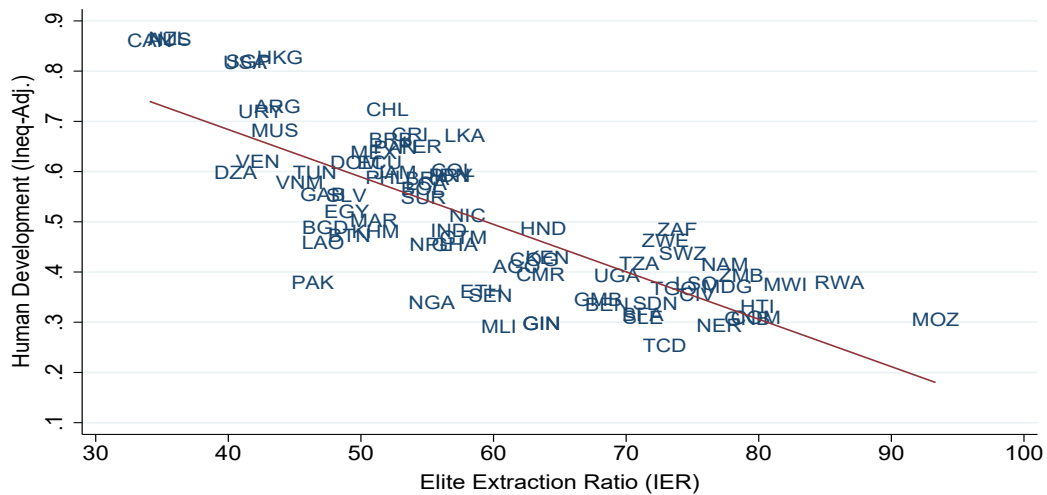
Notes: Human Development (inequality-adjusted) is the 2010-18 average from UNDP (2022). Inequality Extraction Ratios (IER) are calculated using World Bank income data (WB 2022) and the Standardized World Income Inequality Database (SWIID 2022), taking the average for 2010-18. Following Milanovic (2013), the IER version for "modern" societies is used. This allows subsistence levels to rise with income (using an elasticity of 0.5), reflecting that these are lower in poor countries. There, families often complement their income with subsistence farming and/or foraging.

II.2   The critics of the consensus

Still, several papers have started to call into question the *neoinstitutionalists'* thesis and methods. Besides the criticism over the narrowness of their research framework (focusing on property rights), the weakness of their identification strategy has also received a lot of attention. In particular, the approach put forward by Acemoglu et al. has been severely put into question due to potential measurement errors and the weakness of their Settler Mortality instrument (Albouy 2012), its impact on channels other than "property rights" institutions (Glaeser et al. 2004) and its oversimplification of causality chains (Austin 2008). The loose classification between "extractive" and "inclusive" states (elite extraction never being directly measured), which is at the core of the empirical strategy and causal narrative of AJR, has also been criticized. Moreover, others critique the lack of clarity on the mechanisms by which institutions affect development and, which ones, among the loose "inclusive" cluster, are relatively more important (Bardhan 2005).

This paper aims to tackle these criticisms. That is first by differentiating, identifying and quantifying extraction mechanisms. Prior to this, studies have not provided evidence on extraction levels, disentangled elite and state extraction, or proposed a framework to test via which mechanisms this extraction takes place. Then, while the literature stresses limited property rights to explain poverty and inequality, they have not provided evidence in favour of this channel over others. This open flank has led to severe flaws. As Irarrázaval (2023) shows, studies often assume that "extractive" states are the ones with rapacious elites that heavily tax (extract) citizens, and thus, are poorer. Yet, the evidence goes in the opposite direction. Former "extractive" colonies tax citizens way less. Then, failing to unblind extraction and overlooking other potentially relevant factors (like fiscality), create the risk of putting forward flawed interpretations.[3]

This limit of the consensus has also led to remarks over an overly "negative" vision of the state. A common "heterodox" criticism of this literature is that much of their work, broadly speaking, has consisted in emphasizing the "virtuosity" of liberalized markets and limited government for prosperity, while overlooking key state institutions associated with development -like welfare, progressive taxes, and public services (e.g., Chang 2011). In a similar line, Bardhan (2005) notes that the "preoccupation of the literature with the institution of security of property rights, often to the exclusion of other important institutions, severely limits our understanding of the development process". This criticism seems even more fundamental in light of the *East Asian Economic Miracle*, which has led to reconsidering the role of state institutions in development. As such, by overlooking the developmental role of the state (e.g., providing public goods and guiding markets with policies), development studies appear to have taken a somewhat "biased" (overly negative) vision of the state, often seeing it as a pure source of inefficiency and distortions.

In this line, both fiscality and redistribution, as interventions, have been seen as unambiguously "bad". That is, as a source of economic inefficiency rather than as a mechanism guaranteeing social stability and/or the functioning of the state. In the economic literature, taxation is typically studied as a socially and growth-inefficient measure. Without going forward, many seminal papers consider fiscal redistribution as a key growth-limiting factor emanating from acute distributive conflict, e.g. Persson and Tabellini (1994), Alesina and Rodrik (2004). That is a distorting outcome that follows (not checks) inequality. Yet, others argue that progressive taxes are not only associated with low (not high) inequality but also with greater development (e.g., Sokoloff and Solt 2007, Irarrázaval 2023). Then, by building on the research that has reinvigorated the role of the state for prosperity, notably Besley and Persson (2011), this paper aims to reach a better (more nuanced) understanding of how state action shapes development dynamics.

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[3]Exploiting this open flank, some critics argue that this "narrow" (some say biased) focus has led to the idea that limited government and property protection would be the sole key to prosperity (e.g., Bardhan 2005, Chang 2011).

To this end, the proposed new research framework contributes by disentangling extraction types. That is by quantifying and differentiating between different kinds of extraction, with, on one side, elite extraction captured by the Inequality Extraction Ratio (IER) developed by Milanovic et al. (2011), and, on the other, state extraction captured by the fiscal capacity measures proposed by Besley and Persson (2011), namely the extent of taxes and, in particular, direct taxes (as % GDP). Again, following the ideas developed above, state and elite extraction ought to be differentiated. They are far from being the same thing and can go in opposite directions. As developed before, given that direct taxes, requiring high extractive capacity (to monitor and collect citizens' revenue), are on income and profits (that concentrate at the top), more state extraction checks elite extraction via a more progressive fiscality. In turn, this extra revenue can then be channelled toward public goods, thus democratizing access to opportunities. In sum, by unblinding extraction, the aim is to reduce potential sources of confusion and criticism.

II.3   The critics of macro empirics

Recently, some articles have made a call to go beyond "classic" development empirics (Rodrik 2021). In the last decades, broadly speaking, growth economics has turned from a passion for pure theoretical formalization à la Solow to one for focusing on empirically identifying *specific* causal effects à la AJR.[4] That is, since the "credibility revolution" in econometrics. As Gelman and Imbens (2013) note, this has led to studies focused on identifying the "effects of causes" not the "causes of effects". This translates into a preference for using "forward casual inference" methods designed to identify the effects of specific causes (going from cause to effect), rather than for "reverse causal inference" tools designed to answer "what causes a phenomenon". That is for identifying underlying causes. As Rodrik (2021) argues, this preference has translated into a bias for demonstrating the effects of some likely causes of a phenomenon - how x factor affects prosperity -, rather than for identifying the key causes of the phenomenon - prosperity - itself.

In development, this means that rather than aiming to answer "what causes prosperity", studies focus on providing evidence on the effects of one of its likely causes, from property regulation (AJR) to education (Glaeser et al. 2004). This means that empirical research focuses on single factors that may (or not) be first order, like the effects of certain endowments or "extractive" institutions, e.g., tropical soils (Easterly 2007) or slavery (Nunn 2008). Or alternatively, due to limitations related to causal identification, studies may also end up answering a narrower or alternative version of the "bigger" question, like what are the causes of an institutional sub-dimension, such as financial or education development (e.g., La porta et al. 1994, Glaeser et al. 2004). Yet, as Rodrik (2021) notes, by focusing on demonstrating specific mechanisms (causal effects), development empirics often end up offering "partial" answers to the "big questions" of the field.

This limit particularly affects the literature seeking to identify the foundations of prosperity. That is, of the most complex economic phenomena of all, which by its intricate nature, requires a multicausal approach. To address this issue, this paper will simultaneously consider several likely causes of prosperity, seeking to identify patterns. That is, based on assessing different channels tied to colonialism, identify which one(s) seem(s) more primordial. This means developing an analytical work of synthesis, weighing different institutional mechanisms and considering temporal variations. Certain mechanisms, e.g., property rights or education, may prove less persistent than commonly thought and lose significance over time, being surpassed by others. Consequently, by doing this analytical exercise so dear to historical science, e.g., see Rodrik (2021), this research aims to provide a more comprehensive answer to "what causes prosperity".

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[4]Angrist and Pischke (2011) note how this revolutionary empirical turn broke the "theory-centred macro fortress".

Simultaneously, there is growing scepticism on macro-development altogether. Since the 2000s, the tide has been shifting from the "big issues" macro view (the cross-country study wave a la AJR) to "robuster" within-country methods. This is epitomized by randomized control trials (RCTs). Following Banerjee and Duflo (2011), this has allowed escaping from the "fixation" with "big questions" - prone to identification and data issues - and moving to a more "credible" micro ground. That is, to answer urgent policy questions: what works? Still, while this criticism is certainly valid, this does not imply a dismissal of "big topics". Rather, it calls us to acknowledge the shortcomings of previous endeavours (raised by these micro studies) i.e., enhance data quality and identification. While micro methods can better identify causality, they often do so by sacrificing external validity (e.g., Rodrick 2008). Their answers may be "robust" (which pays in an academic context "obsessed" with "internal validity", see Findley et al. 2020), but will remain limited in scope, e.g., one cannot randomly assign institutions or any economy-wide policy.

In this context, macro-development methods retain their primacy. Among these, cross-country analyses, by examining patterns across diverse countries (and thus contexts), offer a comprehensive (externally-valid) perspective of development processes. Then, using this method to exploit "natural experiments" (quasi-random assignments brought by history), constitutes a powerful tool to study the "big questions" and still deliver "credible" answers (Angrist and Pischke 2010). Naturally, this analysis should resonate and be complemented with micro studies, which give ground-level insights. These methods are complementary. Without going forward, it was macro-level comparative work, from scholars like Engerman and Sokoloff (and then AJR), which opened a fertile ground for many micro-level studies. Papers, like Banerjee and Iyer (2005), that sharpened the hypotheses distilled by these macro studies. As such, this research aims to reinvigorate the study of broad development. That is by tackling the flaws of previous attempts and, by doing so, proving that there is still much left to learn from comparative country patterns.[5]

Lastly, this paper also aims to tackle other criticism directed at macro-development via several steps. Firstly, to avoid doing a "compression of history" à la AJR (Austin 2008), this research builds on a long-term empirical perspective, studying from colonial to post-colonial outcomes. Secondly, to avoid overlooking the possibility of post-colonial institutional change, both persistence and reform dynamics are assessed to see whether and why persistence can be empirically identified (or not).[6] That is to not underestimate the agency of colonized people to escape from the "thumb of history": their capacity to face colonial heritage (persistence), like inherited economic disparities, and thus, to build their own history (Banerjee and Duflo 2014). Thirdly, by documenting divergence-convergence institutional patterns (between the West and the Periphery), and persistence-reform institutional dynamics (within the Periphery), this research aims to avoid reproducing the flawed perception of Latin America, Africa, and Asia as "timeless and continuing" institutional entities trapped in their colonial legacies and/or drifting away from the West.[7]

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[5]Also, given the growing criticism of the current development consensus (built on cross-country studies of markets and property rights), this revisiting exercise seems even more timely. To put it differently, "the march of events" (e.g., the rise of East Asia and China) - as Galbraith would put it - calls us to revise current "conventional wisdom".

[6]*Neoinstutionalists* have emphasized the persistent effects of "extractivism" in the Periphery, like forced labour, but they deemphasized identifying and understanding institutional change and the underlying channels explaining the persistence observed in the data or the lack of it (Abad et al. 2019).

[7]This limit of previous endeavours is developed in the discussion section.
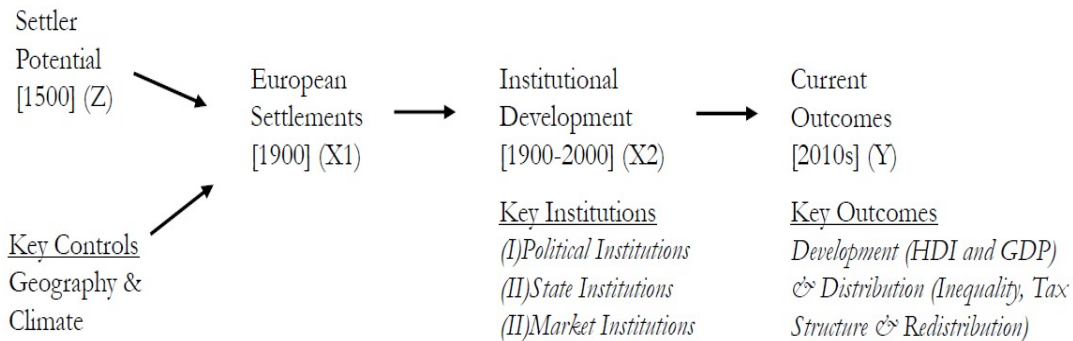
III   Research Framework

III.1   Identification Strategy

This paper's new IV strategy aims to better identify the underlying causes of development. That is by addressing the limits of prior endeavours. In this line, IV methods, by tackling endogeneity, are at the vanguard of designs to identify the causal impact of institutions (Angrist and Pischke 2010). However, even the most celebrated IV strategies have been "hotly" questioned (e.g., Valencia 2021). More specifically and, probably due to its major influence on the literature, the Settler Mortality instrument proposed by Acemoglu et al. (2001) has received substantial criticism. This arises from potential measurement error (due to data assumptions and extrapolations), the need for better control variables (to assure the exclusion restriction), and the instrument weakness to predict institutions -especially once the first two issues are addressed (Gallup and Sachs 2001, Albouy 2012). Thereby, by tackling the open flanks of this seminal IV strategy (notably operating via colonialism), I expect to achieve a robuster identification of causal effects.

For this, this paper develops a novel identification strategy via the Settler Potential Instrument. This strategy contributes by offering a new IV which: (I) rely on less problematic data assumptions and/or extrapolations - see details later, (II) strongly predicts colonial settlements and post-colonial institutions (even with all relevant controls included), and (III) permits to test development mechanisms in a more diverse set of former colonies due to its larger country coverage. Furthermore, when this new IV is compared with an improved version of the AJR Settler Mortality Instrument, based on better data from Albouy and AJR (2012)´s own response to Albouy´s criticism as used in Irarrázaval (2023), Settler Potential outperforms AJR´s instrument. That is in terms of predicting European settlements, post-colonial institutions and current outcomes. Perhaps more importantly, complementing this new IV with AJR´s revised Settler Mortality one, allows us to go even further in determining institutional mechanisms, and thus, in understanding what drives shared prosperity. Taken together, these improvements should arguably allow for achieving a better identification of the causal chains going from colonialism to current outcomes.

Scheme 1: Summarizing the Identification Strategy

Settler Potential [1500] (Z) → European Settlements [1900] (X1) → Institutional Development [1900-2000] (X2) → Current Outcomes [2010s] (Y)

Key Controls Geography & Climate

Institutional Development [1900-2000] (X2)
Key Institutions
(I)Political Institutions
(II)State Institutions
(II)Market Institutions

Current Outcomes [2010s] (Y)
Key Outcomes
Development (HDI and GDP)
& Distribution (Inequality, Tax Structure & Redistribution)

This investigation also pioneers by applying new metrics to study elite capture and development. While this paper is not the first to study the connection between inequality and development, e.g., Rodrik (1999), Easterly (2007), Persson and Tabellini, (2004), it contributes by incorporating an arguably better metric of institutional elite capture. That is the Inequality Extraction Ratio (IER)

proposed by Milanovic et al. (2011), namely the ratio between the observed level of inequality (the Gini) and the maximum feasible inequality. This maximum is calculated based on income per capita and minimum subsistence levels. The IER, especially its version for "modern" societies -see Milanovic (2013), outperforms standard inequality metrics in several dimensions. Firstly, unlike the "plain" inequality Gini, it rules out the im-possibility that one person can concentrate all income (as the rest of the population would starve) and instead relies on minimum subsistence levels to account for *feasible* levels of income extraction by the elite.

Secondly, it takes into account that the potential for inequality increases with nations' income. Richer societies have more surplus (income above subsistence) to be captured by the elite. Thereby, more developed countries have a higher level of maximum inequality. This explains why when considering "plain" Ginis, countries like Chile and Costa Rica look as extractive as Sub-Saharan Africa. This is because these countries are significantly richer than African ones, thus the potential for inequality is higher - there is more space for disparities. Then, while their Ginis are roughly the same (around 44-46 Gini points), the IER in Sub-Saharan Africa is approx. 70% versus 50-52% in Chile and Costa Rica. The IER ultimately reflects the distance between the maximum feasible inequality (using the inequality possibility frontier proposed by Milanovic et al.) and the actual (observed) inequality using official household surveys. As such, by considering feasible extraction, the IER is a better metric of how "abusive" (dominant) elites are. This then allows for a fairer comparison between countries, and thus, better assessing elite capture.

As Figure 2 shows, once the IER is compared with standard inequality Ginis, the IER appears to better reflect institutional elite capture. While in Gini terms, Latin America stands out as the most unequal region, in IER terms, Sub-Saharan Africa takes this place with their world-record levels of inequality extraction at almost 70%. This means that their elite manages to almost reach maximum extraction. Instead, this number is 54% in Latin America. Given that Latin American countries are significantly more democratic and have overall better institutions than Sub-Saharan Africa, the IER captures better these institutional differences. This is not the case with the Gini coefficient, which gives the idea that Latin American elites, despite being more institutionally checked, are more rapacious than African ones. Likewise, within the Periphery, countries like Chile and Costa Rica, which have the same Gini as the average Periphery country, only appear less extractive than their neighbours when accounting for their greater development. Therefore, one can reasonably think that the IER is a far better metric of elite extraction.

Figure 2: Inequality differences across former colonies
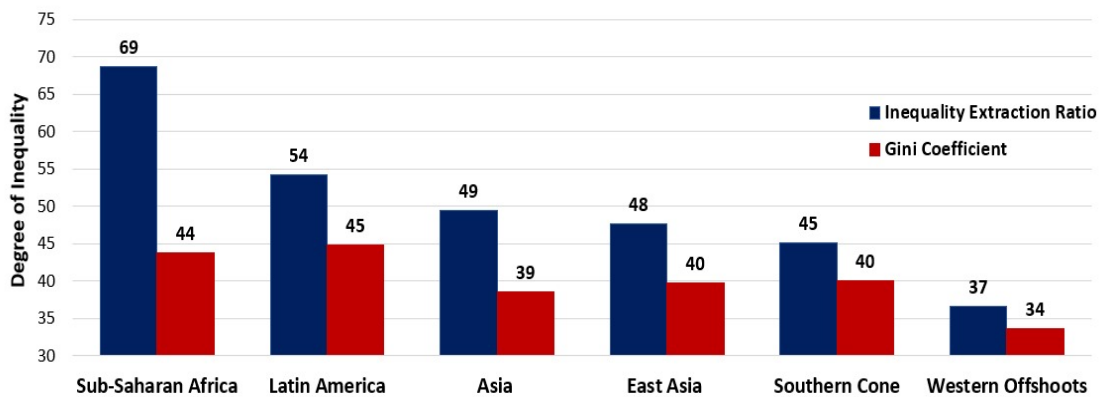
III.2 The Settler Potential Instrument

The challenge of building a strategy capable of estimating the causal effect of colonial institutions on development is twofold. Firstly, it must confront the econometric challenge of finding a source of exogenous variation in institutions. Secondly, this instrument needs to resonate with the process of European colonization and settlements that mostly took place during the 16th to 19th centuries. The Settler Potential instrument tackles both issues. Ultimately, the capacity to settle and establish European institutions depended on confronting: (I) benign biogeographic conditions for settling, namely temperate soils (as in Europe) that are less exposed to tropical diseases -see AJR (2001), and (II) low native institutional development, which paves the way for importing European institutions (rather than for using native ones to exploit the locals) -see Engerman and Sokoloff (1994). Thus, by exploiting how these two factors interact, a new IV can help us predict European settlements, colonial institutions and subsequent development. In this line, the Settler Potential Instrument, with a value between 0 and 1, is defined as follows.

$$Settler\ Potential = Absolute\ Latitude \cdot (1 - State\ History\ in\ 1500) \qquad (1)$$

As equation (1) shows, the Settler Potential Instrument captures the interaction of, on one side, a benign biogeographic environment for settling captured by the absolute distance from the equator (a higher distance meaning less tropical soils and diseases) and,[8] on the other, native institutional development measured by the accumulated local State History in 1500 from Borcan et al. (2018).[9] Both absolute latitude and State History go from 0 to 1, being 0 at the equator (being in the tropics) and no state history respectively. Then, the interaction of these two variables allows us to build an exogenous source of variation that synthesises the crucial aspects determining colonial institutions. Moreover, considering that this interaction is only important for colonization patterns, there is no reason to believe that in future periods the combination of these two aspects has an independent (not via colonial institutions) impact on development.[10]

This interaction gives us 4 large categories: (i) countries far from the equator and with no native institutional development (maximum Settler Potential, the IV tends to 1), like Western Offshoots, where Europeans settled in large numbers and brought their institutions, (ii) countries with equally benign environments but with a relatively higher native development (medium Settler Potential), like Latin America's Southern Cone,[11] where European settlements and their institutions developed along with some native exploitation via pre-colonial systems. Then, (iii) countries with bad settling conditions (namely in the tropics), where, independent of native development (if absolute latitude is close to 0, the IV tends to 0), few Europeans settled to exploit either imported labour (slaves), as in the Caribbean (no state history), or local labour, as in Central America (high state history). Lastly, (iv) countries with the highest state history (close to 1), where, independent of geographic conditions (if state history tends to 1, IV tends to 0), few settled (namely colonial administrators) and put themselves at the top of strong native institutions to systematically exploit the locals, such as in South Asia (tropical) and the Andean Region (template).

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[8] As Engerman and Sokoloff (ES 1994, 1997, 2002), Easterly (2007) and AJR (2001) show, a set of biogeographic factors influenced colonial institutions. A natural way to summarize all these conditions is to use absolute latitude. Firstly, it captures the distance from the Equator (tropics), where weather, soils and diseases dramatically differ from the ones in Europe, discouraging settlers. Secondly, tropical soils also allow for developing extractive plantations (cash crops), where exploitation of labour is more profitable, limiting settlers to a few administrators.

[9] Strong native institutions, ultimately captured by state presence (e.g., the Delhi Sultanate in India, the Aztecs in Mesoamerica or the Incas in the Andes) stimulated 'extractive' strategies: put colonizers at the top of the state (native hierarchy) and exploit the locals for the benefit of a European minority and the metropolis (ES 1994, AJR 2002). The year 1500 is chosen as it represents the beginning of large-scale European colonization of the world.

[10] In other words, the rationale behind this formula only makes sense to explain colonization patterns.

[11] For example, when colonizers arrived, the North of Chile and Argentina had been recently annexed by the Incas.

Figure 3: Settler Potential Across Former Colonies.
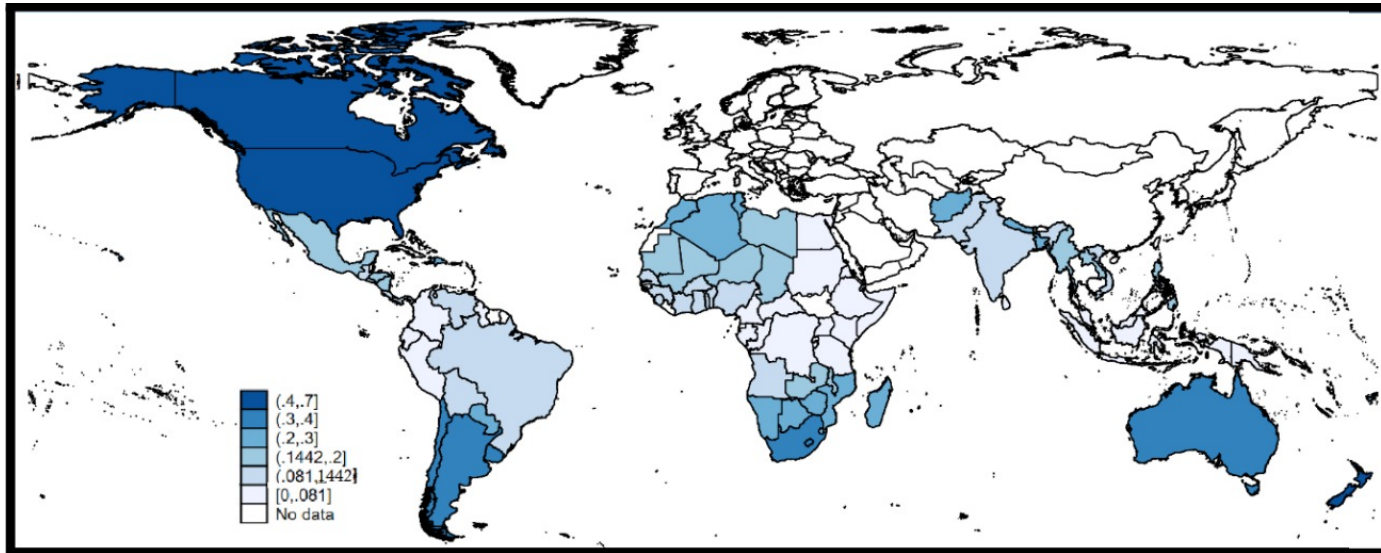
Notes: The figure divides the world into 6 settler potential levels. The first category comprises countries with the 'highest' potential; Canada, New Zealand and the United States with over 0.4. The second is countries with over 0.3, namely Australia, Latin America´s Southern Cone and Southern Africa. The other intervals correspond to other parts of our sample's distribution: the third interval is deciles 8 and 9, the fourth one is deciles 6 and 7, the fifth is the second quartile (bottom 25-50%) and the sixth is the bottom quartile. Countries with no data (namely European colonizers and non-colonised countries) are left blank.

Figure 3 maps settler potential. A quick look at the map reveals that it mirrors prosperity levels. The sample is divided into settler potential categories. The first category comprises countries with the highest potential; Canada, New Zealand and the United States, namely the developed core. The second is countries with medium settler potential, namely Latin America´s Southern Cone, Northern Africa and the Southern parts of Africa, which had template weather but also some local institutional development. These upper-middle-income countries are part of the so-called Semi Periphery. Then, we have the Poor Periphery, namely the rest of Latin America and the Caribbean, Africa, and most of Asia, which either had either strong native institutions and/or tropical weather. Within this last category, we also have the rare combination of very strong native institutions and non-template climate, an interaction which has led to acute poverty and elite extraction levels, like in Central America and Eastern Africa.[12]

III.3   The origins of shared prosperity

This paper´s thesis is that places with low settler potential received fewer European settlers which led to institutions favouring elite extraction, especially via unchecked and regressive states. Then, this colonial heritage dynamically interacted with the policies pursued by independent states. On one side, countries which inherited unchecked and regressive states could hardly issue the credible commitments to public probity needed to extract substantial taxes from citizens. This led to a state capacity trap, where limited taxation and public goods provision fed low income and inequality. When state capacity is lacking, no justice, property protection or education can be *de facto* provided and states end up recurring to more inefficient and economically harmful ways of raising revenue (taxing trade rather than people) and redistributing (via clientelism rather than social protection) to compensate for their in-capacity to do otherwise.[13]

On the other side, nations which inherited checked states were able to build a solid fiscal contract. There, in exchange for substantial taxes, the state credibly committed to providing the public goods needed to pave the way for shared prosperity. Executive checks, in particular, are key to directly taxing citizens, who expect, and, will make sure of it (via these checks), that revenue is invested in public goods, not diverted to corruption. Then, given that direct taxes, i.e., on income and profits that concentrate at the top, are more progressive than indirect taxes (on consumption and trade), which adds up to more generous welfare (via higher spending), this fiscal pact also checks inequality, i.e. limits elite extraction. That is by channelling income from elites to state institutions, especially public education, infrastructure, health, and welfare. Thus, checked states, namely an elite of public servants credibly committed to probity, solve a coordination failure between privates by assuring that large income is invested in public goods (growth) and welfare (equality), i.e., shared prosperity. This development thesis derives from six premises:

- The feasibility of settlement by European colonizers was determined by the interaction of the geographical and institutional endowments of the area they settled in. While the first included factors such as disease environments, soils, and climate that discouraged settlements around the tropics, strong native institutions represented a possibility to inherit the precolonial state to extract resources and transfer them to a small elite of settlers or the metropolis. Thereby, the interaction of these two key factors (namely biogeographic and institutional endowments), ultimately explains the colonial strategies developed by Europeans.

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[12]In the Americas, Bolivia, Nicaragua, Honduras, Salvador, and Guatemala, all had high native development and relatively tropical climate and are among the poorest countries in that region. In Africa (which was later colonized), Eritrea, Ethiopia, Somalia, Mali and Sudan, also had strong local institutions and lacked template weather and are, respectively, among the poorest countries in the world.

[13]As argued later, building fiscal capacity and redistributing via taxes and transfers pre-requires a fiscal contract: being able to credibly commit to redistributing fiscal revenue back to citizens via public goods and welfare.

- The building of colonial institutions was done through settlements. Where Europeans settled in large numbers, due to the rare combination of template zones and no pre-colonial states (i.e. no strong native institutions), colonizers imported European institutions that generally provided broader access to political and property rights to a majoritarian European-descent population, including more checks on state action.[14]

- All societies lend themselves to some form of extraction by an elite, but the nature of such extraction is pivotal for determining distributive and development outcomes. That is, while countries with low settler potential bear the extraction of resources by a small private elite to their own benefit, countries with high settler potential, because of their better institutions, were able to build a solid fiscal contract (via executive checks) such that the state, namely an elite of public servants, extract substantial resources from citizens via direct taxation and use them to invest in public goods benefiting the bulk of society.

- This pivotal divergence in extraction types ultimately explains shared prosperity differences. In a pro-elite extraction institutional equilibrium, fragile states characterized by a regressive and limited fiscality (via indirect taxes) and public spending (low public goods provision), feed into underdevelopment and inequality. Instead, when state capacity is higher, substantial state extraction, especially via direct taxes, allows for a larger public goods provision that benefits the majority, and thus, for more economic opportunities and development. In turn, given the more progressive nature of direct versus indirect taxes (direct ones require more capacity), which add up to more redistribution via better welfare systems (due to higher fiscal capacity), a higher state extraction also checks elite extraction.

- The persistence of state capacity results from the distinct nature of market and fiscal reforms. While the prevalence of limited institutional checks has not been an obstacle to transitioning to market systems ensuring more economic "inclusion", e.g., easier access to property rights, they have undermined building fiscal capacity. Liberalizing market reforms pursued over the last decades, since the fall of communism and the rise of market liberalism, were not only seen as a political priority (to boost development) but were also relatively easier to implement. Instead, building fiscal capacity and tackling inequality via taxes and transfers pre-requires a fiscal contract: being able to credibly commit to redistributing fiscal revenue back to citizens via public goods and welfare. In the Periphery, this commitment was unlikely to hold in the absence of democratic accountability -and less in the presence of populist and/or revolutionary "strongmen" who build support by polarizing society.

- Thus, state fragility rules over other factors in limiting shared prosperity across the Periphery. In Latin America, Africa, and India, both underdevelopment and inequality chiefly derive from their states' persistent in-capacity to build fiscal capacity over the 20th century. While post-colonial states have been relatively successful in tackling the remnants of their "rigged" colonial-era economic systems (seen as a drag on development), the prevalence of limited executive checks has undermined building the state's credible commitments needed to raise substantial direct taxes. Accordingly, a restricted political voice of poorer households limited the necessary political pressure to channel income to fiscal redistribution (checking inequality). Therefore, despite a post-colonial convergence to relatively more "inclusive" and "pro-market" economic systems in the Periphery, significant elite extraction and underdevelopment persist via a state capacity trap favouring elites.

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[14]In all colonial settings, natives and imported labour were institutionally subjugated to the rule of settlers. Then, the number of settlers vis-à-vis non-settlers ultimately determined how inclusive a society was. In other words, relative access to rights depended on the composition of the population rather than in *de jure* institutional differences. African-descent populations were slaved both in North and South America. Indigenous were systematically discriminated against and saw their land expropriated in Western Offshoots and Latin America alike.

Figure 4: Settler Potential, Development, and Extraction
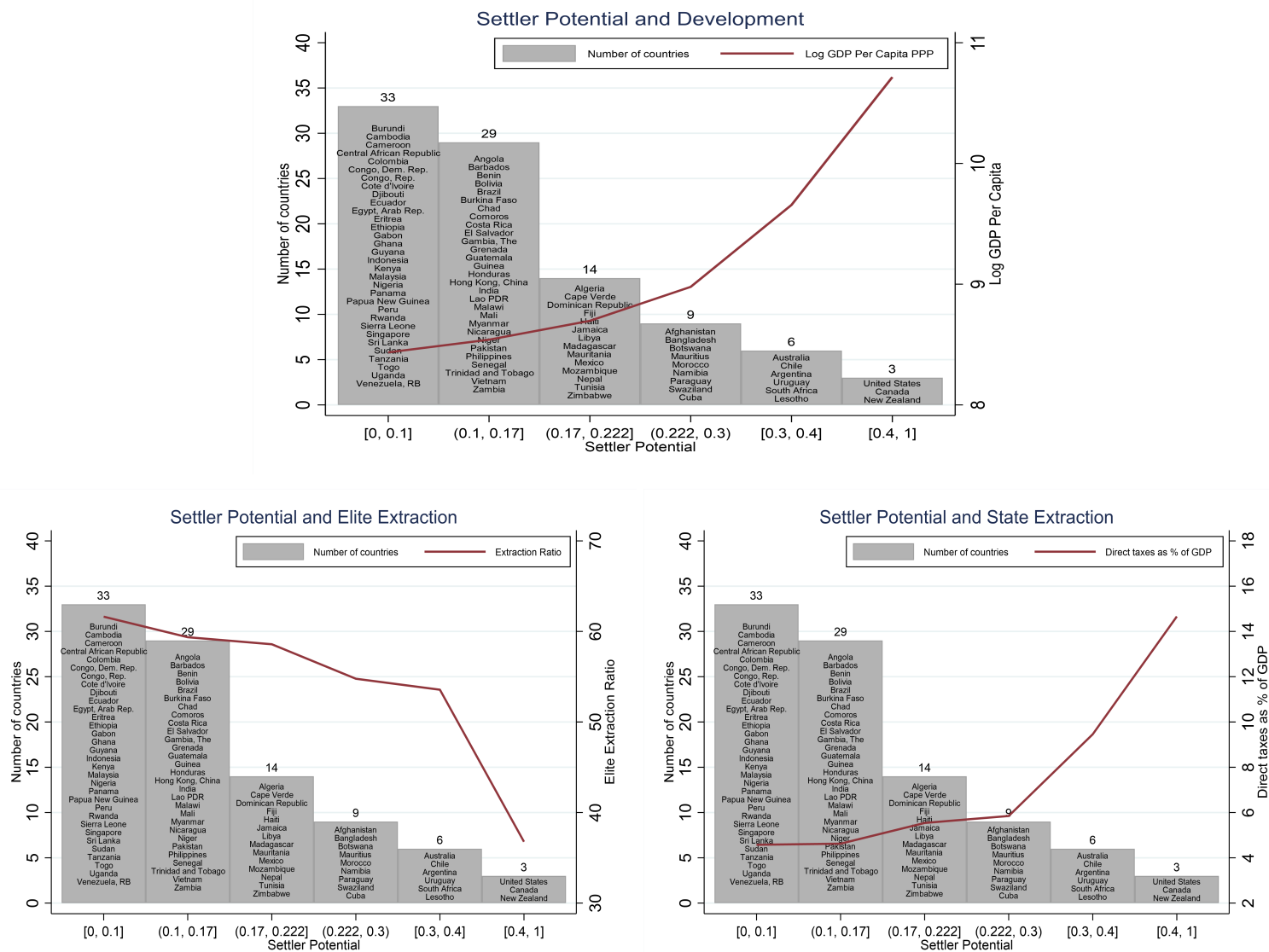
In sum, state capacity stands as a fundamental cause of prosperity by determining the ability to (I) support markets and private development by providing public goods (thus assuring growth), and (II) tackle inequality via substantial progressive taxes and transfers (welfare) ensuring significant redistribution (thus limiting elite extraction). These two stand as the pillars of human development. Figure 4 (above), in line with these points, shows that countries with higher settler potential were able to generate the state's credible commitments (via executive checks) to build state extraction. Thus, they can levy more direct taxes as % of GDP, sustain income growth via quality public goods, and check elite extraction via robust taxes and transfer systems. The next sections will prove that these different premises, like the relations observed in the data, hold in a more rigorous econometric analysis that arguably establishes causality.

IV   From Data to Mechanisms

IV.1   Instrumental variables

As mentioned, the new IV depends on latitude and state history. Data on latitude comes from Acemoglu and Johnson (2005) and state history from Borcan et al. (2018).[15] State history is used to account for native institutional development as (I) a history of state presence captures the ultimate (most complex) level of pre-colonial institutional progress, the state -see Diamond (1997),[16] and (II) because accumulated state presence in 1500 seems reasonably easier to "observe" (estimate) based on historical records than other measures being used. For instance, AJR (2002) uses native population density and urbanisation rates in 1500 that seem more exposed to measurement errors. As the authors acknowledge, this data rely on potentially problematic assumptions and extrapolations. Instead, besides being one of the most reliable historical predictors of institutional progress, Borcan et al. (2018) State History dataset is the latest version of a long effort to better account for historical state presence started in 2002.[17] Thereby, it seems reasonable to think that using this metric minimizes measurement errors and potential sources of bias.

Concerning Settler Mortality, following Irarrázaval (2023), this IV is revised based on the debate and advancements in its correct usage. Following AJR (2012) and Acemoğlu et al. (2014), a capped version of the instrument (at 250 per 1,000) is used to better capture the variation in mortality rates across countries, namely by reducing the impact of outliers and potentially contaminated data.[18] In turn, following Albouy (2012), this research does not use the same data as AJR to build their IV. Acemoglu et al. (2001) data have potential measurement error as the authors had to extrapolate (based on assumptions) some settler mortality rates to address the lack of historical evidence on mortality in some colonies. This research then uses Albouy´s revised version of AJR (2001) data, which includes a set of new mortality rates based on within-country historical evidence, i.e., not extrapolated. Therefore, the estimations use the revised and capped Settler Mortality Instrument as it is closer to capturing the historical (exogenous) variation in mortality rates -thus minimizing measurement error and potential sources of bias.

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[15]I add the missing latitude for Cambodia and Cuba to calculate their settler potential

[16]More specifically, state history captures if 1) there is government above the tribal level 2) this government is foreign or locally based and 3) How much of the territory of the modern country was ruled by this government

[17]In turn, AJR (2002) data is based on guesstimates developed between the 1960s-70s

[18]"The 250 per 1,000 estimate was suggested by A.M. Tulloch, the leading authority of the day, as the maximum mortality in the most unhealthy part of the world for Europeans [. . .] This capping strategy has several attractive features. First, provided that settler mortality is a valid instrument, a capped version of it is also a valid instrument. Second, on a priori grounds one might expect that mortality rates above a certain level should not have much effect on settler behaviour. Third, it is an effective strategy for reducing the impact of various types of measurement errors, which are likely to be present in settler mortality data". (AJR 2012).

IV.2 Settlements and relevant controls

One of the main objectives of this paper´s strategy is to better determine European settlements. The baseline indicator of settlements is taken from AJR (2001), which uses the European share of the population in 1900. As a robustness check, the Appendix shows this paper´s results when using the data on settlements from Easterly and Levine (2016), by taking the average of European presence (as % of the population) during colonization. That is from the 16th to the mid-19th century for the Americas and from the mid-19th century to the mid-20th century for regions colonized later, i.e., Africa and Asia. Like AJR and Easterly and Levine, I assume that countries without information on European presence have no settlements. In this research, AJR´s indicator is preferred as it takes the same baseline year (1900) for all colonies and because data on settlers after 1900 is more likely contaminated with post-colonial migration patterns. In any case, as the Appendix shows, the results are robust to using any of these measures.

A set of relevant controls is considered. First, key geographic and climate controls are included as accounting for these factors is fundamental to achieving causal estimations when using settler mortality and/or potential as IV. Historical mortality rates, like current disease environments, are harsher in areas with warmer and/or tropical weather (i.e., near the equator) thus not accounting for these factors could produce bias (e.g., McArthur and Sachs 2000). The IVs could correlate with the omitted variables (geography and climate), which themselves may impact outcomes. Following the literature, the model controls for these factors. This includes absolute latitude, mean temperature and a landlocked dummy from AJR (2001) and, as Easterly and Levine (2016), I add Malaria Ecology to further certify that effects are not operating via health outcomes.[19] In turn, dummies of French and British origin of the colonizer are also included to account for potential differences in religious, cultural and/or political traditions (e.g., La Porta et al 2008). By considering these relevant factors, the exclusion restriction can be better assured.

IV.3 Development, Inequality and Redistribution

The paper studies a set of key development outcomes. The most used indicator of economic development is the logarithm of GDP per capita adjusted by purchasing power parity (PPP). This data is from the World Bank (2022) and it is used as a baseline outcome of human development, together with average years of schooling and life expectancy. Accordingly, the key measure of prosperity (the outcome synthesises all the previous ones) is the Human Development Index (HDI). In turn, given that the final aim is to identify the origins of shared prosperity, the HDI adjusted by inequality, which captures both prosperity and its distribution, is considered.

Regarding distributive outcomes, inequality data before and after taxes and transfers are from the Standardized World Income Inequality Database (SWIID) by Solt (2020). To reduce potential measurement errors (e.g., due to variations in household surveys), the average value between 2010 and 2018 is taken for each country. Then, based on this and on average income per capita for the same period (2022 USD PPP) using World Bank data (2022), Inequality Extraction ratios are computed. These are calculated both for the market and disposable Ginis, allowing minimum subsistence to vary according to the income of each country using an elasticity of 0.5 -the minimum level being 300 dollars as in Milanovic (2013). Also, based on SWIID data on inequality before and after taxes and transfers, absolute and relative redistribution metrics are computed - in Gini points of reduction and in % relative to market inequality respectively.

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[19]This is an ecological-based index of climatic endowments prone to malaria transmission by Kiszewski et al (2004). As the authors argue, malaria prevalence based on reported cases is endogenous. Reports are limited by the extent of health care coverage, and the efficacy of surveillance and reporting systems, not necessarily reflecting the underlying (ecological) force of malaria transmission. This is better accounted for by climatic determinants, which are based on more "objective" ecologic bases and less affected by country-specific institutional conditions.

Table 1 describes the main variables used by settler potential levels:

Table 1: Descriptive Statistics

	Top 10%	High Potential	Low Potential	Full Sample
HDI (Human Development Index)	0.81	0.68	0.63	0.65
	(0.14)	(0.15)	(0.13)	(0.14)
HDI (Inequality adjusted)	0.68	0.54	0.46	0.5
	(0.18)	(0.18)	(0.14)	(0.16)
Log GDP pc	9.87	8.90	8.52	8.71
	(0.90)	(1.08)	(1.06)	(1.08)
Life Expectancy	74.26	70.36	67.51	68.94
	(9.75)	(7.60)	(7.04)	(7.42)
Years of Schooling	10.54	7.54	6.62	7.09
	(2.87)	(3.27)	(2.74)	(3.04)
GINI (disposable income)	41.17	41.70	42.48	42.07
	(9.33)	(7.70)	(4.32)	(6.32)
Elite Extraction (IER)	48.59%	55.92%	61.05%	58.29%
	(15.34)	(14.41)	(13.86)	(14.30)
State Extraction (Direct-Taxes-to GDP)	14.58%	8.41%	5.40%	7.05%
	(6.47)	(5.82)	(3.49)	(5.11)
Redistribution (Gini points reduction)	8.89	3.49	1.03	2.33
	(5.61)	(4.50)	(2.92)	(4.01)
State Capacity (1970-2000)	0.83	0.02	-0.26	-0.12
	(1.05)	(0.82)	(0.54)	(0.70)
Democracy Index 20th (Polity)	5.35	2.14	1.23	1.68
	(3.91)	(2.78)	(1.65)	(2.31)
Executive Constraints 20th (Polity)	4.62	2.61	2.11	2.35
	(2.31)	(1.71)	(1.07)	(1.44)
Euro Settlements in 1900 (AJR)	0.54	0.17	0.07	0.12
	(0.38)	(0.29)	(0.12)	(0.22)
Settler Potential Instrument	0.37	0.23	0.08	0.15
	(0.11)	(0.10)	(0.04)	(0.11)
Observations (countries)	11	47	47	94

Notes: Standard deviation in parentheses. The divisions of settler potential of the table are as follows: top 10% is the top decile, "High Potential" is the top 5 deciles of the sample and "Low Potential" is the bottom 5 deciles of the sample. Table 1b of the Appendix details the data description, measurement, time covered, and rules followed to build it.

IV.4 Institutional mechanisms

Institutions are defined as the set of rules and practices that structure a certain sphere of society.[20] That is from politics to the functioning of markets and the state up to social behaviour (culture). Here, institutions are grouped into four categories: (a) political institutions, (b) market institutions, (c) state institutions and (d) informal ones. These structures will be defined based on the literature to then assess whether they drive shared prosperity. In turn, given that the divergence in inequality and prosperity between the West and Periphery roughly took place during the 20th century (e.g., Prados de la Escosura 2007, Moatsos et al. 2014, Williamson 2015, Irarrázaval 2023), when possible (depending on data), these different institutional mechanisms will be assessed during this period.[21] These institutional categories are defined as follows:

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[20] Please see for instance North (1990)

[21] The timing of the divergence varies across regions. While Africa may have fallen behind somewhat earlier, it is by now agreed, that Latin America fell behind during the 20th century (e.g., Edwards 2010). For instance, Argentina, Chile and Uruguay had a similar or even higher development level than Western Europe until the early 20th century.

- Political institutions structure the power of the legislative, judicial, and executive in a society. To quantify a history of institutional checks on political power, two core metrics are built based on the Polity database -which is widely used and the best fit for this purpose (e.g., Glaeser et al. 2004). These measures correspond to the average value during the 20th century of (1) the Polity Democracy Index (measuring the extent of democratization from 0 to 10) and (2) Executive Constraints (capturing checks and balances on the executive from 1 to 7).[22]

- Market Institutions structure market forces, property rights and the business environment. For measuring them, the World Bank Doing Business Report is used as a comprehensive source of indicators of market institutions. This report is actually a product of the literature on how property rights (including expropriation risk), financial rules and the business environment (e.g, the regulation of entry) affect growth – as developed by Djankov et al. since 2001 (Djankov 2016).[23]. As a robustness check, other indicators of market institutions are used based on the Economic Freedom Report of the Fraser Institute, especially for property rights protection -as done in the literature (e.g. Besley and Persson 2021).

- State institutions structure the capacity of the state to efficiently perform its key functions. Following Besley and Persson (2011), state capacity corresponds to the ability of the state to raise substantial direct taxes and to mobilise such revenue towards an "efficient" intervention. That is when state action pursues public goals and as such fiscal revenue is invested in public goods and/or redistributed back to citizens via welfare. For capturing this, this research uses (i) direct taxes as % of GDP to account for state extractive institutions, namely the capacity to build a solid fiscal contract and tax citizens, (ii) the extent of redistribution to capture the state's redistributive institutions, namely progressive taxes and welfare systems, and (iii) state administrative institutions -that is the ability of government (public servants) to deliver an *efficient* state action -via *de facto* committing to probity.[24]

- Informal institutions structure the social behaviour (namely the cultural norms) of a society. Following Nunn and Wantchekon (2011), a growing body of literature emphasizes differences in social norms as fundamental for explaining prosperity. More precisely, the literature focuses on trust in others (people) and in government. For capturing these informal institutions, two major global surveys on social norms (preferences) are used, namely the World Values Survey used by Besley and Person to update their *Pillars of Prosperity* book in 2021 and the Global Welcome Monitor (2018) as a robustness check.

Lastly, the data used to account for state institutions, except for redistribution (detailed above), comes from the State Capacity database (Hanson 2022), which also provides a State Capacity Index synthesizing all key state functions. For robustness, the State Fragility Index from the Fund for Peace (2022) is also used as a comprehensive indicator of failing state institutions. Furthermore, the Varieties of Democracy (V-Dem) dataset gives us an exceptional long-term approach to several institutional mechanisms, notably on state institutions (public administrative probity) and on market institutions (access to property rights), permitting us to account for these dimensions over the 20th century. For instance, the Fraser Institute uses the V-Dem dataset to trace back their property rights indicator before the 1980s (Lawson and Murphy 2019).[25]

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[22]The Democracy index captures the extent of democratisation, from 0 ("absence of democratic institutions") to 10 ("fully institutionalized democracy"). It considers executive recruitment (elected or not), executive constraints, and political participation and competition, among others. Executive Constraints measure the extent of institutional checks on the executive decision-making powers, including, inter alia, the strength and independence of the judiciary, the legislature oversight, and other accountability systems. Constraints range from 0 ("unlimited authority") to 7 ("executive parity or subordination"). In the appendix, the rules followed to build these indicators are described

[23]Please see World Bank. (2001). World development report 2002: Building Institutions for markets

[24]Conversely, state action is inefficient when public revenue is diverted for corruption and/or clientelism schemes, rather than duly invested in providing public goods that benefit the bulk of society.

[25]The V-Dem dataset is the only one with long-term data on property rights -the other data starts in the 1980s.

V Empirical Results

As clarified before, the goal of the empirical section is to assess the impact of the key mechanisms that, following the literature, would answer "what drives shared prosperity levels". For this goal, applying the proposed research framework and identification strategy to a revised version of AJR´s model (that is, to better identify causality via the colonial natural experiment), will allow for testing "what institutional mechanisms matter more" for explaining shared prosperity differences. Thus, more than trying to achieve a *perfect* causal identification, which in cross-country is difficult, the aim is to test whether when applying an improved version of AJR´s seminal identification strategy to a more comprehensive research framework, the institutional mechanisms and development narrative (i.e., the causality chains) stressed by the *neoinstitutionalists* hold. Or instead, state capacity rules. That is, whether, after addressing the endogeneity of institutions (with instruments), the primordial driver of shared prosperity is state institutions rather than market or informal ones. In this line, four key relationships are studied in the next sections.

- Firstly, linear regression will be run to test how the Settler Potential IV predicts settlements. For this, different specifications are used to compare the results with AJR´s Settler Mortality, analysing how robust are these IVs. As we shall see, the Settler Potential is a systematically stronger instrument than Settler Mortality in both significance and relevance (R2) to explain settlement patterns - even when all relevant controls are included.

- Secondly, linear and 2SLS regressions are run to see how each instrument predicts institutions directly and indirectly (via settlements) respectively, using a common country sample and the most complete specification with all relevant controls for comparison. This is done first with linear regressions to see how the instruments directly determine different institutions. Then, the same is done by assessing the effects of settlement patterns in 1900 -instrumentalized with each instrument. Both linear and 2SLS regressions (via settlements) indicate that colonialism chiefly matters for explaining political and state institutional progress, but significantly less so for market and informal institutions.

- Thirdly, a series of robustness checks is performed for each institutional mechanism. That is, to look more closely into how colonial settlements affect these mechanisms, by assessing more granular variables and different periods. This is done via 2sls regressions instrumentalizing settlements with each instrument and then using both IVs for maximizing explanatory power. Still, the robustness checks confirm the previous results: political and state mechanisms rule. The results also indicate that following a post-colonial Periphery-West convergence to more "inclusive" and "pro-market" economic systems, differences in market institutions appear to have lost significance and relevance relative to state capacity.[26]

- Lastly, we bridge these causal chains via a system of equations setting the pillars of prosperity. This system is studied via a three-stage least squares equation (3SLS) solving the causal relations going from: (i) colonial endowments to political institutions, (ii) from these institutions to state capacity, and (iii) from state capacity to current outcomes. That is to study Human Development (HDI), including its sub-indicators: income pc, education, and life expectancy. Distributive outcomes are also studied: Inequality Extraction Ratios (IER), Ginis (market and disposable), and redistribution. For robustness, we also test other specifications (2SLS). Overall, the results show that state capacity differences (linked to inherited executive checks) explain most of the divergence in shared prosperity today.

All the regressions are clustered by absolute latitude to account for potential clustering effects. The only exception is the Structural System of Equations -which does not allow for clustering.

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[26]In other words, we do not observe the same convergence in state capacity.

V.1 Determining European settlements

The literature studying the effects of colonial institutions on prosperity mostly identifies them as a result of European settlements (e.g., ES 1994, AJR 2001, Gallego 2010, Easterly and Levine 2016). For this, they study how the conditions faced by European colonizers determined settlements, and via this, the institutions that persisted after independence. As such, the first step is to see whether the Settler Potential IV strongly determines European settlements: that countries with low potential effectively end up with fewer settlers (and vice versa), and whether these results are robust to different specifications and how they compare to AJR´s Settler Mortality IV.

Table 2 presents these results. In the first 8 columns, we have 4 different specifications for each IV (progressively adding controls), from columns 1 to 4 for Settler Potential and 5 to 8 for Mortality. The first three columns in each case are different specifications for predicting settlement with each IV. The first column controls by absolute latitude, the second adds relevant geographic controls (malaria ecology, mean temperature and being landlocked or not) and the third adds dummies for the origins of the colonizer. The fourth column of each IV uses the full specification and restricts the sample to countries with both Settler Potential and Mortality data. Finally, column 9 uses both instruments to predict European settlements.

As Table 2 shows, Settler Potential strongly and significantly predicts European settlements. That is at a level of 0.1% statistical significance - a level that is robust to the addition of controls. Moreover, it is able to explain almost 70% of the sample variation in the preferred specification (column 4 with all controls) and the coefficient itself does not vary much between each column. The situation with settler mortality is different. While it predicts settlement with a 1% of significance in the first two specifications, it drops to 5% in the full specifications with all Controls -both in the shared (column 7) and full sample (column 8). This indicates that settler mortality does not strongly predict settlements, while Settler Potential does. As shown in the next tables (3 and 4), this is further confirmed by weak instrument tests.

Table 2: Instrumental Variables and European Settlements

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable is European settlement in 1900
Settler Potential	2.245***	2.296***	2.212***	2.554***					2.444***
	(0.357)	(0.403)	(0.392)	(0.357)					(0.333)
Settler Mortality					-0.101**	-0.0811*	-0.0834*	-0.0952*	-0.0801*
					(0.0311)	(0.0357)	(0.0364)	(0.0405)	(0.0305)
Latitude	-0.932***	-1.167***	-0.973**	-1.192***	0.774***	0.623**	0.851***	0.840***	-1.282***
	(0.245)	(0.282)	(0.283)	(0.275)	(0.192)	(0.183)	(0.220)	(0.236)	(0.285)
Geog. and Climate	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
British Origin			-0.0601	-0.0389			-0.110	-0.137*	-0.0767
			(0.0464)	(0.0528)			(0.0579)	(0.0634)	(0.0501)
French Origin			-0.0938	-0.119*			-0.143*	-0.161*	-0.110*
			(0.0484)	(0.0547)			(0.0600)	(0.0640)	(0.0470)
Observations	92	89	89	75	85	79	79	75	75
R^2	0.460	0.576	0.594	0.701	0.451	0.509	0.550	0.562	0.744

Notes: Standard errors are in parentheses. Settler Mortality is the logarithm of AJR (2001) settler mortality rates, capped at 250 with the revisions of Albouy (2012). Latitude is the absolute distance from the Equator. Geog. and Climate are mean temperature, malaria ecology and a landlocked dummy. Asterisks indicate the following statistical significance levels: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

As such, Settler Potential appears to systematically outperform Settler Mortality in explaining settlements. The new IV offers a more significant and stronger prediction of European Settlements, delivering a higher R2 in all specifications. In the full specification with all controls and the common country sample, the new IV offers a more significant effect (0.1% v/s 5%) and a 14 percentage points (pp) higher R2 (columns 4 and 8). The Settler Potential IV and the results obtained with it are in themselves a contribution. For instance, the R2 was (at best) 47% in AJR´s original paper. Here, using both IVs in the full specification, the explanatory power is maximized by capturing 74% of the variation in settlements. Thus, while this new IV appears to consistently outperform AJR one, the combination of both IVs maximises our capacity to explain settlements. Building on this, I will then try to better predict (identify) institutions using both instruments.

V.2 Determining Institutional Mechanisms

Now that the settlements have been studied, the next step is to see how they determine institutions. That is directly by regressing the IVs on institutions and then indirectly via instrumentalizing settlements patterns (2sls). Settlements must be instrumentalised as these patterns may also reflect selective migration to prosperous regions rather than solely pre-colonial and biogeographic factors. Therefore, papers directly studying the effects of settlements on institutions and/or development (without using instruments) are misspecified.[27]

As explained before, 4 sets of institutions will be studied: political, market, state and informal. Tables 3 and 4 present how each instrument determines the first three institutional mechanisms.[28] Panel A of each table presents the direct effects of the IVs on institutions (OLS) and Panel B the results when instrumentalizing settlements (2SLS). The second panel also reports the Kleibergen Paap F tests to assess the strength of the instrument to predict settlements. The full specification with all Controls and the common sample (countries with both IVs data) is used for comparison reasons and to better assure the exclusion restriction.

The institutional results support this paper´s thesis stressing political and state mechanisms. As Table 3 (below) shows, settler potential strongly determined political and state institutions. More settler potential, via the influx of European settlers, effectively led to more democratic countries with stronger executive checks (columns 1 and 2) and higher state capacity and extraction levels (columns 5 and 6). For instance, 10% more settlers (as % of the population) led to a significantly higher index of democracy and of executive checks over the 20th century (0.94 and 0.5 respectively), which is roughly one-third of the standard deviation in each index. In turn, as column (6) indicates, when states are checked by citizens, they can issue the necessary credible commitments to extract substantial direct taxes. For example, going from 20% to 50% settlers (from Ecuador to Chile) is associated with a 4.2 GDP points higher direct taxation.

However, we do not see a clear link with market institutions. Settler potential is not significantly associated with access to property rights over the 20th century (panel A column 4) nor with a better business environment today (column 3). The second stage (2SLS) results are consistent with linear regressions (OLS). While the effects of settlements (via settler potential) increase in significance and relevance for political and state mechanisms, this is not necessarily the case for market institutions. We only obtain a slightly significant effect at 5% of settlements on the Doing Business index, but the effects on property rights remain insignificant. The IV model explains 26-37% of the variation in market institutions versus 60-70% of state ones. For instance, 10% more settlers are associated with a 2.1 better Doing Business Index and a 0.27 higher State Capacity, representing 16% and 37% of the standard deviation of each respective index (panel B, columns 3 and 6).

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[27]This is the case of Easterly and Levine (2016).

[28]We will then also study informal institutions in the robustness checks

Table 3: Studying Institutions with Settler Potential

	Political institutions		Market institutions		State Institutions	
	(1)	(2)	(3)	(4)	(5)	(6)
	Democracy	Constraints	Doing Business	Property rights	State Capacity	Direct taxes
Panel A: Linear Results						
Settler Potential	22.82***	12.62***	51.96	0.911	6.172***	32.94***
	(3.655)	(2.760)	(29.60)	(0.628)	(1.405)	(7.941)
French Origin	-0.777	-0.661*	-2.188	-0.0948	0.103	2.690
	(0.586)	(0.313)	(4.336)	(0.0807)	(0.248)	(1.479)
British Origin	0.905	0.416	6.552	0.0393	0.359	4.138***
	(0.621)	(0.357)	(3.522)	(0.0786)	(0.199)	(1.110)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	74	74	74	75	71	61
R^2	0.621	0.614	0.303	0.242	0.461	0.504
Panel B: 2SLS IV Results						
Euro in 1900	9.311***	5.138***	21.04*	0.361	2.563***	14.02***
	(0.956)	(0.834)	(10.28)	(0.231)	(0.402)	(3.026)
French Origin	0.371	-0.0294	0.307	-0.0512	0.453*	4.352***
	(0.375)	(0.272)	(3.928)	(0.0865)	(0.203)	(1.290)
British Origin	1.362**	0.664*	7.552*	0.0550	0.504**	4.587***
	(0.479)	(0.303)	(3.154)	(0.0710)	(0.165)	(1.089)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	73	73	73	74	70	60
R^2	0.756	0.723	0.371	0.266	0.682	0.614
Kleibergen-Paap F stat	49.92	49.92	50.68	51	40.62	37.18

Notes: Standard errors are in parentheses. Panel A presents linear regressions between the instrument and institutions. Panel B is the effect of European settlement in 1900 instrumented. European settlement in 1900 is the share of the population of European descent from AJR (2001). Democracy and executive constraints come from the Polity data series and are the average of the 20th century. Doing Business is the average score in 2016-2020 of the report from the World Bank. Property rights are the average score in the 20th century of the V-Dem Dataset. State Capacity is the 1970-2000 average and direct taxes are the average taxes for the period 1970-2000, from Hanson and Sigman (forthcoming). This data starts in 1970. The Kleibergen Paap F test was obtained using the command ivreg2 in Stata and its null hypothesis is that the equation is weakly identified (the instrument is only weakly correlated with the treatment). Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

Table 4 results -using Settler Mortality instead of Potential - offer a somewhat similar picture. Although now the instrument has an effect on market institutions that is more consistent with the argument of AJR (2001), the link is still weak and noisy -statistical significance remains at best at 5% and the R^2 do not surpass 33%. Then, when estimating market institutions via settlements (using mortality), the explanatory power (R2) remains below 23%. Whereas when studying political and state institutions (linearly or via the 2SLS), while the results are less robust than when using Settler Potential, the effects remain way more significant and relevant than for market mechanisms. Going forward, as anticipated earlier, using settler mortality leads to weak instrument bias. The Kleibergen-Paap F stat is about 5 for Settler Mortality when explaining institutions via settlements, and thus, below the threshold to reject the hypothesis that the instrument is weak. The F stat for Settler Potential is around 45, well above the rule of thumb of 10 proposed by Yogo et al (2002). This confirms the robustness of the Settler Potential IV.

Table 4: Studying Institutions with Settler Mortality

	Political institutions		Market institutions		State Institutions	
	(1)	(2)	(3)	(4)	(5)	(6)
	Democracy	Constraints	Doing Business	Property rights	State Capacity	Direct taxes
Panel A: Linear Results						
Settler Mortality	-1.074*	-0.701**	-4.893	-0.00373	-0.509***	-1.881**
	(0.411)	(0.232)	(2.830)	(0.0455)	(0.134)	(0.645)
French Origin	-1.138	-0.849*	-2.678	-0.114	-0.0258	1.938
	(0.580)	(0.340)	(3.594)	(0.0865)	(0.186)	(1.024)
British Origin	-0.108	-0.205	3.064	0.0192	-0.0738	2.537**
	(0.628)	(0.378)	(4.150)	(0.0872)	(0.188)	(0.905)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	74	74	74	75	71	61
R^2	0.544	0.574	0.334	0.219	0.524	0.470
Panel B: 2SLS IV Results						
Euro in 1900	13.15***	8.461**	56.74	0.0374	5.108***	21.47**
	(3.575)	(2.695)	(29.48)	(0.478)	(1.383)	(7.269)
French Origin	1.035	0.547	6.487	-0.108	0.969*	5.553**
	(0.727)	(0.567)	(6.881)	(0.121)	(0.379)	(2.028)
British Origin	1.695**	0.953*	10.87*	0.0242	0.783**	5.049***
	(0.623)	(0.454)	(4.612)	(0.0890)	(0.295)	(1.365)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	73	73	73	74	70	60
R^2	0.637	0.523	0.183	0.228	0.359	0.451
Kleibergen-Paap F stat	4.6	4.6	5.57	5.53	6	4.4

Notes: Standard errors are in parentheses. The variables and specifications are the same as in Table 3, but now using Settler Mortality as IV. Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

Taken together, the findings suggest that the Settler Potential IV outperforms Settler Mortality. This new instrument is better at determining institutions both directly and indirectly via settlements. Thus, by offering a better identification not prone to weak instrument bias and measurement error, this new strategy contributes to improving our understanding of the effects of colonialism. For instance, by using the Settler Potential instrument to predict settlements, we are able to explain between 60% and 75% of the variation in the sample in both political and state institutions, suggesting that the instrument and model are both strong. In turn, the results challenge the emphasis on market institutions of the literature (perhaps tied to measurement errors and weak instruments), instead highlighting state mechanisms. These results are quite relevant. The literature has stressed market institutions, especially access to property rights, as a pivotal and persistent colonial legacy. Yet, the IV results indicate these effects are less significant and relevant than commonly thought, especially in relation to political and state institutions.

V.3 Robustness checks

To further explore previous results, four robustness checks of how colonialism affects institutions are developed, namely on market, state, and informal mechanisms. With respect to the previous exercise, following a more granular assessment of market and state institutions, trust and human capital patterns are also studied. In turn, now 2SLS estimations using both instruments are included to maximize our explanatory power of settlements. That is to try to better identify institutions, especially considering that previous results showed that both IVs combined explained most of the variation in European settlements (74%). As we shall see, the previous analysis is further confirmed. The effects remain strong and significant for state institutions, noisy and mostly insignificant for market institutions, and practically nonexistent for informal ones.

As Table 5 shows, European settlements do not appear to strongly predict market institutions. Firstly, if instead of looking at the full 20th century using V-Dem data, we use the Fraser Institute's measure of property rights protection for the 2010s, we also find no significant results (column 2).[29] Likewise, if we look at granular data on the current ease of registering property and/or starting a business based on World Bank Indicators for 2010-18, we also do not find much. We see a reduction in the time to register property (column 3), which is consistent with this paper´s thesis stressing a more capable (efficient) administrate capacity. Still, this effect is only significant at 5% when both IVs are included and not very relevant (the R2 is 17%). In turn, we obtain positive yet insignificant effects on the cost of registering property and starting a business. As such, when looking at more granular data on the ease of accessing property rights and markets, we also do not identify a clear relationship going from colonialism to current market institutions.

Even when using AJR's property rights indicator, effects remain noisy and not always significant (column 6, panels A and B). They go from being significant at 5% when directly using the IVs to significant at 0.1% only when instrumentalizing settlements with both IVS (Panel C). The R2 remains consistently below 45%. Still, AJR´s indicator is quite problematic due to its subjective nature and limited coverage. It actually captures the perception of FDI protection by a private company, not general access to property rights *per se*.[30] Then, as the Fraser property rights protection indicator shows (column 1), colonial effects on current access to secure property rights are insignificant.[31] These robustness checks then confirm that settlements do not strongly predict market institutions. Once measurement errors and weak instruments are addressed, there is little evidence that current access to property rights are explained by colonialism as emphasized by the *neoinstitutionalists* (e.g., AJR 2001, AJR 2002, Acemoglu and Robinson 2005). These results challenge the key role given to divergent market institutions (via colonialism) in the literature, especially property rights, and reinforce the imperative of studying other mechanisms.

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[29]This measure is used in the literature, e.g., Besley and Persson (2021).

[30]Besides being limited in coverage, following criticism over its subjective nature, Acemoglu (2008) later noted that this measure of property protection could be problematic in its measurement: "The data on this measure of economic institutions come from Political Risk Services, a private company which assesses the risk that foreign investments will be expropriated in different countries. These data are not perfect. They reflect the subjective assessment of some analysts about how secure property rights are." In other words, rather than measuring access to secure property rights (protection) of the general population, it captures a subjective account of FDI protection by private analysts. This perception is also likely contaminated by other country characteristics - its income, political conditions, ideology (favourable or not to foreigners) etc. This is why World Bank market indicators are preferred. These are based on less subjective data, like the cost and time of registering property.

[31]The Fraser protection index is primarily based on the World Economic Forum´s Global Competitiveness Reports, going from property rights being poorly defined and not protected (1) to clearly defined and well protected (7).

Table 5: Robustness Checks for Market Institutions

	(1) Property Rights [2010s]	(2) Register Property (Time)	(3) Register Property (Cost)	(4) Start a Business (Time)	(5) Start a Business (Cost)	(6) Expropriation Risk [1985-95]	(7) Property Rights [19th]	(8) Property Rights [21st]
Panel A: Linear Results								
Settler Potential	4.549	-258.6	9.188	21.56	46.37	7.124*	7.297**	2.606
	(3.607)	(185.5)	(6.888)	(51.52)	(83.16)	(3.238)	(2.579)	(2.515)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	86	89	89	90	90	73	34	34
R^2	0.204	0.070	0.435	0.101	0.217	0.288	0.355	0.171
Panel B: Linear Results								
Settler Potential	3.603	-206.2	6.415	43.78	41.51	6.342	7.734*	2.635
	(3.741)	(194.9)	(8.322)	(47.11)	(106.6)	(3.357)	(3.046)	(2.855)
Settler Mortality	-0.402	24.81*	0.708	-2.518	-1.980	-0.616*	0.148	0.0926
	(0.389)	(9.691)	(0.552)	(4.113)	(11.55)	(0.298)	(0.373)	(0.300)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	74	75	75	75	75	65	32	32
R^2	0.278	0.132	0.524	0.158	0.271	0.403	0.355	0.266
Panel C: 2SLS IV Results								
Euro 1900	2.715	-141.8*	0.357	16.91	19.08	3.510***	1.824**	0.549
	(1.593)	(59.18)	(3.039)	(16.33)	(30.93)	(1.064)	(0.643)	(0.489)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	73	74	74	74	74	65	32	32
R^2	0.304	0.171	0.503	0.152	0.248	0.437	0.335	0.311
Kleibergen-Paap F	29.91	32.28	32.28	32.28	32.28	33.59	79.66	79.66

Notes: Panel A uses settler potential to directly asses institutions, Panel B adds settler mortality and Panel C estimates how European settlements (instrumentalized with both IVs) affect institutions. Register Property and Start a Business are from the Doing Business Report (average 2010-18), capturing the time and cost (as % of property value) of business activities. Expropriation Risk is from AJR (2001). Property rights [2010s] are based on the Fraser Institute, while Property rights [19th and 21st] are from V-dem property rights for men as in Lawson and Murphy (2019). Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

Still, these results should be taken with caution. While we find that property rights institutions do not seem persistently determined by colonialism, at least during the 20th century (for which extensive data exist), this does not mean that property rights and business-friendly rules have not played a key role throughout history. That is especially so during colonial times -not covered here. In fact, if we look at property rights during the late 19th century, we do find significant colonial effects on access to property rights - for the 34 countries for which data is available (column 8), namely for the Americas. In this line, Engerman and Sokoloff (2002), show that post-independence Latin America had a higher ownership concentration than North America, namely of land for which historical data exists since the late 19th century .[32] Yet, while we do identify significant effects on property rights during 1860-1900 (column 7), we no longer observe significant or relevant effects on property rights across these countries (column 8). This tells us that access to property rights has significantly improved in the Periphery over the 20th century.[33]

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[32]This evidence is for post-colonial times, independence in Latin America took place during the 1810s and the data from ES is for roughly 100 years after data. Also, this does not mean that property was necessarily less secure in Latin America, where proprietors were also the political elite (suffrage was tied to ownership and/or literacy). Access to ownership rights is not the same as property protection, property rights can be very concentrated and still secure -being protected by the very same elite that owns them and rules the country.

[33]See Irarrázaval (2023) for a comprehensive assessment of this convergence.

These IV results document a post-colonial Periphery-West convergence in market institutions. If we take V-Dem property rights data for the late 19th century as a proxy of market institutions and we assume that this picture can be traced back to colonial times, i.e., that the literature is right in stressing limited access to property rights across the Periphery during colonialism. Then, these results tell us that there has been a significant and relevant post-colonial convergence to more "inclusive" and "pro-market" economic systems in the Periphery. As Table 5 shows, while colonial settlements had a significant and relatively relevant impact on property rights in 1860-1900, we no longer identify significant effects over the 21st.[34] The effect itself has become 3 times lower and the model (colonial factors) does not explain more than 31% of the variation. These results then favour a Periphery-West convergence in market institutions, i.e., in access to property rights and markets in general. This process is consistent with the series of structural reforms that developing countries have experienced over the 20th century (Irarrázaval 2023). This includes liberalizing reforms since the fall of communism and the rise of market liberalism in the 1980s.[35]

Table 6: Robustness check for informal institutions and human capital

	(1) Trust Others	(2) Trust Government	(3) Trust People	(4) Trust Government	(5) Education Years [1900]	(6) Education Years [1950]	(7) Education Year [2010s]
Panel A: Linear Results							
Settler Potential	-0.828**	-0.254	0.390	0.0473	10.20***	22.19***	17.21*
	(0.255)	(0.459)	(0.287)	(1.246)	(2.618)	(3.111)	(6.840)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	76	72	42	42	66	66	66
R^2	0.330	0.282	0.306	0.225	0.523	0.645	0.461
Panel B: Linear Results							
Settler Potential	-0.566*	-0.269	0.463	0.140	10.53***	22.16***	17.00*
	(0.241)	(0.517)	(0.259)	(1.656)	(2.465)	(2.724)	(7.138)
Settler Mortality	-0.0145	-0.0348	-0.00777	0.0515	-0.306	-0.446	-0.344
	(0.0240)	(0.0375)	(0.0450)	(0.0992)	(0.233)	(0.413)	(0.725)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65	62	38	38	56	56	56
R^2	0.462	0.291	0.335	0.241	0.615	0.726	0.487
Panel C: 2SLS IV Results							
Euro 1900	-0.144	0.00688	0.169	-0.0854	4.641***	8.694***	6.038*
	(0.0847)	(0.120)	(0.109)	(0.310)	(0.705)	(0.814)	(2.616)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65	62	38	38	55	55	55
R^2	0.452	0.274	0.385	0.245	0.728	0.850	0.596
Kleibergen-Paap F test	31.00	20.16	34.57	34.57	29.89	29.89	29.89

Notes: Specifications are the same as in Table 5. Trust in others and in government comes from Welcome Global Monitor (2018). Trust in people and confidence in government are from Besley and Persson (2021), who in turn obtained it from the World Values Survey 2010-2016. In all indicators, a higher value implies a higher level of trust. Years of education in 1900 and 1950 come from Our World in Data, which builds on Barro-Lee Education dataset (2016, 2018). Years of schooling (average 2010-2018) is from UNDP (2023). Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

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[34]For instance, 10% more settlers increase access to property rights by 0.182 in the 19th versus 0.055 in the 21st, accounting for 17% and 06% standard deviations respectively.

[35]Even countries that still identify with Communism, like China, Laos and Vietnam, have made strong efforts to transition toward more "pro-market" and "freer" economic systems. The exceptions being North Korea and Cuba.

The same holds true for access to education. As Table 6 (above) shows, while colonialism had very relevant and significant impacts on human capital in 1900 and 1950 (columns 5 and 6), this is significantly less the case today (column 7). 10% more settlers increase average education by 0.86 years in 1950 versus 0.68 in the 2010s, accounting for 45% and 22% standard deviations respectively. This tells us that, like for property rights, we identify a strong post-colonial convergence to more "inclusive" educational systems in the Periphery.[36] As an additional robustness check, we study informal institutions. A series of works have focused on cultural dimensions as a mechanism by which history affects prosperity, especially via trust patterns (e.g., Nunn and Wantchekon 2011).[37] To assess the effect of colonialism on the levels of trust in society and government we use data from the World Values Survey (2010-2016), as in Besley and Persson (2021), and the Welcome Global Monitor (2018). Table 6 presents these results, showing that there is not a clear chain of causality going from settlements to better (more trustworthy) social structures (Panel c).

Table 7: Robustness Checks for State Institutions

	(1) State Fragility	(2) Direct Taxes [UNU-Wider]	(3) Direct Taxes [Hanson et al]	(4) Administrat. Quality[20th]	(5) Government Quality[2000s]	(6) State Capacity [1960s]	(7) State Capacity [2010s]
Panel A: Linear Results							
Settler Potential	-23.38***	23.66***	31.69***	7.162**	15.60***	5.013***	6.304***
	(3.726)	(5.656)	(6.834)	(2.149)	(4.374)	(1.293)	(1.654)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	89	67	81	92	89	79	79
R^2	0.456	0.574	0.502	0.276	0.351	0.398	0.406
Panel B: Linear Results							
Settler Potential	-22.87***	19.94**	24.80***	7.296**	13.95**	5.025***	5.461**
	(3.732)	(5.848)	(6.976)	(2.082)	(4.723)	(1.171)	(1.577)
Settler Mortality	0.587	-0.376	-1.247	-0.278	-0.821	-0.338*	-0.476***
	(0.357)	(0.476)	(0.630)	(0.200)	(0.432)	(0.130)	(0.132)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	73	56	68	76	73	69	69
R^2	0.534	0.598	0.529	0.399	0.489	0.558	0.602
Panel C: 2SLS IV Results							
Euro 1900	-8.245***	8.018***	12.11***	2.782***	7.261***	2.360***	2.802***
	(1.445)	(1.593)	(2.576)	(0.671)	(1.859)	(0.307)	(0.555)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	72	55	67	75	72	69	69
R^2	0.493	0.705	0.582	0.470	0.515	0.656	0.594
Kleibergen-Paap F test	22.7	29.28	27.71	32.32	34.04	29.37	29.37

Notes: Specifications are the same as in Table 5. The State Fragility Index in 2018 is from the Fund for Peace (2022). Direct Taxes (in GDP percentage points) average for 2010-18 are based on the UNU-WIDER GRD dataset (2022) and Hanson and Sigman (forthcoming). Administrative Quality accounts for *"rigorous and impartial public administration"* averaged in the 20th century from V-Dem. Government Quality is the level of government accountability and effectiveness from Kaufman et al (2002) -as used by Easterly and Levine (2016). Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

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[36]Therefore, somewhat contradicting Gleaser et al. (2004), the effects of colonialism on human capital proved to be less persistent than commonly thought. As we shall see, the remaining effects chiefly go via the effects of colonialism on state capacity. In other words, the human capital brought by settlers themselves appears no longer relevant.

[37]See Alesina and Giuliano (2015) and Persson and Tabellini (2021) for a review of this literature.

As Table 7 confirms, settlements strongly predict state institutions. Firstly, if instead of looking at the 20th century, we assess recent state extraction (2010-18) based on the State Capacity Dataset (Hanson et al.) and the Government revenue database (UNU-Wider), we also obtain relevant and significant results. A 10 percentage points (pp) increase in settlers is associated with an increase of 0.8 GDP pp in direct taxes and the model itself (colonial factors) explains 70% of the variation (Panel C column 2). Secondly, while the preferred state capacity indicator goes from 1970 to 2010 (for max. country coverage), if we take the decade just before and after (the 1960s and 2010s), the effects remain very significant and relevant (columns 6 and 7). This tells us that there has been no post-colonial convergence of state capacity, but rather the divergence has increased. In the 1960s (when data starts), 10% more settlers increased state capacity by 0.23 accounting for 0.35 SD, in the 2010s, this is associated with a 0.28 increase (0.36 SD respectively).

Thirdly, if we look at the probity of public administration over the 20th century, we also find significant and large results (column 4). The same holds for the more recent quality of governance (column 5). This is consistent with the idea that the state's credible commitment to probity, reflected in rigorous and impartial public administrations, goes along with extractive capacity. Then, if rather than studying state capacity, we look at state fragility today, using the comprehensive index of failing state institutions developed by the Fund for Peace, we also obtain large and significant effects (column 1), thus further confirming that *extractive* colonialism à la ES and AJR led to weak post-colonial states. This means states incapable of performing their basic duties, from holding the monopoly of violence to delivering justice, levying revenue and redistributing it, *de facto* depending on (or competing with) local elites in these duties, e.g., from mafias to guerrillas. This is in stark contrast with the "strong" states depicted by the literature.

Under this new light, the so-called "extractive" nature of Periphery states appears misleading. States that are hardly able to enforce their taxation right (reflected in rampant shadow economies) and that capture a marginal share of economic activity (reflected in famished tax-to-GDP ratios) could actually benefit from having more extractive power. That is especially so vis-à-vis private elites, which profit from an absentee state. When direct taxes and public goods are missing, elites thrive by paying fewer progressive taxes and being the ones that privately provide essential services. A quick look at the developing world shows how an absentee state means elites crowding in the different spheres of society that are under the protection of the state in more developed countries, going from security to health and education. Given that citizens have a high propensity to pay for these services (due to an inelastic demand), this means extraordinary profits and power for elites. This dominant position helps explain the record elite extraction levels seen in the Periphery -which goes hand in hand with limited public development.

Yet, while these elites may rule the country, they have no incentives to build strong tax machinery (to extract citizens´ income). In the future, they could be the ones extracted by this machinery. This helps explain the persistence of a limited fiscal capacity, see Cardenas (2010) for a formalization. Then, these states rely on trade taxes or, when possible, on non-tax sources that are less accountable to citizens, like natural resource revenue from state-owned companies and/or private concessions. This happens across the Middle East, Africa and Latin America. Due to a lack of legitimacy and fiscal capacity, taxing citizens is less viable than getting revenue from tariffs or natural resources. Even when accounting for natural resources income (as in UNU-Wider data), these states still show a limited fiscal capacity (column 2). Also, by not relying on taxes that directly target citizens (that is direct taxes as in Western Offshoots), Peripheral states have no incentives to build accountability. They *de facto* do not depend on citizens. As such, low settlements (via limited executive checks) have led to a history of state fragility and little state extraction, marked by states incapable of committing to probity, and thus, of taxing citizens.

VI   Building Shared Prosperity

VI.1   Development dynamics

Now that the key mechanisms have been identified, the next sections study how state institutions (exogenously determined via colonialism) affects current outcomes. Informal, market and human capital channels will not be studied as they cannot be properly identified. That is to say, while we do identify persistent, significant and relevant effects on state capacity, we do not observe a significant and relevant divergence in these other dimensions -e.g., property rights - via colonialism. This also helps us assure the exclusion restriction, i.e., that colonialism affects current outcomes via the mechanisms stressed here.[38] This does not mean that colonialism does not have an impact on market institutions and education. Rather, it means that, as the overidentification tests later confirm, these effects chiefly operate via state capacity.

The next sections study the impact of political and state institutions, which can be duly identified (via the quasi-random colonial "experiment"), on current development and distributive outcomes. Given that the instrument's relevance in determining political and state institutions was proved, the full research framework with its 3 causal chains can be set. This three-stage system is defined as follows. The first equation (2) estimates the effect of the instruments vector (x_1), which includes Settler Potential and Mortality, on executive constraints (y_1). In the second stage, equation (3) estimates the effect of these constraints (x_2) on state capacity (y_2), Finally, equation (4) estimates the effect of state capacity (x_3) on current outcomes (y_3). All equations have a different constant (c) and use the full specification will all controls (x_c), including absolute latitude, mean temperature, malaria ecology, a landlock dummy and colonial origins.

$$y_1 = c_1 + x_1\beta_1 + x_c\beta_2 + \varepsilon \tag{2}$$

$$y_2 = c_2 + x_2\beta_3 + x_c\beta_4 + \varepsilon \tag{3}$$

$$y_3 = c_3 + x_3\beta_5 + x_c\beta_6 + \varepsilon \tag{4}$$

This system will be studied via a three-stage least squares method (3SLS). That is to solve the causal relations going from: (i) colonial endowments to post-colonial political institutions (20th), (ii) from these systems to state capacity (1970-2010), and (iii) from this to current outcomes (2010s). As Zellner and Theil (1962) show, the 3SLS estimator can prove more efficient than the 2SLS one in several dimensions. Firstly, it uses more information. While 2SLS is a single equation method that estimates coefficients using only the variables that appear in the model, the 3SLS considers the entire system, taking into account the covariances across equation disturbances as well. Instead, 2SLS estimates one equation at a time and does not consider the correlations between error terms. Yet, when studying complex (multicausal) economic phenomena, like prosperity, it could happen that the error terms of different equations are correlated.

This could occur because we only include the most relevant variables in each specific equation. Thereby, we leave out the effects of other less relevant factors to be captured by the error terms. Since institutional mechanisms are interconnected in complex relationships (i.e., double causality), it is not improbable that the error terms of different equations may end up being correlated. Then, given that single equation methods cannot account for this, 3SLS is applied to better capture the relations between different institutional mechanisms and development.

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[38]Each of the robustness checks have confirmed that the impact of colonization across former colonies is more clearly identified in state and political mechanisms, rather than in other channels commonly stressed by the literature.

Yet, this does not seem to be an issue. As the robustness checks later prove, the 3SLS results are equivalent to the 2SLS ones (i.e., that follow a non-structural stage-by-stage estimation method). That is a 2SLS regression estimating how state institutions (instrumentalized with both IVs) affect development. Following Zellner and Theil (1962), when the structural disturbances have no mutual correlations across equations (the variance-covariance matrix of the system errors is diagonal), 3SLS estimates are identical to 2SLS ones. As the results show, this is the case here. This tells us that the results are robust to different methods and that we are not leaving out other relevant factors. Further confirming this, the overidentification tests consistently indicate that our instruments are exogenous, i.e., the p-values report that we cannot reject that the IVs affect development via other channels than state capacity. Based on all this, one can reasonably consider that the IV estimations (including all relevant controls) arguably establish causal relations.

Table 8 presents the 3SLS results. Four metrics are used to account for development. That is the Human Development Index (HDI) - elaborated by the United Nations - and its sub-components, namely income per capita (GDPpc), education years (Educa.) and life expectancy (Epect.) - taken as the average for 2010-18. As the 3SLS results show, state capacity (exogenously determined) permits us to explain 80% of today´s HDI (column 1). A one standard deviation increase in state capacity (0.73) is associated with a 0.7 SD higher HDI (1 point), which corresponds to moving from Algeria or Colombia (0.75-77 HDI) to Argentina or Chile (0.85-86). In turn, the IV model explains between 62-75% of income per capita (log), years of schooling and life expectancy. A one SD higher state capacity is associated with an increase of 0.72 SD log income per capita, 0.64 SD schooling years and 0.52 SD life expectancy. Accordingly, moving from the settler potential of the Dominican Republic (0.21) to Chile (0.33) is associated with going up 15 ranks of a total of 94 former colonies in terms of Human Development (from 0.771 to 0.852).

Table 8: Studying Human Development

	(1) HDI	(2) GDPpc	(3) Educa.	(4) Expect.	(5) HDI	(6) GDPpc	(7) Educa.	(8) Expect.
State Capacity	0.137***	1.060***	2.623***	5.277***	0.137***	1.060***	2.621***	5.301***
	(0.0202)	(0.170)	(0.598)	(1.085)	(0.0236)	(0.175)	(0.658)	(1.346)
R^2 [Final-Stage]	0.798	0.735	0.625	0.769	0.798	0.735	0.625	0.769
			State Capacity Index					
Executive Constraints	0.557***	0.557***	0.557***	0.558***				
	(0.0878)	(0.0878)	(0.0878)	(0.0879)				
R^2 [Middle-Stage]	0.535	0.535	0.535	0.533				
		Executive Constraints Index				State Capacity Index		
Settler Potential	10.66***	10.60***	10.63***	10.73***	5.390***	5.390***	5.390***	5.390***
	(2.199)	(2.199)	(2.201)	(2.198)	(1.376)	(1.376)	(1.376)	(1.376)
Settler Mortality	-0.738***	-0.742***	-0.740***	-0.732***	-0.456***	-0.456***	-0.456***	-0.456***
	(0.143)	(0.143)	(0.143)	(0.143)	(0.118)	(0.118)	(0.118)	(0.118)
R^2 [First-Stage]	0.682	0.682	0.682	0.682	0.625	0.625	0.625	0.625
Estimation Method	3SLS	3SLS	3SLS	3SLS	2SLS	2SLS	2SLS	2SLS
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	75	75	75	75	75	75	75	75
Kleibergen-Paap F test	-	-	-	-	19.13	19.13	19.13	19.13
Overidentification (p-value)	0.409	0.327	0.247	0.213	0.983	0.496	0.322	0.206

Notes: This table presents the two-stage and tree-stage least squares (2SLS and 3SLS) results. Capacity is the average 1970-2010. Constraints are the average of the 20th century. Development outcomes are average 2010-2018. Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

Respectively, the effects of executive checks on state capacity are also very large and significant. Yet, the 3SLS model itself explains half of the variation in state capacity. This probably reflects the fact that some ex-colonies build state capacity, quality administrations and fiscal capacity, without having many settlers or checks like East Asia.[39] Yet, this is an exception. Executive checks have played a key role by helping states build fiscal capacity via credibly committing to probity. There is extensive empirical and theoretical literature on how a history of democracy (via executive checks) is key for enhancing the extractive capacity of the state (e.g., Besley and Persson 2011, 2014, Besley 2020, Irarrázaval 2023). Moreover, executive checks, by allowing for a greater state extraction, also lead to a larger provision of public goods which reinforces the state´s commitment to public probity -further reinforcing the fiscal contract (tax morale). Therefore, in practice, political and state institutions have coevolved together, complementing each other. The results illustrate these synergies (multiplication effect), one standard deviation (SD) in executive checks (1.44 points) is associated with a 1.1 SD higher state capacity (0.81 points).

As Table 8 shows, these findings are robust to different estimation methods. The 2SLS results -going from colonialism to state capacity (skipping constraints) - are consistent with the 3SLS ones. The effect of state capacity on HDI is 0.137 on both the 3SLS and 2SLS model. The statistical significance levels also hold at 0.01% and the overidentification and weak instruments tests consistently indicate that the model is robust and well-identified. The 2SLS model studying HDI levels delivers an overidentification test p-value of 0.983 i.e., indicating that there is absolutely no reason to believe that the IVs affect development via other channels. Also, in the Appendix, we present results from a non-structural 3SLS model (solved stage by stage,), which further confirms that the results are not driven by specific empirical choices.[40] Thus, once the limits of previous studies are addressed, state capacity emerges as a fundamental cause of development. While this is consistent with the results of the literature from AJR (2001) onward, it shows that prosperity is driven by a specific set of institutions within the "inclusive" cluster. That is state institutions, which ultimately determine the ability to (I) support markets and privates via public goods (tied to state revenue), and (II) guide agents via better policies (tied to state probity).

VI.2   Distribution dynamics

This section studies how political and state institutions affect key distributive outcomes. That is the Inequality Extraction Ratio (IER) before and after taxes and transfers (market and disposable), income inequality (the market and disposable Gini), and redistribution. That is the absolute reduction in inequality after taxes and transfers, i.e., the impact of the state redistributive institutions. One word of caution, most of the distributive results present overidentification tests that cast a shadow of doubt on whether the instruments only affect distribution via state capacity. While this was not the case with development outcomes (and it is also not the case with disposable income inequality, i.e. the standard metric of inequality), for the rest of the distributive outcomes, other factors may be at play. The effects should then not be interpreted as the result of state capacity per se. Still, given that the robustness checks have confirmed that the impact of colonization is more clearly identified via state institutions, state capacity is emphasized.

Overidentification tests could be linked to state capacity affecting distribution via development. As argued, greater income per capita creates space for inequality to grow, and thus, also for more redistribution. Alternatively, this could arise from measurement errors associated with inequality.

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[39]This is probably linked to post-colonial factors that are not accounted for in the model. East Asia was marked by the Second World War and the postwar communist threat, which may have reinforced political and fiscal contracts.

[40]The results are robust to using cluster-robust errors (the 2SLS) or not (the structural 3SLS which does not allow for cluster-robust errors), or a 3SLS system solved simultaneously (structural) or stage by stage (non-structural).

Inequality data is only *properly* comparable in a small set of ex-colonies, especially in its granular version (before-and-after taxes and transfers) -see Irarrázaval (2023). Inequality reports are likely to be contaminated by institutional differences. In this line, if I run the regressions with countries with only quality data (based on the LIS and OECD method), we cannot reject that the IVs affect inequality via other channels than state capacity. As the Appendix shows, while we lose country coverage, the overidentification tests obtained confirm the exclusion restriction. Moreover, countries with little state capacity are likely to under-report inequality (they lack the administrative capacity and/or political will to fully assess it), thus, if there is any bias, it is most probably attenuating the point effects and significance levels presented next.

Table 9 (below) presents the 3SLS results. In terms of inequality, we obtain that state capacity (via more checks on political power) leads to significantly more redistribution (columns 5 and 6). One point higher state capacity (1.4 SD) is associated with a significantly higher Gini reduction of 3.7 points via taxes and transfers. That is the inequality gap between Argentina (38 Gini index) and Egypt (42), which is equivalent to 0.63 SD in disposable inequality. In turn, this redistributive effect significantly limits inequality extraction by 3.6 points (column 6). As argued, state capacity checks elite extraction by providing the state with the tools to raise substantial progressive taxes (via credible commitments to probity) and use this revenue to redistribute income via more welfare (thanks to a higher fiscal capacity). This leads to an extractive equilibrium where the state trumps elites in capturing income, thus checking inequality. As such, the data indicates that state capacity (tied to executive constraints) limits elite extraction chiefly through taxes and transfer systems, i.e. via the state´s re-distributive institutions.

Table 9: Studying Distribution [3SLS Method]

	Income Inequality Index (Gini)			Inequality Extraction Ratio (IER)		
	(1)	(2)	(3)	(4)	(5)	(6)
	Disposable	Market	Reduction	Disposable	Market	Reduction
State Capacity	-0.00241	3.596*	3.671***	-7.253*	-5.343	3.665**
	(1.608)	(1.739)	(0.859)	(3.243)	(3.324)	(1.136)
R^2 [Third-Stage]	0.186	0.127	0.527	0.451	0.234	0.384
	Second-stage results: State Capacity Index					
Executive Constraints	0.565***	0.578***	0.573***	0.565***	0.540***	0.571***
	(0.0878)	(0.0888)	(0.0886)	(0.0880)	(0.0722)	(0.0884)
R^2 [Second-Stage]	0.540	0.527	0.532	0.539	0.561	0.534
	First-stage results: Executive Constraints					
Settler Potential	9.974***	9.765***	10.22***	10.09***	10.22***	10.25***
	(2.269)	(2.260)	(2.266)	(2.274)	(2.221)	(2.268)
Settler Mortality	-0.780***	-0.773***	-0.756***	-0.773***	-0.794***	-0.758***
	(0.148)	(0.146)	(0.146)	(0.147)	(0.147)	(0.147)
R^2 [First-Stage]	0.678	0.678	0.680	0.679	0.678	0.680
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	71	71	71	71	71	71
Overidentification (p-value)	0.116	0.018	0.0126	0.0375	0.0348	0.0122

Notes: This table presents the three-stage least squares (3SLS) results, using Settler Potential and Mortality as instruments. State Capacity is the average 1970-2010. Executive Constraints are the average of the 20th century. All development outcomes are average 2010-2018, for more details please see Table 1b in the appendix. Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

In turn, we see no significant effects on elite extraction before the state´s redistributive impact. The evidence shows that former settler colonies, with more executive checks and state capacity, even have significantly higher market disparities (column 2). While this may appear, *prima facie*, somewhat strange (counterintuitive), these results are consistent with this paper´s core argument. As developed before, the potential for inequality increases with prosperity. Then, in countries with high state capacity, due to larger provision of public goods (supporting growth), there is more space for market disparities to develop. By having quality public administrations, these states also offer better guidance to privates - leading them to seize more and/or better economic opportunities. Conversely, fragile states, by not being able to provide public goods and good guidance (policies), provide fewer market opportunities. Privates do not have the means, infrastructure or incentives to generate income. These citizens are then relatively equal in their lack of opportunities (poverty). Thus, state capacity creates space for market inequalities to develop.

But then, these inequality-enhancing effects are trumped by the redistributive hand of the state. State capacity, via more progressive taxes and transfers, i.e., a fiscal system which targets its extraction more heavily on richer citizens and which has welfare systems that then redistribute this income to poor households, reduces overall (disposable) inequality (column 1). This is more significantly reflected in that the redistributive effect is higher than the increase in market inequality (columns 2 and 3). Moreover, as presented in the Appendix, the results show that both the redistributive impact of the state and its effects on checking elite extraction are also significantly associated with state extraction. Yet, when solely assessing state extraction the effects are not as large as with overall state capacity, indicating that how efficiently the income captured by the state is spent (linked to the quality of public administration) also plays a crucial role. Thus, more redistribution (tied to state extraction and efficient spending) trumps more market disparities via opportunities (tied to better public goods and policies), limiting elite extraction.

Conversely, in a context of state fragility, limited redistribution (tied to a lack of fiscal capacity), leads to unchecked elite extraction. State action may even feed inequality. Taxes and transfers can have regressive effects, as in Honduras, Salvador, Ecuador, and Bolivia. This follows practically in-existent direct taxes and inefficient allocations of social spending, benefiting upper-middle classes. As Abad and Lindert (2017) show, an inefficient targeting of transfers and a lack of progressive taxes have been historical features of Latin America. Often, in a context of rampant informality and corruption, i.e., states incapable of enforcing tax law and credibly committing to probity, benefits end up serving clientelist goals or favouring formal middle-class workers. As across the Periphery, this results from unchecked states (prone to rent-seeking) with poor administrative capacities (prone to inefficient policy-making and clientelism). Moreover, given that international methods to measure inequality (e.g, the OECD and LIS) do not consider the often regressive impact of indirect taxes (the Periphery´s fiscal backbone), which adds to severe inequality under-reporting, the regressive impact of Periphery states is likely underestimated.[41]

The 2SLS model results presented in the Appendix as a robustness check confirm these findings. While the 3SLS and 2SLS results are somewhat different in significance (probably due to the less robust identification of distributive outcomes), the directions of the effects are consistent. In sum, former colonies with weak executive checks, dominant in Latin America, Africa and most of Asia, had been unable to create the state´s credible commitment to public probity necessary for building state capacity. That is for forming a fiscal pact with the society that allows for substantial direct taxes, and thereby, for funding public development and redistribution. Then, under limited access to political and economic opportunities, income is captured by private elites (not by checked states), severely undermining development and equality.

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[41] Again, while the periphery overwhelmingly relies on indirect tax sources (especially on consumption and trade), Western countries rely more heavily on taxes on income, profits and capital gains -see Irarrázaval (2023).

VI.3 Shared Prosperity dynamics

This last empirical section studies the effect of state capacity on shared prosperity. Here, shared prosperity should be understood as development with relative equality, i.e., inclusive development. To account for shared prosperity we use the inequality-adjusted Human Development Index (IHDI) used by the United Nations and originally developed by Foster, Lopez-Calva and Szekely (2005). The IHDI considers the distribution of each HDI dimension, namely education, life expectancy and income. It accounts for inequalities by "discounting" each dimension's average value according to its inequality level, thus penalizing countries with high underlying disparities in access to economic opportunities, education, and health.

Table 10 presents the results of state capacity (exogenously determined via colonialism) on IHDI. Firstly, the impact of state capacity is significantly larger than when not adjusting the HDI by inequality. When considering the specification with all controls (columns 4 and 8), the effect of state capacity is 26% higher than on HDI - 0.137 versus 0.173. That is 1.05 and 1.25 standard deviations of each index respectively. Therefore, in line with the arguments developed here, this reflects that state capacity not only leads to more economic development (via better public goods), but also to one that is less unequally shared (notably via redistributive systems). The state crowding in the economy, via credible commitments to public probity, which allow for substantially taxing economic activity, also translates into less elite capture (crowding out of elites from essential services) via a larger provision of public goods. This then democratizes access to these services, from education to health, otherwise privately provided at a sub-optimal level.

Table 10: The Origins of Shared Prosperity

Dependent Variable:	HDI Inequality-adjusted (3SLS)				HDI Inequality-adjusted (2SLS)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
State Capacity	0.167***	0.167***	0.160**	0.173***	0.167***	0.167***	0.160**	0.173***
	(0.0473)	(0.0219)	(0.0486)	(0.0239)	(0.0507)	(0.0244)	(0.0486)	(0.0274)
R^2 [Final-Stage]	0.777	0.805	0.786	0.808	0.777	0.805	0.786	0.808
		State Capacity Index						
Executive Constraints	0.401***	0.494***	0.429**	0.527***				
	(0.117)	(0.0751)	(0.133)	(0.0907)				
R^2 [Middle-Stage]	0.592	0.555	0.586	0.545				
	Executive Constraints Index				State Capacity Index			
Settler Potential	10.79***	10.15***	9.808***	9.664***	4.323***	4.257***	4.208**	4.328**
	(2.987)	(2.068)	(2.873)	(2.067)	(1.202)	(1.157)	(1.358)	(1.266)
Settler Mortality		-1.168***		-1.041***		-0.616***		-0.607***
		(0.162)		(0.171)		(0.136)		(0.146)
R^2 [First-Stage]	0.488	0.726	0.546	0.744	0.411	0.699	0.459	0.700
Geo and Climate	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Origins Controls	No	No	Yes	Yes	No	No	Yes	Yes
Observations	77	68	77	68	77	68	77	68
Kleibergen-Paap F test	-	-	-	-	12.92	24.77	9.608	21.23
Overidentification (p-value)	-	0.355	-	0.338	-	0.406	-	0.549

Notes: This table presents the two-stage and tree-stage least squares (2SLS and 3SLS) results, using Settler Potential and Mortality as instruments. State Capacity, Constraints and Controls are the same as in the previous tables. Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

Secondly, these findings are robust to different specifications and methods. Table 10 shows that the results do not vary much across specifications. The impact of state capacity remains significant at 0.1% and the point effect varies between 0.160 and 0.173 when geographic and climatic controls are included (the variation being below 10%), whether when using only the new settler potential IV or when adding mortality. Again, we prefer the specification with both instruments because, as the Kleibergen-Papp F tests suggest, it maximises our explanatory power of institutional development. Secondly, when using the full specification with all controls, the significance level and point effects are the same if we alternatively use the 2SLS method. This tells us that the IV results are robust to other estimation methods and that there are no error correlations in the system not being accounted for, i.e. it appears that we are not leaving out other relevant factors. Adding this to the overidentification tests indicating that the IVs chiefly affect shared property via state capacity, helps assure that the effects are well identified.

Lastly, taken together, the IV findings confirm the arguments developed through this paper. Shared prosperity, i.e., development with relative equality, appears chiefly driven by state capacity. This result is robust to studying development and distributive outcomes in their own right, or together as synthesized by the IHDI studied here. As such, across Africa, Latin America, and Asia, following a clear post-colonial convergence to more "pro-market" and "inclusive" economic systems (marked by the fall of communism and the rise of market liberalism since the 1980s), elite extraction and underdevelopment both seem to primarily persist via a state capacity trap. In the Periphery, persistently limited executive checks have undermined the state's credible commitments to public probity necessary for building fiscal capacity. Then, this limits their ability to mobilize large funds to (I) support markets and private sector development via an ample public goods provision, and (II) check elite extraction via robust taxes and transfers systems ensuring substantial redistribution. Overall, these emerge as the pillars of shared prosperity.

VII   Discussion

VII.1   Epistemological considerations

Since the success of D. North´s work in the 1990s, institutions have been at the core of economics. While there still is an ongoing debate into which specific institutional channels matter the most for explaining shared prosperity patterns, from market to informal institutions, most economists (including economic historians) would agree that institutions are a key cause of long-run growth. Yet, following the influence of the neoinstitutionalists, the study focus has been on how checks on state action support market development, especially by limiting the so-called "extractive" grip (role) of the state -which goes from growth-limiting progressive taxes (Persson and Tabellini 1994) to the expropriation of private property (AJR 2001). However, ironically, development studies seem to have overlooked the developmental role of the state.

Following Foucault's "Archaeology of Knowledge" (1969), historical context and power relations affect the production of knowledge, from "discursive formations" (narratives) and "interpretations" to research avenues. Then, it appears logical that following the context of the 1990s, marked by the fall of communism and the rise of market liberalism, studies have tended to focus on how limiting state intervention was good for growth, e.g., from freeing markets to securing private property. Accordingly, in light of the failure of planned economies, where the state played a pivotal role, state action, in general, was perceived in a negative - or at least suspicious - way. States were framed as "rapacious" or "extractive", projecting the idea that restraining their capacity was optimal. Thus, broadly speaking, the study focus was on which institutional checks would keep markets and the private sector from suffocating under the distorting "thumb" of the state, not on how building state capacity could support markets, e.g., via better public goods.

In light of the *East Asian Miracle* and the research on state capacity, revisiting the role of the state seemed imperative. As Peer Vries (2013) notes, the *neoinstitutionalist* have mostly studied the state from the lens of how it secures (or not) contract enforcement and property rights (if not altogether confined to such a role), while its other functions -from levying revenue to providing other public goods- were overlooked. This is especially so for the state's extractive and redistributive role. Despite notable exceptions like Sokoloff and Zolt (2007), fiscal institutions have been either ignored or seen as development threats, not as first-order drivers of prosperity. That is despite taxes being among the oldest institutions and most important pillars of the state. Thus, by overlooking the developmental role of the state, the literature appears to have overstated the role played by market over state institutions. This paper then expects to have contributed by putting state capacity and fiscality at the core of development and institutional economics.

Fiscality has been central in all major institutional revolutions. That is from the Magna Carta in 1215 (*"no scutage without general counsel"*) to the American Revolution in the 18th century (*"no taxation without representation"*). The event that is meant to have started the path towards modern economic growth, namely the Glorious Revolution (1688), also started as a fiscal struggle, where parliament (taxpayers) refused to finance an unconstrained state (North and Weingast 1989). Yet, rather than assessing the effects of the resulting Parliament supremacy over fiscal policy on fiscality per se, *neoinstitutionalists* have focused on finance and property rights.[42] While the effects on market institutions have been contested or are at least less clearly identifiable (e.g., Clark 2008), the revolutionary fiscal effects have not. As noted by Dincecco (2015), this revolution led to the first "effective state" in history via credible commitments to fiscal probity (tied to checks and balances), which permitted to increase the state extraction (fiscal capacity) and to channel of revenue towards public goods that paved the way for shared prosperity.[43]

Going forward, Adam Smith, who was born into the prosperity that followed this revolution, saw the benefits of the exceptional state institutions of England.[44] In The Wealth of Nations (1776), he argues that the state plays a fundamental role in development by solving a coordination failure between privates. Following Smith, the state has the duty to provide the *"public institutions"* that are of the *"highest degree advantageous"* for society, but that no private would ever want to finance on its own.[45] For this reason, state institutions play a fundamental role in promoting prosperity (Smith dedicated the full book V to this topic), especially via collecting revenue and channelling it to finance public goods, from education to infrastructure. [46]In turn, by committing to fiscal probity (non-arbitrary taxation), the state helps to build a fiscal contrary, allowing to proportionally tax the income that citizens *"enjoy under the protection of the state"*. Therefore, one could reasonably say that the importance of state capacity (tied to a fiscal contract between the state and privates) was already in Adam Smith´s view a core pillar of prosperity.

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[42]For instance, this is the case of North and Weingast (1989) and Acemoglu and Robinson (2012).

[43]Rather than financing constant wars that would solely benefit the Crown at the expense of taxpayers, public revenue was channelled toward expanding public goods -notably towards a Navy that would ensure order across the sea for private (namely commercial) interests to thrive (e.g., Jha 2015).

[44]Even before Smith, the importance of these state institutions had been identified. In particular, Hobbes (1642) considered state institutions to be the foundations of shared prosperity, notably by providing the enabling conditions (peace, security, justice etc.) for citizens to thrive and develop their better nature (notably including public charity). Following Hobbes, it is only under the protection of the state when "Man to Man is a kind of God". Then, taxes, by being a core pillar of the state ("the wages that are due to those who hold the public sword"), enable this prosperity ("the enjoyment that everyone receives from taxes is the enjoyment of life") -see Hobbes (1651).

[45]See quote at the beginning of this paper

[46]*"Were there no public institutions for education, no system, no science, would be taught ..."*

VII.2 Development-extraction dynamics

This paper has contributed by capturing an elite-versus-state struggle that is pivotal for prosperity. It did so by proving that elite extraction and underdevelopment derive from a weak state capacity. An inability to assure state extraction (taxes), public goods (growth), and redistribution (equality). When states are weak, elites benefit from little direct taxes and privately providing basic services. Then, this pro-elite extraction equilibrium of limited state power feeds inequality and low income via a sub-optimal provision of public goods. As shown here, this would be the case in the Periphery. Conversely, in Western countries, higher state capacity, especially to extract substantial direct taxes, has allowed for large public goods (including welfare), and thus, ample opportunities and prosperity. Moreover, direct taxes appear to have been key to checking elite extraction and routing their income into public investment. Thus, state capacity, besides boosting "inclusive" growth via public goods, has also directly limited inequality via progressive taxes and transfers.

Figure 5 depicts how these state-versus-elite extraction dynamics are key for shared prosperity. In the Periphery (left side), we have a political equilibrium where elite extraction trumps state one. These captured states are both unable to check (tax) elites and make public investments. Therefore, there is limited access to security, infrastructure, or education, perpetuating poverty and inequality. There, Human Development (HDI) is scarce (there is little income, education, and health) and very unequally distributed. The inequality-adjusted HDI is used to better reflect this. Then, in between, we have Semi-Periphery nations which have been able to build basic state capacity (and extraction), but seem stuck in a middle-state capacity trap. There, state extraction appears to coexist with elite one (being intertwined via corruption), eroding the quality of public goods and the fiscal contract. That is the potential for further taxing citizens. At last, in Western Offshoots, states seem to match elites in extraction. There, as history shows, the public sector grew at the expense of private elites (via direct taxes), paving the way to development.

These different extractive equilibria are indeed linked to historically-divergent state institutions. As Sokoloff and Zolt (2007) show, North America (the US and Canada), like Western Europe, since the early stages of growth have been pioneers in taxing citizens (especially via progressive ways), while the Periphery has lagged behind. In Western states, the implementation of progressive taxes was facilitated by the combination of executive checks and profound democracies (larger franchises). This favoured the emergence of solid and progressive fiscal contracts. Then, this allowed to direct large revenue from elites (which were more heavily taxed) towards public institutions, especially education, infrastructure (transportation), health, and social programs. Whereas in South America, under unequal access to political power (i.e., state management), there has been a historical lack of fiscal capacity (namely of direct taxation), which has translated into limited public development and an excess of elite extraction. Thus, this North-South historical divergence in fiscal trajectories helps to explain modern income and inequality gaps.

A state capacity trap is thus crucial to explain why the Periphery fell behind Western nations. In line with the literature (e.g., Besley and Persson 2014), I showed that executive checks are pivotal in this divergence. These are key to directly taxing citizens, who expect, and, will make sure of it (via such checks), that their revenue is de facto invested in public goods -assuring long-term growth. This fiscal pact also checks inequalities. That is by channelling income from elites (via tax tools) to public development, from education and infrastructure to welfare. Thus, checked states, namely an elite of public servants credibly committed (accountable) to probity, solve a coordination failure by assuring that large income is invested in public goods. In its absence, the Periphery bears the extraction of income by rapacious elites for their own private benefit. There, a state capacity trap feeds into high elite extraction and underdevelopment, explaining the persistence of the low-fiscality, low-growth, and high-inequality Periphery equilibrium.

Figure 5: Development-Extraction Equilibriums
(Or development as a coordination failure)
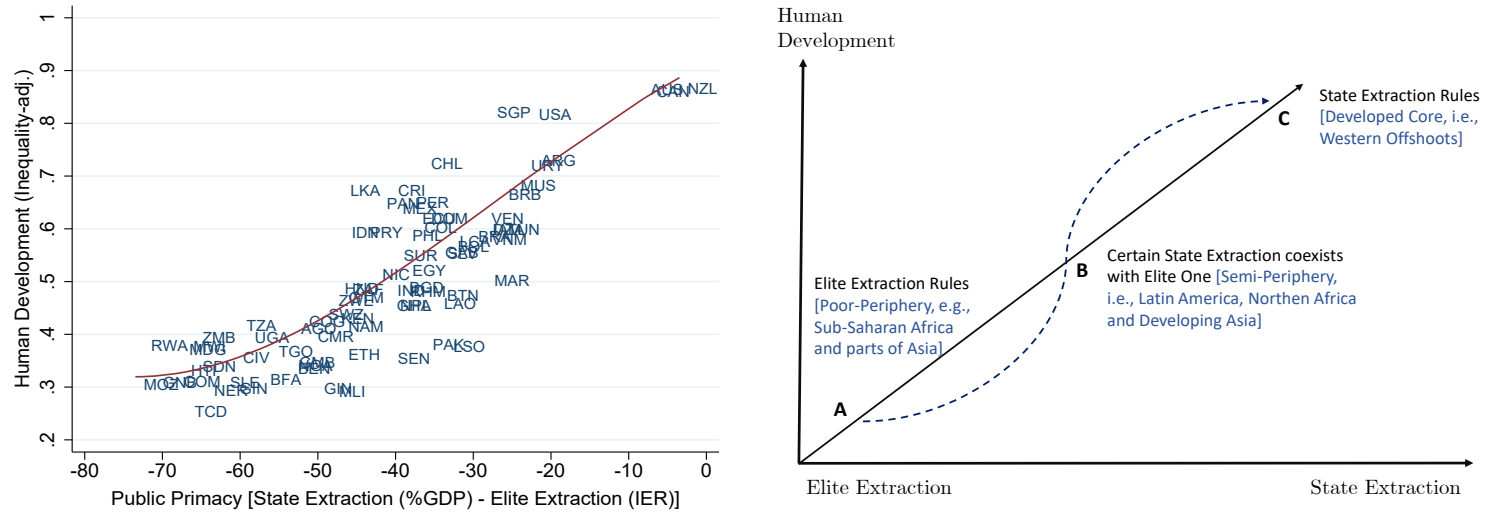
Notes: The Human Development Index (inequality-adjusted) is the 2010-18 average from UNDP (2022). Here, State Extraction is taxes to GDP based on Hanson and Sigman (2021), taking the average for 2010-18. Elite Extraction (average 2010-18), i.e., the Inequality Extraction Ratio (IER), is the same as in previous sections. In turn, Public Primacy is an "illustrative" measure built to compare Elite and State Extraction dynamics, i.e. to give us an idea about how both compare. Yet, one word of caution, Elite extraction and State one are not necessarily capturing the same income (extraction) base. Elite extraction, like any inequality measure, is based on household surveys - which fail to capture all income sources. Then, different from State Extraction, It does not capture the total GDP. This is why these extraction measures are studied separately across the paper. Also, most likely, Elite Extraction based on the IER, by only measuring feasible income extraction (i.e., the proportion of income surplus captured by elites), offers an upper bound of the unobservable Elite Extraction (as % of GDP).

These different extractive equilibria originate in divergent political institutions since colonialism. As developed, the Periphery (group A), by inheriting unchecked states, could not issue the credible commitments to probity needed for substantial taxation. This led to a coordination failure between privates, where a suboptimal public goods provision perpetuated low income and high inequality. Then, we have the Semi-Periphery (group B). These countries, thanks to historically higher checks, were able to secure basic state commitments to probity. This has allowed them to collect more taxes and offer better public goods than most of the Periphery, explaining their higher prosperity. Yet, given that they lag behind Western Offshoots (Group C) in oversight (checking state capture), state extraction co-exits with elite one. These states are still vulnerable to rent-seeking, eroding the credibility of their commitments and development. Finally, Western states, by being more checked, have been able to overtake elites (via taxes and crowding out private supply of essential services), assuring that large income goes into public investments.

This elite-versus-state power struggle appears consistent with historical development processes. In *Old Regime* Europe, as in the Periphery, low state capacity (tied to little checks) forced states to bargain with elites to keep order, tax and allocate spending. The resulting regressive fiscality and low spending equilibrium serving elites bred inequality and poverty (Dincecco 2015, Alfani, 2021). Despite progress toward shared prosperity via institutional changes that made state management more inclusive, like the Glorious Revolution, this pro-elite equilibrium persisted broadly unchecked through Monarchies and Elite Democracies (excluding the poor). That is until Full Democracies emerged in the early 20th century, which led to the advent of progressive taxes and public growth (Lindert 2004, Piketty 2013). Yet, Full Democracies, with mass participation and strong executive checks, developed first and more fully in Western nations. As the post-war period illustrates, this led to very different income and inequality trajectories.

In Western states, following unprecedented democratization during the early 20th century, direct taxes and the public sector boomed -welfare states rose (e.g., Lindert 2004, 2019). In line with our thesis, this was followed by unparalleled inequality reduction and development levels, leading to the famous "Great Levelling" and "Golden Age of Growth" respectively. Yet, the Periphery missed this process, falling behind in equality and growth.[47] As Lindert (2004) and Dincecco (2015) argue, the emergence of a solid fiscal contract was key for a pro-growth and pro-equality state to emerge. Moreover, in a post-war context when state-led industrialization was considered the key to growth, the persistence of captured and inefficient states (prone to rent-seeking) also helps explain why the Periphery failed to converge with the West.[48] This was an age of state *dirigisme* for which quality public administrations, as during the *East Asian Economic Miracle*, played a key role in guiding markets and privates toward shared prosperity.

As such, a broken fiscal contract (tied to no executive checks) accounts for the low-fiscal revenue, high-inequality and low-growth equilibrium in the Periphery. That is to say, the autocratic, unequal, and underdeveloped cluster, identified by the *neoinstitutionalists*, appears tied together by these unchecked states' incapacity to raise revenue, provide public goods and redistribute income. Today, this adds up to having to rely on more inefficient and economically harmful ways of levying revenue (taxing trade rather than citizens) and redistributing (via clientelism rather than social protection). These unchecked states, besides being prone to poor policy-making, often end up trying to tackle their high inequalities via distortive ways -but requiring little fiscal capacity. That is via, *inter alia*, protectionism, fixing prices and wages, and clientelist schemes, as in Latin America, rather than via less distortionary and more effective post-production interventions, namely via direct taxes and social transfers as in OECD countries (e.g., Sachs 1990).[49]

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[47]See Williamson (2015) and Irarrázaval (2023) on how the Periphery missed the "Great Levelling".

[48]In this line, Jenkins (1991) connects colonial heritages (operating via state capacity) to explain this failure.

[49]Likewise, Edwards (2010) notes how Latin American "strongmen" try to address inequality via distortive policies.

VII.3   Convergence-divergence patterns

Historically, scholars have often exploited "essentializing narratives" and "assumptions" to study the Periphery (the non-Western "other"), depicting it in a rather "romanticized" way (Said 1978). That is by overstating differences with the West. Seminal development studies seem to have echoed such essentializing theses. Latin America, Africa and Asia are usually depicted as regions marked by immutable elements, like stagnant, structurally rigged, captured, etc. Regions that appear destined to suffer under the "thumb of history" (colonialism), see Banerjee and Duflo (2014). In this line, Austin (2008) notes that AJR´s analysis offers a "compression of history", which assumes that for 500 years the elements characterizing the colonial Periphery vis-à-vis the West have remained roughly stable. That is by overlooking the possibility of post-colonial change (Irarrázaval 2023). Then, while Periphery-West institutional divergence certainly plays a key role (tied to colonialism), the extent of its persistence appear overstated.

This is especially true for market institutions and education. As the empirical section showed, access to private property rights has significantly improved in the Periphery since the 19th century. This then explains why market institutions have become a secondary factor in explaining prosperity. The same can be said for education, for which several papers have documented a strong post-colonial convergence untied to democratization (e.g., Kosack 2012, Paglayan 2021, Irarrázaval 2023). Thus, this casts a shadow of doubt over the literature's preferred channels and calls to put more attention into studying convergence dynamics (not only divergence). Moreover, on a more positive note, one can reasonably think that the fact that market institutions have become a rather secondary cause of prosperity may be a partial result of the *neoinstitutionalists* own success. That is to say, the convergence of the Periphery to better market institutions (at least over the last decades) may be, to a certain extent, a result of this influential literature.

That is particularly via the byproducts of this literature. *Neoinstitutionalists* studies not only led to the emergence of the World Bank Doing Business Reports, designed to measure and promote better market institutions, but also to a series of structural reforms across the developing world (e.g., Djankov 2016). Their goal was to improve access to private property rights, facilitate market entry and improve the business environment in general. International organisations pushed these reforms, from the World Bank to the FMI, recommending policies based on this research line.[50] That is especially since the 1980s, following the fall of communism and rising market liberalism. The findings of this paper documenting a Periphery-West convergence in access to property rights and markets in general, resonate with this recent historical process of institutional change. However, despite this clear post-colonial Periphery-West convergence to more pro-market institutions, significant inequality and development gaps persist.

This supports the thesis that state capacity rules over other factors in causing prosperity today. As noted, this results from the distinct political economy of market and fiscal institutional reforms. While the prevalence of low executive checks has not stopped peripheral autocrats from tackling the remnants of their "rigged" colonial-era economies (seen as a development priority), it undermined building the state´s credible commitments needed to build a solid fiscal contract. Accordingly, the restricted political voice of citizens limited the necessary political pressure to channel income towards public goods (opportunities) and welfare (redistribution). Therefore, despite a post-colonial convergence to more "inclusive" and "freer" economic systems, significant underdevelopment and elite extraction persist via weak state institutions. Today, what is salient about the Periphery (and explains its excessive poverty and inequality) is not limited access to markets and secure property, but a persistent in-ability to build state capacity.

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[50]As anecdotal evidence, while working at the OECD Econ. Department, I contributed to some of these projects. There, one could see how this literature influenced policy recommendations and the economists implementing them. In this line, The World Bank Doing Business indicators were a key input.

Moreover, the democratization of the Periphery has not led to significantly more fiscal capacity. Considering that the Periphery started democratizing after the 1970s in an age marked by market liberalism, reform efforts were put into freeing markets and assuring access to private property rights rather than building fiscal capacity. This process was not unique to the Periphery. As Torregrosa (2015, 2021) shows, Spain after democratizing in the 1970s, also had a fiscal transition that did not favour progressive taxes - seen as inefficient under the new (so-called) neo-liberal ideology. Thus, despite democratizing, Spain could not fully converge with other Western nations in checking elite extraction via robust state extraction (direct taxes). Inequality did decrease but slowly and mostly via progressive social spending (transfers). But, by lacking the fiscal capacity of their neighbours, a limited state extraction also translated into a less generous welfare system. This ten helps explain why Spain lags behind Western Europe in checking inequality.

The same process happened in Latin America -which started democratizing during the 1970-80s. Following the consolidation of democracy in the 2000s, inequality started to decline in the region.[51] As in Spain, this process was led by social transfers, not by progressive taxes. As epitomized by the establishment of targeted cash transfers in Latin America (e.g., the famous *bolsa familia* in Brazil), inequality started to decline due to public spending becoming increasingly progressive (López-Calva et al. 2010, Lustig et al. 2013). Yet, by advancing on just one front (transfers), redistribution is still 5 times lower than in Western states (Irarrázaval 2023). The Latin American fiscal transition was built on indirect (regressive) taxes, namely on value-added. Then, while income taxes reduce inequality by 12 Gini points in the European Union, meagre ones reduce inequality by 2 Gini points in Latin America (OECD 2018).[52] Thereby, on top of a shorter and less profound democratic history (via-a-vis Western nations), a political context unfavourable to progressive taxes has also hindered the redistributive capacity of the Periphery.

Consequently, what is salient about Latin America, Africa, and most of Asia, and explains their world-leading inequality is a limited fiscal capacity to tackle market disparities through progressive taxes and transfers. This is primarily due to a significantly lower fiscal capacity. These states not only extract little revenue (as % of GDP), and thus, do not have much to invest and redistributive back, but also tend to collect revenue via regressive methods, further fuelling inequality. Therefore, while the literature has emphasized that inequality and underdevelopment are rooted in divergent market institutions (via sticky colonialism), this paper´s assessment shows that this thesis is flawed: inequality is above all embedded in a state capacity trap benefiting elites. Following the findings, (a) stressed colonial legacies are less sticky than commonly assumed by development studies, and (b) the role given to market institutions appears overstated. Especially in relation to state capacity, which would not only be the key to building prosperity (via public goods) but also to less inequality (via redistribution), i.e. to shared prosperity.

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[51]The consolidation of democracy took quite some time. For instance, while Chile become democratic in 1990, Pinochet (the last dictator) was still commander in chief of the army and senator for life until the early 2000s.

[52]That is on average. The situation appears to be no different across Africa, where fiscal capacity and redistribution are limited or practically inexistent, especially in sub-Saharan Africa (Odusola 2017)

VIII   Conclusions

Overall, this paper has contributed by: (a) offering a novel set of measures and empirical avenues, including a new instrument, a more comprehensive causal framework, and preciser extraction metrics, to revisit possibly one of the biggest questions in Economic History and Development Economics: what explains the divergence in human development between, on one side, Latin America, Africa, and Asia, and on the other side, Western Europe and its Offshoots. To this end, this investigation (b) developed a new research framework that, by taking into account previously overlooked factors, namely state capacity, fiscality and extraction dynamics, allowed us to better identify the underlying institutional mechanisms explaining comparative development and inequality levels. Furthermore, thanks to a pioneering identification strategy bridging different periods and mechanisms (the 3SLS) to avoid oversimplifying causality (history), this research (c) helped to disentangle the causal chains going from colonialism to current outcomes.

The findings support the *neoinstitutionalists´* thesis, stressing executive checks for development (to limit elite extraction), but challenge their preferred mechanisms. Prosperity and equality levels chiefly follow divergent state capacities, not converging market systems. By extension, given the key role played by inequality-generating institutions in explaining "why nations fail" in the literature, these results call to revise the current development consensus. That is especially so for the emphasis on market over state institutions. This also means putting state-versus-elite extraction dynamics as a pivotal factor of shared prosperity, especially in light of a growing research line that has reinvigorated the role of the state in development - but has not yet fully explored its distributive edge e.g., Besley and Persson (2011). As shown here, state capacity would not only lead to more growth but also to limited elite extraction. Therefore, by overstressing market forces over state interventionism, the literature has overlooked the pivotal role of state extraction and public development in shaping modern distributive and development dynamics.

This paper also pioneered by showing how the autocratic, underdeveloped and unequal cluster (dominant in the Periphery), as identified by the literature, appears tied by a state capacity trap. In Latin America, Africa and Asia, the prevalence of limited checks has undermined the credible commitments to state probity needed to tax citizens directly. There, a broken fiscal contract would not only lead to more inequality (via meagre taxes and transfers), but also to lower growth. Besides a precarious (unfunded) public goods provision, this would result from incentives to redistribute via more inefficient and distortionary ways, especially via growth-limiting regulatory and trade policies. This means trying to tackle inequality via, *inter alia*, fixing prices and wages, protectionism and red tape in general, rather than via more effective, less economically harmful and direct interventions. That is taxes and transfers as in the OECD. Overall, these dynamics help to explain why the Periphery, where state capacities languish and these distortionary (so-called populist) policies thrive, has failed to deliver more equality and growth.

To conclude, in the Periphery, a persistently limited state capacity breeds inequality and poverty. To put it differently, what makes Africa, Latin America, and Asia comparatively unequal and poor, is their persistent state (in)capacity to extract revenue from citizens. Seen in this light, the so-called "extractive" nature of these states stressed by the literature appears misleading. States that are hardly able to enforce their exclusive right of extraction (reflected in rampant shadow economies) and that capture a marginal share of economic activity (reflected in famished tax-to-GDP ratios) would actually benefit from having more extractive power. In particular, to channel income from elites (via direct taxes) to public institutions. Then, due to limited state capacity, these nations lack the ability to (I) support markets and private sector development via public goods provision, and (II) check elite extraction via robust taxes and transfers systems ensuring significant redistribution. These stand as the pillars of human development.

For the taxes that are imposed to the people by the sovereign power are nothing but the wages that are due to those who hold the public sword to defend private men in their exercise of various trades and professions. So, the benefit that everyone receives from taxes is the enjoyment of life.

Thomas Hobbes, Leviathan (1651, Chapter 30)

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X Appendix

X.1 Variables Details

- **Settler Potential**: Our proposed IV, is calculated as Latitude*(1 - State History in 1500)

- **Settler Mortality**: Logarithm of the settler mortality rates of AJR (2001) capped at 250 as in AJR (2012) and with the revisions of Albouy (2012) for 8 countries -revisions that exceed 250 are also capped-.

- **Latitude**: Absolute value of the latitude of the country, scaled to take values between 0 and 1 (0 is the equator). Data comes from Acemoglu and Robinson (2005) and we added the latitude for Cambodia and Cuba.

- **All Controls** : This term refers to four geographic and climatic controls: absolute latitude, mean temperature, malaria ecology and a dummy equal to 1 if the country is landlocked. Data comes from AJR (2002) and Easterly and Levine (2016). We manually expanded the landlock dummies for countries with missing observations.

- **Origin dummies**: Dummies of British and French origin equal to 1 if the country was colonized by that power, from AJR (2002).

- **European settlement in 1900**: Percent of population that was European of European descent in 1900. Data comes from AJR (2001).

- **European settlement (Easterly et. al)**: Data of European settlement from Easterly and Levine (2016). We make revisions on several countries and also substitute all missing observations (countries with no data) as if they had no European settlement.

- **Democracy**: Democracy Index from Polity Data Series. It is an additive 0-10 scale where a higher value indicates a stronger democracy. To build the variable in the 20th century we assign the value 0 for years with no data (no independence, i.e., under colonial rule).

- **Constraints**: Constraints on the executive from Polity Data Series. It is an additive scale from 1 to 7 where a higher value indicates more executive constraints. To build the variable in the 20th century we assign the value 1 for years with no data (no independence, i.e., under colonial rule).

- **Doing Business**: Average of the score of the Doing Business Report elaborated by the World Bank in the years 2016-2020.

- **Property rights**: Average score in the 20th century of the Property Rights indicator of the V-Dem Dataset.

- **State Capacity**: The State Capacity Dataset seeks to fill a gap in comparative, cross-national research by providing researchers with a measure that captures the multidimensionality of the concept and is distinct from other concepts of interest such as economic development or regime type. Data comes from Hanson and Sigman (forthcoming).

- **Direct Taxes**: This variable is built as a comprehensive indicator of taxation using data of taxes on income and tax revenue. It is calculated as the product average of the product of both variables. Data comes from Hanson and Sigman (forthcoming).

- **Direct taxes as % of GDP**: Average 2010-2019 of direct taxes including social contributions and resource revenue. Data comes from WIID of UNU-WIDER.

- **Register Property**: These subindicators of the Doing Business Report of the World Bank are estimations of the costs and time required to register property.

- **Start a Business**: These subindicators of the Doing Business Report of the World Bank are estimations of the costs and time required to start a business.

- **Government Quality**: Government quality is an index of the current level of government accountability and effectiveness. Also defined by the authors as "The first principal component of the six governance indicators from the 2002 vintage of Kaufman et al." Data come from Easterly and Levine (2016).

- **State Fragility**: Fragility State Index (2018) of the Fund for Peace. It reflects the vulnerability of a state to conflict or collapse and is composed of 12 subindicators. To clean the variable of its economic subcomponents that overlap with other variables used we code it with 6 non-economic subindicators: Fractionalization of the Elites, Security Apparatus, Public Services, Human Rights and Rule of Law, State Legitimacy and Group Grievance.

- **Trust in others**: Trust in other people. Higher score indicates more trust. Data is from 2018 and comes from Welcome Global Monitor.

- **Trust in government**: Trust in the government. Higher score indicates more trust. Data is from 2018 and comes from Welcome Global Monitor.

- **Trust in people** Average 2010-2016 of trust on people. We obtain it from the book Pillars of Prosperity (updated, 2021) of Persson and Besley. The original source of this data that these authors use is the World Values Survey, and they transform the scale so that higher values mean people are more trustworthy by multiplying by negative 1 and adding 3.

- **Trust Confidence in government**: Average 2010-2016 of confidence on the government. We obtain it from the book Pillars of Prosperity (updated, 2021) of Persson and Besley. The original source of this data that these authors use is the World Values Survey, and they transform the scale so that higher values mean people have more confidence by multiplying by negative 1 and adding 5.

- **HDI**: The Human Development Index is a statistic composite index of life expectancy, education, and per capita income indicators, which is used to rank countries into four tiers of human development. Data is the average 2010-2018 and comes from the United Nations Development Programme (UNDP).

- **HDI (Inequality adjusted)**: The Inequality-adjusted HDI (IHDI) was introduced by the UNDP in 2010 to measure human development by accommodating inequality. IHDI is the HDI adjusted for inequalities in the distribution of achievements in each of the three dimensions of the HDI (health, education and income). Data is the average 2010-2018 and comes from the United Nations Development Programme (UNDP).

- **Log GDP pc**: Average of the logarithm of GDP per capita in the period 2010-2018. Data comes from the World Bank.

- **Years of schooling**: Mean years of schooling in a country. Data is the average 2010-2018 and comes from the United Nations Development Programme (UNDP).

- **Life expectancy**: Mean life expectancy. Data is the average 2010-2018 and comes from the United Nations Development Programme (UNDP).

- **Extraction Ratio (Market and Disposable)**: The extraction ratio, proposed by Milanovic et al. (2011), is a inequality metric that compares observed income inequality (that is, Gini) to the maximum feasible inequality that, at a given level of income, might have been 'extracted' by those in power. Following Milanovic (2013), we create a level of subsistence for each country that depends on its median income with an elasticity of 0.5. The Inequality Possibility Frontier (IPF) is calculated using the Gini, Market or Disposable in each case, from Solt (2020). Data is the average 2010-2018.

- **Gini (Market and Disposable)**: Gini indexes from Solt (2020). The "Market" is the Gini before taxes and transfers, and the "Disposable" Gini is after taxes and transfers. Data is the average 2010-2018.

- **Reduction (Gini and IER)**: This is defined as the absolute reduction in the Gini or the IER index after taxes and transfers. Absolute means the absolute change (e.g., Gini Disposable - Gini Market). Data is the average 2010-2018.

X.2   From Data to Mechanisms

Table 2b: Instrumental Variables and European Settlement (Easterly)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable is European settlement (Easterly et. al)								
Settler Potential	1.721***	1.694***	1.677***	1.894***					2.444***
	(0.320)	(0.332)	(0.331)	(0.329)					(0.334)
Settler Mortality					-0.0664**	-0.0511	-0.0488	-0.0688*	-0.0801*
					(0.0231)	(0.0284)	(0.0302)	(0.0289)	(0.0305)
Latitude	-0.679**	-0.777***	-0.750**	-0.930***	0.667**	0.595**	0.652**	0.583*	-1.282***
	(0.197)	(0.209)	(0.221)	(0.226)	(0.223)	(0.214)	(0.241)	(0.249)	(0.285)
Geog. and Climate	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
British Origin			-0.00111	0.0306			-0.0157	-0.0417	-0.0766
			(0.0345)	(0.0365)			(0.0326)	(0.0337)	(0.0501)
French Origin			-0.0202	-0.0125			-0.0428	-0.0447	-0.110*
			(0.0373)	(0.0480)			(0.0462)	(0.0496)	(0.0475)
Observations	94	91	91	75	85	79	79	75	74
R^2	0.446	0.567	0.569	0.634	0.421	0.469	0.474	0.505	0.742

Notes: This table is a robustness check of Table 2. Standard errors are in parentheses. All variables are as used in Table 2, but now the European settlement data comes from the work of Easterly and Levine (2016). Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

Table 3b: Explaining Institutional Development with Settler Potential (Easterly data)

	Political institutions		Market institutions		State Institutions	
	(1) Democracy	(2) Constraints	(3) Doing Business	(4) Property rights	(5) State Capacity	(6) Direct taxes
Panel A: Linear Results						
Settler Potential	22.82***	12.62***	51.96	0.911	6.172***	32.94***
	(3.655)	(2.760)	(29.60)	(0.628)	(1.405)	(7.941)
Latitude	-12.60***	-6.721**	-29.82	0.0199	-3.608*	-23.28***
	(3.072)	(2.464)	(29.10)	(0.591)	(1.396)	(6.405)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
French Origin	-0.777	-0.661*	-2.188	-0.0948	0.103	2.690
	(0.586)	(0.313)	(4.336)	(0.0807)	(0.248)	(1.479)
British Origin	0.905	0.416	6.552	0.0393	0.359	4.138***
	(0.621)	(0.357)	(3.522)	(0.0786)	(0.199)	(1.110)
Observations	74	74	74	75	71	61
R^2	0.621	0.614	0.303	0.242	0.461	0.504
Panel B: 2SLS IV Results						
European settlement (Easterly et al.)	12.28***	6.792***	27.35	0.481	3.377***	19.32***
	(1.701)	(1.229)	(14.40)	(0.327)	(0.654)	(4.429)
Latitude	-1.583	-0.626	-4.338	0.467	-0.683	-8.517**
	(1.824)	(1.191)	(14.91)	(0.327)	(0.665)	(3.057)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
French Origin	-0.625	-0.577	-1.928	-0.0888	0.177	2.745**
	(0.494)	(0.302)	(3.846)	(0.0839)	(0.195)	(1.055)
British Origin	0.498	0.191	5.650	0.0246	0.247	3.190***
	(0.578)	(0.364)	(3.424)	(0.0770)	(0.197)	(0.914)
Observations	74	74	74	75	71	61
R^2	0.728	0.700	0.378	0.239	0.607	0.616
Kleibergen-Paap F stat	33	33	33	33.16	28.62	17.6

Notes: This table presents a robustness check of Table 3. All variables are the same except for European settlement, which now is the data of Easterly and Levine (2016). We make revisions on several countries and also substitute all missing observations (countries with no data) as if they had no European settlement.

Table 4b: Explaining Institutional Development with Settler Mortality (Easterly data)

	Political institutions		Market institutions		State Institutions	
	(1)	(2)	(3)	(4)	(5)	(6)
	Democracy	Constraints	Doing Business	Property rights	State Capacity	Direct taxes
Panel A: Linear Results						
Settler Mortality	-1.074*	-0.701**	-4.893	-0.00373	-0.509***	-1.881**
	(0.411)	(0.232)	(2.830)	(0.0455)	(0.134)	(0.645)
Latitude	5.053*	2.796*	4.751	0.815**	0.746	1.336
	(2.380)	(1.372)	(14.19)	(0.243)	(0.674)	(3.212)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
French Origin	-1.138	-0.849*	-2.678	-0.114	-0.0258	1.938
	(0.580)	(0.340)	(3.594)	(0.0865)	(0.186)	(1.024)
British Origin	-0.108	-0.205	3.064	0.0192	-0.0738	2.537**
	(0.628)	(0.378)	(4.150)	(0.0872)	(0.188)	(0.905)
Observations	74	74	74	75	71	61
R^2	0.544	0.574	0.334	0.219	0.524	0.470
Panel B: 2SLS IV Results						
European settlement (Easterly et al.)	16.72***	10.92***	71.00	0.0543	7.497**	33.22**
	(3.941)	(3.133)	(39.74)	(0.619)	(2.526)	(11.41)
Latitude	-4.879	-3.686	-36.73	0.783	-3.815	-18.71*
	(4.197)	(3.020)	(35.48)	(0.464)	(2.448)	(9.509)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
French Origin	-0.397	-0.365	0.372	-0.112	0.469	3.188
	(0.688)	(0.473)	(5.196)	(0.0896)	(0.382)	(1.730)
British Origin	0.496	0.189	5.942	0.0214	0.263	2.753*
	(0.611)	(0.402)	(3.738)	(0.0777)	(0.251)	(1.129)
Observations	74	74	74	75	71	61
R^2	0.594	0.462	0.188	0.228	.	0.202
Kleibergen-Paap F stat	4.44	4.44	5.67	5.67	4.95	3.5

Notes: This table presents a robustness check of Table 4. All variables are the same except for European settlement, which now is the data of Easterly and Levine (2016). I made revisions on several countries and also substitute all missing observations (countries with no data) as if they had no European settlement.

X.3 Development Dynamics

Table 8c: Studying Human Development
(3SLS Non-Structural Results)

	(1) HDI	(2) IHDI	(3) Log GDP pc	(4) Schooling Years	(5) Life expectancy
State Capacity	0.137***	0.173***	1.060***	2.623***	5.277***
	(0.0202)	(0.0239)	(0.170)	(0.598)	(1.085)
R^2 [Third-Stage]	0.798	0.808	0.735	0.625	0.769
			Second-stage results: State Capacity Index		
Executive Constraints	0.557***	0.527***	0.557***	0.557***	0.558***
	(0.0878)	(0.0906)	(0.0878)	(0.0878)	(0.0878)
R^2 [Second-Stage]	0.535	0.545	0.535	0.535	0.533
			First-stage results: Executive Constraints		
Settler Potential	10.69***	9.707***	10.64***	10.68***	10.78***
	(2.198)	(2.068)	(2.198)	(2.200)	(2.198)
Settler Mortality	-0.736***	-1.038***	-0.739***	-0.736***	-0.729***
	(0.143)	(0.171)	(0.143)	(0.143)	(0.143)
R^2 [First-Stage]	0.682	0.744	0.682	0.682	0.683
All Controls	Yes	Yes	Yes	Yes	Yes
Observations	75	68	75	75	75
Overidentification test (p-value)	0.41	0.3380	0.3273	0.2477	0.2127

Notes: This table presents the three-stage least squares (3SLS) results, using Settler Potential and Mortality as instruments. State Capacity is the average 1970-2010. Executive Constraints are the average of the 20th century. All development outcomes are average 2010-2018, for more details please see Table 1b in the appendix. Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

X.4   Distribution Dynamics

The robustness checks confirm these findings. While the 3SLS and 2SLS results are somewhat different in significance (probably due to the less robust identification of distributive outcomes), the effects are similar. The 2SLS results confirm that state institutions chiefly check inequality and elite extraction via taxes and transfer systems (columns 3 and 4). In turn, while state capacity creates space for market disparities to grow by expanding opportunities via better public goods and policies (column 2), a higher redistribution outweighs this effect (column 3). This leads to significantly less elite extraction (column 5). Taken together, the 3SLS and 2SLS results confirm the arguments developed. Former colonies with weak executive checks, dominant in Latin America, Africa and Southern Asia, had been unable to create the state´s credible commitment to public probity necessary for building state capacity. That is for forming a 'fiscal pact' with the society that allows for substantial direct taxes, and thereby, for funding public development and redistribution. Under unequal access to political and economic opportunities, income is captured by private elites (not by states committed to public probity), undermining equality.

Table 9b: Studying Distributive Outcomes
(2SLS Institutions Instrumentalized with both IVs)

	Income Inequality Index (Gini)			Inequality Extraction Ratio (IER)		
	(1)	(2)	(3)	(4)	(5)	(6)
	Disposable	Market	Reduction	Disposable	Market	Reduction
State Capacity	-0.169	3.432	3.602***	-7.461**	-3.880	3.581***
	(1.853)	(2.075)	(0.649)	(2.821)	(3.274)	(0.819)
R^2 [second-Stage]	0.187	0.130	0.528	0.452	0.241	0.385
	First-stage results: State Capacity Index					
Settler Potential	4.999***	4.999***	4.999***	4.999***	4.999***	4.999***
	(1.380)	(1.380)	(1.380)	(1.380)	(1.380)	(1.380)
Settler Mortality	-0.491***	-0.491***	-0.491***	-0.491***	-0.491***	-0.491***
	(0.121)	(0.121)	(0.121)	(0.121)	(0.121)	(0.121)
R^2 [First-Stage]	0.634	0.634	0.634	0.634	0.634	0.634
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	71	71	71	71	71	71
Kleibergen-Paap F test	19.50	19.50	19.50	19.50	19.50	19.50
Overidentification (p-value)	0.150	0.008	0.005	0.004	0.000	0.005

Notes: This table presents the two-stage least squares (2SLS) results, using Settler Potential and Mortality as instruments. State Capacity is the average 1970-2010. Executive Constraints are the average of the 20th century. All development outcomes are average 2010-2018, for more details please see Table 1b in the appendix. Asterisks indicate the following levels of statistical significance: *** significant at 0.1%, ** significant at 1%, * significant at 5%.

Now the sample is restricted to countries with an INEQUALITY TRANSPARENCY INDEX click higher than 1 and/or with granular data on redistribution based on the SWIID. The results are similar to when using the core sample, but somewhat smaller and less significant -as we are leaving out the most interesting part of the variation, namely the countries with the lowest settler potential and highest extraction ratios that are mostly in Africa.

The results show that when measurement errors are addressed, which are likely linked to state capacity (countries with lower capacity are most likely under-reporting inequality), the overidentification tests suggest that the exclusion restriction is being met. Therefore, in line with the overidentification tests of development outcomes, the instruments chiefly appear to affect current outcomes via state capacity patterns, i.e., we are not leaving out other relevant factors.

Table 9c: Studying Distributive Outcomes
(3SLS System of Structural Equations using only countries with quality inequality data)

	Income Inequality Index (Gini)			Inequality Extraction Ratio (IER)		
	(1)	(2)	(3)	(4)	(5)	(6)
	Disposable	Market	Reduction	Disposable	Market	Reduction
State Capacity	-0.722	3.484	4.298***	-2.856	2.377	4.479***
	(2.746)	(2.839)	(0.990)	(3.198)	(3.121)	(1.180)
R^2 [Third-Stage]	0.149	0.168	0.788	0.380	0.0297	0.752
	Second-stage results: State Capacity Index					
Executive Constraints	0.609***	0.612***	0.569***	0.579***	0.554***	0.567***
	(0.180)	(0.179)	(0.171)	(0.171)	(0.138)	(0.170)
R^2 [Second-Stage]	0.385	0.381	0.443	0.429	0.462	0.446
	First-stage results: Executive Constraints					
Settler Potential	8.052**	8.101**	9.108**	8.883**	9.131**	9.109**
	(3.998)	(3.970)	(4.050)	(4.051)	(3.811)	(4.059)
Settler Mortality	-0.752***	-0.743***	-0.723**	-0.727**	-0.741**	-0.727**
	(0.285)	(0.284)	(0.301)	(0.295)	(0.303)	(0.302)
R^2 [First-Stage]	0.593	0.593	0.596	0.595	0.595	0.596
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	36	36	36	36	36	36
Overidentification (p-value)	0.1356	0.1773	0.1871	0.2410	0.4975	0.1643

Notes: This table presents the three-stage least squares (3SLS) results, using Settler Potential and Mortality as instruments. State Capacity is the average 1970-2010. Executive Constraints are the average of the 20th century. All development outcomes are average 2010-2018, for more details please see Table 1b in the appendix. Asterisks indicate the following levels of statistical significance: *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 9d: Studying Distributive Outcomes

(2SLS Institutions Instrumentalized with both IVs using only countries with quality inequality data)

	Income Inequality Index (Gini)			Inequality Extraction Ratio (IER)		
	(1)	(2)	(3)	(4)	(5)	(6)
	Disposable	Market	Reduction	Disposable	Market	Reduction
State Capacity	-1.133	2.912	4.049***	-3.933	0.269	4.201***
	(2.216)	(2.374)	(0.849)	(2.474)	(2.755)	(1.030)
R^2 [second-Stage]	0.145	0.164	0.789	0.396	0.086	0.754
	First-stage results: State Capacity Index					
Settler Potential	4.546**	4.546**	4.546**	4.546**	4.546**	4.546**
	(2.123)	(2.123)	(2.123)	(2.123)	(2.123)	(2.123)
Settler Mortality	-0.517*	-0.517*	-0.517*	-0.517*	-0.517*	-0.517*
	(0.276)	(0.276)	(0.276)	(0.276)	(0.276)	(0.276)
R^2 [First-Stage]	0.685	0.685	0.685	0.685	0.685	0.685
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	36	36	36	36	36	36
Kleibergen-Paap F test	10.23	10.23	10.23	10.23	10.23	10.23
Overidentification (p-value)	0.231	0.184	0.859	0.349	0.514	0.747

Notes: This table presents the two-stage least squares (2SLS) results, using Settler Potential and Mortality as instruments. State Capacity is the average 1970-2010. Executive Constraints are the average of the 20th century. All development outcomes are average 2010-2018, for more details please see Table 1b in the appendix. Asterisks indicate the following levels of statistical significance: *** significant at 1%, ** significant at 5%, * significant at 10%.