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Multilevel business power in environmental politics: the avocado boom and water scarcity in Chile

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ABSTRACT

The production and export of avocados in Chile have experienced explosive growth since the 1990s, severely threatening local communities' human right to water. Despite contentious activities and protest, there has been scant reaction from public authorities and policy continues to strongly support avocado exports. We explain this by analyzing the role that business plays in water politics and the different means it has to counter the search for political influence by aggrieved communities. We argue that the outcome is a product of the multilevel deployment of business power. Based on quantitative and qualitative data, we use process tracing methods to unveil business power mechanisms at the local, national and international levels and their connections. We contribute to the cross-fertilization of business power analyses in comparative political economy and environmental politics, and to the understanding of the under-researched multilevel dynamics of business power and the related politics of scale shift.

KEYWORDS Business power; water politics; multilevel analysis; scale shift; Chile

Introduction

During October 2019, the world saw Chileans take to the streets to demand substantive transformations in the country's economic policy model. It was the greatest mobilization since the return to democracy in 1990. The key societal demands were related to access and quality of pensions, education, and healthcare. Surprisingly, the re-nationalization of water also ranked among the top demands (Bloomberg 2019).

For some years, social grievances due to lack of access to water have become normal in Chilean news. According to one national poll, up to 92% of interviewees regard access to water and drought as primary environmental concerns (El Mostrador 2019). Chileans have thus become aware of the situation of communities like Petorca, a small agriculture-based province in the epicenter of water stress and export agribusiness, and have come to understand the

connection between the exuberantly green avocado fields of its surroundings and water scarcity. Not without reason, amidst the October uprising, protests in Petorca included roadblocks and the burning of neighboring avocado fields. However, in spite of the increasingly high salience of the water scarcity situation, it remains unchanged and access to water continues to favor agribusiness development over human consumption. We argue that the explanation for this is related to business power. How does business manage to nullify conflict and prevent a solution to water scarcity?

The environmental politics literature has been moving from an emphasis on institutions, governance, and interest groups, to the analysis of business power as a key factor affecting environmental policy (Tienhaara 2013, Betsill *et al.* 2014, Falkner 2017). However, much of this literature has concentrated on the international level; that is, in the capacity of firms to shape global environmental policies and governance mechanisms disregarding the way business affects policy nationally and sub-nationally. Several authors have recently turned to analyzing business power and environmental policy at the subnational level (Amengual 2013, Fernández Milmanda and Garay 2019). Although this is an important shift in focus, we still don't know how business deploys its power throughout these different levels. In a nutshell, we need to move toward a better understanding of the interconnection between the multiple levels where business can affect environmental politics and policy.

We show how the persistence of the water scarcity problem in Chile is related to the simultaneous deployment of business power at the subnational, national, and international levels. Our main contribution is our original combination of multilevel analysis with the three dimensions of business power discussed in the literature – structural, instrumental, and discursive. By bringing together the fruitful if disconnected literatures on business power in comparative political economy and environmental politics, we provide novel analytical clues about how business actors build and use their power resources. The key message is that businesses not only build and use different types of power but that they also do so strategically at different levels, which intermingle to favor capital's interests over those of local communities. This allows looking at business power not as a monolithic resource exerted over subordinated groups, but as an active and multifaceted process that shows both business's overarching influence and the possible spaces for contestation from aggrieved communities.

We proceed as follows. First, we review the multilevel perspective and the business power literature in comparative political economy and environmental politics. Second, we explain our case study and process tracing methods. Third, we detail the outcome to be explained, namely water scarcity. Fourth, we analyze the multilevel influence of business power on water scarcity in Petorca, focusing on the channels by which business reduced the capacity of affected communities to gain influence in the ongoing dispute and of the state to respond through

effective public policy. We show that as affected communities looked for different venues for political influence, business deployed its power resources to block them and reassert their influence over the state. Finally, and going beyond our case study, we conclude by revisiting the importance of conceptualizing and studying business power in a multilevel context and how it improves our understanding of the crucial politics of scale-shift in environmental politics. We argue that this provides important clues not only for scholars but also for activists and civil society organizations looking for ways of increasing their political clout against large companies.

Business power and environmental politics: towards a multilevel analysis

Business power research has gone through a revitalization since the 2000s. It has become a focal point in public policy and taxation analyses (Hacker and Pierson 2002, 2010, Fairfield 2015a) and increasingly so in studies of environmental politics (Tienhaara 2013, Betsill *et al.* 2014, Falkner 2017). However, business power research tends to concentrate on one level of analysis – international, national, or subnational – and its multilevel character has not been observed in detail. We argue that a multilevel analysis that brings together the subnational, national, and international levels is crucial for a full comprehension of how business power operates in environmental politics, because environmental politics occurs essentially at different levels (Madariaga and Allain 2020, p.676). In fact, trade and investment liberalization in the past decades have intensified the transnational character of production chains and strengthened natural resource-based development models. This has increased the local environmental effects of production operations carried out by export-oriented companies that often lobby subnational and national governments to maintain favorable exploitation conditions and exercise their power over global commodity chains (see Baglioni and Campling 2017, Irarrázaval and Bustos-Gallardo 2019).

Multilevel analysis is a well-established tradition in comparative politics that has been used to open new agendas in the study of governance (Hooghe and Marks 2001), social mobilization (Tarrow and McAdam 2005), and recently in democratic theory related to environmental issues (Riofrancos 2017). A multilevel perspective requires observing the phenomenon of interest at different geographic or administrative levels, assuming that the actors involved, the strategies adopted, or the temporality in motion may vary. Such a perspective reveals that actors are embedded in multilevel contexts that open or limit differentiated opportunities for them, setting up the necessity for studying ‘the politics of scale shift’ (Von Bulow 2013), that is, the strategies political actors use to increase their political influence on different levels. This implies that all three sources of business power traditionally recognized in the literature – structural, instrumental, and discursive power – need to be addressed at different levels.

Structural power refers to the particular role that business plays in society through its key participation in economic activities, decisive for employment, investment, or growth in general. This privileged position can be used as a threat – tacit or explicit – against politicians. Responsive and office-oriented politicians will consider the impact of their decisions on the economy and try to avoid antagonizing business (Fairfield 2015b). Instrumental power combines a set of practices to exert direct influence, including partisan linkages, recruitment of government cadres, technical expertise, and media access, among others (Fairfield 2015a). Finally, discursive power refers to influence on the framing of public discussions. Traditionally, business frames imply transforming profit-making motives into society-wide concerns (see Falkner 2017).

As we can see, discursive power is closely related to the other two sources of power. Business can be more convincing in portraying itself as representing collective interests rather than narrow ones in large part because of its relation with economic growth and employment and because of its control of the media (Falkner 2017). But this reinforcement is also present between other sources of business power. For example, structural power increases the importance attributed to business ideas in public debate and at the same time augments the chances that governments give business direct influence in policy formulation; similarly, control of the media strengthens business discursive power and, at the same time, helps to better convey business capital flight threats. In sum, while the three sources of business power are independent, they are mutually reinforcing (see Figure 1).

But how do these different sources of business power operate in a multilevel context? Our proposal is to look at how the three dimensions of business power

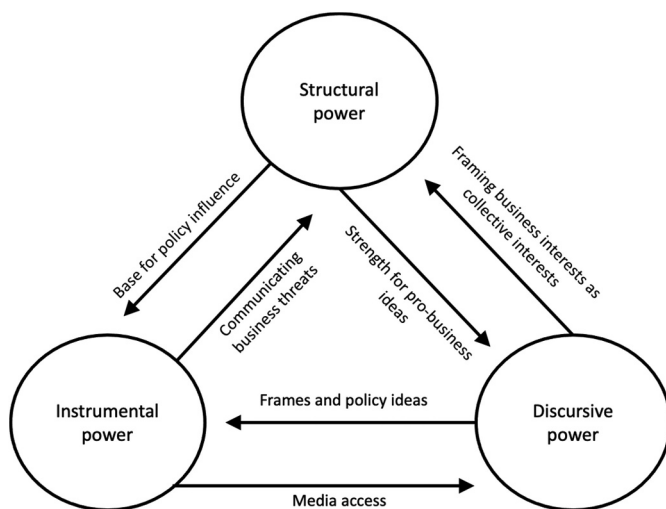


Figure 1. Business power's reciprocal complementarities. Source: Authors' own elaboration.

are differently constructed and manifest at the subnational, national, and international levels. This allows better understanding of how business actions at the three levels have impacted the water scarcity situation in Petorca, Chile. The latter involves methodological definitions and challenges that we address below.

Research design and methods

Chile is particularly suited to advance the study of business power in environmental politics in a multilevel setting. Several authors have revealed the strong power of Chilean business at the national level of policy formulation, particularly in the realm of environmental policy (Fairfield 2015a, Madariaga 2019). Moreover, the country is a case known worldwide for market-led development and an extremely resource-biased export profile. This implies a strong integration into global value chains and their relatively unmediated impact on local economies. In fact, Chile's countryside has been heavily transformed in the process of supplying international food markets, and both local and national politics have been deeply affected by the investment decisions of internationalized businesses (see Kurtz 2004, Irrarrázaval and Bustos-Gallardo 2019). Although a wave of social movements since the mid-2000s has spurred substantive policy reforms – including environmental policy – (Delamaza *et al.* 2017, Madariaga 2019, Madariaga and Allain 2020), business continues to exert major influence on the governance of global value chains, national public policy-making processes, and local politics and economies. Chile represents, therefore, what the literature calls an extreme case, i.e. a case that is particularly appropriate for exploring business power from a multilevel perspective.

We focus on the case of avocado growing and exporting and the water scarcity situation in the Petorca Province,¹ which allows tracing the full chain of relations from the local to the international through the national levels. Located in the Valparaíso region, 100 kms. north-west of the capital Santiago, Petorca has historically been dedicated to subsistence agriculture and mining. It has about 78,000 inhabitants from which close to 30% live in rural areas and 28% work in agriculture (2013–2017 average), a figure significantly above the national figure (8.6%).²

Petorca has become a poster child for the preeminence of economic growth over environmental concerns and human rights. After almost two decades of a water scarcity 'emergency', thousands of its inhabitants have uncertain and unsatisfying access to water (INDH 2014), while their agribusiness neighbors continue expanding production to increase exports as international avocado prices soar. Local social movements have urged municipal authorities to solve the water scarcity problem, attempted to influence water policy and legislation at the national level, and launched an international campaign to expose their situation to avocado consumers in European

markets. As a response, avocado growers have exerted formidable pressures on local and national authorities, and established international lobbying campaigns to countervail these social movements' tactics.

The operation of business power is a complex phenomenon with causal mechanisms that act at different levels of analysis (Hooghe and Marks 2001) and temporal layers (Falleti and Lynch 2009). To analyze how these mechanisms unfold in time, we use process tracing. This method allows us to construct a causal narration through an iterative process between inductive analysis and deductive theorization (Bril-Mascarenhas *et al.* 2017). We trace the following processes at each level of analysis: (a) how business power was constructed, (b) the manifestations of that business power, and (c) the outcome of business power on the countervailing conflict and maintenance of water scarcity. For the latter, we analyze a specific outcome associated with the overall water scarcity situation at each level (see below).

Data for our analysis came from 28 in-depth interviews with relevant actors (see Table A1), 61 press articles from two national newspapers (*La Nación* and *La Tercera*) written between 2000 and 2019, four interviews from Petorca province's *Radio Heradio* and a review of secondary data.

We now turn to a description of our outcome of interest, water scarcity in Petorca.

The outcome: water scarcity in Petorca

Following the avocado boom in international markets, Petorca was incorporated into the process of export growth and significantly reshaped as a fruit-processing zone for export markets. Over 40 years, the relationship between planted surface of annual subsistence crops versus export-oriented fruit crops – of which avocados constitute over 70% – was completely reversed: from 6:1 in 1976 to 1:9 in 2007 (Tamayo and Carmona 2019, p. 26). The growth of avocado exports in Chile has been spectacular, growing eight times between 1995 and 2017, making Chile the third-largest world exporter of avocado.³ In 2017, small Petorca represented a quarter of total avocado-planted surface in Chile (down from 40% during the 2000s).⁴

After more than a decade of expansion, agricultural producers and neighboring communities started to butt heads over scarce water resources. The Petorca and Ligua rivers that irrigate the zone were declared exhausted in 1997 and 2004, respectively. According to the law, this means that no new underground water rights could be assigned, and new superficial rights could only be provided temporarily based on an assessment that this would not significantly affect water volumes or flow rates. However, production and exports – and water demand – continued to grow with the international avocado boom, generating acute water scarcity problems. In fact, the three largest municipalities of the Petorca province (La Ligua, Cabildo and Petorca) are the municipalities most

exposed to water stress in the country (Henríquez *et al.* 2016). Deprived of water, local communities have lived without sanitation services, and with water provided by cistern trucks (INDH 2014). This situation was called a ‘violation of the human right to water’ by the National Institute for Human Rights (INDH) and produced a myriad of responses which reached a peak with demonstrations and roadblocks in 2011 and 2012, and which have repeated sporadically since then (Bolados 2016).

Mobilizations have been organized for recovering the increasingly scarce water resource, mostly by the grassroots Movement for Defense of the Access to Water, Land and Environment Protection (Modatima). Notwithstanding, authorities have continued to give water consumption permits to avocado growers as well as cheap credit to continue expanding their water irrigation infrastructure. Companies have also participated in a series of illegal maneuvers, including the construction of unauthorized wells and drains to capture underground streams from the river beds – what activists call ‘water robbery’ (Bolados *et al.* 2018). Even though greater attention and media coverage has been given to this issue in the last 5 years, the actions from local and national authorities remain negligible with regards to solving the acute water stress situation in Petorca. We argue that this passivity is directly related to how business has exerted influence through multiple channels at the different levels.

How business power affects water scarcity

In this section, we trace the process of building business power and its manifestations at the national, local, and international levels, assessing the effects of different business power sources on countervailing conflicts and the continuance of water scarcity. Figure 2 summarizes these relations and the main findings thereof.

National level: maintaining the status quo in water policy

The key focus of contention related to the water stress situation at the national level has been water policy. National water policy is deeply related to agribusiness and intermingled with this sector’s process of business power construction since the dictatorship years (1973–1989). However, data show that agriculture’s power does not stem from structural sources.⁵ Agriculture’s share of GDP in the country was already low in 1970–1986, around 8.5%, and it dropped dramatically thereafter to represent a mere 2.7% in 2015. National employment in agriculture follows a similar pattern: from 20% of those occupied in 1986, to only 8.2% in 2015. In terms of exports, although the most important agricultural export category, ‘Fruit and vegetables’, jumps from around 2.5% of the country’s export basket in the late 1960s to over 10% in the late-1980s to early-1990s, it presents large fluctuations. For example, during

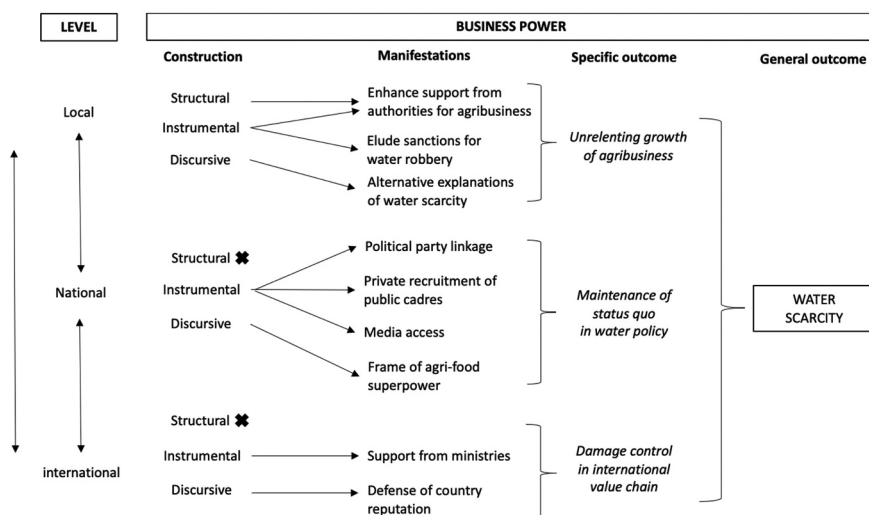


Figure 2. Multilevel process tracing of water scarcity.
Source: Authors' own elaboration.

the avocado boom years (2006–2010) it represented only around 6.5% of the total export basket.

This relatively low structural power contrasts with the sector's strong political influence and image as one of the country's economic pillars. The sources of agriculture's business power lie, therefore, mostly in instrumental and discursive sources.

Large landowners were among the main bases of support for the 1973 coup and received preferential access to policymaking as Pinochet reversed Allende's land reform and vowed to modernize agriculture to transform it into one of Chile's flagship export sectors. This comeback to the center stage of national politics was heralded by the National Society of Agriculture (SNA), the organization of big agricultural producers founded in the nineteenth century. During the dictatorship, the Agricultural Ministry—mostly made up of SNA leaders—oversaw the modernization and opening of the sector to free trade, against the interests of traditional producers and subsistence agriculture (Avendaño and Escudero 2016). Since then, the state has played a key role in fostering agricultural interests through water policy (assignment of water rights) and state-promotion schemes including subsidies to build irrigation infrastructure.

Water policy follows from the 1981 Water Code. This was designed as a market-conforming policy instrument that separates the property of land from water resources and allows the free transaction of water rights (Bauer 1998). The Water Code was key for ensuring that the vital water resource could be used for intensive agricultural exploitation. Under this legislation,

water rights are assigned for free and at perpetuity to those who request them without the need to justify the flow requested or to prove their use in productive activities. This generated a strong concentration of water rights and economic speculation as the agri-export boom expanded, and has been widely criticized for its inefficiency in protecting and managing scarce water resources (Budds 2009, Usón *et al.* 2017).

The other key area of business influence on state policy was the development of water management infrastructure. Since 1985, the Ministry of Agriculture, through the National Irrigation Commission (CNR), offers a subsidy to top-up between 70% and 90% of private investment funds for water irrigation infrastructure (Law 18, 450). Although created with the objective of aiding small and medium-sized farmers, the subsidy has been appropriated by big producers since its inception.

Agribusiness has extended its influence over politics during democratic times through three instrumental power channels. We analyze these channels through agribusiness's capacity to defend water policy, which, as we argued above, is key to maintaining water scarcity. In 2014, center-left congresspeople sent a reform package to Congress that would have made assigned rights a concession for 30 years (as opposed to perpetual) and made them revocable in case of non-use. Moreover, this reform aimed to strengthen the capacity of the General Water Directorate (DGA) to expropriate water rights when needed to secure human consumption. This was the first relatively significant attempt to modify the Water Code in more than 30 years.⁶

The first channel affecting this reform was the strong linkages to political parties. Since the return to democracy, agribusiness has invested heavily in campaign donations to the two right-wing parties (UDI and RN) in parliament and actively participated in politics (Fernández Milmanda 2019). For example, between 1990 and 2010, an average of 40% of RN deputies were agricultural producers (Avendaño and Escudero 2016, p. 57). There is evidence of these parties' strong opposition to water code reform.

The second channel for instrumental power is preferential access to media. When the reform was presented in Congress, the SNA and its allies staged an important media campaign to convince public opinion and deter congressional changes. During discussion of the reform in the Senate, the principal Chilean newspaper, *El Mercurio*, published as its lead headline that 50% of farmers were withholding investment decisions due to the uncertainty created by the reform (Madariaga 2019). Thus, even without strong structural power, agriculture has been able to use access to mainstream media to convey the threat of disinvestment and the effects on employment if the reform to the Water Code is passed.

A third venue for instrumental power is the recruitment of former public servants to industry positions, a revolving door that has been particularly visible with heads of the DGA. Former DGA heads Matías Desmadryl (2010–2012) and

Francisco Echeverría (2012–2014) were active lobbyists against water code reform after they left office (CIPER 2017). Their arguments that the solution to the water scarcity problem requires better management of public services and not a legal reform potentially affecting investment, are exactly the same espoused by the SNA and the business community.

Discursive power is a second key source of business power at the national level. Since the dictatorship, agribusiness has been part of the image of Chile as an export miracle based on its ability to increase trade and help the country diversify away from its historical dependence on minerals (Kurtz 2004). This contributed to framing the country's long-term strategy of becoming a world 'agri-food superpower' (*potencia alimentaria*). That expression, coined during the government of socialist Ricardo Lagos (2000–2006), is now widely used by presidents of all colors and by business as the battle horse behind their policy demands (see SNA 2018), highlighting, through the constructed image of agricultural exports as an integral part of Chile's development prospects, the peculiar symbiosis between private and public interests.

Using this ideational construction, business has used discursive power to portray the reform to the Water Code as an assault on 'legal certainty', harming the country's goal of becoming an agri-food superpower. During discussion of the reform in 2018, the SNA led an effort along with six other major business peak associations to publish an insert in 18 journals of national circulation claiming that the reform constituted a *de facto* expropriation – spurring long-seated associations in the public imagination of land reform conflicts during the Allende years.

It is no coincidence that the right-wing government of Sebastián Piñera took exactly this formulation to oppose the legislation. In an interview, then Minister of Agriculture Antonio Walker argued that 'legal certainty and political-economic stability' are key to achieving the goal of transforming Chile into an 'agri-food superpower' (Nuevo Poder 2018). Thanks to this impressive display of discursive power, business has been able to build an image of the Water Code reform as a far-left demand affecting not only the economy and employment but also property rights and the development prospects of all.

In sum, instrumental and discursive business power has been used at the national level to promote policies favoring the development of agribusiness that contribute to water stress in Petorca and to oppose policies that would help alleviate the situation by privileging water for human consumption.

Local level: agribusiness's unrelenting growth

At the local level, business power has been manifested in the unrelenting growth of agribusiness. This has deterred authorities from giving support to local aggrieved communities and their demands for taking care of the increasingly water-stressed situation that the communities portray as 'environmental

suffering' (Bolados *et al.* 2018). This has affected several initiatives by local communities and movements, most notably their attempt at exposing to the authorities the 'water robbery' mentioned above.

In terms of structural power, business exerts a much higher influence at the local than at the national level. During the boom years (2000–2009) employment in agriculture in Petorca was consistently over 40% and it even peaked at 50% during 2005–2006.⁷ If we add to this that the poverty headcount in Petorca is 60% higher than at the national level (10.1% versus 17.5%), we get a clearer picture of business's structural power bases.⁸

National-level legislation had important effects on this local structural power, strongly supporting agribusiness's continued expansion. Looking at water rights assigned for agricultural production in Petorca following the 1981 Water Code, we see a massive and relentless upward trend coinciding with the origins of the avocado export boom in the late 1990s (see Figure 3). The pace and magnitude of this process is breathtaking. In 1990, the accumulated discharge assigned for private (mostly business) consumption in Petorca was 2,070 lt./sec.; by 2018, it had grown to 39,217 lt./sec. Interestingly, the declaration of the Petorca and Ligua rivers as 'exhausted' in 1997 and 2004, respectively, did nothing to stop or smooth out this trend.

A similar picture emerges when looking at data on infrastructure subsidies. Data for the northernmost five regions of Chile, including the Valparaíso Region where Petorca is situated, indicate that in 1986–1990 big agricultural producers received ten times the resources of small producers in per capita

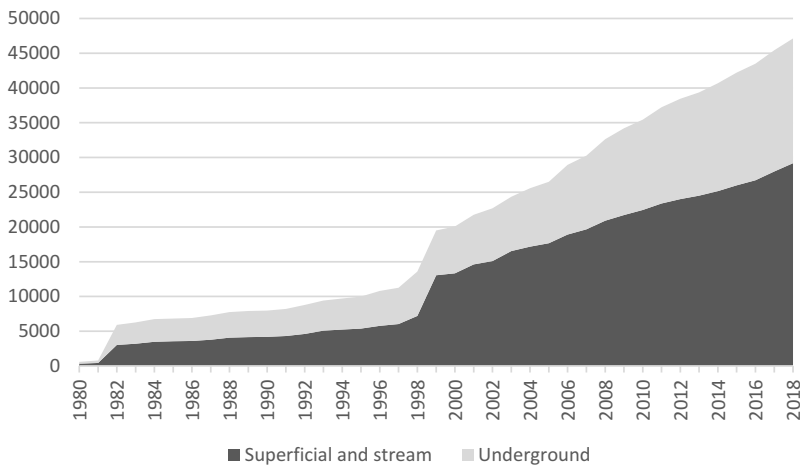


Figure 3. Assignment of water rights Petorca and Ligua rivers, cumulative flow volume 1990–2018 (lt./sec., monthly average).

Source: Authors' own elaboration based on data from General Water Directorate (DGA). Available at: https://dga.mop.gob.cl/productosyservicios/derechos_historicos/Paginas/default.aspx

terms (see Table 1); by 2001–2006, the gap had grown to 20 times, despite several initiatives to improve the targeting of the subsidy on small producers.

Structural power is strongly felt by local authorities who struggle to remedy the situation with the few resources at their disposal. The current mayor of the Petorca municipality, the only one in the province that has actively opposed business, expressed it bluntly: the Petorca community ‘has been angry during the last ten years with the [avocado growing] companies, even though we could also say that it needs them, because they provide jobs. It is somehow contradictory, but let’s say there’s no other way’ (Emol 2018a).

This structural power is strongly reinforced through discursive power. In fact, the importance of avocado growing and export agriculture in the zone is usually associated with the possibility of development of a relatively backward community. This alone, according to a former mayor of Cabildo, is enough to forgive the possible nasty effects of avocado growing. In his words: ‘Agricultural development has allowed many people to access jobs, it has pushed the development of the valley. So, we should be fair with it’ (Heradio 2018).

Agropetorca, the local association of agricultural producers, uses its discursive power to provide alternative explanations of water scarcity in the province that shift the blame away from business. According to this group, ‘There is enough water in the region to provide for all health needs’ (Emol 2018b), and businesses have started to voluntarily cede water rights to fill the dried wells in an effort to reduce criticism. In order to shift causality away, they blame other processes or actors while showing themselves to be part of the solution. First, they blame climate change and reduced rainfall. For example, Alfonso Ríos, President of Agropetorca, told a local radio, ‘We can do very little with the climate issue . . . If it rains there is water, but if it doesn’t there is no water’ (Heradio 2019a).

Second, they pass blame on the state, claiming it has not invested enough in water infrastructure while simultaneously holding it responsible for alleged resource mismanagement. For example, Ricardo Ferreira, author of an Agropetorca-mandated study on the water scarcity situation, has said, ‘We are all responsible [for the mismanagement of the water resource], but especially the state for not regulating adequately nor organizing the territory in line with the

Table 1. Subsidies for irrigation infrastructure (Law 18,450), 1986–2006 (Thousands of 2018 US\$ per capita).

Size/type of producer	1986–1990	1991–1995	1996–2000	2001–2006
Small	0.4	0.9	1.2	1.6
Medium	NA	11.8	7.9	29.8
User organization	NA	NA	1.2	1.0
Big	3.2	7.1	18.5	34.6

Source: Authors’ own elaboration based on data from CNR (2007).

Corresponds to the five northern-most regions, accounting for one-fourth of the country’s irrigation infrastructure subsidy over the 1986–2006 period. The Valparaíso Region accounts for 16% of this share.

availability of water' (Heradio 2019b). Finally, water sanitation companies have also become a target. In this case, they are accused of profiting from the crisis, seeing as how they can charge more for the water delivered by cistern trucks (Heradio 2018).

Business power becomes even stronger at the local level if we consider its instrumental components, the key attribute being the highly placed political connections of avocado growers. At the local level, they participate directly in the electoral arena, particularly in Cabildo – one of the municipalities in the Petorca province – where the Cerda family, affiliated with the centrist Christian Democratic party, are local producers and politicians. Members of the family have served as mayors and as Congressional representatives for Petorca in several periods, both before and after the Pinochet dictatorship. Another important figure is their fellow Christian Democrat Edmundo Pérez Yoma, who served as Minister of Defense and of the Interior when the Christian Democratic party was in the governing coalition (1990–2010).⁹ As the owner of an avocado growing company, he has been openly accused of 'water robbery' since the late 2000s. On the right end of the political spectrum, Alfonso Ríos, avocado producer and President of Agropetorca, was one of the founders of the rightwing UDI party and is now linked with the recently formed radical right populist Acción Republicana.

Family and friendship ties with political parties among local producers are reinforced by campaign financing, another classical strategy for building instrumental power. For example, in the last election for deputies, elected candidate Luis Pardo from the center-right RN party got almost 20% of its campaign funding from local and national agricultural producers (SERVEL 2018).¹⁰

Connections between avocado producers and political circles intermingling at the local and national levels strengthen business instrumental power. One result is to get favorable treatment in terms of public policy, such as water rights and infrastructure subsidies. When asked whether big producers press to get subsidies, one civil servant from the Institute of Agricultural Development (INDAP) – a state promotion agency for small farmers – in La Ligua told us: 'Big producers talk with the Hydraulic Works Direction, even sometimes directly with the Ministry . . . They go directly to Santiago.' Data provide details into the benefits allocated to local politically connected producers. For example, since 1995 the Cerda family (mentioned above) has received close to US\$0.5 million in infrastructure subsidies.¹¹

Business also uses instrumental power to limit controls from the state, particularly with regards to the inspections carried out by the DGA of the correct use of water rights and related regulations. The inspection unit at the DGA exhibits highly erratic behavior in terms of inspection campaigns and attribution of fines, and there are high-level political pressures to maintain inspections and the people involved below the radar of public opinion. In 2011 the governor of the Petorca province, Gonzalo Miquel, was forced to

resign after he declared that ‘the Ligua River does not have water because two or three people who were authorities during the previous government have taken over the water’ (El Mercurio de Valparaíso 2011). Up to then, the DGA did not give credit to accusations of ‘water robbery’ but had also alleged that it did not have sufficient human and financial resources or even legal competencies to inspect the use of water rights (Budds 2009).

Miquel’s declarations and subsequent resignation increased the public salience of the topic and triggered an inspection campaign by the DGA’s regional division. Following this, in 2014 the DGA revoked water rights to 27 holders engaged in malpractices. Among the affected companies was one belonging to former minister of interior Perez Yoma. He hired as his attorney to counter this disposition one Rodrigo Weisner, a fellow member of the Christian Democratic Party and former head of the DGA from 2006 to 2010. In 2016, they managed to get the Appeals Court to declare the DGA revocation of permits illegal, therefore allowing the restoration of water rights (El Mostrador 2016).

In sum, at the local level, we see the three sources of business power in action, reducing the political clout of aggrieved communities and reinforcing the expansion of agribusiness. Remarkably interesting in this case is the crossing of boundaries of business power from the national to the local level, for example, through public policies strengthening business’ local structural power or through political connections that have effects at the local level. We will return to this below.

International level: controlling damage to the value chain

In 2018, the grassroots organization Modatima and the Heinrich-Boell Foundation – the political foundation of the German Green Party – led a campaign to make the water scarcity situation in Petorca visible in European markets. In fact, strong business power at the local and national levels had left few avenues of political influence. Their idea was therefore to gain international visibility, reducing the international demand for avocados, alleviating in that way the water scarcity situation, and eventually gaining influence over national authorities. One of the leaders of Modatima justified the campaign by saying that ‘In Chile, they [the press] do not listen to us, but foreign press does’ (Silva 2018). In fact, the Danish press agency Danwatch (2017), later followed by Germany’s ARD and Britain’s *The Guardian*, reported that in Petorca avocado exports (and European consumption of them) were hurting the human right to water. Executives from business associations confirmed to us that this international press coverage led to requests for clarifications from major European super-market chains.

Unable to mobilize structural power resources, Chilean businesses deployed instrumental and discursive power to exert damage control. Agropetorca together with national associations such as Comité Palta Hass (Avocado growers

and exporters) and the Association of Agricultural Exporters (ASOEX) organized an international tour through European countries to counter the effects of the international campaign.

What's more, businesses once again used the discourse of the importance of exports for the country's development prospects to push the state to back them. Specifically, businesses argued that the NGO-led campaign hurt not only the interests of avocado exporters but the image of the country as a whole, and thus, the fate of all agricultural exports. One executive from an agribusiness association explained it to us thusly: 'It is a damage to the country's image . . . A foreign supermarket or an Italian consumer will not get that this is about avocados from Petorca . . . They will understand that this has to do with Chile, so they will stop buying fruit from Chile.'

As a result of these efforts, they convinced the government to produce reports certifying that the situation exposed internationally by the NGOs was not accurate. Specifically, Direcon (Ministry of Foreign Affairs), the promotion agency ProChile, and the DGA presented several studies that countered the argument that there was any violation of the human right to water in Petorca.

Producers also used their political connections to attempt to silence the international advocacy campaign via diplomatic relations. One NGO interviewee told us that businesses were able to convince Foreign Affairs Minister Heraldo Muñoz to complain to his Danish colleague about the Danwatch report and ask that Danish authorities demand a retraction from the news media. As the activist recalls, the Danish minister refused to threaten the freedom of press in his country by indulging in his Chilean colleague's demands, but the episode shows how instrumental power can be used – and sometimes fails – to produce results.

Even if less successful, this deployment of business power in the international arena had important implications at the national level, a process that the literature has recognized as a 'boomerang effect' (Keck and Sikkink 1998). While the campaign did not generate great dislocations in Chilean avocado exports, it did change the national media attention to the water scarcity situation. In fact, Petorca finally made it into the headlines of the national press and TV and what had been a local problem started receiving much broader attention. In this sense, the international venue seems to have been more successful for challenging business power. We reflect more on this below.

Discussion and conclusions

We have introduced an original multilevel framework to improve our understanding and analysis of business power in environmental politics. Through the case study of the politics behind water scarcity in Petorca, Chile, we have shown how business deploys structural, instrumental, and discursive power simultaneously at the local, national, and international levels to nullify conflict and

reduce avenues of political influence for the aggrieved communities. In this three-tiered narrative, we analyzed the construction and sources of business power at the three levels, their manifestations, and their effect on neutralizing conflict and maintaining the overall situation of water scarcity. In addition to summarizing and highlighting our main results, in this conclusion, we also reflect upon the uses of multi-level analysis and the concrete insights we gain when studying business power in this framework. In doing this, we also offer ways to understand how subordinated actors can countervail business power and advance environmental concerns in an otherwise hostile political environment.

In our case study, business did not have structural power, except at the local level. Instead, it used formidable instrumental and discursive power resources. Thanks to these, agricultural businesses in general – and avocado producers in particular – were able to deter legal changes that could challenge the continued use of water rights for agribusiness and were able to influence the results of inspection campaigns by institutional authorities investigating illegal appropriations of water rights. In the absence of business power, both of these could have provided relief to water-deprived local communities.

Instrumental power was also deployed at the national level in order to turn public policy in favor of business. This increased the economic significance of agricultural activities (i.e. their structural power) at the local level, helping to persuade municipal authorities from undertaking more audacious actions – such as more aggressively denouncing water robbery. Instrumental power at the national level was also mobilized to strengthen business's international lobby activities. As we discuss below, this was the least successful venue to mobilize business interests.

Discursive power permitted the adoption by national and local authorities of business ideas (i.e. agriculture as a key engine of development). At the local level, this manifested in the idea that agriculture's contribution to local development outweighs its potential costs. Businesses also provided alternative explanations for the water scarcity situation that were used to counter denunciations of business malpractice. At the national level, it generated and diffused the idea that agricultural exports are key to the development prospects of the country, an idea that authorities adopted and made theirs through the strategy of transforming Chile into an 'agri-food superpower'. Moreover, discursive power reinforced business actions against water reform, helping to portray the reform as changing legal certainty and potentially hurting the future development of the country.

Our multilevel analysis offers a number of advantages for analyzing business power in environmental politics, a domain that occurs essentially at different scales. Concrete business actions can be distinguished at the three levels, that is, local, national and international. This helps to refine our understanding of how business power acts and what specific resources are

mobilized. It also helps in understanding the complementarity between the three sources of business power. For example, as we discussed, Chilean agricultural businesses do not have high structural power at the national level; yet strong instrumental and discursive powers at this level could produce disinvestment threats as if they do.

Beyond this, our multilevel analysis can also be used to understand three further, and connected, issues: first, how business actions at one level affect business actions at other levels; second, how subordinated actors can shift scales in their quest for political influence; and third, what types of scale shift strategies are more successful for each actor.

Regarding the first issue, state policy and the issue of structural power come to mind. Although business structural power is low at the national level, business policy influence has had substantial consequences for the economic concentration of agricultural businesses at the local level. This not only increased structural power locally, in itself reinforcing the water scarcity situation; it also significantly reduced the capacity of local authorities and organized communities to solve the situation. Another example is the 'Perez Yoma Affair': locally, aggrieved communities denounced water robbery, and the water inspectorate revoked permits for politically connected producer Edmundo Perez Yoma. However, he climbed the ladder of influence up to the national level, and the Appeals Court finally revoked the sentence. In these examples, national-level business power acts to (1) strengthen local sources of business power and to (2) reduce the political influence of local aggrieved communities.

Perhaps the best example showing these strategies in action is the international advocacy campaign. Looking for avenues of influence in an otherwise hostile political environment, local communities and NGOs jumped to the international level where business power is less effective. Although the campaign had only limited effect on avocado production chains as had been the initial intention, it had a clear boomerang effect on national-level politics, particularly the visibility of the situation in the national media. It would be exaggerated to claim that this internationalization strategy challenged business' strong national level instrumental and discursive powers; however, by making it into the mainstream media and disputing the dominant frameworks, grassroots community organizations have been able to enter the arena of the country's water politics. Modatima, the most visible movement, has since built national-level structures and networks of advocacy, and is today one of the key actors in ongoing grassroots mobilizations in favor of water reform.

To conclude, the study of concrete channels of business influence in a multilevel context provides ways to analyze not only how business gets what it wants but also how subordinated actors – in this case, local communities and environmental social movements – can counteract that influence. This provides

important lessons not only for scholars interested in environmental politics and the power and influence of business thereof but also to activists and civil society organizations looking for ways of increasing their political clout *vis à vis* large corporations.

Notes

1. The subnational administrative system in Chile distinguishes between regions, provinces and municipalities, the latter being the smallest unit. Petorca is the name of a province as well as a municipality within that province. Unless otherwise stated, when naming Petorca we refer to the province.
2. Data from Biblioteca del Congreso, *Estadísticas Territoriales*, <https://www.bcn.cl/siit/estadisticasterritoriales>.
3. Data from the Atlas of Economic Complexity, <http://atlas.cid.harvard.edu>.
4. Data from Catastro Fruticola V Region years 2008 and 2017, ODEPA-Ciren, Ministry of Agriculture, Chile.
5. The following macroeconomic data come from the Central Bank of Chile. Data on exports come from the WITS database, SITC classification.
6. A milder reform in the early 2000s introduced fines for non-use of water rights.
7. Data from Biblioteca del Congreso, *Estadísticas Territoriales*, <https://www.bcn.cl/siit/estadisticasterritoriales>.
8. Ibid.
9. Relatives of other prominent politically connected families (such as the Frei and Alvear families) have also been associated with investments in avocado plantations in Petorca (Budds 2004).
10. Data available at: <https://www.servel.cl/ingresos-y-gastos-de-candidatos/>.
11. Our calculations based on data from Bolados *et al.* (2018). We deflated the reported amounts and converted to constant US\$. Data came from World Bank WDI database (GDP deflator 2018) and the Chilean Central Bank (2018 average exchange rate).

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Table A1. Interviews.

Profile	N
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