Business History

ISSN: 0007-6791 (Print) 1743-7938 (Online) Journal homepage: https://www.tandfonline.com/loi/fbsh20

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To cite this article: Martin Shanahan & Susanna Fellman (2019): Shifts in government business relations: Assessing change using the restrictive business registers in the OECD, 1945-1995, Business History, DOI: 10.1080/00076791.2019.1642875

To link to this article: https://doi.org/10.1080/00076791.2019.1642875

Published online: 13 Aug 2019.

BUSINESS HISTORY
https://doi.org/10.1080/00076791.2019.1642875

Routledge
Taylor & Francis Group

Shifts in government business relations: Assessing change using the restrictive business registers in the OECD, 1945-1995

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ABSTRACT

The varieties of capitalism framework highlights the governance of firms' competitive behaviour as a key aspect of state-business relations. This article examines changes in the scope, intensity and transparency of cartel registers in 13 OECD countries in the half century following World War II. Quantifying these policy aspects over five decades using the OECD's 2013 *New Indicators of Competition Law and Policy* reveals changes in government-business relations over time, with different approaches evident in each country. The results reveal complex interactions effect policy in each country and challenge a simple 'Americanisation' explanation for changes in cartel policy and the static typology of the VoC literature.

KEYWORDS

Business regulation; anti-competitive behaviour; policy influence; cartel register

Introduction

How governments regulate the behaviour of firms in market-based economies is at the heart of the relationship between capitalism and the state. This study examines the variation and development of a key policy instrument, the 'cartel register' that was used in many countries in the mid-20th century to identify and constrain anti-competitive behaviour. Our aim is to investigate how this instrument reflects the differing and gradual transitions in state-business relations from initially tolerant attitudes towards anti-competitive agreements to regulations that were intolerant of cartels and their activities. This policy, and its evolution serves as an explicit case-study of the relationship between the government and private sector

The varieties of capitalism (VoC) literature, most closely associated with the work of Hall and Soskice, and expanded by Hanke and others, examines patterns in countries' institutional and governance frameworks that organise capitalistic markets within their own boarders (Hall & Soskice, 2001; Hanke, Rhodes, & Thatcher, 2008). As part of a broader literature on comparative capitalism the VoC literature attempts to explain variations in economic performance using a framework that goes beyond a nation's proximity to the technological frontier or simple adherence to market-based solutions (Jackson & Deeg, 2006). The central

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idea is that institutions can provide a comparative advantage to an economy (or conversely produce a comparative disadvantage) and so affect economic performance.

> Something approaching a consensus has now emerged around the notion that national capitalisms are distinguished one from another by particular configurations of interlocking and interdependent political-economic institutions that produce different forms of behaviour on the part of economic actors, different economic and social outcomes, and different patterns of economic development. These distinct national capitalisms are quite resistant to pressures towards convergence upon a single model of capitalism (Howell et al., 2003, p. 103).

Institutions are important, not because they operate as individual elements in the economy, but because they have impact on the strategic interactions between firms and economic actors affecting the level of decentralised cooperation required to solve collective problems. In their original work, Hall and Soskice advanced the notion of two distinct classes of national capitalism; one that tended towards a liberal market economy (LME), captured in the examples of Australia, Canada, Ireland, New Zealand, the UK and the US and another class that tended toward a coordinated market economy (CME). The membership of this group included Austria, Belgium, Denmark, Finland, Iceland, Germany, Japan, The Netherlands, Norway, Sweden and Switzerland. Differences in institutional structures and processes resulted in different responses to economic stresses and different 'patterns' of capitalism. For example, liberal market economies could be characterised as being able to make relatively rapid adjustments in their capital and labour markets. Driven more by markets, competitive pressures and with economic actors more at 'arms' length' such economies are heavily influenced by market mechanisms and shaped by market outcomes. Coordinated market economies, however, are characterised as those where firms have a more 'connected' and 'committed' relationship to each other, and to other actors in the economy. The state can also be quite active in coordinating the market mechanism. The result is a slower ability to respond to market signals, but higher quality labour and productivity outcomes because of their enhanced consultative processes and more interconnected links between labour and capital. The LME and CME both represent 'ideal types' and the variations between countries can be considerable.

Despite the insights of their approach, however, there are difficulties with the VoC approach. As recently noted, determining which institutions are critical in these comparative studies, and then delimiting their individual areas of influence using a comprehensive model, is challenging (Rougier & Combarnous, 2017, p. 71). In broad terms, the VoC model identified as critical: 1) industrial and labour relations; 2) corporate governance and finance; 3) product market regulation and inter-firm relations; 4) training and education systems; and 5) level and type of social protection (Rougier & Combarnous, 2017, p. 71). Clearly, identifying and separating these categories is not always simple; for example, delineating corporate governance from inter-firm relations; or labour relations from a nation's social protection system, may result in arbitrary (and potentially false) differences being identified between nations. This has led some researchers to include additional sectors.[1]

The organising concepts behind the models, such as a sector's 'governance mechanisms' may also be vague and difficult to define. For example, given Douglass North's definition of what institutions are, such categories need to be broad enough to include both formal institutional structures and national attitudes. Efforts to measure 'institutions' have revealed the difficulty of producing commonly accepted estimates of institutions; or that other

factors (such as human capital) appear to be more fundamental (Glaeser, La Porta, Lopez-de-Silanes, & Shleifer, 2004; North, 1990).

Other criticisms of the VoC literature are that it is 'incomplete' (underestimating the multiple roles of the state); path-dependent and overly static; 'mechanistic' in its determinism, overly simple, and with a heavy bias toward countries and institutions with a significant manufacturing sector (Hanke, Rhodes, & Thatcher, 2008, pp. 6–9). It has also been suggested that the varieties of capitalism thesis is time dependent (Howell, 2003) as the thesis better explains the stable 1990s than the unstable 1970s.

Ahlquist and Christian undertook a careful review of the original country clusters posited by Hall and Soskice (Ahlquist & Breunig, 2009). Using a mixed-model clustering analysis, they examined the stability and consistency of the identified clusters in three different periods; 1980–1984; 1990–1994 and 2000–2003. They found that not only did the number of 'like' clusters (based on statistical measures of association) vary over these periods but also that individual countries shifted between clusters in different periods. They concluded that while they had not disproved the varieties of capitalism literature, they had shown that the clusters were not as stable or consistent as the literature implied, and that great care needed to be taken to avoid circular reasoning.[2] They suggested the characterisation of countries as CME or LME should be considered as ideal-types that could alert researchers to look for patterns of 'institutional complementarities' to explain different outcomes - but that the differences may be in more specific areas (such as wages or monetary policy). Examining the historical development of LME and CME countries from 1900 onwards, others found little evidence that the characteristics associated with each ideal-type persisted over time, strengthening the argument that the patterns proposed by the VoC literature are period specific (Schneider & Paunescu, 2012; Shanahan, 2012).

Research question and approach

Our research takes its point of departure from these debates. Separate from the VoC literature are current historical interpretations of economic development of advanced economies in the decades after WWII and the importance of American attitudes towards markets, competition and trade in shaping those economies. As one aspect of this, it has been suggested that the competition and cartel policies in many countries (and especially many OECD countries) after World War II were a direct result of their Americanisation. It is suggested that America's strong anti-trust approach to cartels something that developed in the United States in the 1890s, was transferred to many European and developed countries, directly for example, through the US occupation in Germany and later via consultants and experts in European institutions. American attitudes and models also penetrated Europe indirectly suggesting to some interpreters that the process was inevitable and occurred in a relatively similar manner across a range of countries (Djelic, 2002; Edwards, 1967; Leucht, 2009; Leucht & Marquis, 2013; Schröter, 2005, 2010).

By showing the varied paths and occasionally slow transitions towards less tolerant attitudes regarding anti-competitive behaviour, this article challenges the static VoC categories and the 'inevitable' Americanisation interpretation of Europe's competition policy history. While the overall significance of American influence is clear, and international convergence

on economic models and competition policy obvious, the transition has been complex and followed national paths.

Despite the insights provided by the VoC approach there are problems with identifying the critical patterns of similarity or difference in governance mechanisms that ultimately impact on economic performance. The critical literature suggests the results depend on the time period selected and the breadth of institutions analysed. One way forward would be to examine an extended period (perhaps 50 years), but focus on a comparatively narrow, but critical aspect in state-business relations. Given a sufficient number of studies that examine particular aspects of state-business relations, or individual aspects of wage setting, or financial markets it would be possible to construct a more nuanced analysis of the similarities and differences between nations and the changes in these areas over time.

Similarly, the Americanisation interpretation of European nations' competition policy fails to take account of the important variations between countries' economies, political parties, and national histories (Segreto & Wubs, 2014). After WWII, different countries faced different economic and social challenges, and there was considerable variation in national attitudes towards cartels and other forms of cooperative behaviour. Moreover, competition legislation was the focus of strong lobbying from various economic sectors and industries, often dressed as being in the 'national interest', and which affected the outcome of the legislation. A close examination of the transition of national policies governing anti-competitive behaviour would reveal whether nations were simply 'swept along' in their adoption of American style anti-trust legislation, or whether their paths of policy development were more unique.

This article investigates how and when the content, enforcement and transparency of cartel registers changed after World War II. We do this by creating a form of 'tolerance index' for the individual countries, at specific points of time. While the end-point in most countries was the adoption of legislation that criminalised or heavily punished cartel-like behaviour, the results show that the path to this final position varied greatly between nations. We demonstrate this historical journey in national competition policies and how anti-cartel policies differed between countries in ways that were not always consistent with the VoC framework.

The article is in four sections. The first briefly introduces the cartel registers, explains their aims and methods and demonstrates the degree of national variation between them, despite their relatively common objectives. Section two discusses the recent OECD competition indicator that we adapt to measure change in the register-legislation and the data sources on which this assessment is based (Alemani, Klein, Koske, Vitale, & Wanner, 2013). Section three presents the results of this analysis for 13 countries over the five decades of the second half of the twentieth century. Finally, section four presents our conclusions and overall assessment development of policies designed to inhibit anti-competitive business practices in the OECD.

Cartel registers

The Sherman Act of 1890 and the Clayton Act of 1914 are usually taken as delineating the starting date of American's strong anti-cartel (anti-trust) attitudes. The Europeans, by contrast, were less antagonistic towards cartels, probably because of the proportion of family businesses in Europe and the perception that only cooperation could help European

businesses compete against their US counterparts.[3] The European approach attempted to balance the potentially harmful activities of cartels against the benefits of cooperation they might create (Edwards, 1967; Thorelli, 1959; Timberg, 1953). The inter-war period is seen as the highpoint for cartels in Europe and countries outside the American sphere of influence. Inter-firm collaborations were frequently regarded as promoting stability and cooperation, especially via export cartels that advanced the national interest. Many forms of business collaboration and restrictive practices were not targeted by governments and were occasionally promoted in times of crises and wars (Bertilorenzi, 2016).

This approach did not go completely unchallenged, however. While the cooperative movement expressed its concern about the impact of cartels on smaller firms and consumers, and legal and economic experts too expressed their reservations, the consensus of the 1927 League of Nations report was that business combinations were not necessarily bad, but must be judged by their impact (Hirsch, 1926). They recommended a policy of watching and learning (Bertilorenzi, 2016). Four years later, however, the reports of another international committee suggest the tide had turned against cartels and recommended publicly identifying offenders and their agreements (McGowan, 2010).[4] The dominance of the US economy after WWII, with its free-enterprise approach and trade liberalisation, and cartels' close association with fascist systems saw attitudes shift against anti-competitive practices. For nations to participate in the modern, international economy required the old rules of comfortable business arrangements be overturned, especially if they might hamper change or cause inflationary pressures. As a consequence, several European countries introduced competition legislation, although these usually did not ban anti-competitive agreements outright.

Influenced by their previous interactions with business, European regulators focused more on the effects of the anti-competitive practices than on the agreements themselves, balancing the pros and cons of cartel behaviour, frequently on a case-by-case basis (Harding & Joshua, 2010, p. 40.) Consideration was given to the public interest, business and consumer interests, as well as economic and political goals. Through the 1950s, 1960s and 1970s, balancing such considerations also saw modifications to the cartel legislation – as each nation followed the path it viewed as best serving its own interests. By the last two decades of the 20th century, however, supranational policies (such as those required by EU membership) required individual nations to meet externally imposed standards when tackling non-competitive agreements within their own borders. Harsher legislation directly prohibiting firm cooperation became the new norm.

While the national attitude to cartels when legislation was introduced can reveal how tolerant (or not) government regulators were, it is also possible to use the modifications made to the legislation after it became enacted, as a measure of change in national business-government relations, and the degree to which countries solved the 'coordination problem' between market processes and market outcomes. If the legislation governing firms' anti-competitive behaviour remained relatively unchanged, for example, this suggests a relatively static government-business relationship and perhaps that the internal national vested interests are influential. If there were real modifications to the initial legislative settings, it may be that the business-state relationship is more dynamic than proposed by the VoC framework, or that factors external to the nation (i.e. trade openness) are (or become) influential. In any case, overlooking legislative and regulatory change reduces our understanding of how business-government relationships vary over time and how market economies transform. Change is usually a gradual rather than revolutionary process.

Business regulations and the rules designed to promote competition are the outcome of many influences including a nation's traditional attitudes to competition ('competition culture') and the role of the state, the relative importance of particular industries, pressure groups, individual actors, international trends and the overall balance between the economy, development and standard of living. They are also a critical element in defining the relationship between government and business – a dimension at the core of the VoC literature.

Cartel registers were one form of regulation that occurred in many nations in the twentieth century. These registers, which existed to chronicle anti-competitive agreements, adopted a wide variety of approaches, revealing a broad range of potential influences (Fellman & Shanahan, 2016). The term 'cartel register' or 'restrictive practices register' refers to the instrument that recorded restrictive trade practices used by businesses to manipulate their markets and lessen competitive forces. These instruments frequently formed one element of a government's broader competition policy.[5] For example, some reflected agreements which were under government control (an approach labelled 'anti-abuse' or 'tolerant') while others only recorded agreements exempt from overall prohibition (an 'anti-trust' or a 'non-tolerant' approach) (Schröter, 2010). Some jurisdictions were legalistic in their enforcement, while others were informal or even 'voluntary'. Some registers were designed to publicise market manipulation; others were secret registers not open to the public. All were designed, however, to govern in some way, anticompetitive business agreements. Given such variation, cartel registers and their content can reveal aspects of the central relationship between governments and the capitalist actors (firms) and markets within their jurisdiction.

This article takes advantage of the variation in regulation of cartel behaviour to detect whether there was any association between this variation and a country's classification as a liberal market economy or a coordinated market economy. Finding only circumstantial evidence of an association we quantify dimensions of the anti-competitive regulations, and their changes over time, to detect whether these shifts to cartel register legislation appear to be the result of the 'coordination' mechanism associated with being either a CME or LME economy, or whether the changes are clearly consistent with an American-type 'anti-trust', pro-competition influence.

More than a simple record and monitor, the registers were also used by some competition authorities as a mechanism to alter firms' behaviour. This variation around a common legislative form can be compared against the VoC categories of a nation being either a coordinated market economy (CME) or a liberal market economy (LME). Table 1 reports the dates when cartel registers were introduced, (as early as 1920 in Norway, and as late as 1967 in Australia). It is also classifies whether the initial legislation (which changed over the decades) was initially highly tolerant, tolerant, intolerant or very intolerant of business behaviour that was anti-competitive, by identifying how restrictive was the initial form of legislation. This categorisation is of course a crude first-estimate (based on earlier assessment of each country's attitudes) and our further calculations from the model developed here will provide a more fine-grained picture (Fellman & Shanahan, 2016). Finally, it reports Hall and Soskice's classification of each nation as either LME or CME.

As is clear from the table, despite the register being a common form of governance of firm behaviour, there is no clear pattern of adoption by either the LME or CME coded nations. Our data set, which collected records from countries where information about the register was available for an extended period, suggests that both coordinated and liberal market

Table 1. Thirteen OECD countries with cartel registers in the 20th century and the VoC categorisation.

Country	Original legislation	Tolerance of restrictive practices (year legislation introduced)	Type of register	Liberal Market or Coordinated Market Economy
Norway	Price Regulation Act	Tolerant (1920)	Public	CME
Denmark	Law on Price Agreements; replaced by Monopolies Supervision Act 1955	Highly Tolerant (1937)	Public	CME
Sweden	Act on Probation on Restrictive Business Practices	Highly Tolerant (1946)	Public	CME
Japan	Act on Prohibition of Private Monopolization and Maintenance of Fair Trade	Highly Intolerant (1947/1953)	Public	CME
United Kingdom	Monopolies and Restrictive Practices (Inquiry and Control) Act	Intolerant (1956)	Public	LME
Germany	Law against Restraints in Competition	Intolerant (1957)	Public	CME
Finland	Act on the Control of Practices Restricting Economic Competition	Highly Tolerant (1957)	Public	CME
Netherlands	Economic Competition Act	Highly Tolerant (1958)	Secret	CME
New Zealand	Trade Practices Act	Intolerant (1958)	Public	LME
Austria	Cartels Act	Tolerant (1951)	Public	CME
Israel	Restrictive Trade Practices Act	Intolerant (1959)	Public	n.c
Spain	Act to Afford Protection Against Activities that Reduce Competition	Intolerant (1963)	Public	n.c
Australia	Trade Practices Act	Highly Tolerant (1967)	Secret	LME

Note: Of the 35 current members of the OECD, more than 14 had cartel registers during the 20th century. Other countries that had cartel registers include Hungary, Poland, Czechoslovakia, Yugoslavia and Italy and Bulgaria, but these are omitted from this analysis due to lack of information about the content of their registers. The registers in the Eastern European countries were abolished after WWII, when these countries became part of the socialist bloc.
Degrees of tolerance: Highly tolerant (ban no restrictive practices; only control); tolerant (bans some specific practices; no general ban); intolerant (in principle bans; allow exemptions); highly intolerant (ban most; few exceptions).
n.c. – not originally classified by Hall and Soskice Varieties of Capitalism.
Sources: As in Table 2 plus Borrel, 1998; Hunter, 1963; Thorelli, 1959; Rampilla, 1989.

Table 2. Dates cartel registers were introduced and ended in selected OECD countries.

Country	Register first considered (ie first mentioned in debates)	Register legislation created	Register began operation	Year ended	Years in existence
Norway	1919	1920	1920	1993	73
Denmark	1920/1930	1937	1938	1989	52
Sweden	1936	1946	1947	1993	47
Japan	1952	1953	1954	1999	46
Austria	1898/1948	1951	1952	2006	55
United Kingdom	1955	1956	1956	1989	33
Germany	1923/1952	1957	1958	1985	28
Finland	1952	1957	1959	1992	35
Netherlands	1941/1956	1958	1959	1998	40
New Zealand	Na	1958	1958	1961	3
Israel	1956	1960	1960	1988	28
Spain	1962	1963	1964	1989	26
Australia	1959	1965	1967	1975	9

Sources: Compiled from: Bhattacharjea, 2012; Collinge, 1969; Edwards, 1967; Hunter, 1961; Jaffe, 1967; Kestenbaum, 1973; OECD, 1964, 1971, 1978b; OECD, 1967–1975; OECD, 1978a; OECD, 1987, 1991, 1993, 1995, 1997, 2007; OECD, 1998.

economies used registers as a policy instrument. Half of Hall and Soskice's original six LME nations (Australia, New Zealand and the United Kingdom) and almost three quarters of their CME nations (Austria, Denmark, Finland, Germany, Japan, The Netherlands, Norway, and Sweden) adopted a register.[6] While most of the countries that were tolerant towards cartels

when the register legislation was introduced were also coordinated economies, the link between intolerance and categorisation as a liberal market economy is not as clear-cut. There were only two cases where the register documentation was not made public; one case was in the Netherlands (a CME) and the other case was in Australia (an LME).

One interpretation of these patterns is that the cartel register is not, as is claimed, an insightful tool by which to identify countries' governance of businesses and the role of markets. Given that the legislation establishing a register is directly focused on identifying (and in some cases reducing) firms' anti-competitive activities, this interpretation does not seem reasonable. A second interpretation is that the link between government, business and markets is more complex than the binary categorisation proposed under the VoC. It is assumed here that the interaction between the state, business and markets is relatively complex, changes over time, and is influenced by the history and the particular institutional circumstances found in each nation.

Variation between nations

While the label 'restrictive practices register' or 'cartel register' identifies a policy mechanism that dealt with firms' anti-competitive activities, there was considerable variation in how the various registers operated. As already highlighted by the categorisation of legislation as ranging from highly tolerant to highly intolerant, government policies varied in the type of activities they targeted, how they were used by the authorities, and the vigour with which they were implemented.

The activities and forms of anti-competitive behaviour included in the registers also differed. In some countries, it included virtually all anti-competitive agreements, as well as mergers and acquisitions and firms in dominant market positions, while in others only vertical and horizontal agreements were registered. Resale price maintenance, which directly impacted on consumers, was often made an offence, but not in every jurisdiction. In some nations, the registers recorded firms with written agreements to engage in anti-competitive behaviour; in others, all known agreements were recorded. In some countries, the records included firms that had restrictive agreements, while in others the registers recorded firms granted exemption from prosecution for being involved in such agreements. At least some of these variations were likely due to the impact of lobbying on the policy creators and the politics associated with creating legislation. This has been discussed elsewhere (Fellman & Shanahan, 2018).

Table 3 provides a simplified categorisation of the possible variations in form, content, and approach associated with the regulatory instrument labelled a 'cartel register'. Within this narrow slice of competition policy, the variation in these dimensions represents the range of potential 'solutions' to what has been termed 'the coordination problems' facing both LME and CME countries (Hall & Soskice, 2001).

Method

In 2013, OECD researchers proposed a set of competition law and policy indicators (Alemani et al., 2013).[7] We essentially follow a modified version of their approach in the analysis that follows. This reveals the extent to which national legislation is tolerant (or not) toward restrictive business practices as well as categorising aspects of the complexity of such legislation.

Table 3. Categorisation of variation in range of aims, contents and enforcement of cartel registers in the 20th century.

	Possible range of variation	
Aim of Register	Prohibit outright (intolerant)	Prevent Abuse (tolerant of existence)
Types of agreements	All forms (written or verbal)	Only written included
Content of Register/Forms of agreement	All forms of market manipulation prohibited	Selected forms of manipulation
	Horizontal. Vertical, full-price forcing, market sharing, tender rigging,	Typically horizontal agreements
	Include merger and acquisitions	Excludes mergers and acquisitions
Enforcement mechanisms	Public exposure (shaming)	Authorities record (have a record)
	Use of law courts (prosecution)	Quiet discussion (persuasion)
	Vigorous pursuit	Minimal efforts to enforce policy
Level of transparency	Transparent (publicly accessible)	Not transparent (closed)
Coverage	Entire economy (including export industries)	Partial coverage of select industries

Source: Fellman and Shanahan 'Regulating Competition'.

Even countries that have adopted strictly non-tolerant policies over the past two decades often adopt different targets, and practices in enforcing their policies. The OECD report focuses first on the scope of action of the authorities (legal powers to investigate, impose sanctions or block mergers or other anti-competitive behaviour); secondly on their policies toward anti-competitive behaviour (methods to counter or reveal various forms of anti-competitive behaviour); and thirdly, on their probity of investigation (independence and accountability of authorities and their fairness in their actions). Thus, modern analysis of contemporary competition policies sees the focus increasingly on the efficiency of the authorities and their independence from interest groups and their influence, and less on the formal legislation itself. The 2013 report concludes that the competition regimes in the OECD are broadly similar and close to 'best practice', while the real differences between jurisdictions lie in the implementation of their legislation (Alemani et al., 2013). Their method of assessing the relationship between government and business, in the field of competition policy, lends itself to examining changes in the efficacy and impact of cartel registers in the decades after WWII, although it has to be simplified for our historical investigation.[8]

The indicators proposed by the 2013 OECD study that focus on the scope of policies are the most useful for our analysis of cartel register policies. A diagrammatic representation of the indicators' categories, and their sub-elements used in this study is reflected in Figure 1. For example, the 'scope' of any country's cartel register is assessed against four elements, that include: the number of sectors of the economy the legislation covered; the percentage of restrictive agreements included; whether international agreements were included, and whether the activities of foreign-owned companies operating inside a country were required to be included on the register. Each element is given a value ranging from zero (not required) to a maximum of six (for sectors covered).[9] The values and meanings of each element are given in detail in Appendix 1.

For our purposes, this approach quantifies changes in one important governance relationship between the government and the private sector and provides the case-study evidence with which to assess the consistency of VoC categorisations. The results also allow us to examine the path state-government relations travelled in this field of regulation and assess whether the changes appear to be a direct consequence of the 'Americanisation' of competition policy. Beginning with either a tolerant or non-tolerant attitude to cartels, the evidence reveals the comparative changes to the duration, scope, activities and transparency of the registers over almost 50 years of regulation.

Competition Indicators		
Scope of Action	**Activity Registered**	**Transparency of Register**
Elements within each indicator		
No. of Sectors covered	**Horizontal Agreements**	**Public or Secret**
% of restrictive agreements included	**Vertical Agreements**	**Vigour of application**
Inclusion of international agreements	**Refusal to deal/boycott**	
Inclusion of foreign owned companies	**Excusive Dealing**	
	Dominant firm	
	Resale Price maintenance	
Number of Years Legislation in Operation*	**Mergers & Acquisitions**	

Figure 1. Overview of Register indicators. Source: Based on OECD study by Alemani et al. (2013). Notes: *This category was classified as a separate competition indicator in the scales that follow.

Having collected data from historical documents relating to the registers, we tabulate and rank each country's register along the three dimensions of scope, activity and transparency in each decade from 1950 to 2000.[10] Given the variation in start and end dates, not every country appears in each panel. While many elements may trigger change in government policy, and cause a modification of the register, our focus is on the relative changes that occurred in different dimensions of the registers themselves.

The key data source for this approach is the series of OECD publications on restrictive business practices published regularly since the 1960s. These present summaries of member countries' legislation together with regular follow-ups of any legislative changes. These are supplemented with reports from individual countries, and analysis by contemporary commentators, to construct a series of observations on the registers in 13 countries.

The balance in the instrument's measures of duration, scope, activity and transparency is reflected in the maximum aggregates possible for each indicator: 10 for duration; 11 for scope; 7 for activity and 2 for transparency. The total score is expressed as a percentage to assist comparisons.[11]

Results

Tables 4a and 4b report the key variations in the legislation covering restrictive trade practices legislation in 13 OECD countries for the decades of the 1950s, 1960s, 1970s, 1980s, and 1990s. Collectively Table 4 incorporates the four most important dimensions of the administrative and legislative permutations within each register policy and quantifies these into four simple numerical scores to improve comparability.[12] A total percentage score is recorded as a summary of all four dimensions. The results are a relative measure of the collective 'impact' of a nation's register policy. As the registers changed over time, we report scores,

Table 4a. Relative impact of national anti-competition registers.

	1950s					1960s				
Impact measure	Duration	Scope	Activity	Transp.	Total	Duration	Scope	Activity	Transp.	Total
Max score	**10**	**11**	**7**	**2**	**100**	**10**	**11**	**7**	**2**	**100**
Norway	10	6	6	2	**80.0**	10	6	6	2	**80.0**
Denmark	10	5	5	2	**73.3**	10	5	5	2	**73.3**
Sweden	10	6	5	2	**76.7**	10	6	6	2	**80.0**
Austria	8	5	5	2	**66.7**	10	5	5	2	**73.3**
Japan	6	8	7	1	**73.3**	10	7	7	1	**83.3**
UK.	4	3	3	1	**36.7**	10	3	6	2	**70.0**
Germany	2	4	6	2	**46.7**	10	4	6	2	**73.3**
Finland	1	5	3	1	**33.3**	10	5	4	1	**66.7**
Netherlands	1	6	4		**36.7**	10	6	4	1	**70.0**
New Zealand	2	6	7	1	**53.3**	1	6	7	1	**50.0**
Israel						10	6	6	1	**76.7**
Spain						6	5	4	1	**53.3**
Australia						3	5	5	1	**46.7**

	1970s					1980s				
Impact measure	Duration	Scope	Activity	Transp.	Total	Duration	Scope	Activity	Transp.	Total
Norway	**10**	6	5	2	**76.7**	**10**	7	6	2	**83.3**
Denmark	10	5	5	2	**73.3**	9	5	5	2	**70.0**
Sweden	10	7	6	2	**83.3**	10	7	6	2	**83.3**
Austria	10	6	6	2	**80.0**	10	7	6	2	**83.3**
Japan	10	7	6	1	**80.0**	10	8	7	2	**90.0**
UK.	10	6	6	2	**80.0**	9	8	6	2	**83.3**
Germany	10	4	6	2	**73.3**	10	4	5	1	**66.7**
Finland	10	6	6	2	**80.0**	10	4	5	1	**66.7**
Netherlands	10	6	4	1	**70.0**	10	6	4	1	**70.0**
New Zealand										
Israel	10	8	6	1	**83.3**	8	8	7	1	**80.0**
Spain	10	6	6	1	**76.7**	9	6	6	1	**73.3**
Australia	5	6	6	1	**60.0**					

Notes: Adapted from Alemani et al. (2013) and Lee (2007). For details of values, see Appendix 1.
Sources: See Tables 1 and 2.

Table 4b. Relative impact of national anti-competition registers.

	1990s				
Impact measure	Duration	Scope	Activity	Transp.	Total
Max score	**10**	**11**	**7**	**2**	**100**
Norway	3	8	6	2	**63.3**
Denmark					
Sweden	3	7	6	2	**60.0**
Austria	10	8	6	2	**86.7**
Japan	9	10	7	2	**93.3**
UK.					
Germany					
Finland	2	7	6	2	**56.7**
Netherlands	8	8	7	1	**80.0**
New Zealand					
Israel					
Spain					
Australia					

Notes: Adapted from Alemani et al. (2013) and Lee (2007). For details of values, see Appendix 1.
Sources: See Tables 1 and 2.

for each decade of the 1950s to 1990s, capturing the change in each country's policy over time. The scores are mostly comparable within the period to which they refer, as legislative changes over time redefined activities (usually broadening the mandated behaviour). This

is even though the number of activities proscribed in legislation increased over time in most jurisdictions. One issue is that when some types of agreements were eventually banned, they disappeared from the legislation as such behaviour was no longer registered. In our model these behaviours also disappear, as our focus is to reveal changes to the cartel legislation and its scope, implementation and transparency, rather than measure a nation's entire statutory transition toward more anti-cartel legislation.[13] On the repeal of the entire register legislation, the jurisdiction disappears from our measure entirely.

It is immediately obvious that the use of the cartel register as a form of governance, while used extensively in the 1950s, reached its peak in our 13 sampled OECD countries in the 1960s, diminishing only marginally in the 1970s and the 1980s. By the 1990s, however, the use of the register as a form of anti-cartel policy had disappeared from the statute books of most of our sampled countries.

Japan achieved the legislation with the widest scope (achieving 10/11 in the 1990s), while many of the Nordic countries' legislation was broadly applied for several decades. Countries that exhibited the narrowest range of areas covered by the legislation were Germany, which exempted many sectors from the legislation, Australia (and briefly) New Zealand. The United Kingdom went from an initially narrow scope (score 3) to the 1980s when it achieved a score of 8. Overall the scope of coverage generally enlarged over the decades.

The measure 'activity' which takes account of the various types of agreements covered within the sectors covered by the legislation was generally sustained through the decades. The exceptions were the UK and Finland which started with a relatively low number of agreements in the 1950s.[14] Again Japan scored highly in this field, as did the Netherlands in the 1990s. As with the results for scope, activity scores generally increased over the decades.

Transparency (with a maximum score of 2) was mostly impacted by the legislative requirement that the registers were either public documents or secretly recorded. In all cases where the registers were initially secret, they remained so over the period of the legislation. The vigour with which the legislation was enforced (also included in this category) also increased over time (and the exception, however, is Spain).

Calculating scores for four dimensions immediately highlights the importance of continuity in regulatory regimes. Countries where the registers existed for extended periods (e.g. Austria, Norway, Denmark, Japan) were likely more influential in shaping firms' behaviour than countries where the register existed for only a short period. This is not equivalent to saying there was necessarily less anti-competitive behaviour as a result, but rather, that the longer a regime is in place, the more firms are likely to modify (in one way or another) their behaviour. A more embedded 'competition culture' develops. Consumers and other interest groups in the market also adapt their expectations to the view that collusion and anti-competitive behaviour is not acceptable. To determine whether the regulatory framework produced relatively more intense pressure on firms, however, requires consideration of the other dimensions of application – such as the range of sectors covered, the activities included in the register and the degree to which firms' behaviour was revealed publicly. This is the intention behind quantifying these other dimensions.

The transition towards less tolerant legislation took a variety of paths. Based on the scores for legislative scope, activity and transparency reported in Tables 4a and 4b, Figure 2 depicts changes in the 'tolerance index' and reveals the various paths followed by each nation; and that each country gradually shifted from more to less tolerant cartel registration legislation

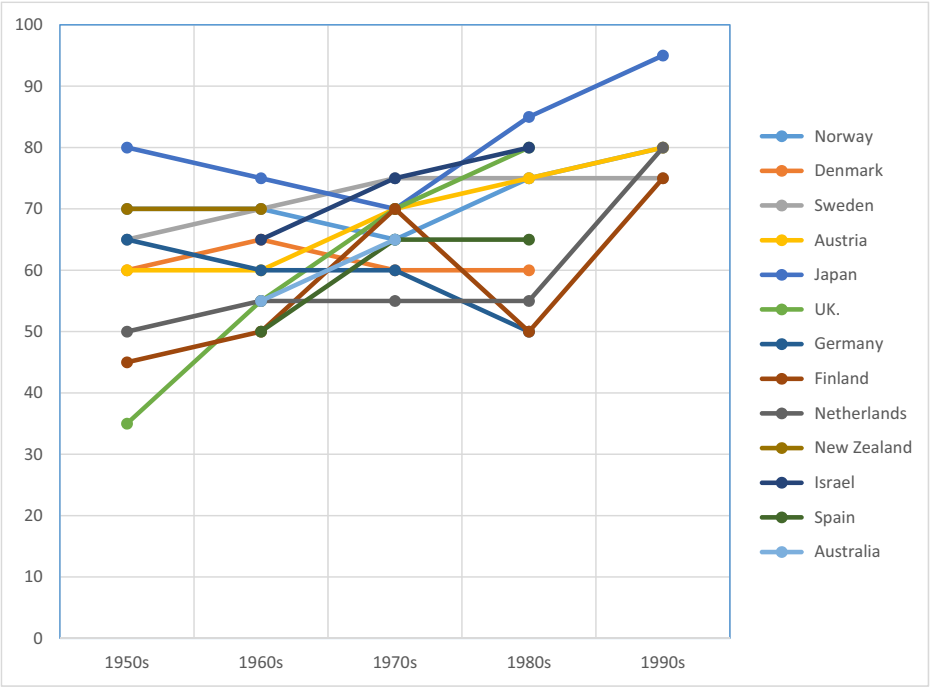

Figure 2. Trends in the scope, activity and transparency of anti-competitive business registers in 13 OECD countries after WWII.
Note: Based on total scores for each country reported in Tables 4a and 4b, but excluding scores for duration. Several countries prohibited anti-competitive behaviour outright in the 1980s. Including varying low duration scores in this decade misrepresents the shift to less tolerant legislation.

over 50 years. Some nations were 'early adopters', but it took a long time for them to 'toughen' their approach. This is best exemplified by Norway, which first legislated in 1920 but only adopted zero-tolerance legislation in the 1990s. On the other hand, the Norwegian legislation was not completely toothless compared, for example, to Finland or Sweden during the first decades. Finland was included by Thorelli among the early starters, but the first statute was especially weak and remained so for a long time. On some occasions, the direction of change was reversed and legislation impeding anti-competitive practices was weakened, as in Japan in 1953 (Ohata & Kurosawa, 2016). Finally, there were other examples (i.e. Spain) where intolerant legislation was so meekly enforced as to make the actual policy environment quite accepting of anti-competitive practices. In other situations (e.g. Australia) the proposed legislation was successfully opposed for several years before an acceptable (weakened) consensus emerged, while in other countries such as New Zealand, comparatively strong legislation was passed only to be quickly (within three years) taken off the statute books.

Countries which held public accountability in high regard mostly created registers that were open to public inspection (e.g. Sweden, Denmark, Norway) while more secretive approaches were adopted in Australia and the Netherlands. To judge a strong anti-trust framework as definitive of the actual competitive environment or to equate the development of such a framework with the process of modernisation is thus overly simplistic.

The influence of America's antitrust fervour also differed between countries. In the case of Japan and Germany the rapid implementation of an anti-cartel policy was a direct result

of the US occupying forces. Nonetheless, these initially harsh policies were eased after the withdrawal of the occupying administrations. In many cases countries learned from their neighbours (like the Nordic countries, or in the cases of Australia and New Zealand) or adopted legal models suited to their own circumstance, for example Israel where the legislation resembled the UK legislation, but with details that were not familiar to the UK legislation (Kestenbaum, 1973).

The historical record reveals that the process of shifting from more to less tolerant legislation was one of gradual transition. One factor that motivated such change was that registration and lenient treatment of restrictive practices proved inadequate to trigger changes in firms' behaviour. Often the number of registrations remained very low, (as in the UK, Finland, Austria and Spain) due to weak enforcement and/or firms' reluctance to notify their agreements. Over time new forms of restrictive agreement emerged as important, later becoming totally banned as authorities lost patience with the private sector's continued use of such schemes. Until the arrival of a strong common European competition policy national competition policies were also less a matter of anti-trust ideology and more a matter of pragmatic problem solving. For example, the quest for economic advancement required balancing different interests and consideration of multiple policy goals (growth, price moderation, a peaceful labour market, social policy goals etc.). As in the case of Austria, the first legislation was written as a compromise between conservatives and social democrats in an extremely sensitive political situation in 1951. Balancing sensitive political considerations marked the cartel law in Austria for decades (Hoffmann, 1969). Such balancing and multiple goals also explains why the transition to less tolerant legislation often occurred in small increments; there were multiple goals to consider simultaneously. In 1953 Timberg observed

> …. the national legislation in this field [in Europe] differs in broadness of legal scope, detail of administrative articulation, extent of economic activity covered, intensiveness of enforcement, and animating public policy objectives. These differences are only partially due to the diverse economic circumstances and organic and legal institutions … They depend largely on the balance (or lack of it) which individual countries have drawn between two 'liberal' principles –freedom of trade and competition on the one hand, and freedom of contract and association on the other. (Timberg, 1953, p. 445).

Our examination of the various economic, legal, and development factors potentially influencing the cartel registers, would appear to be consistent with his observations. To this we would add the importance of policy path dependence in explaining the different policy journeys in each country.

Conclusions

Our conclusions, based on the evidence presented in the cartel register policies of 13 OECD countries, is that each followed different paths to a common, supra-nationally imposed end; the outright prohibition of serious cartel conduct. Our results also show national variations in the timing, extent and transitions in both the pace and scope of legislation that established and expanded the registers of anti-competitive business practices in these countries. Tables 4a and 4b also reflect the rise of these registers, which were originally restricted to selected countries in the 1950s, and which then expanded rapidly in the 1960s before declining in

use though the 1970s and 1980s. Originally the legislation was designed to register, and in some countries, through public pressure or administrative action curb anti-competitive behaviour. By the 1990s most had been superseded by other forms of legislation that were far less tolerant and which explicitly prohibited or, in some jurisdictions, criminalised anti-competitive behaviour among firms

Our work highlights variations in the 'starting points' for such legislation in each country, Some began with comparatively tolerant and open attitudes to cartel-like behaviour; others were less tolerant, but not prepared to aggressively prohibit such activities. In all cases the technique of establishing a register served the administrative purpose of formalising government-business regulations in this field of private sector activity and signalled governments' attitudes to anti-competitive arrangements. As these attitudes hardened, and businesses appeared little affected by the registration process, so the legislation changed in response to the particular national priorities.

This case study of one critical intersection between government and business and their gradual transition, also suggests that the VoC categories are too statistically oriented to explain such gradual shifts and they fail to reflect the dynamic evolution of government-business relations. The VoC focus on institutional complementarities, can however provide some insight into the transition from tolerant to intolerant attitudes. As mentioned, policies in different countries were often a result of balancing a number of interests, and a range of policy goals other than competition in the market. This reinforces the point that competition legislation is always one component in a larger institutional, political and legislative framework – or regime – and to understand individual features, needs to be studied in context.

We further conclude from this evidence that the simple narrative that many European anti-cartel policies were the result of post WWII 'Americanisation' overlooks the multiple policy variants and important nuances that occurred over 50 years. While there was US influence, especially within the EU where there were direct contacts, how this influenced individual member countries or countries outside of the EC is complex and needs to be studied in detail. As we observe, it was not uncommon that a jurisdiction modelled its approach on policies drawn from a neighbouring country and/or a large European nation. Influence from other jurisdiction was diffused via several steps and 'filters'.

In many countries, the establishment of registers and the stepwise changes to legislation on anti-competitive agreements began as part of a process of 'watching and waiting'. For many years, the optimum approach to anti-competitive behaviour was to learn and observe. Moreover, some industries and lobby groups were able to stall the development towards a tighter legislation, which also slowed change towards more non-tolerant practices. In several of these countries, cartels and restrictive trade agreements were occasionally even considered beneficial, not only for the firms themselves, but also for the economy and other actors in the market, by preventing fluctuations. To change such attitudes was a slow process. Only over time, as attitudes hardened, and an international consensus about the primacy of competitive markets emerged, did the processes of registration and regulation become harsher. Depending on a country's previous experience with competition, the political and economic situation of the individual country, and its particular attitude to the importance of regulation to foster growth or development, or counter inflationary pressures, a country might move more or less quickly to stricter measures against cartels. By the mid-1990s, the importance of coordinating large trading blocs and the push for more globalised trade saw the individual

differences between national regulatory systems give way almost entirely to the force of international standardisation and the outlawing of serous cartel conduct. The internal transition of government-business relations under the weight of such forces, however, was neither simple, smooth nor necessarily inevitable.

Notes

1. Corporate governance; inter-firm relations; work organisation; industrial relations; product market; labour–wage nexus; financial systems; education and skill creation; welfare and social protection; Rougier and Combarnous (2017, p. 71).
2. For example, circular reasoning could result from 'finding' clusters existed because other institutional mechanisms could be present; and 'finding' coordinating mechanisms that produced clusters.
3. Especially as the 1918 Webb–Pomerene Act allowed US firms to form cartels if they traded internationally.
4. These were the views of the Inter Parliamentary Union IPU of 1930 and 1931.
5. Our analysis is restricted to only one form of competition policy legislation.
6. On average, the LME countries maintained their registers for only 60 percent as long as the CME group of nations.
7. The OECD has a long record of tracking the competition legislation in member countries and (more recently) elsewhere. The organisation also adapted an active policy to promote policies and legislative reforms that improved competition and decreased barriers to trade. It has published regular reports and surveys of the regulation of restrictive business practices, which have been useful also in our research.
8. The original version is based on over 70 questions sent to the competition authorities in 49 jurisdictions in 2013. With a coverage of 100 percent, the responses were recorded on a six-point scale in four separate categories and analysed using cluster analysis and correlation to detect similarities between jurisdictions. The scale and coverage of our approach is reduced by the availability of historical data and our reliance on written evidence.
9. These values are clearly arbitrary. As our interest lies in assessing change and comparing the relative path of each country's register policies, the focus is on relative rather than total scores.
10. Our approach also follows the spirit of Thorelli (1959). He based his analyses on five dimensions: i) stated policy objections, ii) aims regarding interaction of firms, iii) approaches or strategies to implement the objectives of the legislation, iv) scope of the legislation (i.e. the type of agreements in focus) and finally, v) enforcement. Thorelli also emphasised the 'sliding scale of friendliness' in European legislations.
11. As our focus is to compare national registers in different time periods and across decades, the somewhat arbitrary and subjective values given to the components of each dimension are arguably less important than adopting a consistent and comprehensive scale over time. Changing the weights given to a particular component will clearly impact on the aggregate scores in particular cases, but the overall conclusions as to the rise and fall of the registers, and which countries adopted more or less comprehensive registers recording restrictive business practices remain relatively unchanged.
12. This approach is similar in concept to others, for example, Nicholson (2007) who introduced an Antitrust Law Index to compare legislation since 2000 and Kaufmann, Kraay, & Mastruzzi (2010), who used more sophisticated methods to create governance indicators for over 200 countries since 1996.
13. Assessing a country's full transition from accommodating (or tolerating) cartels to one which banned them entirely would require identifying and measuring a wide range of legislation that existed under a range of policies including: competition policy; anti-merger policy; foreign ownership policy; consumer protection or trade practices policy etc. Such a study is beyond the scope of this project.

14. Note the difference between legislative 'activity' and what occurred in the economy. In Britain, for example, Broadberry & Crafts (2001) find only a quarter of manufacturing in the 1950s was free of price fixing; their price-cost margins were almost double those of West Germany (Crafts & Mills, 2005); and around 60 per cent were in collusive agreements, something which was negatively correlated with productivity (Broadberry & Crafts, 1996). We are grateful to an anonymous referee for these references. Anti-trust policy in the UK was not, however, really effective until the passing of the 1956 Restrictive Practices Act (Broadberry & Crafts, 1996, p. 77).

Disclosure statement

No potential conflict of interest was reported by the authors.

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References

Ahlquist, J. S., & Breunig, C. (2009). *Country clustering in comparative political economy* (MPIfG Discussion Paper 09/5). Cologne: Max Plank Institut fur Gesellschaftsforschurung (Max Plank Institute for the Study of Societies).

Alemani, E., Klein, C., Koske, I., Vitale, C., & Wanner, I. (2013). *New indicators of competition law and policy in 2013 for OECD and Non-OECD countries* (OECD Economics Department Working Paper No 1104, 96). OECD. Paris. Retrieved from www.oecd.org/eco/Workingpapers

Bhattacharjea, A. (2012). India's new antitrust regime: The first two years of enforcement. *The Antitrust Bulletin*, *57*(3), 449–483.

Bertilorenzi, M. (2016). Legitimising cartels: The joint roles of the League of Nations and of the International Chamber of Commerce. In S. Fellman & M. Shanahan (Eds.), *Regulating competition. Cartel registers in the twentieth-century world* (pp. 30–47). Oxon: Routledge.

Borrel, J. (1998). Spanish competition policy: A case of government's response to domestically perceived problems. *The Antitrust Bulletin*, *43*(2), 445–466.

Broadberry, S., & Crafts, N. F. R. (1996). British economic policy and industrial performance in the early post-war period. *Business History*, *38*(4), 65–91. doi:10.1080/00076799600000135

Broadberry, S., & Crafts, N. F. R. (2001). Competition and innovation in 1950s Britain. *Business History*, *43*(1), 97–118. doi:10.1080/713999207

Collinge, J. (1969). *The law relating to the control of competition, restrictive trade practices and monopolies in New Zealand*. Wellington: Sweet and Maxwell.

Crafts, N., & Mills, T. C. (2005). TFP growth in Britain and German manufacturing, 1950-1996. *The Economic Journal*, *115*(505), 649–670.

Djelic, M. L. (2002). Does Europe mean Americanization? The case for competition. *Competition & Change*, *6*(3), 233–250. doi:10.1080/10245290215046

Edwards, C. D. (1967). *Control of cartels and monopolies: An international comparison*. New York, NY: Oceana Publications.

Fellman, S., & Shanahan, M. (Eds.) (2016). *Regulating competition. Cartel registers in the twentieth-century world*. Oxon: Routledge.

Fellman, S., & Shanahan, M. P. (2018). Sectorial influence on competition legislation: Evidence from the cartel registers, 1920–2000, *Business History Review* 92(4) 633–660. doi:10.1017/S0007680518001058

Glaeser, E. L., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2004). Do institutions cause growth? *Journal of Economic Growth*, *9*(3), 271–303. doi:10.1023/B:JOEG.0000038933.16398.ed

Hall, R. A. & Soskice, D. (Eds.) (2001). *Varieties of capitalism. The institutional foundations of comparative advantage*. Oxford: Oxford University Press.

Hanke, B., Rhodes, M., & Thatcher M. (Eds.) (2008). *Beyond varieties of capitalism. Conflict, contradictions and complementarities in the European economy*. Oxford: Oxford University Press.

Harding, C., & Joshua, J. (2010). *Regulating cartels in Europe. A study of legal control of corporate delinquency* (2nd ed.). Oxford: Oxford University Press.

Hirsch, J. (1926). *National and international monopolies from the point of view and labour, the consuming public and rationalisation, Preparatory Committee for the International Economic Conference*. Geneva: League of Nations.

Hoffmann, G. (1969). Austrian cartel law: Principles and background, the foreign antitrust. *Antitrust Bulletin*, *14*(1), 249–270.

Howell, C. (2003). 'Review: Varieties of Capitalism: And Then There Was One?' *Comparative Politics*, *36*(1), 103–124.

Hunter, A. (1961). Restrictive practices and monopolies in Australia. *Economic Record*, *37*(77), 25–49. doi:10.1111/j.1475-4932.1961.tb01353.x

Hunter, A. (1963). Restrictions of competition in New Zealand. *Economic Record*, *39*(86), 131–141. doi:10.1111/j.1475-4932.1963.tb01467.x

Jackson, G., & Deeg, R. (2006). *How many varieties of capitalism? Comparing the comparative institutional analyses of capitalist diversity* (MPIfG Discussion Paper No. 06/2). Cologne: Max Plank Institut fur Gesellschaftsforschurung (Max Plank Institute for the Study of Societies).

Jaffe, J. (1967). Cartel control in Israel. *Antitrust Bulletin*, *12*(3), 931–948.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). *The Worldwide Governance Indicators: Methodology and Analytical Issues* (Policy Research Working Paper; no. WPS 5430). The World Bank. © World Bank. Development Research Group. https://openknowledge.worldbank.org/handle/10986/3913 License: CC BY 3.0 IGO.

Kestenbaum, L. (1973). Israel's restrictive trade practices law: Antitrust misadventures in a small developing country. *Israel Law Review*, *8*(3), 411–465. doi:10.1017/S0021223700004283

League of Nations Geneva. (1927). International Economic Conference: Resolutions Adopted by the Assembly, September. 24. A. 117. II (B).

Lee, C. (2007). Model competition laws. In R. Fabella, P. Cook, & C. Lee (Eds.), *Competitive advantage and competition policy in developing countries* (pp. 29–53). Cheltenham: Edward Elgar.

Leucht, B. (2009). Transatlantic policy networks in the creation of the first European anti-trust law. Mediating between American anti-trust and German ordo-liberalism. In W. Kaiser, B. Leucht, & M. Rasmussen (Eds.), *The history of European Union: The origin of trans- and supranational polity, 1950–72* (pp. 56–73). Abingdon: Routledge.

Leucht, B., & Marquis, M. (2013). American influences on EEC competition law: Two paths, how much dependence? In K. K. Patel & H. Schweitzer (Eds.), *The historical foundations of EU competition law*. (pp. 125–161). Oxford: Oxford University Press.

McGowan, L. (2010). *The antitrust revolution in Europe: Exploring the European Commission's cartel policy*. Cheltenham: Edward Elgar.

Nicholson, M. W. (2007). Quantifying antitrust regimes. *Erasmus Law and Economics Review*, *3*(1), 41–62.

North, D. C. (1990). *Institutions, institutional change and economic performance*. New York, NY: Cambridge University Press.

OECD. (1964). *Restrictive business practices: Comparative summary of legislations in Europe and North America*. Paris: OECD.

OECD. (1967–1975). *Guide to legislation on restrictive business practices*. Paris: OECD.

OECD. (1971). *Restrictive business practices. Comparative summary of legislations in Europe and North America*. Paris: OECD.

OECD. (1978a). *Comparative summary of legislation on restrictive business practices*. Paris: OECD.
OECD. (1978b). *Restrictive business practices: Comparative summary of legislations in Europe and North America*. Paris: OECD.
OECD. (1987). *Competition policy in OECD countries 1989–90*. Paris: OECD.
OECD. (1991). *Competition policy in OECD countries 1989–90*. Paris: OECD.
OECD. (1993). *Competition policy in OECD countries 1990–1991*. Paris: OECD.
OECD. (1995). *Competition policy in OECD countries 1992–1993*. Paris: OECD.
OECD. (1997). *Competition policy in OECD countries 1993–1994*. Paris: OECD.
OECD. (1998). Recommendation of the council concerning effective action against hard core cartels, C/M(98)7/PROV, March, OECD, Paris.
OECD. (2007). *Competition policy in OECD countries 2005-06*. Paris: OECD.
Ohata, T., & Kurosawa, T. (2016). Policy transfer and its limits: Authorised cartels in twentieth-century Japan. In S. Fellman & M. Shanahan (Eds.), *Regulating competition. Cartel registers in the twentieth-century world* (pp. 169–190). Oxon: Routledge.
Rampilla, N. R. (1989). A developing judicial perspective to India's monopolies and Restrictive Trade Practices Act of 1969. *The Antitrust Bulletin*, *34*(3), 655–682.
Rougier, E. & Combarnous, F. (Eds.) (2017). *The diversity of emerging capitalism in developing countries. Globalization, institutional convergence and experimentation*. Switzerland: Palgrave Macmillan.
Schneider, M. R., & Paunescu, M. (2012). Changing varieties of capitalism and revealed comparative advantages from 1990 to 2005: A test of the Hall and Soskice claims. *Socio-Economic Review*, *10*(4), 731–753. doi:10.1093/ser/mwr038
Schröter, H. G. (2005). *Americanization of the European economy. A compact survey of American economic influence in Europe since the 1880s*. Dordrecht: Springer.
Schröter, H. G. (2010). Loser in power-plays? Small states and international cartelisation. *The Journal of European Economic History*, *39*(3), 527–555.
Segreto, L., & Wubs, B. (2014). Resistance of the defeated: German and Italian big business and the American antitrust policy, 1945-1957. *Enterprise & Society*, *15*(92), 307–336. doi:10.1093/es/khu001
Shanahan, M. (2012). *History, measurement and varieties of capitalism*. XVIth World Economic History Congress, Stellenbosch, 9–13 July.
Thorelli, H. B. (1959). Antitrust in Europe: National policies after 1945. *The University of Chicago Law Review*, *26*(2), 222–236. doi:10.2307/1598181
Timberg, S. (1953). Restrictive business practices: Comparative legislation and the problems that lie ahead. *The American Journal of Comparative Law*, *2*(4), 445–473. doi:10.2307/838096

Appendix 1. Register indicator values

The allocation of numerical weights to each dimension of our indicator is an arbitrary process, the main purpose of which is to create a relative ranking of the registers. In the table below, we provide the range of possible values for each dimension, and a brief justification for these. The values are aggregated to create the final values for each country's policies in each decade.

Indicator	Scale/points	Justification and explanation
Duration of register		
Years in existence	0–10	Split into years existing each decade.
Scope of the Register		
Number of sectors covered in economy	0–6	Ideally a percentage figure, given data limitations, score 1 for each of: Manufacturing; Merchandise services (wholesale and retail trade); Agriculture; Transportation; Building and Construction; Other.
Were all restrictive agreements included or were there exemptions?	0–3	As the proportion of restrictive agreements actually covered is unknown, we estimate scores from 1-3. The value 3= no exemptions; 2= few exemptions, 1= several or many exemptions
Local firms with international partners included?	0–1	Score 1 if local firms with international partners were required to register.
Foreign owned firms	0–1	Score 1 if foreign owned firms were required to register
Activities included in register		
Horizontal agreements	0–1	1 if register included horizontal agreements
Vertical agreements	0–1	1 if register included vertical agreements
Resale price maintenance	0–1	1 if register included resale price maintenance
Dominant firm	0–1	1 if register included dominant firm
Refusal to sell	0–1	1 if register included refusal to sell
Merger and acquisition	0–1	1 if mergers included in register
Exclusive dealing	0–1	1 if register included exclusive dealing
Register transparency		
Public or private	0–1	1 if a public (open) register
Vigour of enforcement	0–1	1 if vigorously enforced, (plus 1 if legal action used to enforce regulations).

Notes: Adapted from Alemani et al. (2013).