Local Economic Voting and the Agricultural Boom in Argentina, 2007–2015

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ABSTRACT

This article investigates the effect of local economic conditions on voting behavior by focusing on the export-oriented agricultural areas of Argentina during the commodities boom. It assesses the marginal effect of export wealth on electoral outcomes by studying the impact of soybean production, the main Argentine export product during this period. The combination of rising agricultural prices and a salient national tax on exports allows us to evaluate how wealth and tax policy shape local electoral behavior. This study relies on a spatial econometric analysis of the vote across Argentine departments for the 2007–15 period, along with qualitative evidence from interviews and a descriptive analysis of government appointments.

Keywords: economic voting, subnational politics, conservative parties, commodities boom, Argentina

The literature on voting behavior in Latin America recognizes the impact of retrospective voting based on national-level economic performance. However, in spite of a growing scholarship on subnational political effects, the impact of local economic conditions on support for national coalitions remains understudied. This article argues that pocketbook voting is influenced not only by national economic performance, but also by local conditions shaping the material well-being of voters.

To investigate the marginal effect of local wealth on electoral support for a national incumbent, this research takes advantage of both the geographic distribution of wealth that rising agricultural prices generated and a tax scheme on agricultural exports in Argentina. Because agricultural producers staged countrywide protests against this tax in 2008, increasing the salience of its redistributive consequences, we are able to assess how voters assigned responsibilities for local economic conditions in multiple elections before and after this event. In addition to contribut-

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ing to knowledge of electoral behavior, analyzing the local dimension of the vote in Argentina allows us to trace the regional basis of a new political coalition, thereby providing important insights on party-building strategies.

Empirically, this study examines the relationship between local economic determinants and electoral behavior through an ecological analysis at the Argentine departmental level, equivalent to U.S. counties. We conduct a spatial econometric analysis of the vote in presidential and legislative elections across Argentine departments for the 2007–15 period. We also provide qualitative evidence of in-depth, semistructured interviews with rural leaders and public officials; a report of participant observations in a rural organization assembly; and a comparison of career trajectories of government officials in the Ministry of Agriculture.

To measure local wealth, we concentrate on soybean harvests, which accounted for half of total Argentine export value in 2007 and were the main target of the tax we study (Richardson 2012). We find that soybeans' geographic concentration, which allows us to infer local wealth effects, shapes departmental electoral behavior. In soybean-rich zones, high agricultural prices delivered a mass of wealth and increased the marginal support for a leftist, protectionist incumbent in the 2007 election. However, the same areas became less likely to support the governing coalition after a 2008 conflict over export taxes made redistribution patterns toward urban areas more salient. By 2015, these local economic conditions contributed to the election of a conservative challenger as president who, in turn, phased out the export taxes and increased the policy influence of organizations representing export agriculture.

Studying the effects of local economic conditions on national electoral outcomes—rather than just local elections—contributes to understanding the complex interplay between national and subnational politics. There is a burgeoning scholarship on this topic in Latin America, but we are not aware of previous studies focusing on its electoral implications (see Eaton 2016, 2017). Exploring the local component of economic voting in national elections can also improve understanding of party building, a difficult endeavor in Latin America, as Levitsky et al. (2016) have shown. The geographical clustering of economic or sociodemographic characteristics of the electorate may offer a powerful tool for young political parties seeking to build national coalitions.

This article proceeds to review the relevant literature and elaborate the argument. It then introduces the Argentine case and the hypotheses, and next presents the empirical analysis. Last, it discusses the implications of the conservative victory in 2015.

LOCAL ECONOMIC VOTING
AND THE COMMODITIES BOOM

Economic voting has been widely accepted as a crucial factor explaining individual electoral behavior in comparative politics (Duch 2001; Duch and Stevenson 2008; Hellwig 2010; Nadeau et al. 2013; Lewis-Beck and Stegmaier 2013). In Latin America, individual-level studies have mostly associated electoral behavior with sociotropic evaluations of the national economy (Gélineau 2007; Lewis-Beck and Ratto 2013; Singer 2013, 2015).[1] Similarly, studies focusing on aggregate data have looked only at national economic conditions to explain voting behavior across Latin American democracies (Murillo et al. 2010; Remmer 2003, Murillo and Visconti 2017).

Less attention has been paid to local economic conditions and their marginal effect on electoral behavior, although the literature on political economy provides evidence of the geographic distribution of policy preferences as a result of local distributive outcomes (Ardanaz et al. 2013; Scheve and Slaughter 2001). As exceptions to this trend, Books and Prysby (1999) and Johnston et al. (2000) focus on the impact of local socioeconomic variables on electoral behavior, using survey data. The former show that state-level unemployment rates have an effect on voting intentions in U.S. presidential elections through the evaluation of presidential economic performance. The latter find that both local- and ward-level unemployment rates, as well as evaluations of regional prosperity, shape voting decisions in parliamentary elections in England and Wales. Drawing on aggregate data in Argentina, Porto and Lodola (2013) find that agribusiness's contributions to the municipal GDP, in conjunction with federal fiscal policies, affect the electoral support for national legislators at the municipal level in the province of Buenos Aires.

Furthermore, the literature on economic voting assumes that voters are able to attribute the responsibility for economic performance to politicians, conditional on economic openness and institutional variables (Duch and Stevenson 2008; Hellwig 2014). Institutional factors facilitating the assignment of responsibilities include presidential regimes, a unified government, and presidential re-elections. All of these increase the incidence of economic voting and have been shown to influence national-level electoral behavior in the region (Hellwig and Samuels 2008; Gélineau 2007; Ratto 2011; Tagina 2012).

However, the assumption about voters' ability to discern politicians' responsibility for economic outcomes is not widely accepted. Achen and Bartels (2016) and Bermeo and Bartels (2013) suggest that U.S. and European citizens punish governments for natural disasters and economic crises outside their control. Similarly, Campello and Zucco (2016) argue that Latin American voters blame or reward incumbents for economic performance associated with the price of commodities and international interest rates, which are outside their control. They suggest, though, that information facilitates the attribution of responsibility over economic outcomes (Campello and Zucco 2017). This view is also supported by Rho and Tomz's experimental evidence (2017) showing that once trade distributive effects are explained, individual respondents are more likely to espouse self-serving material views on openness.

Whereas most analyses of policy responsibility focus on national economic performance, this study builds on the work of Porto and Lodola (2013) on local economic conditions and federal policymaking. Like their study, this one focuses on a salient export tax with distinctive redistributive consequences for soybean-producing areas. That is, it compares the local wealth impact of increasing agricultural prices on electoral behavior before and after the countrywide protests that took place in 2008 against a hike in a federal export tax.

The interaction of local economic conditions with federal tax policies, we argue, affects the incumbent's national electoral performance. We expect greater local wealth to have a positive marginal effect on the support for the incumbent, in accordance with economic voting. Yet salient national policies—especially tax policies—have a geographically differentiated impact, which tends to shape voting patterns in distinct ways across local jurisdictions. Voters come to realize the influence of these policies when information makes them aware of their redistributive consequences. Therefore, when these policies are widely perceived to erode the accumulation of local wealth, we expect a negative marginal effect on the vote for the national incumbent. Data on Argentine department-level soybean production at different electoral periods in time is used to identify these local economic effects.

THE AGRICULTURAL BOOM AND LOCAL ELECTORAL BEHAVIOR IN ARGENTINA

Argentina is a suitable case for studying electoral behavior during the commodity boom because we can isolate the influence of local-level wealth while controlling for sudden shifts in national tax policies that gained salience during this period. By focusing on Argentina, we can map the varying geographic distribution of export wealth that mounting agricultural prices created across departments that are similar in numerous characteristics. Moreover, by examining this local wealth at different moments through time, we can capture changes in salience that featured an export tax designed to appropriate a share of this wealth.

Argentina is a major exporter of agricultural goods. At the onset of the new millennium, a threefold devaluation and an upward trend in agricultural prices improved the terms of trade, because two-thirds of country's exports are primary products or manufactured goods of primary origin (INDEC n.d.). Argentina's main export products were soybeans and soy byproducts. Soybean wealth spread in the traditional agricultural zones due to a capital-intensive model relying on the subcontracting of agriculture-related services, such as planting and harvesting, while increasing dependence on inputs like agrochemicals, machinery, and seeds (Barsky and Dávila 2008; Bisang et al. 2008; Gras 2009). Given low labor mobility in Argentina, soybean wealth also boosted the demand for unrelated services in the towns serving these areas. These effects were heightened because they followed a period of economic malaise marked by low agricultural prices and an appreciated

exchange rate in the 1990s. As Millán describes it in his ethnographic account of an Argentine rural town in 2007:

> Those were times when the rise in soybean international prices had multiplied the income of agricultural producers to the point that they were able to pay their debts and even invest in buying a truck or renovating their homes. . . . The recovery allowed by the devaluation and the increase in soybean prices also had an effect on consumption and money circulation among the town inhabitants, thereby translating the benefits of the agricultural sector to the rest of the economic activities. (Maillán 2010, 141, authors' translation.)

Therefore we expect the agricultural boom to generate local wealth effects that drove voters' decisions beyond its broader effect through fiscal revenue or national macroeconomic growth, which was positive between 2003 and 2013 although almost null in 2009 and 2010 (World Bank, World Development Indicators).

In 2003, as soybean prices began to take off, Néstor Kirchner was elected president with 23 percent of the vote. Argentina had experienced a profound institutional and economic crisis in 2001–2, and Kirchner had run as one of three candidates of the Peronist Party. He was the runner-up, but the frontrunner withdrew, anticipating a defeat in the runoff. Once in power, Kirchner consolidated a Peronist-based coalition labeled Front for Victory (FPV), which won the 2005 midterm elections. In 2007, his wife, Cristina Fernández de Kirchner, was elected president with 45 percent of the vote. After her husband's unexpected death in 2010 generated a massive wave of sympathy, she was re-elected the following year with 54 percent of the vote.

The Kirchners' electoral success has been associated with the economic bonanza that soybeans triggered. The federal government collected taxes on exports, the revenues from which could be administered discretionally and were used to finance redistributive programs favoring core constituencies in urban areas and poor peripheral provinces (Richardson 2009; Mazzuca 2013). Export taxation became a vital source of fiscal revenue for the federal government and had a substantial impact on crops, especially soybeans (Freytes and O'Farrell 2016; Richardson 2012).[2] The highest tax rates were imposed on soybeans and their derivatives, which were not subject to export quotas because they were not consumed domestically (Barsky and Dávila 2008; Richardson 2009). By contrast, meat, wheat, and maize were regulated by both price controls and export restrictions after 2005 in an effort to contain domestic food prices.

The soybean export tax rate, originally established in 2002, was raised under Néstor Kirchner in 2005 and in early 2007 and, after the election of Cristina Kirchner, again in late 2007. However, as growing prices accompanied these tax hikes, they did not seem to hinder the influx of wealth that export-oriented areas were accumulating—or at least its effect was not salient for local populations.

On March 11, 2008, at the beginning of the harvest season, the Ministry of Finance raised export tax rates and linked them to international prices on a sliding scale.[3] Agricultural producers reacted by launching massive protests, including lock-

outs and roadblocks, which caused food shortages. In response, progovernment labor unions and organized groups of the unemployed staged countermobilizations (Barsky and Dávila 2008; Giarracca et al. 2008; Hora 2010). These protests increased the public salience of the export tax and voters' information about its net effects through both the actions of agricultural organizations and media coverage.

A coordinating committee organized these protests, bringing together the Rural Society of Argentina (SRA), which represents the largest and richest producers; the Rural Confederations of Argentina (CRA), which gathers midsized producers; the Agrarian Federation of Argentina (FAA), an association of small farmers; and the Confederation of Agricultural Cooperatives (CONINAGRO), representing the numerous cooperatives that dot the Argentine countryside, rather than producers themselves (Lattuada 2006). As coordination overcame prior interorganizational conflicts, agricultural producers' mobilization resulted in 329 departmental lockouts (Murillo and Mangonnet 2016). The president of the Argentine Association of Research Regional Consortia (AACREA), the largest technical association in the sector, briefly explained the discontent of those days.

> [The 2008 conflict] served as a trigger. . . . The sector went out in full force because of the attack on soybeans, not because of other products. The producers went to the roadblocks from 2 AM to 6 AM and then came back to their lands to work. . . . The mobile tax was the drop that spilled the glass, because . . . if the price went up, the producer wouldn't earn anything. (Blacker 2014)

In describing their role as information providers to town dwellers, in the same interview, the Executive Committee of AACREA explained:

> We served as a guide with national capacity for networking. . . . We unified the message and the information to the society. We separated politics and technical issues. We introduced ourselves as technical members to influence public policy, we showed up in towns in the interior and in the roadblocks with our Power Point to present the main seven issues. . . . The effect of information on people was important. There was an impact of redistribution affecting the local economy. (2014)

To mitigate the protests, President Cristina Kirchner, who controlled both chambers of Congress, introduced a bill seeking legislative ratification for the tax raise. The bill included promises of redistribution to poorer provinces of the hinterland. The bill passed the Chamber of Deputies despite defections from the government caucus but was defeated in the Senate by one vote, further raising the salience of the tax.

The media coverage amplified the salience of the tax's redistributive consequences. For instance, the number of articles referring to export taxes obtained using the search engine of *La Nación*, a major national newspaper, peaked in 2008 at 1,440, when the annual average during Néstor and Cristina Kirchner's administrations was 515 per year. In the 4 months between the announcement of the tax hike and the legislative vote, a third of total news coverage in the two largest newspapers, *Clarín* and *La Nación,* and in the progovernment *Página 12* was dedicated to cov-

ering it—even when the former two expressed negative views of the export tax and the latter a positive evaluation (Zunino 2015, 229, 281). Indeed, the topic was on the front page of the three mentioned newspapers for all but five days of this period (Zunino 2015, 233).

Hypotheses About Local Economic Voting

Economic voting in Argentina has been linked to national economic conditions (Tagina 2016; Ratto 2011). The soybean bonanza promoted high growth rates, which increased the level of support for the incumbent in the 2007 and 2011 presidential elections. By contrast, declining agricultural prices were concomitant with the erosion of such support toward the 2013 midterm elections and the 2015 presidential election. Moreover, support for the incumbent coalition is higher in concurrent elections for president and Congress and typically falls in midterm elections (Shugart 1995).

Keeping these conditions constant, we focus on the local economic determinants of the vote. We expect local-level conditions to shape the marginal electoral support for national candidates. These local marginal effects operate at different levels of electoral support, driven mostly by national trends, such as the wave of sympathy following the death of Néstor Kirchner, which affect the whole territory. We use soybeans at the departmental level to gauge the diverse geography of local-level wealth. We evaluate this local effect in distinct electoral races throughout the 2007–15 period to gauge the impact of national taxation salience across departments.

We expect that local wealth increased the marginal support for the incumbent coalition in 2007, when export taxation was less salient.

Hypothesis 1. Greater soybean production should correlate with higher electoral support for the FPV in the 2007 legislative election.[4]

We expect this effect to turn negative in all national elections taking place after the 2008 protests because voters internalized the export tax's local redistributive consequences. The salience of that tax should decrease the support for the FPV in soybean-rich departments. In addition to the tax consequences, lockouts inflicted economic damage on the involved communities because withholding agricultural exports forced local agricultural sectors to forgo extraordinary months of high prices and brought regional economies to a halt. We also expect this negative marginal effect to be stronger in the 2009 midterm election, in view of the proximity of the conflict.

Hypothesis 2. Greater soybean production should correlate with lower electoral support for the FPV in the 2009, 2011, and 2013 legislative elections, as well as in the 2011 presidential election.

In addition to highlighting redistributive consequences, the 2008 conflict generated antipathy toward the government in the agriculturally rich areas.[5] This resent-

ment was magnified as international soybean prices began to decline in the second half of 2013 (they fell 30 percent from October 2013 to October 2015, according to the World Bank Global Economic Monitor). The domestic currency continued to appreciate and was subject to a two-tier exchange rate that hurt exporters, whereas the export tax rate remained fixed at 35 percent. Because Cristina Kirchner was constitutionally banned from running for re-election in 2015, the probability of a victory by a challenger increased, thereby affecting the prospective voting calculus.

The presidential race was divided among three candidates: Daniel Scioli, the incumbent candidate and governor of the province of Buenos Aires; Sergio Massa, leader of the Renewal Front (FR), who had broken with Kirchner in 2013 after serving as her chief of staff; and Mauricio Macri, the mayor of the City of Buenos Aires, from the conservative Republican Proposal (PRO). The latter joined forces with the Radical Civic Union (UCR) and the Civic Coalition into an electoral alliance labeled Cambiemos (Let's Change) in June 2015. We expect that Macri, who had promised to immediately end export taxes and trade restrictions, would be the soybean-producing areas' choice. Additionally, his lack of prior connections with Kirchner increased his credibility with agricultural leaders, as they explained to us.

> The options were two: Renewal Front and PRO. The PRO was more convincing and we worked to help the PRO to win without raising a partisan flag. The common goal was to defeat Kirchnerism; we even collaborated with money for campaign advertising. We invited everyone . . . to talk about their proposals. . . . Macri gave us a schedule to end retentions and the ROE [i.e. export permits]. Massa was not specific but said that it depended on international markets. Macri was the main expression of change. Massa was a detachment of an "aggiornated" Kirchnerism. (Executive Committee of CARBAP 2016)

Politicians themselves perceived that export taxes represented a litmus test for agricultural producers. In the words of Massa's main expert on agricultural policy,

> Our agroindustrial program is very similar to Cambiemos's. Yet the agricultural sector voted for Macri because we proposed to end the export taxes by lowering them gradually because of their impact over fiscal revenues; we want to assess first their impact on the fiscal situation. (Alegre 2016)

Macri received 34 percent of the vote in the first round, whereas Scioli and Massa obtained 37 percent and 21 percent, respectively. A runoff was called, following constitutional provisions.[6] Macri won by a 2 percent margin. Because the runoff vote is strategic, our expectations refer to the first round.

> *Hypothesis 3. Greater soybean production should be correlated with higher electoral support for Mauricio Macri in the (first round of the) 2015 presidential election.*

Macri's promise to end trade restrictions and export taxes was especially appealing to agricultural producers, whose organizations had been fragmented before 2008 and who lacked linkages with other parties or institutional mechanisms for policy influence (Fairfield 2016; Freytes 2015; Richardson 2009). After the 2008 protests,

agricultural organizations sought to increase their policy influence by running congressional candidates on different party lists and lobbying to sway party platforms. Macri's election seemed to make this latter strategy successful, as they won increasing influence through decisionmaking positions in his cabinet.

Their 2009 electoral strategy had generated 11 legislators (10 percent of those elected), but the high partisan discipline that characterizes the Argentine Congress (Calvo 2014) dashed their expectations about influencing policy (Freytes 2015). As described by the CRA's president, Dardo Chiesa,

> all these guys in their provinces gathered votes because they were the ones who had led the resistance. Now they went to the Congress…and the Congress put them in a crusher. . . . One thing is to be an agricultural producer, another thing is to be a rural leader, and another thing is to be a legislator, where you have a structure, you have a regulation, and a way of working. And where you're in a context and, overall, within a party. (Chiesa 2017)

In switching to lobbying for broadening their policy influence, agricultural producers prioritized ending export taxes and trade restrictions (Etchevehere 2014). Macri opened a door to them in 2015 when he chose Ricardo Negri to write the agricultural section of his electoral platform. Negri had previously been the director of AACREA's R&D division (*La Política Online* 2015).[7] He was close to most rural leaders, as Dardo Chiesa explains.

> We have the Agro-Industrial Forum, which is formed by the entities, mainly CRA and SRA . . . and part of the Agro-Industry Forum, and to influence the agenda we generated proposals. A formal presentation was made . . . where the 13 points were presented. AACREA helped us to generate and implement the program presented . . . the one who presented the 13 points was Ricky Negri. And that program was given to all political parties. Cambiemos took it all, and others used it as inspiration for their policy proposals. . . . The 13 proposals that Cambiemos presented were [those we] . . . presented to Macri . . . written by Negri, who's now Secretary of Agriculture. (Chiesa 2017)

Therefore, Macri's election not only correlated with the support of agriculture-rich areas but also opened an opportunity for policy influence by agricultural producers.

EMPIRICAL ANALYSIS

The analysis examines the economic determinants of the local context on presidential and legislative elections (only for the Chamber of Deputies) across Argentine departments for the 2007–15 period. The sample includes all departments of the country's 23 provinces.[8] We exclude the City of Buenos Aires because it is a fully urbanized district with no agricultural production. Departments are the geographic units for computing most economic statistics in Argentina. They are also the lowest tier for which national-level electoral data are available.[9]

Data and Measurement

The dependent variable for the FPV is the proportion of valid votes obtained in a given department in both presidential and legislative elections between 2007 and 2015. For Cambiemos, the outcome is the proportion of valid votes obtained in a particular department in the first round of the 2015 presidential election.[10]

The key explanatory variable is harvested soybeans in a department, measured as the natural logarithm of the number of hectares in the harvest season of a particular electoral race.[11] In Argentina's wealthiest agricultural areas, the soybean-harvesting season begins around April-May—that is, approximately a semester before the elections, which typically take place in October.[12] Thus, harvests provide a proxy for both local wealth in export-oriented regions (i.e., the profits being what is reaped from the soil) and taxation of future export windfalls shortly before an election takes place.[13]

Except for the 2007 legislative election, we introduce the logged number of department-level farm lockouts that occurred during the 2008 revolt against the export tax raise. Farm lockouts interrupt commercialization activities, such as withholding harvests or cattle or sabotaging the sale and transportation of food at customs and ports.[14] Lockouts are the proxy for protests, which exacerbated the salience of the export tax's distributive consequences at the local level. We expect lockouts to have a negative effect on the vote for the FPV in 2009. We also anticipate that effect to become weaker in the subsequent elections. By contrast, we predict a positive effect on the support for Macri in 2015.

The controls include two agriculture-related variables that may shape voting behavior in the Argentine countryside. First, we incorporate the capitalization in a department's agricultural sector. We measure it as the percentage of working farms possessing seed drills (National Agricultural Census 2002, chart 9). The utilization of drills has been associated with a capitalized export agriculture, especially soybeans (Teubal and Rodríguez 2002).[15] We expect higher investments in agricultural capital at the departmental level to have effects in the same direction as soybean harvests.

Second, we include the number of smallholding farms in a department, including both small farmsteads and family farms. According to Lowder et al. (2016), these are properties smaller than 2 hectares but no bigger than 25 hectares. Our measure is the percentage of working farms whose size is less than 25 hectares (National Agricultural Census, chart 1). Peasant communities and tenant farmers tend to work on these properties. In 2012, the national government created the Secretariat of Family Farming, whose remit was to provide subsidies to family farms, and appointed a pro-Kirchner social movement leader to run it (*Ambito Financiero* 2012). Therefore, we expect this variable to be positively correlated with FPV's local vote share, especially since 2013.

We also control for baseline sociodemographic covariates. We use the proportion of a department's population (15 years old or older) that has completed middle school as an indicator of educational attainment. To control for poverty, we use the proportion of a department's households with unsatisfied basic needs. Following the

literature on electoral behavior in Argentina, we expect education to have a negative effect on the vote for the FPV, and poverty a positive one. We control for the proportion of rural inhabitants, a logged measure of population density, and the logged number of working farms in each department.[16] Furthermore, we control for the vote share of the previous election in all of our models.[17] All the utilized variables are summarized in table 1 of the supplementary online appendix.

Estimation

A visual inspection through exploratory spatial data analysis, parametric tests, and least squares diagnostics suggests the possibility of spatial dependence in our data.[18] Spatial dependence, or autocorrelation, is problematic, as it violates the underlying assumptions of linear regression. Spatial effects in the form of correlated residuals or high or low values of the dependent variable clustered in space (i.e., lack of independent observations) can yield biased and inefficient estimates (Anselin 2002; Anselin and Bera 1998). Consequently, we proceeded by estimating a spatial error model. Such a model incorporates spatial effects through an adjustment of the error term.[19] We estimated the following equation:[20]

$$y_i = \alpha + Harvest_i \beta + Lockouts_i \gamma + \mathbf{X}_i \delta + \varepsilon_i,$$

where y_i is the vote share for the FPV or Cambiemos in a given department i; $Harvest_i$ is the log of the number of soybean harvested hectares; $Lockouts_i$ is the logged number of departmental lockouts occurring in 2008; $\mathbf{X}_i$ denotes a matrix of agricultural variables (agricultural capital and smallholding farms) and controls, which includes lagged vote shares and sociodemographic covariates; and ε_i is the error term.[21] More important, the error term has the following form:

$$\varepsilon_i = \mathbf{W}_i \varepsilon_i \lambda + \xi_i,$$

where $\varepsilon_i \mathbf{W}_i$ is the vector of error terms ε_i weighted by $\mathbf{W}_i$, which is a matrix of spatial weights or "connectivity matrix" (Anselin and Bera 1988) specifying the degree of interdependence among observations; and ξ_i is the vector of uncorrelated, homoscedastic errors.[22]

Results

Tables 1, 2, and 3 present the results. All models test the effect of soybean harvests and the controls. We next proceed to add agricultural capital, small farms, and lockouts. Tables 1 and 2 display the models for the Chamber of Deputies.[23] Table 3 shows the models for presidential elections.

In accordance with hypothesis 1, harvested soybeans increased the support for the FPV in the 2007 legislative election, suggesting a wealth effect independent of tax policy. We focus on model 2 (table 1). A one-percent increase in the number of soybean-harvested hectares is correlated with an extremely small increase in the aver-

Table 1. Legislative Vote and Local Wealth in Argentina, 2007–2009

	FPV 2007		FPV 2009	
	(1)	(2)	(3)	(4)
Soybean harvest (ln)	0.007***	0.005***	–0.008***	–0.007***
	(0.002)	(0.002)	(0.002)	(0.002)
Lockouts 2008 (ln)				0.005
				(0.012)
Agricultural capital		0.060		–0.029
		(0.039)		(0.036)
Smallholding farms		–0.028		0.062**
		(0.032)		(0.030)
Lagged FPV vote share	0.479***	0.482***	0.351***	0.356***
	(0.038)	(0.038)	(0.036)	(0.036)
Education	–0.388***	–0.360**	–0.518***	–0.543***
	(0.143)	(0.144)	(0.134)	(0.135)
Poverty	–0.132	–0.109	0.124	0.115
	(0.096)	(0.097)	(0.089)	(0.091)
Farms (ln)	–0.004	–0.005	0.009*	0.009*
	(0.006)	(0.006)	(0.005)	(0.005)
Rural population	–0.013**	–0.013**	–0.004	–0.005
	(0.005)	(0.005)	(0.005)	(0.005)
Population density (ln)	–0.023	–0.024	0.031	0.027
	(0.024)	(0.025)	(0.023)	(0.023)
Constant	0.384***	0.372***	0.338***	0.347***
	(0.063)	(0.063)	(0.059)	(0.059)
Observations	499	499	499	499
Log Likelihood	391.961	393.390	427.799	430.365
σ^2	0.010	0.010	0.009	0.009
AIC	–765.922	–764.781	–837.598	–836.729
Wald Test	1,285.016***	1,307.228***	977.619***	988.482***
LR Test	451.678***	453.581***	350.558***	343.056***

*p < 0.10 **p < 0.05 ***p < 0.01

age support for the FPV, at nearly zero. However, there are substantive statistical effects as percentage changes in soybean harvests get larger. For example, a percentage change from the mean to its maximum value in the 2007 season—from Guatraché in La Pampa to General López in Santa Fe—is associated with a 1.5 percent increase in vote share for the FPV.

As expected, the relationship between soybean harvests and FPV's electoral performance is negative and statistically significant at the conventional levels in most of our models on the 2009–2013 elections (tables 1, 2, and 3), as stated in hypothesis 2. We interpret the results of model 4 in table 1 for the 2009 midterm election. A

percentage change from the mean to the maximum of the harvested soybeans in the 2009 season—from Capitán Sarmiento in Buenos Aires to General López in Santa Fe—is correlated with an average decrease of 2.13 percent in the share of valid votes for FPV candidates to the Chamber of Deputies, other things being equal. Similarly, a percentage change from the median—Patagones, in Buenos Aires—to the maximum value is correlated with an average decrease of 5.8 percent in the share of FPV's valid votes.

The marginal effects of harvested soybeans on FPV's vote shares in the 2011 and 2013 elections are smaller than those of the 2009 election. While in the expected direction, the coefficients that model 1 and 2 (table 2) and model 2 (table 3) yield for the 2011 legislative and presidential election, respectively, do not reach statistical significance. The exception is model 1 (table 3) on the presidential election, but without controlling for lockouts, capital, and property size. In the 2013 midterm election (model 4, table 2), a percentage change from the mean to the maximum of the 2013 harvest season is correlated with an average decrease of 1.5 percent in the share of valid votes for the FPV. As theorized, tax policy effects tended to decline in the post-2009 elections.

Though it is negative, we find no statistically significant relationship between the 2008 lockouts and FPV's vote share in 2009 (model 4, table 1). Neither do we find significant effects in subsequent elections. We do find statistically significant effects with regard to agricultural capital and smallholding farms according to our expectations, though only in 2009 and 2011, respectively.

As predicted in hypothesis 3, there is a positive and statistically significant relationship (at the 1 percent level) between harvested soybeans and Cambiemos's presidential vote share (models 5 and 6, table 3). We interpret the coefficient in model 6. A percentage change from the mean to the maximum of harvested soybeans in the 2015 season—from San Antonio de Areco in Buenos Aires to Río Cuarto in Córdoba—is correlated with an average increase of 1.5 percent in the share of valid votes for Mauricio Macri, other things being equal. Similarly, a change from a value around the median—Pocho, Córdoba—to the maximum level of harvested soybeans is correlated with a 2.7 percent average increase. These magnitudes should be viewed in the context of a highly competitive national election that ended up yielding a surprising, unforeseen result at the polls.

In the 2015 election, we also find a positive, significant effect at the .1 level for 2008 lockouts. A percent increase from its mean to maximum value—Puán, in Buenos Aires—is associated with an average increase of 4 percent in Cambiemos's vote share. Substantively, this quantity shows that the resentment that the 2008 conflict induced in the sector might have contributed to prospective voting for Macri's candidacy rather than retrospective voting against the FPV in the 2009–2013 elections. Control variables, such as agricultural capital and education, also have a positive and statistically significant effect on the vote share for Cambiemos. On the contrary, the coefficient for poverty is negative and significant.

In short, our findings seem to support our main three hypotheses regarding the effect of local wealth on electoral behavior. That is, soybean wealth had a positive

Table 2. Legislative Vote and Local Wealth in Argentina, 2011–2015

	FPV 2011		FPV 2013		FPV 2015	
	(1)	(2)	(3)	(4)	(5)	(6)
Soybean harvest (ln)	-0.002 (0.001)	-0.0004 (0.002)	-0.004** (0.002)	-0.005** (0.002)	-0.002 (0.001)	-0.001 (0.002)
Lockouts 2008 (ln)		-0.002 (0.010)		-0.006 (0.012)		-0.008 (0.010)
Agricultural capital		-0.077** (0.030)		0.032 (0.037)		-0.008 (0.030)
Smallholding farms		-0.009 (0.025)		-0.025 (0.031)		0.010 (0.026)
Lagged FPV vote share	0.356*** (0.034)	0.357*** (0.034)	0.589*** (0.048)	0.594*** (0.048)	0.497*** (0.032)	0.496*** (0.032)
Education	-0.218** (0.088)	-0.225** (0.088)	-0.418*** (0.108)	-0.405*** (0.108)	-0.398*** (0.091)	-0.402*** (0.091)
Poverty	0.121** (0.061)	0.116* (0.060)	0.079 (0.074)	0.081 (0.075)	0.142** (0.062)	0.135** (0.062)
Farms (ln)	0.010** (0.004)	0.011*** (0.004)	-0.006 (0.005)	-0.006 (0.005)	0.002 (0.004)	0.002 (0.004)
Rural population	-0.013 (0.018)	-0.011 (0.018)	0.034 (0.022)	0.037 (0.023)	0.017 (0.019)	0.015 (0.019)
Population density (ln)	0.002 (0.004)	0.003 (0.004)	-0.002 (0.005)	-0.002 (0.005)	0.004 (0.004)	0.004 (0.004)

Table 2. Legislative Vote and Local Wealth in Argentina, 2011–2015 (*continued*)

	FPV 2011		FPV 2013		FPV 2015	
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	0.406***	0.405***	0.188***	0.180***	0.280***	0.283***
	(0.045)	(0.045)	(0.053)	(0.054)	(0.041)	(0.041)
Observations	499	499	499	499	499	499
Log Likelihood	513.151	516.305	425.770	426.544	520.727	521.252
σ^2	0.006	0.006	0.009	0.009	0.006	0.006
AIC	−1,008.302	−1,008.610	−833.539	−829.089	—	—
Wald Test	1,450.307***	1,390.278***	522.939***	513.528***	355.884***	353.548***
LR Test	507.742***	450.828***	253.056***	237.337***	215.278***	196.561***

*p < 0.10 **p < 0.05 ***p < 0.01

Table 3. Presidential Vote and Local Wealth in Argentina, 2011–2015

	FPV 2011		FPV 2013		FPV 2015	
	(1)	(2)	(3)	(4)	(5)	(6)
Soybean harvest (ln)	-0.003***	-0.001	-0.001	-0.002	0.005***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Lockouts 2008 (ln)		-0.005		-0.006		0.014*
		(0.008)		(0.007)		(0.008)
Agricultural capital		-0.061***		0.023		0.077***
		(0.022)		(0.021)		(0.025)
Smallholding farms		0.018		0.008		0.023
		(0.019)		(0.017)		(0.021)
Lagged FPV vote share	0.454***	0.447***	0.656***	0.662***		
	(0.029)	(0.029)	(0.032)	(0.033)		
Education	-0.220***	-0.234***	-0.331***	-0.330***	0.329***	0.336***
	(0.068)	(0.068)	(0.061)	(0.061)	(0.071)	(0.071)
Poverty	0.153***	0.143***	0.064	0.063	-0.207***	-0.200***
	(0.046)	(0.046)	(0.042)	(0.042)	(0.050)	(0.049)
Farms (ln)	-0.001	-0.0001	-0.003	-0.003	-0.003	-0.005
	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)
Rural population (ln)	0.011	0.010	0.050***	0.049***	-0.019	-0.020
	(0.014)	(0.014)	(0.013)	(0.013)	(0.015)	(0.015)
Population density (ln)	0.002	0.002	-0.0001	-0.001	-0.002	-0.003
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Constant	0.398***	0.405***	0.101***	0.097***	0.270***	0.268***
	(0.034)	(0.034)	(0.033)	(0.033)	(0.030)	(0.030)

Table 3. Presidential Vote and Local Wealth in Argentina, 2011–2015 (*continued*)

	FPV 2011		FPV 2013		FPV 2015	
	(1)	(2)	(3)	(4)	(5)	(6)
Observations	499	499	499	499	499	499
Log Likelihood	661.738	666.175	622.458	628.778	721.942	722.951
σ^2	0.004	0.003	0.004	0.004	0.003	0.003
AIC	−1,305.476	−1,308.350	−1,228.916	−1,235.557	−1,425.885	−1,421.903
Wald Test	527.482***	535.337***	558.191***	472.765***	383.406***	359.593***
LR Test	272.465***	273.868***	237.005***	221.275***	230.766***	204.777***

*p<0.10 **p < 0.05 ***p < 0.01

marginal effect on incumbent support in 2007—unaffected by fiscal policymaking—and a negative effect as national export taxes were internalized in 2009 and subsequent elections. Furthermore, as expected, we find a substantive positive effect on support for Macri in 2015. Such electoral support had significant implications.

THE AFTERMATH
OF MACRI'S ELECTION

Macri's administration made a turnaround that favored the agriculture sector. On his third day in office, President Macri abolished trade restrictions and all export taxes except for soybeans, which were scheduled to decline 5 percent annually, thereby providing immediate incentives for agricultural investments (*Infobae* 2016). The decision was announced in a town considered to be the capital of soybeans, with a symbolic effect, as the CRA's president noted: "The president, 72 hours after taking office, went to Pergamino, to a 'corral,' to announce the end of export taxes and restrictions. He fulfilled his campaign promise, and we put the items on the agenda" (Chiesa 2015).

Furthermore, Macri's high-rank appointments in agriculture represented a dramatic shift from his predecessor. The Ministry of Agriculture was established in 2009, having previously operated as a secretariat in the Ministry of the Economy. Under the Kirchner administration, the appointees' professional background was either political (with no connections to the sector whatsoever) or technical, especially those who came from the National Institute of Agricultural Research (INTA). By contrast, Macri filled these positions with former top officials from agricultural organizations, including SRA, CRA, and AACREA.

We analyze the appointments to minister, chief of staff, secretary, and undersecretary by tracking their previous careers.[24] We grouped them into six categories.[25] As figure 1 shows, only 1 of the 28 appointed officials during the Kirchner terms had previous experience in the aforementioned rural organizations. Conversely, 12 of 29 appointees under Macri had previously occupied important positions in at least one agricultural organization. Most remarkably, Macri appointed Ricardo Buryaile, a former CRA vice president and *agrodiputado,* as minister of agroindustry—as the ministry was renamed—and Ricardo Negri, from AACREA, as his secretary of agriculture (equivalent to deputy minister). In personal interviews, both these officials averred that Macri's victory signaled a dramatic shift toward agricultural interests.

> The vote was emotional, sentiments, not rational. We came from the mistreatment of Kirchnerism. Macri was preferred to Massa, because he inspired more confidence and represented the opposite side of what we had. . . . Our relationship with the rural organizations is very good because humanly we know each of them. (Buryaile 2016)

> The conflict is over and there are only problems to solve. We have a daily and institutional link although we have a common origin. . . . It's the nineteenth day of our term and we have met with most of the representative, technical, and value chain organizations, and they tell us that we've already done more than what was done in all previous

Figure 1. Officials Appointed to the Ministries of Agriculture and Agroindustry, 2009–2017
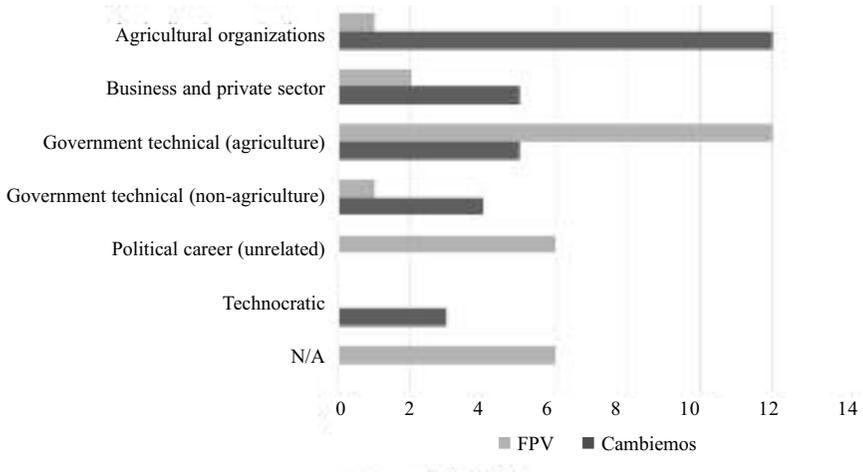
years because we ended the export taxes, the export permits, and the differential exchange rates. (Negri 2016)

After a cabinet reshuffling in 2017, Macri replaced Buryaile with Luis Miguel Etchevehere, then president of the SRA, further confirming the tendency to appoint representatives of agricultural organizations to this ministry; other members of this organization were also appointed in conjunction with Etchevehere. Indeed, Canelo and Castellani (2017, 23–27) report that agroindustry is the ministry in Macri's cabinet with the greatest number of high-ranking officials coming from business organizations and the private sector. Representatives of agricultural organizations welcomed this increase in their policymaking influence and recognized that it reduced their incentives to protest, just as the literature on labor unions' political exchanges predicted (Pizzorno 1978). The following quotations from leaders of the SRA, CRA, and FAA illustrate this perception.

> The key change is in the public-private relation. The offices are now open. The minister is a man from CRA and was an agricultural legislator. We've already had meetings about the fundamental problems in the first four days and we have direct access to the minister. (Chiesa 2015)

> Protests? No way. Today, in the province of Buenos Aires, an agro-table was set in place, which is an environment of monthly dialogue that includes us. There are conversations to call for a national-level one for January, we can see willingness to dialogue. (Solmi 2016)

> Our case changed the reality of changing the demands by protesting and closing the doors of the Ministry of Agriculture. Now, the ministry has suitable people. It's a contradiction to protest with people who are offering to come to work, to seek for solutions. (Etchevehere 2016)

Local-level representatives have a similar perspective, as we heard when participating in an assembly of approximately one hundred delegates from local agricultural associations in 2016. There was a consensus among these delegates about demanding specific policies without resorting to protests that could hurt the government. Local-level representatives stressed the need to be cautious without neglecting the demands of producers suffering economic hardship, emphasizing the importance of the success of this strategy. This was a recurring theme. Many delegates stressed the need to abandon protests as a mechanism to draw the government's attention, and reported local-level discussions in which producers asked their representatives for prudence in the relationship with the national government, given their recently gained access to policymaking.

Thus, not only did local economic conditions drive the FPV's electoral performance from 2007 to 2015, but they also favored the victory of a conservative president, who subsequently increased the sector's policy influence. Macri's party, which was born in the City of Buenos Aires (Vommaro et al. 2015), took advantage of those local conditions to gain support in the agriculturally rich areas in 2015. Local economic conditions thereby contributed to party building. Once in office, Macri cemented this relationship with traditional agricultural regions while expanding it across the poorer hinterland (Murillo 2017).

The connection between economic interests and political organizations in Argentina, which favored the building of a successful center-right coalition, contrasts with the experience of Bolivia. Eaton (2016, 2017) describes how opposition to Evo Morales's populist presidency was built around the agricultural producers of Santa Cruz, including soybean farmers, who were afraid of land reform and resentful of export quotas. These economic actors financed rival political elites, leading to an increasingly polarized confrontation with the Morales government, also around 2008. However, Eaton argues that Morales's concessions to these sectors were crucial in demobilizing them, thereby depriving political elites of their financial support for building a successful conservative party in Bolivia.

Conclusions

This research about the relationship between departmental economic conditions and electoral behavior in Argentina complements a literature that focuses on the impact of the commodities boom on incumbent support (Campello and Zucco 2016; Mazzuca 2013; Richardson 2009). By looking at this effect at different points in time, we are able to distinguish the marginal impact of agricultural wealth and the internalization of tax policies at the department level. The marginal effect of high agricultural prices favored the incumbent coalition in 2007. Yet it became negative once widespread protests raised the salience of redistribution through an export tax, even when the rate of that tax remained unchanged, thanks to the agricultural producers' mobilization. These findings highlight both the effect of local conditions and the ability of voters to identify policy effects on their wellbeing. We expect

future studies to analyze further the characteristics that define local contexts that could be relevant in explaining national voting patterns.

We have also shown the electoral effect of export-oriented agricultural areas on Macri's support in 2015. In return, Macri fulfilled his campaign promise to end export restrictions and appointed representatives of agricultural interests. Indeed, when he could not deliver the scheduled 5 percent reduction in soybean taxes, due to a fiscal deficit in 2016, he found patience on their side.

Although it is too early to evaluate this strategy, Macri seems to be leading not just the first electorally successful center-right political party in Argentina but also the first one connected to agricultural interests.[26] This modern rural vote is based on a model that expanded the demand for local services. As a result, it is associated not only with agricultural production and related services but more generally with nonagricultural services, since local populations indirectly reaped the benefits of agricultural growth. The relationship between modern agriculture and a democratic electoral right is a political novelty in Argentina. The durability of this alliance remains to be evaluated.

NOTES

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1. Murillo and Visconti (2017) are an exception, focusing on egotropic considerations.

2. Federal taxes accounted for two-thirds of the produced value of soybeans, and more than half of that was export taxes (FADA 2017).

3. The rate would follow the soybean price, which was US$510 per ton and rising in May 2008. The reform included a top marginal rate of 95 percent, applicable if soybean prices exceeded U$S600 per ton (MECON 2008, Article 4).

4. We exclude the 2007 presidential election because the preceding election, in 2003, was exceptional. The high degree of partisan fragmentation in 2003 allowed Néstor Kirchner to be elected with just 23 percent of the valid vote, thus hindering evaluations of growing support by 2007.

5. As shown in the analyses of Zunino (2015) and Zunino and Aruguete (2010), the major newspapers fed this view of the government with regard to the agrarian conflict.

6. According to the 1994 Constitution, if no candidate obtains more than 45 percent of the vote or 40 percent with 10 percentage points over the runner-up, a runoff election is held between the two candidates with the highest number of votes.

7. The SRA's chief economist also joined the Ministry of Agriculture, heading a new agricultural fund (*La Nación* 2017).

8. These are Buenos Aires, Catamarca, Chaco, Chubut, Corrientes, Córdoba, Entre Ríos, Formosa, Jujuy, La Pampa, La Rioja, Mendoza, Misiones, Neuquén, Río Negro, Salta, San Juan, San Luis, Santa Cruz, Santa Fe, Santiago del Estero, Tierra del Fuego, Tucumán.

9. Municipal statistics are practically nonexistent in Argentina.

10. The data were obtained at the Dirección Nacional Electoral (DNE), http://www.elecciones.gob.ar, and the *Atlas Electoral de Andy Tow*, www.andytow.com.

11. Data come from the Ministerio de Agroindustria (https://datos.magyp.gob.ar).

12. We preliminarily explore the relationship between soybean harvests and electoral support in a series of scatterplots (figure A1) exhibited in the supplementary appendix.

13. The planting season, conversely, starts in October-November, once elections are over. Nevertheless, due to concerns about measurement errors, we conduct robustness checks in the supplementary materials by utilizing three other measures of soybeans: planted hectares, produced kilograms, and yield per harvested hectare. Our main results remain fairly robust to changes in the measurement instrument.

14. Data for department-level rural lockouts come from Murillo and Mangonnet 2016, and their source is the Consejo Nacional de Inversiones. Their yearbooks with the raw data can be requested at the Centro de Documentación e Información at the Ministry of Finance, http://cdi.mecon.gov.ar/biblioteca

15. Drills are sowing machines which increase productivity by depositing seeds symmetrically before covering them with soil.

16. Data for education, poverty, and population variables were retrieved from INDEC's 2010 National Census for elections occurring after 2009 and from the 2001 census for the 2009–2007 legislative elections. Both censuses can be accessed at http://www.indec.gob.ar/ micro_sitios/webcenso/index.asp. Rural population is the sum of two different types of rural populations: dispersed and inhabitants living in municipalities with fewer than two thousand people. The number of farms was obtained from the 2002 National Agricultural Census.

17. Because Cambiemos was running a presidential candidate for the first time in 2015, we were unable to include this control for models in which support for Macri is the dependent variable. Data come from the DNE and *Atlas Electoral de Andy Tow*.

18. To visualize potential spatial biases, we mapped the spatial structure of the vote share for the two political parties in each election in the supplementary materials (figure A2). Regarding parametric tests, Moran's I test statistic, randomization and permutation inference with 999 simulations, rejects the null hypothesis of no spatial autocorrelation in the data ($p < .001$). We also plotted the dependent variable against its spatially lagged values and the OLS residuals against their spatially lagged values in a series of Moran scatterplots. We present this additional evidence in figures A4 and A5 in the supplementary materials. Lagrange Multiplier tests suggest that spatial autocorrelation, in the form of spatial lags and error dependence, is present in our linear specifications ($p < .001$).

19. Because the diagnostics show the presence of spatial autocorrelation in the dependent variable as well, we reestimated all our specifications utilizing a spatial lag model in section B of the supplementary appendix.

20. We estimate specifications on a cross-sectional basis, running separate regressions for each presidential and legislative election of interest. This design is analogous to a within-estimator because we analyze the relationship between local-level variables and electoral outcomes in each electoral year, thus being able to capture year-specific effects (i.e., changes in national tax policy) affecting all departments equally at the time of that election. This proposed design is identical to that of Porto and Lodola (2013) but comprises all Argentine departments and more post-2008 elections.

21. The extant literature has mostly emphasized the influence of national (or provincial) variables on voting behavior. Although our design captures national-level effects, it does not do so for provincial ones. As a robustness check, in the supplementary appendix (section C2),

we account for the nested structure of the data by estimating a hierarchical model and random intercept models with constants varying by province, and controlling for provincial-level covariates. These models produce results nearly identical to those presented in this section.

According to Anselin and Arribas-Bel (2012), spatial fixed effects (at the provincial level in our case) are not recommended in a pure cross-section setup. They might be spurious when the true data-generating process takes the form of a spatial lag or error dependence, or when all observations within each group are not neighbors of each other. The supplementary appendix (section C3) presents the results of a linear specification with spatial fixed effects. Our results remain unchanged. Moreover, Beck and Katz (1996) find that standard methods for longitudinal analyses are inadvisable for data sets in which the number of time units is fewer than 10.

22. Neighboring departments define a weights matrix. We set up a simple contiguity matrix (i.e. Queen matrix), in which weights indicate whether or not departments share a common edge or common vertex. Contiguous departments get the value of 1 and noncontiguous get 0.

23. The coefficient indicates strong spatial dependence of the residuals in all models.

24. All appointments in the Ministries of Agriculture and Agroindustry were collected at http://www.infoleg.gob.ar and online searches were conducted to determine their career trajectories.

25. We explain the classification criteria and provide concrete examples for each of them in the supplementary appendix (section D).

26. Gibson (1996) observes the lack of a successful right-wing party in Argentina, and Hora (2012) suggests that Argentine landowners were unable to develop connections with a political party.

AUTHOR INTERVIEWS

All interviews took place in Buenos Aires.

Alegre, Gilberto. 2016. Agricultural expert. July 29.

Blacker, Alejandro. 2014. President, Argentine Association of Research Regional Consortia (AACREA). April 21.

Buryaile, Ricardo. 2016. Minister of AgroIndustry. August 2.

Chiesa, Dardo. 2015. President, Rural Confederations of Argentina (CRA). December 18.

———. 2017. January 12.

Etchevehere, Miguel. 2014. President, Rural Society of Argentina (SRA). April 14.

———. 2016. August 1.

Executive Committee of AACREA. 2014. April 21.

Executive Committee of Confederation of Rural Associations of Buenos Aires and La Pampa (CARBAP). 2016. July 27.

Negri, Ricardo. 2016. Secretary of Agriculture. January 14.

Solmi, Jorge. 2016. Vice President, Agrarian Federation of Argentina (FAA). December 22.

REFERENCES

Achen, Christopher H., and Larry M. Bartels. 2016. *Democracy for Realists: Why Elections Do Not Produce Responsive Government*. Princeton: Princeton University Press.

Ámbito Financiero (Buenos Aires). 2012. Asumió el nuevo subsecretario de agricultura familiar. August 27. www.ambito.com/651584

Anselin, Luc. 2002. Under the Hood: Issues in the Specification and Interpretation of Spatial Regression Models. *Agricultural Economics* 27, 3: 247–67.

Anselin, Luc, and Anil K. Bera. 1998. Spatial Dependence in Linear Regression Models with an Introduction to Spatial Econometrics. *Statistics Textbooks and Monographs* 155: 237–90.

Anselin, Luc, and Daniel Arribas-Bel. 2012. Spatial Fixed Effects and Spatial Dependence in a Single-Cross Section. *Papers in Regional Science* 92, 1: 3–17.

Ardanaz, Martin, M. Victoria Murillo, and Pablo M. Pinto. 2013. Sensitivity to Issue Framing on Trade Policy Preferences: Evidence from a Survey Experiment. *International Organization* 67, 2: 411–37.

Barsky, Osvaldo, and Mabel Dávila. 2008. *La rebelión del campo: historia del conflicto agrario argentino*. Buenos Aires: Sudamericana.

Beck, Nathaniel, and Jonathan Katz. 1996. Nuisance vs. Substance: Specifying and Estimating Time-series Cross-section Models. *Political Analysis* 6 (July): 1–36.

Bermeo, Nancy, and Larry Bartels, eds. 2013. *Mass Politics in Tough Times: Opinions, Votes and Protest in the Great Recession*. Oxford: Oxford University Press.

Bisang, Roberto, Guillermo Anlló, and Mercedes Campi. 2008. Una revolución (no tan) silenciosa. Claves para repensar el agro en Argentina. *Desarrollo Económico* 48, 190/91: 165–207.

Books, John, and Charles Prysby. 1999. Contextual Effects on Retrospective Economic Evaluations: The Impact of the State and Local Economy. *Political Behavior* 21, 1: 1–16.

Calvo, Ernesto. 2014. *Legislator Success in Fragmented Congresses in Argentina: Plurality Cartels, Minority Presidents, and Lawmaking*. Cambridge: Cambridge University Press.

Campello, Daniela, and Cesar Zucco, Jr. 2016. Presidential Success and the World Economy. *Journal of Politics* 78, 2: 589–602.

———. 2017. Commodity Price Shocks and Misattribution of Responsibility for the Economy: Observational and Experimental Evidence. Paper presented at the Annual Meeting of the Red para el Estudio de la Economía Política de América Latina, Lima, Peru, April 27–28.

Canelo, Paula, and Ana Castellani. 2017. Perfil sociológico de los miembros del gabinete inicial del presidente Mauricio Macri. Research Report No. 1. Observatorio de las Élites Argentinas, Universidad Nacional de San Martín.

Duch, Raymond M. 2001. A Developmental Model of Heterogeneous Economic Voting in New Democracies. *American Political Science Review* 95, 4: 895–910.

Duch, Raymond M., and Randolph T. Stevenson. 2008. *The Economic Vote: How Political and Economic Institutions Condition Election Results*. Cambridge: Cambridge University Press.

Eaton, Kent. 2016. Challenges of Party-Building in the Bolivian East. In Levitsky et al. 2016. 383–411.

———. 2017. *Territory and Ideology in Latin America: Policy Conflicts Between National and Subnational Governments*. Oxford: Oxford University Press.

Fairfield, Tasha. 2016. *Private Wealth and Public Revenue*. Cambridge: Cambridge University Press.

Freytes, Carlos. 2015. The Cerrado Is Not the Pampas: Explaining Tax and Regulatory Policies on Agricultural Exports in Argentina and Brazil (2003–2013). Ph.D. diss., Northwestern University.

Freytes, Carlos, and Juan O'Farrell. 2016. Providers, Producers, Traders, and the State: Distributive Conflicts in the Soy Chain in Argentina and Brazil (2003–2015). Paper pre-

sented at the 34th International Congress of the Latin American Studies Association, New York, May 27–30.

Fundación Argentina para el Desarrollo Agropecuario (FADA). 2017. Statistical index. June. http://fundacionfada.org/informes/indice-fada-junio-2017

Gélineau, François. 2007. Presidents, Political Context, and Economic Accountability: Evidence from Latin America. *Political Research Quarterly* 60, 3: 415–28.

Giarracca, Norma, Miguel Teubal, and Tomás Palmisano. 2008. Paro agrario: crónica de un conflicto alargado. *Realidad Económica* 237: 33–54.

Gibson, Edward L. 1996. *Class and Conservative Parties: Argentina in Comparative Perspective*. Baltimore: Johns Hopkins University Press.

Gras, Carla. 2009. El nuevo empresariado agrario: sobre la construcción y los dilemas de sus organizaciones. In *La Argentina rural de la agricultura familiar a los agronegocios*, ed. Gras and Valeria Hernández. Buenos Aires: Biblos. 29–59.

Hellwig, Timothy. 2010. Elections and the Economy. *Comparing Democracies* 3: 184–201.

———. 2014. *Globalization and Mass Politics: Retaining the Room to Maneuver*. Cambridge: Cambridge University Press.

Hellwig, Timothy, and David Samuels. 2008. Electoral Accountability and the Variety of Democratic Regimes. *British Journal of Political Science* 38, 1: 65–90.

Hora, Roy. 2010. La crisis del campo del otoño de 2008. *Desarrollo Económico* 50: 81–111.

———. 2012. La evolución del sector agroexportador argentino en el largo plazo, 1880–2010. *Historia Agraria: Revista de Agricultura e Historia Rural* 58: 145–81.

Infobae. 2016. Argentina espera una cosecha récord y precios estables para 2017. October 10. https://goo.gl/aR7zYo

Instituto Nacional de Estadística y Censo (INDEC). n.d. Intercambio Comercial Argentino. http://www.indec.gob.ar/nivel4_default.asp?id_tema_1=3&id_tema_2=2&id_tema_3 =40. Accessed July 5, 2017.

Johnston, Ron, Charles Pattie, Daniel Dorling, Iain MacAllister, Helena Tunstall, and David Rossiter. 2000. Local Context, Retrospective Economic Evaluations, and Voting: The 1997 General Election in England and Wales. *Political Behavior* 22, 2: 121–43.

Lattuada, Mario. 2006. *Acción colectiva y corporaciones agrarias en la Argentina: Transformaciones institucionales a fines del siglo XX*. Buenos Aires: Universidad Nacional de Quilmes.

Levitsky, Steven, James Loxton, Brandon Van Dyck, and Jorge I. Domínguez, eds. 2016. *Challenges of Party-Building in Latin America*. New York: Cambridge University Press.

Lewis-Beck, Michael S., and María Celeste Ratto. 2013. Economic Voting in Latin America: A General Model. *Electoral Studies* 32, 3: 489–93.

Lewis-Beck, Michael S., and Mary Stegmaier. 2013. Economic Determinants of Electoral Outcomes. *Annual Review of Political Science* 3, 1: 183–219.

Lowder, Sarah K., Jakob Skoet, and Terri Raney. 2016. The Number, Size, and Distribution of Farms, Smallholder Farms, and Family Farms Worldwide. *World Development* 87: 16–29.

Mazzuca, Sebastián L. 2013. The Rise of Rentier Populism. *Journal of Democracy* 24, 2: 108–22.

Millán, Facundo. 2010. Cartografías sociales II: Bigand. In *El mundo chacarero en tiempos de cambio: herencia, territorio e identidad en los pueblos sojeros*, ed. Carla Gras and Karina Bidaseca. Buenos Aires: CICCUS. 135–55.

Ministerio de Economía y Producción (MECON). 2008. Resolution 125. March 10. https://goo.gl/oRroo2

Murillo, M. Victoria. 2017. Del batacazo electoral al reformismo permanente. *El Estadista*, October 26. http://elestadista.com.ar/?p=13426

Murillo, M. Victoria, and Giancarlo Visconti. 2017. Economic Performance and Incumbents' Support in Latin America. *Electoral Studies* 45: 180–90.

Murillo, M. Victoria, and Jorge Mangonnet. 2016. Protests of Abundance: Agricultural Rents and Rural Lockouts in Argentina During the Commodities Boom. Paper presented at the Annual Conference of the American Political Science Association, Philadelphia, September 1–4.

Murillo, M. Victoria, Virginia Oliveros, and Milan Vaishnav. 2010. Electoral Revolution or Democratic Alternation? *Latin American Research Review* 45, 3: 87–114.

La Nación (Buenos Aires). 2017. Agroindustria: un economista de la rural coordinará un fondo de $1700 millones. February 16. https://goo.gl/3qfC6s

Nadeau, Richard, Michael S. Lewis-Beck, and Éric Bélanger. 2013. Economics and Elections Revisited. *Comparative Political Studies* 46, 5: 551–73.

National Institute of Censuses and Statistics. 2002. National Agricultural Census. Buenos Aires. https://goo.gl/YrTNhL

Pizzorno, Alessandro. 1978. Political Exchange and Collective Identity in Industrial Conflict. In *The Resurgence of Class Conflict In Western Europe Since 1968*, ed. Colin Crouch and Pizzorno. New York: Palgrave Macmillan. 277–98.

La Política Online. 2015. El PRO suma a un reconocido técnico de CREA como interlocutor con el campo. April 4. www.lapoliticaonline.com/nota/88136/

Porto, Alberto, and Agustín Lodola. 2013. Economic Policy and Electoral Outcomes. *Journal of Applied Economics* 16, 2: 333–56.

Ratto, María C. 2011. El proceso de atribución de responsabilidades en América Latina: un estudio sobre el voto económico entre 1996 y 2004. *Revista de la Sociedad Argentina de Análisis Político* 5, 1: 59–92.

Remmer, Karen. 2003. Elections and Economics in Contemporary Latin America. In *Post-Stabilization Politics in Latin America: Competition, Transition, Collapse*, ed. Carol Wise and Riordan Roett. Washington, DC: Brookings Institution Press. 31–55.

Rho, Sungmin, and Michael Tomz. 2017. Why Don't Trade Preferences Reflect Economic Self-Interest? *International Organization* 71, S1: S85–S108.

Richardson, Neal P. 2009. Export-oriented Populism: Commodities and Coalitions in Argentina. *Studies in Comparative International Development* 44, 3: 228–55.

———. 2012. The Politics of Abundance: Export Agriculture and Redistributive Conflict in South America. Ph.D. diss., University of California, Berkeley.

Scheve, Kenneth F., and Matthew J. Slaughter. 2001. What Determines Individual Trade-Policy Preferences? *Journal of International Economics* 54, 2: 267–92.

Shugart, Matthew Soberg. 1995. The Electoral Cycle and Institutional Sources of Divided Presidential Government. *American Political Science Review* 89, 2 (June): 327–43.

Singer, Matthew. 2015. Electoral Accountability for the Economy in Latin America. *Revista Política* 53, 1: 37–72.

———. 2013. Economic Voting in an Era of Non-Crisis: The Changing Electoral Agenda in Latin America, 1982–2010. *Comparative Politics* 45, 2: 169–85.

Tagina, María L. 2012. Controlando al gobierno a través de las urnas. Un análisis del caso argentino entre 1995 y 2005. *Revista Política* 50, 1: 111–44.

———. 2016. Elecciones 2015 en Argentina: cambio de ciclo. In *Elecciones y cambio de élites en América Latina, 2014 y 2015*, ed. Manuel Alcántara Sáez and Tagina. Salamanca: Ediciones Universidad de Salamanca. 229–48.

Teubal, Miguel, and Javier Rodríguez. 2002. Agro y alimentos en la globalización: una perspectiva crítica. Buenos Aires: Editorial La Colmena.

Vommaro, Gabiel, Sergio Morresi, and Alejandro Bellotti. 2015. *Mundo PRO: anatomía de un partido fabricado para ganar*. Buenos Aires: Planeta.

World Bank. Various dates. Global Economic Monitor—Commodities. http://databank. worldbank.org/data/reports.aspx?source=global-economic-monitor-commodities

———. World Development Indicators. Washington, DC: World Bank. https://goo.gl/ kKb4EE

Zunino, Esteban. 2015. La cobertura mediática del "conflicto campo-gobierno" de 2008 en la prensa gráfica argentina. Un estudio comparativo de las agendas informativas sobre la Resolución No. 125/08 de los diarios *Clarín, La Nación* y *Página/12*. Ph.D. diss., Universidad Nacional de Quilmes.

Zunino, Esteban, and Natalia Aruguete. 2010. La cobertura mediática del conflicto campo-gobierno. Un estudio de caso. *Global Media Journal* 7, 14: 1–23.

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