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Access for All? The Political Economy of Support for Early Childhood Education

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Access for All?

The Political Economy of Support for Early Childhood Education

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Abstract

Early childhood education (ECE) programming offers one of the most promising strategies for reducing achievement gaps. However, access to state-funded pre-K varies widely by state. I develop a theory to explain the political economy of voter and legislator support for universal ECE. I evaluate my theoretical model using data on votes cast by voters and legislators for ECE-related policies in California. I also study the determinants of ECE policy outcomes across states using state-level panel data over 12 years. I find that there is an inverse relationship between median income in a community and support for public pre-K. Racially homogeneous communities are also more likely to support such programs. For legislators, political party matters above all else. Democrats are over 30 percentage points more likely to support the ECE policy considered. Proponents of public pre-K can expect to garner the greatest levels of support for ECE expansion from: racially homogeneous communities, low- and middle-income individuals, and Democrats.

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I. Introduction

The opportunity gap in America based on socioeconomic status (SES) is wide and achievement gaps continue to grow (Reardon 2011; Putnam 2015). States have begun to develop and implement policies targeted at narrowing these gaps (CA Secretary of State 2006a; Cascio and Schanzenbach 2013; Barnett et al. 2015). Based on an extensive and compelling research literature, early childhood education (ECE) programming offers one of the most promising strategies for reducing achievement gaps. These programs have demonstrated powerful, positive impacts on student outcomes and are economically efficient (Currie 2001; Heckman et al. 2010). In light of this research, a few states, such as Oklahoma and Georgia, have implemented universal public pre-K for four-year-olds (Cascio and Schanzenbach 2013). However, access to state-funded pre-K varies widely by state (Barnett et al. 2015). The purpose of this paper is to explore and explain why some states have universal public pre-K while others do not, with a specific focus on the political economy of support for ECE.

Using models in political economics, I develop a theory about voter and legislator support for universal ECE. I empirically test my theoretical model using data on votes cast by voters and legislators for and against ECE in California. I also study the determinants of ECE policy outcomes across states. With respect to voter support, I argue there is an inverse relationship between median income in a community and support for public pre-K and that racially homogeneous communities are more likely to support such programs. For legislators, political party matters above all else.

Voters in California had the opportunity to vote on the expansion of ECE in 2006. The primary election included a ballot initiative, known as Proposition 82, which

proposed amending California's constitution to provide universal public pre-K for four-year-olds. Proposition 82 was considered at a time when there were questions about school readiness in California. Students' performance as they progressed through school exacerbated these concerns. At the time, 62% of California's 503,000 four-year-olds attended an ECE program, termed a center-based program, but quality was questionable and enrollment varied considerably by SES. Only 49% of four-year-olds from low-income families attended ECE programs. Estimates suggested that if Proposition 82 were passed, at least 70% of the state's four-year-olds would attend pre-K. Proponents of public pre-K hoped the program's emphasis on quality would improve students' prospects for success. To pay for the program, Proposition 82 would have levied a 1.7% tax on individuals making more than \$400,000 and couples making more than \$800,000 per year (Barnett et al. 2006; CA Secretary of State 2006a, n.d.). With more than 60% of votes cast against Proposition 82, the initiative failed to pass (IGS 2014).

California voters had another opportunity to vote on an ECE-related initiative during the 2012 general election. Proposition 38 proposed raising taxes to increase funding for both K-12 education and ECE programs. The initiative failed at the ballot box. Instead, voters passed Proposition 30, which increased taxes to give more funding to community colleges and K-12 schools (Ballotpedia n.d.a, n.d.b; EdSource 2016).

Legislators in California expanded access to developmentally appropriate public school for four-year-olds in California in 2010. During the 2009-2010 legislative session, the California State Senate and California Assembly passed Senate Bill (SB) 1381, known as the Kindergarten Readiness Act of 2010, which created a two-year Transitional Kindergarten (TK) program for which approximately one-fourth of four-year-olds are

eligible. The bill passed with votes cast along party lines; of those who voted, 91% of Democrats voted for, and 73% of Republicans voted against, the bill. Concerns about developmental readiness of four-year-olds to attend kindergarten and an eagerness to do something positive during the Great Recession influenced the bill's passage (Legislative Counsel 2010c, 2010f, 2010g; Barnett et al. 2015; Project Vote Smart 2015b, 2015c; TK California n.d.a, n.d.b; Vickie Ramos Harris, personal communication, Sept. 23rd, 2015; Scott Moore, personal communication, Oct. 28th, 2015).

This paper investigates the political economy of voter support and legislator support for ECE. Why did Proposition 82 fail to pass in California in 2006? Why did SB 1381 succeed in California in 2010? What important economic and demographic factors (e.g., income distribution, racial diversity) at the precinct or district level played a role?

Education is a public good, implying there are potential externalities and different incidence rates that will influence a voter's preference for public provision of pre-K. I put forth a theoretical model about three factors that are likely to influence the political economy of voter support for ECE: (1) income distribution, (2) income inequality, and (3) ethnic fractionalization (Epple and Romano 1996; Alesina et al. 1999; Cowen 2008; Corcoran and Evans 2010). In the U.S., voters entrust legislators with the task of making decisions on their behalf, presenting a classic principal-agent relationship. Assuming legislators are relatively good agents of their principals, theory suggests the preferences of legislators often will align with the preferences of voters (Jensen and Meckling 1976; Holmstrom 1999; Fearon 1999; Alesina and Tabellini 2007b). Thus, I posit that legislative voting behavior about ECE policy will be a function of their constituents'

preferences for public pre-K. The same factors that influence the political economy of voter support for ECE should therefore influence legislator support and policy outcomes.

Specifically, with respect to income distribution, I hypothesize that the greater the share of individuals in the middle of the income distribution in a community, the greater the level of voter support for Proposition 82 and the greater the likelihood a legislator will vote for SB 1381. As many low-income children already receive government-supported ECE, I posit that the share of low-income individuals will positively impact both voter and legislator support, but at lower rates than the middle-income share. I hypothesize that high-income individuals will prefer private ECE and lower taxes, implying the percentage of high-income individuals will negatively impact the share, or likelihood, of support. In terms of income inequality, building on the ends-against-the-middle model, I posit that in communities with high levels of income inequality, there will be lower levels of support for Proposition 82 from voters and a reduced likelihood of support for SB 1381 from legislators. Additionally, with respect to ethnic fractionalization, I anticipate that high levels of ethnic/racial diversity in a district will reduce voter support for Proposition 82 and reduce legislator support for SB 1381. Importantly, I expect that legislators will work to implement ECE policies that reflect the preferences of their constituents. Thus, in a state where voters have strong preferences in favor of public pre-K, I expect: a higher level of funding for, greater access to, and better quality of ECE programming (Epple and Romano 1996; Alesina et al. 1999; Fearon, 1999; Barnett et al. 2006; Alesina and Tabellini 2007a, 2007b; Barnett et al. 2009; Corcoran and Evans 2010; Barnett et al. 2015; CA Secretary of State n.d.).

To empirically test my theoretical model, I first use ordinary least squares (OLS) regression analysis to measure the relationship between my three main factors of interest and the percentage of votes for Proposition 82 in 2006. I compare these results with those for Propositions 30 and 38 in 2012. I then use logistic regression analysis to examine the relationship between my factors of interest and the likelihood that a legislator voted for SB 1381 in 2010. To analyze the extent to which the preferences of voters and legislators are reflected in actual policy implementation, I conclude by performing a cross-state analysis of ECE policy outcomes using state-level panel data over 12 years.

I find that income level and ethnic fractionalization are key components of the political economy of voter support for ECE policy. Specifically, my results suggest there is an inverse relationship between median income in a community and support for public pre-K programs like Proposition 82. Further, more ethnically/racially heterogeneous precincts are less likely to support ECE expansion. The level of income inequality does not seem to impact support to any substantial degree. However, for legislators, my results imply that a legislator's political party has the strongest influence on his vote for ECE policies. Democrats are over 30 percentage points more likely to support SB 1381. Finally, my findings for my cross-state analysis suggest there is a disconnect in the relationship between voter preferences, legislator actions, and the ECE policies implemented at the state level; the factors that influence voter preferences are not related to state policy outcomes in the same manner, if at all.

The remainder of this paper proceeds as follows. In Section II, I describe Proposition 82, Propositions 30 and 38, and SB 1381 in greater detail. In Section III, I discuss the literature relevant to my theoretical model. In Section IV, I describe my

theoretical model for the political economy of support for ECE policy. Section V outlines my empirical strategy for testing my theoretical model and Section VI describes my data. In Section VII, I report my findings. Section VIII concludes with a discussion of the implications of my results for ECE expansion.

II. Policy Characteristics of Propositions 30, 38, and 82 and SB 1381

Policy Characteristics of Proposition 82

Proposition 82 appeared on the June 2006 primary election ballot in California. This initiative would have created a public pre-K program available to all four-year-olds in California. Such universal programs already existed in Oklahoma, Georgia, and Florida. Florida had just passed a similar initiative in 2002 (FL Department of State 2002; CA Secretary of State 2006a). Proposition 82 failed to pass. Of the five million votes cast, 39.2% of people voted for, and 60.8% voted against, Proposition 82 (IGS 2014).

In conjunction with a number of education and labor organizations, Robert Reiner, a wealthy actor, “submitted the Preschool for All Act to the California Attorney General’s Office” in 2005 (IGS 2014, n.p.). The act proposed an amendment to the California Constitution to create universal public pre-K. The program would have included three hours of instruction per day for 180 days per year. The proposed program emphasized high-quality curriculum standards. Receiving well over the necessary number of signatures, Proposition 82 qualified to appear on the ballot in the June 2006 primary election. Thus, the act was not proposed and debated in the state legislature, but rather received attention through grassroots action (CA Secretary of State 2006a; IGS 2014).

As was mentioned on the ballot, Proposition 82 would have been “funded by an increase in personal income tax rates for high income individuals” (Smart Voter 2007,

n.p.). The “Official Voter Information Guide” sent to California voters explained it would have levied a 1.7% tax on individuals making more than \$400,000 and married couples making more than \$800,000 per year beginning in 2007. According to estimates, 99.4% of taxpayers would have seen no change in their marginal tax rate. The tax was projected to generate over \$2 billion annually. State projections estimated spending would be \$6000 per child, costing the state \$2 billion per year (Barnett et al. 2006; CA Secretary of State 2006a; Social Explorer 2016).

In 2006, California already had various ECE programs, including Head Start, state general childcare, and state preschool, along with private preschools and other center-based options. Many programs provided by the state were targeted and not available to all children. The quality of these programs was also a concern. For instance, state preschool, which served kids whose parents made no more than 230% of the federal poverty level, supported only 11% of four-year-olds. Access varied widely; over 70% of districts did not provide state preschool (Barnett et al. 2006; CA Secretary of State 2006a).

Organizations representing labor, teachers, law enforcement, and some business groups supported Proposition 82. These groups advocated for universal pre-K on the grounds of the positive outcomes associated with ECE. Most opposition came from the private sector. While many groups expressed opposition to the proposed tax, some people who were against Proposition 82 wanted the government to focus on improving K-12 education first (Currie 2001; Karoly and Bigelow 2005; CA Secretary of State 2006a; McCabe et al. 2009; National Institute on Money in State Politics 2013; IGS 2014).

Policy Characteristics of Propositions 30 and 38

Propositions 30 and 38 both appeared on the November 6, 2012 general election ballot in California. Proposition 30 proposed increasing funding available for K-12 schools and community colleges, among other programs, by raising revenue for the State General Fund. Proposition 38 would have increased funding for K-12 schools and ECE programs. For the first few years of its implementation, it would have also supplied funds to decrease California's bond debt. According to California law, because each would have increased personal income taxes, if both passed, only the proposition with more votes in favor would have been instituted. Proposition 30 passed with 55.4% of the vote. Proposition 38 failed to pass; only 28.7% of votes were cast for the proposition (Ballotpedia n.d.a, n.d.b; CA Secretary of State 2012a; EdSource 2016).

Proposition 30 was sponsored by California Governor Jerry Brown, a Democrat. (Ballotpedia n.d.a, n.d.d; EdSource 2016). "Philanthropist Molly Munger and the Advancement Project, a...civil-rights organization" sponsored Proposition 38 (EdSource 2016, p. 1). Munger funded the campaign for its passage (Ballotpedia n.d.b).

Proposition 30 proposed raising funds in two ways. First, from 2013-2016, it would raise the "sales tax rate by one-quarter cent for every dollar" (CA Secretary of State 2012a, p. 12). Second, from 2012-2018, it proposed raising the tax rate for people making \$250,000 or more by 1% to 3%, depending on their incomes. This change would have affected about 1% of taxpayers. Proposition 38 proposed increasing taxes for people with incomes of \$7,316 or more, with marginal rates rising by between 0.4% and 2.2%. This increase would have been in effect from 2013-2024 (CA Secretary of State 2012a).

Proposition 30 had many more backers than Proposition 38, including the California Democratic Party, Teachers Association, and Police Chiefs Association. Both the California Democratic and Republican Parties opposed Proposition 38. Many business groups also opposed both propositions. Democrats appeared worried that voters would only vote for one of the tax hikes. With the governor's support, Proposition 30 had a better chance of passing (Ballotpedia n.d.b; Daily Democrat 2012; EdSource 2016).

Policy Characteristics of SB 1381

Senate Bill 1381 was passed by the California State Senate and the California Assembly on August 31, 2010 and signed by the governor on September 30th, 2010. This law, known as the Kindergarten Readiness Act, expanded access to developmentally appropriate public school for four-year-olds in California by creating a two-year Transitional Kindergarten (TK) program. TK provides the opportunity for about one-fourth of four-year-olds in California to attend public school each year. As Table 2 shows, this law passed nearly along party lines, with most Democrats voting in favor of, and most Republicans voting against, the bill (Legislative Counsel 2010c, 2010f, 2010g; Project Vote Smart 2015a, 2015b, 2015c; James Snyder, personal communication, Oct. 5th, 2015; Ballotpedia n.d.c, n.d.e, n.d.f, n.d.g; Placer County Office of Elections n.d.; TK California n.d.a, n.d.b). Nearly 60,000 four-year-olds enrolled in the TK program for the 2013-2014 school year (Barnett et al. 2015).

Democratic Senator Joe Simitian submitted the initial version of SB 1381 on February 19, 2010 (Legislative Counsel 2010d, 2010e; Project Vote Smart 2015c; Scott Moore, personal communication, Oct. 28th, 2015). This initial version simply proposed “gradually mov[ing] the kindergarten cutoff age from December to September” (Barnett

et al. 2015, p. 35). At the time of the bill's proposal, four-year-olds who turned five between September and December could enter kindergarten. However, the developmental difference between four- and five-year-olds entering kindergarten was substantial (Vickie Ramos Harris, personal communication, Sept. 23rd, 2015; Scott Moore, personal communication, Oct. 28th, 2015). As a result of this bill, only children who were already five-years-old at the start of the school year would be able to start 5K (Legislative Counsel 2010c; Barnett et al. 2015; TK California n.d.a, n.d.b).

However, the bill was amended on August 4th, 2010 to create TK, a two-year program for the four-year-olds with birthdays between September and December, instead. While regulations for TK and traditional kindergarten would be the same, the curriculum used in TK was required to be tailored to the developmental needs of four-year-olds (Legislative Counsel 2010c, 2010d, 2010e; Barnett et al. 2015; TK California n.d.b).

Both kindergarten and each year of TK would be funded using the same funding formula (TK California n.d.b). Even with the supposed extra year of schooling, TK was “marketed as a cost neutral” program because the cost of a child receiving a 14th year of schooling would not be incurred for 13 years (Vickie Ramos Harris, personal communication, Sept. 23rd, 2015, n.p.; Scott Moore, personal communication, Oct. 28th, 2015). Further, kids who started kindergarten as four-year-olds were being held back more frequently, suggesting the state was already paying for 14 years of school in many cases. Hopefully, the benefits of ECE would also offset any costs. However, many, including some members of the Appropriations Committee, were skeptical that TK would not impose added costs (Vickie Ramos Harris, personal communication, Sept. 23rd, 2015; Scott Moore, personal communication, Oct. 28th, 2015).

SB 1381 received strong media coverage, giving the bill momentum. With the TK amendment, the bill gained support from pro-ECE groups. Governor Schwarzenegger, a Republican, signed the bill (Vickie Ramos Harris, personal communication, Sept. 23rd, 2015; Scott Moore, personal communication, Oct. 28th, 2015; TK California n.d.b). The country was in the midst of the Great Recession. Creating TK provided an opportunity to do something positive. In its final form, it was considered “the biggest education bill of the year” (Steve Moore, personal communication, Oct. 28th, 2015, n.p.).

Though a hopeful move toward universal ECE, this bill is inherently inequitable. Only 25% of kids have access to 14 years of public schooling; the rest have access to 13 years (Scott Moore, personal communication, Oct. 28th, 2015). In 2014, Senator Steinberg introduced SB 837, which would have provided TK to all four-year-olds. The bill was altered and passed the Senate only after it no longer included changes to TK. It stalled in the Assembly (The California Channel 2014; Legislative Counsel 2015).

III. A Review of the Relevant Literature on the Political Economy of ECE

There is an extensive literature on the effectiveness of ECE (Currie 2001). While a robust literature exists on public goods provision theory and legislator decision-making, little empirical work exists to explain the political economy of ECE policies (Meltzer and Richard 1981, 1983; Epple and Romano 1996; Alesina et al. 1999; Fearon 1999; Alesina and Tabellini 2007a, 2007b; Corcoran and Evans 2010; Kahn and Barron 2015).

Literature on the Achievement Gap and the Success of ECE Programs

Achievement gaps based on race and socioeconomic status in educational performance pose a serious concern for educators and policymakers (Currie 2001; Government Accountability Office 2004; Reardon 2011). ECE programs offer one of the

most promising strategies for narrowing these gaps for two reasons. First, there is strong empirical evidence that these programs are effective; they demonstrate powerful, positive impacts on student outcomes. These outcomes include: improved academic performance; higher high school graduation rates, college attendance rates, and earnings; better health outcomes; and/or lower levels of crime than controls (Currie 2001; Campbell et al. 2002; Muennig et al. 2011). Second, these programs are economically efficient (Aos et al. 2004; Barnett and Masse 2007; Heckman et al. 2010; Heckman 2011). Heckman et al. (2009) estimate a 7-10% yearly return on investment in such programs.

Literature on Voter Preferences for Public Goods Provision

Education is a public good. Public goods have two characteristics: non-rivalry and non-excludability. Both apply to universal pre-K. The benefits of an educated populace cannot be completely captured privately or equally. As such, there is an insufficient incentive to supply education privately, meaning individuals will underinvest in education (Epple and Romano 1996; Cowen 2008; Corcoran and Evans 2010; Mitra 2011; University of Pittsburg n.d.).

The demand for public pre-K varies across segments of the population. Three factors that impact the preference for public provision of education will be considered: a community's distribution of income and its levels of both income inequality and racial diversity (Epple and Romano 1996; Alesina et al. 1999; Corcoran and Evans 2010).

There are two relevant theories that relate income distribution to public goods provision. First, the Meltzer-Richard model relates income and voting behavior to the size of government (Meltzer and Richard 1981). This theory takes as given that: mean income is typically higher than median income, as the distribution of income is skewed to

the right; and the median voter can also be considered the decisive voter, as the U.S. system is based upon majority rule. Meltzer and Richard (1981) posit that the more votes concentrated below the mean income, the greater the level of redistribution and therefore the greater the size of government. Intuitively, the median voter—whose income is below the mean—will prefer higher taxes, resulting in greater redistribution (Meltzer and Richard 1981, 1983). Empirical evidence has largely not supported this model (Meltzer and Richard 1983; Perotti 1996; Alesina et al. 2001; Borge and Ratsø 2004; Kenworthy and Pontusson 2005; Corcoran and Evans 2010; Kerr 2014).

Second, Epple and Romano (1996) put forth an ends-against-the-middle model to explain voter support for publicly provided goods in a world where private alternatives exist. When the public good with private alternatives—like pre-K—is being funded by taxes, this model implies that high-income individuals likely will oppose public funding in favor of private alternatives. For instance, if the quality of private school exceeds the quality of public school—and this difference in quality is not outweighed by a lower price for public education—high-income individuals will prefer private school. They will oppose marginal tax increases to fund public education. Low-income individuals will also oppose public funding; they prefer to keep taxes low so they can consume more of other goods. Middle-income voters prefer increased spending for public provision of the good. In this general case, because the tax is imposed proportionally, the preferences of the below-median income voter will be determinative (Epple and Romano 1996; Corcoran and Evans 2010). Epple and Romano (1996) recognize that cases may arise in which low-income individuals actually support raising taxes to pay for the public provision of a good more than high-income individuals, such as for public transit. In such cases, “the median-

income voter is decisive” (p. 322). This suggests that the share of middle-income households in a community will play a critical role in determining the level of public goods provision. This notion is supported by the findings of Husted and Kenny (1997).

These two theories have important implications for the impact of income inequality on public goods provision. The Meltzer-Richard model predicts greater redistribution when there is a large difference between the mean and median income in a community. As such, this theory implies that the higher the level of income inequality, the greater the level of public goods provision through redistribution (Meltzer and Richard 1981, 1983; Corcoran and Evans 2010). In contrast, the ends-against-the-middle model would predict a different outcome. According to this model, when there are sufficiently large proportions of the population at the top and bottom of the income distribution, the ends—who prefer less public provision—will work against the middle’s preference for public provision. This implies greater income inequality will result in fewer publicly provided goods (Epple and Romano 1996; Corcoran and Evans 2010).

There are varied results for the impact of income inequality on the public provision of education. Goldin and Katz (1997) conclude that communities with economically unequal populations were less likely to support the expansion of secondary education from 1910 to 1940. In contrast, Corcoran and Evans (2010) find that fiscal support for public schools has increased as income inequality has grown from 1970 to 2000. They argue that growing income inequality has lowered the median voter’s tax share while allowing the government to collect additional tax revenue from people with high incomes. Boustan et al. (2013) support this finding.

The level of ethnic/racial diversity in a community serves as a key political economy factor relevant to support for public goods provision. In theory, racially diverse communities “will value public goods less” than more homogeneous communities (Alesina et al. 1999, p. 1274). Individuals prefer government funding to provide goods desired by the groups with which they align themselves. This is particularly relevant to education, which can be contentious along racial lines. Strong evidence supports the notion that a high level of racial diversity reduces public goods delivery (Alesina et al. 1999; Easterly and Levine 1997; Luttmer 2001; Lind 2007; Fernandez and Levy 2008).

Literature on Legislator Decision-Making

To understand how a legislator’s proclivity to vote for ECE policies may or may not align with a voter’s propensity to do so, it is important to consider how legislators make decisions. Legislators are agents of their principals, or their constituents. They are also utility maximizers. Thus, a principal-agent problem can arise in which agents shirk and follow their own preferences rather than those of their principals. In so doing, the legislators will maximize their own utility instead of the voters’ utility (Jensen and Meckling 1976; Holmstrom 1979, 1999; Grossman and Hart 1983; Fearon 1999; Bolton and Dewatripont 2004; Alesina and Tabellini 2007b).

Political theory suggests there are two key factors a legislator will weigh in his decision-making process: the preferences of his geographic constituents and his own ideological preferences. In this context, ideological preferences are both preferences of special interests and personal preferences. There is a substantial theoretical and empirical debate regarding the extent to which legislative decisions are influenced by constituent preferences versus personal ideological preferences. On the one hand, a significant

literature concludes that voter preferences strongly influence legislator decision-making. Regardless of whether voters use elections to select candidates who will vote for policies in line with their preferences, or to sanction politicians by voting them out of office for failing to support desired policies, the expected outcome is the same: legislators will follow their constituents' preferences (Barro 1973; Ferejohn 1986; Fearon, 1999; Holmstrom 1999; Alesina and Tabellini 2007a, 2007b; Mian et al. 2010). However, a compelling theoretical and empirical literature also contends that legislators are substantially influenced by their own personal ideologies rather than their geographic constituents (Stigler 1971; Kalt and Zuppan 1990; Levitt 1996; Poole and Rosenthal 1996; Lee et al. 2004). Constituents may be poor monitors of legislators' actions, allowing legislators to shirk and vote based on their own ideologies (Fearon 1999).

Decision-making by legislators is particularly complex. The disagreement within the literature discussed above suggests legislative votes will not simply be influenced by constituent preferences or personal desires, but rather by the interaction of many factors. Put simply, as the findings from Mian et al. (2010) show, a legislator's ideology is likely to mitigate the influence of constituent preferences on a legislator. Further, legislative institutions, such as committee(s) on which the legislator serves, will complicate whether he votes in favor of a bill (Shepsle 2010).

Studies have not devoted significant time to considering the influence of these general factors on a legislator's attitude toward ECE. I do so by empirically testing the theory I put forth in Section IV about legislator decision-making in relation to ECE.

Literature on the Political Economy of ECE

There have been numerous case studies and commentaries examining the political process through which states (e.g., Florida, Georgia, Illinois, New Jersey, New York, Oklahoma, and West Virginia) or DC, passed/expanded ECE programs. Though each case is unique, salient factors that often influence the implementation of ECE programs include: a committed public leader, partnerships with community organizations, and/or available funding (Raden 1999; Lascarides and Hintz 2000; Government Accountability Office 2004; Hampton 2004; Ackerman et al. 2009; B.H. Watson 2010; S. Watson 2010; Lerner 2012; Khimm 2013).

However, little empirical work has been done to examine the political economy of support for ECE. In a recent working paper, Kahn and Barron (2015) consider voter preferences for ECE policies by examining four California ballot initiatives related to education policies and funding, including Propositions 30, 38, and 82. Using OLS, they test a variety of demographic factors and conclude that suburban voters and Republicans do not support state pre-K expansion. Employing an upward mobility geographic index developed by Chetty and Hendren (2015), they also find that areas with poor prospects for low-income children support such policies at higher rates, though the effect size is small. Further, they consider factors that may be related to a state's funding for and enrollment in state pre-K. While they test correlates between state demographics and ECE outcomes, they do not develop a strong causal relationship between the two.

IV. A Theory of Voter and Legislator Support for ECE

In the American electoral system, the relationship between voters and legislators presents a classic principal-agent relationship. In this relationship, the electorate, or

principals, entrusts the elected officials, or agents, with the task of making decisions on their behalf (Fearon 1999).

It is necessary to examine the relationship between voter and legislator support for or against the public provision of ECE. To do so, I consider the preferences of the principals, or voters, for public pre-K in the context of Proposition 82 before considering the interaction of these preferences with those of the agents, or legislators, in the context of SB 1381. I conclude by applying my theory described for voters and legislators to my expectations about their relationship to ECE outcomes.

A Theory of Public Goods Provision Related to Proposition 82

The public nature of California's proposed pre-K program, complicated in part by the option to attend private school, implies that there are different incidence rates that will influence voter preferences. The differential benefits resulting from the implementation of Proposition 82 will likely strongly influence a voter's decision to vote for or against the initiative. Thus, it is important to consider the differential demand across the income distribution for public pre-K funded by a tax (Epple and Romano 1996; Cowen 2008; Corcoran and Evans 2010).

I put forth a theoretical model of support for public ECE based upon one's income and relate this theory to one's expected level of support for Proposition 82. Importantly, Proposition 82 proposed a tax that would have been imposed on high-income individuals or couples who made more than \$400,000 or \$800,000 per year, respectively (Epple and Romano 1996; Corcoran and Evans 2010; CA Secretary of State n.d.).

I posit that high-income individuals will have a high demand for high-quality private ECE, but a low demand or low willingness to pay for public pre-K. They can

afford to send their children to private pre-K. When Proposition 82 was put on the ballot, nearly 80% of four-year-olds from high-income families attended pre-K; these families did not demand public pre-K as their needs were fulfilled already. Thus, I expect high-income individuals will not want an additional tax levied on them to pay for a service they do not demand (Epple and Romano 1996; Corcoran and Evans 2010; CA Secretary of State n.d.). High-income individuals or couples, who make less than \$400,000 or \$800,000, respectively, are still likely to oppose Proposition 82 for two reasons. First, they may suspect that the initial revenue will insufficiently fund pre-K expansion, leading the government to raise taxes on other income brackets (CA Secretary of State 2006a). Second, people below the income thresholds but in high-income brackets may expect to earn income above these cutoffs in the future; this is known as the “prospect of upward mobility” (POUM) hypothesis (Bénabou and Ok 2001). Because of their expectation about their future income, they will be less likely to support this initiative. Thus, I hypothesize that precincts with high shares of high-income households will be less likely to support Proposition 82.

The preferences of low-income individuals are harder to discern because the tax to fund public pre-K would not have been levied on them. Presumably, they will have a low willingness to pay for any ECE because of their income status and a relatively high demand for publicly funded ECE because it would be free (Epple and Romano 1996; Corcoran and Evans 2010). Their demand for universal public pre-K is complicated by the fact that many kids in low-income families already receive ECE through means-tested publicly funded programs. For instance, as mentioned in Section II, in 2006, California had a state preschool program and a federal Head Start program for a portion of low-

income children (Barnett et al. 2006; Kline and Walters 2014). However, low-income individuals may have concerns with the quality of means-tested programs; the standards for these programs tend to be below those established for programs offered to greater segments of the population. This suggests some low-income individuals may have a preference for universal ECE over means-tested ECE under the expectation that universal ECE would be of better quality (Gelbach and Pritchett 2002; Barnett et al. 2006; CA Secretary of State 2006a; Ackerman et al. 2009). Considering these somewhat contradictory factors, I expect low-income individuals will have a relatively high demand for public pre-K, but lower demand than that of middle-income individuals because some low-income kids already receive publicly funded ECE. I posit that the greater the share of low-income households in a precinct, the greater the support for Proposition 82. However, I expect the impact of the low-income share to be less than that of the middle-income share (Epple and Romano 1996; Corcoran and Evans 2010).

I expect middle-income individuals will have a demand for public ECE that is higher than that of both low- and high-income individuals. Middle-income people will want public ECE for their children but will not already be covered by means-tested programs nor will be as likely as high-income people to be able to afford high-quality private ECE (Epple and Romano 1996; Barnett et al. 2006; CA Secretary of State 2006a; Corcoran and Evans 2010). Thus, I posit that the greater the share of middle-income households in a precinct, the greater the support for Proposition 82.

Relatedly, the differential demand for public pre-K across the income distribution has potential implications for the impact of income inequality on voter support for public ECE. As described in Section III, the literature is inconclusive on this point (Meltzer and

Richard 1981, 1983; Epple and Romano 1996; Corcoran and Evans 2010). Because of the emphasis my analysis places on the distribution of income, it is important to consider how measures of income inequality impact support for the public provision of pre-K.

I posit that—building on the ends-against-the-middle model—in a community with a high level of income inequality, there is reason to anticipate a low level of support for public ECE. In such a socioeconomically unequal community, there will be relatively large proportions of low- and high-income individuals. The low-income individuals will have an insufficient demand for public pre-K, as much of their demand is met through means-tested programs. The high-income individuals will prefer private pre-K. The middle-income individuals will have the greatest demand for public ECE. However, in a community with such a high level of income inequality, there will be an insufficient proportion of the population in the middle of the income distribution to generate sufficient support for universal public pre-K (Epple and Romano 1996; Barnett et al. 2006; Corcoran and Evans 2010). Rather, “a battle of the ‘ends against the middle’” will result in which the lack of support from low- and high-income individuals will outweigh votes in favor of universal public pre-K (Corcoran and Evans 2010, p. 34). Thus, income inequality will generate less support for redistribution within a precinct. In essence, economically unequal precincts will be less likely to support Proposition 82.

Further, a key political economy factor relevant to the share of support for Proposition 82 is the level of ethnic/racial diversity in a precinct. Ethnic/racial diversity will likely play an important role in determining support for universal public pre-K. As described, individuals have an individual-level demand for public goods (Epple and Romano 1996; Alesina et al. 1999; Cowen 2008; Corcoran and Evans 2010).

Simultaneously, individuals associate with in-groups and associate others with out-groups (Halevy et al. 2008). In theory, individuals value public provision of goods that benefit the groups with which they identify, or the in-groups. Individuals will “discount the benefits for other groups” because they receive less utility when other groups, the out-groups, use the goods and/or because they prefer to spend funds on different goods (Alesina et al. 1999, p. 1244). As such, I anticipate that one’s willingness to pay for public goods will be impacted by the degree of solidarity that one feels with others. One’s race/ethnicity is a strong source of identity, and a strong means of association with others, in the U.S. (Smedley 1998). This suggests that one’s ethnic/racial identity supports a sense of solidarity with others in the same ethnic/racial group. Public delivery of education can be especially divisive on racial grounds (Alesina et al. 1999). Thus, I expect one’s willingness to pay for public ECE will be mitigated by ethnic/racial diversity within a community. As such, I hypothesize that racially heterogeneous precincts will be less likely to support Proposition 82.

A Theory of Legislator Preferences Related to SB 1381

Theory predicts that legislators will be relatively good agents of their principals. Constituency interests matter to assembly members and senators; they will pay attention to what their principals want. Therefore, I expect legislators’ preferences, and therefore their votes, to reflect the preferences of their constituents. Following from this, I posit that legislative voting behavior will be a function of their constituents’ preferences. I recognize that given agency theory, there is room for shirking in this relationship; it is possible that legislators’ votes will deviate at times from their constituents’ preferences

(Barro 1973; Jensen and Meckling 1976; Ferejohn 1986; Fearon, 1999; Holmstrom 1999; Alesina and Tabellini 2007a, 2007b).

I extend the theory about voter preferences established in the previous subsection to justify my hypotheses about the likelihood that a legislator will vote for SB 1381 (Epple and Romano 1996; Alesina et al. 1999; Corcoran and Evans 2010).

In terms of level of income, I hypothesize that the greater the proportion of high-income individuals in a legislator's district, the less likely he will be to support universal ECE policy and therefore SB 1381. Conversely, I posit that the greater the fractions of low- and middle-income individuals in a legislator's district, the more likely he will be to support SB 1381. Specifically, I expect that, just as in the case of voters described earlier, while the share of low-income individuals will positively impact the likelihood of voting in favor of the bill, it will do so at a lower rate than the middle-income share; some low-income children in legislators' districts already attended government-sponsored ECE programs, such as California's State Preschool Program or Head Start, reducing their immediate need/demand for ECE (Epple and Romano 1996; Barnett et al. 2005; Barnett et al. 2006; Barnett et al. 2009; Corcoran and Evans 2010).

Further, with respect to income inequality, I posit that in socioeconomically unequal districts, legislators will be less likely to vote in favor of SB 1381. In such communities, there will be an insufficient proportion of voters in the middle of the income distribution; these are the voters who are expected to highly favor expanded access to public pre-K. Rather, constituents will be concentrated in the low- and high-income bins. Such voters will either demonstrate less fervent support for, or opposition to, increased public provision of pre-K. As such, in unequal districts, state senators and

assembly members will be less likely to vote for SB 1381; there will be insufficient support for public provision of universal pre-K from their constituents (Epple and Romano 1996; Barnett et al. 2005; Barnett et al. 2006; Barnett et al. 2009; Corcoran and Evans 2010). Thus, I hypothesize that the greater the level of income inequality in a district, the less likely a legislator—an agent of his principal’s preferences—will be to vote in favor of SB 1381.

In terms of ethnic/racial diversity, I expect that the level of ethnic fractionalization in a district will negatively impact the likelihood of a legislator voting for SB 1381. As explained, individuals prefer goods to be publicly provided to groups with which they associate (Alesina et al. 1999). Therefore, in diverse communities, individuals will be less likely to support the public provision of education for four-year-olds. Further, as good agents of their principals, legislators representing more racially heterogeneous districts will be less likely to support pre-K expansion.

The Relationship between My Theory of Voter and Legislator Support for ECE and State Funding for, Access to, and Quality of ECE Programs

It is important to consider the extent to which the theories outlined above are reflected in the following state ECE policy outcomes: the level of funding per child enrolled in ECE programs, the availability of ECE for four-year-olds, and the quality of such programs. By considering these links, I can hopefully identify relationships between voter and legislator support for ECE policy and the actual implementation of these policies (Barnett et al. 2015; Linda Dusenbury, personal communication, Dec. 4th, 2015).

Building on my theory about voter and legislator support, I posit that legislators, as relatively good agents of their principals, will work to implement policies that reflect

voter preferences. As such, I anticipate that the factors related to political economy discussed earlier (i.e., income distribution, income inequality, and ethnic/racial diversity) will be associated with the level of funding per child enrolled in, the access for four-year-olds to, and the quality of ECE programs. At a basic level, in a state where voters have strong preferences in favor of ECE policy, I would expect legislators to pass legislation providing for: a higher level of funding for, greater access to, and better quality of ECE programs. Therefore, I posit that the levels of funding for, access to, and quality of state pre-K are likely to be a function of voter—and therefore legislator—support for ECE programming (Epple and Romano 1996; Alesina et al. 1999; Fearon, 1999; Alesina and Tabellini 2007a, 2007b; Corcoran and Evans 2010; Barnett et al. 2015). These expectations will be discussed in greater detail below.

First, in terms of funding, in states where there is greater support for ECE programming, I would anticipate more funding per child enrolled.¹ Further, with respect to access, in states where there is greater support for public provision of pre-K, I would expect greater demand/support for public ECE. As such, I would expect these states to have higher levels of access to, and therefore higher enrollment in, state pre-K. Relatedly, in terms of quality, I hypothesize that states with greater support for public pre-K have higher-quality ECE programming; in such states, ECE may be a higher priority and/or programs may receive more funding, positively impacting this level of quality (Calman and Tarr-Whelan 2005; Barnett et al. 2015).

¹ In this subsection, when I make a statement similar to “greater support for ECE programming,” I am referring to a greater level of voter support for public pre-K and a greater likelihood of legislators supporting public pre-K policies.

Thus, extending the theories I established in the previous two subsections about voter and legislator support for ECE policy, I have the following expectations. First, I expect that the higher the proportion of low- and middle-income households in a state, the greater the level of funding for, access to, and quality of state pre-K. I anticipate that the impact of the middle-income share will be the largest in magnitude. Further, I expect that states with higher levels of income inequality will have lower levels of funding and quality and less access. I hypothesize that states with higher levels of ethnic and racial diversity will also experience the same outcomes (Epple and Romano 1996; Alesina et al. 1999; Fearon, 1999; Calman and Tarr-Whelan 2005; Alesina and Tabellini 2007a, 2007b; Corcoran and Evans 2010; Barnett et al. 2015).

Additional Theoretical Expectations Related to Support for ECE

My main theory of voter and legislator support for ECE focuses on three factors: income distribution, income inequality, and ethnic/racial diversity. However, there are other variables that may be related to a voter or a legislator's likelihood of support for such programs that warrant mention. First, as discussed, individuals with access to private pre-K are less likely to demand universal public pre-K. Therefore, I expect communities with high levels of preschoolers enrolled in private preschool to be less likely to support public ECE expansion (Epple and Romano 1996; Corcoran and Evans 2010; CA Secretary of State n.d.). Further, I expect one's age to influence his support. People of childbearing age are more likely to recognize the need for public pre-K than older individuals who do not have young children. Thus, I anticipate the shares of individuals of childbearing age to positively impact support (Goldin and Katz 1997). Finally, I posit that household size will impact support. Household size serves as a proxy

for family size; the greater the household size, the more children the family is likely to have. As such, I expect that communities with greater average household sizes will have more children and therefore be more likely to support expansion of public pre-K.

Communities that are more likely to support public ECE will have legislators who are more likely to support it as well (Fearon 1999). These variables will be included as covariates in some/all of my empirical analyses.

V. Methodology

An Empirical Model of Voter Support for Proposition 82

To examine the political economy of voter support for Proposition 82 empirically, I perform OLS regression analysis using a dataset combining election results and 2000 Census data for 91% of the 23,124 precincts registered in the 2006 primary election. I only have demographic data for a precinct's total population, not individual voters (UC Regents 2014b; CA Secretary of State's Office, personal communication, Apr. 8, 2015; Social Explorer 2016). To test my hypotheses, I estimate five empirical models that measure the impact of the level of: income, socioeconomic diversity, and ethnic/racial diversity on the share of support for Proposition 82. In each model, my outcome variable is the percentage of votes in favor of Proposition 82 in a precinct.

To consider how level of income, based on the share of households in a given income bin, impacts support for Proposition 82, I examine the following model:

$$(1) \text{PROP82}_i = \beta_0 + \beta_1 \text{LOW}_i + \beta_2 \text{MIDDLE}_i + \beta_3 \text{X}'_i + \varepsilon_i$$

where PROP82 is the percentage of votes in favor of Proposition 82, β_0 is a constant, LOW is the percentage of low-income households, MIDDLE is the percentage of middle-income households, X' is a vector of controls, ε is a precinct-level error term, and all

observations are at the precinct level i . To avoid perfect multicollinearity, the high-income percentage is left out of the regression. The control variables included in X' are: the percentage of male individuals; the average household size; and race/ethnicity, political, and age controls. The political control is based upon the political party supported for governor. Besides the average household size, these variables are created as percentages out of their respective populations. In each group, one variable is left out of the regression due to multicollinearity concerns. I cluster standard errors at the county level as counties set precinct boundaries, implying unobserved election policies may be correlated across precincts within a county (UC Regents 2014b; UC Regents Statewide Database Office, personal communication, Mar. 30, 2015). I also consider additional specifications of Model (1) that include variables for: the percentage of college-educated individuals, the percentage of students in public school, the share of households making \$200,000 or more per year, and/or the share of preschoolers enrolled in private school.

Model (1) tests my hypotheses related to the differences in support for Proposition 82 across low, middle, and high-income households (Epple and Romano 1996; Corcoran and Evans 2010). I posit, in comparison to the high-income share, the shares of low- and middle-income households will positively impact support, with support being greatest from middle-income households (i.e., β_1 and β_2 will be greater than zero, with β_2 being the largest in magnitude).

Next, I estimate a series of models to investigate how the level of income inequality in a precinct impacts the share of support for Proposition 82:

$$(2) \text{ PROP82}_i = \beta_0 + \beta_1 \text{NINETY/TEN}_i + \beta_2 X'_i + \varepsilon_i$$

$$(3) \text{ PROP82}_i = \beta_0 + \beta_1 \text{NINETY/FIFTY}_i + \beta_2 \text{FIFTY/TEN}_i + \beta_3 X'_i + \varepsilon_i$$

where NINETY/TEN is the natural log of the ratio of the implied ninetieth percentile of household income to the implied tenth percentile, or the ninety/ten ratio, multiplied by 100; NINETY/FIFTY is the natural log of the ratio of the implied ninetieth percentile to the implied fiftieth percentile, or the ninety/fifty ratio, multiplied by 100; FIFTY/TEN is the natural log of the ratio of the implied fiftieth percentile to the implied tenth percentile, or the fifty/ten ratio, multiplied by 100; all other variables are the same as in Model (1); and all observations are at the precinct level i (Weinberg 2011). Again, I cluster standard errors at the county level. I also analyze another specification of Models (2) and (3) that controls for the natural log of median household income multiplied by 100. The larger the ratio of one percentile of income to another is, the more unequal the precinct.² These models test my hypothesis that more economically unequal precincts will have lower support for Proposition 82. Thus, I expect that the coefficients of interest (i.e., β_1 in Model (2) and β_1 and β_2 in Model (3)) will be less than zero.

Further, to consider how the level of ethnic/racial diversity impacts the share of support, I investigate the following model:

$$(4) \text{PROP82}_i = \beta_0 + \beta_1 \text{DIVERSITY}_i + \beta_2 X'_i + \varepsilon_i$$

where DIVERSITY is a diversity index used to measure ethnic fractionalization, all other variables are the same as in Model (1), and all observations are at the precinct level i (Alesina et al. 1999). Model (4) also controls for the natural log of median household income multiplied by 100. Standard errors are clustered at the county level. Model (4)

² I considered using the ratio of mean to median household income to measure income inequality in a precinct, similar to the method used by Corcoran and Evans (2010). However, the results of this measure of income inequality were similar to those when using the ninety/ten ratio. Thus, for consistency with Model (3), I use the ninety/ten ratio, rather than the mean/median ratio, in my final analysis.

tests my hypothesis that racially diverse precincts will support Proposition 82 at lower rates (i.e., β_1 will be less than zero).

Finally, the following model measures how the interaction of the level of income and the level of ethnic/racial diversity within a precinct impacts the share of support:

$$(5) \text{ PROP82}_i = \beta_0 + \beta_1[\text{LOW}_i + \text{MIDDLE}_i] + \beta_2\text{DIVERSITY}_i + \beta_3[\text{LOW}_i + \text{MIDDLE}_i] * \text{DIVERSITY}_i + \beta_4 X'_i + \varepsilon_i$$

where [LOW+MIDDLE] is the percentage of low- and middle-income households, DIVERSITY is the diversity index used in Model (4), [LOW+MIDDLE]*DIVERSITY is the interaction of these two variables, all other variables are the same as in Model (1), and all observations are at the precinct level i . I cluster standard errors at the county level. In theory, I expect that increasing the level of ethnic/racial diversity in a precinct will mitigate the positive impact of the proportion of low- and middle-income households on the share of support for Proposition 82. If this hypothesis is true, β_3 will be less than zero (Epple and Romano 1996; Alesina et al. 1999; Corcoran and Evans 2010).

Voter decision-making is complex. To understand policy and election outcomes, it is necessary to consider the key democratic institution of voting (Acemoglu n.d.). However, it is impossible to consider all the factors that influence voters' decisions in one model; omitted variable bias is a concern. I chose to control for characteristics that are particularly predictive of votes, including income, party identification, and race (Jacobson 2013; Snyder 2015).

An Empirical Model of Voter Support for Propositions 30 and 38

To consider the relationship between voter preferences and education-related policies further, I investigate the political economy of voter support for Propositions 30 and 38 empirically. I use a dataset that combines election results, 2010 U.S. Census data,

and 2010-2014 American Community Survey (ACS) 5-Year Estimates data for approximately 21,100 of the 24,491 precincts registered in the 2012 general election (UC Regents 2014e; CA Secretary of State's Office, personal communication, Feb. 26, 2016; Social Explorer 2016). I employ the base versions of Models (1) through (5) to empirically examine the relationship between the outcomes of Propositions 30 and 38 and the levels of: income, socioeconomic diversity, and ethnic fractionalization in a precinct. My outcome variables of interest are therefore the percentages of votes in favor of Propositions 30 and 38 in a precinct.

As Propositions 30 and 38 are education-related initiatives, my hypotheses regarding, and expectations about the outcomes of, Models (1) through (5) for Proposition 82 apply to Propositions 30 and 38 (Epple and Romano 1996; Alesina et al. 1999; CA Secretary of State 2006a, 2012a; Corcoran and Evans 2010). However, my theory about Proposition 82 was developed with special attention to the fact that this proposition was specifically related to ECE. As such, I expect that the results for Propositions 38 and 82 will be the most similar. These supplementary analyses of Propositions 30 and 38 therefore serve as a test of the applicability of my theory to either ECE policy or broader education-related policies.

An Empirical Model of Legislator Support for SB 1381

To investigate the political economy of legislator support for SB 1381 empirically, I perform logistic, or logit, regression analysis using a dataset combining roll call voting results for the California State Senate and State Assembly on SB 1381 and demographic information at the office (i.e., state senate or state assembly) district level. I use demographic information from both 2010 U.S. Census data and 2008-2012 ACS 5-

Year Estimates data. Thirty-six senators cast votes for or against the bill and 69 assembly members cast votes for or against the bill for a total of 105 votes; while California has 40 senate districts and 80 house districts, in 15 cases a seat was vacant or the legislator did not vote (Rodriguez 2007; Legislative Counsel 2010f, 2010g; California State Assembly 2011; Stock and Watson 2011; California State Senate 2014; Project Vote Smart 2015a; Social Explorer 2016; Ballotpedia n.d.g; Placer County Office of Elections n.d.).³

To test my hypotheses, I estimate a series of logistic regression models in which my outcome variable of interest is whether or not the senator or assembly member voted in favor of SB 1381. These regressions are built upon the following base models:

$$(6) \Pr(\text{SB 1381} = 1)_{ij} = F(\beta_0 + \beta_1 \text{LOW}_{ij} + \beta_2 \text{MIDDLE}_{ij} + \beta_3 X'_{ij})$$

$$(7) \Pr(\text{SB 1381} = 1)_{ij} = F(\beta_0 + \beta_1 \text{NINETY/TEN}_{ij} + \beta_2 X'_{ij})$$

$$(8) \Pr(\text{SB 1381} = 1)_{ij} = F(\beta_0 + \beta_1 \text{NINETY/FIFTY}_{ij} + \beta_2 \text{FIFTY/TEN}_{ij} + \beta_3 X'_{ij})$$

$$(9) \Pr(\text{SB 1381} = 1)_{ij} = F(\beta_0 + \beta_1 \text{DIVERSITY}_{ij} + \beta_2 X'_{ij})$$

$$(10) \Pr(\text{SB 1381} = 1)_{ij} = F(\beta_0 + \beta_1 [\text{LOW}_{ij} + \text{MIDDLE}]_{ij} + \beta_2 \text{DIVERSITY}_{ij} + \beta_3 [\text{LOW}_{ij} + \text{MIDDLE}]_{ij} * \text{DIVERSITY}_{ij} + \beta_4 X'_{ij})$$

where SB 1381 is a binary variable that equals 1 if the legislator voted for SB 1381 and 0 if the legislator voted against SB 1381, β_0 is a constant, X' is a vector of controls, all observations are at the office i district j level, and the other variables are defined in the same way as the previous subsection, but at a different unit of analysis (Stock and Watson 2011). The control variables in these models are also the same, and follow the same pattern of specification (e.g., controlling for the natural log of median household income or not), with two exceptions. In these models, the political control is a dummy

³ In two cases, the seat was vacant. In nine cases in the Assembly and four cases in the Senate, the legislator did not vote (Legislative Counsel 2014f, 2015g; Project Vote Smart 2015a; Ballotpedia n.d.g; Placer County Office of Elections n.d.).

variable for whether or not the legislator is a Democrat and I do not control for the average household size. I also consider additional specifications of Model (6) that include variables for: the share of votes in favor of Proposition 82 in the legislator's district and whether or not the legislator served on a committee that considered SB 1381 (i.e., Education and/or Appropriations) (Fearon 1999; Legislative Counsel 2010b; Shepsle 2010). The first variable will help determine the influence of voter preferences on legislator decisions. In terms of the second variable, Shepsle (2010) describes members of committees as preference outliers who have a strong interest in the business of a committee due to their constituents' interests. It is important to consider whether being on a relevant committee is correlated with one's likelihood of voting for the bill.

Models (6) through (10) investigate what factors impact the likelihood that a legislator will vote in favor of SB 1381. Because my outcome variable in Models (6) through (10) is binary, I use a logistic regression, or logit, model. I report average marginal effects in place of the regression coefficients (Rodriguez 2007; Stock and Watson 2011; Bruich 2015). Practically, in cases with binary dependent variables, there are not significant differences between using a logit or a probit nonlinear regression model. Both have been used in similar analyses of legislator decision-making (Poole and Rosenthal 1996). Following the work of Kau and Rubin (1979) and Kalt and Zuppan (1990), I use a logit model for my main analysis and compare my results to those using a probit model to ensure there are no evident differences. OLS regressions are sometimes used with binary dependent variables as well, so I also compare my results to those using OLS (Angrist and Pischke 2009). I report robust standard errors using the delta method,

although there is debate about the usefulness of robust standard errors in nonlinear models (Freedman 2006).

By examining the impact of the level of income, socioeconomic inequality, and ethnic/racial diversity on a legislator's likelihood of voting for SB 1381, Models (6) through (10) test my basic hypothesis that legislators will be relatively good agents of their principals (Jensen and Meckling 1976; Fearon, 1999; Holmstrom 1999; Alesina and Tabellini 2007b). Model (6) investigates my hypothesis that the share of households in a legislator's district in a given income bin will impact the likelihood of support. I expect that, building on the hypotheses outlined in Section IV and the previous subsections, β_1 and β_2 will be greater than zero, with β_2 being the largest in magnitude. Models (7) and (8) explore my hypothesis that the more economically unequal a district, the lower the likelihood of support for SB 1381. Thus, I hypothesize that β_1 in Model (7) and β_1 and β_2 in Model (8) will be less than zero. Model (9) tests my hypothesis that the greater the level of ethnic/racial heterogeneity in a district, the lower the likelihood of support (i.e., β_1 will be less than zero). Model (10) tests the impact of the interaction of income level and racial diversity in a district to determine whether the effect of income is mitigated by the effect of racial diversity. Thus, I expect that β_3 will be less than zero (Epple and Romano 1996; Alesina et al. 1999; Corcoran and Evans 2010).

The main purpose of my analysis is to understand the basis of support for ECE. Thus, I focused my hypotheses and related models on constituent factors. Of course, achieving this goal will require that I control for other potential influences on the legislator, such as personal ideology. As discussed in Section III, there exists a concern that legislators will be incentivized to shirk, or vote against their constituents'

preferences, because of their own ideological preferences or special interests. I outlined a theory in Section IV in which legislators are assumed to be relatively good agents of their principals. If this is not what I find, this may suggest a principal-agent problem exists (Jensen and Meckling 1976; Holmstrom 1979, 1999; Kalt and Zuppan, 1990; Fearon 1999; Alesina and Tabellini 2007b; Shepsle 2010).

An Empirical Model of State Funding for, Access to, and Quality of ECE

To examine the extent to which the political economy of voter and legislator support for public provision of ECE aggregates up to the state level, I perform a cross-state analysis of public ECE policy. Specifically, I employ fixed effects regressions to examine a panel dataset containing funding for, enrollment in, and quality of state pre-K for four-year-olds with Census and ACS data—along with other datasets that consider political and economic variables—for the years 2003 to 2014. I include states that do not have state pre-K programs to account for potential selection bias concerns.⁴ (Millimet 2001; StataCorp 2005; Michelle Horowitz, personal communication, Sept. 15th-16th, 2015 and Oct. 14th, 2015; Carl Klarnar, personal communication, Oct. 21st, 2015; Social Explorer 2016; Melissa Sands, personal communication, Feb. 25th, 2016; Frank n.d.; Sage Publishing n.d.).

To test how income distribution, level of income inequality, and level of ethnic/racial diversity are related to funding for, enrollment in, and quality of state pre-K, I estimate the following base models for each of these three outcome variables:

⁴ I have also estimated a Heckman Selection Model to account for selection bias concerns. In many cases, the parameters could not be estimated because of nonconcavities in the likelihood function. Thus, to overcome this problem and also to leverage the panel nature of my dataset, I have chosen to report results using fixed effects regressions instead (Heckman 1976, 1979; Puhani 2000; Millimet 2001; StataCorp 2005; Melissa Sands, personal communication, Feb. 25th, 2016; Sage Publishing n.d.).

$$(11) y_{1it} = \beta_0 + \beta_1 \text{LOW}_{i,t-3} + \beta_2 \text{MIDDLE}_{i,t-3} + \beta_3 \mathbf{X}'_{i,t-3} + \alpha_i + \lambda_t + \varepsilon_{i,t-3}$$

$$(12) y_{1it} = \beta_0 + \beta_1 \text{GINI}_{i,t-3} + \beta_2 \mathbf{X}'_{i,t-3} + \alpha_i + \lambda_t + \varepsilon_{i,t-3}$$

$$(13) y_{1it} = \beta_0 + \beta_1 \text{DIVERSITY}_{i,t-3} + \beta_2 \mathbf{X}'_{i,t-3} + \alpha_i + \lambda_t + \varepsilon_{i,t-3}$$

where y_1 is either: FUNDING (the funding per child enrolled in state pre-K), ENROLLED (the percentage of four-year-olds enrolled in state pre-K), or QUALITY (a Z-score of the quality score of state pre-K programming determined by the NIEER). Additionally, β_0 is a constant, GINI is the Gini coefficient in a state in a given year, \mathbf{X}' is a vector of controls, α are state fixed effects, λ are year fixed effects, ε is a state year level error term, all observations are at the state i year t level, and all other variables are defined in the same way as they were for the voter support models, but at a different unit of analysis (Barnett et al. 2015). In Models (11) through (13), the political controls are: the percentage of seats in the lower chamber that are held by Democrats and a dummy for whether the governor is a Democrat (Carl Klarner, personal communication, Oct. 21st, 2015). I also control for race/ethnicity and age. Further, I analyze a specification of Model (12) that controls for the natural log of median household income multiplied by 100. Model (13) always controls for this variable. I cluster robust standard errors at the state level to allow serial correlation across years within a state (Barnett et al. 2015).

With respect to year and state fixed effects, I examine three specifications of Models (11), (12), and (13). In the first specification, I do not include state or year fixed effects. The source of variation in this specification is across states, within states, and over time. In the second specification, I include year fixed effects but not state fixed effects. This specification most preferably controls for national trends/national omitted variables (e.g., national economic conditions) while still maintaining meaningful

variation across states. In the third specification, I include both year and state fixed effects. In so doing, I control for national trends and omitted variables constant in states. As such, this specification simply considers changes within a state. As policies within a state typically do not vary much during the period examined, this specification may have insufficient variation (Stock and Watson 2011; Barnett et al. 2015; Michelle Horowitz, personal communication, Sept. 15th-16th, 2015 and Oct. 14th, 2015).

Models (11) through (13) investigate the extent to which the expected preferences of voters, which as theorized will be related to the preferences of legislators, are correlated with ECE policy at the state level. Thus, these models test my basic hypothesis that the preferences of voters and legislators will impact state ECE policy outcomes. Model (11) investigates my hypothesis that the share of household's in a state in a given income bin will impact ECE policy characteristics. Building on the hypotheses described in Section IV and the previous subsections, I hypothesize that the coefficients on the covariates of interest will be positive. Further, I expect that the coefficient on MIDDLE will be larger than the coefficient on LOW. Thus, I anticipate that the shares of low- and middle-income households in a state will be positively associated with the funding appropriated to, along with the availability and quality of, state public pre-K.

Model (12) tests my hypothesis that the greater the level of income inequality in a state, the lower the: funding for, access to, and quality of state pre-K. To measure income inequality, Model (12) uses the Gini coefficient (Weinberg 2011; Frank n.d.). Model (13) investigates my hypothesis that the more ethnically/racially heterogeneous a state, the lower the level of each of the outcome variables of interest. Thus, in both Models (12) and (13), I expect the coefficient on the covariate of interest to be negative.

There are two important concerns associated with these models. First, state provision of public pre-K is complex (Barnett et al. 2015; S. Paul Reville, personal communication, Sept. 23rd, 2015; Sara Watson, personal communication, Sept. 28th, 2015). I cannot control for all the factors that may impact state provision of pre-K. Thus, the purpose of this analysis is to highlight potential key factors that identify trends in state pre-K policy outcomes that may be illuminated by my analysis in California. Second, empirical analysis at the state level may remove much of the enlightening variation in explanatory variables because of the large unit of analysis. This may make it difficult to draw definitive conclusions from my findings. Even so, this analysis narrows the possible explanations for the range of state policy differences.

VI. Data

Data for the Empirical Model of Voter Support for Proposition 82

Models (1) through (5) for Proposition 82 use data from two sources: the 2006 Primary Election data at the SR precinct level for California obtained from the California Statewide Database and the 2000 U.S. Census data at the Census block group level for California obtained from Social Explorer (UC Regents 2014b; Social Explorer 2016).⁵ Because I do not have 2006 Census data, I assume there is not much demographic change at the precinct level between 2000 and 2006.⁶ There were 23,124 precincts registered in the 2006 primary election (CA Secretary of State's Office, personal communication, Apr. 8, 2015). The data I use has information on 21,007 precincts that include the necessary

⁵ The SR precinct data represents consolidated precincts that can be matched most easily to Census blocks (UC Regents 2014a).

⁶ For the population of California as a whole, the share of households in each income bin did not change markedly between 2000 and 2006 (Social Explorer 2016). This mitigates concerns about some of my independent variables of interest.

variables (UC Regents 2014b).⁷ I created a conversion file to match Census block groups to SR precincts (Levonyan 2013; UC Regents 2014c).

My outcome variable in Models (1) through (5) for Proposition 82 is the percentage of people in a precinct that voted for the proposition. I define this variable as the total number of votes for Proposition 82 divided by the total number of votes cast for or against Proposition 82. I obtain data for this variable from the 2006 Primary Election data provided by the California Statewide Database (UC Regents 2014b).

I have nine independent variables of interest. I obtain data for these variables from the 2000 Census (Social Explorer 2016). My first three independent variables—used in Model (1)—are the shares of low, middle, and high-income households in a precinct. I define low, middle, and high-income bins using state data for household income in California from the 2000 Census. I determined bin thresholds using the definition for the middle-class employed by Pew (2015), which considers a middle-income individual to make between two-thirds and two times median household income. According to the 2006 ACS 1-Year Estimates data, median household income in California in 2006 was \$65,455. Working within the confines imposed by Census income bins, I define a middle-income household as making between \$44,999 and \$125,000 (Social Explorer 2016).⁸

My next three independent variables of interest—used in Model (2) and Model (3)—are the natural logs of the ninety/ten ratio, the ninety/fifty ratio, and the fifty/ten ratio. For ease of interpretation of the coefficients, I multiply the natural log of each of these ratios by 100. Model (2) includes the ninety/ten ratio and Model (3) includes the

⁷ Some supplementary regressions contain fewer than 21,007 observations due to the more limited availability of data for some/all of the variables included in these analyses.

⁸ For all of my analyses, I adjust monetary values for inflation to 2013 USD.

other two ratios. These variables measure income inequality (Weinberg 2011). I had to calculate the implied ratios; the Census only provides information on the number of households in bins of income (Piketty and Saez 2003; Social Explorer 2016). To do so, I determined the bin in which the ninetieth, fiftieth, and tenth percentiles of income were located based on cumulative shares of income across the distribution. I then assumed a uniform distribution within each bin to calculate the implied ninetieth, fiftieth, and tenth percentiles. I assumed an upper bound of the top bin to be \$250,000 in my main model, but also performed analyses with upper bounds of \$300,000 and \$400,000.

My seventh independent variable—used in both Models (4) and (5)—is a diversity index similar to the ethnic fractionalization index used by Mauro (1995) and Alesina et al. (1999). However, I include Hispanic/Latino as a separate classification. I define this variable as the probability that a pair of randomly selected individuals will be from different ethnic/racial backgrounds (Alesina et al. 1999; MO State 2015). I calculate this variable as follows:

$$(14) P(\text{Different Race or Ethnicity}) = 1 - [P(\text{White})^2 + P(\text{Black})^2 + P(\text{Hispanic or Latino})^2 + P(\text{Asian})^2 + P(\text{Native Hawaiian and Other Pacific Islander})^2 + P(\text{American Indian and Alaska Native})^2 + P(\text{Other Race Alone})^2 + P(\text{Two or More Races})^2]$$

For the diversity index used in my regression analysis, I multiply this variable by 100 to put it on a scale from 0 to 100. The greater the probability of the pair being from different ethnic/racial backgrounds is, the higher the level of racial diversity in a precinct.

My eighth and ninth independent variables of interest are included in Model (5). These variables are the fraction of low- and middle-income households in a precinct and the interaction of this variable with the diversity index described above. Together, these three variables consider the relationship between income level and diversity in a precinct.

I control for race/ethnicity, age, and sex. All of these variables are included as shares of their total relevant populations defined in percentage terms (i.e., 0 to 100 scale). I also control for the average household size. In some specifications, I include variables for: the educational attainment of the population for individuals ages 25 and older, the percentage of students in public school, the share of households making \$200,000+, the percentage of preschoolers in private pre-K, and the natural log of median household income multiplied by 100. I multiply the natural log by 100 to support an easier interpretation of the coefficient. All of the data for these controls is obtained from the 2000 Census (Social Explorer 2016). Further, I control for party affiliation using data from the 2006 Primary Election data (UC Regents 2014b). The data I have do not include voters' party identification. As a proxy for this, I calculate the percentage of votes cast for a gubernatorial candidate running as either a Democrat, a Republican, or in another party. This is a good proxy as this election was a semi-closed primary, implying that if a voter had a registered party identification, he could only vote for a candidate in that party (CA Secretary of State 2006b).

Column 1 of Table 1 displays means and standard deviations for the variables I use in Models (1) through (5) as well as more detailed characteristics of people in the precincts. On average, about 40% of voters in a precinct voted in favor of Proposition 82 in 2006. Voter turnout in the average precinct was low. California is known for having very low turnout in primary elections (Hosie and Richie 2014). These summary statistics demonstrate that the precincts in California were relatively diverse. Slightly more than half of preschoolers enrolled in school attended private school. On average, most voters supported Democrats.

Figure 1a displays a binscatter plot of the relationship between support for Proposition 82 and the natural log of median income in a precinct. A binscatter plot is a nonparametric representation of the conditional expectation function. As expected theoretically in relation to income distribution, as income increases in a precinct, support for Proposition 82 decreases in a seemingly linear way.

The data available pose two important threats to the validity of my models. First, the demographic characteristics of actual voters and the entire population of eligible voters may be very different. Actual voters tend to be richer, older, and better educated than the population at large (Jacobson 2013; Snyder 2015). I only have data on eligible, not actual, voters (Social Explorer 2016). Thus, my analysis rests on the assumption that even if a representative sample of eligible voters did not vote, the demographic characteristics of the whole population influenced voters.

Second, I only have data for just over 90% of the registered precincts. I assume this data provides a representative sample of precincts. Notably, the average values for the precincts in my dataset are similar to the election statistics reported for California as a whole (UC Regents 2014b; CA Secretary of State 2006b; IGS 2014; CA Secretary of State's Office, personal communication, Apr. 8, 2015; Social Explorer 2016).

Data for the Empirical Model of Voter Support for Propositions 30 and 38

Models (1) through (5) for Propositions 30 and 38 use data from three sources: the 2012 General Election data at the SR precinct level for California obtained from the California Statewide Database, the 2010-2014 ACS 5-Year Estimates data, and the 2010 U.S. Census data. For the final two datasets, data are obtained at the Census block group level for California from Social Explorer (UC Regents 2014e; Social Explorer 2016).

During the 2012 General Election, there were 24,491 precincts registered. I have data on 21,100 precincts for Proposition 30 and 21,102 precincts for Proposition 38. I created a conversion file to match precinct data to Census block group data (Levonyan 2013; UC Regents 2014f; CA Secretary of State's Office, personal communication, Feb. 26, 2016).

My outcome variables of interest for these specifications of Models (1) through (5) are the percentages of individuals in a precinct that voted for Proposition 30 and Proposition 38. I define these variables as the total number of votes for the proposition of interest divided by the total number of votes cast for or against the proposition. I obtain data for these variables from the 2012 General Election data (UC Regents 2014e).

My independent variables of interest are the same as those described for Proposition 82. However, I make modifications to the income distribution covariates in Model (1). Median household income in California in 2012, according to the 2012 ACS, was \$59,176 (Social Explorer 2016). Thus, using Pew's (2015) definition, I define a middle-income household as making between \$39,999 and \$125,000. Variables related to race/ethnicity and other basic demographics use data from the 2010 Census. Variables related to education and income use data from the 2010-2014 ACS (Social Explorer 2016).⁹ My control variables are also the same as those described in the previous subsection with a few exceptions. For Propositions 30 and 38, I do not consider variables related to the educational attainment of the population or the percentage of students in

⁹ The Census no longer includes a long form, meaning the 2010 Census does not provide information on the necessary explanatory variables related to education and income. This data must be supplemented with ACS data, as the ACS does ask for this information. The 5-Year Estimates must be used to obtain data at the block group level. I chose to use the 5-Year Estimates provided for 2010-2014 because multi-year estimates from the ACS act as a moving average, suggesting that the estimates with 2012 in the middle provide the most robust data available for 2012 demographic information (Sen 2015; U.S. Census Bureau 2015a, 2015f; Social Explorer 2016).

public school. The political control is the percentage of votes cast for a presidential candidate running as either a Democrat, a Republican, or in another party. I obtain data for this variable from the 2012 General Election data (UC Regents 2014e).

Column 2 of Table 1 displays means and standard deviations for the 21,100 precincts for which data are available for both Propositions 30 and 38. In an average precinct, 54% of voters supported Proposition 30. Only 39% of individuals voted for Proposition 38. Voter turnout was significantly higher in 2012, which makes sense given it was a general election in a presidential election year (CA Secretary of State 2012a, 2012b; DeSilver 2014). As in 2006, the majority of voters supported Democrats.

Figure 1b and Figure 1c display binscatter plots that depict similar relationships between the shares of support for Propositions 30 and 38 and the natural log of median household income. In both cases, median income seems negatively related to support.

Data for the Empirical Model of Legislator Support for SB 1381

Models (6) through (10) use data from four main sources: the Unofficial Ballot Role Call vote information for SB 1381 for the California Senate and Assembly provided by the Legislative Counsel of California, the 2010 U.S. Census at the state legislative district level (Upper and Lower Chamber) for California obtained from Social Explorer, the 2008-2012 ACS 5-Year Estimates data at the state legislative district level (Upper and Lower Chamber) for California obtained from Social Explorer, and data on senators and assembly members for each legislative district in California in 2010 provided by James Snyder (Legislative Counsel 2010f, 2010g; Social Explorer 2016; James Snyder, personal communication, Oct. 5th, 2015).^{10,11}

¹⁰ I thank James Snyder for providing these data.

My outcome variable in Models (6) through (10) is whether or not the legislator voted in favor of SB 1381. Seventy-two legislators voted in favor, and 33 voted against, the bill. I do not consider the 15 cases in which a vote was not recorded for the assembly member or senator's district. This may be due to a vacancy or because the legislator did not vote. I obtain data for this variable from the Unofficial Ballot Roll Call information reported by the Legislative Counsel of California (Legislative Counsel 2010f, 2010g). I supplement this data using a variety of sources to ensure accuracy between district and legislator (Project Vote Smart 2015a, 2015b, 2015c; James Snyder, personal communication, Oct. 5th, 2015; Ballotpedia n.d.c, n.d.e, n.d.f, n.d.g; Placer County Office of Elections n.d.).

I have nine independent variables of interest for Models (6) through (10). These variables are the same as the explanatory variables of interest in the corresponding Models (1) through (5). However, I modify the covariates in Model (1). According to the 2010 ACS 1-Year Estimates data, median household income in California in 2010 was \$61,655. Thus, I define a middle-income household as making between \$39,999 and

¹¹ For information on legislators, I use data on senators and assembly members for each legislative district provided by Snyder. Snyder's data are based on election results. However, the legislator representing a district at the start of the term does not necessarily match the legislator representing a district when votes were cast for/against SB 1381; a seat may have been vacant or have had a new representative following a special election. Thus, I hand-cleaned the data to ensure accuracy. I trusted the Unofficial Ballot Roll Call information reported by the Legislative Counsel of California for who voted for/against the bill. I then used information from a variety of sources to alter Snyder's data to ensure both the appropriate senator or assembly member and his relevant information are listed for each district (Legislative Counsel 2010f, 2010g; Project Vote Smart 2015a, 2015b, 2015c; James Snyder, personal communication, Oct. 5th, 2015; Ballotpedia n.d.c, n.d.e, n.d.f, n.d.g; Placer County Office of Elections n.d.).

\$125,000 per year (Pew 2015; Social Explorer 2016). I obtain data for these variables from the 2010 Census or the 2008-2012 ACS.¹²

Besides two exceptions in Models (6) through (10), I use the same controls as are employed in Models (1) through (5). In this case, the political control is the party of the legislator (Project Vote Smart 2015a, 2015b, 2015c; James Snyder, personal communication, Oct. 5th, 2015; Ballotpedia n.d.c, n.d.e, n.d.f, n.d.g; Placer County Office of Elections n.d.). I do not control for the average household size in these models. I obtain data for the race/ethnicity, age, and sex controls from the 2010 Census. I obtain data for the income-related controls from the 2008-2012 ACS (Social Explorer 2016).

I include additional specifications of Model (6) that consider other controls. I include a variable for the percentage of votes in favor of Proposition 82 in the legislator's district. I obtain data for this variable from the 2006 Primary Election data (UC Regents 2014b). I created a merging file to match votes for Proposition 82 in 2006 to legislative districts in 2010 (Citizens Redistricting Committee 2011; UC Regents 2014b, 2014d; U.S. Census Bureau 2015b, 2015c, 2015e). I also include a dummy variable for whether the legislator served on the Education or the Appropriations committee (Legislative Counsel 2010b; Shepsle 2010). I obtain data for this variable from a variety of sources (Legislative Counsel 2010a, 2010b, 2010f; Project Vote Smart 2015c; Ballotpedia n.d.c., n.d.e; Placer County Office of Elections n.d.; Sunlight Foundation n.d.a., n.d.b., n.d.c., n.d.d., n.d.e.).

¹² As explained, I use data from both the 2010 Census and the 2008-2012 ACS because the Census no longer provides data on education and income. I use data from the ACS for these variables. The legislative district level is the smallest unit of analysis at which data can be downloaded and ensure the most accurate matching of data (Sen 2015; U.S. Census Bureau 2015a, 2015b, 2015c, 2015d, 2015e, 2015f, personal communication, Nov. 9th, 2015; Social Explorer 2016).

Table 2 includes means and standard deviations for the variables I use in Models (6) through (10) along with more detailed characteristics of legislative districts. Column 1 displays information for the Senate and Assembly combined. Column 2 displays information for Assembly districts only and Column 3 does the same for the Senate. Income, education, and demographic characteristics between Assembly and Senate districts are nearly identical. The average district had an income distribution that was similar to the statewide distribution of income in California in 2010 (Social Explorer 2016). The average district also seems to have been fairly diverse; for the Senate and Assembly combined, the average diversity index was 59.22. However, while both chambers voted to pass the bill and had similar percentages of Democratic legislators, the Assembly did so with a greater margin of legislators voting in favor. While 74% of assembly members voted for SB 1381, only 58% of senators voted for the bill. Democrats represented approximately 65% of districts.

Based on the data, there are two key threats to the validity of my models. First, my research design does not identify causal mechanisms, but rather potential correlates. The decision-making process surrounding legislative votes is complex with a multitude of potential factors to consider. Legislators may be influenced by: their constituencies, their party, their own ideology, interest groups, or other factors. While my analysis establishes a theory used to test relevant correlates, my results cannot sufficiently establish causal mechanisms. Second, there may be differences between the demographic characteristics of actual voters who vote for the legislator and the entire population of individuals within a district. For instance, a factor such as interest group influence may mean a segment—rather than the majority preferences—of the legislator's constituency

influences his choices (Stigler 1971; Kalt and Zuppan 1990; Levitt 1996; Poole and Rosenthal 1996; Fearon 1999; Lee et al. 2004; Shepsle 2010). I only have data for the total population in a district, not actual voters (UC Regents 2014e). Thus, I assume that a majority of people within a legislator's district influenced a legislator's vote.

Data for the Empirical Model of State Funding for, Access to, and Quality of ECE

Models (11) through (13) employ data from five sources: the NIEER, the 2000 U.S. Census data at the state level obtained from Social Explorer, the ACS 1-Year Estimates for the years 2006 through 2011 obtained from Social Explorer, updated Klarner Politics data provided by Carl Klarner, and U.S. State-Level Income Inequality data from Mark Frank for the years 2000 through 2011 (Michelle Horowitz, personal communication, Sept. 15th-16th, 2015 and Oct. 14th, 2015; Carl Klarner, personal communication, Oct. 21st, 2015; Social Explorer 2016; Frank, n.d.).^{13,14} All of these data are obtained at the state year level. I examine the years 2003-2014 in my analysis because these are the years for which the NIEER provides information on state pre-K and for which I can obtain the necessary lagged variables (Barnett et al. 2015; Social Explorer 2016). Unfortunately, no Census or ACS data is available between the years 2000 and 2006. To ensure that I had sufficient Census/ACS demographic data for each state and

¹³ I am grateful to Michelle Horowitz for providing data from the NIEER. I thank Carl Klarner for providing data as well.

¹⁴ The data that are publicly provided by the NIEER in its "State Preschool Yearbooks" are not necessarily the same as the data used in my analysis. If the NIEER receives new information about a state for a previous year, it may retroactively update information in its internal database. Thus, as recommended by Michelle Horowitz at the NIEER, I use the data provided by her in a series of spreadsheets rather than the data documented in the NIEER's yearly reports (Barnett et al. 2009; NIEER 2015; Michelle Horowitz, personal communication, Sept. 15th-16th, 2015 and Oct. 14th, 2015).

year, I interpolated the data I obtained from Social Explorer for the years 2001 through 2005 using the 2000 Census and 2006 ACS data (Social Explorer 2016).

My outcome variables of interest for Models (11) through (13) are: the funding per child enrolled in state pre-K, the percentage of four-year-olds enrolled in state pre-K, and the Z-score of the State Pre-K Quality Standards Benchmarks from the NIEER.^{15,16} The funding per child enrolled measures state-level monetary support for state pre-K. The data used for this variable do not include possible supplementary “funds from federal or local sources” (Barnett et al. 2015, p. 36). I use funding rather than the natural log of funding so that observations for states with \$0 in funding (i.e., states with no state pre-K program) may be used in my analyses. The percentage of four-year-olds enrolled in state pre-K acts as a proxy for access to pre-K within a state, as is standard. I calculate the Z-score of the quality sum on a yearly basis as follows:

$$(14) \text{ Z-score of Quality Score} = (\text{Quality Score} - \text{Average Quality Score}) / \text{Standard Deviation of Quality Score}$$

I create a Z-score of the NIEER’s quality score to more accurately consider changes in the scores over time. This variable measures the quality of state pre-K based on a robust

¹⁵ States that do not have state pre-K programs have: \$0 in funding and 0% enrollment. I give these states a quality score of 0.

¹⁶ To create a quality benchmark score for states with multiple state pre-K programs, the NIEER generates a weighted average of the quality benchmark score for each program based on the number of three- and four-year-olds enrolled in each program. However, these weighted averages had not been updated since their initial publication in the relevant NIEER Yearbook and some had never been created (Barnett et al. 2009; NIEER 2015). Thus, I updated/generated the weighted averages of the quality benchmark scores as necessary, using an Excel calculator provided by Horowitz (personal communication, Oct. 14th, 2015). I preferred the updated information in the spreadsheets provided by the NIEER to the information printed in the NIEER Yearbooks (Michelle Horowitz, personal communication, Sept. 15th-16th, 2015 and Oct. 14th, 2015). However, I used the total state program enrollment information (i.e., the number of three- and four-year-olds enrolled in a given program) from the applicable NIEER Yearbooks (NIEER 2015).

set of criteria, including teacher qualifications and early learning standards.¹⁷ I obtain data for each of these variables from the NIEER (Barnett et al. 2015; Michelle Horowitz, personal communication, Sept. 15th-16th, 2015 and Oct. 14th, 2015).

I have five independent variables of interest for Models (11) through (13). Unless otherwise noted, I obtain data for these variables from the 2000 Census, the interpolated data between the 2000 Census and the 2006 ACS 1-Year Estimates for the years 2001 through 2005, and the ACS 1-Year Estimates for the years 2006 through 2011 (Social Explorer 2016). My first three independent variables—used in Model (11)—are the percentages of low, middle, and high-income households in a state for a given year. For consistency with my other analyses, I define the cutoffs using the definition put forth by Pew (2015). I change the income bins yearly, updating for changes in the national median household income. I use data on the national median household income provided by the Federal Reserve Bank of St. Louis (2015).¹⁸

My next independent variable of interest—used in Model (12)—is the Gini coefficient for a state in a given year. I obtain data for this variable from the U.S. State-Level Income Inequality data (Frank n.d.). The Gini coefficient measures income inequality within a state. The higher the Gini coefficient, the more unequal the state (Weinberg 2011; Frank n.d.). My fifth independent variable is a diversity index used in Model (13). It is calculated in the same way as the diversity index used in Model (4).

¹⁷ While I am focused on ECE for four-year-olds, the rating system is based on the quality of programming for both three- and four-year-olds. Specifically, programs for both three- and four-year-olds must not surpass the same maximum class size and the same child-staff ratio. However, if a state does not have a program for three-year-olds (as many do not), this is not counted against the state (Barnett et al. 2015; Michelle Horowitz, personal communication, Sept. 15th-16th, 2015 and Oct. 14th, 2015).

¹⁸ I convert these data to 2013 USD using the CPI provided by Social Explorer (2016).

Due to the limited number of observations in the data, I use fewer controls in these regressions than in Models (1) through (10). I include variables for race/ethnicity, age, and political affiliation. In this case, the political variables are: a variable for the proportion of seats in the lower chamber controlled by Democrats and a dummy variable for whether the governor is a Democrat.¹⁹ Besides the political variables, I obtain data for these controls from the Census and ACS data (Social Explorer 2016). I obtain data for the political variables from updated Klarner Politics data provided by Carl Klarner (Carl Klarner, personal communication, Oct. 21st, 2015).²⁰

The independent and control variables are lagged by three years to account for the lag between the decision to implement a change in ECE policy (e.g., a change in quality guidelines) and the reflection of these changes in the program. Education-related policies are often phased in over multiple years. I test other lags as well; using other lags does not make a substantial difference in my results (Barnett et al. 2015; TK California n.d.b).

Table 3 reports means and standard deviations for the variables I use in Models (11) through (13) as well as more detailed characteristics of states. Column (1) displays information for states that have a state pre-K program by 2014. Column (2) displays information for the states that do not. A typical state with pre-K pays \$4500 per student per year for programming. In states with pre-K, about 30% of four-year-olds are enrolled on average. Programs are of reasonably high quality (Barnett et al. 2015). There are noticeable differences in states with and without pre-K programs. In comparison to states

¹⁹ I chose to control only for the proportion of seats in the lower chamber controlled by Democrats and not the proportion in the upper chamber because of the high correlation between these two variables (correlation = 0.84).

²⁰ Because “Nebraska has a non-partisan state legislature,” it does not have all of the necessary control variables (Carl Klarner, personal communication, Nov. 12th, 2015, n.p.). Thus, I do not include Nebraska in my analysis.

with pre-K, states without pre-K: are less ethnically/racially diverse, have legislatures with noticeably lower proportions of seats controlled by Democrats, are less likely to have a Democratic governor, and have lower minority populations.

VII. Results for the Basic Models

Results for the Empirical Models of Voter Support for Proposition 82

Table 4 displays the results for Model (1) in which I consider how level of income—based on the share of households in a precinct in a given income bin—impacts support for Proposition 82. These results demonstrate that the level of income in a precinct has a significant impact on the likelihood that the precinct will vote in favor of ECE expansion. In comparison to the percentage of high-income households, the percentages of low- and middle-income households are positively associated with the share of support for Proposition 82. The coefficients on these two variables are positive and statistically significant at the 1% level. These results hold across specifications.

Column 1 displays the results for the baseline regression of Model (1). These findings support my basic hypothesis that the higher the percentage of low- or middle-income households in a precinct, the greater the likelihood of support for Proposition 82. However, the magnitude of the coefficient on the share of low-income households is about three times the size of the coefficient on the share of middle-income households. Specifically, a one percentage point increase in the fraction of low-income households, relative to the fraction of high-income households, leads to a 0.237 percentage point increase in the share of support for Proposition 82. The magnitude on the coefficient of the middle-income share is 0.0721. With respect to the low-income share, the coefficient

implies that a one standard deviation increase in the fraction of low-income households leads to a four percentage point increase in the share of support for Proposition 82.

These results suggest low-income individuals may support public ECE more than, or at greater rates than, other income groups. One potential explanation for this is that the POUM hypothesis applies to some voters in the middle-income group, thereby making them opposed to Proposition 82's proposed tax increase (Bénabou and Ok 2001). These results hold for Column 2, which controls for the shares of college-educated individuals and students enrolled in public school. However, I prefer the results displayed in Model (1) due to the high collinearity between these variables and the income shares.²¹

In Column 3, I consider the direct relationship between the share of households making \$200,000 or more per year and support for Proposition 82. Given that the tax to pay for ECE expansion would have been levied on individuals making more than \$400,000 and couples making more than \$800,000, examining this group is theoretically interesting. Due to the way income bins are reported in Census data, the highest income bracket I can consider is \$200,000+ (Barnett et al. 2006; CA Secretary of State 2006a; Social Explorer 2016). However, considering the relationship between this group and support for the proposition is important because: (1) the high-income individuals on which the tax would have been levied are included in this group and (2) the POUM hypothesis likely applies strongly to individuals with incomes in the \$200,000-\$400,000 range (Bénabou and Ok 2001). As expected, these results show there is a strong negative relationship between the share of households making \$200,000 or more and support for

²¹ The collinearity between the income variables and both the share of college-educated individuals and the share of students enrolled in public school ranges from 0.38 to 0.72.

ECE expansion. A one standard deviation increase in the share of households making at least \$200,000 decreases support for Proposition 82 by nearly 2 percentage points.

In Columns 4 and 5, I examine the relationship between the share of preschoolers enrolled in private preschool and support for public ECE. Column 4 does not include income shares, but Column 5 does. These results show a negative and statistically significant relationship between the share of preschoolers enrolled in private school and support for Proposition 82. This suggests that areas with high levels of private preschool enrollment are less inclined to see the need for public pre-K, regardless of income level.

Table 5 displays the results for Models (2) and (3), which measure how income inequality impacts support for Proposition 82. Columns 1 and 2 display the results for Model (2) in which the natural log of the ninety/ten ratio is used to measure inequality. Columns 3 and 4 depict the results for Model (3), which uses the natural logs of both the ninety/fifty and the fifty/ten ratios. I multiply the log of these ratios by 100 for simpler interpretation of the coefficients. These results assume an upper bound on the income distribution of \$250,000.²² Unlike in Columns 1 and 3, the specifications in Columns 2 and 4 control for the natural log of median household income multiplied by 100.²³

In Column 1, the coefficient on the natural log of the ninety/ten ratio is positive and statistically significant at the 1% level, though the effect size is small; a one standard deviation increase in the log of the 90/10 ratio leads to a 0.0126 percentage point increase in the share of support (Kephart 2013). The direction of these initial results suggests there is increased support for public ECE in more economically unequal precincts, thereby

²² I also try specifications with upper bounds of \$300,000 and \$400,000, which do not change the results.

²³ I chose to use the natural log of median household income due to the skewed distribution of income.

supporting the findings of Corcoran and Evans (2010). However, when I control for the natural log of median income in Column 2, the coefficient on the ninety/ten ratio is negative and insignificant. In this case, the coefficient on the natural log of median income is negative and statistically significant at the 1% level.

The results for Model (3) mirror the results for Model (2). In Column 3, the coefficient on the natural log of the ninety/fifty ratio is positive and statistically significant at the 1% level. When I control for the natural log of median income in Column 4, the coefficient on the natural log of the ninety/fifty ratio becomes negative and insignificant. The coefficient on the natural log of the fifty/ten ratio is never significant. However, the coefficient on the natural log of median household income is negative and statistically significant at the 1% level, suggesting the higher the level of median income in a precinct, the lower the support for Proposition 82.

The results for Models (2) and (3) imply that income inequality as measured by income ratios does not impact support for public ECE. Rather, the level of median income affects support. The coefficient on the natural log of median income multiplied by 100 is consistently negative and significant. The results demonstrate that a one standard deviation increase in this variable leads to a 4.12 percentage point decrease in the share of support (Kephart 2013).

The findings from Models (1) through (3) together suggest that what impacted support for Proposition 82 was not the distribution of income so much as the level of income. Specifically, these findings imply there is an inverse relationship between the level of income in a precinct and the share of support for Proposition 82 (as Figure 1a showed). The results for Model (1) display that the share of low-income households has

the greatest positive impact on support. The results for Models (2) and (3) show that as median income increases, the share of support decreases. These results suggest that my expectations apply relatively well to the outcome of Proposition 82 (Epple and Romano 1996; Corcoran and Evans 2010). While the magnitude of impact is greatest for the low-income share, it is evident that the people concentrated in the low- and middle-income portions of the income distribution support Proposition 82 most strongly.

Column 1 of Table 6 displays the results for Model (4) in which I examine the impact of the level of ethnic fractionalization on support for Proposition 82. The coefficient on the diversity index is negative and statistically significant at the 1% level. This implies that more ethnically/racially heterogeneous precincts display lower levels of support for Proposition 82. A one standard deviation increase in the index decreases support for Proposition 82 by nearly 2 percentage points. This result supports my hypothesis that the greater the level of ethnic/racial diversity, the lower the support for public ECE. The following studies have similar findings: Easterly and Levine (1997), Alesina et al. (1999), Luttmer (2001), Lind (2007), and Fernandez and Levy (2008).

Column 2 of Table 6 reports the results for Model (5) in which I consider the impact of the interaction between the diversity index and the share of low- and middle-income households in a precinct. The coefficient on the interaction term is essentially zero and insignificant, suggesting little mitigating impact of ethnic/racial diversity on the effect of the share of low- and middle-income households in a precinct.

The results for some of the control variables for Models (1) through (5) warrant mention. The share of voters who voted for a Democratic gubernatorial candidate has a positive and statistically significant impact on support for Proposition 82. The coefficient

on this variable is consistently the largest in magnitude in the regressions. A one standard deviation increase in the share of votes in favor of a Democratic gubernatorial candidate increases the share of support for Proposition 82 by 10%. Additionally, non-whites are also more likely to support the initiative. With respect to the age controls, the coefficients on these variables are inconsistently significant. However, if they are significant, the coefficients on the ages of people of childbearing age are positive. As expected, people who may have, or may be preparing to have, young children seem to be particularly supportive of the initiative. The coefficient on the average household size is consistently statistically significant and positive, suggesting that communities with larger household sizes, and therefore more children, are more likely to support the proposition.

Results for the Empirical Models of Voter Support for Propositions 30 and 38

Table 7 reports the results for Model (1) applied to Propositions 30 and 38. Columns 1 through 3 display the results for Proposition 30 and Columns 4 through 6 depict the outcomes for Proposition 38. Columns 1 and 4 display the results for the base regression of Model (1). Columns 2, 3, 5, and 6 report results for additional specifications of Model (1) that consider the impact of the share of preschoolers enrolled in private school on support for the propositions. I do not include low- and middle-income shares in Columns 2 and 5, but include them in Columns 3 and 6.

With respect to Columns 1 and 4, in contrast to the results for Proposition 30 (which provided K-12 and community college funding), the results for Proposition 38 (which provided funding to K-12 and ECE) follow the same general pattern of those for Proposition 82 (EdSource 2016). For Proposition 30, while the coefficient on the middle-income share is positive and statistically significant, the coefficient on the low-income

share is insignificant. However, in the case of Proposition 38, the coefficients on the low- and middle-income percentages are both positive and statistically significant, just as they were for Proposition 82. Again, the coefficient on the low-income share is about three times larger in magnitude than the middle-income share. A one standard deviation increase in the percentage of low-income households increases the support for Proposition 38 by 2.5 percentage points.

In Columns 2 and 3, the share of preschoolers enrolled in private school fittingly has no effect on support for Proposition 30; the proposition was unrelated to ECE. Private preschool enrollment plays a more prominent role for Proposition 38 in Columns 5 and 6. In line with Proposition 82, when income shares are not included in Column 5, this variable has a negative and statistically significant impact on support for Proposition 38. This relationship does not hold when income shares are included in Column 6, suggesting the importance of income outweighs the significance of private preschoolers.

The results of Model (1) for Propositions 30, 38, and 82 suggest there is something unique about the relationship between income distribution in a community and support for ECE that does not apply to education policy more broadly. The results for Propositions 38 and 82 highlight the significance of the percentage of low-income individuals for support of ECE initiatives. This group has an insignificant impact on support for education policies unrelated to ECE, specifically Proposition 30.

Tables 8 and 9 report the results for Models (2) and (3) applied to Propositions 30 and 38, respectively. In each table, Columns 1 and 2 report the results for Model (2) and Columns 3 and 4 report the results for Model (3). In line with Proposition 82, these results demonstrate the insignificant impact of income inequality on support for

education-related policies.^{24,25} In keeping with the results for Model (1), these outcomes again suggest a unique relationship between income in a precinct and support for ECE policies. For Proposition 30, when I control for median income in Columns 2 and 4 of Table 8, the coefficient on this variable is insignificant. However, when I do the same for Proposition 38 in Table 9, the coefficient on median income is statistically significant and negative. This supports my finding for Proposition 82 that there is an inverse relationship between level of income in a community and support for ECE-related policies.

Table 10 reports the results for Model (4) in which I consider the impact of ethnic fractionalization on support for Propositions 30 and 38. Column 1 displays the results for Proposition 30 and Column 2 does the same for Proposition 38. In neither case does ethnic/racial diversity significantly impact support for the proposition. Though these results do not support those of Proposition 82 with respect to ethnic/racial diversity, they

²⁴ For Proposition 30 in Table 9, the coefficient on the natural log of the ninety/ten ratio is never significant. For Proposition 38 in Table 10, the coefficient on this variable is positive and significant—with an extremely small effect size—only in Column 1 when I do not control for median income. When I do so in Column 2, the variable becomes insignificant. In Columns 3 and 4 of Tables 9 and 10, the natural log of the ninety/fifty ratio is consistently significant. It has a positive impact for Proposition 30. However, the direction of the impact changes for Proposition 38 depending upon whether or not I control for median income. When I do not control for median income in Column 3 of Table 10, the coefficient on the natural log of the ninety/fifty ratio is positive. When I do control for median income in Column 4, the coefficient is negative. These results may seem to provide slight suggestive evidence that income inequality in the upper half of the income distribution impacts support for Propositions 30 and 38. However, little is known about the upper tail of the income distribution due to the way in which the income bins are reported (Social Explorer 2016). I had to impute an upper tail on the income distribution, which may inaccurately influence the significance of this variable. Further, the effect size on the coefficient on the natural log of the ninety/fifty ratio is miniscule.

²⁵ These results remain similar regardless of whether I assume an upper bound on the income distribution of \$250,000, \$300,000, or \$400,000.

affirm the importance of the level of income in a community for support of ECE policies. For Proposition 38, the natural log of median income is negative and significant.²⁶

Importantly, the results for Propositions 30 and 38 stress the significance of party for education-related policies. A one standard deviation increase in the percentage of people voting for a Democratic presidential candidate increases the shares of support for Propositions 30 and 38 by 16 percentage points and 6.5 percentage points, respectively.

Results for the Empirical Models of Legislator Support for SB 1381

Table 11 displays the logistic regression results for Model (6) in which I consider how the distribution of income in a district, as measured by the share of households in a given income bin, impacts the likelihood of support for SB 1381. As for all tables in this section, the coefficients are reported as marginal effects and the standard errors are calculated using the delta method. The results do not change markedly when I use a linear probability model or a probit model instead of the logit model (Stock and Watson 2011).

Column 1 displays the results for the basic specification of Model (6). These results do not support my hypothesis. I hypothesized that a higher percentage of low- or middle-income households in a district would positively impact a legislator's likelihood of support. However, the coefficients on the shares of low- and middle-income households, though positive, are statistically insignificant. This suggests the percentages of low- and middle-income households have little to no significant impact on a legislator's likelihood of voting in favor of SB 1381. In Column 2, to further assess

²⁶ Though unreported here, I do consider specifications of Model (5) for Propositions 30 and 38, which consider the interaction of the low- and middle-income share in a precinct and ethnic/racial diversity in a precinct. While the coefficients on the interaction terms are significant, the effect size is essentially zero (on the order of magnitude of 1×10^{-3}). As such, I choose not to discuss these results.

whether the preferences of voters impact the decisions of their legislator, I include a variable that measures the share of support for Proposition 82 in a legislator's district. Surprisingly, the variable is unrelated to the likelihood of a legislator voting for SB 1381.

Instead, the political party of a legislator serves as a critically determinative factor of a legislator's likelihood of support for the bill. Being a Democrat, rather than being a Republican, increases the likelihood that a legislator will vote in favor of SB 1381 by about 33 percentage points (Rodriguez 2007; Stock and Watson 2011). This effect is statistically significant at the 1% level.

Columns 3 through 5 of Table 11 consider the impact of a legislator's committee on his or her likelihood of support. These results show that being a member of the Education Committee has a strong statistically significant impact on a legislator's likelihood of supporting the bill. According to Column 3, even when controlling for party, being on the Education Committee increases a legislator's likelihood of voting in favor of the bill by about 19 percentage points. In contrast, Column 4 reports that being a member of the Appropriations Committee decreases a legislator's likelihood of voting for the bill by about 20 percentage points. This makes sense given the presumed outlier preferences of members of these committees. Members of the Education Committee would be especially likely to care about education policy and its improvement whereas members of the Appropriations Committee might be particularly concerned with the potential cost of California TK (Legislative Counsel 2010b; Shepsle 2010; Scott Moore, personal communication, Oct. 28th, 2015).

Though unreported here, I also consider the relationship between the share of preschoolers enrolled in private preschool in a legislator's district and his likelihood of support for SB 1381. This variable has no significant impact on the results.

Table 12 displays the results for the logistic regression model that tests how income inequality within a district impacts a legislator's likelihood of support for SB 1381. Columns 1 and 2 report the results for Model (7) in which the natural log of the ninety/ten ratio multiplied by 100 is employed. Columns 3 and 4 report the results for Model (8) in which the natural logs of the ninety/fifty and fifty/ten ratios multiplied by 100 are used instead. All of the results assume an upper bound on the income distribution of \$250,000.²⁷ The specifications in Columns 2 and 4 control for median income.²⁸

In contrast to my hypothesis, the results for Models (7) and (8) suggest that income inequality has no significant impact on the likelihood that a legislator will vote for or against SB 1381. I anticipated that income inequality would have a negative impact on a legislator's likelihood of support. However, in Columns 1 and 2 of Table 12, while the coefficient on the natural log of the ninety/ten ratio is negative, it is statistically insignificant. In Columns 3 and 4, the coefficients on the natural logs of the ninety/fifty and fifty/ten ratios are insignificant and typically negative. The coefficient on the natural log of median income is also insignificant.

Thus, the results for Models (7) and (8) suggest income inequality does not significantly impact the likelihood that a legislator will vote in favor of SB 1381. Rather, in keeping with the results for Model (6), the party of the legislator has a particularly

²⁷ As for the propositions, I also try additional specifications with upper bounds of \$300,000 and \$400,000. Changing the upper bound does not impact the results.

²⁸ I take the natural log of median income to correct for the skewness of the distribution of median income.

strong and statistically significant impact at the 1% level on the likelihood that the legislator will vote in favor of the bill. Across all specifications, being a Democrat increases a legislator's likelihood of voting in favor of the bill by a magnitude that ranges from 35.81 to 37.41 percentage points (Rodriguez 2007; Stock and Watson 2011).

Political party seems to play a critical role in a legislator's decision to vote for SB 1381.

Column 1 of Table 13 reports the results for Model (9) in which I test the impact of the level of ethnic/racial diversity in a district on a legislator's likelihood of voting in favor of SB 1381. Consistent with my hypothesis, the coefficient is negative. However, it is insignificant. Thus, in contrast to my hypothesis, these results suggest that the level of ethnic/racial diversity has no significant impact on a legislator's likelihood of support.

Column 2 of Table 13 displays the results for Model (10) in which I examine how the level of ethnic/racial diversity in a district interacts with the percentage of low- and middle-income households. Mirroring the results for Proposition 82, the coefficient on the interaction term is insignificant and has a small effect size. The interaction of income and diversity in a district seems to have no notable impact.

Nonetheless, a consistent result across Models (6) through (10) with respect to race/ethnicity warrants mention. For nearly all reported results in Tables 11 through 13, the percentage of Non-Hispanic Asian individuals has a negative and statistically significant impact at the 1% level on a legislator's likelihood of support. Typically, a marginal increase in the percentage of Non-Hispanic Asian individuals in a district is associated with a 1.2-1.9 percentage point decrease in a legislator's likelihood of support (Rodriguez 2007; Stock and Watson 2011). This suggests that while the level of diversity may not significantly impact support, race/ethnicity still plays a role in a legislator's

likelihood of supporting SB 1381. Most importantly, as is consistent with Models (6) through (8), the results for Models (9) and (10) show that the party of the legislator is critically important in determining the legislator's probability of voting for the bill.

In sum, the results for Models (6) through (10) do not support the expectations of my hypotheses. Neither: the distribution of income, the level of income inequality, nor the level of ethnic/racial diversity in a district has a consistently significant impact on the likelihood that a legislator will vote in favor of SB 1381. Rather, the party of the legislator seems to matter more than the demographic characteristics of constituents.

Though not as hypothesized, it is not particularly surprising that the demographic factors that influence voting behavior are not directly related to the behavior of legislators. Legislative behavior involves many more complex decisions than those of individual voters. To be successful, Democrats have to build a coalition that includes legislators from more and less affluent districts. This may wash out the individual income effects that mattered for voters in favor of political party (Shepsle 2010).

Results for the Empirical Models of State Funding for, Access to, and Quality of ECE

Tables 14 through 16 report the results for Models (11) through (13) in which I consider the relationship between measures of income shares, income inequality, and ethnic/racial diversity in a state and my ECE outcome variables of interest. In each table, Panel A displays the results for which the dependent variable is the funding per child enrolled in state pre-K. Panel B depicts the results for which the outcome variable is the percentage of four-year-olds enrolled in state pre-K. Panel C displays the results for which the dependent variable is the Z-score of the quality score of state pre-K.

Table 14 reports the outcomes for Model (11) in which I consider how the distribution of income within a state into low, middle, and high-income bins is associated with ECE outcomes. Columns 1 and 2 do not include state or year fixed effects. Columns 3 and 4 include year fixed effects and Columns 5 and 6 include both year and state fixed effects. Columns 1, 3, and 5 consider baseline regressions of Model (11). Columns 2, 4, and 6 consider an additional specification of each version of Model (11) that includes the share of preschoolers enrolled in private preschool.

In contrast to my hypotheses, across all baseline specifications in Panels A and C, the percentages of low- and middle-income households have no statistically significant association with either the level of funding per child enrolled or the quality of state pre-K. Further, in both Panels A and C, the coefficient on the share of low-income households is consistently negative, which is the opposite of my expectations. The coefficient on the middle-income share is typically positive, as expected, though it is always insignificant.

With respect to Panel B in which enrollment in state pre-K is the outcome variable, the coefficient on the low-income share is typically positive, as hypothesized, but the results are consistently insignificant across columns. In Column 1, the coefficient on the middle-income share is also imprecisely estimated with a standard error that is larger than the coefficient. However, the coefficient on the middle-income share in Columns 3 and 5 is negative and statistically significant at the 1% level. This suggests that when controlling for national trends in Column 3 or for both national trends and differences across states in Column 5, the impact of the share of middle-income households is negative. The results imply that increasing the share of middle-income households in a state by one percentage point decreases enrollment in, or access to, public

pre-K by 1.6-1.9 percentage points (Stock and Watson 2011; Barnett et al. 2015). This stands in direct contrast to my expectations. I expected the coefficient on both the low- and middle-income shares to be positive.

In Columns 2, 4, and 6, I examine the relationship between private preschool enrollment and funding for, access to, and quality of public pre-K. Across Panels A through C, the coefficient on the variable for the share of preschoolers enrolled in private school is negative. However, its impact is only statistically significant in Panel B. This result suggests I can reject that the level of private pre-K enrollment in a state has no impact on public pre-K enrollment in later years. Regardless of the income distribution, states with relatively high levels of access to private pre-K seem to demonstrate less need for, and therefore provide less access to, public pre-K.

Table 15 reports the results for Model (12), which examines the relationship between income inequality in a state and the level of funding for, access to, and quality of ECE. Just as for Table 14, Columns 1 and 2 do not control for year or state fixed effects, Columns 3 and 4 control for year fixed effects, and Columns 5 and 6 control for both year and state fixed effects. In each case, the second column controls for the natural log of median income multiplied by 100. The level of income inequality in a state seems to have no association with funding for, access to, or quality of state pre-K; the coefficients are imprecisely estimated with wide confidence intervals. The coefficient on median income is never significant or consistently positive, suggesting that the relationship between level of income and state ECE outcomes is insignificant.

Table 16 reports the results for Model (13) in which I examine the relationship between the level of ethnic/racial diversity in a state and the ECE outcome variables. In

each panel, Column 1 does not include year or state fixed effects, Column 2 includes year fixed effects, and Column 3 includes both year and state fixed effects. The results display essentially no relationship between the level of diversity and the outcome variables. In Panel B when I examine impacts on access, the coefficient on the diversity index is consistently insignificant. In Panels A and C when I consider impacts on funding and quality, respectively, the diversity index only has a significant impact when I do not include year or state fixed effects. In these cases, the coefficient on the diversity index is positive, which is the opposite of my expectations. However, when I control for national trends or national omitted variables in Column 2, the coefficient becomes insignificant. These results suggest that when appropriately controlling for national trends over time, the level of state diversity no longer has a meaningful impact on state ECE funding or quality. Further, when I control for differences across states as well in Column 3, the coefficient remains imprecisely estimated. Taken together, these results imply that ethnic/racial diversity has little noticeable impact on state ECE outcomes.

Political party plays a less critical role in ECE policy outcomes at the state level than it did for voters and legislators. Across Models (11) through (13), variables for the share of lower chamber seats held by Democrats and whether or not the state has a Democratic governor have no statistically significant impact on funding for, or access to, state pre-K. However, for Models (11), (12), and (13), these political variables have a positive and statistically significant impact on the Z-score of quality of ECE programs when I do not include state or year fixed effects. These coefficients become insignificant when I control for national trends and/or differences across states. Even so, these results provide slight suggestive evidence that Democratic control of the House and governor's

mansion may have positive implications for quality of state pre-K. Nonetheless, Democrats are unable to influence ECE funding and access significantly (Stock and Watson 2011; Barnett et al. 2015).

In essence, the results of Models (11) through (13) do not support my hypotheses. In almost all cases, the independent variables of interest (i.e., the proportions of low- and middle-income individuals, the level of income inequality, and the level of ethnic/racial diversity) have no statistically significant impact on the funding for, access to, or quality of state pre-K. The standard errors are typically on the same order of magnitude as the coefficients. In the few cases with statistically significant results for the independent variables, the coefficients are in the opposite direction than expected (e.g., negative, rather than positive). There are multiple explanations that may explain these results.

First, there may be slippage as the relationships between voters, legislators, and state policies build up from voter preferences to legislator actions to the ECE policies implemented at the state level. I theorized that voters will have preferences for ECE and that these preferences of voters will impact the actions of legislators (i.e., how the legislator votes). I further posited that the votes of legislators would impact the policies implemented at the state level (Ferejohn 1986; Epple and Romano 1996; Alesina et al. 1999; Fearon 1999; Corcoran and Evans 2010; Barnett et al. 2015). However, based upon these results, the expected relationship seems to have broken down at some point. Supporting my hypotheses, the results for Models (1) through (5) implied that the percentages of low- and middle-income individuals have a positive impact on voter support for ECE and the level of ethnic/racial diversity has a negative impact on voter support. However, the results for Models (11) through (13) demonstrate: that these

variables either have no statistically significant association with ECE policy outcomes like enrollment levels or that these variables have the opposite association than expected (e.g., a negative, not positive, coefficient).

As such, these results seem to suggest a disconnect between voter preferences and implemented policies within a state. This may result either because voters are unable to successfully influence the actions of legislators—as the results for Models (5) through (10) may suggest—or because legislators are unable to effectively implement desired policies. Importantly, policy implementation is incredibly challenging; this may help to account for some of the slippage (Jensen and Meckling 1976; Holmstrom 1979, 1999; Grossman and Hart 1983; Fearon 1999; Bolton and Dewatripont 2004; Alesina and Tabellini 2007b; Linda Dusenbury, personal communication, Dec. 4th, 2015).

Second, the data at the state level may be insufficiently granular to capture nuances in the relationship between the factors of interest and ECE outcomes. Further, the data may not appropriately consider the link between presumed voter preferences in a state and policy implementation outcomes. I recognize that the data are imperfect. The number of observations is relatively small (approximately 580). Though the data are not ideal, considering these results supports an important step toward trying to understand ECE policy differences across states.

VIII. Conclusions

In an effort to narrow achievement gaps, some states have succeeded in expanding access to ECE programs (Cascio and Schanzenbach 2013). This paper investigated the political economy of voter and legislator support for universal public pre-K for four-year-olds. I focused my analysis on why Proposition 82 failed to pass in

California in 2006 and why SB 1381 succeeded in California in 2010 (Legislative Counsel 2010b; IGS 2014). I also considered the relationship between ECE policy outcomes across states and the presumed preferences of both voters and legislators.

I developed a theoretical model of support for universal ECE. The model expects that the individuals who are most likely to realize the net benefits from this public policy will be the most likely to support it. As such, my model predicts that voters will be more likely to favor universal public pre-K if they: (1) are in the low- and middle-income segments of the income distribution, (2) live in economically equal communities and/or (3) reside in areas with low levels of ethnic/racial diversity (Epple and Romano 1996; Alesina et al. 1999; Corcoran and Evans 2010; CA Secretary of State n.d.). My model also posits that legislators will be relatively good agents of their principals (Jensen and Meckling 1976; Fearon 1999; Holmstrom 1999). Thus, I anticipated that a legislator's likelihood of supporting ECE policies would be: (1) positively impacted by the proportion of low- and middle-income households in his district and (2) negatively impacted by the levels of income inequality and ethnic fractionalization in his district. My empirical analysis tested this model by estimating the relationship between my political economy factors of interest (i.e., income distribution, income inequality, and ethnic fractionalization) and both a voter's and a legislator's likelihood of supporting universal public pre-K. I also examined the extent to which these factors are determinants of funding for, access to, and quality of ECE across states.

In terms of voter support, I used OLS regression analysis to estimate the relationship between the share of support for Proposition 82 and my three factors of interest. I find that as a precinct's proportion of low- or middle-income households

increases, support for Proposition 82 increases. This effect is strongest for low-income households; a one standard deviation increase in the fraction of low-income households leads to a four percentage point increase in the share of support for Proposition 82. Measures of income inequality have little to no statistically significant impact on the share of support. However, more ethnically/racially diverse precincts are less likely to support Proposition 82. This supports previous work in the field (Easterly and Levine 1997; Alesina et al. 1999; Luttmer 2001; Lind 2007; Fernandez and Levy 2008). My findings suggest that the income level of the median voter matters more than the extent of income inequality in a precinct. This differs from the work of both Goldin and Katz (1997) and Corcoran and Evans (2010) who find that income inequality impacts education policy outcomes, though in different directions. Further, my findings imply that the higher the proportion of voters below/near the median income level in a community, the greater the likelihood the community will support universal pre-K. The Meltzer Richard model would predict such an outcome (Meltzer and Richard 1981, 1983; Corcoran and Evans 2010). In sum, these findings suggest there is an inverse relationship between median income in a community and support for public pre-K. Racially homogeneous communities are also more likely to support ECE expansion.

This analysis also demonstrates that the political affiliation of voters has a particularly strong impact on support for ECE policies. A one standard deviation increase in the share of votes in favor of a Democratic gubernatorial candidate increases the share of support for Proposition 82 by 10%. Additionally, areas with relatively high levels of private preschool enrollment are less inclined to see the need for public preschool, regardless of income level.

My supplemental analysis of Propositions 30 and 38 affirms many of these findings. Most importantly, these results suggest there is something unique about the relationship between income distribution in a community and support for ECE that does not apply to education policy more broadly. My findings for Propositions 38 and 82 demonstrate that the demand for public provision, or public financing, of ECE declines with income. Relatedly, the proportion of low-income individuals in a community has a strong influence on support for public pre-K. This group has an insignificant impact on support for education policies unrelated to ECE. Low-income individuals may have a particularly strong proclivity to support pre-K expansion because it is the one form of public education that is currently not provided universally.

The direct importance of the levels of income and ethnic/racial diversity in a community breaks down at the legislator level. In terms of legislator support, I estimated the relationship between my factors of interest and a legislator's likelihood of voting in favor of SB 1381 using a logistic regression model. In contrast to the results for my voter analyses, I find that a district's income distribution and level of ethnic/racial diversity do not have a significant impact on a legislator's likelihood of voting in favor of SB 1381.

Rather, I find that the political party of the legislator seems to exert the greatest influence on his probability of voting for ECE policies. Being a Democrat increases the probability that a legislator will vote in favor of SB 1381 by 33 percentage points. Given that legislators must act strategically to aggregate the preferences of a disparate electorate and build majority coalitions in Congress, these results are not astounding (Shepsle 2010). Instead, they suggest that for ECE policies, this aggregation problem that is endemic in legislative politics plays out along party lines. Individual voters will be much

less contaminated by strategic concerns when voting on a referendum; they do not have to aggregate any preferences but their own. As such, income and diversity directly influence their votes, as hypothesized. However, a legislator's vote may be contaminated by strategic preference aggregation. This means party becomes the most important factor influencing a legislator's vote, rather than the political economy variables of interest.

My analysis of committees highlights one of the strongest tensions between legislative institutions, or committees, and party organizations. I find that, controlling for party, a member of the Education Committee is about 20 percentage points more likely, and a member of the Appropriations Committee is about 20 percentage points less likely, to vote in favor of SB 1381. These results demonstrate that, as Shepsle (2010) would predict, committee members are preference outliers.

There are two important limitations of my legislator analysis. First, the possibility of omitted variable bias is a concern. Further, there is a potential endogeneity problem with this analysis. Specifically, the political economy variables (e.g., the proportion of low-income individuals) that I test in my analysis of a legislator's likelihood of support for ECE also likely influence whether the legislator representing a given district is a Democrat or a Republican (Stock and Watson 2011; Jacobson 2013; Snyder 2015).

My findings for my cross-state analysis suggest there may be slippage in the relationship between voters, legislators, and implemented ECE policies. I estimated the relationship between my factors of interest and the funding for, access to, and quality of ECE policies across states using state-level panel data. In the case of this cross-state analysis, the variables that demonstrated a significant impact on voter support either are insignificant or have a coefficient of the opposite sign. This implies there is a disconnect

between voters' preferences, legislators' actions and/or ECE policy outcomes. This analysis would benefit from granular data.

My results have implications for future ECE expansion. Going forward, politicians, policy makers, and practitioners can expect to garner their greatest support for public pre-K from homogeneous communities with low-levels of high-income individuals. As the average level of income in a community increases, support likely will decrease. Of course, low-income individuals typically have low rates of voter turnout (Jacobson 2013; Snyder 2015). Thus, when voters are given the opportunity to vote on ECE policies, proponents of public pre-K must focus efforts on getting these voters to the polls. Given that ethnically/racially diverse communities are less supportive of universal preschool, proponents of public pre-K should emphasize the mutual benefits of universal access to ECE when producing ads for public pre-K expansion (Currie 2001; Heckman et al. 2010). When in doubt, expect Democrats to be devoted to the cause of closing the achievement gap through expanded access to public pre-K.

This paper contributes an important first step in empirically understanding the propensity of voters and legislators to support ECE policy. Future studies should focus on: (1) examining voter support for ECE expansion outside of California, (2) gaining a more nuanced view of legislator support for public pre-K by testing multiple bills, and (3) formulating a better picture of cross-state differences in ECE policies using more granular data. In so doing, we can develop a thorough understanding of the political economy of support for ECE that will allow us to achieve public pre-K access for all.

Table 1
Descriptive Statistics for Voter Support Models: Full Sample by Precinct

	All Precincts in 2006	All Precincts in 2012
Share of Votes in Favor of Proposition 82	40.24 (16.24)	
Share of Votes in Favor of Proposition 30		53.81 (17.82)
Share of Votes in Favor of Proposition 38		28.81 (11.53)
Income Share by Household		
Percent Low-income	30.53 (16.45)	32.11 (16.53)
Percent Middle-income	44.24 (9.533)	45.71 (10.75)
Percent High-income	25.23 (16.97)	22.19 (16.51)
Percent \$200,000+	9.451 (10.59)	
Log of Ninety/Ten Ratio (Multiplied by 100)	208.3 (39.38)	220.4 (40.32)
Log of Ninety/Fifty Ratio (Multiplied by 100)	80.67 (20.71)	86.43 (23.79)
Log of Fifty/Ten Ratio (Multiplied by 100)	127.6 (26.14)	134.0 (32.16)
Ninetieth Percentile of Household Income (in \$1,000's)	169.0 (45.11)	162.8 (49.66)
Fiftieth Percentile of Household Income (in \$1,000's)	79.52 (35.08)	72.41 (34.16)
Tenth Percentile of Household Income (in \$1,000's)	23.74 (13.65)	19.59 (10.93)
Median Household Income	80202.3 (36079.5)	73236.7 (34434.4)
Log of Median Household Income (Multiplied by 100)	1119.8 (43.56)	1109.6 (46.63)
Diversity Index	47.51 (16.11)	50.03 (15.24)
Political Variables		
Voter Turnout	28.83 (14.12)	73.30 (11.44)
Votes for Governor or President		
Percent of Votes for Democratic Candidate	57.75 (21.37)	58.82 (20.86)
Percent of Votes for Republican Candidate	40.21 (21.67)	38.63 (21.07)
Percent of Votes for Other Party Candidate	2.043 (3.589)	2.547 (2.456)
Race and Ethnicity		
Not Hispanic or Latino	75.17 (21.58)	69.01 (23.80)

Table 1 (Continued)

	All Precincts in 2006	All Precincts in 2012
Percent White	55.46 (26.04)	48.08 (26.27)
Percent Black	5.602 (10.59)	5.074 (9.070)
Percent Asian	10.27 (12.34)	12.05 (14.21)
Percent Other	3.838 (2.036)	3.798 (2.250)
Hispanic or Latino	24.83 (21.58)	30.99 (23.80)
Percent White	10.39 (7.994)	14.73 (11.04)
Percent Other	14.44 (14.26)	16.27 (13.67)
Educational Attainment for Population Ages 25+		
Does Not Have a College Degree	70.75 (18.54)	66.71 (20.56)
Has a College Degree or More	29.25 (18.54)	33.29 (20.56)
Level of School by Type of School		
Public School	83.13 (11.61)	83.23 (13.27)
Private School	16.87 (11.61)	16.77 (13.27)
Percent of Preschoolers Enrolled in Private School	51.35 (30.39)	48.27 (37.21)
Additional Demographic Variables		
Age		
Percent Under 5 Years	6.693 (2.257)	6.212 (2.186)
Percent 5 to 17 Years	19.00 (5.681)	17.38 (5.169)
Percent 18 to 24 Years	8.936 (5.920)	9.627 (6.135)
Percent 25 to 44 Years	30.92 (7.224)	26.79 (7.491)
Percent 45 to 64 Years	22.48 (6.058)	27.03 (6.476)
Percent 65 Years and Over	11.97 (7.807)	12.97 (7.102)
Percent Male	49.52 (3.373)	49.57 (3.007)
Average Household Size	2.880 (0.638)	2.982 (0.682)
Census Average Total Precinct Population	4958.6 (3149.7)	4354.9 (2769.4)
Total Number of Precincts	21,007	21,100

Source.—With respect to Column 1, data for the Share of Votes in Favor of Proposition 82 and all Political Variables were obtained from the 2006 Primary Election data at the SR precinct level in California from the California Statewide Database. Data for all other variables were obtained from the 2000 U.S. Census at the Census block group level for California from Social Explorer. These two datasets were matched using the conversion files provided by the California Statewide Database to match SR precincts in the 2006 primary election to 2000 Census block groups. The precincts examined were restricted to those that matched with block groups using this conversion file. The data were collapsed and aggregated up to the precinct level, summing and averaging variables appropriately (e.g., sum the number of males up from the block group level to the precinct level and average median household income). When averaging variables, the data were weighted based on the population size at the block group level. The data were then restricted so each precinct met the following criteria: at least one registered voter in a precinct, no more total votes cast than total registered voters, and observations available for all independent and dependent variables. With respect to Column 2, data for the Shares of Votes in Favor of Propositions 30 and 38 and all Political Variables were obtained from the 2012 General Election data at the SR precinct level in California from the California Statewide Database. Data for all income variables (e.g., Median Household Income) and education variables (e.g., Educational Attainment for Population Ages 25+ variables) were obtained from the 2010-2014 ACS 5-Year Estimates at the Census block group level for California from Social Explorer. Data for all other variables were obtained from the 2010 U.S. Census at the Census block group level for California from Social Explorer. These datasets were matched using the conversion file provided by the California Statewide Database to match SR precincts in the 2012 general election to 2010 Census block groups. The same guidelines for summing and averaging used for Column 1 were used for Column 2. When averaging 2010 Census variables, data were weighted by the 2010 Census block group population. When averaging 2010-2014 ACS variables, data were weighted by the 2010-2014 ACS block group population. The same restriction guidelines used for Column 1 were used for Column 2. Importantly, this table only displays summary statistics for the 21,100 precincts for which data is available for both Propositions 30 and 38. The two precincts for which data is available for Proposition 38 but not 30 are not summarized.

Note.—Column 1 displays information for all California precincts for which there is data in 2006. Column 2 displays information for all California precincts for which there is data for both Propositions 30 and 38 in 2012. Averages are reported with standard deviations in parentheses. When appropriate, means and standard deviations are weighted based on population size at the Census block group level or the ACS block group level. All monetary variables are adjusted for inflation to 2013 USD. All logs are natural logs. For this table and in corresponding regression tables (i.e., Tables 4 through 10), unless otherwise noted, all logged variables are multiplied by 100. The Share of Votes in Favor of Proposition 82 is defined as the number of votes cast for Proposition 82 divided by the total number of votes cast for or against Proposition 82. It is then multiplied by 100. The Share of Votes in Favor of Propositions 30 and 38 are calculated in a parallel manner. For Column 1, to make the Household Income Shares, the bins are defined as follows: Low-income Households make \$44,999 or less; Middle-income Households make between \$44,999 and \$125,000; and High-income Households make \$125,000 or more. For Column 2, the bins are defined as follows: Low-income Households make \$39,999 or less; Middle-income Households make between \$39,999 and \$125,000; and High-income Households make \$125,000 or more. Percent \$200,000+ is the percentage of households that make \$200,000 or more per year. The Logs of the Ninety/Ten Ratio, the Ninety/Fifty Ratio, and the Fifty/Ten Ratio are each multiplied by 100 for a more straightforward interpretation of the coefficients. Before taking the natural logs of each ratio (i.e., the Ninety/Ten Ratio, the Ninety/Fifty Ratio, and the Fifty/Ten Ratio) the respective ratios were calculated. The Ninety/Ten Ratio was calculated by dividing the implied household income at the ninetieth percentile by the implied household income at the tenth percentile in a precinct. The Ninety/Fifty Ratio and the Fifty/Ten Ratio were calculated in a similar manner, substituting the implied household income at the fiftieth percentile where appropriate. The income levels at the ninetieth, fiftieth, and tenth percentiles were imputed by using bins of household income to determine the bin in which the ninetieth, fiftieth, and tenth percentiles of income were located based on cumulative shares of income across the distribution. Then, to calculate the implied ninetieth, fiftieth, and tenth percentiles of income within the appropriate bin, a uniform distribution within the bin was assumed. The upper bound of the top bin was assumed to be \$250,000. All variables except the Logs of the Ninety/Ten Ratio, the Ninety/Fifty Ratio, the Fifty/Ten Ratio, and Median Household Income; the Ninetieth, Fiftieth, and Tenth Percentiles of Household Income; the Median Household Income; the Diversity Index; the Average Household Size; and the Census Average Total Precinct Population are

reported as percentages out of their respective totals. The Diversity Index is calculated as the probability that a pair of randomly selected individuals will be from different ethnic or racial backgrounds. It is multiplied by 100 to maintain consistency with the other variables that are on a 0 to 100, rather than a 0 to 1, scale. Voter Turnout is defined as the total number of votes cast in a precinct divided by the total number of registered voters in a precinct; it is multiplied by 100 to characterize it in percentage terms. With respect to Votes for Governor or President under the Political Variables category, for Column 1, these variables are calculated as the Percent of Votes for Gubernatorial Candidates. For Column 2, these variables are calculated as the Percent of Votes for Presidential Candidates. In the Race and Ethnicity category, Percent Other for Not Hispanic or Latino is defined as the share of individuals identified as Native Hawaiian and other Pacific Islander alone, American Indian and Alaska Native alone, some other race alone, or two or more races. Percent Other for Hispanic or Latino is defined as the share of individuals identified as Black, Asian, Native Hawaiian and other Pacific Islander alone, American Indian and Alaska Native alone, some other race alone, or two or more races. The population under consideration in the Level of School by Type of School category is the enrolled in school population 3-years-old and older. In the Educational Attainment for Population Ages 25+ category, Does Not Have a College Degree is defined as the share of individuals with no high school diploma, a high school diploma, or some college. Has a College Degree or More is defined as the share of individuals with a bachelor's degree, a master's degree, a professional degree, or a doctorate degree. The Percent of Preschoolers Enrolled in Private School is defined as the share of preschoolers enrolled in private preschool out of the total population of preschoolers enrolled in school.

Table 2
Descriptive Statistics for Legislator Support Models: Full Sample by District

Variable	All Districts	Assembly Districts	Senate Districts
Percentage of Votes in Favor	68.57 (46.65)	73.91 (44.23)	58.33 (50)
Number of Votes in Favor	72	51	21
Democrat	62	42	20
Republican	10	9	1
Number of Votes Against	33	18	15
Democrat	6	3	3
Republican	27	15	12
Income Share by Household			
Percent Low-Income	33.35 (9.334)	33.33 (9.738)	33.40 (8.639)
Percent Middle-Income	46.66 (3.813)	46.67 (3.975)	46.64 (3.537)
Percent High-Income	19.99 (9.192)	20.00 (9.456)	19.97 (8.794)
Log of Ninety/Ten Ratio (Multiplied by 100)	237.2 (15.38)	236.4 (16.01)	238.7 (14.18)
Log of Ninety/Fifty Ratio (Multiplied by 100)	97.16 (9.485)	97.08 (10.38)	97.30 (7.621)
Log of Fifty/Ten Ratio (Multiplied by 100)	140.0 (10.47)	139.3 (10.11)	141.4 (11.16)
Ninetieth Percentile of Household Income (in \$1,000's)	167.8 (35.30)	167.7 (35.68)	168.0 (35.08)
Fiftieth Percentile of Household Income (in \$1,000's)	64.26 (17.12)	64.38 (17.86)	64.04 (15.85)
Tenth Percentile of Household Income (in \$1,000's)	15.74 (3.867)	15.89 (4.167)	15.43 (3.251)
Median Household Income	63875.0 (16918.4)	63981.7 (17670.4)	63670.5 (15614.5)
Log of Median Household Income (Multiplied by 100)	1103.0 (26.49)	1102.9 (27.47)	1103.2 (24.88)
Diversity Index	59.22 (10.30)	58.52 (10.80)	60.57 (9.275)
Political Variables			
Percentage of Democratic Legislators	64.76 (48.00)	65.22 (47.98)	63.89 (48.71)
Number of Democrats	76	45	23
Number of Republicans	42	24	13
Race and Ethnicity			
Not Hispanic or Latino	62.78 (19.66)	63.85 (20.06)	60.74 (18.96)
Percent White	39.80 (19.30)	40.96 (20.11)	37.57 (17.70)
Percent Black	5.825 (5.593)	5.692 (5.514)	6.078 (5.813)
Percent Asian	13.53 (10.09)	13.50 (10.80)	13.59 (8.715)

Table 2 (Continued)

Variable	All Districts	Assembly Districts	Senate Districts
Percent Other	3.635 (1.331)	3.706 (1.369)	3.501 (1.263)
Hispanic or Latino	37.22 (19.66)	36.15 (20.06)	39.26 (18.96)
Percent White	17.14 (9.248)	16.61 (9.266)	18.16 (9.256)
Percent Other	20.08 (10.73)	19.54 (11.10)	21.11 (10.05)
Educational Attainment for Population Ages 25+			
Does Not Have a College Degree	70.09 (13.54)	70.02 (13.84)	70.22 (13.12)
Has a College Degree or More	29.91 (6.391)	29.98 (6.608)	29.78 (6.044)
Level of School by Type of School			
Public School	85.40 (6.052)	85.36 (6.110)	85.46 (6.024)
Private School	14.60 (6.052)	14.64 (6.110)	14.54 (6.024)
Percent of Preschoolers Enrolled in Private School	43.88 (17.35)	44.24 (17.62)	43.19 (17.06)
Additional Demographic Variables			
Age			
Percent Under 5 Years	6.780 (1.186)	6.727 (1.220)	6.880 (1.129)
Percent 5 to 17 Years	17.95 (3.131)	17.81 (3.273)	18.22 (2.863)
Percent 18 to 24 Years	10.48 (1.673)	10.38 (1.819)	10.67 (1.353)
Percent 25 to 44 Years	28.47 (3.279)	28.46 (3.589)	28.50 (2.631)
Percent 45 to 64 Years	24.90 (2.912)	25.08 (3.051)	24.57 (2.635)
Percent 65 Years and Over	11.42 (2.326)	11.55 (2.419)	11.16 (2.145)
Percent Male	49.72 (1.108)	49.73 (1.184)	49.70 (0.960)
Census Average Total District Population	626511.5 (223036.1)	466241.6 (5163.1)	933695.3 (8084.9)
ACS Average Total District Population	625595.4 (230969.6)	465578.9 (46637.8)	932293.5 (84026.7)
Total Number of Districts	105	69	36

Source.—Data for the Percentage of Votes in Favor and all Political Variables were obtained from the Unofficial Ballot Role Call vote information for SB 1381 for the California Senate and California Assembly provided by the Legislative Counsel of California and from data provided by James Snyder. Snyder's data are based on election results. However, the legislator representing a district at the start of the term does not necessarily match the legislator representing a district when votes were cast for/against SB 1381. Thus, the data were hand-cleaned, using a variety of supplementary sources, to ensure accuracy. Data

for all income variables (e.g., Median Household Income) and education variables (e.g., Educational Attainment for Population Ages 25+ variables) were obtained from the 2008-2012 ACS 5-Year Estimates data at the state legislative district level (Upper and Lower Chamber) for California obtained from Social Explorer. Data for all other variables (e.g., Race and Ethnicity Variables and Additional Demographic Variables) were obtained from the 2010 U.S. Census at the state legislative district level (Upper and Lower Chamber) for California obtained from Social Explorer. Data on the Upper Chamber applies to the State Senate. Data on the Lower Chamber applies to the State Assembly.

Note.—Column 1 displays information for all districts (Senate and Assembly) combined. Column 2 displays information for State Assembly districts only. Column 3 displays information for State Senate districts only. Averages are reported with standard deviations in parentheses. All monetary variables are adjusted for inflation to 2013 USD. All logs are natural logs. For this table and in corresponding regression tables (i.e., Tables 11 through 13) unless otherwise noted, all logged variables are multiplied by 100. When percentages for variables are calculated (e.g., the Percent Under 5 Years Old), the relevant source population is used. For instance, data for Age variables are obtained from the 2010 U.S. Census, so the Census Average Total District Population—and not the ACS Average Total District Population—is used to calculate the Percent Under 5 Years. To make the Household Income Shares, the bins are defined as follows: Low-income Households make \$39,999 or less; Middle-income Households make between \$39,999 and \$125,000; and High-income Households make \$125,000 or more. The Logs of the Ninety/Ten Ratio, the Ninety/Fifty Ratio, and the Fifty/Ten Ratio are each multiplied by 100 for a more straightforward interpretation of the coefficients. Before taking the natural logs of each ratio (i.e., the Ninety/Ten Ratio, the Ninety/Fifty Ratio, and the Fifty/Ten Ratio) the respective ratios were calculated. The Ninety/Ten Ratio was calculated by dividing the implied household income at the ninetieth percentile by the implied household income at the tenth percentile in a precinct. The Ninety/Fifty Ratio and the Fifty/Ten Ratio were calculated in a similar manner, substituting the implied household income at the fiftieth percentile where appropriate. The income levels at the ninetieth, fiftieth, and tenth percentiles were imputed by using bins of household income to determine the bin in which the ninetieth, fiftieth, and tenth percentiles of income were located based on cumulative shares of income across the distribution. Then, to calculate the implied ninetieth, fiftieth, and tenth percentiles of income within the appropriate bin, a uniform distribution within the bin was assumed. The upper bound of the top bin was assumed to be \$250,000. All variables except the Number of Votes in Favor; the Number of Votes Against; the Logs of the Ninety/Ten Ratio, the Ninety/Fifty Ratio, the Fifty/Ten Ratio, and Median Household Income; the Ninetieth, Fiftieth, and Tenth Percentiles of Household Income; the Median Household Income; the Diversity Index; the Number of Democrats; the Number of Republicans; the Census Average Total District Population; and the ACS Average Total District Population are reported as percentages out of their respective totals. The Diversity Index is calculated as the probability that a pair of randomly selected individuals will be from different ethnic or racial backgrounds. It is multiplied by 100 to maintain consistency with the other variables that are on a 0 to 100, rather than a 0 to 1, scale. In the Race and Ethnicity category, Percent Other for Not Hispanic or Latino is defined as the share of individuals identified as Native Hawaiian and other Pacific Islander alone, American Indian and Alaska Native alone, some other race alone, or two or more races. Percent Other for Hispanic or Latino is defined as the share of individuals identified as Black, Asian, Native Hawaiian and other Pacific Islander alone, American Indian and Alaska Native alone, some other race alone, or two or more races. The population under consideration in the Level of School by Type of School category is the enrolled in school population 3-years-old and older. In the Educational Attainment for Population Ages 25+ category, Does Not Have a College Degree is defined as the share of individuals with no high school diploma, a high school diploma, or some college. Has a College Degree or More is defined as the share of individuals with a bachelor's degree, a master's degree, a professional degree, or a doctorate degree. The Percent of Preschoolers Enrolled in Private School is defined as the share of preschoolers enrolled in private preschool out of the total population of preschoolers enrolled in school. The Census Average Total District Population is the average district population based on Census data. The ACS Average Total District Population is the average district population based on ACS data.

Table 3
Descriptive Statistics for State Models: Full Sample by State

	States w/ Programs	States w/out Programs
Funding per Child Enrolled in State Pre-K	4494.8 (2361.5)	0 (0)
Percentage of Four-year-olds Enrolled in State Pre-K	29.11 (24.10)	0 (0)
Quality Score	7.126 (2.061)	0 (0)
Z-score of Quality Score	0.415 (0.610)	-1.694 (0)
Income Share by Household		
Percent Low-income	34.53 (5.836)	33.72 (6.527)
Percent Middle-income	43.70 (2.348)	46.31 (2.321)
Percent High-income	21.76 (6.039)	19.96 (5.821)
Gini Coefficient	0.605 (0.0366)	0.597 (0.0212)
Median Household Income	52445.4 (8850.5)	52573.8 (8703.7)
Log of Median Household Income (Multiplied by 100)	1085.4 (16.32)	1085.7 (16.92)
Diversity Index	44.95 (15.02)	33.71 (17.72)
Political Variables		
Democratic Upper Chamber	49.73 (16.50)	34.11 (24.54)
Democratic Lower Chamber	49.65 (14.18)	35.25 (21.14)
Democratic Governor	0.449 (0.497)	0.300 (0.483)
Race and Ethnicity		
Not Hispanic or Latino	87.98 (10.99)	93.73 (4.163)
Percent White	69.38 (13.89)	76.32 (20.98)
Percent Black	11.46 (8.845)	5.400 (11.50)
Percent Asian	3.420 (2.577)	4.846 (11.40)
Percent Other	3.726 (3.854)	7.163 (8.226)
Hispanic or Latino	12.02 (10.99)	6.268 (4.163)
Percent White	7.648 (7.832)	3.636 (2.900)
Percent Other	4.367 (3.596)	2.633 (2.108)

Table 3 (Continued)

	States w/ Programs	States w/out Programs
Educational Attainment for Population Ages 25+		
Does Not Have a College Degree	71.82 (5.135)	73.41 (3.784)
Has a College Degree or More	28.18 (5.135)	26.59 (3.784)
Level of School by Type of School		
Public School	83.67 (4.331)	85.30 (4.369)
Private School	16.33 (4.331)	14.70 (4.369)
Percent of Preschoolers Enrolled in Private School	41.81 (8.726)	45.68 (12.19)
Additional Demographic Variables		
Age		
Percent Under 5 Years	6.299 (0.612)	6.858 (1.074)
Percent 5 to 17 Years	17.02 (0.974)	17.55 (2.010)
Percent 18 to 24 Years	9.929 (0.531)	10.39 (0.921)
Percent 25 to 44 Years	25.98 (1.295)	25.39 (1.289)
Percent 45 to 64 Years	27.17 (1.411)	26.44 (2.899)
Percent 65 Years and Over	13.60 (1.685)	13.38 (1.718)
Percent Male	49.20 (0.659)	49.89 (0.673)
Average Total State Population	7422211.9 (7378874.7)	1966501.6 (1801642.9)
Total Number of States	39	10

Source.—Data for Funding per Child Enrolled in State Pre-K, Percentage of Four-year-olds Enrolled in State Pre-K, Quality Score, and Z-score of Quality Score were obtained from data from the NIEER provided by Michelle Horowitz. Data for the Gini Coefficient were obtained from U.S. State-Level Income Inequality data from Mark Frank. Data for all Political Variables were obtained from Klarner Politics data provided by Carl Klarner. Data for all other variables were obtained from the 2000 U.S. Census data at the state level obtained from Social Explorer and the ACS 1-Year Estimates data for the years 2006 through 2011 obtained from Social Explorer. Data for the years 2002 through 2005 had to be interpolated using the 2000 Census and 2006 ACS data. For states that had multiple state pre-K programs, a weighted average of the quality benchmark score for each program often needed to be generated. To do so, an Excel calculator provided by Michelle Horowitz at the NIEER was used. For more information, please see Footnote 16. Nebraska is not included in this analysis because it does not have all of the necessary political variables. Thus, information on Nebraska is not included in this table.

Note.—Averages are reported with standard deviations in parentheses. Data used for Funding per Child Enrolled in State Pre-K, Percentage of Four-year-olds Enrolled in State Pre-K, Quality Score, and Z-score of Quality Score are from the years 2003-2014. Data used for all other variables are from the years 2000-2011 because variables are lagged by three years in the regression analysis. All monetary variables are adjusted for inflation to 2013 USD. All logs are natural logs. For this table and in corresponding regression tables (i.e., Tables 14 through 16), unless otherwise noted, all logged variables are multiplied by 100. The

Z-score of Quality Score is the Z-score of the State Pre-K Quality Standards Benchmarks from the NIEER. The thresholds for Household Income Shares change yearly based on data on the national median household income provided by the Federal Reserve Bank of St. Louis. These values were converted to 2013 USD using the CPI provided by Social Explorer. The thresholds are defined using the definition put forth by Pew (2015) that a middle-income household makes between two-thirds and two times median household income. All variables except the Funding per Child Enrolled in State Pre-K, the Percentage of Four-year-olds Enrolled in State Pre-K, the Quality Score, the Z-score of Quality Score, the Gini Coefficient, the Median Household Income, the Log of Median Household Income, the Diversity Index, Democratic Governor, and the Average Total State Population are reported as percentages out of their respective totals. The Diversity Index is calculated as the probability that a pair of randomly selected individuals will be from different ethnic or racial backgrounds. It is multiplied by 100 to maintain consistency with the other variables that are on a 0 to 100, rather than a 0 to 1, scale. Democratic Upper Chamber is the percentage of seats in the upper chamber that are held by Democrats. Democratic Lower Chamber is the same for the lower chamber. Democratic Governor is a dummy variable that equals 1 if the governor is a Democrat and 0 otherwise. In the Race and Ethnicity category, Percent Other for Not Hispanic or Latino is defined as the share of individuals identified as Native Hawaiian and other Pacific Islander alone, American Indian and Alaska Native alone, some other race alone, or two or more races. Percent Other for Hispanic or Latino is defined as the share of individuals identified as Black, Asian, Native Hawaiian and other Pacific Islander alone, American Indian and Alaska Native alone, some other race alone, or two or more races. The population under consideration in the Level of School by Type of School category is the enrolled in school population 3-years-old and older. In the Educational Attainment for Population Ages 25+ category, Does Not Have a College Degree is defined as the share of individuals with no high school diploma, a high school diploma, or some college. Has a College Degree or More is defined as the share of individuals with a bachelor's degree, a master's degree, a professional degree, or a doctorate degree. The Percent of Preschoolers Enrolled in Private School is defined as the share of preschoolers enrolled in private preschool out of the total population of preschoolers enrolled in school.

Table 4
 Relationship between Precinct Income Shares and Proportion of Votes for Proposition 82

Dependent Variable: Share of Voters in Favor of Proposition 82					
Variables	Model (1)	Model (1)	Model (1)	Model (1)	Model (1)
Percent Low-income	0.237*** (0.0223)	0.265*** (0.0256)			0.235*** (0.0193)
Percent Middle-income	0.0721*** (0.0191)	0.110*** (0.0359)			0.0606*** (0.0201)
Percent \$200,000+			-0.158*** (0.0261)		
Percent Votes for Gov. (D)	0.482*** (0.0171)	0.478*** (0.0174)	0.492*** (0.0217)	0.481*** (0.0207)	0.480*** (0.0175)
Percent Black (NH)	0.0705* (0.0418)	0.0948** (0.0416)	0.0972** (0.0469)	0.108** (0.0434)	0.0667 (0.0402)
Percent Asian (NH)	0.0676** (0.0271)	0.0605** (0.0286)	0.0889*** (0.0269)	0.0905*** (0.0236)	0.0695** (0.0284)
Percent Other (NH)	0.208** (0.0849)	0.257*** (0.0864)	0.344*** (0.0859)	0.449*** (0.0843)	0.185** (0.0839)
Percent White (H)	-0.0649 (0.0622)	-0.0265 (0.0575)	-0.0924 (0.0818)	-0.0349 (0.0784)	-0.0421 (0.0626)
Percent Other (H)	0.0594 (0.0455)	0.0593 (0.0442)	0.233*** (0.0668)	0.226*** (0.0633)	0.0359 (0.0448)
Percent Ages 5 to 17	-0.259* (0.154)	-0.350** (0.147)	-0.283* (0.167)	-0.0187 (0.147)	-0.275* (0.152)
Percent Ages 18 to 24	0.173 (0.122)	0.101 (0.124)	0.107 (0.135)	0.312** (0.119)	0.161 (0.126)
Percent Ages 25 to 44	0.313** (0.155)	0.244 (0.155)	0.0429 (0.171)	0.282* (0.142)	0.318** (0.153)
Percent Ages 45 to 64	0.224* (0.121)	0.185 (0.120)	0.0162 (0.135)	0.133 (0.121)	0.251** (0.122)
Percent Ages 65+	0.0865 (0.134)	0.0543 (0.133)	0.000105 (0.148)	0.206 (0.126)	0.0313 (0.131)
Percent Male	-0.0754 (0.0641)	-0.0297 (0.0564)	0.0826 (0.0754)	0.0261 (0.0739)	-0.101 (0.0643)
Average Household Size	5.294*** (0.738)	5.765*** (0.721)	1.360* (0.729)	0.670 (0.795)	5.214*** (0.695)
Percent College Degree Plus		0.0985*** (0.0242)			
Percent in Public School		0.119*** (0.0246)			
Percent Private Pre-K				-0.046*** (0.00762)	-0.018*** (0.00635)
Constant	-23.95* (14.32)	-37.52*** (13.61)	2.863 (15.23)	-11.14 (13.32)	-20.34 (13.63)
Observations	21,007	20,996	21,007	20,571	20,571
R-squared	0.691	0.696	0.679	0.682	0.697

Source.—Source information for data in this analysis provided below Table 1 under Source for Column 1.
 Note.—Columns 1 through 5 report results for specifications of Model (1). The unit of observation is the SR precinct in California for the 2006 primary election. The dependent variable of interest is the share of votes in favor of Proposition 82. To avoid perfect multicollinearity, one variable in each category is always left out of the regression (e.g., for the Race and Ethnicity variables, the variable representing the Percent

White who are not Hispanic or Latino is left out of the regression). Thus, the percentage of high-income households is left out of the regression as well. Percent Votes for Gov. (D) is the percentage of votes for a Democratic candidate for governor. NH stands for not Hispanic/Latino. H stands for Hispanic/Latino. More information provided below Table 1 under Note. Robust standard errors clustered by county in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 5
Relationship between Precinct Income Inequality and Proportion of Votes for Proposition 82

Dependent Variable: Share of Voters in Favor of Proposition 82				
Variables	Model (2)	Model (2)	Model (3)	Model (3)
Log of Ninety/Ten Ratio	0.0320*** (0.00523)	-0.00158 (0.00675)		
Log of Ninety/Fifty Ratio			0.0810*** (0.0109)	-0.0227 (0.0166)
Log of Fifty/Ten Ratio			0.00523 (0.00624)	0.00502 (0.00610)
Log of Median Income		-0.0864*** (0.0100)		-0.0946*** (0.0127)
Percent Votes for Gov. (D)	0.477*** (0.0191)	0.486*** (0.0179)	0.482*** (0.0195)	0.485*** (0.0181)
Percent Black (NH)	0.0997** (0.0409)	0.0675 (0.0421)	0.0970** (0.0415)	0.0654 (0.0423)
Percent Asian (NH)	0.0786*** (0.0223)	0.0678** (0.0280)	0.0806*** (0.0237)	0.0661** (0.0277)
Percent Other (NH)	0.495*** (0.0747)	0.183** (0.0865)	0.422*** (0.0744)	0.180** (0.0869)
Percent White (H)	-0.0448 (0.0723)	-0.0757 (0.0679)	-0.0643 (0.0714)	-0.0716 (0.0666)
Percent Other (H)	0.215*** (0.0729)	0.0767 (0.0526)	0.196*** (0.0700)	0.0706 (0.0500)
Percent Ages 5 to 17	-0.0841 (0.149)	-0.311** (0.141)	-0.166 (0.145)	-0.302** (0.140)
Percent Ages 18 to 24	0.226** (0.109)	0.125 (0.110)	0.153 (0.106)	0.142 (0.108)
Percent Ages 25 to 44	0.216 (0.135)	0.240* (0.135)	0.149 (0.136)	0.267** (0.132)
Percent Ages 45 to 64	0.0451 (0.114)	0.186* (0.110)	0.0198 (0.113)	0.209* (0.106)
Percent Ages 65+	0.150 (0.117)	0.0413 (0.116)	0.0669 (0.117)	0.0614 (0.115)
Percent Male	0.0578 (0.0786)	-0.0721 (0.0615)	0.0444 (0.0768)	-0.0796 (0.0595)
Average Household Size	1.950** (0.903)	4.940*** (0.646)	2.326*** (0.855)	5.087*** (0.676)
Constant	-18.24 (13.34)	89.15*** (16.05)	-12.94 (13.13)	97.45*** (18.14)
Observations	21,007	21,007	21,007	21,007
R-squared	0.677	0.691	0.680	0.691

Source.—Source information for data in this analysis provided below Table 1 under Source for Column 1. Note.—Columns 1 and 3 report results for the base model regression of Models (2) and (3), respectively. Columns 2 and 4 report results for the additional specification of Models (2) and (3), respectively, that controls for the natural log of median household income multiplied by 100. The unit of observation is the SR precinct in California for the 2006 primary election. The dependent variable of interest is the share of votes in favor of Proposition 82. All logged variables multiplied by 100. More information provided below Tables 1 and 4 under Note. Robust standard errors clustered by county in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 6
 Relationship between Precinct Ethnic/Racial Diversity and Proportion of Votes for Proposition 82
 Dependent Variable: Share of Voters in Favor of Proposition 82

Variables	Model (4)	Model (5)
Diversity Index	-0.114*** (0.0181)	-0.129* (0.0661)
Diversity Index Interaction Term		-0.000156 (0.000762)
Percent Low-income and Middle-income		0.163*** (0.0375)
Log of Median Income	-0.0748*** (0.00733)	
Percent Votes for Gov. (D)	0.471*** (0.0179)	0.473*** (0.0192)
Percent Black (NH)	0.123*** (0.0460)	0.146*** (0.0499)
Percent Asian (NH)	0.160*** (0.0307)	0.199*** (0.0326)
Percent Other (NH)	0.512*** (0.0875)	0.591*** (0.0884)
Percent White (H)	-0.0103 (0.0674)	-0.0201 (0.0793)
Percent Other (H)	0.121** (0.0496)	0.183*** (0.0572)
Percent Ages 5 to 17	-0.195 (0.129)	-0.290** (0.145)
Percent Ages 18 to 24	0.156 (0.104)	0.0553 (0.121)
Percent Ages 25 to 44	0.258* (0.130)	0.0617 (0.152)
Percent Ages 45 to 64	0.118 (0.114)	-0.0389 (0.128)
Percent Ages 65+	0.0453 (0.116)	-0.0883 (0.138)
Percent Male	-0.0210 (0.0687)	0.0772 (0.0799)
Average Household Size	3.156*** (0.686)	1.347 (0.820)
Constant	79.31*** (13.19)	-2.772 (14.31)
Observations	21,007	21,007
R-squared	0.696	0.693

Source.—Source information for data in this analysis provided below Table 1 under Source for Column 1.
 Note.—Column 1 reports results for Model (4). Column 2 reports results for Model (5). The unit of observation is the SR precinct in California for the 2006 primary election. The dependent variable of interest is the share of votes in favor of Proposition 82. Percent Low-income and Middle-income is the percentage of low- and middle-income households. The Diversity Index Interaction Term is created by multiplying Diversity Index and Percent Low-income and Middle-income together. More information provided below Tables 1 and 4 under Note. Robust standard errors clustered by county in parentheses.
 ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 7
Relationship between Precinct Income Shares and Proportion of Votes for Propositions 30 and 38

Variables	Model (1) Prop. 30	Model (1) Prop. 30	Model (1) Prop. 30	Model (1) Prop. 38	Model (1) Prop. 38	Model (1) Prop. 38
% Low	0.0302 (0.0223)		0.0288 (0.0196)	0.152*** (0.0103)		0.152*** (0.0109)
% Middle	0.0564*** (0.0191)		0.0608*** (0.0196)	0.0454*** (0.0113)		0.0456*** (0.0128)
% Pres. (D)	0.762*** (0.0185)	0.764*** (0.0179)	0.773*** (0.0187)	0.312*** (0.0133)	0.313*** (0.0160)	0.317*** (0.0154)
% Black (NH)	-0.079*** (0.0273)	-0.083*** (0.0253)	-0.092*** (0.0259)	-0.052** (0.0226)	-0.029 (0.0250)	-0.061*** (0.0207)
% Asian (NH)	0.00763 (0.0158)	-0.00217 (0.0141)	0.00202 (0.0140)	0.0538*** (0.00812)	0.0559*** (0.0126)	0.0544*** (0.00799)
% Other (NH)	0.0554 (0.0933)	0.0880 (0.101)	0.0391 (0.0974)	0.105 (0.0671)	0.199*** (0.0664)	0.114 (0.0723)
% White (H)	-0.101*** (0.0227)	-0.0974*** (0.0216)	-0.107*** (0.0218)	0.0579*** (0.0177)	0.0586*** (0.0191)	0.0556** (0.0211)
% Other (H)	-0.00869 (0.0223)	0.0107 (0.0194)	-0.0107 (0.0221)	0.0544* (0.0281)	0.167*** (0.0323)	0.0471 (0.0295)
% Ages 5-17	-0.0219 (0.115)	-0.0554 (0.135)	-0.0294 (0.130)	0.0213 (0.138)	-0.250 (0.159)	0.0249 (0.138)
% Ages 18-24	0.146 (0.0953)	0.149 (0.110)	0.129 (0.108)	0.0471 (0.104)	-0.117 (0.125)	0.0426 (0.106)
% Ages 25-44	0.0454 (0.111)	0.0482 (0.127)	0.0203 (0.124)	0.0272 (0.129)	-0.262* (0.151)	0.0114 (0.135)
% Ages 45-64	-0.0527 (0.0926)	-0.0487 (0.109)	-0.0588 (0.105)	-0.109 (0.115)	-0.406*** (0.128)	-0.131 (0.116)
% Ages 65+	-0.0412 (0.0923)	-0.0461 (0.0973)	-0.0592 (0.0978)	0.00941 (0.110)	-0.173 (0.131)	-0.00308 (0.113)
% Male	-0.0311 (0.0601)	-0.0661 (0.0671)	-0.0348 (0.0664)	0.135** (0.0568)	0.183*** (0.0589)	0.118 (0.0710)
Avg. HH Size	-0.602** (0.299)	-0.645** (0.273)	-0.752** (0.330)	0.844** (0.349)	-0.794 (0.489)	0.774* (0.461)
% Priv. Pre-K		-0.00694* (0.00349)	-0.00382 (0.00280)		-0.0176*** (0.00248)	-0.00309 (0.00228)
Constant	10.21 (9.406)	15.98 (9.714)	11.98 (10.38)	-6.982 (11.15)	25.29* (13.30)	-4.775 (11.65)
Observations	21,100	18,997	18,997	21,102	18,999	18,999
R-squared	0.800	0.821	0.822	0.569	0.602	0.618

Source.—Source information for data in this analysis provided below Table 1 under Source for Column 2.
 Note.—Columns 1 and 4 report results for the base model regression of Model (1). Columns 2, 3, 5, and 6 report results for an additional specification of Model (1). The unit of observation is the SR precinct in California for the 2012 general election. The dependent variable of interest in Columns 1 through 3 is the share of votes in favor of Proposition 30. In Columns 4 through 6, it is the share of votes in favor of Proposition 38. % represents percent. Percent Low is the percentage of low-income households. Percent Middle is the percentage of middle-income households. Percent Pres. (D) is the percentage of votes for a Democratic candidate for president. For the race and ethnicity variables (e.g., Percent Black), NH stands for not Hispanic or Latino and H stands for Hispanic or Latino. More information provided below Table 1 under Note. Robust standard errors clustered by county in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 8
Relationship between Precinct Income Inequality and Proportion of Votes for Proposition 30
Dependent Variable: Share of Voters in Favor of Proposition 30

Variables	Model (2)	Model (2)	Model (3)	Model (3)
Log of Ninety/Ten Ratio	0.00288 (0.00375)	0.00104 (0.00331)		
Log of Ninety/Fifty Ratio			0.0186** (0.00761)	0.0180** (0.00774)
Log of Fifty/Ten Ratio			-0.00389 (0.00311)	-0.00382 (0.00319)
Log of Median Income		-0.00846 (0.00735)		-0.000598 (0.00881)
Percent Votes for Pres. (D)	0.754*** (0.0175)	0.756*** (0.0184)	0.757*** (0.0180)	0.757*** (0.0182)
Percent Black (NH)	-0.0703** (0.0266)	-0.0767*** (0.0270)	-0.0752*** (0.0257)	-0.0755*** (0.0270)
Percent Asian (NH)	0.00309 (0.0159)	0.00311 (0.0156)	0.00242 (0.0154)	0.00244 (0.0154)
Percent Other (NH)	0.108 (0.0975)	0.0871 (0.0946)	0.0985 (0.0963)	0.0973 (0.0948)
Percent White (H)	-0.0902*** (0.0219)	-0.0921*** (0.0224)	-0.0923*** (0.0225)	-0.0923*** (0.0224)
Percent Other (H)	0.0154 (0.0186)	-0.00589 (0.0207)	-0.00163 (0.0159)	-0.00265 (0.0212)
Percent Ages 5 to 17	-0.0616 (0.122)	-0.00954 (0.117)	-0.0212 (0.120)	-0.0187 (0.113)
Percent Ages 18 to 24	0.144 (0.101)	0.174* (0.0966)	0.158 (0.101)	0.160* (0.0912)
Percent Ages 25 to 44	0.0500 (0.123)	0.0985 (0.110)	0.0754 (0.122)	0.0781 (0.103)
Percent Ages 45 to 64	-0.0602 (0.0995)	-0.0154 (0.0923)	-0.0390 (0.0991)	-0.0365 (0.0865)
Percent Ages 65+	-0.0430 (0.0960)	-0.0101 (0.0925)	-0.0278 (0.0958)	-0.0259 (0.0880)
Percent Male	-0.0522 (0.0659)	-0.0656 (0.0590)	-0.0610 (0.0653)	-0.0616 (0.0583)
Average Household Size	-0.483 (0.298)	-0.291 (0.343)	-0.335 (0.307)	-0.326 (0.346)
Constant	14.35 (8.819)	20.50* (11.16)	11.83 (9.079)	12.33 (12.75)
Observations	21,100	21,100	21,100	21,100
R-squared	0.799	0.800	0.800	0.800

Source.—Source information for data in this analysis provided below Table 1 under Source for Column 2. Note.—Columns 1 and 3 report results for the base model regression of Models (2) and (3), respectively. Columns 2 and 4 report results for the additional specification of Models (2) and (3), respectively, that controls for the natural log of median household income multiplied by 100. The unit of observation is the SR precinct in California for the 2012 general election. The dependent variable of interest is the share of votes in favor of Proposition 30. All logged variables multiplied by 100. More information provided below Tables 1 and 7 under Note. Robust standard errors clustered by county in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 9
Relationship between Precinct Income Inequality and Proportion of Votes for Proposition 38
Dependent Variable: Share of Voters in Favor of Proposition 38

Variables	Model (2)	Model (2)	Model (3)	Model (3)
Log of Ninety/Ten Ratio	0.00751** (0.00287)	-0.00334* (0.00186)		
Log of Ninety/Fifty Ratio			0.0317*** (0.00473)	-0.0269*** (0.00507)
Log of Fifty/Ten Ratio			-0.00293 (0.00238)	0.00343 (0.00210)
Log of Median Income		-0.0498*** (0.00341)		-0.0607*** (0.00451)
Percent Votes for Pres. (D)	0.307*** (0.0146)	0.316*** (0.0127)	0.311*** (0.0140)	0.315*** (0.0125)
Percent Black (NH)	-0.0165 (0.0273)	-0.0538** (0.0221)	-0.0240 (0.0258)	-0.0555** (0.0223)
Percent Asian (NH)	0.0537*** (0.0116)	0.0538*** (0.00839)	0.0527*** (0.0105)	0.0548*** (0.00815)
Percent Other (NH)	0.222*** (0.0580)	0.0978 (0.0636)	0.207*** (0.0586)	0.0836 (0.0635)
Percent White (H)	0.0666*** (0.0164)	0.0553*** (0.0171)	0.0635*** (0.0165)	0.0556*** (0.0170)
Percent Other (H)	0.188*** (0.0324)	0.0622** (0.0274)	0.161*** (0.0305)	0.0577** (0.0268)
Percent Ages 5 to 17	-0.296* (0.166)	0.0106 (0.139)	-0.234 (0.165)	0.0233 (0.139)
Percent Ages 18 to 24	-0.154 (0.128)	0.0229 (0.102)	-0.131 (0.127)	0.0419 (0.101)
Percent Ages 25 to 44	-0.287* (0.154)	-0.00154 (0.125)	-0.248 (0.152)	0.0268 (0.125)
Percent Ages 45 to 64	-0.405*** (0.132)	-0.141 (0.110)	-0.372*** (0.131)	-0.112 (0.110)
Percent Ages 65+	-0.195 (0.135)	-0.00127 (0.110)	-0.171 (0.133)	0.0206 (0.109)
Percent Male	0.225*** (0.0491)	0.146*** (0.0495)	0.211*** (0.0484)	0.141*** (0.0502)
Average Household Size	-0.547 (0.398)	0.582 (0.357)	-0.318 (0.393)	0.629* (0.354)
Constant	21.94 (13.55)	58.09*** (10.69)	18.04 (13.56)	69.44*** (10.07)
Observations	21,102	21,102	21,102	21,102
R-squared	0.552	0.568	0.555	0.569

Source.—Source information for data in this analysis provided below Table 1 under Source for Column 2. Note.—Columns 1 and 3 report results for the base model regression of Models (2) and (3), respectively. Columns 2 and 4 report results for the additional specification of Models (2) and (3), respectively, that controls for the natural log of median household income multiplied by 100. The unit of observation is the SR precinct in California for the 2012 general election. The dependent variable of interest is the share of votes in favor of Proposition 38. All logged variables multiplied by 100. More information provided below Tables 1 and 7 under Note. Robust standard errors clustered by county in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 10
Relationship between Precinct Ethnic/Racial Diversity and Proportion of Votes for Propositions
30 and 38

Variables	Model (4) Proposition 30	Model (4) Proposition 38
Diversity Index	0.00866 (0.0167)	-0.0115 (0.00896)
Log of Median Income	-0.00926 (0.00762)	-0.0481*** (0.00345)
Percent Votes for Pres. (D)	0.758*** (0.0201)	0.314*** (0.0130)
Percent Black (NH)	-0.0813*** (0.0233)	-0.0476** (0.0220)
Percent Asian (NH)	-0.00148 (0.0147)	0.0598*** (0.0106)
Percent Other (NH)	0.0674 (0.0981)	0.125* (0.0714)
Percent White (H)	-0.0930*** (0.0238)	0.0569*** (0.0174)
Percent Other (H)	-0.00920 (0.0212)	0.0666** (0.0285)
Percent Ages 5 to 17	-0.0109 (0.117)	0.0115 (0.139)
Percent Ages 18 to 24	0.172* (0.0972)	0.0209 (0.103)
Percent Ages 25 to 44	0.0964 (0.111)	-0.00128 (0.127)
Percent Ages 45 to 64	-0.0132 (0.0941)	-0.146 (0.111)
Percent Ages 65+	-0.00807 (0.0934)	-0.00614 (0.110)
Percent Male	-0.0644 (0.0587)	0.145*** (0.0497)
Average Household Size	-0.251 (0.379)	0.555 (0.349)
Constant	21.12* (11.01)	56.25*** (10.38)
Observations	21,100	21,102
R-squared	0.800	0.568

Source.—Source information for data in this analysis provided below Table 1 under Source for Column 2.

Note.—Columns 1 and 2 report results for Model (4). The unit of observation is the SR precinct in California for the 2012 general election. The dependent variable of interest in Column 1 is the share of votes in favor of Proposition 30. The dependent variable of interest in Column 2 is the share of votes in favor of Proposition 38. All logged variables multiplied by 100. More information provided below Tables 1 and 7 under Note. Robust standard errors clustered by county in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 11
Marginal Effects of District Income Shares on the Probability that a Legislator Votes in Favor of
SB 1381

Dependent Variable: Binary Variable that Equals 1 if Legislator Voted in Favor and 0 if Voted Against					
Variables	Model (6)	Model (6)	Model (6)	Model (6)	Model (6)
Percent Low-income	0.0465 (0.336)	0.0231 (0.351)	-0.0382 (0.337)	0.0504 (0.302)	-0.0626 (0.290)
Percent Middle-income	0.586 (1.038)	0.741 (1.174)	0.467 (1.073)	1.145 (1.083)	1.222 (1.137)
Percent Votes for Prop. 82		0.0957 (0.371)			
Education Committee			18.59** (7.801)		25.84*** (8.811)
Appropriations Committee				-19.92*** (7.015)	-23.58*** (6.484)
Democrat	33.19*** (9.235)	33.03*** (9.474)	29.17*** (8.504)	28.76*** (9.086)	25.60*** (8.042)
Percent Black (NH)	1.975 (1.568)	1.953 (1.544)	1.768 (1.484)	1.143 (1.495)	0.633 (1.461)
Percent Asian (NH)	-1.537*** (0.483)	-1.559*** (0.507)	-1.633*** (0.488)	-1.208** (0.500)	-1.444** (0.564)
Percent Other (NH)	-6.986 (5.958)	-7.164 (6.053)	-4.693 (5.693)	-4.649 (5.272)	-2.269 (5.510)
Percent White (H)	0.983 (2.124)	0.968 (2.131)	-0.482 (1.641)	0.976 (2.374)	-1.596 (1.763)
Percent Other (H)	0.268 (2.168)	0.274 (2.182)	1.751 (2.078)	0.425 (2.510)	2.901 (2.700)
Percent Ages 5 to 17	-2.214 (12.76)	-2.971 (13.14)	3.568 (12.44)	-8.431 (12.33)	-1.715 (13.15)
Percent Ages 18 to 24	-2.404 (10.16)	-2.972 (10.39)	2.060 (9.824)	-8.026 (9.269)	-2.941 (10.04)
Percent Ages 25 to 44	6.945 (10.80)	6.337 (11.03)	12.47 (10.85)	0.864 (11.20)	7.780 (12.94)
Percent Ages 45 to 64	2.442 (8.487)	1.944 (8.770)	6.829 (8.749)	-2.761 (9.075)	2.585 (10.81)
Percent Ages 65+	2.385 (10.58)	1.776 (10.55)	7.623 (10.32)	-4.221 (10.63)	1.710 (11.87)
Percent Male	-0.630 (4.435)	-0.764 (4.302)	-1.092 (4.013)	-2.095 (4.876)	-3.853 (5.007)
Observations	105	105	105	105	105

Source.—Source information for data in this analysis provided below Table 2 under Source.

Note.—Reports marginal effects and standard errors multiplied by 100 for logit regressions. Columns 1 through 5 report results for Model (6). The unit of observation is the California legislative district (Upper or Lower Chamber) in 2010. The dependent variable is an indicator for whether the legislator voted for SB 1381. Percent Votes for Prop. 82 is the share of votes for Proposition 82. Education Committee is a dummy variable that equals 1 if the legislator is on the Education Committee. Appropriations Committee is a dummy variable that does the same for the Appropriations Committee. Democrat is a dummy variable that equals 1 if the legislator is a Democrat. NH stands for not Hispanic/Latino. H stands for Hispanic/Latino. More information provided below Table 2 under Note. Robust standard errors calculated using the delta method in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 12
Marginal Effects of District Income Inequality on the Probability that a Legislator Votes in Favor
of SB 1381

Dependent Variable: Binary Variable that Equals 1 if Legislator Voted in Favor and 0 if Voted Against				
Variables	Model (7)	Model (7)	Model (8)	Model (8)
Log of Ninety/Ten Ratio	-0.262 (0.219)	-0.262 (0.219)		
Log of Ninety/Fifty Ratio			-0.0668 (0.425)	0.598 (0.692)
Log of Fifty/Ten Ratio			-0.378 (0.288)	-0.774* (0.470)
Log of Median Income		-0.00406 (0.109)		0.261 (0.222)
Democrat	37.41*** (9.363)	37.39*** (9.461)	36.60*** (9.611)	35.81*** (8.559)
Percent Black (NH)	2.194 (1.613)	2.205 (1.622)	2.391 (1.568)	2.428 (1.538)
Percent Asian (NH)	-1.658*** (0.527)	-1.658*** (0.527)	-1.696*** (0.511)	-1.854*** (0.522)
Percent Other (NH)	-8.295 (5.398)	-8.300 (5.405)	-8.233 (5.527)	-7.989 (5.349)
Percent White (H)	0.727 (2.097)	0.739 (2.114)	0.753 (2.083)	0.0686 (2.013)
Percent Other (H)	0.288 (2.058)	0.278 (2.077)	0.352 (2.072)	1.141 (2.151)
Percent Ages 5 to 17	0.494 (11.37)	0.430 (11.65)	0.179 (11.31)	2.868 (11.28)
Percent Ages 18 to 24	-0.529 (9.135)	-0.591 (9.344)	-0.865 (8.989)	1.780 (8.849)
Percent Ages 25 to 44	9.263 (9.669)	9.227 (9.811)	9.510 (9.721)	12.54 (9.783)
Percent Ages 45 to 64	4.029 (7.596)	4.005 (7.701)	4.360 (7.659)	6.871 (7.725)
Percent Ages 65+	4.578 (9.432)	4.533 (9.636)	4.448 (9.468)	6.685 (9.382)
Percent Male	-0.339 (4.306)	-0.316 (4.342)	-0.428 (4.266)	-2.273 (4.578)
Observations	105	105	105	105

Source.—Source information for data in this analysis provided below Table 2 under Source.

Note.—Reports marginal effects and standard errors multiplied by 100 for logit regressions. Columns 1 and 3 report results for the base model regression of Models (7) and (8), respectively. Columns 2 and 4 report results for the additional specification of Models (7) and (8), respectively, that controls for the natural log of median household income multiplied by 100. The unit of observation is the legislative district (Upper or Lower Chamber) in California in 2010. The dependent variable is an indicator for whether the legislator voted for SB 1381. All logged variables multiplied by 100. More information provided below Tables 2 and 11 under Note. Robust standard errors calculated using the delta method are reported in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 13
Marginal Effects of District Ethnic/Racial Diversity on the Probability that a Legislator Votes in Favor of SB 1381

Dependent Variable: Binary Variable that Equals 1 if Legislator Voted in Favor and 0 if Voted Against		
Variables	Model (9)	Model (10)
Diversity Index	-0.741 (0.603)	0.119 (3.791)
Diversity Index Interaction Term		-0.0106 (0.0471)
Percent Low-income and Middle-income		0.605 (2.834)
Log of Median Income	0.0192 (0.115)	
Democrat	29.97*** (8.623)	29.84*** (8.666)
Percent Black (NH)	2.537 (1.705)	2.562 (1.700)
Percent Asian (NH)	-1.253*** (0.483)	-1.274*** (0.481)
Percent Other (NH)	-4.638 (5.179)	-4.799 (5.512)
Percent White (H)	0.836 (2.481)	0.804 (2.459)
Percent Other (H)	0.724 (2.229)	0.741 (2.259)
Percent Ages 5 to 17	3.497 (11.54)	3.485 (11.87)
Percent Ages 18 to 24	2.518 (8.653)	2.675 (8.945)
Percent Ages 25 to 44	12.16 (9.865)	12.23 (10.20)
Percent Ages 45 to 64	6.274 (7.668)	6.382 (7.943)
Percent Ages 65+	6.544 (9.281)	6.526 (9.663)
Percent Male	-2.773 (5.042)	-2.950 (5.079)
Observations	105	105

Source.—Source information for data in this analysis provided below Table 2 under Source.

Note.—Reports marginal effects and standard errors multiplied by 100 for logit regressions. Column 1 reports results for Model (9). Column 2 reports results for Model (10). The unit of observation is the legislative district (Upper or Lower Chamber) in California in 2010. The dependent variable is an indicator for whether the legislator voted for SB 1381. Percent Low-income and Middle-income is the percentage of low- and middle-income households. The Diversity Index Interaction Term is created by multiplying Diversity Index and Percent Low-income and Middle-income together. All logged variables multiplied by 100. More information provided below Tables 2 and 11 under Note. Robust standard errors calculated using the delta method are reported in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 14
Relationship between State Income Shares and Funding for, Access to, and Quality of ECE

Variables	Model (11)	Model (11)	Model (11)	Model (11)	Model (11)	Model (11)
<i>Panel A. Dependent Variable: Funding per Child Enrolled in State Pre-K</i>						
% Low	-62.92 (51.74)	-79.65 (55.09)	-109.5 (77.89)	-133.2 (83.22)	-110.9 (91.75)	-114.8 (91.13)
% Middle	18.45 (21.30)	20.20 (21.32)	23.49 (82.88)	24.85 (79.59)	16.74 (111.1)	30.77 (112.8)
% House (D)	29.81 (19.36)	29.33 (18.92)	25.08* (14.54)	28.26* (15.12)	28.02* (15.74)	30.48* (16.16)
Dem. Gov.	764.2* (406.8)	773.4* (404.3)	-178.1 (165.1)	-186.8 (161.5)	-210.3 (169.8)	-211.0 (164.1)
% Priv. Pre-K		-25.50 (40.27)		-61.93* (33.15)		-59.57* (32.29)
Observations	586	586	586	586	586	586
R-squared	0.209	0.214	0.200	0.223	0.214	0.234
<i>Panel B. Dependent Variable: Enrollment of Four-Year-Olds in State Pre-K</i>						
% Low	0.528 (0.375)	-0.0768 (0.318)	0.354 (0.489)	0.112 (0.417)	0.165 (0.656)	0.117 (0.577)
% Middle	0.173 (0.199)	0.233 (0.184)	-1.571*** (0.560)	-1.535*** (0.489)	-1.904** (0.835)	-1.736** (0.759)
% House (D)	0.0114 (0.128)	-0.00694 (0.131)	0.0490 (0.101)	0.0851 (0.104)	0.0879 (0.108)	0.117 (0.114)
Dem. Gov.	2.281 (2.957)	2.569 (2.740)	0.914 (1.025)	0.835 (1.000)	0.835 (1.009)	0.834 (0.978)
% Priv. Pre-K		-0.920*** (0.306)		-0.721*** (0.211)		-0.714*** (0.242)
Observations	588	588	588	588	588	588
R-squared	0.177	0.271	0.304	0.349	0.309	0.354
<i>Panel C. Dependent Variable: Quality Z-score of State Pre-K</i>						
% Low	-0.0104 (0.0179)	-0.0248 (0.0173)	-0.0313 (0.0302)	-0.0356 (0.0327)	-0.0310 (0.0386)	-0.0314 (0.0386)
% Middle	-0.00233 (0.00808)	-0.000888 (0.00787)	0.0331 (0.0373)	0.0328 (0.0368)	0.0463 (0.0503)	0.0476 (0.0527)
% House (D)	0.0202*** (0.00638)	0.0197*** (0.00608)	-0.00102 (0.00438)	-0.000396 (0.00491)	-0.00516 (0.00423)	-0.00493 (0.00451)
Dem. Gov.	0.412*** (0.133)	0.419*** (0.133)	-0.00248 (0.0697)	-0.00382 (0.0706)	0.00326 (0.0709)	0.00320 (0.0707)
% Priv. Pre-K		-0.0220 (0.0153)		-0.0108 (0.0142)		-0.00572 (0.0148)
Observations	587	587	587	587	587	587
R-squared	0.313	0.334	0.071	0.068	0.107	0.109
Race Controls	Yes	Yes	Yes	Yes	Yes	Yes
Age Control	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	Yes	Yes	Yes
State FE	No	No	No	No	Yes	Yes

Source.—Source information for data in this analysis provided below Table 3 under Source.

Note.—Columns 1 through 6 report results for specifications of Model (11). The unit of observation is the state year level for 2003-2014. In Panel A, the dependent variable is Funding Per Child Enrolled in State Pre-K. In Panel B, it is Enrollment of Four-year-olds in State Pre-K. In Panel C, it is the Quality Z-score of State Pre-K. All independent variables are lagged by three years. % represents percent. Percent Low is the

percentage of low-income households. Percent Middle is the percentage of middle-income households. Percent House (D) is the percentage of seats in the lower chamber that are held by Democrats. Dem. Gov. is a dummy variable for whether the governor is a Democrat. All regressions control for race/ethnicity and age. The Race Controls are the same as they were for the regressions in Table 4. The Age Control is the percentage of people under 5-years-old. Columns 3 through 6 include year fixed effects. Columns 5 and 6 include state fixed effects. More information provided below Table 3 under Note. Robust standard errors clustered by state in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Table 15

Relationship between State Income Inequality and Funding for, Access to, and Quality of ECE

Variables	Model (12)	Model (12)	Model (12)	Model (12)	Model (12)	Model (12)
<i>Panel A. Dependent Variable: Funding per Child Enrolled in State Pre-K</i>						
Gini	-4,277 (6,162)	242.4 (6,141)	-3,464 (3,820)	-2,516 (3,253)	-1,922 (3,249)	-1,008 (2,906)
Log Median		40.70 (26.78)		27.97 (22.18)		26.98 (31.94)
% House (D)	23.68 (18.31)	27.84 (20.27)	26.90* (14.55)	26.23* (15.00)	30.78* (16.65)	30.54* (17.02)
Dem. Gov.	713.7* (412.3)	776.5* (393.9)	-167.0 (164.4)	-169.3 (164.8)	-193.3 (177.4)	-200.4 (177.3)
Observations	586	586	586	586	586	586
R-squared	0.196	0.240	0.189	0.191	0.202	0.205
<i>Panel B. Dependent Variable: Enrollment of Four-Year-Olds in State Pre-K</i>						
Gini	79.28 (52.21)	64.52 (50.82)	44.89 (28.14)	43.34* (26.15)	48.03 (31.47)	46.49 (29.62)
Log Median		-0.133 (0.145)		-0.0445 (0.179)		-0.0452 (0.246)
% House (D)	0.0540 (0.147)	0.0405 (0.133)	-0.0368 (0.0973)	-0.0360 (0.0960)	-0.0415 (0.0996)	-0.0411 (0.0993)
Dem. Gov.	3.364 (2.948)	3.160 (2.845)	1.003 (1.048)	1.010 (1.057)	1.015 (1.001)	1.027 (1.021)
Observations	588	588	588	588	588	588
R-squared	0.168	0.176	0.269	0.269	0.273	0.273
<i>Panel C. Dependent Variable: Quality Z-score of State Pre-K</i>						
Gini	-3.890* (2.085)	-3.639* (1.827)	-1.604 (1.460)	-1.312 (1.298)	-0.960 (1.342)	-0.600 (1.304)
Log Median		0.00226 (0.00757)		0.00787 (0.00875)		0.0106 (0.0140)
% House (D)	0.0193*** (0.00680)	0.0195*** (0.00652)	0.000790 (0.00488)	0.000593 (0.00497)	-0.00123 (0.00577)	-0.00133 (0.00583)
Dem. Gov.	0.371*** (0.134)	0.375*** (0.135)	-0.000195 (0.0721)	-0.00151 (0.0723)	0.00295 (0.0765)	3.33e-05 (0.0773)
Observations	587	587	587	587	587	587
R-squared	0.325	0.326	0.041	0.047	0.083	0.087
Race Controls	Yes	Yes	Yes	Yes	Yes	Yes
Age Control	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	Yes	Yes	Yes
State FE	No	No	No	No	Yes	Yes

Source.—Source information for data in this analysis provided below Table 3 under Source.

Note.—Columns 1 through 6 report results for specifications of Model (12). Columns 2, 4, and 6 control for the natural log of median income multiplied by 100. The unit of observation is the state year level for 2003-2014. In Panel A, the dependent variable is Funding Per Child Enrolled in State Pre-K. In Panel B, it is Enrollment of Four-year-olds in State Pre-K. In Panel C, it is the Quality Z-score of State Pre-K. Gini is the Gini Coefficient. Log Median is the natural log of median household income multiplied by 100. More information provided below Tables 3 and 14 under Note. Robust standard errors clustered by state in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

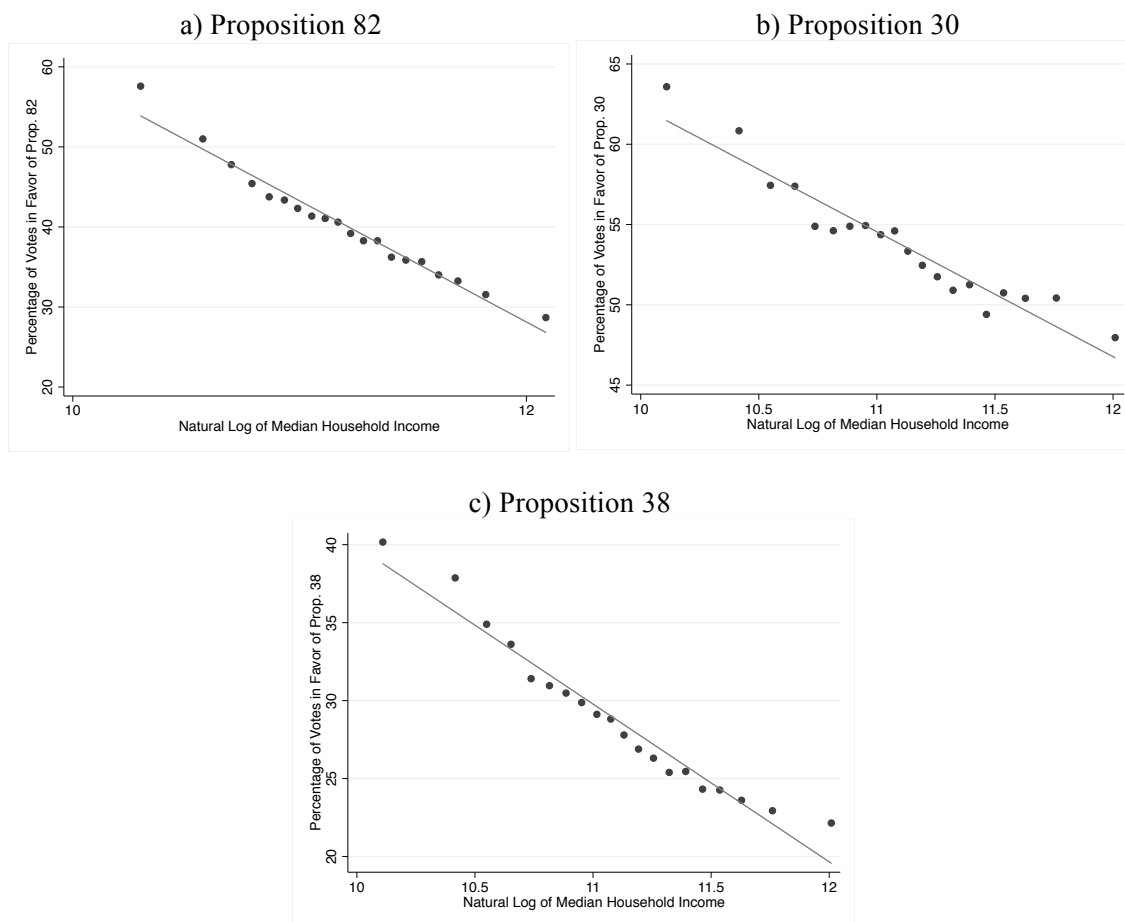
Table 16
 Relationship between State Ethnic/Racial Diversity and Funding for, Access to, and Quality of
 ECE

Variables	Model (13)	Model (13)	Model (13)
<i>Panel A. Dependent Variable: Funding per Child Enrolled in State Pre-K</i>			
Diversity Index	243.1*** (74.70)	59.70 (82.32)	-127.5 (164.4)
Log of Median Income	8.011 (21.76)	28.89 (24.55)	27.77 (33.38)
Percent House (D)	28.29 (21.01)	26.35* (15.42)	33.70* (18.84)
Democratic Governor	709.6* (386.0)	-169.1 (164.1)	-195.2 (172.5)
Observations	586	586	586
R-squared	0.347	0.184	0.208
<i>Panel B. Dependent Variable: Enrollment of Four-Year-Olds in State Pre-K</i>			
Diversity Index	0.573 (0.868)	-0.630 (0.913)	-1.302 (1.517)
Log of Median Income	-0.250 (0.198)	-0.0793 (0.197)	-0.146 (0.261)
Percent House (D)	0.0369 (0.133)	-0.0473 (0.0980)	-0.0431 (0.0986)
Democratic Governor	2.403 (2.868)	1.074 (1.054)	1.169 (1.046)
Observations	588	588	588
R-squared	0.176	0.264	0.268
<i>Panel C. Dependent Variable: Quality Z-score of State Pre-K</i>			
Diversity Index	0.0865*** (0.0321)	0.0446 (0.0420)	0.0147 (0.0754)
Log of Median Income	-0.00703 (0.00606)	0.00636 (0.00938)	0.0119 (0.0139)
Percent House (D)	0.0200*** (0.00663)	0.00118 (0.00550)	-0.00126 (0.00712)
Democratic Governor	0.386*** (0.133)	-0.00157 (0.0725)	-0.00167 (0.0765)
Observations	587	587	587
R-squared	0.399	0.040	0.086
Race Controls	Yes	Yes	Yes
Age Control	Yes	Yes	Yes
Year FE	No	Yes	Yes
State FE	No	No	Yes

Source.—Source information for data in this analysis provided below Table 3 under Source.

Note.—Columns 1 through 3 report results for specifications of Model (13). The unit of observation is the state year level for 2003-2014. In Panel A, the dependent variable is Funding Per Child Enrolled in State Pre-K. In Panel B, it is Enrollment of Four-year-olds in State Pre-K. In Panel C, it is the Quality Z-score of State Pre-K. Column 2 includes year fixed effects and Column 3 includes year and state fixed effects. More information provided below Tables 3 and 14 under Note. Robust standard errors clustered by state in parentheses. ***Significant at 1% level. **Significant at 5% level. *Significant at 10% level.

Figure 1
 Binscatter Plots of the Natural Log of Median Household Income in a Precinct and the Shares of Support for Propositions 30, 38, and 82



Source.—Source information for data in this analysis provided below Table 1 under Source.

Note.—Figure 1a is a binscatter plot of the Percentage of Votes in Favor of Proposition 82 versus the Natural Log of Median Household Income. Figure 1b does the same for Proposition 30. Figure 1c does the same for Proposition 38. A binscatter plot is a nonparametric representation of the conditional expectation function. Data are divided into vingtiles, so that each dot represents about 1,000 observations.

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