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Competition Law and Economic Inequality: A Comparative Analysis of the US Model of Law

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ABSTRACT

To what extent does the choice of competition law model correlate with economic inequality? While competition laws have been suggested as potentially contributing to current inequality trends in developed countries and as a viable instrument to address them, there is little empirical evidence on their distributional effects. This article helps fill this gap. It utilizes a comparative legal approach and a unique estimation framework based on the textual similarity to estimate the differences between the US and EU models and provides evidence that countries that adopt a US-style antitrust model are more likely to exhibit higher income inequality levels over time. While this link should not be interpreted causally, it suggests that potential institutional factors might affect the rise of inequality.

I. INTRODUCTION

Despite global economic growth, economic inequality levels have been increasing in many parts of the world.[1] In the face of the current economic downturn brought about by the Coronavirus pandemic, these trends have intensified.[2] Researchers and regulators point to the usual suspects: regressive tax policy, trade (globalization), and technological changes.[3] Commentators have also recognized that competition law and the way it is applied might contribute to the rise

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[1] The latest United Nation Development Report records that income inequality based on the top 10% income share has risen since the 1980s. In 2017, the global top 1% owned more than 33% of the total wealth, while the bottom 50% owned less than 2%. United Nation, 'Human Development Report 2019', http://hdr.undp.org/sites/default/files/hdr2019.pdf (visited 26 February 2022), at 111, 132. We use the term economic inequality to refer to both wealth and income measures of inequality in contrast to opportunity inequality and other methods of estimations of social gaps, e.g. mobility, wages, and so on.

[2] Aaron van Dorn, Rebecca E Cooney, and Miriam L Sabin, 'COVID-19 exacerbating inequalities in the US', 395(10232) Lancet (2020), at 1243. According to the Institute for Policy Studies, between March 18 and 15 September 2020, the US billionaires' total net worth rose from $2.95 trillion to $3.8 trillion. Gains of $141 billion a month, $32 billion a week, or $4.7 billion a day. From mid-March to mid-August, the collective work income of rank-and-file private-sector employees (all hours worked times the hourly wages of the entire bottom 82% of the workforce) declined by 4.4.%. Institute for Policy Studies, 'Billionaire Bonanza 2020', https://ips-dc.org/wp-content/uploads/2020/04/Billionaire-Bonanza-2020.pdf (visited 26 February 2022).

[3] Emmanuel Saez, 'Income and wealth inequality: Evidence and policy implications', 35(1) Contemporary Economic Policy (2017), at 7; Facundo Alvaredo, Anthony B Atkinson and Salvatore Morelli, 'Top wealth shares in the UK over more than a century', 162 Journal of Public Economics (2018), at 26.

of inequality. Stiglitz, Baker, and Salop[4] were among the first to argue that an increase in rents could contribute to the increase in income and wealth inequality and that the decline of antitrust enforcement in the USA might be a cause. However, to date, the debate has mostly been limited to abstract legal and normative arguments—'should' competition law aim to effect inequality?[5] Perhaps most critically, the discussion lacks empirical analysis of the actual interaction between competition law and inequality.

This paper examines how the choice of model of law (proxied by similarity in the legal text) might be linked to economic inequality. Its main contribution is offering a first comparative analysis of competition law models using an extensive cross-country database (country–year), which links the choice of model of law, United States of America (US) and the European Union (EU), to levels of inequality. It takes advantage of a new and extensive dataset on competition laws developed by Bradford and Chilton[6] and macroeconomic data gathered by the World Bank and the World Inequality Lab (WID). The article exposes a strong link between the model of law and distributional outcomes; the US model of law is associated with higher levels of economic inequality. While it does not aim at establishing causal relationships between the model of law and economic inequality, the conclusions offer fertile ground for future work to focus on testing more precise transmission mechanisms at different scales, such as at the country, industry, and household level.

The paper is organized as follows: section II reviews the empirical literature on the effects of competition law on economic inequality, section III develops the hypothesis concerning the link between the choice of competition law model and economic inequality, section IV presents the methods and data, and section V summarizes the empirical results, linking the similarity to the US model with economic inequality.[7] Section VI discusses the results from a comparative legal perspective and section VII concludes. More detailed information about the data, methods, and additional sensitivity and robustness testing can be found in the online appendix.

II. COMPETITION LAW, THE INTENSITY OF COMPETITION, AND ECONOMIC INEQUALITY

The primary effect of competition law is to enhance the competitive environment in product markets by constraining the illegal exercise of market power (that is, firms using their market dominance to stifle entry or expansion of competitors, allowing them to raise prices over costs over a long period of time), by breaking up restrictive agreements among competitors,[8] and by challenging mergers and accusations that have the potential to create dominance.[9] If firms try to substantially raise their markup (prices above costs) in a highly competitive environment, new companies will enter the market, driving the markups back down.

[4] Joseph E Stiglitz, *The Price of Inequality: How Today's Divided Society Endangers our Future* (WW Norton & Company, 2012, United States). Jonathan B Baker and Steven C Salop, 'Antitrust, competition policy, and inequality', 104 Geo LJ Online (2015), at 1. Maybe the first to argue that market power is casing inequalities are William S Comanor and Robert H Smiley, 'Monopoly and the Distribution of Wealth', 89(2) The Quarterly Journal of Economics (1975), at 177.

[5] Lina M Khan and Sandeep Vaheesan, 'Market power and inequality: The antitrust counterrevolution and its discontents', 11 Harvard Law Review 235 (2017), at 245; Niamh Dunne, 'Fairness and the Challenge of Making Markets Work Better', 84(2) Modern Law Review (2020), at 1468.

[6] Anu Bradford and Adam S Chilton, 'Competition Law Around the World from 1889 to 2010: The Competition Law Index', 14 (3) Journal of Competition Law & Economics (2018), at 393.

[7] Our empirical analysis applies panel data techniques and a General Synthetic Control (GSC) method to test this hypothesis. This method has been used in recent years using aggregated data and a small group of treated units, making it ideal for this study. Eduardo Cavallo et al., 'Catastrophic Natural Disasters and Economic Growth', 95 (5) The Review of Economics and Statistics (2013), at 1549.

[8] Hiau Looi Kee and Bernard Hoekman, 'Imports, entry and competition law as market disciplines', 51 (4) European Economic Review (2007), at 831. Jonathan B Baker, *The Antitrust Paradigm: Restoring a Competitive Economy* (Harvard University Press, 2019, United States). Timothy Besley, Nicola Fontana and Nicola Limodio, 'Antitrust Policies and Profitability in Nontradable Sectors', 3 (2) American Economic Review: Insights (2021), at 251.

[9] Steven Berry, Martin Gaynor, and Fiona Scott Morton, 'Do Increasing Markups Matter? Lessons from Empirical Industrial Organization', 33 (3) Journal of Economic Perspectives (2019), at 44.

Competition law enforcement may, therefore, affect economic inequality in two main ways. First, lower prices resulting from competition in essential product markets (like food and clothes) affect households in a progressive way, as poorer consumers tend to spend a higher proportion of their income on consuming these products.[10] Hausman and Leibtag estimated an average 4.8% reduction in prices associated with greater retail competition (due to the entry of low-priced outlets into the geographical market) in the USA and found that households with an income below USD 10,000 benefitted disproportionately from competition (by approximately 50% more than the average household). Market power, therefore, has a potentially regressive effect.[11]

Second, higher prices reduce consumption, which in turn reduces the scale of economy-wide production and subsequently leads to a reduction in the demand for labour (especially for low-skilled workers).[12] Even though the labour market might be competitive (a difficult assumption in and of itself), wages for workers drop due to the general effect of an economy-wide increase in market power. De Loecker, Eeckhout, and Mongey found that market power had an effect on equilibrium wages and that, quantitatively, the effect was large (real wages as a share of Gross Domestic Product (GDP) dropped by over 26%).[13]

The enforcement of competition laws, however, may have other important spill-over effects. For example, prominent voices in the antitrust public and academic world are calling for proactive engagement in the labour market to tackle anticompetitive practices by employers as a way to potentially raise wages (in this case monopsony power), as until recently, such enforcement activities have been minimal to non-existent in most countries.[14]

Therefore, at least in theory, competition laws' ability to constrain market power can have a direct effect on economic inequality. To exemplify the link between firms' markups and economic inequality, we plot the aggregated markups time series of the USA (Figure 1) on the left panel, next to the correlation between the top 1% and 10% income groups and markups (the top 1% or 10% income groups refer to the ratio of the income, which is accumulated by these two groups and the rest of society). As markups increase, the share of the two top income groups increases dramatically.

Yet, there are little empirical data on how strong the connection between the laws and inequality actually is. Indeed, Dierx et al.[15] provided the only empirical investigation, which considered both the effect of the laws on competition intensity and the following impact on distributional macroeconomic results. The authors developed a model that connected competition policy, competition, and wealth distribution and so accounted for the two-part causal chain explored until here, using a mixed methods 'bottom-up' approach.[16] The authors looked at how EU competition policy measures affected distributional outcomes in households with varying skill levels and income earners (capital owners, wage earners, and benefit recipients).

[10] Jerry Hausman and Ephraim Leibtag, 'Consumer benefits from increased competition in shopping outlets: Measuring the effect of Wal-Mart', 22 (7) Journal of Applied Economics (2007), at 1157.

[11] John Creedy and Robert Dixon, 'The relative burden of monopoly on households with different incomes', 65 (258) Economica (1998), at 285; Carlos M Urzúa, 'Distributive and regional effects of monopoly power', 22 (2) Economia Mexicana, Nueva Epoca (2013), at 279.

[12] Jan De Loecker, Jan Eeckhout, and Gabriel Unger, 'The Rise of Market Power and the Macroeconomic Implications', 135 (2) Quarterly Journal of Economics (2020), at 561.

[13] Ibid; Jan De Loecker, Jan Eeckhout, and Simon Mongey, *Quantifying Market Power and Business Dynamism in the Macroeconomy*, w28761 (Cambridge, MA: National Bureau of Economic Research, 2021) http://www.nber.org/papers/w28761.pdf.

[14] Sumit K Majumdar, Rabih Moussawi, and Ulku Yaylacicegi, 'Mergers and Wages in Digital Networks: a Public Interest Perspective', 19 (4) Journal of Industry, Competition and Trade (2019), at 583. Ioana Elena Marinescu and Eric A Posner, 'Why Has Antitrust Law Failed Workers?' SSRN Electronic Journal (2019), at https://www.ssrn.com/abstract=3335174. OECD 2019 at: https://one.oecd.org/document/DAF/COMP(2019)2/en/pdf.

[15] Adriaan Dierx et al., '6. Distributional Macroeconomic Effects of the European Union Competition Policy: A General Equilibrium Analysis', Step Ahead Compet Policy Shar Prosper Incl Growth Banco Mund OCDE (2017), at 155.

[16] Consumers' saving estimates are calculated by multiplying the foreseen reduction in prices (in comparison with the counterfactual of no competition policy intervention) and the duration of such a price reduction and the turnover in the market affected by the decision.

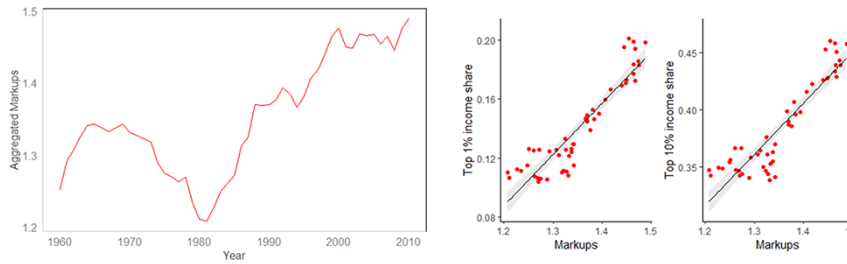

Figure 1. Aggregated markup trends in the USA and top income shares.

Note: aggregated markups are a ratio between price and cost on a firm level. They are used to estimate market power instead of price elasticity or market shares. On the left, the US aggregated markups[17] time series; on the right, the linear correlation between aggregated markups in the USA and aggregated income shares from WID, which are used in this paper. Markup estimations from De Loecker, Eeckhout, and Gabriel Unger (2020).

They discovered that liquidity-strapped households—i.e. those who were less well-off—raised their spending proportionally more than non-liquidity-strapped households (four times more after 5 years). This supported the idea that competition law enforcement could have a progressive effect.The research is illuminating as it highlights the economic mechanism at play: from the law to inequality via market competition.

Connected, a companion paper to this article studies in-depth the effects of competition law on the labour share, and in there, we show a similar association between competition policy and distributional outcomes: competition policy is negatively affecting firm's average profits and positively linked with the labour share.[18] The approach in that article focuses on competition policy (rather than specific enforcement decisions) using industry panel data and a measure of competition policy developed by Buccirossi et al.,[19] which includes data on budgets, staff, and output in 12 industrialized countries from the Organisation for Economic Co-operation and Development (OECD). The results also suggest that competition policy is linked with economic inequality, as the labour share decline is associated with a rise in inequality.

In summary, effective competition law is expected to be negatively correlated with markups and profits on the firm, industry, and even country level. Competition intensity (or the lack thereof, i.e. market power) affects consumers in a regressive way via prices and workers via wages, potentially contributing to rising economic inequality.

We move on to explore the comparative legal research on competition laws to support the main hypothesis of this paper—the US model of law is linked to higher levels of economic inequality.

III. HYPOTHESIS: MODEL OF LAW AND ECONOMIC INEQUALITY

A. Comparative analysis of model of law

It has been argued that the USA and the EU represent two 'models of law'[20] and that they encouraged the adoption of dozens of new competition laws all over the world from the early 2000s.[21]

[17] See De Loecker, Eeckhout, and Unger, above n 12.

[18] Amit Zac et al., 'Competition Policy and the Labour Share' (2021) CCLP Working Paper https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3824115 (visited 31 January 2022).

[19] Paolo Buccirossi et al., 'Competition policy and productivity growth: An empirical assessment', 95 (4) The Review of Economics and Statistics (2013), at 1324.

[20] 'In spite of the large number of antitrust enforcement regimes, there are three that are recognized as extremely important in global commerce: the United States, the EU, and China. Moreover, China has modelled its antitrust law regime on that of the EU. Given this, there are essentially two antitrust regime types that dominate global commerce: the United States and the EU', Roger D Blair and D Daniel Sokol, *The Oxford handbook of international antitrust economics* (USA: Oxford University Press, 2015), at 17:18.

[21] Mattia Guidi, *Competition Policy Enforcement in EU Member States* (Springer, 2016, United States).

These two laws reflect a slightly different process of decision-making in competition regulation[22] and competing philosophies for economic regulations.[23] Overall, these differences relate to a central question on risk avoidance: in an error-cost framework, on what side of the 'error' do legal architects prefer to fall, privileging false positives (overenforcement and its associated chilling effects) or false negatives (under deterrence of potentially illegal conduct)? While US antitrust enforcers are focused on minimizing the chilling effects of the law, the EU model is concerned with under deterrence.[24] Related to our hypothesis, if competition law is calibrated to minimize false positives, the intensity of competition may decline over a long period of time, affecting distributional outcomes.

Another way to characterize these differences is offered in the theoretical literature of comparative competition law, which is based on the optimal enforcement models of Becker and Landes.[25] Optimal enforcement theory implies that the optimal antitrust enforcement policy should reduce monopolizing firms' incentives to inflect harm on consumers. One way to reach optimal deterrence, according to Landes' model, is to internalize consumer harm (i.e. pay back), while another is to eliminate the expected profits from the anticompetitive conduct in hopes of deterring the behaviour altogether (i.e. prevent gains).[26] According to Blair and Sokol, these two options manifest themselves in the two different legal models: US antitrust (internalize consumer harm) and the EU competition policy (complete deterrence). They further argued that the choice may reflect a public welfare mechanism.[27] In other words, how the law is enforced (e.g. legal standard of abuse of dominance) could incorporate social goals even if, formally, they are not specified directly in the EU regulation.[28]

A third and last comparative viewpoint on the two models is reflected in the differences between their institutions of enforcement. US competition law is a criminal–legalistic system centred around the Supreme Court.[29] Recent evidence supports the argument that the Supreme Court has been shifting to suppress the antitrust movement,[30] potentially heralding a drift towards less (USA) interventionist policy. In contrast to this approach stands EU competition law, with its public administrative–bureaucratic focus on wider policy goals and its higher appetite for enforcement.[31]

These three comparative viewpoints support the hypothesis that countries that follow the US antitrust law model might be associated, overall, with higher levels of market power and, as a result, with higher levels of inequality. In Figure 2, we plot a recent estimate of markups for a group of 20 OECD countries between 1985 and 2017. The figure shows that the countries (mainly Australia, Canada, Ireland, Japan, and New Zealand) that are closer to the US model of antitrust also saw some of the largest rises in markups. Excluding Canada, which only shows a

[22] Eleanor M Fox, 'US and EU competition law: A comparison', Global Competition Policy (United States: The Peterson Institute for International Economics, 1997), at 339.

[23] Peter A Hall and David Soskice, *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford: OUP, 2001).

[24] Anu Bradford et al., 'The Global Dominance of European Competition Law Over American Antitrust Law', 16 (4) Journal of Empirical Legal Studies (2019), at 731, at 733–734.

[25] Becker, 1968; Landes, 1983.

[26] See Blair and Sokol, above n 20, at 19–22.

[27] Ibid, at 27.

[28] Roger J Van den Bergh, *Comparative Competition Law and Economics* (Edward Elgar Publishing, 2017, United Kingdom).

[29] Earl E Pollock, 'Antitrust, the Supreme Court, and the Spirit of '76', 72 Northwestern University Law Review (1977), at 631; Keith N Hylton, *Antitrust Law: Economic Theory and Common Law Evolution* (Cambridge University Press, 2003, United Kingdom), at 48–49; Robert H Lande and Joshua P Davis, 'Benefits from private antitrust enforcement: an analysis of forty cases', 42 USFL Rev 879 (2007), at 906; Michael J Trebilcock and Edward M Iacobucci, 'Designing competition law institutions: values, structure, and mandate', 41 Loy U Chi LJ (2009), at 455; David Ramsey, *Antitrust and the Supreme Court* (LFB Scholarly Pub., 2012, United States), at 1–6.

[30] Filippo Lancieri, Eric A Posner, and Luigi Zingales, 'The Political Economy of the Decline in Antitrust Enforcement in the United States', *Forth. Antitrust Law Journal* (2023), at https://www.ssrn.com/abstract=4011335.

[31] Pablo Ibáñez Colomo and Andriani Kalintiri, 'The Evolution of EU Antitrust Policy: 1966–2017', 2 The Modern Law Review 83 (2020), at 321. Anu Bradford, Adam S Chilton, and Filippo Maria Lancieri, 'The Chicago School's Limited Influence on International Antitrust', 87 (2) University of Chicago Law Review (2020), at 297.

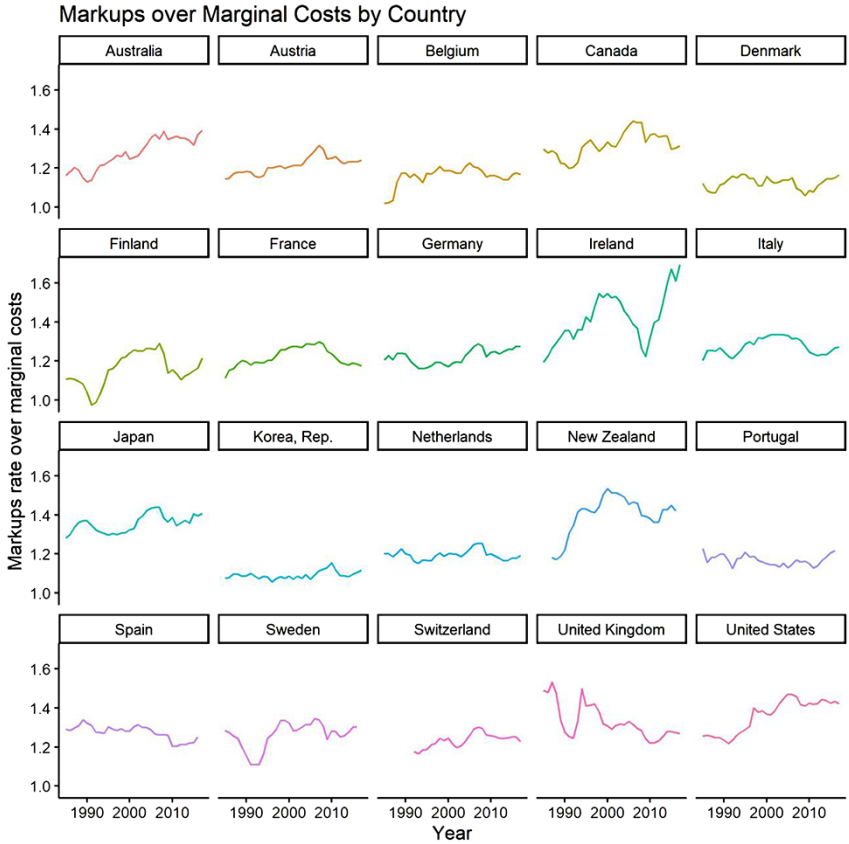

Figure 2. Markups over marginal costs by country, between 1990 and 2010.

Note: Markups measure the ratio of price over costs. On the *y*-axis, the ratio for 1985 until 2017 is aggregated per country. Markups estimations from Schreyer and Zinni (2020), author elaborations.[32]

small increase in markupssince 1985 and 2017, the rest of the group shows a big change between the observed years. These findings are also consistent with De Locker and Eeckhout's global analysis.[33]

Clearly, other factors influence these ratios and therefore require a subtle econometric analysis. Yet this descriptive picture supports the intuition that some cross-country differences might be at play in addition to global economic forces such as trade and technology. Next, we explore our chosen proxy for model of law: text similarity.

B. Similarity in text as a proxy for the US model

Ideally, we would prefer to use a qualitative approach to determine the roots and *de facto* elements of the competition law models' adoption by countries. However, such an approach requires significant resources to reach a wide enough dataset of countries and years required

[32] Paul Schreyer and María Belén Zinni, 'Productivity Measurement, R&D Assets, and Mark-Ups in OECD Countries', Rev Income Wealth (2020), at roiw.12492.

[33] Jan De Loecker and Jan Eeckhout, *Global market power*, 0898–2937 (National Bureau of Economic Research, 2018), at 7.

for an econometric study. Alternatively, one can use a leximetric dataset that captures competition laws, such as Hylton and Deng's[34] competition law measure or the Competition Law Index (CLI) developed by Bradford and Chilton.[35] Yet, for our purpose, relying on a scope measure (like the CLI) is ineffective. Scope measures are limited in their ability to predict policy outcomes over time. For example, in many of these indexes, the scope of US antitrust continued to expand between 1980 and 2010, while the legal discourse clearly points to the decline of the antitrust movement.[36]

The empirical analysis relies on the similarity of legal text language as a proxy for the model of law. Similarity of legal text language is a standard method to document the spread of laws.[37] If there is a similar language in two jurisdictions' laws, the later adopter may have borrowed from the earlier adopter.[38] Bradford, Chilton, and Lancieri also showed that similarity in text can be a useful tool to group countries based on legal influence in the context of competition law models.[39] In order to increase the robustness of results, this article adds qualitative analyses to the text language similarity, helping to minimize errors resulting from false positives while still enjoying the approach's main benefits. For example, the appendix hosts a short, descriptive legal analysis on three key countries—Ireland, New Zealand, and Japan—which are recognized by the similarity proxy. As explained in the next section, these countries included textual similarity to the USA in one of the main areas of law (cartel, merger, or dominance).

Employing this similarity method leads to a recognition of 10 countries as similar to the USA in their antitrust regime: Australia, Canada, and Japan are all similar to the USA for the entire time series, while Estonia, Ireland, Lithuania, New Zealand, Poland, and Slovenia all copy US antitrust law after the 1970s. We consider a country as 'treated' if it has any similarity to the US antitrust text after 1972, based on other studies marking the turning point on US antitrust.[40]

Finally, we used a placebo model to further test the text similarity proxy, checking if the definition of treatment is statistically different from a placebo similarity effect using indicators from comparative law studies of the 'origin of law'. This means that if the observed results come from a shared confounder (i.e. legal origin), the placebo test should be able to capture it.

The remainder of the paper presents the data and empirical estimations of the link between the model of law using text similarity as a proxy and economic inequality. As mentioned above, the main hypothesis is that the US antitrust law model should be associated with higher economic inequality. As such, countries that resemble the US model—like Japan, for example—should also have higher economic inequality than those following the EU model, all other things being equal.

[34] Keith N Hylton and Fei Deng, 'Antitrust around the world: An empirical analysis of the scope of competition laws and their effects', 74 (2) Antitrust Law Journal (2007), at 271.

[35] See Bradford and Chilton, above n 6, at 402. Besides a dummy variable of the enactment of the laws, the CLI quantifies the essential elements of the authority granted to regulate competition and the substance of competition laws that are in force in each jurisdiction in each year since the country introduced its first competition law. They aggregated the elements into an overall index that can be used to measure the scope of competition regulation (the net regulation or risk associated with it).

[36] See Lancieri, Posner, and Zingales, above n 30.

[37] David S Law and Mila Versteeg, 'The declining influence of the United States Constitution', 87 NYUL Rev (2012), at 762. David S Law, 'Constitutional archetypes', 95 Tex Rev (2016), at 153.

[38] Jack L Walker, 'The diffusion of innovations among the American states', 63 (3) American Political Science Review (1969), at 880.

[39] See Bradford, Chilton, and Lancieri, above n 31.

[40] Vivek Ghosal, 'Regime shift in antitrust laws, economics, and enforcement', 7 (4) Journal of Competition Law & Economics (2011), at 733, studied the pragmatic shift in the US enforcement using statistics of the federal agencies' activities. Ghosal does not assume a breakpoint but instead uses econometric techniques to reveal the structural change date (pp. 751–752). He finds a distinct regime shift in antitrust enforcement during the 1970s, which is consistent with the claims made by Khan and others. This conclusion relies on a compositional change of enforcement efforts; a significant increase in criminal antitrust court cases alongside a decrease in civil antitrust court cases. Even more impressive is the clear decreasing trend apparent when disaggregating the civil cases to sections 1 and 2 of the Sherman Act. For both the aggregated civil cases and the Sherman Act, section 2–1972 is the estimated time point.

IV. METHODS AND DATA

A. Methods

The main estimation parameter for this article is a country's textual similarity to US antitrust laws. In other words, we test the hypothesis that the US model will be associated with higher levels of economic inequality by looking at laws that copy the wording of the Sherman Act. The difference-in-difference (DiD) country–year panel data are based on the binary treatment of similarity to the antitrust law,[41] with the following regression equation:

$$\log(\mathrm{Y}_{i,t}) = \alpha_i + \beta_t + \log(\mathrm{Y})_{i,t-1} + \delta resemb\_us\_after\_1972_{i,t} + \log\left(X'_{i,t}\right) + v_{i,t}$$

The cross-country panel data enable us to link the similarity in the text of the law ($resemb\_us\_after\_1972_{i,t}$) with economic inequality ($\log(\mathrm{Y})_{i,t}$). The similarity data cover the period from 1960 to 2010.[42] The actual time series varies according to the controls included in ($X'_{i,t}$). It includes a minimum of 32 countries from the OECD group, depending on the data's availability. We include country (α_i) and year (β_t) fixed effects, while $v_{i,t}$ represents the error term. The advantage of the DiD model is its ability to capture any country-specific non-varying effects on inequality (e.g. historical determines) as well as global effects (economic shocks). As we explain in the next section, we also try to model the error term by including geographical region time trends ($Region_i * \beta_t$), which allow for time-varying regional differences (to capture, for example, a 'European effect' separately).

All panel data DiD models are based on the parallel trend assumption of the countries selected for comparison, i.e. in the absence of the treatment (similarity here), the average outcomes of treated and control units would have followed parallel paths. Researchers have more confidence in its validity when limiting the sample to homogenous units, which in this case is measured in terms of economic development countries like the OECD (compared to a world dataset, for example). Yet this assumption is often violated. The DiD models are also more easily manipulated by the researcher's specification and choices (e.g. choice of controls). For these reasons, this article also implements a version of synthetic control method (SCM).[43] The SCM is based on the construction of a so-called 'synthetic unit' as a counterfactual unit to assess a state of the world in absence of the treatment. The synthetic unit is a weighted unit of potential control units to approximate the most relevant characteristics of the treated unit in the pre-treatment period. In the period after the treatment, one can estimate the counterfactual scenario of the treated unit by looking at the trend of the synthetic control unit. The intuition behind these methods is matching or correcting for un-parallel trends.

The general SCM (GSC) used here also relaxes the assumption of parallel trends and unifies older SCM with linear fixed-effects models.[44] In short, the GSC model allows for multiple treated units (in our case different countries adopting the antitrust text) and combines two approaches in the literature to deal with assumptions of the DiD model—matching pre-treatment data (the assumption of parallel trend) and modelling the error term with time-varying latent factors, which are not directly observed in the model (the assumption of exogenous treatment).

[41] We do not report the similarity to EU results because it is easier to find an effect resulting from the lower levels of inequality (despite high levels of heterogeneity) apparent in the EU countries. Nonetheless, the results are as predicted by theory, showing a negative correlation between similarity to the EU law and inequality.

[42] Under a conservative assumption, the effect of the similarity criterion is extended to 5 years since the last observation (max 2015).

[43] The method was developed for comparative case studies in Alberto Abadie, Alexis Diamond, and Jens Hainmueller, 'Synthetic control methods for comparative case studies: Estimating the effect of California's tobacco control program', 105 (490) Journal of the American Statistical Association (2010), at 493.

[44] Yiqing Xu, 'Generalized synthetic control method: Causal inference with interactive fixed effects models', 25 (1) Political Analysis (2017), at 57.

These methods have several advantages:[45] first, it allows the treatment to be correlated with the unobserved unit and time heterogeneities under more reasonable assumptions. Second, it generalizes the SCM to the case of multiple treated units (like our case) and variable treatment periods and improves efficiency and interpretability. Third, with a built-in cross-validation procedure, it avoids specification (p-hacking) searches and is thus easy to implement. More information on the method can be found in the online appendix.

B. Explanatory variables

We use Bradford and Chilton's textual laws analysis,[46] which examines the extent to which various national laws replicate the language used in the US (*resemb_us*) and EU (*resemb_eu*) competition laws using human coding. The law is considered to resemble US law if it uses any of the following phrases:

1. 'substantially lessen competition'
2. 'every contract, combination'
3. 'every person who shall monopolize' (*resemb_us_monopolize* is also coded separately).

As described, the empirical analysis is based on the notion that most countries decide to initially 'copy' from either the USA or EU and then develop their own unique set of competition laws over time. However, it is relatively rare for countries to borrow language from both the USA and the EU.

In the OECD database we compiled, only 7% of the observations (country–year) indicate a positive sign for both dummy similarity variables for the USA and the EU, making them *de facto* distinct groups. Only 13% of the observations are similar to the USA model compared to 36% similar to the EU model, with the remaining 44% non-similar to either model. However, as explained, in many of the observations (a country–year pair), a country could have no competition law in place, meaning that 44% is higher than the actual number of unique (no similarity) choices. Figure 3 lists countries and years considered similar to the USA.

Each of the European countries that are mentioned has the EU competition law text sitting above its national law, which applies to almost any major firm operating in the country. As such, the effects of the EU supra-national law are expected to be similar in all EU countries. The focus on national competition texts for European countries allows us to use variation between the two levels. However, we do not ignore the likelihood that inequality would be driven at least as much, if not more so, by applying supra-national (non-US) competition laws and enforcement efforts of the European Commission.

C. Control variables

The database includes various controls typically associated with inequality in cross-country macroeconomic studies.[47] The main source for these variables is the World Development Indicators repository maintained by the World Bank. It includes GDP per capita (in constant US dollars, 2000) (*gdp_pcg*) to capture the level of economic development of a country and the

[45] Ibid; See Abadie, Diamond, and Hainmueller, above n 43, at 405–408.
[46] See Bradford et al., above n 53.
[47] Robert J Barro, 'Inequality and Growth Revisited' (2008) Asian Development Bank Working paper series on regional economic integration www.adb.org/sites/default/files/publication/28468/wp11-inequality-growth-revisited.pdf (visited 2 February 2022); Manthos D Delis, Iftekhar Hasan, and Pantelis Kazakis, 'Bank Regulations and Income Inequality: Empirical Evidence' (2014) 18 Review of Finance 1811; Orsetta Causa, Alain De Serres, and Nicolas Ruiz, 'Can Pro-Growth Policies Lift All Boats?: An Analysis Based on Household Disposable Income' (2015) OECD Journal: Economic Studies 227; Sebastian Jauch and Sebastian Watzka, 'Financial Development and Income Inequality: A Panel Data Approach', 51 Empirical Economics 291 (2016).

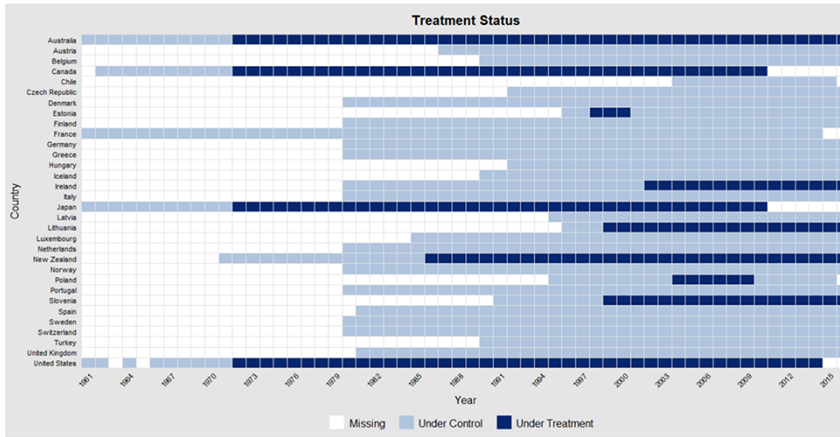

Figure 3. Similarity to the USA.

Note: Treatment (dark squares) is defined by similarity to the US antitrust text post-1972 breakpoint. All other observations are considered part of the control group (light squares), depending on data availability. Missing observations are represented in white boxes.

inflation rate (*inflat*) to control for macroeconomic stability and monetary policy.[48] The total unemployment rate (*unemploy*) is also included. Increased unemployment has been found to disproportionately affect low-income groups and increase inequality, as more workers shift to the bottom of the income distribution.[49] The level of imports (*imp_gdp*) and exports (*exp_gdp*) as % GDP are included separately[50] to control for globalization effects. Public expenditure (*gov_exp*) as % GDP can effectively reduce inequality by improving the living conditions of the bottom income earners through redistributive policies (if efficiently allocated); on the other hand, if the public resources are not wisely employed, inequality might increase. The data also include life expectancy in years (*life_exp*) as a proxy for human capital and level of public services. While education would have been a better proxy and that it plays a crucial role in shaping inequality,[51] the limited amount of data and the presence of several missing values would have further reduced the size of the sample. In addition, life expectancy is strongly and positively correlated with education.[52] Gross capital formation or physical investment (*inv*) as % GDP is another control that captures differences in how the rate of returns of human and physical capital interacts with inequality over time.[53]

[48] The effect of inflation on inequality is ambiguous—see, for example, Olivier Coibion et al., 'Innocent Bystanders? Monetary Policy and Inequality', 88 Journal of Monetary Economics 70 (2017); Davide Furceri, Prakash Loungani, and Aleksandra Zdzienicka, 'The Effects of Monetary Policy Shocks on Inequality', 85 Journal of International Money and Finance 168 (2018). Inflation can be costly and harmful for the poor, who hold more illiquid assets. When prices increase, the real value of wages and cash decrease, while the value of financial assets (mostly held by the wealthy groups) increase, making the rich better insured and protected against uncertainty. However, lower interest rates can benefit borrowers (middle-class households with fixed-rate mortgage debt) to the detriment of savers. See Matthias Doepke and Martin Schneider, 'Inflation and the Redistribution of Nominal Wealth', 114 Journal of Political Economy 1069 (2006).

[49] Bradford M Van Arnum and Michele I Naples, 'Financialization and Income Inequality in the United States, 1967–2010', 72 American Journal of Economics and Sociology 1158 (2013).

[50] Max Roser and Jesus Crespo Cuaresma, 'Why Is Income Inequality Increasing in the Developed World?' 62 Review of Income and Wealth 1 c(2016).

[51] David Coady and Allan Dizioli, 'Income Inequality and Education Revisited: Persistence, Endogeneity and Heterogeneity', 50 Applied Economics 2747 (2018).

[52] The *life_exp* proxy is highly correlated with the education measure ($\rho = 0.85$) and there is sufficient data for the required time periods of the analysis.

[53] Oded Galor and Omer Moav, 'From Physical to Human Capital Accumulation: Inequality and the Process of Development' (2004) 71 Review of Economic Studies 1001. According to this model, in the initial phase of industrialization, physical capital tends to be the main booster of economic growth (also ensuring a higher rate of return), exacerbating income inequality as the

Lastly, we control for technological investment by including gross domestic spending on research and development investment (*tpc_gcp*) to proxy the countries' technological progress.[54] Unfortunately, this measure is only available for a short timespan (after 1980) and for a small number of countries compared to other controls. Given the aggregation levels of the data, and the limited cover of the proxy, we do not expect it to capture capital-augmenting technology or automation changes to their fullest extent.

D. Dependent variables

The dependent variables are the income shares accumulated by the top 1 and 10 percentile. The data are taken from the WID. The WID project combines different data sources—national accounts, survey data, fiscal data, and wealth rankings—in one of the larger inequality research projects in the world. Table 1 provides summary statistics of the control and dependent variables:

V. RESULTS: COMPARATIVE ANALYSIS OF THE US MODEL

A. DiD results

Table 2 presents a summary of the panel data results, using similarity to the US Sherman Act with the two income share indicators between 1990 and 2015. It presents results for three specifications—fixed effects only, fixed effects with geographical time trends, and both in addition to a lag of dependent variable (autocorrelation).[55] All specification includes the list of controls mentioned above.

The similarity to the Shearman Act is positive in all of the models with statistical significance ($\alpha < 0.05$ for the top 1 income share and $\alpha < 0.1$ for the top 10 income share), suggesting that competition laws whose text resemble that of the USA are linked to a higher level of economic inequality.[56] Full results are available in Supplementary Appendix Table A1 of the online appendix.

The shift from a non-US competition law text to a law similar to the Sherman Act wording is associated with an increase in the top 1 income share, supporting the notion that a US model is more inclined towards income inequality. Again, we do not see this result as a causal link but a correlation that requires further investigation. The main problem with this estimation is that our treatment assignment is not random. The similarity to the US model comes with many other uncontrolled similarities.

As explained, fixed effects for year and country help limit these concerns alongside the controls for the classic alternative explanations, but they do not solve the concerns from omitted variable bias, as further explained in section VI. However, due to the possible link between the adoption of a US antitrust model and other political and institutional preferences, this method cannot fully distinguish the causal connection between the choice of model and economic inequality. In other words, a selection bias (an institutional bias broader than

poor have a lower marginal propensity to save. As the economy develops, the rate of return of human capital increases, making human capital accumulation the main engine of growth.

[54] Daron Acemoglu, 'Labor-and capital-augmenting technical change', 1 Journal of the European Economic Association 1 (2003), at 1.

[55] The three specifications are aimed to capture economic cycles: year fixed effects capture the global trend; the geographical time trends are a powerful (but inefficient) tool to address economic shocks affecting regions; the lag of the dependent variables (top 1 and top 10 income share) is designed to capture the persistence of inequality (past observations explain future trend).

[56] Top shares are also correlated with GDP growth (as the economy expands, the shares at the top increase). The other controls' sign is consistent with the literature, government expenditure is negative, and unemployment and imports are positive. Note, government expenditure is used as an explanatory variable to go around issues of tax evasion. Yet, taxes can include both progressively collected taxes (e.g. income tax) and regressive taxes (e.g. VAT taxes), which have contrasting impacts on inequality. Hence, changes in the tax mix changes, affect inequality in ways that are not picked up by a government-spending variable. For this reason, we also use the income, profits, and capital tax burden as a sensitivity test for our results, yet the results in Table 2 remain the same with the treatment effects positive and statistically significant in columns 1–5.

Table 1. Summary Statistics

Control variables	Num. Obs.	Mean	Std. dev	Q1	Median	Q3	IQR	Source
gdp_pcg (growth)	1851	2.55	3.23	0.94	2.43	4.24	3.29	World Bank
inflat (price inflation)	1994	11.72	52.92	1.96	3.60	8.28	6.32	World Bank
unemploy (unemployment)	1073	7.88	4.20	4.80	7.06	9.93	5.13	World Bank
imp_gdp (imports)	1738	35.81	22.29	21.39	30.52	43.50	22.09	World Bank
exp_gdp (exports)	1738	36.31	26.10	20.11	29.51	44.73	24.60	World Bank
gov_exp (government)	1764	17.89	4.89	14.79	18.24	20.92	6.13	World Bank
life_exp (life expectancy)	2179	74.15	5.36	70.87	74.38	77.98	7.11	World Bank
inv (capital formation)	1738	24.18	5.00	21.01	23.58	26.84	5.83	World Bank
tpc_gcp (technology investment)	1070	1.66	0.92	0.93	1.58	2.27	1.33	OECD
Dependent variables								
Top 1 (1% income share)	1116	0.09	0.04	0.07	0.08	0.10	0.03	WID
Top 10 (10% income share)	1102	0.31	0.07	0.27	0.29	0.33	0.06	WID

Table 2. Top income share, similarity to the US Sherman Act

	Dependent variable:					
	Top 1% income share			Top 10% income share		
Similar text the USA	0.063*	0.067**	0.048**	0.034*	0.035*	0.014
Observations	528	528	526	528	528	526
Fixed effects	YES	YES	YES	YES	YES	YES
Geographical region time trend	NO	YES	YES	NO	YES	YES
Autocorrelation	NO	NO	YES	NO	NO	YES

Note: Errors are clustered by country.
***p < 0.01, **p < 0.05, *p < 0.1.

competition law) or even reverse causality[57] limits the interpretation of the results. Supplementary Appendix Table A1 in the appendix includes the full results, with additional models and sensitivity analysis that diminish but do not fully rule out these potential alternative explanations.

B. GSC results

The key features of the GSC models create a synthetic—that is, an artificial, statistically generated control group—that can be used as a benchmark for counterfactual analysis. In doing so, they are a complementary technique that can help researchers identify causal links in areas where other methods to estimate counterfactuals are not available/ideal. GSC models are based on three stages: first, the time-varying latent factors for the model are estimated based on all the countries included in the pre-treatment periods. Following the analysis, the treated countries' counterfactuals are giving actual weights based on the control group, i.e. estimating the synthetic units. Finally, the effect estimated by the model is the comparison between the predicted outcome of the syntactic unit (the counterfactual) and the observed data of the treated units.

The GSC method's primary assumption is that there are no spill-over effects between the treated and control groups (stable unit treatment value assumption), which is a reasonable assumption in the context of our inquiry. We use the GSC for eight treated countries in our OECD sample group (Australia, Canada, Ireland, Japan, New Zealand, Poland, Slovenia, and the USA) as we had to drop Estonia and Lithuania due to there being too few pre-treatment data points to calibrate the model.

First, we run the model without any controls. The results are positive and significant, with an estimated effect of 0.13 (***p value $\sim$ 0). Next, we included three controls only (as the algorithm does not support missing values) to maximize the number of observations using log-log transformation for consistency with the DiD models: government expenditure, GDP per capita growth, and inflation. With this specification, we report the top 10 income share graphically as the dependent variables. The top 1 income share results are similar and consistent, but as with the DiD model less statistically significant. All of the results are summarized in Supplementary Appendix Table A3 of the online appendix.

The GSC estimates (Figure 4) an increase in the top income share as a long-term effect of the US antitrust similarity. Both the average treatment effect (ATE) and the Ireland example show a positive correlation between the US text similarity criterion and an increase in the top income shares.

[57] In this case, reverse causality would suggest that countries that are more inclined to economic inequality choose a form of competition law that seems less intrusive.

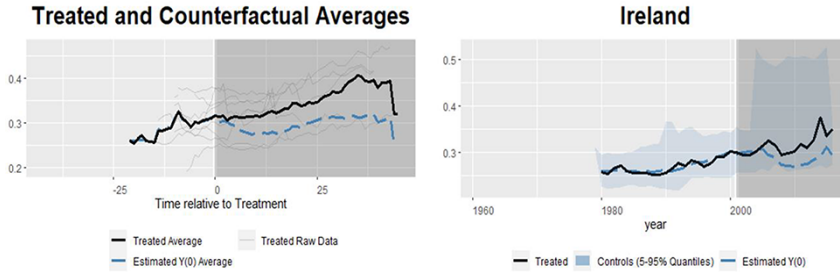

Figure 4. 10% income share similarity to the US model, Expectation Maximization (EM) algorithm, and OECD.

Note: Author's estimation, GSC model. On the left, ATE for all treated units; on the right, treatment effect for Ireland only. The light colour lines represent the raw data, while the bold line is the dependent variable, logarithm of the top 10% income share for the treated. The dashed line represents the Y zero counterfactual (the same unit/average without treatment trend).

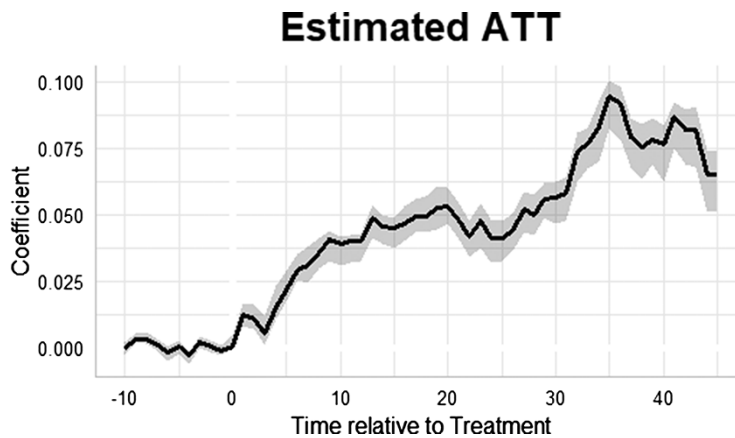

Figure 5. 10% income share, similarity to the US model.

Author's estimation, GSC model. The long-term estimated coefficient of similarity to the US antitrust and top 10 income share. The coefficient is positive in the sample, showing a positive increase over time (from treatment) averaged for all treated units per year. The light colour area around the bold line represents a 95% confidence interval.

The ATE on treated (ATT) is 0.0434 (SE, 0.002; ***p value < 0.01), which is higher than the 0.035* found in the DiD model (Table 2, column 5), but the key is that the coefficient estimate remains positive and stable across the years (Figure 5).

The appendix includes the list (Supplementary Appendix Table A2) of weights used in the analysis for Ireland, Japan, and New Zealand. We add sensitivity tests using alternative specifications for the GSC in the online appendix, and results from all models are summarized in Supplementary Appendix Table A3.

We also run a placebo model as another way to test our proxy for the model of law (similarity in legal text). The idea behind placebo testing is similar to the classic terminology used in testing new pharmaceutical drugs: a non-treatment ('sugar pill') is expected to show no effects on economic inequality. In this case, a treatment proxy that is unrelated to the main hypothesis of this article will be used as the placebo. We used the legal origin literature[58] to create two placebo

[58] Daniel M Klerman et al., 'Legal origin or colonial history?' 2 Journal of Legal Analysis 3 (2011), at 379. We use the 'LO' variable, which is Kerman et al. (2011)'s coding of legal origins, and the 'CO' variable, which is their coding of colonial power.

treatments for the countries of 'Common law' and 'British' colonial power. We re-run the same model as above, changing the treatment definition based on these two variables (instead of similarity to the US antitrust). The results show no effect for the placebo treatment group, supporting the main findings in this section: it is similarity to the US antitrust model, not another older relationship to the British legal system, which drives the correlation with inequality data. The results are detailed in the online appendix.

It is important to acknowledge that the number of treated countries in our dataset is small (eight in most models). This presents a very narrow picture. Yet, the advantage of using similarity to the US model is that the textual similarity is closer to an exogenous variable than other law measures, such as scope or number of antimonopoly cases. All in all, both the findings from the difference–indifference and the findings from the GSC models support the hypothesis that the US model of law is associated on average with higher levels of income inequality. We discuss some of the implications of these findings next.

VI. REGULATORY COMPETITION AND COOPERATION

Competition laws around the world converged towards the two models of law analysed in this paper. One possible reason for this process (i.e. internationalizing of economic law into two models of law) stems from the hypothesis that nations design or use their laws to attract trade, investment, or the establishment of business away from their neighbours and that minimizing the costs associated with regulatory burdens is a lead way to do so. Such process is often referred to as regulatory competition[59] and could lead to a race between nations. In the context of antitrust and competition laws, it has been argued that the laws create marginal incentives for firms as 'competition laws normally govern not only the conduct of firms within that jurisdiction, but also the conduct of firms located outside of the jurisdiction that harm competition within the jurisdiction.'[60]

This paper emphasized the ways in which the US and EU models are different in both policy goals and conflicting understandings of the role and extent of competition law enforcement. Previous work suggested that further attempts for internationalization of competition law are prone to failure.[61] One might ask, is it the end of the harmonization process of international competition law? One possibility that has been generalized by scholarship in this area is that as different antitrust models compete, a natural equilibrium will develop. This would be because firms would primarily face compliance costs that multiple as regimes differ and not directly from a particular model of law versus another. Under these circumstances, the stricter competition law model would prevail.[62] Indeed, one can see that the EU model of law has spread over the last decades, marginalizing the US antitrust laws to a narrow group of countries.[63] It has been argued that the EU was more successful in spreading EU competition laws for several reasons, including their use of the desire to gain access to EU economic markets ('The Brussels Effect')

[59] Richard Revesz, 'Rehabilitating Interstate Competition: Rethinking the "Race to-the-Bottom" Rationale for Federal Environmental Regulation',67 New York University Law Review 1210 (1992).

[60] Eleanor M. Fox, 'Antitrust and Regulatory Federalism: Races Up, Down, and Sideways', 75 New York University Law Review 1781 (2000), at 1789. Even if we regard some countries laws' as 'efficiency' laws and some as 'fairness' laws as Professor Fox suggested, the incentives of countries to follow the Antitrust model, i.e. efficiency model by degrading their laws would be minimal. I use 'bottom' and 'top' here as defined by Fox, although the argument of what is an optimal law for firms and countries is practically impossible to define.

[61] Anu Piilola, 'Assessing Theories of Global Governance: A Case Study of International Antitrust Regulation', 39 Stanford Journal of International Law 207 (2003), who argues that to advance international competition laws a global governance regime must incorporate different aspects of cooperation: intergovernmental (e.g. WTO), trans-governmental (e.g.), and non-governmental institutions (e.g. OECD). The lack of a global governance could also be a game theoretic deadlock between countries. See Anu Bradford, 'International Antitrust Negotiations and the False Hope of the WTO', 48 Harvard International Law Journal 383 (2007), who uses game theory to explain why such global coordination fails again and again, regardless of the mechanism.

[62] Anu Bradford, 'International Antitrust Cooperation and the Preference for Nonbinding Regimes' in *Cooperation, Comity, and Competition Policy* 16 (2011).

[63] See Bradford et al., above n 53, at 733–735.

and the diversity of policy goals in EU model. Adopting countries preferred to 'defer less to markets and more to governments in their ability to correct market failures.'[64]

This article provides some suggestive evidence backing this general line of inquiry, but one that is focused on potential welfare gains which are associated with the different available models. If the EU model is associated with lower levels of inequality (regardless of the causal mechanism), this might persuade countries trying to diminish this inequality that a versatile toolbox could work for their advantage. In the current global inequality crisis, the EU competition law model may even drive a 'race to the top' that pulls US-style legal systems, including US antitrust, by encouraging them to expand the scope of laws and their appetite for enforcement. This would lead to a more harmonized global regime based on the EU model of law.

VII. CONCLUSIONS

While scholars recognize the distributional effects of market power,[65] most economists have generally eschewed making judgements on their second-order consequences, arguing that there is no objective way or conceptual apparatus to assess how the gains should be distributed.[66] There is also a view that assigning weights to different society members involves 'political' or 'social welfare' judgements on which economists have no expertise.[67] Some even see uneven distributions as a necessary outcome of the competitive process. While abstracting from distributional issues can aid analytical tractability, there is no reason why these topics should not be the focus of systematic inquiries.

This paper provides one of the first attempts to examine the link between competition laws and economic inequality from a legal comparative viewpoint. It makes two main contributions.

First, countries that are similar to the USA in terms of their competition law text are more likely to exhibit high inequality trends. These findings suggest that some regulatory choices, which are essential parts of the antitrust model, might be associated with less competition and higher inequality. The paper's findings are consistent with the differences we observe between countries in the intensity of competition of their internal markets.[68] Studies that explore the trends over leading EU countries show that overall, the rise of market power (measured by concentrations levels or markups) and the decline of market dynamism is less dramatic than the trends observed in the USA.[69] These findings are also consistent with the legal work on the paradigmatic shift, which occurred in US antitrust.[70] While the multifaceted nature of the questions prevents a clean identification that fully distinguishes other possible interpretations of the results presented herein, the growing economic literature on market power effects on the labour share and economic inequality provides further general backing to the positive link between the antitrust similarity proxy and economic inequality.

Second, our findings support the line of inquiry that explains both the convergence towards two diverse models of competition law (USA and EU) and the current momentum of the EU

[64] Ibid, at 735, 757–758.

[65] Alan A Fisher and Robert H Lande, 'Efficiency considerations in merger enforcement', 71 Calif Rev (1983), at 1580.

[66] Oliver E Williamson, 'Economies as an antitrust defense: The welfare tradeoffs', 58(1) The American Economic Review (1968), at 18.

[67] William J Baumol and Dietrich Fischer, *Superfairness: applications and theory* (MIT Press, 1986, United States).

[68] Germán Gutiérrez and Thomas Philippon, 'How EU Markets Became More Competitive than US Markets: A Study of Institutional Drift' (2018) National Bureau of Economic Research Working Paper 24700 https://www.nber.org/papers/w24700 (visited 31 January 2022).

[69] Maria Chiara Cavalleri et al, 'Concentration, market power and dynamism in the euro area' (2019); Matej Bajgar et al, 'Industry concentration in europe and north america' (2019); John P Weche and Achim Wambach, 'The fall and rise of market power in Europe', Jahrbücher für Nationalökonomie und Statistik (2021). One exception is the study by Sean F Ennis, Pedro Gonzaga, and Chris Pike, 'Inequality: A hidden cost of market power', 35(3) Oxford Review of Economic Policy 518 (2019), at 529, who finds excess markups for France, Germany, South Korea, and Spain, which are almost twice as much as estimates for the USA and Japan for example.

[70] See Lancieri, Posner, and Zingales, above n 30.

model in the global arena. The diversified set of goals and tools (i.e. the remaining differences between the models) could be meaningful and reflect a wider association between the choice of competition law model sustainability goals (i.e. reducing inequality).

Still, it is always important to recognize that the empirical analysis of the model of law relies on factors that are not exogenous. In other words, omitted variable bias could affect the results. For example, there may be missing variables such as market 'ideology' or democratic process related to the model of law chosen and, simultaneously, to the market outcomes.[71] Because of this, it is hard to disentangle the effects of broader ideological influences from the effects of the antitrust regime. At the minimum, if the antitrust text is nothing more than a proxy for a laissez-faire ideology, countries following such an ideological approach may also be the ones that experience greater degrees of inequality—this is already an important observation concerning market mechanisms. The efforts to find a link between competition law and other macroeconomic performance factors (e.g. growth) have long had substantial difficulty achieving compelling results, so it is not surprising to find a similar difficulty with relation to economic inequality.

All in all, this article represents an important step in our understanding of the links between competition law models, economic inequality, and global governance regimes—one that echoes other work being done in this and its associated fields. It also provides an important stepstone for further inquiries into this field that can better disentangle the causal links between competition laws and economic inequality at a more disaggregated level.

SUPPLEMENTARY MATERIAL

Supplementary material is available at *JIELAW* online.

[71] Allen Michael O., Kenneth Scheve, and David Stasavage, 'Democracy, Inequality, and Antitrust' (2021).