Contents lists available at ScienceDirect



International Review of Law & Economics

journal homepage: www.elsevier.com/locate/irle



Law and inequality: A comparative approach to the distributive implications of legal systems

Illan Barriola^{a,b}, Bruno Deffains^{a,b,*}, Olivier Musy^{c,d}

^a CRED, France

^b Université Paris Panthéon-Assas, France

^c Université Paris Cité, F-75006 Paris, France

^d LIRAES, F-75006 Paris, France

ARTICLE INFO

JEL classification: D3 K00 K15 O15 P51 Keywords: Legal origins Legal systems Inequality Gini Top incomes

1. Introduction

As stated by Keynes (1931), "the political problem of mankind is to combine three things: Economic Efficiency, Social Justice, and Individual Liberty". Societies build institutions aiming to achieve different and potentially conflicting objectives. The international differences in outcomes may result from specific national preferences but also from contrasting levels of effectiveness of institutions in pursuing each of these goals. Focusing mainly on economic efficiency, La Porta et al. (2008) have shown that it is possible to associate legal families with significant differences in terms of investors' protection. While the seminal paper of this literature focused on financial law (Porta et al. (1998)) a series of subsequent articles have extended the analysis to other institutions related to economic activity and state control. For each topic, they exhibited systematic differences in legal institutions and economic outcomes, depending on countries' "legal origins". Their conception of legal origins was a broad one referring to a style of social control, the main difference being related to the state's capacity to control economic life. In their terms, "common law stands for the strategy of social control that seeks to support private market outcomes, whereas

ABSTRACT

The literature on legal traditions focuses on the comparative macroeconomic effects of legal systems, concentrating on efficiency alone and leaving distributive issues to taxation. However, a country's legal structure also conditions the primary distribution of income and may have a comparative advantage over taxation as a distributive instrument. We use cross-section and panel estimates to show that the level of income inequality in a country is correlated with its legal system. By several measures of inequality, common law countries are on average more unequal than civil law countries. We explain these results by the nature of the systems. The looser regulation in common law countries limits their capacity to achieve social objectives such as combating income inequality.

civil law seeks to replace such outcomes with state-desired allocations". While strong criticisms have been made about some specific results,¹ their whole work produces a bundle of clues that support their overall thesis. However, they fail to derive an important implication of their approach concerning societies' capacities to manage their social justice objectives efficiently. Empirical evidence shows that countries perform very differently with respect to their ability to address the universal concern of economic inequalities. We argue that some part of the systematic differences observed in terms of inequality can be explained by the legal rules of countries and therefore by legal origins, understood as a style of social control over economic life. In civil law systems, the greater importance of the state in the production of legal norms helps to limit the primary production of inequalities. The state's mandate to represent society as a whole gives it the legitimacy to produce laws that pursue social objectives. An illuminating example is provided by the French state which permanently produces laws designed to control the distribution of revenues derived from market activities, for example by imposing limits on private contracting in labor relations or between buyers and suppliers.² Judge-made law, aimed mainly at resolving legal

https://doi.org/10.1016/j.irle.2023.106139

Received 10 August 2022; Received in revised form 13 February 2023; Accepted 1 May 2023 Available online 23 May 2023 0144-8188/© 2023 Elsevier Inc. All rights reserved.

^{*} Corresponding author at: Université Paris Panthéon-Assas, France.

E-mail addresses: illan.barriola@u-paris2.fr (I. Barriola), bruno.deffains@u-paris2.fr (B. Deffains), olivier.musy@u-paris.fr (O. Musy).

¹ See, for example, Spamann (2010) for a critical appreciation of the data used to measure the Antidirector Rights Index.

² Lionel Jospin, a former French Prime Minister, famously summarized this approach: "Yes to the market economy, no to the market society".

disputes, is less suited to pursuing social goals involving agents other than the parties to a trial.

The Law & Economics literature is aware of the distributive aspects of legal rules, but the emphasis has been placed mainly on economic efficiency. The debate began with Posner (2014) and his popular common law efficiency thesis. For him, the common law is an efficient process of creation of legal norms due to the behavior of appointed judges looking for efficient outcomes. Rubin (1977), Priest (1977), and Goodman (1978) highlighted other arguments as to why common law was efficient. This theoretical approach has influenced the subsequent empirical literature on the effects of legal systems. Some authors have sought to demonstrate a connection between legal tradition and the level of economic and financial development. La Porta, Lopez-De-Silanes, Shleifer, and Vishny (LLSV) have published several articles demonstrating that common law countries are associated with better investor protection, better contract enforcement, and a greater respect for private property (see La Porta, Lopez-De-Silanes, and Shleifer (2008), for a survey). As a result, these countries seemingly benefit from greater economic efficiency than civil law countries marked by the influence of the Napoleonic Code. Subsequent works have supplemented or tempered the impact of the common law on economic and financial development (e.g. Mahoney (2001), La Porta et al. (2002b), and Levine (1999)). Debates have focused on methodological issues and the quality of empirical treatments (Spamann (2006), Rostowski and Stacescu (2006), Kim (2009), Xu (2011), or Klerman et al. (2011)). In this vein, a recent stream of literature has emerged to explain the controversy between the classical assumptions of companies' goals and recent empirical evidence concerning the rising trend of investments in social and environmental activities. As the country's legal system contributes to defining the social mechanisms for controlling economic activity, it implicitly shapes the agreements between companies and their stakeholders (including shareholders). Liang and Renneboog (2016) show that legal origin is an important determinant of environmental, social, and governance (ESG) performance in firms. This result highlights the relevant role that a country's legal system plays in promoting sustainable policies and investments, finding that financial firms based in civil law countries present higher ESG scores than those based in common law countries. The paper also shows that state investment in the capital of the companies studied, in civil law systems, is also a factor that reinforces the incentive for companies to invest more in the environmental transition. This is consistent with our analysis of the way in which countries with a civil law tradition, particularly France, seek to satisfy social justice objectives and not just economic efficiency objectives. Another important question concerns the relevance of the classification among legal families. For instance, rather than finding a clear-cut common versus civil law division, Chang et al. (2021) observe that the France-inspired group forms a supercluster, separate from other jurisdictions. It might be more relevant to consider specific legal topics rather than the overall legal systems (see e.g. Bradford et al. (2021) suggesting that shared legal origins predict the similarity in countries' property laws, but they do little to predict similarity in antitrust laws. More rarely, the question of the nature and foundations of legal systems has been addressed (Glaeser and Shleifer 2002, Roe 2007, Klerman and Mahoney 2007, or Crettez et al. 2018).

One subject that has not been much discussed is whether the objective of legal systems can be reduced to the question of economic efficiency alone. The approach developed by LLSV makes the protection of private property the central element of good economic governance, insofar as it maximizes individual incentives to invest, produce, and undertake (La Porta, Lopez-de-Silanes, and Shleifer (La Porta et al. 2002a, 2006). Concerning financial topics, for example, LLSV adopt exclusively the point of view of the interests of shareholders, and thus give precedence to the question of value creation. This has steered thinking in a direction that emphasizes the question of resource allocation without looking at the distributive aspects in relation to the

treatment of economic inequalities.³ By focusing on the protection of shareholders, it seems clear that the objective sought, from a normative point of view, is to maximize the value of the firm, which is questionable (see e.g. Deffains et al. (2021)). These questions are also present in the World Bank's new Business Enabling Environment project, which aims to replace the Doing Business ranking and to take into account "stakeholder" considerations such as the protection of workers and environmental sustainability. Pistor (2019) has recently shown how the law impacts the revenue of capital assets and the concentration of wealth.⁴ The distributive implications of law and legal systems are central and deserve more attention. In this article, we aim to provide a first comparative analysis of the performance of legal systems in terms of reducing income inequality. Only a few articles have examined this issue empirically (Islam 2016, Easterly 2007, Maggio et al. 2014, and Ferguson et al. 2017). The results are contrasted. Some results establish a significant link between legal tradition and the Gini coefficient while others conclude there is no such correlation. We supplement these studies by proposing a more in-depth analysis of the relationship between legal systems and inequalities in order to understand to what extent these systems reflect economic concerns other than economic efficiency. Since the French Revolution, the question of the development of nations has not been limited to the measurement of productive efficiency, but has also been raised about the nature of the social contract and the setting up of institutions capable of ensuring the protection of individuals through social policies and solidarity mechanisms in the face of growing inequalities. The growing literature on inequalities (Atkinson et al. 2011 and Piketty 2014, 2020) has also left aside legal questions as explanatory factors of the observations made (an exception being Pistor 2019).

The degree of centralization of the production of legal norms and judicial decisions contributes to explaining the distributive differences between common law and civil law (e.g. Deffains and Musy 2018). In common law countries, the production of legal norms appears less centralized than in civil law countries, where the legislator is the main source of new legal norms. Damaska 1986 argues that civil law is policy implementing, while common law is dispute resolving. Given the lesser importance of the state, for La Porta et al. 2008, quoting Pistor 2005, the common law is designed to support "unconditioned private contracting' while French civil law embraces'socially-conditioned private contracting". The primacy of the law established at a centralized level implies that legal developments often reflect trade-offs inherent in public choices that incorporate a multiplicity of social objectives, among which the protection of individuals and freedom of contract are only component parts. Legal systems supposedly thus reflect potentially different trade-offs in the scope accorded to the defense of individual and general interests. The centralized, coordinated approach of civil law may have a comparative advantage over common law when pursuing social objectives. We show that inequalities depend on the legal systems and that, on average, they are not as great in civil law countries.

The purpose of this article is to fill a gap by discussing how the law deals not only with the allocative but also the distributive aspects that jointly characterize the functioning of any society. We argue that the counterpart of the greater efficiency of the common law may be its lesser capability to control economic inequalities. Distributive issues are not absent from the Law & Economic literature, but the classic position is to think of redistribution exclusively through the prism of the tax system. The main argument in favor of redistribution solely through the tax system is that of the double distortion introduced by

³ Concerning the literature exploring the law-efficiency nexus, see for example Dam (2006) and Roe and Siegel (2009)).

⁴ These questions are not new. Tocqueville explained how the question of inequalities contributes to defining certain aspects of legal systems (see Tocqueville, *On Democracy in America*, 1835, and Crettez et al. 2018).

Kaplow and Shavell 1994. The tax system is inherently distorting to the economy but addresses equity concerns, while the legal system is also distorting but supposedly less effective than the tax system at redistribution. For the proponents of the double distortion, it is not relevant to have two distorting systems and it would therefore be preferable to resort to the more efficient system for redistribution, i.e. the tax system. The legal system should thus only address efficiency concerns. In a way, the work of LLSV can be seen as extending this approach into the empirical arena by moving the debate in the direction of investigating the effects of legal systems solely from the point of view of the efficient allocation of resources.

This article is organized as follows: In Section 2 we present the mechanism by which the law contributes to limiting income inequalities. We argue that the law has a social conditioning role that contributes to conditioning the distribution of income through ex-ante regulatory mechanisms. Section 3 provides a new empirical correlation between legal systems and pre-tax income inequality. Section 4 discusses the results and the extent to which these differences between common law and civil law groups can be attributed to legal systems, each system reflects a preferred view of the state in a market economy. In Section 5, we provide new insight into the comparative economic performance of legal systems across income inequalities. We justify the differences between civil law and common law through the study of the French case and its evaluations during the last 200 years. Section 6 concludes.

2. Law and the reduction of income inequality

2.1. Law versus income taxation

The analysis of legal systems often appears biased since it leads to ignoring the relationship between law and inequality. It is therefore important to go beyond this vision and to show that the question of the distribution of wealth and the treatment of inequalities is fundamental from a dual perspective of interdisciplinary dialog and analysis of legal systems and their economic "performance".

A central argument developed against the distributive effects of legal rules is mainly built on the idea that the legal system is inherently less efficient than the tax system⁵ in dealing with distributive issues. The classic argument, synthesized by Kaplow and Shavell 1994, is that there is a risk of "double distortion" inherent in any legal solution. They argue that the use of legal rules to redistribute income distorts incentives as much as the tax system does and also reduces efficiency in the domains framed by the legal rules. As a result, redistribution through legal rules offers no advantage over redistribution through income taxes and is less efficient overall.

The example taken by Kaplow and Shavell 1994 concerns accident liability. They consider two situations, the first where the damages that the injurer have to pay depend on the incomes of the parties (redistributive rule) and the second where the liability rule is one of strict liability (efficient rule). They show that switching from the first inefficient situation to the second, in addition to a modification of the income tax schedule, leads to an improvement in the Pareto sense. In both situations there is a distortion due to redistribution itself, but with the inefficient rule there is another source of distortion due to the suboptimal levels of precautions taken by parties. It would therefore be preferable to make the economic system and the legal rules governing it as efficient as possible and to use the gains made to redistribute wealth through the tax system. All in all, this should lead to greater redistribution and better conditions for all. The gains in efficiency would thus make it possible to improve the conditions of redistribution in a second stage. From this analysis, they also draw the more general conclusion that the economic analysis of law should focus on efficiency issues and ignore income distribution on normative grounds. This approach is consistent with the standard view in economics, including Coase's theorem, about disconnecting issues of resource allocation from those of distribution.

The double distortion view has been criticized (see e.g. Liscow 2013). In a second-best world where the government observes imperfect signals there is no reason to restrict legal norms to the sole objective of efficiency. Sanchirico 2000 considers that there is an optimal policy mix between legal rules and the tax code in order to achieve social preferences. Dimick 2016 provides examples of situations where legal rules are more effective than taxation with respect to equity issues. For instance, competition law makes it possible to reduce market concentration and so reduce prices and inequalities (see Khan and Vaheesan 2017). Taxing a monopoly would create distortions and be less efficient. Dimick 2016 provides other examples for labor and financial markets.

2.2. Social conditioning and the law

Considering the reduction of income inequality through legal norms solely on the basis of direct effects with a focus on monetary transfers between individuals misses the "big picture". The law plays a part in social conditioning; it defines the "boundaries" of legal options (i.e. what can be subject to contract and under what conditions). In economies where bargaining power asymmetries are significant, the law could impose corrective measures by saying something ex ante about the fairness of contracts. Taxation (on income) meanwhile says nothing about the fairness of transactions, it takes income as exogenous and redistributes it ex post. Kaplow and Kaplow and Shavell 1994 reasoning only holds for a redistributive law with effects comparable to income taxation. However, we argue that the impact of law on income inequality is not to substitute for income taxation but to define the conditions under which agents carry out transactions through the consideration of various social objectives, such as aversion to inequality. It is surprising to see how much of the literature has focused on tax mechanisms to deal with the subject of income inequality, including the work of Piketty and Saez. However, some studies on inequalities provide results consistent with an substantial ex-ante impact of the law on income inequality. Blanchet et al. 2022 study the sources of the difference of income inequality between Europe and the United States. They show that the difference in inequality is not due to a difference in redistribution - which is the difference between pre-tax and post-tax income distribution -, but is already present at the pre-tax level. This supports the idea that the legal systems and the content of legal norms are central in order to explain income inequality at the pre-tax level.

Another viewpoint on the question may refer to Sen's capability approach (Sen 2014). In Sen's view the welfare state, in providing better access to basic goods and public goods, enables people to use their freedom and take initiatives. In this view, a welfare state that increases capabilities has similar effects to the insurance contract, the corporate form, and the limited liability company in the business sector, which enable business people to realize business ideas and take risks they would not otherwise take. The capabilities approach rejects the widely held view that more income equality benefits low-income people who nevertheless reduce their activity. It is therefore questionable, whether the trade-off between more efficiency and more equality even exists if more equality leads to more capabilities for more people.

On this view, the promulgation of the French Civil Code in 1804 was a major achievement with respect to equality concerns since it erased the traces of feudalism and created new rights holders: citizens and legal entities. It defined property no longer as a set of aristocratic privileges but as absolute rights that natural or legal persons could enjoy in relation to a specific object. And it specified the rules of contracting for these assets and their inheritance. Some provisions of

⁵ We only consider income taxation here. It would be necessary to discuss in more detail the issues of corporate taxation or inheritance taxation, for example.

the Civil Code are mandatory, but many are optional. Private law is a horizontal law that empowers private parties to avail themselves of the coercive powers of the state in managing their private affairs. Modern nation-states can be seen as the legal organization of centralized coercive powers. The law determines the vertical relationship between individuals and the state but also the horizontal rights among legal persons. This horizontal relationship is often overlooked by political scientists and taken for granted by economists, but it is essential for the organization of economies and in particular for the organization of capitalism. Private parties mobilize the powers of the state when they enter into a contract, for instance into agreements that meet the legal prerequisites of a contract that will be enforceable in a court of law. This is definitely true when they transfer title of ownership or other securities. It follows that the flexibility with which private parties can push the boundaries of existing law and engage in legal innovation with the expectation that new types of transactions and new assets will be recognized by the courts varies across legal systems. Pistor 2019 argues that the law selectively "codes" certain assets, endowing them with the capacity to produce and protect private wealth. With an "adapted" legal coding, any object (or idea) can be turned into capital (and lawyers become the keepers of the code). From this perspective, the "legal code"⁶ ensures that certain claims and certain objects are able to create wealth. The capital code is thus composed of different modules, including contract, property, civil liability, criminal sanctions, and so on. These modules confer essential attributes such as priority, durability, convertibility, and universality that give certain goods a comparative advantage over others. Although Pistor's approach is intended to be general in scope, particularly under the influence of private international law and globalization, there is no doubt about differences between legal systems since the "social conditioning" of law may be based on different approaches across countries. To concede with Pistor that the legal privileges conferred by the drafting of the law are not only binding on those who are parties to the contractual agreement but also on all those who are not parties to it, simply means that once the agreement has been accepted as legal, the state can enforce it against all third parties. But it can also be conceded that the parties who enter into a contractual relationship (employment contract, commercial contract, etc.) commit themselves mutually but also "before society". There is a commitment that extends beyond the parties themselves, so that it can be admitted that the society has a form of control over the content and nature of the contractual relations. It follows that social conditioning via legal coding could contribute to reducing the disparity of legal systems around the world, but, in practice, it has not led to complete uniformity of law (see e.g. Crettez et al. 2014 for arguments about the drivers and barriers to legal convergence). Differences remain between the different legal families, and even legal systems belonging to the same family can differ significantly. Very different parts of national laws are designed to reduce inequalities in different ways.

A first example is given by competition law. The economic efficiency objectives linked to this legal field are familiar enough. By ruling on mergers and acquisitions and by prohibiting cartels and abuse of dominant positions,⁷ competition law promotes competition and market efficiency. However, in addition to these efficiency issues, competition law also guarantees a certain equity in the markets between supply and demand. By limiting the concentration and size of firms, their market power is reduced. Grullon et al. 2019 have documented how "[s]ince the late 1990s, over 75% of US industries have experienced an increase in concentration levels". For them this is due to a decline in the enforcement of US antitrust policy under Presidents Bush and Obama. However, competition law occupies a central place in the explanation of inequalities. It contributes to limiting the bargaining power of firms (their market power) relative to that of consumers. In a world where firms naturally tend to be increasingly concentrated (due to market failures), the role of competition law is to limit the price paid by consumers by promoting competition. As noted by Khan and Vaheesan 2017, "market power can be a powerful mechanism for transferring wealth from the many among the working and middle classes to the few belonging to the 1% and 0.1% at the top of the income and wealth distribution". Competition law therefore contributes to limiting inequalities by limiting the power of the most powerful players. It is in this sense that the Sherman Act, the earliest anti-trust legislation, was defended by Senator John Sherman in 1890: "If we will not endure a king as a political power, we should not endure a king over the production, transportation, and sale of any of the necessaries of life". Competition law can therefore also be interpreted as an ex-ante regulation aimed at promoting fair transactions in a market economy.

A second example refers to labor law. Considering the labor relationships as very specific, some countries have implemented stringent regulations. The purpose of these regulations is often to protect workers by removing them from what would be "free and undistorted" bargaining. In France as in Germany, bargaining can be organized at the branch or even the national level under labor law. By promoting collective bargaining, the law makes it possible to increase the bargaining power of workers and thus their wages. Botero et al. 2004 argue that a tough labor market regulation is associated with less efficient performance, common law systems then being associated with more efficient labor markets. Those regulations could, however, better integrate other concerns such as the fight against inequalities. The content and the motivations of legal rules are influenced by a multitude of values, including an aversion to inequality. The "social conditioning" of the law should take into account its ex-ante impact on economic relations.

3. Law and income inequality: an empirical comparative law approach

3.1. Legal systems

In this section, we compare the inequality (especially income inequality) performances of common law and civil law countries. In order to differentiate between these two legal systems, we use data from La Porta et al. 2008 and Juriglobe.8 La Porta, Lopez-De-Silanes, and Sheifer (2008) provide data on legal traditions using dichotomous variables that indicate whether the country is one of English Law, French Law, German Law, Scandinavian Law, or Socialist Law. Here, we are interested in the common law civil/law duality, which is why we set the English Law variable to 1 for common law countries and to 0 for civil law countries only. The database of La Porta, Lopez-De-Silanes, and Sheifer (2008) does not contain data on every country, which is why we complete the database for the missing countries using the Juriglobe classification proposed by the University of Ottawa. Countries are categorized according to four legal systems, each country potentially belonging to one or more of these categories: civil law, common law, customary law, and muslim law. When a country is classified as belonging to a mixed system, we include it in the analysis whenever one of the components of this mixed system is classified as common law or civil law, excluding those that combine these two traditions. Thus, countries whose legal tradition is not provided by La Porta, Lopez-De-Silanes, and Sheifer (2008), as well as those that are mixed in civil law and common law or that are neither common law nor civil law are excluded from the analysis.

⁶ It should be noted that this is not a code in the sense of the Civil Code or the Commercial Code, but rather a code in the sense of genetic or computer programming insofar as the law conditions society through the definition of rule.

 $^{^7\,}$ In Europe, for example, articles 101 and 102 of the TFEU (1957) prohibit cartels and abuse of dominant positions.

⁸ http://www.juriglobe.ca/fra/index.php

Descriptive statistics of HDI, HDII, and Loss and Atkinson indices for income, education, and life expectancy. The sample includes 110 civil law countries and 43 common law countries (year 2019).

	Min	Q1	Median	Mean	Q3	Max	SD
hdi_civ	0.403	0.634	0.770	0.740	0.859	0.962	0.154
hdi_com	0.393	0.554	0.645	0.693	0.802	0.952	0.162
hdii_civ	0.243	0.491	0.645	0.623	0.773	0.914	0.187
hdii_com	0.250	0.396	0.485	0.552	0.679	0.874	0.190
loss_civ	4.452	9.447	15.749	17.667	25.267	44.643	9.942
loss_com	7.219	13.334	24.068	22.150	29.308	36.803	9.308
ineq_le_civ	2.225	4.263	9.673	12.643	18.821	40.170	10.117
ineq_le_com	2.132	5.685	16.562	16.565	23.821	40.945	11.048
ineq_edu_civ	1.388	4.949	12.141	17.313	29.323	50.124	14.526
ineq_edu_com	1.840	9.654	20.436	22.213	36.264	48.227	15.127
ineq_inc_civ	8.525	14.343	20.141	21.949	27.614	56.013	9.675
ineq_inc_com	13.090	18.515	24.940	25.977	30.771	56.996	9.681

Table 2

Tests of differences in means between common law and civil law.

	Mean civil	Mean	Difference	p.value
	law	common law		
hdi	0.740	0.693	0.047	0.105
hdii	0.623	0.552	0.070	0.043
loss	17.667	22.150	-4.483	0.010
ineq_le	12.643	16.565	-3.922	0.047
ineq_edu	17.313	22.213	-4.900	0.073
ineq_inc	21.949	25.977	-4.028	0.023

3.2. HDI and HDI adjusted for inequality

First, to introduce our subject, we consider the effects of legal systems on the basis of simple standard indicators of well-being. The question of the empirical measurement of the well-being of a society is recurrent in economics. Traditionally GDP per capita was used to measure well-being, but in the face of much criticism, such as the fact that GDP per capita fails to take account of inequality or other aspects of development, economists and public decision-makers have implemented new measures. This is why in 1990, under the impetus of the work of economists like Amartya Sen - and his theory on capabilities - the United Nations Development Program (UNDP) introduced the Human Development Index (HDI). This tool is not a simple indicator of wealth like GDP per capita; it takes into account other aspects of development. Contrary to the classic vision which considers that any redistribution is costly in terms of efficiency because it discourages work, Sen considers it desirable for a state to want to redistribute in order to increase the capabilities of its citizens and thus give them a real possibility to undertake and create wealth.

It is with this idea of measuring real freedom in mind that the UNDP introduced the inequality-adjusted HDI (HDII) in 2010. One of the criticisms of the HDI was its failure to take into account inequalities in the measurement of well-being. Indeed, the HDI assumes that wealth as well as access to education and health conditions are the same for all individuals in a population whereas in fact there are disparities. With the HDII, the new interpretation of the HDI is the potential level of development if resources are equally accessible. The HDII measures the actual level of development by taking into account inequalities.⁹ We use the variable loss to measure the loss of HDI due to inequalities $(100.[1 - \frac{HDII}{HDI}])$ and the variables ineq_educ, ineq_le, and ineq_inc to observe the sources of this loss in the three dimensions of the HDI (education, life expectancy, and income per capita).

Table 1 presents the descriptives statistics of HDI, HDII, loss of HDI due to inequalities and inequality indices for education, life expectancy, and income for the year 2019. Our sample contains 153 countries including 110 civil law countries and 43 common law countries. Table 2 contains the mean difference tests for these different indicators between common law and civil law systems. It can be seen that the HDI of civil law countries is not significantly different from that of common law countries. However, when inequalities with the HDII are taken into account, the difference which was not significant becomes significant. On average, civil law countries lose 17.7% of their HDI due to inequality, while common law countries lose 22.1% (difference significant at 5%). When we look at the sources of these inequalities for each of the three pillars of the HDI, we see that, whatever the dimension, common law countries are significantly more unequal. The most significant difference is for income. However, these differences are too heterogeneous. Table 3 contains the OLS estimates of loss (loss of HDI in % due to inequalities) and indicators of inequalities in education, life expectancy, and income. Our control variables include Logarithm of Gross National Income Per Capita (2017 PPP\$) (gnipc), Life Expectancy at Birth (le), and Mean Years of Schooling (mys), which are the three non-standardized pillars of the HDI.¹⁰ We also control for World Bank Governance Indicators with corruption (cor), rule of law (rule), Government Effectiveness (gov), Political Stability and Absence of Violence/Terrorism (polstab), Regulatory Ouality (reg), Voice and Accountability (voicac) and the indicators of ethnic (ethnic) and linguistic (lang) fragmentation from Alesina et al. 2003. Due to missing values, the sample of these regressions contains 141 countries (100 civil law countries and 41 common law countries). Table 3 also contains the regressions on these four variables where the countries in the first quartile of the "Rule of Law" variable have been omitted (models (2), (4), (6), and (8), 105 countries including 71 civil law countries and 34 common law countries). We make these sub-regressions because, in countries where the rule of law is observed little if at all, it is unlikely that the legal system will have an impact.

It can be seen that the legal system remains a significant explanatory factor for HDI loss due to inequality. However, this difference is mainly explained by income inequality, the legal system not being significant for education and life expectancy. For income inequality, the difference is robust to the addition of controls and to subsample regression. It would seem that common law countries have a more unequal distribution of income than civil law countries.

3.3. Pre-tax income distribution

The standard approach to measuring inequality is to focus exclusively on monetary inequalities. We use data from the World Inequality

⁹ The HDI is the geometric mean of three standardized indices: income (GNI per capita), education (Expected years of schooling and Mean years of schooling) and life expectancy (Life expectancy at birth). The HDII is obtained by correcting each index by the level of inequality associated with it (using an Atkinson index). For more details, see https://hdr.undp.org/system/files/documents//technical-notes-calculating-human-development-indices.pdf

¹⁰ For the education index, the pillar corresponds to the mean between mean years of schooling and expected years of schooling but for the control, we use mean years of schooling only.

OLS estimation for loss, ineq edu, ineq le, and ineq inc (year 2019).

	loss	loss	ineq_edu	ineq_edu	ineq_le	ineq_le	ineq_inc	ineq_inc
		$> Q1_{rule}$		$> Q1_{rule}$		$> Q1_{rule}$		$> Q1_{rule}$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
legor	1.839**	1.935**	0.543	0.097	-0.465	0.149	4.877***	5.012***
	(0.777)	(0.897)	(1.209)	(1.396)	(0.525)	(0.502)	(1.658)	(1.855)
log(gnipc)	2.677***	3.393***	2.182*	1.651	0.093	-0.202	5.196***	7.840***
	(0.777)	(1.257)	(1.289)	(1.990)	(0.775)	(0.895)	(1.754)	(2.920)
le	-0.529***	-0.528***	0.051	0.153	-1.030***	-0.933***	-0.607**	-0.797***
	(0.108)	(0.133)	(0.207)	(0.237)	(0.084)	(0.085)	(0.235)	(0.294)
mys	-2.091***	-1.942***	-4.278***	-4.040***	-0.737***	-0.883***	-1.029**	-0.755
	(0.191)	(0.325)	(0.298)	(0.485)	(0.180)	(0.203)	(0.409)	(0.653)
cor	0.765	0.305	1.874	0.062	1.081	0.276	-1.246	-0.193
	(1.050)	(0.960)	(1.746)	(2.037)	(0.939)	(0.930)	(2.210)	(2.166)
gov	-1.323	1.451	-4.508	-1.378	-1.515	-0.276	1.554	5.478
	(2.355)	(1.700)	(2.903)	(2.926)	(1.269)	(1.329)	(4.608)	(3.417)
pol	-0.383	-1.289	-1.390	-1.673	-1.003**	-1.527***	1.274	-0.480
	(0.639)	(0.808)	(1.083)	(1.468)	(0.471)	(0.517)	(1.425)	(1.856)
reg	-0.818	-3.027*	-0.472	-2.984	-0.351	0.163	-0.884	-4.820
	(1.206)	(1.814)	(2.119)	(2.857)	(0.888)	(0.821)	(2.457)	(3.521)
rule	-0.004	-0.213	3.253	5.454*	2.012*	1.845	-4.509	-7.114**
	(1.538)	(1.734)	(2.557)	(2.998)	(1.106)	(1.196)	(3.255)	(3.522)
voicac	0.899	1.236	-0.123	-0.526	0.052	0.683	2.371	3.094
	(0.735)	(0.921)	(0.999)	(1.271)	(0.472)	(0.455)	(1.500)	(1.892)
ethnic	3.745	4.743**	-0.076	1.761	0.757	0.288	9.795*	10.751**
	(2.344)	(1.895)	(3.328)	(3.501)	(1.211)	(1.270)	(5.292)	(5.142)
language	-1.258	0.145	6.017*	7.645**	0.768	-0.095	-10.380**	-7.199
	(1.777)	(2.165)	(3.114)	(3.423)	(1.127)	(1.333)	(4.159)	(5.238)
Constant	49.209***	39.834***	30.272**	23.783	93.751***	90.179***	25.915*	11.294
	(7.516)	(9.637)	(13.605)	(17.394)	(6.053)	(7.414)	(15.204)	(19.833)
Observations.	141	105	141	105	141	105	141	105
R ²	0.862	0.848	0.847	0.816	0.934	0.931	0.325	0.399
Adj. R ²	0.849	0.829	0.832	0.793	0.928	0.922	0.261	0.321
F statistic	118.297	63.468	82.160	31.812	160.992	94.686	6.762	4.870

*** p < 0.01; ** p < 0.05; *p < 0.1. HC-Standard errors in parentheses.

Database (WID).¹¹ The WID contains data on the distribution of pre-tax national income for most countries and over several years (sometimes more than a century). Since we focus on the effects of legal systems and not fiscal rules, we consider the distribution of pre-tax income as a prime indicator. The impact of taxation will explain the difference between pre-tax and post-tax income. Difference in pre-tax incomes can be considered as the result of the constraints placed by legal rules on the primary distribution of income. Law shapes markets, allocates bargaining power, and frames all transactions. The role of law is incorporated in the determinants of national income distribution before the impact of taxation.

Concerning our variables of interest, we use the same classification as in most of the work (Piketty 2014, 2020, Alvaredo et al. 2018) of the researchers of the World Inequality Lab, i.e. we analyze the share of national income of the poorest 50%, the middle 40%, and the richest 10%. We also study the Gini coefficient, also available on the WID website.

For 2019 our sample includes 112 civil law and 45 common law countries (see Table 10 in the appendix for the list of countries in our sample). Table 4 shows that common law countries appear to be more unequal than civil law countries. Without any control, we observe that common law countries have a 0.036 higher Gini index than civil law countriles (significant at the 5% level), but also a share of national income of the richest 10% that is 3.8% higher (significant at the 1% level), a share of national income of the middle 40% that is lower by 2% (significant at the 5% level), and a share of national income of the bottom 50% that is lower by 1.9% (significant at the 1% level). Now, the challenge of this empirical section will be to show that this difference is robust to the addition of relevant control variables that can explain these inequality differences. Our sample is built to include only the countries for which the control variables are all available in

 Table 4

 Mean difference tests (year 2019)

mean anterence tests (Jean 2019).							
	Mean civ (N = 112)	Mean com $(N = 45)$	Difference	p.value			
t10	0.441	0.479	0.038	0.009			
m40	0.405	0.385	-0.020	0.018			
b50	0.154	0.135	-0.019	0.010			
gini	0.554	0.590	0.036	0.011			

order to be able to compare the regressions. The descriptive statistics are in Table 5 and the definitions of the variables are in the appendix.

We try to isolate the effect of the legal system on the inequality indicators. Although common law countries appear significantly more unequal than civil law countries, this difference may be due to unobserved heterogeneity. This is why we seek to estimate the impact of the legal system on the three groups as well as on the Gini coefficient by introducing control variables using the OLS and panel (2005–2020) methods (see appendix). We estimate variants of the following specification:

$$coef_ineg_{i,t} = \alpha + \gamma legor_i + \beta_1 log(gnipc)_{i,t} + \beta_2 mys_{i,t} + \beta_3 le_{i,t} + \lambda Gouv_{i,t} + \phi Fract_i + \epsilon_i$$
(1)

Where *i* is the country index, *t* the year index, α is the model constant, and *legor_i* is a dummy equal to 1 if it is a common law country and equal to 0 if it is a civil law country. We use the UNPD data : $gnipc_{it}$ is gross national income per capita (2017 PPP\$), mys_{it} is mean years of schooling, and le_{it} is life expectancy at birth. $Gouv_{it}$ includes the six World Bank indicators with rule of law (rule), regulatory quality (reg), control of corruption (cor), government effectiveness (gov), voice and accountability (voicac), and political stability and absence of violence/terrorism (polstab). $Frac_{it}$ is ethnic and linguistic fragmentation (ethnic and lang) (Alesina et al. 2003) which are available for only one year.

¹¹ https://wid.world/fr/accueil/

International Review of Law & Economics 75 (2023) 106139

Table 5					
Descriptives	statistics	(vear	2019	N =	157)

	Min	Q1	Median	Mean	Q3	Max	SD
t10	0.268	0.382	0.462	0.452	0.518	0.654	0.086
b50	0.058	0.116	0.144	0.149	0.174	0.257	0.044
m40	0.271	0.373	0.392	0.399	0.437	0.508	0.046
gini	0.374	0.502	0.575	0.565	0.628	0.749	0.084
cor	-1.693	-0.857	-0.303	-0.084	0.639	2.167	1.020
gov	-1.770	-0.753	-0.097	-0.008	0.671	2.213	0.987
pol	-2.730	-0.714	-0.185	-0.184	0.557	1.639	0.914
reg	-2.362	-0.725	-0.138	0.003	0.677	2.160	1.004
rule	-2.254	-0.789	-0.305	-0.071	0.554	2.049	0.998
voicac	-2.206	-0.863	-0.049	-0.115	0.654	1.655	0.981
le	52.910	66.603	74.054	72.763	78.975	85.274	7.675
mys	2.115	6.166	9.436	9.013	11.822	14.091	3.272
log(gnipc)	6.625	8.510	9.509	9.426	10.368	11.383	1.156
language	0.002	0.133	0.384	0.403	0.644	0.923	0.281
ethnic	0	0.237	0.490	0.458	0.673	0.930	0.255

Table 6

Share of pre-tax national income received by the top 10%.

Share of pre-tax national income received by the top 10%t10t10t10t10 $t10 > Q$	rule
t10	rule
legor 0.038*** 0.036*** 0.029** 0.044*** 0.044*** 0.041***	
(0.014) (0.014) (0.013) (0.013) (0.013) (0.013)	
log(gnipc) -0.030*** 0.006 0.024* 0.017 0.041**	
(0.005) (0.012) (0.014) (0.013) (0.019)	
le -0.004** -0.003 -0.003* -0.005*	
(0.002) (0.002) (0.002) (0.002)	
mys -0.006 -0.006* -0.005 -0.007	
(0.003) (0.003) (0.003) (0.005)	
cor 0.001 -0.002 0.016	
(0.018) (0.017) (0.021)	
gov 0.011 0.016 -0.001	
(0.027) (0.028) (0.032)	
pol -0.003 -0.005 -0.025	
(0.011) (0.011) (0.017)	
reg 0.006 0.011 0.007	
(0.020) (0.020) (0.025)	
rule -0.047* -0.039 -0.039	
(0.027) (0.026) (0.027)	
voicac -0.005 -0.010 -0.007	
(0.011) (0.011) (0.013)	
ethnic 0.087*** 0.101**	
(0.033) (0.039)	
language -0.078** -0.075*	
(0.032) (0.040)	
Constant 0.441*** 0.729*** 0.725*** 0.470*** 0.546*** 0.478***	
(0.008) (0.046) (0.080) (0.116) (0.125) (0.148)	
Observations 157 157 157 157 157 117	
R^2 0.041 0.210 0.257 0.334 0.365 0.445	
<i>Adj.R</i> ² 0.035 0.199 0.238 0.289 0.313 0.381	
F statistic 7.090 20.520 12.639 8.803 9.067 8.702	

*** p < 0.01;** p < 0.05;* p < 0.1. HC-Standard errors in parentheses.

Tables 6–9 present the OLS estimations for 2019 of the share of pretax national income received by the top 10%, bottom 50%, and middle 40%. We see that whichever the model, the coefficient associated with the legal system is significant. On average, in 2019, common law countries are associated with a share of the pre-tax national income of the richest 10% that is 4.4% higher than in civil law countries. The shares of the middle 40% and the bottom 50% are respectively 2.1% and 2.4% lower in common law countries than in civil law countries. The conclusion is similar for the Gini coefficient before taxes. On average common law countries are associated with a 0.045 higher Gini coefficient than in civil law countries. These differences between common law and civil law are stable regardless of the control variables introduced into the regressions. In these four tables, the last regressions are made on a subsample from which countries in the bottom quartile for "rule of law" have been removed. As with the HDI, it is likely that countries with poor performance in observing the rule of law are less subject to the conditioning of income distribution by law. By removing these countries, we show that our result is robust and is not related to differences in the quality of institutions. These estimates show us that law does have an impact on pre-tax income inequality, with common law countries appearing more unequal, at least before the impact of taxation. These results lead us to question the income distribution as conditioned through law. Indeed, the Law & Economics literature has tended to separate allocative issues from redistributive concerns. However, we can see here that these two subjects are closely linked: the question of distribution is contained in the allocation made by law. From then on, one can legitimately wonder about the normative question of the correction of inequalities by law.

In the appendix we provide panel data estimations between 2005 and 2020 using random effects estimations. The difference between

Share of pre-tax national income received by the bottom 50%.

	Dependent variable:								
		Share of	pre-tax national incom	me received by the bo	ttom 50%				
	b50	b50	b50	b50	b50	$b50 > Q1_{rule}$			
legor	-0.019***	-0.018***	-0.014**	-0.024***	-0.024***	-0.021***			
	(0.007)	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)			
log(gnipc)		0.014***	-0.004	-0.015**	-0.012^{*}	-0.022**			
		(0.003)	(0.006)	(0.006)	(0.006)	(0.009)			
le			0.002**	0.001	0.002*	0.002*			
			(0.001)	(0.001)	(0.001)	(0.001)			
mys			0.002	0.003	0.002	0.003			
			(0.002)	(0.002)	(0.002)	(0.002)			
cor				-0.001	0.001	-0.011			
				(0.010)	(0.009)	(0.011)			
gov				0.002	-0.002	0.008			
				(0.014)	(0.014)	(0.016)			
pol				-0.003	-0.003	0.007			
				(0.006)	(0.006)	(0.009)			
reg				-0.009	-0.012	-0.009			
				(0.010)	(0.010)	(0.012)			
rule				0.033**	0.028**	0.029*			
				(0.015)	(0.014)	(0.015)			
voicac				-0.000	0.002	0.001			
				(0.006)	(0.006)	(0.007)			
ethnic					-0.053***	-0.064***			
					(0.017)	(0.020)			
language					0.044***	0.042**			
					(0.016)	(0.019)			
Constant	0.154***	0.019	0.008	0.176***	0.139**	0.178**			
	(0.004)	(0.024)	(0.039)	(0.058)	(0.064)	(0.078)			
Observations	157	157	157	157	157	117			
R^2	0.036	0.176	0.221	0.313	0.353	0.418			
Adj. R ²	0.030	0.165	0.200	0.266	0.299	0.351			
F statistic	7.020	15.517	10.436	7.059	7.353	7.378			

*** p < 0.01;** p < 0.05;* p < 0.1. HC-Standard errors in parentheses.

Table 8

Share of pre-tax national income received by the middle 40%.

	Dependent variable:								
		Share of	f pre-tax national inc	ome received by the n	niddle 40%				
	m40	m40	m40	m40	m40	$m40 > Q1_{rule}$			
legor	-0.020**	-0.019**	-0.015**	-0.021***	-0.021***	-0.020**			
	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.008)			
log(gnipc)		0.016***	-0.002	-0.008	-0.005	-0.019*			
		(0.003)	(0.006)	(0.008)	(0.007)	(0.011)			
le			0.002*	0.001	0.002	0.003*			
			(0.001)	(0.001)	(0.001)	(0.001)			
mys			0.003*	0.003	0.003	0.004			
			(0.002)	(0.002)	(0.002)	(0.003)			
cor				0.000	0.002	-0.005			
				(0.010)	(0.010)	(0.012)			
gov				-0.012	-0.015	-0.007			
				(0.016)	(0.016)	(0.019)			
pol				0.007	0.007	0.019**			
				(0.006)	(0.006)	(0.009)			
reg				0.003	0.000	0.002			
				(0.011)	(0.012)	(0.015)			
rule				0.015	0.011	0.010			
				(0.014)	(0.014)	(0.015)			
voicac				0.005	0.007	0.005			
				(0.006)	(0.006)	(0.007)			
ethnic					-0.034*	-0.037			
					(0.018)	(0.023)			
language					0.034*	0.033			
					(0.018)	(0.024)			
Constant	0.405***	0.253***	0.267***	0.355***	0.316***	0.344***			
	(0.004)	(0.025)	(0.045)	(0.066)	(0.071)	(0.088)			
Observations	157	157	157	157	157	117			
R^2	0.037	0.201	0.243	0.309	0.328	0.404			
Adj. R ²	0.031	0.191	0.223	0.262	0.272	0.335			
F statistic	5.879	20.959	12.300	8.617	8.361	7.616			

*** $p < 0.01;^{**} \ p < 0.05;^* \ p < 0.1.$ HC-Standard errors in parentheses.

Gini coefficient of pre-tax national income.

	Dependent variable:									
			Gini coefficient of	pre-tax national inco	ome					
	gini	gini	gini	gini	gini	$gini > Q1_{rule}$				
legor	0.036***	0.034**	0.026**	0.045***	0.045***	0.040***				
	(0.014)	(0.013)	(0.012)	(0.012)	(0.012)	(0.013)				
log(gnipc)		-0.029***	0.006	0.027**	0.021	0.043**				
		(0.005)	(0.012)	(0.013)	(0.013)	(0.018)				
le			-0.004**	-0.003	-0.003^{*}	-0.005**				
			(0.002)	(0.002)	(0.002)	(0.002)				
mys			-0.005	-0.006*	-0.005	-0.007				
			(0.003)	(0.003)	(0.003)	(0.005)				
cor				0.001	-0.002	0.019				
				(0.018)	(0.017)	(0.020)				
gov				0.002	0.008	-0.011				
				(0.026)	(0.027)	(0.031)				
pol				0.002	0.001	-0.019				
				(0.011)	(0.011)	(0.017)				
reg				0.012	0.018	0.013				
				(0.020)	(0.019)	(0.023)				
rule				-0.056**	-0.048*	-0.048*				
				(0.027)	(0.026)	(0.028)				
voicac				-0.002	-0.006	-0.004				
				(0.011)	(0.011)	(0.013)				
ethnic					0.095***	0.113***				
					(0.032)	(0.038)				
language					-0.082^{***}	-0.079**				
					(0.031)	(0.037)				
Constant	0.554***	0.824***	0.831***	0.532***	0.607***	0.531***				
	(0.008)	(0.046)	(0.077)	(0.112)	(0.123)	(0.145)				
Observations	157	157	157	157	157	117				
R^2	0.037	0.190	0.237	0.325	0.362	0.437				
Adj. R ²	0.031	0.180	0.216	0.279	0.309	0.372				
F statistic	6.810	17.593	11.270	7.851	8.207	8.053				

*** $p < 0.01; ^{**} p < 0.05; ^{*} p < 0.1.$ HC-Standard errors in parentheses.

legal systems is similar between the panel and the estimate for 2019. We also provide in the appendix the same estimations for a sample of democratic countries (according to the dichotomous indicator of Acemoglu et al. 2019). Here too, the link remains significant, except for the share of national income of the middle 40% (m40).

4. Discussion

An important question is which differences between the group of civil law countries and the group of common law countries are attributable to the difference in legal systems? Indeed, common law and civil law countries may differ in many aspects with - among other differences - language, colonization, or the "type" of market economy with what Hall and Soskice (2001) called "Coordinated Market Economy" (CME) and "Liberal Market Economy" (LME). There is no reason to suppose that language is a relevant factor in explaining inequalities. It is more likely that these differences stem from cultural and institutional differences. All the questions associated with colonial origins, the type of market economy, or the legal system are linked. With colonization, France, Spain, the United Kingdom, and other European colonizers have greatly influenced institutions of colonized countries. It is this reasoning that is at the heart of the literature on legal origins. However, it is not easy to distinguish today among the differences in economic performance which are due to the legal system, market institutions, or to other cultural specificities. But as argued by Pistor (2005), the "type" of market economy and legal institution are closely linked. She shows that many common law systems are associated with LMEs based on contractual relations passing through a competitive market; they have relatively unregulated markets (compared to CMEs).

Civil law systems tend to be more akin to CMEs, with more noncontractual relations of trust and better developed state regulation.¹² For Pistor, "[s]ocial preferences are present at the heart of legal systems". This is particularly the case with contractual relations. Pistor shows that the "ground rules" count in the organization of a market economy particularly in terms of the allocation of rights of access to the judicial system or even of what a contract may or may not take as its subject matter. LMEs give much scope to individual initiative whereas CMEs place more value on collective mechanisms. This difference can be found in the higher level of contractibility of corporate law in common law or in the capacity of civil law systems to challenge past contracts on the basis of social preferences (as with the principle of "good faith" for instance). These differences are also noticeable for the allocation of rights of access to the judicial system. LMEs favor more individual initiative, and common law gives significant powers to the individual in terms of access to the judicial system. Conversely CMEs favor collective negotiation mechanisms with significant ex-ante controls, while individual access to the judicial system is more limited and the use of alternative dispute resolution mechanisms is favored. These points are only examples but we know from Pistor's analysis that legal systems and their ground rules are closely related to the type of market economy, which is why in this section we measure the right effect: the differences of market institutions and the place of individual initiative in relation to the collective, which are found at the heart of legal systems.

Damaska (1986) also provides an alternative framework to help to identify the similarities and differences between civil and common law jurisdictions, grouping them into two "ideal types" called "hierarchical" and "coordinated". The hierarchical ideal is associated

 $^{^{12}}$ See Hall and Soskice (2001) for other differences between CMEs and LMEs.

with civil law jurisdictions while the coordinated ideal is related to common law jurisdictions. On this view, the structure of authority in any jurisdiction can be classified into either of these two ideal types, but accepts that features of one can be found in the other. On this basis, Damaška explains that the hierarchical system tends to legitimize public action on behalf of the community, notably through the pursuit of multiple objectives such as efficiency and equity. This approach is also very interesting because it allows us to go beyond the traditional opposition relating to procedural law, which equates common law with the accusatory process and civil law with the inquisitorial process. For this purpose, Damaška proposes a framework of analysis organized along two different axes. The "hierarchical-coordinated" axis reflects the way in which a state organizes its judicial institutions; hierarchical states structure their judicial systems with a rigid definition of roles, while coordinated states organize their judicial systems more flexibly. The second axis concerns "state activism" and considers as "activist" those states that seek to satisfy social priorities through various means, including the judiciary, while reactive states do not adopt such priorities, especially in terms of the "good life", with their judiciary then playing essentially an arbitration role in private disputes, enforcing the parties' agreements and relying on the freedom of contract. Any system of procedural law, according to Damaška, can be situated along these two axes. Seen in this light, the classical Anglo-American trial is coordinated/reactive, while the classical Continental approach is hierarchical/activist. In each system, the existing rules of procedure will reflect the society's preferred view of the state that is compatible with our perspective of the search for equilibrium between efficiency and equity.

5. French Civil law as a case study

The question of how legal systems address equity is not new. Historically common law developed out of premodern tribal law. And tribal law is everywhere dominated by community values at the expense of freedom of choice. It protects people against contingencies and removes incentives for individuals to cause disruptive changes. In a long legal development of judge-made law, common law countries gradually reduced these features of their traditional law. On the European continent, on the contrary, the resurrection of Roman law in Latin Europe in the Middle Ages gradually superseded the traditional law. The European jus commune of the 18th century was an updated form of Roman law. Roman law came in for criticism and even stirred hatred and caused social unrest ever since it was introduced into Latin European countries because it rejects community values and is "unbrotherly". The continental European civil law (jus commune) is therefore based on a legal tradition of Roman law, which failed to support community values and even removed them from traditional law throughout continental Europe (see Whitman 2003). However, in England as well as in Latin Europe, community values of tribal societies were gradually pushed back. The mechanism was, however, a different one: the reception and further development of Roman law in continental Europe and a continuous development of common law in England, which made it more business oriented.

In today's legal systems, the situation remains quite contrasted with regard to equality. Some countries clearly put the reduction of inequalities at a macro-economic level at the heart of their agenda. The development of this vision is a slow process that combines national preferences as well as the legal system as a vehicle to implement those preferences. In order to argue that civil law countries appear to better equipped than common law countries to deal with the issue of income inequality (given equal preferences), we propose an illustration using France as a case study. The Civil Code introduced egalitarian considerations from its inception following the French Revolution which contributed to breaking down class society, even in conquered European countries such as the German states (see Acemoglu et al. 2011). The apparent economic success of the sudden and massive institutional reforms brought about by the French Revolution and Napoleonic campaigns seems to contradict the idea that planned and radical institutional change invariably produces worse results than incremental and spontaneous change. The authors suggest that one of the particularities of this case was that the change was very extensive and altered the entire institutional environment of the affected countries, not just one aspect of it. This could suggest that equity issues became important, in addition to efficiency ones, in countries where civil codification was adopted.

As indicated before, one can revisit the theory of legal origins from this perspective (La Porta, Lopez-De-Silanes, and Shleifer (2008)) to interpret the comparative economic performances of different legal systems. The balance between efficiency and equity is probably not considered in the same way in the United States and in Europe, and even between Southern and Northern European countries, which seems to be quite compatible with the observations of the proponents of the legal origins theory. Distributive considerations are certainly more developed in countries that promote the protection of weaker parties in commercial relations or in labor contracts, just as the generalization of conscription in relation to military service certainly reflects more marked egalitarian concerns than in systems that give precedence above all to the protection of investors in the quest to maximize the value of firms.

Although the French Civil Code of 1804 is largely based on freedom of contract and individual freedom, it is essential to understand to what extent legal systems have contributed to the protection of property, thus leading to the emergence of problems in terms of economic and social inequalities. The "patrimonial" vision of law predates the modern period, since many legal systems contributed very early on to the exclusion of the "poor" from social life, for example, by excluding from access to the courts all those to whom it was possible to "give orders"- in practice the poorest. This example illustrates the way in which law contributes to the construction of society. This is precisely the claim defended by Pistor (2019) when she considers that the rules of positive law reflect society's preoccupation with making capital flourish (e.g. maximizing the value of the firm). Of course, this is not peculiar to any legal tradition, since most legal systems take care to ensure the conditions of validity of contracts. However, in the French legal tradition that is well-established, this right of supervision may go further when society envisages correcting certain possible "outcomes" linked to the functioning of the market, or even, more radically, prohibiting certain transactions. This can be seen in labor law, for example, when it comes to prohibiting hiring or remuneration conditions that are considered socially undesirable and similarly when certain commercial relationships perceived as "significantly" unbalanced are prohibited in commercial law. It is important to understand that such devices at work in the civil law system imply an ex-ante intervention in market mechanisms. In contrast, common law systems are reluctant to operate on the same basis and generally favor ex-post interventions instead. Nevertheless, it follows that, in all legal systems, the law contributes to structuring the distribution of income; but this structuring will not be identical but will vary with the propensity of "social conditioning" to intervene in contractual relations. The contract can be seen as the place where power relations are exercised freely and unconditionally between the parties, but it can also be the place for "re-founding the idea of equality" in the words of Rosanvallon (2011).

From this point of view, one of the main foundations of the civil law approach lies precisely in the fact that if society believes that the distribution of income should be equitable, it is logical that the law should take this into account, in particular by excluding certain contractual provisions that would be incompatible with collective preferences from the outset. It is not surprising, therefore, to observe significant differences between civil law and common law with respect to the consideration of (real or potential) inequalities in market relations. In civil law, these concerns appear to be more prevalent. A detour through the history of law can also shed light on the influence that schools of thought have had on the evolution of legal systems, particularly on their ability to integrate social issues and distributive issues. We will take as proof of this the influence that *solidarist* ideas were able to exert on civil law in France at the end of the 19th century. This period witnessed a growing concern for questions of fairness through objectives that went beyond the particular interests of the parties to the contract and their freedom of contract. On the other hand, the common law no longer experienced such influence. The origins of the solidarist doctrine correspond to specific historical circumstances (Bourgeois 1896). It was born at the end of the 19th century at a time when the individualist conception of French law seemed to lead to an impasse. In order not to let themselves be locked into it, those who defend its philosophy set about "inventing social justice". These ideas have influenced part of doctrine and case law without breaking completely with an individualistic vision of contract law which prefers the classic idea of coexistence or harmony of freedoms to that of solidarity.

In 1804, contracting parties were granted the dignity of legislators by article 1134 of the Civil Code. Liberal thought then imposed itself in the order of law, to the point of eventually securing the triumph of what was later called the dogma of the freedom of contract. A loval servant of a system of liberal economy which prevailed in French society during the second half of the 19th century, this dogma is based on two fundamental postulates. First of all, it assumes that the contract is free from a formalism that is too materialistic to leave room for the will of the parties. This is what, for example, Professor Ripert states from the first lines on freedom of contract in a meaningful expression: "to arrive at this conception of the sovereign will ... philosophy had to spiritualize the law in order to free the pure will from the material forms by which it manifested itself". Secondly, it implies that individuals are perceived as the best defenders of their own interests when they express their will. It is for them the only means of alienating their freedom at the moment when they enter into a contract, because they invariably find their interest, of which they are the only and the best judges.

However, the dogma ended up being contested during the last third of the 19th century under the influence of several closely interrelated factors. The growth of urban pauperism and the multiplication of social disorder resulting from the prodigious development of machinery and industry revealed the poverty of the working class to some civil law students who saw this abstract category as composed of a sum of unique individuals. What was needed was a new law corresponding to a real awareness that society formed a category transcending that of the individuals composing it. The discovery of social justice then led certain jurists to criticize the excessive individualism of their predecessors, as well as their taste for overly abstract constructions. The disembodied and isolated individual was no longer defensible. This is how Saleilles (1904) considered that "what we call the law is the set of laws that govern the organism of a community... to these individualistic and archaic attempts at a justice of equity, we want to substitute the objective scientific and sociological bases of social justice".

Solidarism thus emerged as a body of doctrine to answer the crucial question of the foundation of the social bond. It set about a radical reversal of the Rousseauist philosophy of the social contract that supposedly impelled the French Revolution. This replaces the founding myth of a contract freely entered into between individuals with that of an already constituted society that individuals join. The social fact prevails, but it does not overwhelm the individual who supposedly consents implicitly and retroactively to membership of this community. It is in this sense that the expression "quasi-contract" should be understood. This reference is of particular importance because it is intended to limit the power of the state which can never cross the bounds set by this implicit agreement. Insofar as individuals join society, they are also debtors of the other members who compose it, whether their predecessors or their contemporaries. The idea of "social debt" thus becomes crucial. For Bourgeois (1896), "in the de facto society in which

his quality as a man places him, each of us... is necessarily the debtor of all". However, individuals do not know the exact extent of their debt. They rely on the state to determine it and proceed with the distribution of rights and duties. This is once again a reversal of the liberal logic. The law is no longer a means of limiting the power of the state in order to preserve the freedom of individuals; it becomes an instrument of government likely to call it into question. However, state power is not without its limits. Apart from the fact that it is based on a quasi-contract, it is only legitimate if it preserves harmony within that association of similar but unequal individuals that form human society. According to Bourgeois, it is in the relationship between the individual and society, which cannot exist without each other, that the idea of justice must therefore seek its realization "by finding the exchange of services under the 'apparent opposition of interests".

Such an approach profoundly modifies the relationship of the parts (e.g. citizens) to the whole (e.g. society). For example, it provides a theoretical foundation for the introduction of progressive income tax, which is an important novelty of the solidarist doctrine. Since everyone must pay their debt to society to an extent that may vary from one individual to another, it being up to the state to distribute the benefit in the most profitable way for the whole community. This same philosophy also authorizes a profound overhaul of the law of civil liability, which can no longer be based solely on a relationship of obligation between two individuals. The theory of risk is made possible. It is enough that my action is at the origin of damage to be solely liable for it from the "social point of view". We can see in this reasoning the origins of the famous law of 9 April 1898 on industrial accidents which postulates a greater solidarity of employers toward their workers. This shift was just as important in many branches of law with always the same idea of restoring social harmony on new foundations other than those of individualism and freedom of contract.

Concerns about equality and social justice have thus been able to force their way into the legal sphere. Clearly, French civil institutions,¹³ and by the same token most of the civil law systems which are associated with them, have been shaped in their design and development by a more marked penchant for these considerations of equity. This is evidenced by recent developments in matters of unpredictability or significant imbalance in contractual relations. We find this desire to "protect the weaker party" in many branches of law, such as labor law or contract law. There are many legal possibilities to denounce contracts made because of the lack of equity (significant imbalances). For instance, article 1171 of the French Civil Code provides that "in a contract of adhesion, any non-negotiable clause, determined in advance by one of the parties, which creates a significant imbalance between the rights and obligations of the parties to the contract is deemed unwritten. The assessment of the significant imbalance does not concern the main object of the contract or the adequacy of the price to the service". This type of article shows how the law can include other social objectives not linked to strict efficiency with, for example, the desire to protect the weaker party by giving it the possibility of not applying contractual clauses which are deemed unfair. A recent example is given by the law of 18 October 2021 aimed at protecting farmers' remuneration, known as the "Egalim" Act, by intending to work toward "fair remuneration for farmers" and, to this end, to rebalance commercial relations between the various links in the food industry and its supply chains.

¹³ From another perspective, Yun-Chien Chang et al. (2021) observe that the France-inspired group constitutes a supercluster, separate from other jurisdictions. This could help to explain some specific aspects of the French legal tradition.

6. Conclusion

In this article we have highlighted a relationship between economic inequalities, assessed through income before redistribution, and legal systems. We analyze the role of legal systems beyond the usual vision of the economic attractiveness of law based solely on considerations of resource allocation. From the main data available, in particular from the United Nations (Human Development Index) and the very recent World Inequality Database, it is possible to show that civil law systems are generally more successful than common law systems in addressing the issue of inequality. This result appears essential for the economic analysis of legal systems.

The correlation we document tends to be stronger during the recent period. As has been observed by Atkinson, Piketty, and Saez (2011), the inequality dynamics between English-speaking countries and non-English-speaking countries differed at the turn of the 1980s. A possible explanation for differential development between most common law and civil law countries may be the overall increase in top incomes worldwide. When, in the past, the differences between common law and civil law were not very perceptible, the overall increase in the remuneration of the wealthiest highlighted these differences. For instance, Gabaix and Landier (2008) have shown that CEO pay soared in the US between 1980 and 2003 due to the increase in the size of firms. Cook and Frank (2010) have shown that since the 1980s, market mechanisms have concentrated wealth around the more successful agents. The structural origins of the recent variation in inequality may derive from a combination between globalization and technology increasing the size of markets, the greater distribution of market revenues, and then increasing inequalities. Legal systems able to manage and control market revenues have limited the rise in inequalities. In some cases like France, there is not even a rise of standard measures of inequality.

We are convinced, then, that legal systems and more generally the law have a primordial place among the causes of income inequalities. In this article, we display simple correlations that we try to explain with the help of arguments about the nature of legal systems. In future studies it would be interesting to do more advanced econometric work in order to confirm the robustness of our findings.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Table 10

List	of	countries	and	inequality	indicators	by	legal	systems	(year	2019)).
------	----	-----------	-----	------------	------------	----	-------	---------	-------	-------	----

ISO	Country	t10	b50	m40	gini
AFG	Afghanistan	0.4101	0.1779	0.4121	0.5154
AGO	Angola	0.5801	0.0904	0.3295	0.6856
ALB	Albania	0.3449	0.183	0.4721	0.4828
ARG	Argentina	0.4727	0.1315	0.3957	0.5918
ARM	Armenia	0.396	0.1859	0.4181	0.5021
AUT	Austria	0.3311	0.2266	0.4422	0.4296
AZE	Azerbaijan	0.3822	0.2033	0.4145	0.4778
BDI	Burundi	0.4839	0.1402	0.376	0.5874
BEL	Belgium	0.3295	0.2038	0.4667	0.4501
BEN	Benin	0.4694	0.1422	0.3884	0.5783
BFA	Burkina Faso	0.5484	0.1036	0.348	0.6546
BGR	Bulgaria	0.4197	0.1676	0.4127	0.5308
BIH	Bosnia and Herzegovina	0.3438	0.1834	0.4728	0.4804
BLR	Belarus	0.3277	0.2258	0.4466	0.4281
BOL	Bolivia	0.5179	0.1039	0.3781	0.6425
BRA	Brazil	0.5707	0.1014	0.3279	0.6722
CHE	Switzerland	0.3084	0.2331	0.4585	0.4127
CHL	Chile	0.6124	0.0688	0.3187	0.7237
CHN	China	0.4236	0.1398	0.4366	0.5579
CIV	Cote d'Ivoire	0.4865	0.128	0.3855	0.6012
CMR	Cameroon	0.5205	0.1063	0.3732	0.6377
COD	Congo. The Democratic Republic of	0.4884	0.1264	0.3852	0.6035
COG	Congo	0.5593	0.0992	0.3416	0.6648
COL	Colombia	0.5451	0.0814	0.3735	0.6776
COM	Comoros	0.5026	0.1139	0.3835	0.6214
CRI	Costa Rica	0.5346	0.0847	0.3807	0.6693
CZE	Czechia	0.2897	0.2532	0.4571	0.3809
DEU	Germany	0.3745	0.188	0.4375	0.4886
DJI	Djibouti	0.4955	0.1309	0.3736	0.6010
DNK	Denmark	0.3324	0.2162	0.4515	0.4394
DOM	Dominican Republic	0.5381	0.12	0.3419	0.6396
DZA	Algeria	0.3808	0.1902	0.429	0.4880
ECU	Ecuador	0.4298	0.1236	0.4465	0.5804
EGY	Egypt	0.4783	0.1525	0.3691	0.5744
ERI	Eritrea	0.4547	0.1584	0.3869	0.5543
ESP	Spain	0.3412	0.2122	0.4466	0.4478
EST	Estonia	0.4076	0.1662	0.4262	0.5255
ETH	Ethiopia	0.4547	0.1584	0.3869	0.5543
FIN	Finland	0.3312	0.218	0.4508	0.4386
FRA	France	0.3242	0.2264	0.4494	0.4275
GAB	Gabon	0.4332	0.1442	0.4227	0.5594
GEO	Georgia	0.4903	0.139	0.3707	0.5932
GIN	Guinea	0.3789	0.182	0.4391	0.4946
GNB	Guinea-Bissau	0.4409	0.1543	0.4047	0.5519
GNQ	Equatorial Guinea	0.514	0.1163	0.3698	0.6261
GRC	Greece	0.3264	0.2106	0.463	0.4452

ISO	Country	t10	b50	m40	gini
GTM	Guatemala	0.5179	0.1039	0.3781	0.6425
HND	Honduras	0.5179	0.1039	0.3781	0.6425
HRV	Croatia	0.3471	0.1904	0.4625	0.4705
HUN	Hungary	0.3289	0.2236	0.4475	0.4294
IDN	Indonesia	0.4686	0.1245	0.4069	0.5984
IRN	Iran. Islamic Republic of	0.5239	0.133	0.3431	0.6133
IRQ	Iraq	0.5067	0.1284	0.3649	0.6123
ISL	Iceland	0.2803	0.2567	0.4629	0.3745
ITA	Italy	0.3726	0.1652	0.4622	0.5142
JOR	Jordan	0.4836	0.1431	0.3734	0.5854
JPN	Japan	0.4424	0.1682	0.3894	0.5364
KAZ	Kazakstan	0.412	0.1644	0.4236	0.5314
KGZ	Kyrgyzstan Combodia	0.4327	0.1687	0.3986	0.5371
KHM	Cambodia Karaa Darublia af	0.4538	0.1391	0.40/1	0.5/95
KOK	Korea. Republic of	0.3455	0.2079	0.4400	0.4614
	Lao Beople's Democratic Pepublic	0.329	0.1177	0.3333	0.0409
LAU	Lao. People's Democratic Republic	0.465	0.1269	0.3530	0.0013
LBY	Libvan Arab Jamabiriya	0.4412	0.1637	0.3359	0.0313
LTU	Lithuania	0.4319	0.0762	0 4919	0.6278
	Luxembourg	0.3345	0 1969	0.4686	0.4607
LVA	Latvia	0.3551	0.1742	0.4707	0.4914
MAR	Morocco	0.4943	0.1356	0.3701	0.5960
MDA	Moldova. Republic of	0.3507	0.179	0.4703	0.4873
MDG	Madagascar	0.5076	0.1248	0.3676	0.6138
MEX	Mexico	0.6494	0.0622	0.2884	0.7486
MKD	Macedonia	0.306	0.2074	0.4866	0.4351
MLI	Mali	0.4461	0.1475	0.4064	0.5613
MLT	Malta	0.3533	0.1964	0.4504	0.4706
MMR	Myanmar	0.4293	0.1598	0.4109	0.5445
MNG	Mongolia	0.429	0.1495	0.4214	0.5544
MOZ	Mozambique	0.6463	0.083	0.2707	0.7248
MRT	Mauritania	0.4048	0.1678	0.4273	0.5214
MUS	Mauritius	0.474	0.1481	0.3779	0.5747
NER	Niger	0.4919	0.1438	0.3643	0.5874
NIC	Nicaragua	0.5179	0.1039	0.3781	0.6425
NLD	Netherlands	0.2937	0.2254	0.4809	0.4122
NOR	Norway	0.3023	0.2459	0.4518	0.3959
OMN	Oman	0.5488	0.0896	0.3615	0.6711
PAN	Panama	0.5179	0.1039	0.3/81	0.6425
PER	Peru Philipping	0.5374	0.0977	0.3049	0.03/3
	Poland	0.434	0.1433	0.4025	0.3717
DRT	Portugal	0.3584	0.1949	0.4251	0.4341
DRV	Paraguay	0.5384	0.1903	0.3781	0.4742
OAT	Oatar	0.5378	0.0946	0.3676	0.6624
ROU	Romania	0.4114	0.1544	0.4342	0.5397
RUS	Russia Federation	0.4616	0.1699	0.3685	0.5475
SEN	Senegal	0.478	0.1396	0.3824	0.5842
SUR	Suriname	0.5179	0.1039	0.3781	0.6425
SVK	Slovakia	0.2678	0.2448	0.4874	0.3785
SVN	Slovenia	0.2957	0.2307	0.4737	0.4075
SWE	Sweden	0.3049	0.239	0.4561	0.4038
SYC	Seychelles	0.5209	0.1213	0.3578	0.6254
SYR	Syrian Arab Republic	0.5425	0.1053	0.3521	0.6514
TCD	Chad	0.4673	0.1433	0.3894	0.5761
TGO	Togo	0.5003	0.1242	0.3755	0.6107
TJK	Tajikistan	0.4223	0.1548	0.4229	0.5452
TKM	Turkmenistan	0.4889	0.1206	0.3905	0.6126
TUN	Tunisia	0.4137	0.1661	0.4202	0.5276
TUR	Turkey	0.5144	0.1437	0.3419	0.5984
UKR	Ukraine	0.3308	0.2259	0.4433	0.4292
URY	Uruguay	0.4186	0.1641	0.4174	0.5330
UZB	Uzbekistan	0.4553	0.1462	0.3986	0.5698
VEN	Venezuela	0.5179	0.1039	0.3781	0.6425
VNM	Vietnam	0.4375	0.1463	0.4162	0.5616
Mean civil	law (N=112)	0.4410	0.1540	0.4050	0.5545
ARE	United Arab Emirates	0.4778	0.1281	0.3941	0.5944
AUS	Australia	0.326	0.166	0.508	0.4865
BGD	Bangladesh	0.424	0.1708	0.4052	0.5300
BHR	Bahrain	0.5572	0.1023	0.3404	0.6628

Table 10 (con	tinued).				
ISO	Country	t10	b50	m40	gini
BHS	Bahamas	0.5179	0.1039	0.3781	0.6425
BLZ	Belize	0.5179	0.1039	0.3781	0.6425
BRN	Brunei Darussalam	0.3664	0.1926	0.441	0.4757
BTN	Bhutan	0.4214	0.1504	0.4282	0.5489
BWA	Botswana	0.5926	0.0812	0.3262	0.7003
CAN	Canada	0.397	0.1625	0.4405	0.5234
CYP	Cyprus	0.3369	0.2034	0.4597	0.4558
GBR	United Kingdom	0.3579	0.2029	0.4392	0.4663
GHA	Ghana	0.4891	0.1221	0.3889	0.6078
GMB	Gambia	0.4587	0.1502	0.3911	0.5643
GUY	Guyana	0.5179	0.1039	0.3781	0.6425
HKG	Hong Kong	0.4818	0.1359	0.3823	0.5932
IND	India	0.5713	0.1313	0.2974	0.6336
IRL	Ireland	0.3685	0.1967	0.4348	0.4770
ISR	Israel	0.478	0.1317	0.3903	0.5936
JAM	Jamaica	0.5179	0.1039	0.3781	0.6425
KEN	Kenya	0.4872	0.1301	0.3827	0.5990
LBR	Liberia	0.4324	0.1543	0.4133	0.5488
LKA	Sri Lanka	0.4898	0.1413	0.3689	0.5913
LSO	Lesotho	0.4951	0.1128	0.3921	0.6189
MWI	Malawi	0.4841	0.1393	0.3766	0.5880
MYS	Malaysia	0.4027	0.173	0.4244	0.5179
NAM	Namibia	0.642	0.0655	0.2925	0.7366
NGA	Nigeria	0.4272	0.155	0.4178	0.5451
NPL	Nepal	0.4147	0.167	0.4183	0.5288
NZL	New Zealand	0.3457	0.1957	0.4586	0.4588
PAK	Pakistan	0.4281	0.173	0.3989	0.5298
PNG	Papua New Guinea	0.4628	0.1291	0.4081	0.5899
SAU	Saudi Arabia	0.5253	0.1106	0.3641	0.6401
SDN	Sudan	0.4504	0.1577	0.3919	0.5537
SGP	Singapore	0.4628	0.1665	0.3707	0.5454
SLE	Sierra Leone	0.47	0.1499	0.3801	0.5711
SWZ	Swaziland	0.5988	0.0786	0.3226	0.7047
THA	Thailand	0.4879	0.1389	0.3732	0.5920
TTO	Trinidad and Tobago	0.5179	0.1039	0.3781	0.6425
TZA	Tanzania. United Republic of	0.5137	0.1295	0.3568	0.6125
UGA	Uganda	0.5282	0.1225	0.3492	0.6265
USA	United States	0.4569	0.1357	0.4073	0.5808
ZAF	South Africa	0.6541	0.058	0.2879	0.7465
ZMB	Zambia	0.6174	0.0695	0.3132	0.7222
ZWE	Zimbabwe	0.5895	0.0923	0.3181	0.6852
Mean comm	on law $(N = 45)$	0.4791	0.1354	0.3854	0.5902
Difference		0.0382***	-0.0186***	-0.0196**	0.0358**

 $p^* < 0.1; p^* < 0.05; p^* < 0.01.$

Share of top 10%.

	Dependent variable:							
	Share of pre-tax national income received by the top 10%							
	FE	RE	HT	AM	BMS	OLS 2019		
	(1)	(2)	(3)	(4)	(5)	(6)		
legor		0.042***	0.042***	0.042***	0.042***	0.044***		
		(0.013)	(0.014)	(0.014)	(0.014)	(0.013)		
log(gnipc)	0.006	0.006	0.007*	0.006*	0.006*	0.017		
	(0.009)	(0.008)	(0.003)	(0.003)	(0.003)	(0.013)		
le	-0.0003	-0.0004	-0.0004	-0.0004	-0.0004	-0.003*		
	(0.001)	(0.001)	(0.0003)	(0.0003)	(0.0003)	(0.002)		
mys	-0.007***	-0.007***	-0.006***	-0.007***	-0.007***	-0.005		
	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.003)		
cor	0.0002	-0.0004	0.0001	-0.0001	-0.0002	-0.002		
	(0.005)	(0.005)	(0.003)	(0.003)	(0.003)	(0.017)		
gov	0.0001	-0.0003	0.0001	-0.0002	-0.0001	0.016		
	(0.006)	(0.005)	(0.003)	(0.003)	(0.003)	(0.028)		
polstab	-0.003	-0.003	-0.003***	-0.003**	-0.003**	-0.005		
	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.011)		
reg	-0.001	-0.001	-0.0003	-0.001	-0.001	0.011		
	(0.007)	(0.007)	(0.003)	(0.003)	(0.003)	(0.020)		
rule	-0.002	-0.003	-0.002	-0.003	-0.003	-0.039		
	(0.007)	(0.007)	(0.003)	(0.003)	(0.003)	(0.026)		

Table 11 (continued).

	Dependent variable:							
	Share of pre-tax national income received by the top 10%							
	FE	RE	HT	AM	BMS	OLS 2019		
	(1)	(2)	(3)	(4)	(5)	(6)		
voicac	-0.009*	-0.010**	-0.009***	-0.010***	-0.010***	-0.010		
	(0.005)	(0.005)	(0.003)	(0.002)	(0.002)	(0.011)		
ethnic		0.128***	0.353***	0.117***	0.136***	0.087***		
		(0.035)	(0.102)	(0.045)	(0.037)	(0.033)		
lang		-0.085***	-0.228***	-0.077**	-0.090***	-0.078**		
		(0.032)	(0.069)	(0.037)	(0.034)	(0.032)		
Constant		0.443***	0.392***	0.445***	0.440***	0.546***		
		(0.074)	(0.038)	(0.032)	(0.032)	(0.125)		
Observations	2,496	2,496	2,496	2496	2496	157		
R ²	0.052	0.079	0.064	0.073	0.073	0.365		
Adjusted R ²	-0.015	0.074	0.059	0.068	0.068	0.313		
Hausmann test		0.04072	0.9266	0.548	0.6818			

Note: *p < 0.1; **p < 0.05; ***p < 0.01, HC-standard errors in parentheses.

Table 12 Share of bottom 50%.

	Dependent variable:						
		Shai	re of pre-tax national	income received by t	he bottom 50%		
	FE	RE	HT	AM	BMS	OLS 2019	
	(1)	(2)	(3)	(4)	(5)	(6)	
legor		-0.022***	-0.023***	-0.022***	-0.022***	-0.024***	
		(0.007)	(0.007)	(0.007)	(0.007)	(0.006)	
log(gnipc)	-0.002	-0.002	-0.002	-0.002	-0.002	-0.012^{*}	
	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)	(0.006)	
le	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.002*	
	(0.0004)	(0.0003)	(0.0001)	(0.0001)	(0.0001)	(0.001)	
mys	0.004***	0.004***	0.004***	0.004***	0.004***	0.002	
	(0.001)	(0.001)	(0.0004)	(0.0004)	(0.0004)	(0.002)	
cor	-0.002	-0.001	-0.001	-0.001	-0.001	0.001	
	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.009)	
gov	0.001	0.001	0.001	0.001	0.001	-0.002	
	(0.003)	(0.002)	(0.001)	(0.001)	(0.001)	(0.014)	
polstab	0.001	0.001	0.001**	0.001**	0.001**	-0.003	
-	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.006)	
reg	0.002	0.002	0.001	0.002	0.002	-0.012	
	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.010)	
rule	0.001	0.002	0.001	0.002	0.002	0.028**	
	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.014)	
voicac	0.004*	0.004*	0.004***	0.004***	0.004***	0.002	
	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.006)	
ethnic		-0.069***	-0.188***	-0.062***	-0.072^{***}	-0.053***	
		(0.019)	(0.051)	(0.022)	(0.019)	(0.017)	
lang		0.050***	0.127***	0.046**	0.052***	0.044***	
0		(0.017)	(0.035)	(0.019)	(0.017)	(0.016)	
Constant		0.158***	0.184***	0.156***	0.159***	0.139**	
		(0.034)	(0.019)	(0.016)	(0.015)	(0.064)	
Observations	2,496	2,496	2,496	2496	2496	157	
R ²	0.063	0.089	0.072	0.082	0.082	0.353	
Adjusted R ²	-0.003	0.084	0.067	0.077	0.077	0.299	
Hausmann test		0.00	0.5737	0.3856	0.497		

Note: *p < 0.1; **p < 0.05; ***p < 0.01, HC-standard errors in parentheses.

Appendix A. List of countries

Appendix B. OLS regressions: Robusteness checks

Tables 11–14 correspond to the estimates of Eq. (1) using panel estimations. The panel that we study is balanced (156 countries) between 2005 and 2020. In the four tables, the first specification corresponds to

Table 13	
Share of middle	40%.

	Dependent variable:							
		Shar	e of pre-tax nationa	l income received b	y the middle 40%			
	FE	RE	HT	AM	BMS	OLS 2019		
	(1)	(2)	(3)	(4)	(5)	(6)		
legor		-0.020***	-0.020**	-0.020**	-0.020**	-0.021***		
		(0.007)	(0.008)	(0.008)	(0.008)	(0.007)		
log(gnipc)	-0.005	-0.004	-0.004*	-0.004*	-0.004*	-0.005		
	(0.006)	(0.005)	(0.002)	(0.002)	(0.002)	(0.007)		
le	0.0004	0.0004	0.0005***	0.0005***	0.0004**	0.002		
	(0.001)	(0.001)	(0.0002)	(0.0002)	(0.0002)	(0.001)		
mys	0.003**	0.003**	0.003***	0.003***	0.003***	0.003		
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)		
cor	0.001	0.002	0.001	0.001	0.002	0.002		
	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.010)		
gov	-0.001	-0.001	-0.001	-0.001	-0.001	-0.015		
	(0.004)	(0.003)	(0.002)	(0.002)	(0.002)	(0.016)		
polstab	0.002	0.002	0.002**	0.002**	0.002**	0.007		
-	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.006)		
reg	-0.001	-0.001	-0.001	-0.001	-0.001	0.0003		
	(0.005)	(0.005)	(0.002)	(0.002)	(0.002)	(0.012)		
rule	0.001	0.001	0.0005	0.001	0.001	0.011		
	(0.005)	(0.005)	(0.002)	(0.002)	(0.002)	(0.014)		
voicac	0.005	0.006*	0.005***	0.006***	0.006***	0.007		
	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.006)		
ethnic		-0.058***	-0.163***	-0.053**	-0.063***	-0.034*		
		(0.019)	(0.057)	(0.024)	(0.020)	(0.018)		
lang		0.035**	0.101***	0.031	0.038**	0.034*		
-		(0.018)	(0.038)	(0.020)	(0.018)	(0.018)		
Constant		0.397***	0.421***	0.395***	0.399***	0.316***		
		(0.045)	(0.024)	(0.020)	(0.020)	(0.071)		
Observations	2496	2496	2496	2496	2496	157		
R ²	0.031	0.054	0.043	0.050	0.050	0.328		
Adjusted R ²	-0.037	0.050	0.039	0.046	0.046	0.272		
Hausmann test		0.1992	0.9407	0.538	0.6281			

Note: *p < 0.1; **p < 0.05; ***p < 0.01, HC-standard errors in parentheses.

Table 14

Gini coefficient.

	Dependent variable:							
	Gini coefficient of pre-tax national income							
	FE	RE	HT	AM	BMS	OLS 2019		
	(1)	(2)	(3)	(4)	(5)	(6)		
legor		0.042***	0.042***	0.042***	0.042***	0.045***		
		(0.013)	(0.014)	(0.014)	(0.014)	(0.012)		
log(gnipc)	0.004	0.005	0.005	0.004	0.004	0.021		
	(0.008)	(0.007)	(0.003)	(0.003)	(0.003)	(0.013)		
le	-0.00004	-0.0001	-0.0001	-0.0001	-0.0001	-0.003*		
	(0.001)	(0.001)	(0.0002)	(0.0002)	(0.0002)	(0.002)		
mys	-0.007***	-0.007***	-0.007***	-0.007***	-0.007***	-0.005		
	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.003)		
cor	0.001	0.001	0.001	0.001	0.001	-0.002		
	(0.005)	(0.005)	(0.003)	(0.003)	(0.003)	(0.017)		
gov	-0.001	-0.001	-0.001	-0.001	-0.001	0.008		
-	(0.005)	(0.005)	(0.003)	(0.003)	(0.003)	(0.027)		
polstab	-0.003	-0.003	-0.003**	-0.003**	-0.003**	0.001		
	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.011)		
reg	-0.002	-0.002	-0.002	-0.002	-0.002	0.018		
-	(0.006)	(0.006)	(0.003)	(0.003)	(0.003)	(0.019)		
rule	-0.002	-0.003	-0.002	-0.003	-0.003	-0.048*		
	(0.006)	(0.006)	(0.003)	(0.003)	(0.003)	(0.026)		
voicac	-0.008*	-0.009**	-0.008***	-0.009***	-0.009***	-0.006		
	(0.005)	(0.004)	(0.002)	(0.002)	(0.002)	(0.011)		
ethnic		0.129***	0.353***	0.117***	0.137***	0.095***		
		(0.036)	(0.098)	(0.043)	(0.036)	(0.032)		
lang		-0.093***	-0.236***	-0.085**	-0.098***	-0.082***		
0		(0.032)	(0.067)	(0.036)	(0.033)	(0.031)		
Constant		0.556***	0.508***	0.560***	0.555***	0.607***		
		(0.067)	(0.036)	(0.030)	(0.029)	(0.123)		
Observations	2496	2496	2496	2,496	2496	157		
R ²	0.061	0.087	0.071	0.081	0.081	0.362		
Adjusted R ²	-0.005	0.083	0.067	0.077	0.077	0.309		
Hausmann test		0.003182	0.7864	0.4853	0.6155			

Note: *p < 0.1; **p < 0.05; ***p < 0.01, HC-standard errors in parentheses.

	abie io				
ł	Regressions	on	democratic	countries.	

	Dependent variable:					
	t10	b50	m40	gini		
	(1)	(2)	(3)	(4)		
legor	0.038**	-0.023***	-0.015	0.041***		
	(0.016)	(0.008)	(0.009)	(0.015)		
log(gnipc)	0.015	-0.011	-0.003	0.019		
	(0.026)	(0.012)	(0.015)	(0.024)		
le	-0.003	0.002	0.002	-0.003		
	(0.003)	(0.001)	(0.002)	(0.003)		
mys	-0.006	0.003	0.003	-0.006		
	(0.006)	(0.003)	(0.003)	(0.006)		
cor	-0.006	-0.001	0.007	-0.002		
	(0.019)	(0.010)	(0.012)	(0.018)		
gov	0.073*	-0.027	-0.046*	0.062*		
	(0.040)	(0.019)	(0.024)	(0.037)		
pol	-0.011	0.002	0.009	-0.007		
	(0.021)	(0.011)	(0.011)	(0.021)		
reg	-0.017	-0.001	0.017	-0.008		
	(0.032)	(0.016)	(0.020)	(0.030)		
rule	-0.081**	0.054***	0.026	-0.094***		
	(0.033)	(0.017)	(0.019)	(0.032)		
voicac	0.016	-0.014	-0.003	0.022		
	(0.028)	(0.014)	(0.016)	(0.027)		
ethnic	0.085*	-0.056**	-0.029	0.097**		
	(0.045)	(0.023)	(0.026)	(0.043)		
language	-0.079*	0.047**	0.033	-0.086**		
	(0.044)	(0.022)	(0.025)	(0.042)		
Constant	0.595***	0.129	0.277**	0.644***		
	(0.175)	(0.087)	(0.107)	(0.166)		
Observations	100	100	100	100		
R^2	0.437	0.448	0.366	0.451		
Adj. R ²	0.360	0.372	0.279	0.375		
F statistic	9.610	9.434	6.455	9.944		

Table 16					
Regressions	without	countries	with	regional	imputation.

	Dependent variable:			
	t10	b50	m40	gini
	(1)	(2)	(3)	(4)
legor	0.050***	-0.024***	-0.026***	0.048***
	(0.014)	(0.007)	(0.008)	(0.014)
log(gnipc)	0.010	-0.009	-0.001	0.014
	(0.015)	(0.007)	(0.009)	(0.014)
le	-0.005**	0.002**	0.002*	-0.005**
	(0.002)	(0.001)	(0.001)	(0.002)
mys	-0.006*	0.002	0.003	-0.005
	(0.003)	(0.002)	(0.002)	(0.003)
cor	0.011	-0.007	-0.004	0.012
	(0.018)	(0.009)	(0.011)	(0.017)
gov	0.084***	-0.032**	-0.052**	0.071**
	(0.031)	(0.015)	(0.020)	(0.028)
pol	-0.014	0.004	0.011	-0.010
	(0.012)	(0.006)	(0.007)	(0.011)
reg	-0.004	-0.004	0.008	0.003
	(0.023)	(0.010)	(0.014)	(0.021)
rule	-0.097***	0.053***	0.043**	-0.100***
	(0.030)	(0.015)	(0.018)	(0.029)
voicac	0.001	-0.002	0.001	0.003
	(0.012)	(0.006)	(0.008)	(0.011)
ethnic	0.078**	-0.048***	-0.029	0.085**
	(0.036)	(0.017)	(0.024)	(0.033)
language	-0.093***	0.050***	0.043**	-0.094***
	(0.033)	(0.015)	(0.021)	(0.030)
Constant	0.737***	0.051	0.212**	0.790***
	(0.136)	(0.066)	(0.084)	(0.127)
Observations	126	126	126	126
R^2	0.479	0.452	0.431	0.473
Adj. R ²	0.424	0.394	0.370	0.417
F statistic	12.273	8.885	10.313	10.746

****p < 0.01;*** p < 0.05;** p < 0.1. HC-Standard errors in parentheses.

Fixed Effects estimation, however, due to the time-invariance of legor, ethnic, and lang, the FE cannot estimate the coefficients. Therefore we use RE estimations and instrumental variable methods in order to manage endogeneity issues. Specifications (3) correspond to the Hausman and Taylor (1981) estimator (Hausman and Taylor, 1981), specifications (4) correspond to the Amemiya and MaCurdy (1986), estimator and specifications (5) correspond to the Breusch, Mizon, and Schmidt (1989)) (Breusch et al., 1989) estimator. For the instrumental variable estimates, we categorize our variables as follows:

- · Time invariant and exogenous: legor, lang
- · Time invariant and endogenous: ethnic
- · Time variant and exogenous: gnipc, le, rule, voicac, reg
- · Time variant and endogenous: cor, gov, pol, mys

All the p.values associated with the Hausmann test are above 10%, validating our choice of instruments. The last specifications (6) are the OLS estimates for the year 2019. The correlation between legal systems and income inequality appears to be similar between the cross-section and the panel.

Table 15 shows the regressions on the sub-samples of so-called democratic countries, in agreement with the dichotomous variable of Acemoglu et al. (2019) (for the year 2010 which is the most recent in their database). We see that the relationship between income inequality and the legal system remains robust (except for the national income share of the middle 40% of the distribution) with democratic countries as the only sample.

In the WIB database, data for some countries are calculated based on regional imputations (see Chancel and Thomas 2020). Table 16

*** p < 0.01;** p < 0.05;* p < 0.1., HC-Standard errors in parentheses.

contains the regressions of Tables 6, 7, 8 and 9 with all the control variables on a sub-sample where the countries with regional imputation have been removed. This sample includes 126 countries including 90 civil law countries and 36 common law countries. The countries concerned are:

- Africa: Eritrea, Equatorial Guinea, Libya, Somalia, and Western Sahara.
- Asia: Afghanistan, Brunei, Cambodia, Macao, North Korea, and Papua New Guinea
- Eastern Europe: Belarus, Ukraine, Georgia, Armenia, and Azerbaijan
- Latin America and the Caribbean: Bahamas, Belize, Cuba, Guatemala, Guyana, Haiti, Jamaica, Nicaragua, Suriname, Trinidad and Tobago, Venezuela, Bolivia, Dominican Republic, Honduras, Panama, and Paraguay
- Bahrain, Kuwait, Oman, Qatar, and United Arab Emirates

With this sub-sample, the correlation between legal systems and income inequality remains robust.

Appendix C. Definition of variables

See Table 17, Table 18.

International Review of Law & Economics 75 (2023) 106139

Tub	C 1/					
Defi	nitions	and	sources	of	the	va

Definitions a	nd sources of the variables used (1/2).	
Variable	Definition	Source
legor	Legal origin, dummy variable equal to 1 for common law countries and equal to 0 for civil law countries	La Porta, Lopez-De-Silanes, and Sheifer (2008) and Juriglobe for the missing values (http://www.juriglobe.ca/fra/index.php)
gnipc	Gross National Income Per Capita (2017 PPP\$)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)
le	Life Expectancy at Birth (years)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)
mys	Mean Years of Schooling (years)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)
cor	Control of Corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank (https://databank.banquemondiale.org/source/ worldwidegovernance-indicators)
gov	Government Effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5 .	World Bank (https://databank.banquemondiale.org/source/ worldwidegovernance-indicators)
pol	Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5 .	World Bank (https://databank.banquemondiale.org/source/ worldwidegovernance-indicators)
reg	Regulatory Quality captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank (https://databank.banquemondiale.org/source/ worldwidegovernance-indicators)
rule	Rule of Law captures perceptions of the extent to which agents have confidence i and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank (https://databank.banquemondiale.org/source/ worldwidegovernance-indicators)
voicac	Voice and Accountability captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank (https://databank.banquemondiale.org/source/ worldwidegovernance-indicators)
ethnic	Measure of ethnic fragmentation ranging from 0 to 1. The value 1 corresponds to a fragmented society and 0 to a homogeneous society.	Alesina et al. (2003) (https://ferdi.fr/donnees/indicateurs-de- fragmentation-ethnolinguistiques)
lang	Measure of linguistic fragmentation ranging from 0 to 1. The value 1 corresponds to a fragmented society and 0 to a homogeneous society.	Alesina et al. (2003) (https://ferdi.fr/donnees/indicateurs-de- fragmentation-ethnolinguistiques)

Table 18

Definitions and sources of the variables used (2/2).

Variable	Definition	Source
t10	Pre-tax national income share held by the p90p100 group. Pre-tax national income is the sum of all pre-tax personal income flows accruing to the owners of the production factors, labor and capital, before taking into account the operation of the tax/transfer system, but after taking into account the operation of pension system. The central difference between personal factor income and pre-tax income is the treatment of pensions, which are counted on a contribution basis by factor income and on a distribution basis by pre-tax income. The population is comprised of individuals over age 20. The base unit is the individual (rather than the household) but resources are split equally within couples.	World Inequality Database (https://wid.world/)
b50	Pre-tax national income share held by the p0p50 group. Pre-tax national income is the sum of all pre-tax personal income flows accruing to the owners of the production factors, labor and capital, before taking into account the operation of the tax/transfer system, but after taking into account the operation of pension system. The central difference between personal factor income and pre-tax income is the treatment of pensions, which are counted on a contribution basis by factor income and on a distribution basis by pre-tax income. The population is comprised of individuals over age 20. The base unit is the individual (rather than the household) but resources are split equally within couples.	World Inequality Database (https://wid.world/)

International Review of Law & Economics 75 (2023) 106139

Table 18 (conta	nuea).	
Variable	Definition	Source
m40	Pre-tax national income share held by the p50p90 group. Pre-tax national income is the sum of all pre-tax personal income flows accruing to the owners of the production factors, labor and capital, before taking into account the operation of the tax/transfer system, but after taking into account the operation of pension system. The central difference between personal factor income and pre-tax income is the treatment of pensions, which are counted on a contribution basis by factor income and on a distribution basis by pre-tax income. The population is comprised of individuals over age 20. The base unit is the individual (rather than the household) but resources are split equally within couples.	World Inequality Database (https://wid.world/)
gini	Gini coefficient of pre-tax income, equal-split adults	World Inequality Database (https://wid.world/)
hdi	Human Development Index (value)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)
hdii	Inequality-adjusted Human Development Index (value)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)
loss	Overall loss due to inequalities (%)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)
ineq_le	Inequality in life expectancy (Atkinson index)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)
ineq_edu	Inequality in education (Atkinson index)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)
ineq_inc	Inequality in income (Atkinson index)	United Nation Development Program (https://hdr.undp.org/data-center/documentation- and-downloads)

References

- Acemoglu, Daron, Cantoni, Davide, Johnson, Simon, Robinson, James A., 2011. The consequences of radical reform: The French Revolution. Amer. Econ. Rev. 101 (7), 3286–3307.
- Acemoglu, Daron, Naidu, Suresh, Restrepo, Pascual, Robinson, James A., 2019. Democracy does cause growth. J. Polit. Econ. 127 (1), 47–100.
- Alesina, Alberto, Devleeschauwer, Arnaud, Easterly, William, Kurlat, Sergio, Wacziarg, Romain, 2003. Fractionalization. J. Econ. Growth 8 (2), 155–194.
- Alvaredo, Facundo, Chancel, Lucas, Piketty, Thomas, Saez, Emmanuel, Zucman, Gabriel, 2018. Rapport sur les inégalités mondiales 2018. World Inequality Lab, Paris: Le Seuil, https://Wir2018. Wid. Worl D. (Accessed on 6 December 2018).
- Amemiya, Takeshi, MaCurdy, Thomas E., 1986. Instrumental-variable estimation of an error-components model. Econometrica 869–880.
- Atkinson, Anthony B., Piketty, Thomas, Saez, Emmanuel, 2011. Top incomes in the long run of history. J. Econ. Lit. 49 (1), 3–71.
- Blanchet, Thomas, Chancel, Lucas, Gethin, Amory, 2022. Why is europe more equal than the United States? Am. Econ. J.: Appl. Econ..
- Botero, Juan C., Djankov, Simeon, Porta, Rafael La, Lopez-de Silanes, Florencio, Shleifer, Andrei, 2004. The regulation of labor. Q. J. Econ. 119 (4), 1339–1382.
- Bourgeois, Léon, 1896. L'idée de solidarité et ses conséquences. Solidarité, Paris. Bradford, Anu, Chang, Yun-chien, Chilton, Adam, Garoupa, Nuno, 2021. Do legal
- origins predict legal substance? J. Law Econ. 64 (2), 207–231. Breusch, Trevor S., Mizon, Grayham E., Schmidt, Peter, 1989. Efficient estimation using panel data. Econometrica 695–700.
- Chancel, Lucas, Thomas, Piketty, 2020. Countries with Regional Imputations on WID.world. Technical Note N° 2020/13, World Inequality Lab.
- Chang, Yun-chien, Garoupa, Nuno, Wells, Martin T., 2021. Drawing the legal family tree: An empirical comparative study of 170 dimensions of property law in 129 jurisdictions. J. Leg. Anal. 13 (1), 231–282.
- Cook, Philip J., Frank, Robert H., 2010. The Winner-Take-All Society: Why the Few At the Top Get So Much more than the Rest of Us. Random House.
- Crettez, Bertrand, Deffains, Bruno, Musy, Olivier, 2014. Legal convergence and endogenous preferences. Int. Rev. Law Econ. 39, 20–27.
- Crettez, Bertrand, Deffains, Bruno, Musy, Olivier, 2018. Legal centralization: a tocquevillian view. J. Leg. Stud. 47 (2), 295–323.
- Dam, Kenneth W., 2006. The Law-Growth Nexus: The Rule of Law and Economic Development. Brookings Institution Press.
- Damaska, Mirjan R., 1986. The faces of justice and state authority. In: The Faces of Justice and State Authority. Yale University Press.
- Deffains, Bruno, Durand, Rodolphe, Hurstel, Daniel, 2021. Manifesto shareholder duacy and efficient governance for the xxist century responsible firm. Available At SSRN 3894234.
- Deffains, Bruno, Musy, Olivier, 2018. Droit et finance: quel bilan de la théorie des origines légales? Revue D'économie Financière (1), 237–260.

Dimick, Matthew, 2016. Should the law do anything about economic inequality. Cornell J. Law Pub. Policy 26, 1–69.

- Easterly, William, 2007. Inequality does cause underdevelopment: Insights from a new instrument. J. Dev. Econ. 84 (2), 755–776.
- Ferguson, John, Power, David, Stevenson, Lorna, Collison, David, 2017. Shareholder protection, income inequality and social health: A proposed research agenda. In: Accounting Forum. 41, (3), Elsevier, pp. 253–265.
- Gabaix, Xavier, Landier, Augustin, 2008. Why has CEO pay increased so much? Q. J. Econ. 123 (1), 49–100.
- Glaeser, Edward L., Shleifer, Andrei, 2002. Legal origins. Q. J. Econ. 117 (4), 1193–1229.
- Goodman, John C., 1978. An economic theory of the evolution of common law. J. Leg. Stud. 7 (2), 393–406.
- Grullon, Gustavo, Larkin, Yelena, Michaely, Roni, 2019. Are US industries becoming more concentrated? Rev. Finance 23 (4), 697–743.
- Hall, Peter A., Soskice, David, 2001. An introduction to varieties of capitalism. Op. Cit. 21–27.
- Hausman, Jerry A., Taylor, William E., 1981. Panel data and unobservable individual effects. Econometrica 1377–1398.
- Islam, Muhammed N., 2016. Does democracy reduce income inequality? Empir. Econ. 51 (4), 1299–1318.
- Kaplow, Louis, Shavell, Steven, 1994. Why the legal system is less efficient than the income tax in redistributing income. J. Leg. Stud. 23 (2), 667–681.
- Keynes, John M., 1931. Liberalism and labour. In: Essays in Persuasion. Project Gutenberg Canada.
- Khan, Lina M., Vaheesan, Sandeep, 2017. Market power and inequality: The antitrust counterrevolution and its discontents. Harv. Law Policy Rev. 11, 235.
- Kim, Kensie, 2009. Mixed systems in legal origins analysis. S. Cal. L. Rev. 83, 693.
- Klerman, Daniel, Mahoney, Paul G., 2007. Legal origin? J. Comp. Econ. 35 (2), 278–293.
- Klerman, Daniel M., Mahoney, Paul G., Spamann, Holger, Weinstein, Mark I., 2011. Legal origin or colonial history? J. Leg. Anal. 3 (2), 379–409.
- La Porta, Rafael, Lopez-de Silanes, Florencio, Shleifer, Andrei, 2002a. Government ownership of banks. J. Finance 57 (1), 265–301.
- La Porta, Rafael, Lopez-de Silanes, Florencio, Shleifer, Andrei, 2006. What works in securities laws? J. Finance 61 (1), 1–32.
- La Porta, Rafael, Lopez-de Silanes, Florencio, Shleifer, Andrei, 2008. The economic consequences of legal origins. J. Econ. Lit. 46 (2), 285–332.
- La Porta, Rafael, Lopez-de Silanes, Florencio, Shleifer, Andrei, Vishny, Robert, 2002b. Investor protection and corporate valuation. J. Finance 57 (3), 1147–1170.
- Levine, Ross, 1999. Law, finance, and economic growth. J. Financial Intermediation 8 (1–2), 8–35.
- Liscow, Zachary, 2013. Reducing inequality on the cheap: When legal rule design should incorporate equity as well as efficiency. Yale Law J. 123, 2478.

- Maggio, Giuseppe, Romano, Alessandro, Troisi, Angela, 2014. The legal origin of income inequality. Law Dev. Rev. 7 (1), 1–21.
- Mahoney, Paul G., 2001. The common law and economic growth: Hayek might be right. J. Leg. Stud. 30 (2), 503–525.
- Piketty, Thomas, 2014. Capital in the 21st Century. Harvard University Press.
- Piketty, Thomas, 2020. Capital and Ideology. Harvard University Press.
- Pistor, Katharina, 2005. Legal ground rules in coordinated and liberal market economies. ECGI-Law Working Paper, (30).
- Pistor, Katharina, 2019. The Code of Capital. Princeton University Press.
- Porta, Rafael La, Lopez-de Silanes, Florencio, Shleifer, Andrei, Vishny, Robert W, 1998. Law and finance. J. Polit. Econ. 106 (6), 1113–1155.
- Posner, Richard A., 2014. Economic Analysis of Law. Wolters Kluwer.
- Priest, George L., 1977. The common law process and the selection of efficient rules. J. Leg. Stud. 6 (1), 65–82.
- Roe, Mark J., 2007. Juries and the political economy of legal origin. J. Comp. Econ. 35 (2), 294–308.
- Roe, Mark J., Siegel, Jordan I., 2009. Finance and politics: A review essay based on Kenneth Dam's analysis of legal traditions in the law-growth nexus. J. Econ. Lit. 47 (3), 781–800.

Rosanvallon, Pierre, 2011. La Société des Égaux. vol. 427, Seuil Paris.

- Rostowski, Jacek, Stacescu, Bogdan, 2006. The wig and the pith helmet-the impact of "legal school" versus colonial institutions on economic performance (second version). Tech. rep., CASE-Center for Social and Economic Research.
- Rubin, Paul H., 1977. Why is the common law efficient? J. Leg. Stud. 6 (1), 51-63.
- Saleilles, Raymond, 1904. Introduction à L'étude Du Droit Civil Allemand.... éditeur non identifié.
- Sanchirico, Chris William, 2000. Taxes versus legal rules as instruments for equity: A more equitable view. J. Leg. Stud. 29 (2), 797-820.
- Sen, Amartya, 2014. Development as freedom (1999). In: The Globalization and Development Reader: Perspectives on Development and Global Change. vol. 525.
- Spamann, Holger, 2006. On the insignificance and/or endogeneity of la porta et al.'s Anti-Director Rights Index'under consistent coding. Discussion Paper, (7), Harvard Law School John M. Olin Center.
- Spamann, Holger, 2010. The "antidirector rights index" revisited. Rev. Financ. Stud. 23 (2), 467–486.
- Whitman, James Q., 2003. Long live the hatred of roman law!. Available At SSRN 383761.
- Xu, Guangdong, 2011. The role of law in economic growth: A literature review. J. Econ. Surv. 25 (5), 833–871.