

# The variety of regulatory regimes

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## Abstract

This paper presents an empirical account of the diversity of regulatory developments over the past fifty years, and provides a theoretical framework for understanding this diversity. We build upon the “varieties of capitalism” and the “regulatory capitalism” literatures which provide methods for exploring institutional diversity, and hypotheses about the causes of regulatory diversity. We build a theory of political entrepreneurship under fiscal constraints that expands Stigler’s (1971) account of the demand and supply of regulations by including deficit finance and public opinion in the analysis. This framework (a) allows the creation of country-specific analytic narratives, and (b) provides a fuller account of government crowding-out and crowding-in effects, showing how the crowding-out can occur across the entire structure of production.

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“The central tasks of the theory of economic regulation are to explain who will receive the benefits or burdens of regulation, what form regulation will take, and the effects of regulation upon the allocation of resources.” (Stigler 1971)

## 1 Introduction

Fifty years ago, George Stigler (1971) published one of the most fruitful papers in the history of public choice and economics more broadly. Alongside the theory of rent-seeking (Buchanan, Tullock, and Tollison 1980) and of rent-extraction (McChesney 1987, 1997), Stigler’s theory has provided critical insights for trying to understand policy developments in advanced capitalist democracies, and spurred a very large follow-up literature (Peltzman 1993; Bó 2006). Some of the conclusions of this follow up literature are surprising, and, to some extent, contrary to Stigler’s original intent. In this paper, we focus on one of these surprising developments — how the economic theory of regulation has changed the practice of political entrepreneurship. This focus on political entrepreneurship allows us to better explain the regulatory variation between countries, as Stigler’s theory predicts too much cross-national uniformity.

Originally, Stigler (1971) provided an account of how and why regulated firms can benefit from being regulated, and, as such, capture the regulatory bodies. He argued that “as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit,” and rejected the view that regulation is “thrust upon” industry and “instituted primarily for the protection and benefit of the public at large or some large subclass of the public.” Stigler’s account provides an explanation for many instances of economically inefficient regulatory restrictions, as well as for some instances of deregulation, when deregulation happens to benefit incumbent firms (Peltzman 1976, 1989). McChesney (1987) later argued that we can still build a theory of how regulation is thrust upon industry, without assuming regulators are acting in the public interest. Regulatory bodies can use the threat of regulation to extract rents from industry.

One key conclusion of these theories of regulatory capture, rent-seeking, and rent-extraction

is that there is no necessary connection between the enacted regulatory policies and economic efficiency. In fact, the most likely effect is inefficiency. What happens if *politicians* start believing this? As Stigler (1971) himself noted, the democratic system “is calculated to implement all strongly felt preferences of majorities and many strongly felt preferences of minorities but to disregard lesser preferences of majorities and minorities.” His focus is on how this disregard of lesser majoritarian preferences makes regulatory capture possible. But what about the strongly felt preferences?

Two things that large majorities strongly prefer are (a) expensive government provided public services and (b) low taxes. Catering to such preferences will obviously lead to significant fiscal problems for the state. This seems like an impossible situation, until one recognizes that the general public has much less knowledge and weaker preferences about regulatory matters. As pointed out by Vogel (1996, 40), the public choice critique of regulatory policy was adopted by various politicians across the political spectrum as “a rhetoric of cutting waste and eliminating inefficiency.” Especially in the context of large fiscal deficits, politicians recognized deregulation as a possible “way to turn a political liability into an asset,” and, “to the extent that regulations hamper business productivity, deregulation promises to improve economic performance without any increase in government expenditure” (Vogel 1996, 40). In other words, if deregulation works as advertised, increasing growth and leading to larger government revenues, expensive public services could be maintained, maybe even without increasing taxes.

Furthermore, ideologically, deregulation came “linked to privatization, a policy that actually *produces* revenue with no visible cost to the taxpayer” (Vogel 1996, 41). This has led to some unexpected situations, like the French socialist government deregulating financial markets, against the strong opposition from the French banking sector (Vogel 1996, 237–40; Aligica and Tarko 2015, 74–75), and the Scandinavian social democracies becoming some of the most deregulated economies in the world and privatizing (Bergh 2011). “Ironically, by successfully propagating their critique of regulation, these economists undermined their own theory of the politics of regulation. Stigler and his colleagues had in effect sought to explain why policymakers were not listening to them — only to find that these leaders had started

listening.” (Vogel 1996, 14)

The interactions between fiscal constraints, public opinion, and rent-seeking can lead to substantial diversity across countries. The simple rent-seeking and regulatory capture theory cannot fully account for these differences because “interest groups alignments were roughly similar across countries and yet policy outcomes were strikingly different” (Vogel 1996, 16). Similarly, the view that the structure of capitalism is primarily determined by the interests of employers, a common view within the varieties of capitalism literature, leads to the conclusion of institutional convergence and “an erosion of the arrangements that have distinguished coordinated political economies in the past” as “employers everywhere seek to extend the reach of the market” (Thelen 2014, 3). According to this view, “employer pressures for greater flexibility . . . , notably collective bargaining, have led to a corrosive effect on coordination and social solidarity,” and “globalization and the attendant decline in organized labor’s power, as well as the resurgence of neoliberal ideology, bode very ill for the future of coordinated, egalitarian capitalism” (Thelen 2014, 3). However, as argued by Thelen (2014) and others, this assumption of institutional convergence does not fit the facts, partly because the class warfare assumption is mistaken, “many of these [labor] arrangements were forged out of class-class coalitions” (Thelen 2014, 3), and partly because it underestimates the importance of popular opinion in the working of democracy. Instead of the simple regulatory capture model, in which big firms determine the nature of the economic system, we need to acknowledge that “[s]tate actors have preferences that cannot be reduced to the most powerful groups in society and they frequently act on these preferences” (Vogel 1996, 16). In other words, we need to build a better entrepreneurial account of politics, which gives weight both to rent-seeking and to popular opinion (Tarko 2015a).

In the next section we introduce the “regulatory capitalism” perspective on the policy evolution in advanced capitalist democracies, a perspective that provides an empirically grounded counter-narrative to the “neoliberalism” narrative based on ideology. As argued by Aligica and Tarko (2015) and Tarko and Farrant (2019), the claim that regulatory developments are explained by the ideological ascent of “neoliberalism” is dubious at best. Can we provide a better explanation?

In section 3 we give an empirical account of cross-national regulatory diversity, explaining the difference between the *national patterns approach* (NPA), which assumes that countries as a whole tend to adopt different policy packages, and the *policy sectors approach* (PSA), which assumes that regulatory diversity occurs across different sectors of the economy, with national borders being less relevant. As we will show, there are indeed significant cross-national differences and patterns. Understanding these cross-national differences requires in-depth case studies.

In section 4 we provide a framework for building such case studies. We build a model of political entrepreneurship based upon Richard Wagner’s idea of “politics as a peculiar business” (Wagner 2016, see also 1966), and upon the distinction between “rowing” and “steering” government interventions, commonly used in the regulatory capitalism literature. This model expands Stigler’s (1971) model of the demand and supply of regulations, by including deficit finance and public opinion in the mix, and allows us to (a) build explanations of both PSA and NPA diversity, and (b) have a fuller account of government crowding-out and crowding-in effects, showing how the crowding-out/in can occur across the entire structure of production.

## 2 Competing narratives: neoliberalism, regulatory capitalism, and roundabout liberalization

Over the past few decades, discussions about the rise of “neoliberalism” have acquired a peculiar position both in the public discourse and in academic debates (Campbell and Pedersen 2001; Burgin 2012; Jones 2012). In policy terms, neoliberalism has been defined as a combination of privatization and deregulation (Lash and Urry 1987; Albert 1993; Przeworski 1995). But, since the 1990s, the word has increasingly been used merely as a catchphrase and as a purely pejorative term losing much of its meaning (Boas and Gans-Morse 2009). Furthermore, the idea that privatization and deregulation truly reflected the recent policy trends has been vigorously challenged on empirical grounds. It seems that, as the reality behind the rigorous meaning of “neoliberalism” is slipping away, the word is increasingly used in a more vague and meaningless manner.

The main counter-narrative to “neoliberalism” is provided by the idea of “regulatory capitalism” (Levi-Faur 2003, 2005, 2006; Braithwaite and Drahos 2000; Jordana and Levi-Faur 2004; Braithwaite 2005, 2008; Jordana, Levi-Faur, and Marín 2011). While the neoliberalism narrative claims there has been a general trend toward smaller government, both in terms of the size of government and in terms of deregulation, the regulatory capitalism narrative claims that there has been a shift in the nature of state intervention, a shift from the state being an active participant and provider of goods and services to the state as regulator. Privatization was accompanied by increased regulatory activities, especially by means of independent regulatory agencies.

A third narrative emerges from the distinction and incongruity between structural changes and outcomes. For example, a common expectation is that if more regulatory agencies are created (structural change), the economy will become more regulated (outcome). In practice, such expectations are often not fulfilled, requiring a deeper political economy analysis. With some exceptions (e.g. Levi-Faur 2003) the literature on regulatory capitalism has focused mainly on the structural features. As noted by Jordana, Levi-Faur, and Marín (2011) in their study of the diffusion of regulatory mechanisms, “diffusion as a process should be separated from the outcomes that it may or may not produce.” As such, the interest in the structural details has led them to “focus not on the observed results but on the endogenous processes that lead groups to converge on ideas, practices and institutions” (Jordana, Levi-Faur, and Marín 2011).

As we review below, while the neoliberal narrative of supposed shrinking of the state and deregulation is indeed seriously challenged by structural developments, it is, surprisingly, partially reflected in the resulting outcomes, especially as far as regulatory matters are concerned. In other words, in terms of outcomes, the world seems indeed to have moved somewhat in the liberalizing direction desired by authors like Friedrich Hayek and Milton Friedman, but it did not do so by listening to their policy and institutional recommendations. It did so in a roundabout and unexpected way and in a way that both the critics of neoliberalism and the people currently working in the classical liberal intellectual tradition are yet to fully appreciate or critically evaluate. This third narrative, focused on the apparent

paradox of “freer market, more rules” (Vogel 1996) is emphasizing mechanisms like regulatory arbitrage (Tarko and Farrant 2019) and political entrepreneurship under fiscal constraints (Aligica and Tarko 2015, ch. 3), as opposed to ideology-driven policy changes. The last section of the present paper builds the most elaborate account of political entrepreneurship under fiscal constraints available to date.

To assess these narratives, we need to explore the policy evolution in different countries across two independent dimensions: size of government and regulations. Within the regulatory capitalism literature, these two dimensions are often referred to as “rowing” and “steering” (Jordana and Levi-Faur 2004; Braithwaite 2005, 2008). We can see them as two distinct methods of intervention. On one hand, there is a “steering” aspect of intervention, i.e. the actions of various market actors are changed in certain desired directions by means of regulations; on the other hand, there is a “rowing” aspect of intervention, i.e. the state is an actual actor on the market providing certain services and either competing with private providers of those services or having a monopoly status.

The neoliberalism thesis assumes that welfare states have experienced a decline of both “steering” and “rowing,” while the regulatory capitalism thesis assumes that the decline in rowing has been accompanied by an increase in steering. As Levi-Faur (2005) put it, we have “more capitalism, more regulation.” The roundabout liberalization narrative, accepts the regulatory capitalism critique of the neoliberalism narrative, while noting that, nonetheless, the outcomes produced by the growing regulatory apparatus are often in a neoliberal direction.

Are the rowing and steering dimensions truly independent? In the empirical analysis below we are going to use the data from the Fraser Institute’s “Economic Freedom of the World” (EFW). EFW aggregates the data into five basic components (Gwartney, Lawson, and Hall 2017): (a) size of government; (b) legal system and protection of contracts and property; (c) freedom of movement for goods and capital; (d) sound money; and (e) regulation. A principal component analysis on these five sub-components leads to the conclusion that the size of government variable is orthogonal on the other four (which in turn are highly correlated with one another) (Tarko 2019). “The first two components . . . cover more than 80 percent of the observed variation. In other words, there are actually only two independent variables. A factor analysis

leads to the same conclusion and reveals that the size-of-government variable is orthogonal to the other.” (Tarko 2019) We will add further empirical details in the next section. We thus have fairly strong empirical evidence to validate the rowing-steering framework. In a cross-country comparison we indeed observe that the size of government and the regulatory burden are changed independently on one another.

The rowing-steering framework can also be used to create a qualitative taxonomy of economic systems, as described in Table 1 (Aligica and Tarko 2014: p. 120), which can be useful in conversation. For example, the Scandinavian economies are best understood as “provider states” rather than “welfare states,” many developing countries are “crony capitalist,” and formerly socialist economies transitioned either to regulatory or state capitalist systems.

Table 1: Taxonomy of economic systems

	<b>Few govt. services</b>	<b>Medium</b>	<b>Many govt. services</b>
<b>Low regulation</b>	Free-market capitalism	Neoliberalism	Provider state
<b>Medium</b>	Crony capitalism	Regulatory capitalism	Welfare state
<b>High regulation</b>	Mercantilism	State capitalism	Socialism

The strongest evidence against the neoliberal narrative and in favor of the regulatory capitalism perspective is found by examining structural changes. Overviewing the last 30 years of institutional developments, John Braithwaite draws the conclusion that “the neoliberal policy package of smaller government privatization and deregulation was never an accurate way of describing what was happening in the US or UK” (Braithwaite 2005). Similarly, studying telecoms and electricity in 32 countries, Levi-Faur (2003) noted that privatization was almost always accompanied by the creation of more or less independent regulatory bodies to control the new markets: “While it might be argued that privatization is intimately connected to a retreat (selling, shrinking) of the state, the creation of IRAs [independent regulatory agencies] might well serve as an indicator of restructure which — paradoxically — reinforces state control over the economy.” The same dual phenomenon of privatization and regulation occurred in other industries as well (Vogel 1996; Braithwaite and Drahos 2000; Gilardi 2004;

Lutz 2004; Levi-Faur 2006).

Although deregulation had indeed happened in some industries, such as air travel in the United States, it “proved to be a limited element of the reforms in governance and where it occurred it was followed either immediately or somewhat later with new regulations” (Levi-Faur 2005). Such developments don’t affect just a few selected sectors. They are broad and general. Based on indicators such as the number of regulatory agencies, the number of employees of regulatory agencies, the regulatory budget and the number of pages of regulatory registers, it seems that the real trend has been of significant *growth*, and not of decline of regulation. For example, over the recent decades the rate by which new regulatory agencies (RAs) have been created across 16 sectors in 49 developed nations grew from about three new RAs per year in the 1970s to seven per year in the 1980s to about 30 per year in the 1990s (Jordana, Levi-Faur, and Marín 2011).

In the United States, the increase in the staffing of Federal Regulatory Agencies grew from about 50,000 in the early 1960s to a peak of 150,000 in the early 1980s, followed by a slight decline to about 100,000 during the Reagan era, but returning to a high level of about 170,000 throughout the 1990s and then sharply increasing to more than 250,000 in the 2000s (de Rugy and Warren 2009). Similarly, the growth of federal government spending on regulation grew from about 3 billion dollars in the 1960s (in 2000 dollars adjusted for inflation) to about 15 billion in the early 1990s to more than 40 billion in the present (de Rugy and Warren 2009). The number of occupations requiring licensing in the United States grew from about 5 percent in the 1950s to almost one in three today (Krueger and Kleiner 2010). More broadly, looking at the growth rate of the Federal Register, we also see that, in the presumed neoliberal period, the additional number of pages per year per million people has been around 200 in the 1980s and 250 from 1990s onward. Al-Ubaydli and McLaughlin (2015) have also analyzed the restrictions in the US Code of Federal Regulations. In 1970, the number of federal restrictions was around 340,000, while in 2014 it overpassed one million.

These policy trends, the retreat of the state from ownership and active management coupled with increased regulatory zeal, are best described by the concept of regulatory capitalism which “represents a new chapter rather than a break in the relations between state society

and economy” (Levi-Faur 2006). This is a non-trivial claim that we are witnessing a significant structural transformation of the democratic-capitalist system. The changes are not conjunctural and superficial; they reach the core governance mechanism of democratic capitalism.

Looking at the other side of the presumed neoliberal package, i.e. redistribution and transfers, authors like Weiss (1998), Swank and Steinmo (2002), and Castles (2004) have shown that welfare state institutions, i.e. government provision of various goods and services, have also been remarkably stable. Brooks and Manza (2007)’s extensive study documents that, while a decline has occurred in some areas, such as unemployment and sickness benefits, almost invariably such changes have been more than offset by increases in government spending in other areas. Looking at the overall government consumption spending we see that “many European countries have actually expanded the size of their welfare states during the 1980s and 1990s developing new entitlement programs or increasing social spending outlays” (Brooks and Manza 2007, 62). In the United States there has been a small decrease in overall social spending during the 1980s, followed by an increase in the 1990s, rising even above the pre-Reagan levels. Many commentators and researchers have been misled by their focus on specific programs which may indeed have been reduced, while neglecting the overall situation. Not only were the “two decades prior to 1980 . . . characterized by substantial increases in welfare spending especially within the social and Christian democracies of Western Europe and (to a slightly lesser extent) among liberal democratic regimes” (Brooks and Manza 2007, 69) but also in the presumed era of neoliberalism “wholesale retrenchment [was] a rare event” (p. 62).

The neoliberal narrative of supposed shrinking of the state and deregulation is thus seriously challenged by the actual structural developments. This being said, a significant puzzle emerges once we look at regulatory *outcomes*. As revealed by economic freedom and doing business indices, the movement is often in the direction of deregulation (Aligica and Tarko 2014; Tarko and Farrant 2019). This creates the puzzle of “freer markets, more rules” (Vogel 1996), which justifies a closer look to roundabout political economy mechanisms for deregulation.

### 3 Institutional diversity

Apart from the rowing-steering idea, the literature on regulatory capitalism has often combined two distinct approaches to the analysis of institutional diversity (Levi-Faur 2006; Jordana, Levi-Faur, and Marín 2011): the National Patterns Approach (NPA) and the Policy Sector Approach (PSA).

NPA assumes that country-level factors take precedent, that “significant diversity across countries” exists, and “suggests that political processes and outcomes are shaped by a country’s unique national and historically determined characteristics embedded in specific state traditions, and that the national-level community of policy-makers has effective control over domestic political processes” (Jordana et al. 2011).

PSA assumes, by contrast, that there may be commonalities across countries with respect to specific policy sectors, and that the main differences are across sectors. PSA “emphasizes . . . the multiplicity of political patterns in any one country” (Jordana et al. 2011). NPA and PSA are not necessarily mutually exclusive perspectives (Levi-Faur 2003).

In what follows, we provide, first, an analysis of institutional and policy diversity, using the NPA and PSA perspectives, and, second, a description of differences in terms of a variety of performance indicators.

#### 3.1 National Patterns and Policy Sectors Similarities

The literature on comparative economic systems is plagued by ad hoc, intuition-based classifications. While this works to some extent (for a good account see Clark 2015), some results can be driven by the asserted categories. In contrast, we follow here a more rigorous methodology (Aligica and Tarko 2015; Tarko 2015b). To create categories and explore similarities and differences between countries in a more rigorous manner, we performed a hierarchical cluster analysis on using the EFW detailed data.<sup>1</sup> The aim of this analysis is to find the similarities between the *trajectories* that countries have had, rather than just their static positions in a given year. As such, each country, is described by a column vector of

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<sup>1</sup>The R analysis is available as supplementary material.

EFW indicators for every five years:

$$Country_X = [EFW_{1970}^{indic_1}, \dots, EFW_{1970}^{indic_{50}}, EFW_{1975}^{indic_1}, \dots, EFW_{1975}^{indic_{50}}, \dots, EFW_{2015}^{indic_{50}}]$$

There are 50 policy indicators in the EFW data (Table 2), and we chose the countries that have the least missing data (less than 35% missing data, amounting to 42 countries). The EFW has data from 1970 to 2000 in 5-year steps, while from 2000 it increases yearly. In order not to bias the analysis to the present, we maintained the 5-year step after 2000 as well, dropping the yearly data.

Two countries trajectories are “similar” if the Euclidean distance between their vectors is small. All EFW data is normalized from 0 to 10, which gives equal weight to all indicators. The hierarchical cluster analysis calculates the distances between all the pairs of countries, and then builds the similarity tree. If two countries are shown closer together in the tree, it means their policy trajectories from 1970 to 2015 have been more similar.

Table 2: Fraser’s Economic Freedom of the World indicators, summary statistics

Indicator	Percent Missing	Mean	Std.Dev.	Range	Skew
government consumption	0.00	5.58	1.99	9.35 (0-9.35)	-0.45
transfers and subsidies	3.57	6.70	2.32	9.16 (0.84-10)	-0.29
government enterprises and inves	5.00	6.25	2.74	10 (0-10)	-0.37
top marginal income tax rate	8.57	4.50	2.79	10 (0-10)	0.09
top marginal income and payroll	42.14	4.30	2.64	10 (0-10)	0.13
top marginal tax rate	8.57	4.11	2.67	10 (0-10)	0.24
judicial independence	50.00	6.66	2.25	9.63 (0.19-9.82)	-0.61
impartial courts	50.00	6.27	2.03	8.96 (0.73-9.69)	-0.37
protection of property rights	50.00	6.73	1.82	8.53 (1.08-9.61)	-0.59
military interference in rule of	50.00	7.88	2.30	9.17 (0.83-10)	-0.98
integrity of the legal system	50.00	7.59	2.39	10 (0-10)	-0.83

legal enforcement of contracts	60.00	5.31	1.62	7.31 (1.17-8.48)	-0.33
regulatory restrictions on the s	60.24	7.79	1.39	6.65 (3.3-9.95)	-1.08
reliability of police	70.00	6.81	2.07	8.11 (1.54-9.65)	-0.76
business costs of crime	70.00	6.46	2.01	8.56 (1.04-9.6)	-0.83
gender adjustment	0.00	0.92	0.17	1 (0-1)	-3.21
money growth	0.71	8.15	2.22	9.99 (0-9.99)	-2.46
standard deviation of inflation	0.00	8.33	2.38	9.95 (0-9.95)	-2.57
inflation most recent year	0.00	8.06	2.50	9.99 (0-9.99)	-2.16
freedom to own foreign currency	0.00	6.62	4.31	10 (0-10)	-0.68
revenue from trade taxes percent	0.71	8.28	2.13	10 (0-10)	-2.04
mean tariff rate	15.48	7.80	2.18	10 (0-10)	-2.10
standard deviation of tariff rat	40.00	5.87	2.77	10 (0-10)	-0.84
tariffs	0.71	7.40	2.05	10 (0-10)	-1.59
nontariff trade barriers	50.00	6.66	1.42	7.11 (2.58-9.69)	-0.12
compliance costs of importing an	60.00	8.22	1.72	9.96 (0-9.96)	-2.14
regulatory trade barriers	50.00	7.32	1.40	7.76 (2-9.76)	-0.93
black market exchange rates	0.00	9.14	2.25	10 (0-10)	-3.24
foreign ownership investment res	50.00	7.48	1.44	6.82 (3.18-10)	-0.50
capital controls	0.95	4.28	3.17	10 (0-10)	0.32
freedom of foreigners to visit	70.00	6.51	2.71	9.9 (0.1-10)	-0.99
controls of the movement of capi	0.00	5.04	2.96	10 (0-10)	-0.11
ownership of banks	5.00	7.09	3.02	10 (0-10)	-0.84
private sector credit	3.33	8.09	1.85	10 (0-10)	-1.70
interest rate controls negative	10.00	8.46	2.61	10 (0-10)	-1.84
credit market regulations	0.71	7.82	1.89	9 (1-10)	-1.06
hiring regulations and minimum w	50.00	6.03	2.47	10 (0-10)	0.14
hiring and firing regulations	40.00	4.73	1.76	8.1 (0.73-8.83)	0.32
centralized collective bargainin	10.48	5.98	1.59	7.72 (2.32-10.04)	0.10

hours regulations	25.00	6.23	2.15	8.1 (1.9-10)	0.39
mandated cost of worker dismissa	61.19	6.33	3.31	10 (0-10)	-0.50
conscription	0.48	4.62	4.27	10 (0-10)	0.32
labor market regulations	20.95	5.51	1.67	8.09 (1.48-9.57)	0.35
administrative requirements	60.00	4.80	1.92	7.89 (0.65-8.54)	0.14
bureaucracy costs	50.00	7.05	1.85	10 (0-10)	-0.78
starting a business	50.00	8.43	1.68	7.35 (2.63-9.98)	-1.36
extra payments bribes favoritism	50.00	6.66	2.13	8.43 (1.56-9.99)	-0.41
licensing restrictions	70.00	8.14	1.43	5.73 (4.26-9.99)	-0.87
tax compliance	60.00	7.21	2.05	9.45 (0-9.45)	-1.95
business regulations	50.00	6.99	1.38	7.24 (2.26-9.5)	-0.78

Figure 1 shows the results. First interesting fact is that we recover the standard varieties of capitalism distinction between “liberal market economies” and “coordinated market economies,” although we use here a completely different set of indicators. The original varieties of capitalism classification was based on “spheres of coordination” indicators (Table 3).<sup>2</sup> In addition to the liberal and coordinated economies, we also see a third set of countries, labelled here “developing.” These have had a substantially different policy trajectory than either the liberal or the coordinated economies.

Table 3: Varieties of capitalism variables (based on Hall and Soskice 2001)

Spheres of coordination	Liberal market economies	Coordinated market economies
Wage bargaining	Market-based	Regulated by government
Vocational training	By firms	By government
Industry-finance relations	Distant	Close

<sup>2</sup>Compare Figure 1 to Aligica and Tarko (2015), p. 143, who do a cluster analysis using the original varieties of capitalism variables.

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Spheres of coordination	Liberal market economies	Coordinated market economies
Inter-firm complementary relations	Competitive & contractual	State-managed
Relation between labor and capital	Adversarial	Cooperative

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It is also worth noting that our sub-clusters are also similar to classifications (with some variations and under different labels) common in the comparative welfare states literature. For example Brooks and Manza (2007) classify countries as “liberal democracies” (Australia, Ireland, Japan, New Zealand, UK, US), “Christian democracies” (Austria, Belgium, France, Germany, Italy, Netherlands, Portugal, Spain, Switzerland) and Scandinavian countries (Denmark, Finland, Norway, Sweden). But, unlike such ad hoc classifications, the tree of family resemblances in figure 1 actually reflects policy similarities and differences. One substantive difference is that, in our classification, Switzerland is most similar to free market economies like Hong-Kong and Singapore (which appear as a sub-cluster of the liberal economies), and not to coordinated economies.

Let us further explore the *diversity* of policy trajectories in more detail. Figure 2 shows the differences between the three main categories, as well as the underlining differences between countries.<sup>3</sup> Overall, in accordance to common perceptions, liberal economies have been less regulated than coordinated economies, and have had a smaller size of government (i.e. less welfare transfers). Developing countries have a size of government similar to liberal economies, but are much more heavily regulated than either liberal or coordinated economies.

In terms of *changes*, all three categories have moved in the direction of significantly less regulation, and they have also reduced the size of government since 1980. However, coordinated economies had increased the size of government substantially in the 1970s, and have not (yet?) reduced it below the 1970 level. By contrast, liberal and developing economies have

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<sup>3</sup>In all the graphs and tables the EFW variables have been reverse-coded such that they match the actual meaning of the words: a higher number in our plots means higher regulation or more transfers.

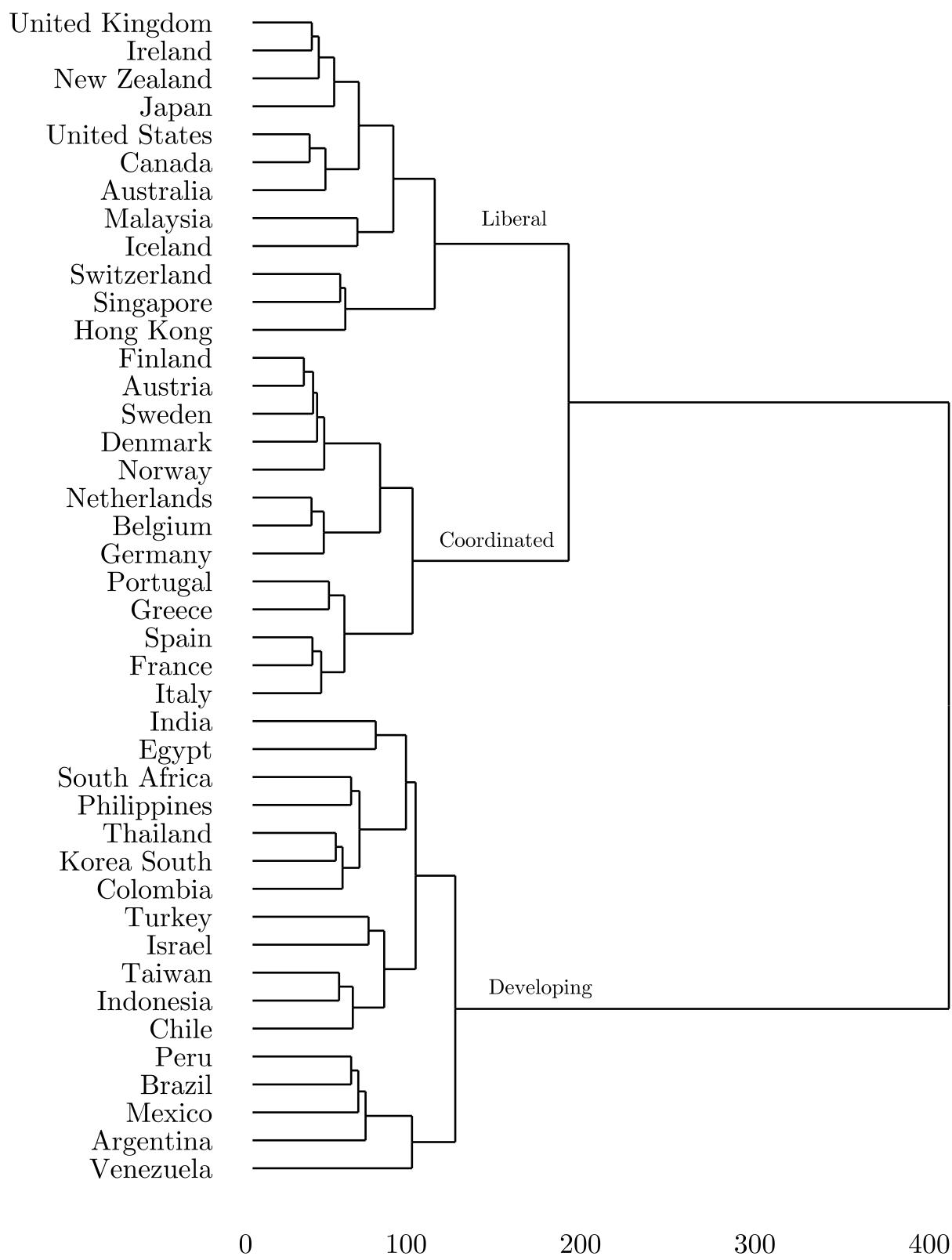
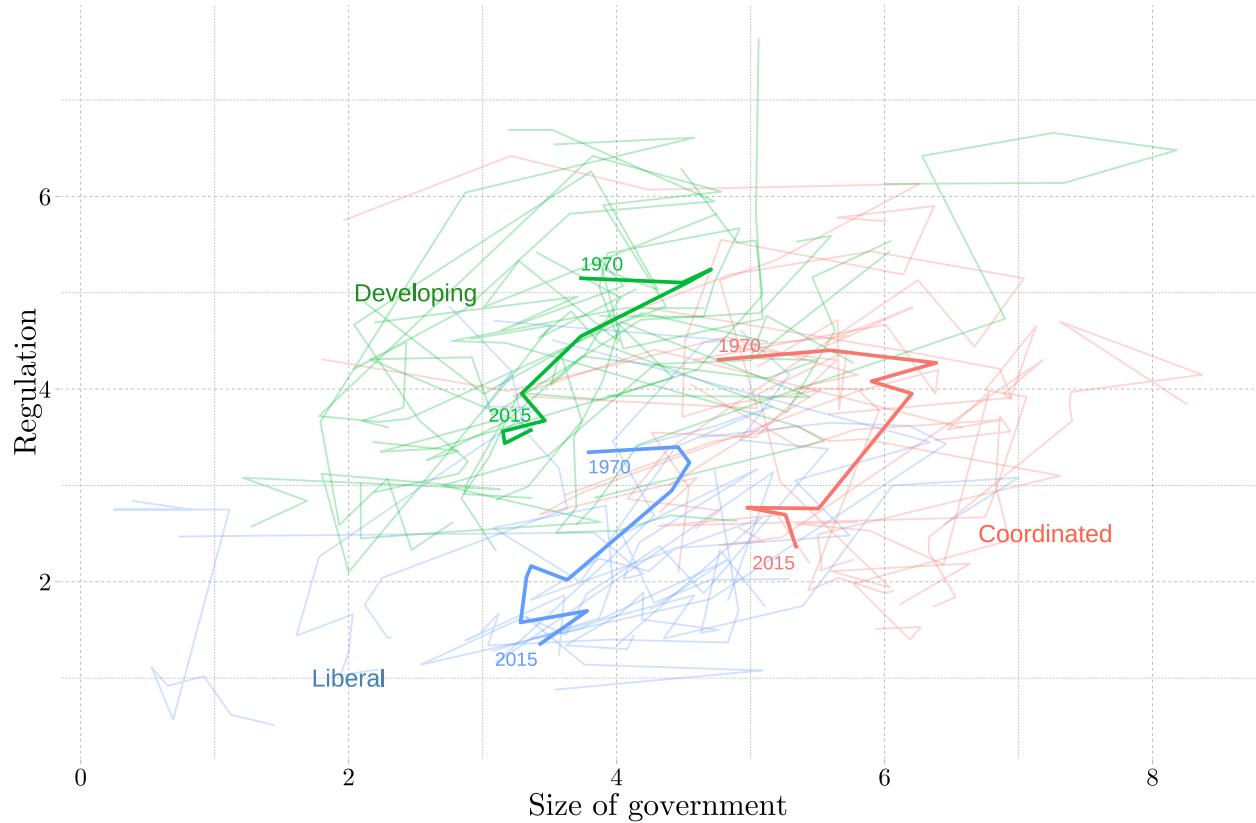


Figure 1: Hierarchical cluster analysis results

(on average) slightly smaller governments today than they had in 1970. In other words, when we are looking at the policy *outcomes*, rather than at the structural changes mentioned earlier, the neoliberal narrative seems to hold some water. Putting together the structural changes and the outcomes changes, we obtain the apparent paradox of “freer markets, more rules.”



Note: Each thin line is a different country. Thick lines are cluster averages.

Figure 2: Policy evolution, 1970 to 2015

Figure 3 highlights a few specific countries. The main thing to observe here is the substantial *diversity* of policy trajectories. While the neoliberal narrative might have some traction when we look at outcomes in the aggregate, across many countries, when we look at specific countries, the situation is more complicated. Some, e.g. Australia, Denmark, Germany, New Zealand, Singapore, Sweden, Switzerland, United Kingdom, fit the narrative of a transition to smaller government and/or less regulation fairly well. Others, like France, Greece, Italy, Japan, Spain and United States, do not. In some of these cases, the opposite narrative is more accurate. In the case of United States, the changes have been relatively small (when

compared to changes in other countries).

This being said, the differences between categories appear to be, for most part, statistically significant. Figure 4 shows the differences between categories in terms of aggregated EFW data: the entire economic freedom index, as well as the five sub-components. These are averages over the period from 1970 to 2015. Table 4 shows the pairwise t-tests between all combinations of categories. The following differences are the only ones that are *not* statistically significant: developing and liberal economies have similar size of government; coordinated and liberal economies have similar property rights protections, sound money, and free trade. This result provides a more in-depth perspective on the principle component analysis result cited earlier: coordinated and liberal economies have similar institutions in several key regards (property, money, and trade), but differ substantially with respect to the generosity of welfare transfers. Furthermore, we now see that, unlike the earlier claim, liberal and coordinated economies do differ with respect to the degree of regulation. Nonetheless, in accordance to the earlier claim, developing economies are indeed more regulated than both.

With respect to developing economies, we find support here for the standard “Washington Consensus” policy package, in accordance with recent research (Grier and Grier 2021). For developing countries to become more institutionally similar to rich economies (either liberal or coordinated), and presumably obtain similar outcomes, they would need to adopt policy reforms of freer trade, more secure property rights, deregulation, and lower inflation.

It is also worth looking in more detail at the rowing and steering sub-components. Using the EFW dataset, the provider state functions can be measured alongside three different dimensions (corresponding to Area 1’s sub-components): general government consumption spending as a percentage of total spending; general government transfers and subsidies as a percentage of GDP; and government investment as a share of total investment. The first indicator offers a measure of how dependent citizens are on government support (as the term “provider state” suggests). The second one is a measure of the size of redistributive policies. The third one measures the share of government ownership and/or control of the means of production. The regulatory functions can also be measured alongside three different dimensions (corresponding to sub-components of Fraser’s Area 5): credit market regulations,

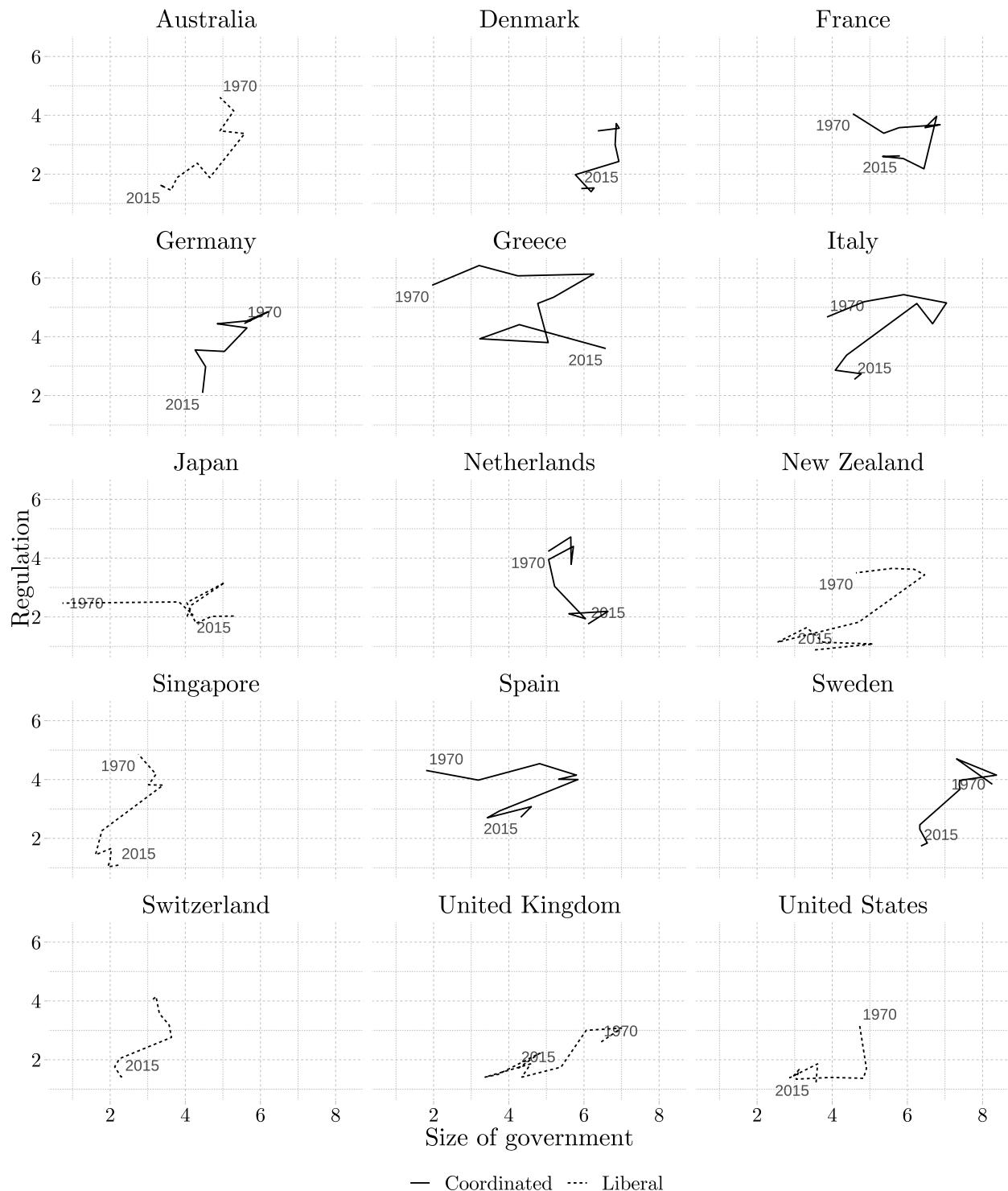


Figure 3: Policy evolution of selected countries, 1970 to 2015

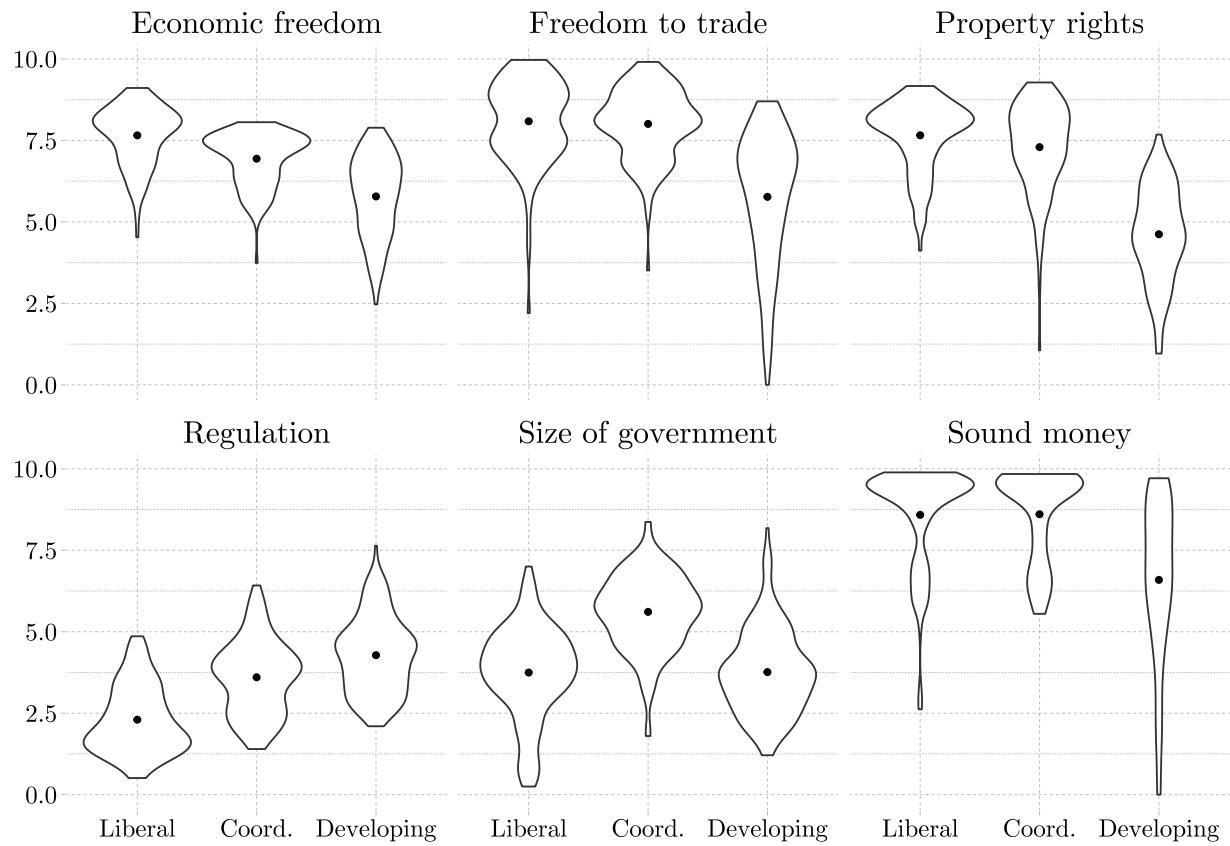


Figure 4: Hierarchical clustering statistics. Averages from 1970 to 2015.

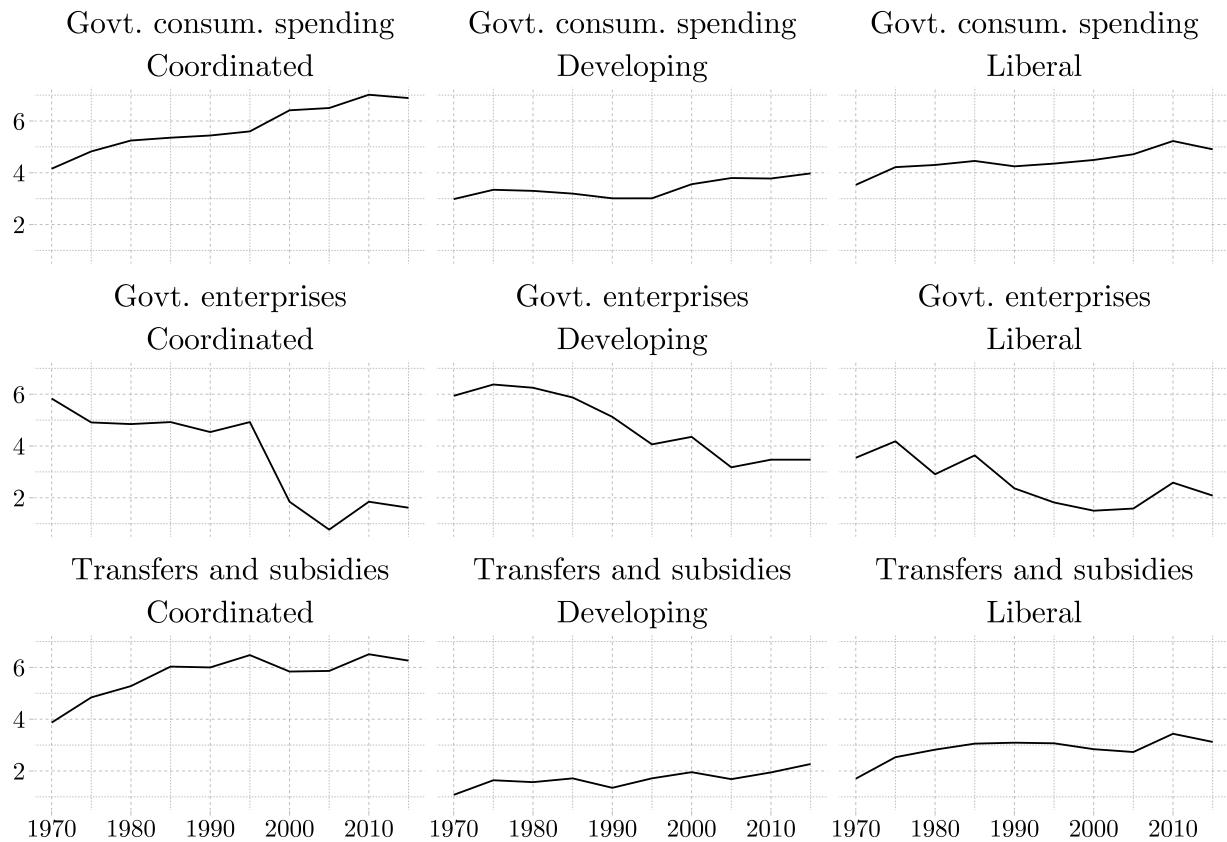


Figure 5: Sub-components of government size

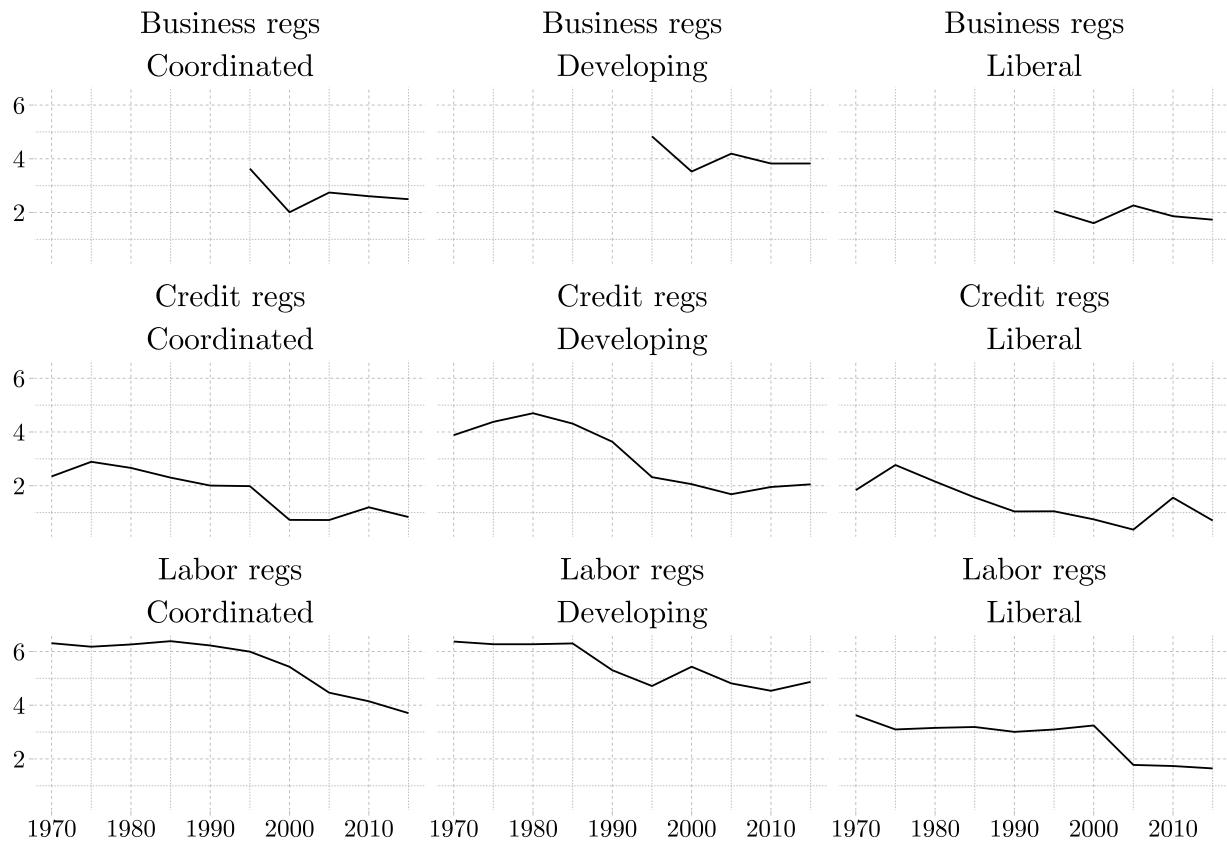


Figure 6: Types of regulations

Table 4: Differences between clusters: Policies

Variable	Group 1	Group 2	Mean 1	Mean 2	Difference	P-value
Economic freedom	Coord.	Developing	6.94	5.78	1.16	<.001
	Coord.	Liberal	6.94	7.66	0.72	<.001
	Developing	Liberal	5.78	7.66	1.87	<.001
Size of government	Coord.	Developing	5.61	3.76	1.85	<.001
	Coord.	Liberal	5.61	3.75	1.86	<.001
	Developing	Liberal	3.76	3.75	0.02	0.925
Property rights	Coord.	Developing	7.29	4.62	2.67	<.001
	Coord.	Liberal	7.29	7.66	0.36	0.022
	Developing	Liberal	4.62	7.66	3.04	<.001
Sound money	Coord.	Developing	8.61	6.59	2.02	<.001
	Coord.	Liberal	8.61	8.59	0.02	0.918
	Developing	Liberal	6.59	8.59	2.00	<.001
Freedom to trade	Coord.	Developing	8.01	5.77	2.24	<.001
	Coord.	Liberal	8.01	8.09	0.08	0.595
	Developing	Liberal	5.77	8.09	2.32	<.001
Regulation	Coord.	Developing	3.60	4.28	0.68	<.001
	Coord.	Liberal	3.60	2.30	1.30	<.001
	Developing	Liberal	4.28	2.30	1.98	<.001

labor market regulations, and business regulations.

Figure 5 shows the evolution of three sub-components of the EFW government size component, and figure 6 shows the evolution of the three sub-components of the EFW regulations component. Figure 5 reveals a crucial fact about both coordinated and liberal economies. *The decline in “government size” is due entirely to privatizations.* Both government consumption spending and transfers have actually *increased* since 1970. This matches both Vogel (1996)’s narrative mentioned in the introduction, according to which privatization and deregulation have been used as a practical strategy for financing increased welfare transfers, and Brooks and Manza’s account of the persistence of the welfare state (Brooks and Manza 2006, 2007). Also, interestingly, while this phenomenon characterizes primarily the coordinated economies, the same thing has happened (at a smaller scale) in liberal economies. We are thus now seeing a key element of the narrative about the supposed ascent of neoliberalism unraveling,

even with respect to outcomes. The claim that the welfare state is being “hollowed out” is definitely not correct.

As argued by Brooks and Manza (2007), two of the provider state functions have indeed generally increased over the alleged neoliberal period: both government consumption spending and transfers have increased, the latter quite dramatically. However, we also see privatizations and a retreat of government as an investor. This trend increased even more after 2000. We also see a clear deregulation of credit markets, although after the 2009 crisis a spike back up occurred in several countries. By contrast, labor markets remained heavily regulated until 2000 after which some deregulation occurred in most but not all (e.g. Greece) countries. The regulation of business is erratic and lacks a clear trend.

The claims about deregulation are much more robust than those about the welfare state, as shown by figure 6. We see a certain degree of deregulation across the board, and with respect to all three types of regulations. The “freer market, more rules” puzzle is also real.<sup>4</sup>

This bird’s eye quick overview of several kinds of indicators also allows us to understand one key source of confusion in the discussions about neoliberalism. Rather than looking at the *entire* range of issues, various authors usually look only at one issue area and one type of indicator. As we have seen, if one looks at privatizations, credit markets and (to some extent) labor markets, the neoliberal story seems to be confirmed. By contrast, if one looks at government consumption spending and transfers, one sees a clear move in the direction of more government involvement. As we have mentioned, the number of regulatory agencies staffing and budgets have also increased.

This brief analysis provides evidence in favor of both NPA and PSA. As we have seen, individual countries have adopted substantially differed policy trajectories. On the other hand, the same countries that have increased government consumption spending and transfers have also decreased involvement in other areas. Apart from the noise of individual country

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<sup>4</sup>One important possible missing element in this analysis is concerned with environmental regulations. Why does RegData show an increase in the overall number of restrictions, which is at odds with the EFW indicators? This may be because most regulations have been concerning the environment. As such, by aggregating by type, the EFW may underestimate the regulatory burden. We thank the late Jerry Ellig for this observation.

trajectories, such changes have happened in all countries of all categories. Hence, some specific policies diffusion may indeed be at play. Moreover, convergence (in terms of the actual levels, rather than trends) has occurred in some sectors (privatizations and credit regulations), while differences persist in others, despite common trends (government consumption spending, transfers and, to some extent, labor market regulations).

### 3.2 Performance indicators

What are some of the consequences of these policy differences between the three categories? Can we explain differences in other outcomes as a result of these institutional differences between liberal, coordinated, and developing countries? While the present analysis is not causal, we can provide a series of descriptive results.

Figure 7 shows the differences between categories for a number of outcome indicators: corruption, real income, growth, inequality, historical conditions (income in 1800), liberal democracy, life expectancy, state capacity, and unemployment.<sup>5</sup> Table 5 shows the pairwise t-tests of the differences in means between categories.

We recover the key varieties of capitalism result showing a trade-off between growth and equality, with liberal economies opting for relatively higher growth and lower equality, while coordinated economies opting for relatively lower growth and higher equality. There are few other differences between liberal and coordinated economies, both of them achieving similar performance across most indicators, with the notable exceptions of unemployment (coordinated economies have higher unemployment) and liberal democracy (coordinated economies have higher democracy, although this result is driven by a few outliers in the liberal category). The original claims made by Hall and Soskice thus hold well:

Although each type of capitalism has its partisans, we are not arguing here that one is superior to another. Despite some variation over specific periods, both liberal and coordinated market economies seem capable of providing satisfactory levels of long-run economic performance . . . . Where there is systematic variation between these types of political economies, it is on other dimensions of performance. . . .

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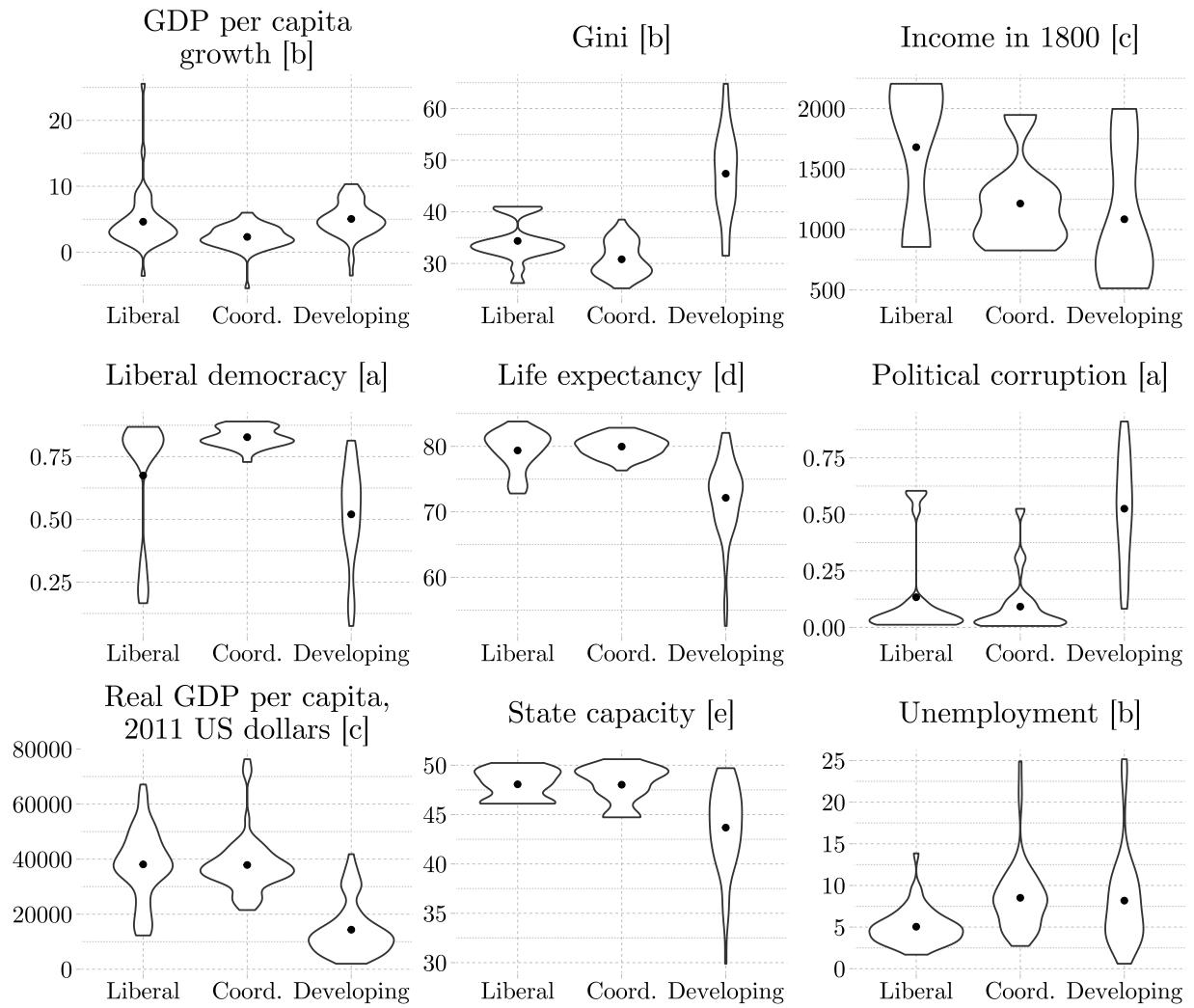
<sup>5</sup>The data is from Teorell et al. (2021), Ziblatt (2021), and O'Reilly and Murphy (2020).

the two types of economies have quite different capacities for innovation [and] they tend to distribute income and employment differently. . . . [I]n liberal market economies, the adult population tends to be engaged more extensively in paid employment and levels of income inequality are high. In coordinated market economies, working hours tend to be shorter for more of the population and incomes more equal. (Hall and Soskice 2001, 21)

Another observation of interest may be that, historically, liberal economies have been significantly richer at the beginning of 19th century. As such, the institutional differences between liberal and coordinated economies may reflect different historical paths, with coordinated economies successfully using higher government intervention for catching up to the liberal economies. The persistent fact of coordinated economies still having lower growth rates appears to indicate that they are still free-riding on the growth created by liberal economies (the two categories have similar levels of incomes).

Unsurprisingly, developing economies score significantly worse than both liberal and coordinated economies on almost all indicators: real incomes, corruption, inequality, liberal democracy, life expectancy, and state capacity. One encouraging fact is that they are growing faster than coordinated economies, and hence catching-up, although they are not growing faster than liberal economies. As long noted by Olson (1996), a proper analysis requires disentangling low-growth and high-growth developing economies, and identifying the critical institutional differences between them, but this goes beyond the scope of the present paper.

To summarize, our first key empirical finding is that different countries have experienced a wide diversity of trajectories. This goes against the narrative about neoliberalism as a pervasive ideological trend. A corollary to this is the fact that, in terms of policy outcomes, some countries do fit the neoliberal narrative, while others don't. The whole discussion can (and usually is) easily derailed by a selective choice of facts. A second important observation is that, even when the neoliberal narrative seems to hold, the *structural* developments, especially involving the expansion of the regulatory state, are fundamentally at odds with the normative positions of authors like Friedrich Hayek or Milton Friedman. The *de facto* regulatory capitalist version of neoliberalism is quite different from the rule of law classical



Sources of data:

- Varieties of democracy
- World Bank
- Maddison Project
- Institute for Health Metrics and Evaluation
- Murphy and O'Reilley 2020

Figure 7: Hierarchical clustering outcomes. Averages for 2000 and 2015.

Table 5: Differences between clusters: Outcomes

Variable	Group 1	Group 2	Mean 1	Mean 2	Difference	P-value
Real GDP per capita, 2011\$ [c]	Coord.	Developing	27194.14	10150.46	17043.68	<.001
	Coord.	Liberal	27194.14	27034.93	159.21	0.921
	Developing	Liberal	10150.46	27034.93	16884.47	<.001
GDP per capita growth [b]	Coord.	Developing	2.55	4.67	2.12	<.001
	Coord.	Liberal	2.55	4.18	1.62	<.001
	Developing	Liberal	4.67	4.18	0.49	0.304
Income in 1800 [c]	Coord.	Developing	1214.29	1084.83	129.45	0.116
	Coord.	Liberal	1214.29	1680.33	466.05	<.001
	Developing	Liberal	1084.83	1680.33	595.50	<.001
Income inequality (Gini) [b]	Coord.	Developing	30.81	47.48	16.67	<.001
	Coord.	Liberal	30.81	35.54	4.73	0.002
	Developing	Liberal	47.48	35.54	11.94	<.001
Unemployment [b]	Coord.	Developing	8.82	8.03	0.78	0.321
	Coord.	Liberal	8.82	5.23	3.58	<.001
	Developing	Liberal	8.03	5.23	2.80	<.001
Political corruption [a]	Coord.	Developing	0.10	0.55	0.45	<.001
	Coord.	Liberal	0.10	0.12	0.02	0.323
	Developing	Liberal	0.55	0.12	0.43	<.001
Liberal democracy [a]	Coord.	Developing	0.79	0.39	0.40	<.001
	Coord.	Liberal	0.79	0.65	0.14	<.001
	Developing	Liberal	0.39	0.65	0.26	<.001
State capacity [e]	Coord.	Developing	47.52	43.48	4.04	<.001
	Coord.	Liberal	47.52	47.76	0.24	0.325
	Developing	Liberal	43.48	47.76	4.27	<.001
Life expectancy [d]	Coord.	Developing	76.58	67.46	9.13	<.001
	Coord.	Liberal	76.58	75.94	0.64	0.185
	Developing	Liberal	67.46	75.94	8.49	<.001

Sources of data:

- a. Varieties of democracy
- b. World Bank
- c. Maddison Project
- d. Institute for Health Metrics and Evaluation
- e. Murphy and O'Reilley 2020

liberal desideratum (Farrant and Tarko 2019; Aligica, Boettke, and Tarko 2019).

## 4 The supply and demand of policies

The observed diversity of policy trajectories (figures 2 and 3) implies that explanations of policy changes need to be highly contextualized to specific countries. Aggregate statistical narratives provide minimal causal insights for individual countries. It is not an accident that case studies are so prevalent in the varieties of capitalism literature (e.g. see Thelen 2014; Clark 2015; Vogel 2018). However, the danger of *ad hoc* explanations is a serious one (Bates et al. 1998; Elster 2000; Parikh 2000; Aligica 2003; Tarko 2015b). In response to this challenge, we provide in this section a framework for building country-specific analytic narratives built upon the rowing/steering distinction and the idea of political entrepreneurship (Wagner 1966; Baumol 1996).

Public choice scholars have identified several mechanisms by which democracies attempt to translate individual preferences into public policy. The two most famous are elected officials competing to implement the preferences of the median voter, and interest groups organizing to influence elected officials and regulators.

Voters may be assumed to have existing preferences about policies, and elected officials campaigning to attract votes must compete to amass a minimum winning coalition. On any particular issue, if the distribution of voter preferences has a single peak, political entrepreneurs whose platforms are closest to that peak will acquire more votes, leading to the well-known median voter theorem. However, forming preferences on policy by informing oneself of the various candidates, platforms, and their consequences is a costly activity. Since the probability of being the deciding vote is negligible, rational voters face strong incentives to remain ignorant (Somin 2013). Since we still observe more than negligible voter turnout in elections, researchers have further identified several explanations to account for the preferences of the public: They may find voting to be a consumption good, rather than an instrumental means to acquire desired policy ends, and gain utility from expression or signalling membership in a group (Brennan and Lomasky 1993). Or they may actually have

strongly-held preferences that are psychologically comforting but “irrational” in the sense that they are led astray by systematic biases, as opposed to a rational consideration of policy outcomes (Caplan 2008). In the end, electoral institutions might efficiently direct political entrepreneurs to provide an accurate mapping of what voters actually want (Wittman 1995). This approach works best for explaining the role of Stigler’s “strongly felt preferences,” in politics, however they may be formed by the public.

The second mechanism emphasizes the role of special interest groups organizing to sway particular policy outcomes directly. In the aggregate, voters that have weak or “lesser preferences” over policy minutiae face much larger costs of organizing and acting collectively to influence either democratic lawmaking or the promulgation of regulation (Olson 1965; Stigler 1971; Buchanan, Tullock, and Tollison 1980; McChesney 1997). Smaller groups, that stand to obtain a concentrated benefit, are much more capable of organizing to influence legislators and regulators to implement a favorable regulation and disperse the cost on a broad base of taxpayers. Such rent-seeking behavior creates significant market distortions, but voters have little incentive or interest to monitor the minutiae of how various industries are regulated, and individually bear only a negligible fraction of the cost of greater market power. Granted, to prevent arousing the suspicions of the wider public, the interests that stand to benefit from such policy, and their allied policymakers, must publicly proclaim their actions as being in the public interest (Yandle 1983).

For convenience, we term the first mechanism “public opinion” and the second mechanism “rent-seeking.” In both cases, political entrepreneurs recognize a politically profitable opportunity to acquire a minimal winning coalition – whether by raw votes and political capital, or by directly accumulating funds for politicking. Both mechanisms affect policy outcomes, as interest groups spend considerable resources trying to influence policy both via public relations campaigns to shape voters’ preferences on the issues, and by lobbying campaigns to directly influence the policymakers themselves. One empirical question is *how much* one mechanism, relative to the other, affects the diversity of policy outcomes across countries or industries.

Our approach uses the rowing/steering distinction to combine these mechanisms into a

broader framework, drawing inspiration from Wagner (2016). According to Wagner's analogy, much like an investment bank allocating private capital, political entrepreneurs play the "market-maker" by bringing together two sides of a peculiar type of market: voters are willing to support a particular set of policies, and rent-seekers demanding certain state interventions that often depart from voters' expressed desires. If they deviate too far from what the public is willing to support, they consume their political capital and face a higher risk of losing power (and must expend more resources on messaging and concealing the true nature of the rents). Policymakers that are in line with public opinion build up political capital, but they may lose resources from rent-seeking firms.

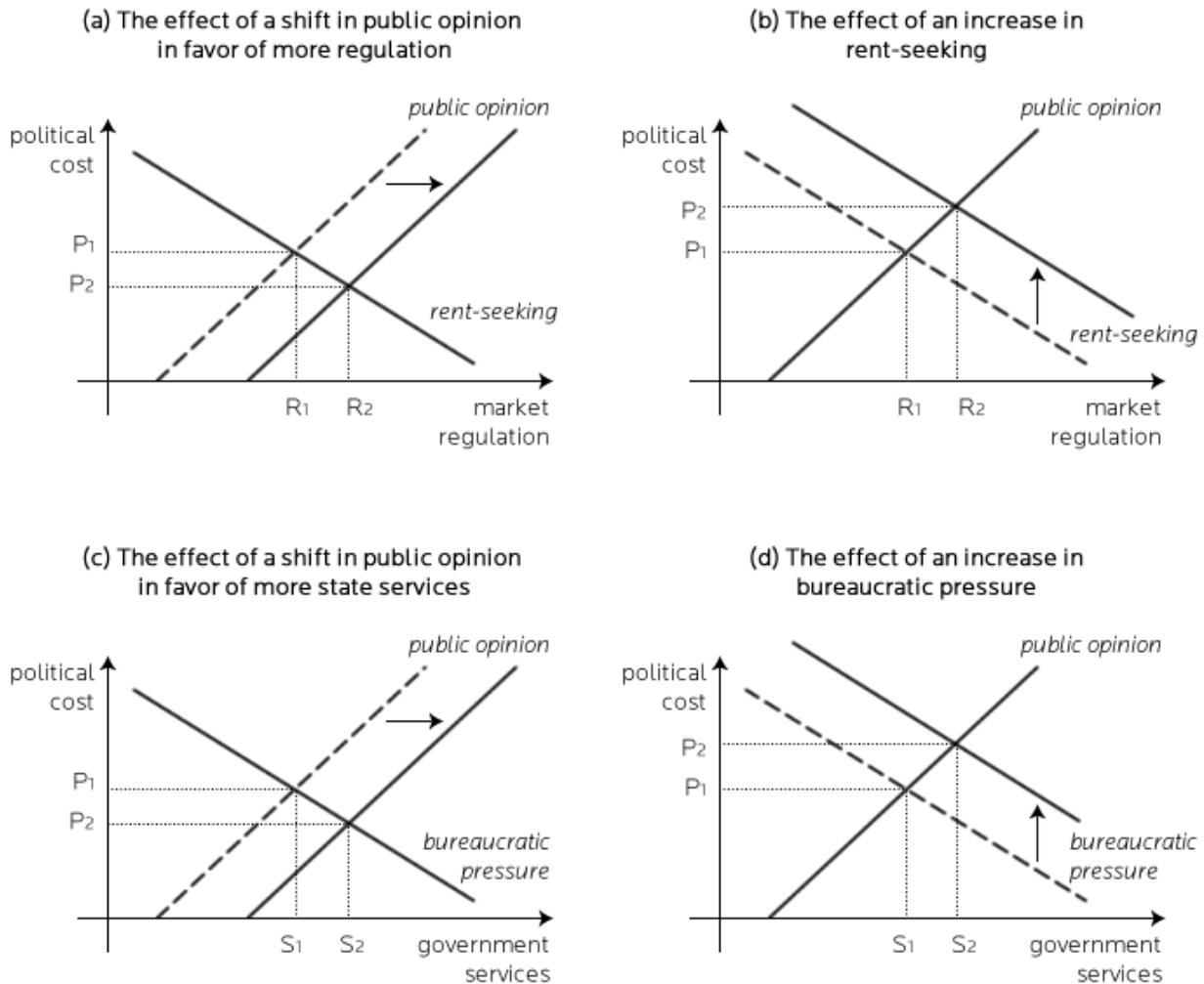


Figure 8: Supply and demand of policies

Rent-seekers may demand a variety of policies, but there is limit to how much political entrepreneurs can satisfy such demands. To put it differently, we can think of political entrepreneur as “buying” certain policies from voters at the expense of some resources lost from rent-seekers (figure 8, a and b). We can also think about this in terms of Tullock’s paradox: rent-seekers may be willing to pay a lot for certain policies (as their gains would be very high), but the actual price they need to pay can be much lower if public opinion also supports those policies. In other words, Yandle’s (1983) “bootleggers and Baptists” phenomenon offers a partial explanation to Tullock’s paradox. The price paid by rent-seekers is not determined solely by their willingness to pay (the demand side of the market), but also by the supply side created by voter’s beliefs.

To explain the cross-country variation in the amount of “rowing” and “steering,” we consider such supply and demand of policies in two quasi-markets: one for public services, and one for regulation. Political entrepreneurs mediate between the supply of voter support and the demands of rent-seekers for interventions, but the actors that comprise each group are different across the two quasi-markets.

In the quasi-market for regulation, the demand side is simply constituted of private interests desiring government regulations to restrict entry or encumber their competitors (Stigler 1971). However, in order to be able to take public opinion into account, we consider the supply side not the regulators themselves, but the voters willing to support (or tolerate) state action.

In the quasi-market for public services, the demand side is driven not merely by *private* rent-seekers (perhaps ambling for government contracts to supply the service itself), but *public* ones as well — government agencies whose missions are expanded with greater public service provision. Instead of conceiving the bureaucracy as constituting the *supply*, we follow Niskanen (1971) in treating them primarily as *demander*s of state action. What rent-seeking is for the regulations (steering) quasi-market, bureaucratic mission creep is for the government services (rowing) quasi-market.

Figure 8 depicts the effects of various changes in public opinion, rent-seeking, and bureaucratic pressures. The crucial prediction of this model is that the same effect in terms of policy outcomes can be obtained either by rent-seeking (including bureaucratic pressures) or via

shifts in public opinion. However, the two paths to the same policy are accompanied by *opposite* effects on political costs to political entrepreneurs. A given increase in regulatory policy induced by a shift in public opinion reflects a *decrease* in political cost (figure 8a); whereas the same change induced by rent-seeking reflects an *increase* in political cost (figure 8b). Similarly, a given increase in public services induced by public opinion shifting reflects a *decrease* in political cost (figure 8c), but if the change were induced by bureaucratic pressures, this would reflect an *increase* in political cost (figure 8d).

Political entrepreneurs seek to exploit opportunities created by shifts in public opinion or rent-seeking, but face an objective constraint due to limited government funds. All agents of the state have a limited amount of resources at their disposal at any moment in time, which they must allocate between the two quasi-markets. Consequently, we can map out a trade-off between allocating government resources to regulation or public services, as in the government production possibilities frontier depicted in Figure 9. This government PPF described the fiscal constraints of the state. These two supply and demand graphs set the political costs associated with various regulatory changes,  $p_r$ , and with changes to government services,  $p_s$ , and the quantities of regulations,  $R$ , and of government services,  $S$ .

Taking these two prices as given (as determined by rent-seeking, bureaucratic mission creep and public opinion), we can also map political diversity. Different political groups,  $k$ , are characterized by different utility functions,  $u_k(R, S)$ , reflecting their ideological preferences. The institutional organization of the legislature determines how, as a result of political competition and cooperation among these groups, these different preferences aggregate into a policy outcome  $(S^*, R^*)$  leading to specific levels of public services and regulation.<sup>6</sup>

In the long run, to prevent national default,  $(S^*, R^*)$  needs to be on or inside the government PPF, determined by all government income sources (tax revenue & user fees, public debt, and monetizing public debt). The PPF is assumed to be convex due to complementarities between regulations and the provision of public services. Considering that taxes are generally unpopular, elected officials tend to make them as small as feasible, hence we should expect a

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<sup>6</sup>In what follows, we merely assume this outcome, rather than describing the details of its emergence. We note here that this is an interesting avenue for possible future research of inter-group political dynamics.

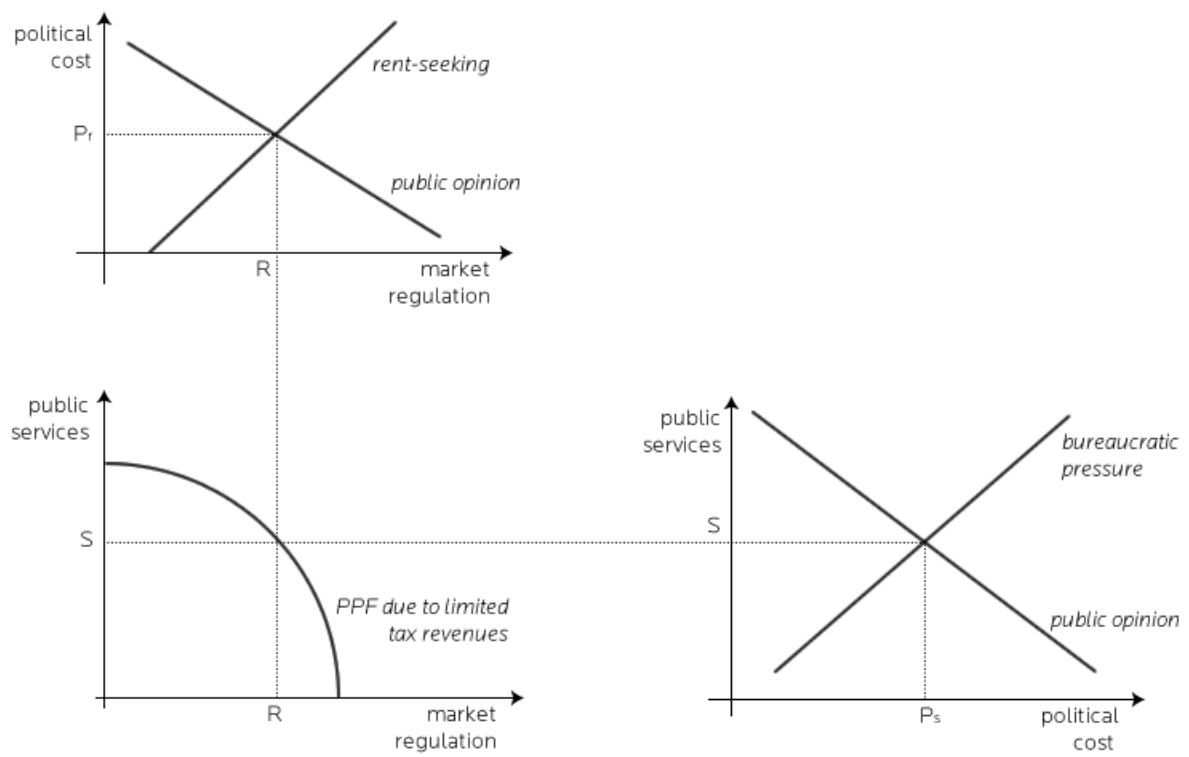


Figure 9: Fiscal Possibilities Frontier

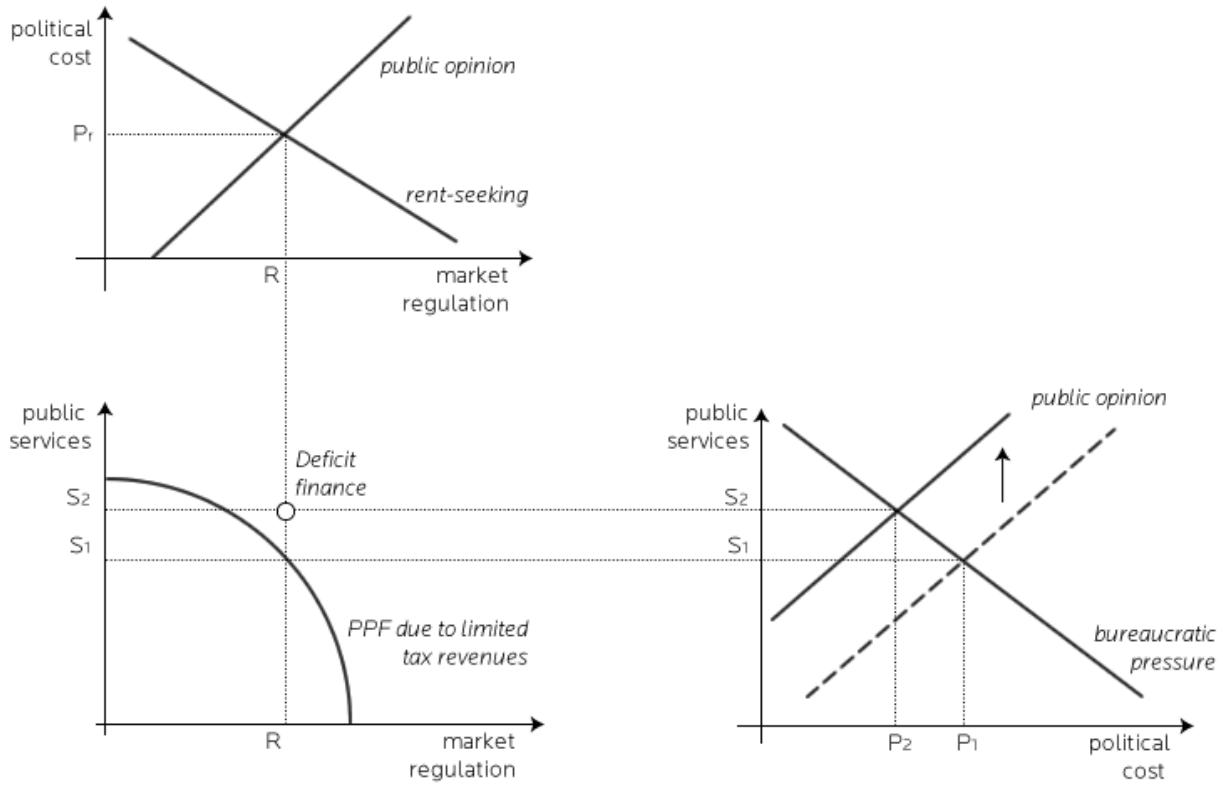


Figure 10: Deficit finance

short-run downward tendency of the PPF. In the long run, however, the PPF may expand as a result of economic growth, facilitating the state to provide more of both public services and regulations (Cowen 2009). When the  $(S^*, R^*)$  outcome is above the PPF, the government is in a situation of deficit finance (fig 10). As Buchanan and Wagner (1977) and Buchanan and Wagner (1978) have observed, democracies have a systematic tendency towards deficit finance.

This theoretical framework provides a tool for empirical analyses. It justifies interpreting public opinion, rent-seeking, and mission creep as the underlining *causes*, while the levels of government spending on public services and the levels of regulation as the induced *effects*. According to this interpretation, different countries differ in terms of policies, because of underlining differences in their causal factors. We can also use this framework to apparently paradoxical policy patterns like those in figures 5 and 6. At first glance, the pattern is puzzling because it cuts across ideological lines. On one hand, we see an increase in public spending on government services, hence, an apparent ideological move towards the left. On the other hand, we see a move towards *de facto* deregulation, hence, an apparent ideological move towards the right. But, bearing in mind the rowing-steering trade-off in figure 9, and the key fact is that regulation is less salient in terms of public opinion, we can actually explain this puzzling development. The political class reacted to the public demand for more services by providing more services. However, as noted by (Vogel 1996, 40), constrained by their limited tax revenues, they looked at deregulation as a possible solution for increasing revenues by increasing the size of the “pie.” In other words, self-interested political entrepreneurs discovered a solution that looks odd from an ideological point of view, but makes perfect sense from their own pragmatic perspective.

This also explains some of the most surprising aspects of the way in which deregulation of some sectors has happened. Discussing financial deregulation in France, Vogel (1996, 239) points out that “[n]either the Bank of France nor the banking community initiated these measures.” Moreover, these deregulatory measures were actually accompanied by increased state control over the banking sector, as the government “unified regulations over different categories of banks, centralized regulatory powers in a new agency, . . . , and created a new

umbrella industry association” with the purpose of “[strengthening] government’s control over the banking industry and [enhancing] the mechanisms of policy coordination between the government and the banks.” This highlights that the deregulatory measures had a very specific revenue-increasing purpose, rather than being some purely ideological move. Ideas about market mechanisms (such as the Stiglerian critique of regulation) mattered in offering government officials a new method of governing, but the goals remained the same as before. Such examples also offer a glimpse into the puzzling fact that *de facto* regulation decreased, while regulatory agencies expanded in size and scope.

As a final element of this framework, we can combine the PPF with the Hayekian triangle (Garrison 2000; Young 2015) in order to analyze crowding-in and crowding-out effects (figure 11). The demand for certain public services and regulations creates a demand for the inputs necessary for delivering those services and regulations. This allows us to get at the issue of public-private partnerships (i.e. the fact that governments might not produce the public services with their own state agencies, but hire private sector firms to do it), and the wider ripples throughout the economy, as various capital goods markets are infused with additional resources which are taken from other capital markets.

Figure 11b shows the effects of an increase in public services, for instance as experienced by Japan (figure 3). Because, over the short term, resources (both capital and labor) remain relatively unchanged, the area of the Hayekian triangle remains constant. Thus, the increase in government services shifts resources towards the input markets of those services. The overall result is a shift in the structure of production in the entire economy as depicted in the lower-left graph in figure 11b. We can see that the crowding-out effect of the private sector is neither homogenous (affecting equally all markets), nor is it located mainly in the same market as the one entered by the government producer. In this case there is a crowding-in effect near the public services, and a crowding-out effect in the capital goods markets that are least connected with the public sector. This might be difficult to measure if the crowding-out effect is spread out over numerous markets.<sup>7</sup>

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<sup>7</sup>For an example of an empirical analysis of geographical spillovers in Japan see Funashima and Ohtsuka (2019).

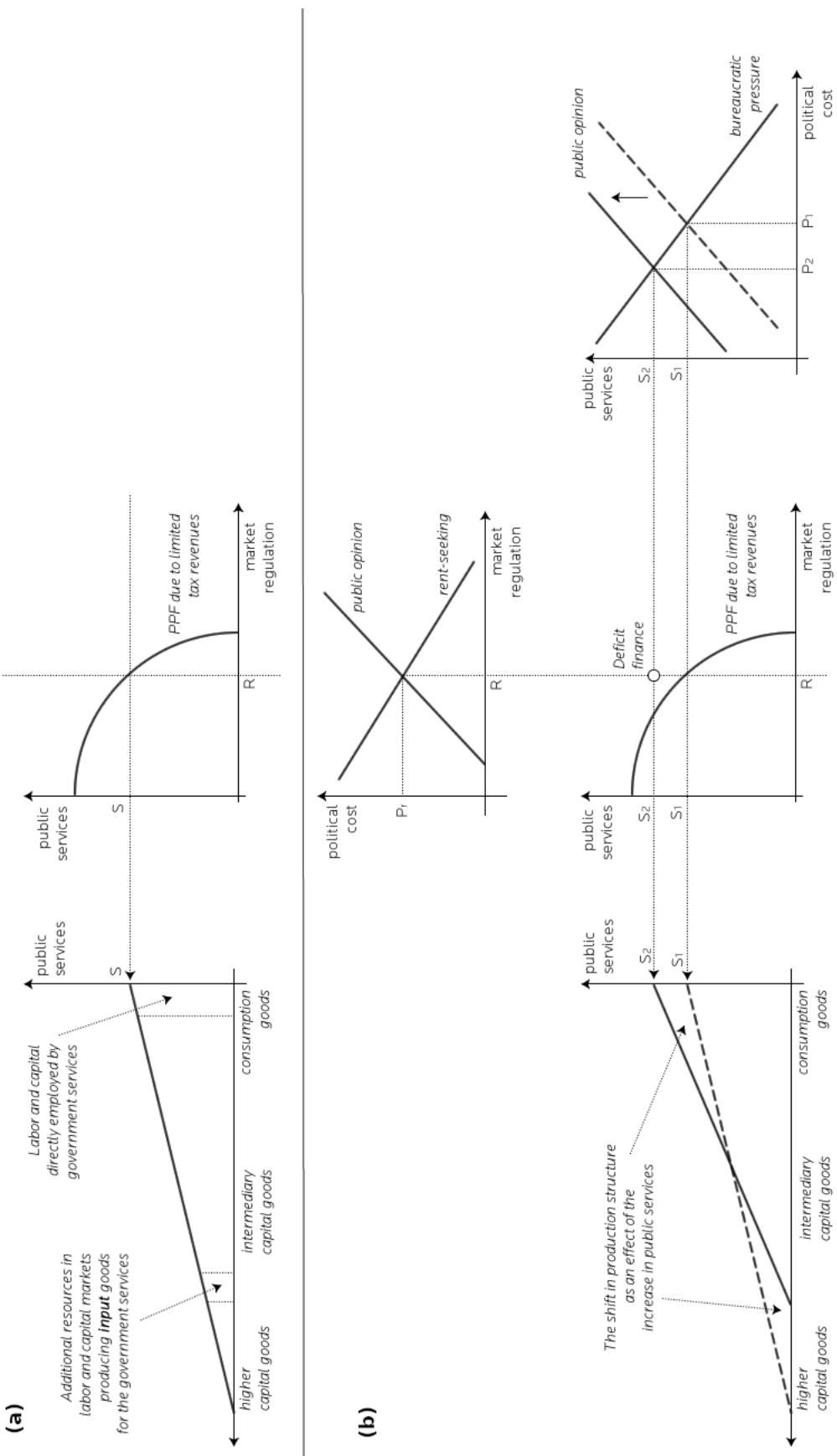


Figure 11: Crowding-in and Crowding-out

The large literature on whether government crowds in or out private firms and non-profits looks almost exclusively to the *direct* private substitutes or complements of the government services. But the effects ripple throughout the entire structure of production. The present framework of analysis may provide a way of structuring the analysis, taking into account not just rent-seeking and bureaucratic mission creep, but also public opinion and the effects upon the entire structure of production.

## 5 Conclusion

Since Stigler's pioneering work on the idea of regulatory capture, and the broader public choice analysis of rent-seeking, capitalist democracies have evolved in unexpected and complex ways. Regulatory capture remains a critical concept for understanding these changes. Among the most surprising changes has been the effect the theory itself has had on political entrepreneurship. In normative terms, regulatory capture can be seen as primarily a tool for criticizing the expansion of the regulatory state and has been associated with the rightwing ideology. In practice, however, the theory has also been used on the left, as a way of easing fiscal constraints and enabling the growth of public services.

In this paper we have used hierarchical clustering as a method of analyzing institutional diversity in a more rigorous way. This analysis gives support to some of the key claims made by the varieties of capitalism literature, both in the aggregate (e.g. about the robustness of the growth-equality trade-off), and about the context-dependent and country-specific nature of policy changes. This country-specificity implies a need for case studies, and we provided here an analytic framework for building such cases studies in a less ad hoc fashion. This framework of analysis builds upon Wagner's idea of political entrepreneurship, Stigler's idea of a supply and demand of policies, and Hayek's triangle for understanding changes along the entire structure of production.

Last but not least, our empirical analysis provides a more nuanced critique of the “neoliberalism” narrative, according to which countries are supposed to have generally deregulated and the welfare states have been “hollowed out.” We point out that deregulation has indeed

happened, but not directly. It has occurred in a roundabout and apparently paradoxical fashion, as a result of the *growth* of regulatory state. To understand this phenomenon, it is critical to understand regulatory arbitrage and political entrepreneurship under fiscal constraints. Secondly, the welfare state has *not* been “hollowed out,” it has in fact *grown* even in liberal economies. This misperception about the welfare state is, under the most charitable assumptions, due to the over-aggregated nature of indicators like “the size of government.” When we disaggregate them, we observe that, while privatizations have occurred, and the state has indeed retreated from its “rowing” role, government consumption spending, and welfare transfers and subsidies have increased. To understand this process, just like the deregulation process, it is critical to look at political entrepreneurship under fiscal constraints. Privatization brings in revenues (just like the increased efficiency due to deregulation), while increased welfare transfers bring in political popularity. One of the bottom lines of this analysis is that ideology is more often than not a *distraction* if one is genuinely interested in understanding the process of policy change. This is one part of our analysis that would not have surprised Stigler.

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