Thrown off Balance: Analysis of California Unified School Districts At-Risk of Financial Insolvency During the Great Recession and its Aftermath

Erin Heys, PhD & James Hawkins, MPP

with Tom Lindman and Daniel Tan

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Executive Summary

The purpose of this paper is to gain a descriptive understanding of unified districts that became at-risk of financial insolvency during the Great Recession and its immediate aftermath, the last large-scale, multi-year fiscal crisis that destabilized school funding in California. This project describes the demographic and enrollment trends, budgets, and operational decision-making of a cohort of 86 unified school districts that transitioned from good financial standing to at-risk of insolvency between 2008-09 and 2012-13. Using publicly available data from the California Department of Education (CDE), we compare this at-risk cohort to districts that remained in good financial standing during the same period and analyze how district student composition, revenues, expenditures, balance sheets, and operational decision-making compare for both sets of districts over three time periods (the pre-period from 2004-05 to 2007-08, the Great Recession period from 2008-09 to 2012-13, and the post-period from 2013-14 to 2020-21). This paper offers insights for policymakers and practitioners about why the last major fiscal crisis may have pushed some unified districts into at-risk status, what happened to their budgets and funding priorities, and how they recovered. The paper also offers insights into the types of districts that may be likely to become at-risk of financial insolvency during any future fiscal crisis. We find:

- **At-risk districts were more likely to be large, serve disadvantaged students and students of color, and experience sharper declining enrollment.** Districts that became at-risk of financial insolvency during the Great Recession served more students, were more likely to experience enrollment declines, and served a higher percentage of students eligible for Free and Reduced Price Meals (FRPM)—a proxy for low-income status—more English Language Learner (ELL) students, and more students of color than districts that remained in good financial standing. Some districts that became at-risk during the recession remained in at-risk status for several years following the recession and state budget crisis, and some of the districts in our sample have continued to experience at-risk status in more recent years.

- **There was little-to-no difference across periods for total expenditures and resources by risk status.** Over each period, the at-risk cohort and comparison group received nearly the same amount of resources as the comparison group, and also spent nearly the same (excluding LAUSD as an outlier). Any variation in total resources or expenditures between the two groups was largely due to capital funds rather than operating funds.

- **Districts that were at-risk during the Great Recession received more revenue from state and federal sources and less from local revenue or other resources**. Over time, the at-risk cohort received more per pupil funding from state and federal sources than the comparison group, especially from resources that target low-income students. The at-risk cohort received less revenue from local sources such as property taxes, parcel taxes, or from local fundraising. The at-risk cohort also had less per pupil revenue from other resources, such as the sale of bonds.

- **Districts at-risk of insolvency had slightly higher operating expenditures, lower capital expenditures**. Over time, at-risk districts had slightly higher expenditures on employee benefits and classified support salaries, along with higher costs associated with special education—cost pressures that increased during the recession period. The at-risk district

cohort spent less on capital outlay, such as the improvement of buildings, and spent less per ADA on bonds sold at a discount than the comparison group during the Great Recession.

- **Both at-risk districts and the comparison group made operational decisions during the Great Recession that affected school quality.** Both at-risk districts and those in good financial standing cut instructional days during the Great Recession, but at-risk districts cut about a day more and took longer to recover instructional time than districts that remained in good financial standing. The analysis also showed that the at-risk cohort including LAUSD lost far more FTEs than the comparison group; however, if LAUSD is excluded from the at-risk sample, the not-at-risk districts shed proportionately more FTE positions in comparison to the at-risk cohort. The at-risk cohort also made spending cuts to teacher salaries that were on par with the comparison group.

- **The at-risk district cohort had a weakened balance sheet**. The at-risk cohort (without LAUSD) entered the recession with less cash on hand than districts that remained in good financial standing, and this worsened during the recession period when the difference in available cash was reduced by more than double. Districts at-risk of insolvency also had fewer reserves in the recession period, were more likely to transfer resources between internal funds, and were more likely to engage in external borrowing practices. Notably, the weaker reserve picture persists for the at-risk cohort into the post-period, indicating that the recession had a prolonged effect on the budgets of districts that experienced insolvency status during the Great Recession.

Introduction

It is no secret that funding for California's school districts is volatile. Over the last several decades, voters and lawmakers have legally bound the majority of K-12 funding to the state's General Fund, which is sensitive to fluctuations in the stock market and the performance of the broader economy. When the economy is strong, state lawmakers typically increase per pupil funding, but when the economy experiences a downturn, state lawmakers often employ budget tactics such as delaying payments to districts or cutting per pupil funding to balance the broader state budget. When such tactics are used, school districts are faced with major cash flow issues and can experience major setbacks, leading some to the brink of financial insolvency, meaning that they become 'at-risk' of not being able to meet their financial obligations.

Following the aftermath of the Great Recession—the last large-scale fiscal crisis that triggered multi-year deficits in California's state budget—in 2011-12 the state's budget crisis reached its peak and 17 percent of all California school districts became at-risk of financial insolvency (Anderson, 2018; Kapphahn, Li & Resnikoff, 2020). During the crisis, many districts, including many at-risk of insolvency, made difficult decisions to make ends meet. District leaders chose to layoff or furlough teachers, cut teacher salaries, increase class sizes, or reduce the number of days of instruction in a school year (Freelon, Bertrand & Rogers, 2012; Knight, 2017; Knight & Strunk, 2016; Lafortune, Mehlortra, & Paluch, 2020; Rogers, Fanelli, Freelon, Medina, Bertrand, & Del Razo, 2010; Shambaugh, Kitmitto, Parrisk, Arellanes, & Nakashima, 2011). The recession's effect on district budgets lingered long after the official recession ended, and it took seven years for the state to return K-12 funding to pre-Great Recession levels (Lafortune, Mehlortra, & Paluch, 2020).

In recent years, a strong national and state economy has left California's state budget on much better footing. The state's General Fund has experienced historic surpluses and school districts have seen record-setting funding levels (California Department of Finance, 2022). Yet the latest financial outlook from the Legislative Analyst's Office (LAO) predicts a $24 billion deficit in the upcoming year followed by multi-year shortages (Hollingshead, 2022b). School districts in the state can anticipate a $2.2 billion deficit in the next fiscal year alone (Kapphahn, 2022). While state lawmakers can use reserves to offset the foreseen shortfalls, the LAO estimates do not predict a recession scenario; if a recession were to occur, revenues could be much lower, which could have more serious consequences for the state and school district financing.

To understand how school district budgets might react to a future economic downturn, we identified a cohort of 86 unified school districts that were financially healthy before the onset of the Great Recession, but became at-risk of financial insolvency during the recession and its immediate aftermath (2008-09 to 2012-13). In other words, with this cohort, we isolate districts that were likely to be at-risk due to financial shortfalls stemming from the Great Recession and state budget crisis rather than due to other factors such as difficult labor negotiations or district mismanagement. We targeted this group of districts, which we refer to as our 'at-risk' cohort, to understand how their finances and operational decision-making changed over time in reaction to the last large, multi-year budget crisis. Using publicly available data from the California Department of Education, we analyzed district characteristics and budgets from 2004-05 until 2020-21 to understand the descriptive differences between financially healthy districts and those that became at-risk of financial insolvency during the Great Recession period. More specifically, we looked at trends in demographic and enrollment characteristics, teacher salary and benefit schedules, and we

analyzed unified school districts' financial data to identify the budgetary characteristics of both groups of districts.

In the first section of this paper we review relevant literature, first providing a brief history of the major events that have influenced the centralized design of school finance in California. We then review the state's history with districts at-risk of financial insolvency followed by a brief review of at-risk districts during the Great Recession and the years that followed. Section two of the paper describes the study's methodology. Section three reviews the findings, first by providing descriptive characteristics of at-risk districts, and then moves into an analysis of district revenues, expenditures, salary and benefit schedules, and the balance sheet. The final section of the paper provides a discussion of the results.

Literature Review

The state's revenue system relies heavily on income tax and capital gains, which makes it extremely sensitive to changes in the broader economy (Murphy, 2022). Over the last several decades, when California has experienced an economic recession the state's General Fund has fluctuated sharply which has triggered shortfalls in K-12 funding (Lafortune, Mehlortra, & Paluch, 2020. This has been an ongoing trend since the 1970s following three major events that altered the design of K-12 finance: the *Serrano v. Priest* court case and passage of Propositions 13 and 98. Below, we first briefly review these three historical events and their effect on the centralized design of school finance in California and then turn to a review of how economic downturns have been associated with the districts' financial insolvency, narrowing in on the Great Recession period and recovery years.

A very brief history of major events affecting the centralization of school finance in California

Throughout much of the mid-20th century, the majority of revenue for California's school districts came from local property taxes and voter-approved special taxes alongside a modest apportionment from the state (Brunner & Sonstelie, 2006; Timar, 2006). Over time, wide disparities in local revenue generation grew at the district level. Wealthy districts had higher assessed property values than low-wealth districts; wealthy districts were also more likely to raise additional funds by voting to increase property tax rates or by passing other special local revenue generating measures (Brunner & Sonstelie, 2006). The state Supreme Court ruled in *Serrano v. Priest*, a series of landmark court cases, that disparities in local revenue generation was a violation of the equal protection clause of the Fourteenth Amendment (Henke, 1986). The *Serrano v. Priest* decisions fundamentally transformed the design of K-12 finance from a decentralized system in which local communities raised the majority of revenue for schools to a centralized system whereby the state legislature would play a significant role in determining the equitable distribution of per pupil funding across K-12 districts (for more information, see Timar, 2006).

Following the *Serrano* decision,[1] voters passed Proposition 13 in 1978 during California's 'tax revolt' to limit increases to property taxes across the state (Brunner & Sonstelie, 2006). More specifically, Proposition 13 capped property tax rates at one percent of a property's purchase price, with increases in the assessed value thereafter capped at the lesser of two percent per year or at

[1] The Serrano decision occurred in three parts between 1971 and 1978. For a historical review, see Henke, 1986.

the rate of inflation; the law also gave the state government authority to allocate locally generated property tax revenue to local jurisdictions such as school districts and local government through county-level property tax distribution rates established prior to the passage of Proposition 13 (Chu & Uhler, 2016). The new voter-approved constitutional amendment limited the amount of property tax revenue collected from all property types in each county and put further pressure on the state to fund K-12 education from the General Fund (Heys, Swanbeck, & Hawkins, 2022). The composition of K-12 revenue before and after *Serrano* and Proposition 13 illustrates the profound transformation that took place: Up until the 1970s, school districts were 60 percent financed by local revenue, 34 percent funded by state revenue, and 6 percent from federal revenue (Timar, 2006). Today, local revenue accounts for only 32 percent (includes property tax and other local revenue), the state provides 58 percent, and the federal government contributes roughly 10 percent (Legislative Analyst's Office, 2019).

Another landmark change for school finance occurred in 1988 with the passage of Proposition 98.[2] Voters intended to increase funding and reduce political battles over school finance in the state legislature by requiring funding for K-12 and community colleges to be a constitutionally protected share of the state budget. Therefore, voters passed Proposition 98 to set a 'minimum guarantee' for school funding; specifically, the proposition was designed so that the state would allocate at least 40 percent of the General Fund to the K-14 education budget each year (Kapphahn & Kuhn, 2017).[3]

Economic recessions and at-risk districts

After the *Serrano v. Priest* decision and the passage of Propositions 13 and 98, many school districts faced financial distress following back-to-back state budget crises during the 1980s and early 1990s, when dozens of school districts either received emergency loans from the state or were declared fiscally distressed by the California Department of Education (Cabral, 2012). The height of the school finance crisis came in 1991 when Richmond Unified declared bankruptcy, prompting the state to issue the district an emergency bailout loan (Anderson, 2018). The culmination of these events motivated the state legislature to create a formal oversight process to monitor districts before they reached the point of financial insolvency. The new oversight process—enacted by the state legislature with AB 1200[4]—mandated that all districts are subject to ongoing fiscal monitoring from County Offices of Education (COEs)[5], and districts experiencing distress are now categorized by escalating tiers of insolvency risk. This monitoring process remains in place today.

While the state-mandated oversight process does not prevent districts from becoming at-risk of insolvency, the rating classifications have been useful for County Offices of Education (COEs) and the state Fiscal Crisis & Management Team (FCMAT) to closely monitor district finances and

[2] For a review of how Proposition 98 works, see Kapphahn & Kuhn (2017) and Wassmer (2008).

[3] The 40 percent allocation is just a rule of thumb. Each year, the legislature uses three 'tests' to determine the precise allocation, and there are several nuanced laws and rules governing the exact amount allocated to K-12 and community colleges every year. For more information, see Kapphahn & Kuhn (2017).

[4] AB 1200 was modified by several subsequent laws, including AB 1840 (2018) and AB 2756 (2004). For more information, see FCMAT (2019a).

[5] The statutory authority to monitor districts rests with the county superintendent of schools but COE's generally do this work. See FCMAT (2019a).

provide escalating tiers of support and intervention based on district financial needs (Anderson, 2018; FCMAT, 2019a). Although rare, since this new process was implemented, some school districts in California have reached the point of fiscal insolvency and have received emergency loans from the state. Since 1991, only 9 districts have requested emergency loans; those with active loans today include Oakland Unified, Vallejo City Unified, South Monterey County Joint Union High School, and Inglewood Unified (FCMAT, 2020). Traditionally in such cases, the state allocates an emergency loan and takes over control of the district, meaning that the district loses local governing and management authority and the State School Superintendent assigns an administrator to oversee the district's operation on behalf of the state.[6] For districts that have not yet reached the point of financial insolvency and are only in at-risk status, consequences are more moderate; for example, at-risk districts may be subject to a state audit and may not issue debt such as revenue bonds or tax anticipation notes (FCMAT, 2019a). For districts that can still issue debt, they may have their credit rating reduced by rating agencies and as a result, pay higher interest rates on loans or bonds.

The Great Recession period

During the 2008 Great Recession, California's state budget had an unprecedented multi-billion-dollar shortfall (Hollingshead & Barkman, 2018). The state was home to a booming construction and housing industry, and California's economy experienced a major downturn that outpaced the national average during the mortgage crisis (Bardhan & Walker, 2011). To balance the budget, legislators made drastic cuts to K-12 and other state programs over five years (Hollingshead & Barkman, 2018). According to the Legislative Analyst's Office, state appropriations to education (after adjusting for inflation) were cut so severely that per pupil spending in 2011-12—the peak of the budget crisis in California—was even lower than 1988-89 funding levels (Legislative Analyst's Office, 2020a). By 2012-2013, the recession's impact on the state's K-12 education budget had reached its trough, with state cuts totaling about $2,100 per student (Lafortune, Mehlotra, & Paluch, 2020).

Making matters worse, during several years of the state budget crisis, state lawmakers delayed billions in payments to districts in order to prioritize balancing the state's general fund (Cabral, 2011). Payments were delayed to districts by several months, often pushed into the next fiscal year, creating a cash flow problem for many districts (Shambaugh, et al., 2011).[7] Other state budgeting maneuvers included eliminating Cost of Living Adjustments (COLAs) for teachers and school staff and shifting property tax revenue between districts and redevelopment agencies (Lafortune, Mehlotra, & Paluch, 2020). These state budgeting maneuvers alongside state budget cuts caused many districts to grapple with major cash flow issues. Districts dipped into reserves and transferred money between different internal funds to make ends meet (Campbell & Herrera, 2019; Soland, 2011). Districts also borrowed funds externally by issuing short-term loans in the form of Tax Revenue Anticipation Notes (TRANs), borrowed from their county offices, or undertook

[6] This was the case until 2018 when the legislature passed AB 1840, which changed the oversight structure from a state-monitoring system to one more aligned with local control, returning oversight to County Boards of Education. For more information, see FCMAT (2019a) and Anderson (2018).

[7] The impact of deferrals became so dire for districts at-risk of financial insolvency that the legislature established a special appeals process for eligible districts to receive a waiver (Cabral, 2011). For information about the latest round of deferrals in the 2020-21 fiscal year, see: https://www.cde.ca.gov/fg/fi/ad/

advances of property tax revenue from county treasurers (Lafortune, Mehlotra, & Paluch, 2020; Campbell & Herrera, 2019; Soland, 2011). Some districts were fortunate enough to successfully raise revenue locally in the form of parcel taxes or other local fundraising efforts (Freelon, Bertrand & Rogers, 2012). But cash flow issues became so serious that hundreds of school districts were classified as at-risk of financial insolvency between the onset of the crisis and the 2012-13 academic year (Legislative Analyst's Office, 2019). At the peak of the crisis, 17 percent of all California school districts were at-risk (Anderson, 2018; Kapphahn, Li & Resnikoff, 2020). Some urban districts such as Los Angeles Unified, Sacramento Unified, and Inglewood Unified became at-risk and remained in at-risk status for several years following the recession's end (California Department of Education, 2023).

Facing severe fiscal constraints, many district administrators made drastic operational decisions in order to balance their budgets due to the depth of the state budget crisis and the longevity of the recession and recovery period. Researchers found that many districts laid off or furloughed teachers, cut teacher and other staff salaries, increased class sizes, shortened the school year, and reduced staff who provided important student services from the onset of the recession through 2012-13 (Edwards & Leichty, 2009; Lafortune, Mehlotra, & Paluch, 2020; Rogers et al., 2010; Shambaugh et al., 2011). Such decisions tended to be made more frequently in districts that were short on reserves at the onset of the recession and among low-income districts that were

Monitoring school district financial health

County Offices of Education (COEs) are involved in a process to monitor district financial health. The first step begins when districts submit a budget to COEs at the beginning of the fiscal year in July. County superintendents review the budget to determine whether the district will meet its financial obligations during the coming fiscal year and whether the district plan would satisfy its financial commitments in future years. COEs either approve, conditionally approve, or disapprove the budget.

Thereafter, County Offices of Education (COEs) monitor school districts using up to three interim reports that assess the financial health of the school district. For each interim report, districts first use one of three ratings to self-certify their fiscal health. County superintendents (or sometimes the California Department of Education if they are the reviewing agency) either agree or change the rating using criteria and standards set by the state and look at district fund and cash balances, reserve levels, operating deficits, enrollment and revenue estimates, and operating expenditures. The ratings from the first two interim reports are reported to the CDE.

A p*ositive* rating means that the district is in good financial standing and will meet its financial obligations for the current and upcoming two fiscal years. A q*ualified* rating indicates that the district may be unable to meet its fiscal obligations for the current or either of the subsequent two fiscal years. A *negative* rating is the most serious, and indicates that the district will be unable to meet its fiscal obligations for the current or upcoming fiscal year without corrective action (Anderson, 2018). COEs will often intervene in districts in Qualified or Negative standing with a series of escalating interventions and consequences. In some cases, districts will also receive assistance from the state Fiscal Crisis & Management Team (for more information, see Cabral, 2012).

unable to raise private local funds in place of statewide cuts (Freelon, Bertrand & Rogers, 2012; Kapphahn, 2015; Lafortune, Mehlotra, & Paluch, 2020; Shambaough et al., 2011). Notably, state lawmakers opened the way for districts to make many of these budget decisions with temporary 'flexibility provisions' that were part of an overall strategy to balance the state budget (Soland, 2011). For example, lawmakers temporarily changed the education code to allow districts to spend categorical funds, increase class sizes, and change the number of instructional days in the school year. While this flexibility may have been necessary for districts (and the state) to make ends meet, such decisions ultimately diminished school quality, especially in districts serving low-income and high-needs students (Lafortune, Mehlotra, & Paluch, 2020; Shambaugh et al., 2011).

To stem the worst effects of the Great Recession, the federal government allocated $6 billion in new funding to California's preschools and K-12 school districts in the American Recovery and Reinvestment Act, and an additional $1.2 billion to K-12 districts through the Federal Education Jobs Funding program (Kapphahn, 2015). While limited, this funding helped to prevent further teacher layoffs and to stem losses experienced from state revenue, particularly for districts that served disadvantaged students (Lafortune, Mehlotra, & Paluch, 2020; Soland, 2011). At the state level, the California legislature passed temporary sales and income tax increases as well as an increase to the vehicle license fee to stabilize the General Fund (Murphy, Paluch, & Mehlotra, 2019). In 2012, voters further increased state funding by passing Proposition 30, which included a temporary income tax increase on top earners as well as an increase in the statewide sales tax intended to improve education funding and balance the state's budget.[8] Despite such efforts from lawmakers and voters to raise new revenue during the recovery from the recession, the state did not return K-12 spending to pre-Great Recession levels until 2015-16, seven years after the onset of the recession (Lafortune, Mehlortra, & Paluch, 2020).

The post Great Recession period

In the post-recession era, a more favorable fiscal environment ensued, and the legislature made major improvements to school funding by creating the Local Control Funding Formula. The new formula is a much simpler, streamlined funding mechanism with an important equity component that acknowledges that districts serving students from different socioeconomic backgrounds have different financial needs (EdSource, 2016). LCFF eliminated the former revenue limit formula along with dozens of categorical aid programs, and replaced it with base funding dependent on Average Daily Attendance (ADA) and grade-level.[9] Through LCFF, all districts receive a base grant but extra supplemental and concentration grants are allocated to districts serving high-need populations, including low-income students, English Language Learners (ELL), and homeless

[8] Voters later passed Proposition 55 in 2016 that maintained the income tax increase on top earners.

[9] Importantly, LCFF shifted away from a 'categorical funding' model where money was constrained by earmarks, and shifted toward a model that gave district leaders more autonomy to manage budgets and make spending decisions (Baumgardner, Frank, Willis, & Berg-Jacobson, 2018). LCFF also returned accountability of school district spending to local control. Districts must now develop three-year Local Control and Accountability plans (LCAPs) alongside parents, community leaders, students, and other stakeholders to plan how supplemental and concentration funds will be used to improve school environments and services for disadvantaged students (Fuller & Tobben, 2014). The extent to which district actors are using LCFF for its intended purpose has caused some concern, since not all districts have used LCFF funds to benefit intended student groups and close the achievement gap (for more information, see California State Auditor, 2019).

and foster care youth (Baumgardner, Frank, Willis & Berg-Jacobson, 2018). With the initial design, the supplemental grants provided eligible districts an additional 20 percent of the base rate for each high-needs student served, and districts serving more than 55 percent of high-needs students received concentration grants at 50 percent of the base rate (Baumgardner, Frank, Willis & Berg-Jacobson, 2018).[10] Annual increases to base funding have improved California's national ranking of K-12 state spending (Heys, Hawkins, & Swanbeck, 2022) and the extra concentration and supplemental funding for districts serving high-needs students have been shown to increase academic achievement (Johnson & Tanner, 2018; LaFortune, 2021).

To offset future risks of revenue loss during recessions, voters passed Proposition 2 in 2014, which created new constitutional rules for allocating revenue from the General Fund and from capital gains to one of the state's reserves (the Budget Stabilization Account) and mandated that a certain portion be dedicated to paying down outstanding debt (Hollingshead, 2021). Proposition 2 established a separate reserve account for K-12 schools; however the rules for how and when the state must contribute to the account are more restrictive, so the state did not make a contribution to the account until 2019, five years after it had been established, and it was less than one percent of annual state spending on schools in that year (Legislative Analyst's Office, 2020). While this approach of paying down debt and building up reserves may help somewhat in the future during mild economic downturns, the latest research indicates that this strategy may not be adequate during any forthcoming moderate or severe recession (Murphy, Paluch & Mehlotra, 2019).

What is known about districts at-risk of financial insolvency?

While the research base is limited, over time, researchers have found common trends associated with districts that are designated 'at-risk' of financial insolvency. Other researchers have found that districts that receive the Qualified or Negative certification typically engage in deficit spending, have low levels of reserves, and poor cash flow analysis (Barlow, 2014; Cabral, 2012; Kapphahn, 2015; Legislative Analyst's Office, 2020). Managerial issues at the district level are associated with at-risk status as well. For example, at-risk districts may have inexperienced superintendents or chief business officers, high turnover rates in district administration, or district leaders may experience difficult labor negotiations with teacher unions (Anderson, 2018; Frazier, 2006; FCMAT, 2019b; Hahnel & Melnicoe, 2019). Lastly, growing cost pressures in district budgets have been associated with risk of insolvency, including growing pension and health care costs, rising special education expenditures, and declining student enrollment (Cabral, 2012; Hahnel & Melnicoe, 2019; Kapphahn, Li & Resnikoff, 2020). Notably, the existing research base includes the study of at-risk districts when the economy is strong and there is limited evidence from previous studies to understand why otherwise financially healthy districts become at-risk of financial insolvency during a statewide budget crises.

[10] In the 2021-22 budget, lawmakers approved an increase of the concentration grant from 50 percent of the base grant to 65 percent. This new increase comes with a spending restriction: Districts must use the money to fund new staff expenditures that provide direct services to students and reduce adult-to-student ratios. For more information, see https://www.cde.ca.gov/fg/fr/eb/yr21ltr0811.asp.

In the years leading up to the COVID-19 pandemic (2019-20), the California and national economy experienced a period of expansion, and the state's General Fund benefitted from multi-year surpluses (Allegretto, 2018; Hollingshead & Barkman, 2018). In fact, state funding for K-12 reached year-over-year historic highs and the number of districts at-risk of financial insolvency decreased substantially (Legislative Analyst's Office, 2019). Overall, about 5 percent of California school districts were at-risk of financial insolvency prior to the onset of the pandemic during a period of relative economic stability. However, several large and medium-sized urban districts such as Los Angeles Unified, Oakland Unified, and Sacramento City Unified had experienced large-scale teacher strikes, difficult labor negotiations, and the looming threat of insolvency and state takeover before the onset of the pandemic (California Department of Education, 2023; Hahnel & Melnico, 2019; Harrington, 2019; Howle, 2019; LA School Report, 2018).

While the new Local Control Funding Formula alongside a more favorable economic climate have been a boon to K-12 schools in recent years, future financial forecasts remain uncertain, with the latest projections from the Legislative Analyst's Office (LAO) outlining many possible revenue scenarios over the next several years depending on the performance of the broader economy (Hollingshead, 2022a). According to the LAO, it is most likely that the state will experience a period of austerity in the coming years as revenue forecasts predict modest multi-year budget deficits (Hollingshead, 2022a). In addition to the economic uncertainty on the horizon, many school districts could see reduced funding due to declining enrollment and the rise of other cost pressures such as rising enrollment in special education and increasing pension and health care costs (Kapphahn, Li, & Resnikoff, 2020), and a coming 'fiscal cliff' due to the end of federal COVID-19 stimulus funding (Jonas, 2023). This may put fiscal stress on districts to balance growing expenditures with fewer resources even if the economy holds on.

Methods

We analyzed a cohort of California's unified school districts that became at-risk of financial insolvency during the Great Recession and its immediate aftermath, and compared them to districts that remained in good financial standing. This paper presents the analysis of the descriptive enrollment and demographic characteristics of both types of districts, presents the analysis of their budgets, and looks at their respective salary and benefit schedules. The key research questions guiding this project ask:

1) What are the demographic and enrollment characteristics of districts that became at-risk of financial insolvency during the Great Recession period, and how do they compare to districts that maintained a healthy financial standing during the economic downturn?

2) For districts that became at-risk, how did their revenue, expenditures, and balance sheets compare over time to districts that remained in good financial standing?

3) What operational decisions did at-risk districts make during the Great Recession, and how did they compare to financially healthy districts?

Data sources

Our data set includes enrollment and demographic data, fiscal solvency data, school finance data, and salary and benefit schedules for California unified school districts in school years 2004-05

through 2020-21.[11] All data was free and publicly accessible through the California Department of Education (CDE) website. Appendix Table 1 describes each of these data sources in more detail.

Data preparation

Focal districts – We narrowed in on unified school districts as the unit of analysis since unified districts serve a common K-12 grade span and also serve the majority of students in the state. In order to compare districts with similar cost structures we excluded districts that are exclusively elementary and high school districts, as well as other non-district agencies, such as County Offices of Education or Joint Power Agencies. Following best practices in school finance reporting using the SACS database (Bruno, 2018; Loeb, Grissom, & Strunk, 2007), we also excluded school districts with Average Daily Attendance less than 250 in any year of the analysis.[12]

Identifying the at-risk cohort - We identify at-risk districts using the interim fiscal reports submitted to the California Department of Education (CDE). Each interim report includes a certification of whether or not the district can meet its financial obligations for the current and two subsequent fiscal years. For the purpose of this analysis, our primary at-risk definition includes districts that received at least three consecutive *qualified* certifications or one *negative* qualification during any year of the Great Recession period (2008-09 to 2012-13).[13] We exclude districts from the analysis if they had an at-risk flag during the Great Recession period and were also at-risk in either 2006-07 or 2007-08 to avoid analyzing districts with a history of at-risk status leading up to the recession. In other words, we wanted to isolate districts that became at-risk during the recession period that were otherwise financially healthy.[14] This process also helps to identify districts that may have become at-risk during the recession for strictly financial reasons rather than due to other factors such as difficult labor negotiations or poor district mismanagement. After narrowing the sample, our analysis includes 303 unified school districts.

Appendix Table 2 shows the districts included in our sample, along with a year-by-year history of their at-risk status. For the analysis, we compare the cohort of districts at-risk during the Great Recession period to other unified school districts that were never at-risk, meaning they never received three consecutive qualified ratings or never received a negative rating between 2008-09 and 2012-13. In total, we identified 86 districts that were at-risk of financial insolvency during the

[11] The California Department of Education has SACS data going back to the 2003-04 year, but given that 2003-04 was the first year of SACS implementation, it was likely that districts experienced reporting errors and we therefore omitted the first year from the analysis (see also Bruno, 2018).

[12] Very small districts are often excluded from financial analysis because they have per pupil revenues and expenditures that are outliers in comparison to statewide averages due to their small size.

[13] FCMAT uses other indicators to determine fiscal insolvency risk, but we use the two criteria that are observable in the available data. For more information, see FCMAT, 2019b.
Although the Great Recession began in December 2007 and ended in June 2009, we use 2012-13 as the end of the recession period since that is the last year of California's state budget crisis (Legislative Analyst's Office, 2012).

[14] We excluded 17 districts from the analysis using this criteria, including: Aromas/San Juan Unified, Calexico Unified, Chico Unified, Dixon Unified, El Rancho Unified, El Tejon Unified, Eureka City Unified, Golden Plains Unified, Healdsburg Unified, Lucerne valley Unified, Munoc Joint Unified, Oakland Unified, Pajaro Valley Unified, Parlier Unified, Ukiah Unified, Vallejo City Unified, and Willows Unified.

Great Recession period and compared them to the 217 districts that remained in good financial standing.[15]

Normalizing dollars by ADA across risk status – Analyzing total dollar amounts across groups of districts based on risk status can be misleading, since some school districts in the sample serve fewer than 1,000 students while others like Los Angeles Unified serve hundreds of thousands of students. To account for district size variation, all dollar amounts reported in the SACS dataset are divided by district Average Daily Attendance (ADA) to get a measure of dollars per ADA to allow a more 'normalized' comparison across districts by risk status.[16] Specifically, to produce our results, we sum up dollars in each risk category (at-risk versus not-at-risk) and in each period, sum up ADA in each risk category and in each period, and then divide our dollar measure by ADA.

Inflation adjustments – We adjusted all dollar amounts for inflation to 2021 dollars using the Consumer Price Index for All Urban Consumers (CPI-U) from the Bureau of Labor Statistics. Each year's multiplier was calculated by dividing the cost of a basket of goods in 2021 by the cost of the same set of goods for each year.

Robustness checks – For all dataset analyses, we ran robustness checks with and without Los Angeles Unified School District (LAUSD) since LAUSD is by far the largest district in the state and their district-level characteristics may be very different from other districts in our sample. We found that after normalizing district dollars by ADA, including LAUSD in the enrollment and demographic data along with the SACS financial and J90 data does indeed make a substantial difference in overall averages due to the fact that LAUSD is an outlier district across our data sources. Therefore, for figures where LAUSD makes a difference, the figures show the at-risk cohort with and without LAUSD.

SACS funds used in analysis – The SACS dataset has three types of funds: governmental, proprietary and fiduciary. We focus exclusively on governmental funds, which are typically funded with tax-supported resources that are used for activities that support the operation of the district such as the education of students, operation of food services and child development programs, the construction and maintenance of school facilities, and repayment of long-term debt. We do not focus on proprietary funds that are used to account for business-type activities. Nor do we analyze fiduciary funds, which are used to account for assets held by the district in a trustee or agency capacity that cannot be used to support the operation of the district. Within governmental funds, we analyze the general fund, which accounts for the majority of district revenue and spending activity, as well as several other special revenue, capital projects, debt service, and permanent funds. We excluded the charter school special revenue fund and the charter school enterprise fund from the analysis to avoid the issue of including charter schools that report their finances independently from the district. To see a full list of funds kept or excluded from the analysis, see Appendix Tables A3-A4.

[15] Note that 2004-05 and 2005-06 include a full sample of 84 at-risk districts, and 2006-07 and 2007-08 include 85 districts. This is because two districts in our sample were not established until later in our time series. Likewise, the cohort of financially healthy districts changes over time from 204 districts in 2004-05 to 217 districts by 20-21 due to the establishment of some new districts in the sample.

[16] We used ADA instead of district enrollment because education funding in California is allocated by average daily attendance (ADA), not enrollment.

Other SACS issues – There is an issue of 'double counting' revenues and expenditures in the SACS dataset since the accounting structure is set up to track fund and interagency transfers. To prevent double counting, we excluded select revenue and expenditure object codes that account for transfers using a similar process developed by Bruno (2018), and also from consultation from the California Department of Education, Financial Accountability & Information Services division. However, because we are interested in whether internal borrowing took place during the recession period, we did not drop any object codes from the balance sheet that reflect transfers (doing so does not affect total resources or expenditures). We also excluded certain resource codes that are only used for charter schools or represent the state's contribution to district retirement funds, and also excluded object codes related to early childhood education or adult education so that the analysis would focus on K-12 alone (per Bruno, 2018). See Appendix Tables A4-A5 for more information.

SACS data limitations – While the SACS database provides extensive and longitudinal data for school district financial actuals, the data is unaudited and each district may have different reporting practices; unfortunately, there is no way to account for any reporting discrepancies between districts, nor can we verify whether data was reported accurately. There is also the issue of charter school reporting. Some charter schools report their finances through district budgets while others report directly to the state; while we attempted to account for this by removing special charter funds or object codes that transfer funds to and from charters, we cannot remove all charter school financial activity from the SACS chart of accounts. However, we attempt to account for this by using the Average Daily Attendance (ADA) reported by districts to normalize district dollars; ADA includes enrollment from charter schools that have data in the district's Current Expense of Education calculation (for more information, see https://www.cde.ca.gov/ds/fd/ec/currentexpense.asp). Despite these limitations, SACS continues to be the primary data source for school finance research in California (Bruno, 2018; Loeb, Grissom, & Strunk, 2007).

About the Standardized Account Code Structure (SACS) dataset

The SACS database uses the Generally Accepted Accounting Principles (GAAP) developed by the Governmental Accounting Standards Board (GASB), which is considered the 'gold standard' for accounting and financial reporting by state and local governments. The first year of available SACS data is from the 2003-04 school year, and data is collected and reported annually. The SACS chart of accounts includes a comprehensive set of all resources, expenditures, and the balance sheet for all California Local Educational Agencies (LEAs) organized by different codes. There are fund codes, goal and function codes, school and project year codes, as well as object codes.

Fund codes - There are many funds used to track LEAs revenue and expenditures related to operating and capital purposes. School districts primarily use the general fund, which is used for reporting general purpose revenues and expenditures.

Resource codes - Resource codes are used to track activities that are funded with resources that are either unrestricted or have special accounting or reporting requirements or that are legally restricted.

Goal codes - goal codes help organize all costs from the LEA by instructional goals or objectives. For example, goal codes might be used to document revenue for special education or migrant education.

Function codes - The function identifies activities or services performed to support or accomplish one or more goals or objectives. For example, districts may categorize function expenditures by instruction, school administration, pupil transportation, and general administration that are associated with broader goals.

Object codes - Object codes organize revenues by source and type, organize expenditures by type of commodity or service, and classify balance sheet accounts such as assets, liabilities, or fund balances.

School codes – School codes are not required but are generally used to document expenditures by school.

The project year - this code is not required but is used to identify the reporting year for a given project that has more than one reporting year during the LEA's fiscal year.

See the SACS manual for more information about the chart of accounts (California Department of Education, 2019).

Findings

Descriptive characteristics

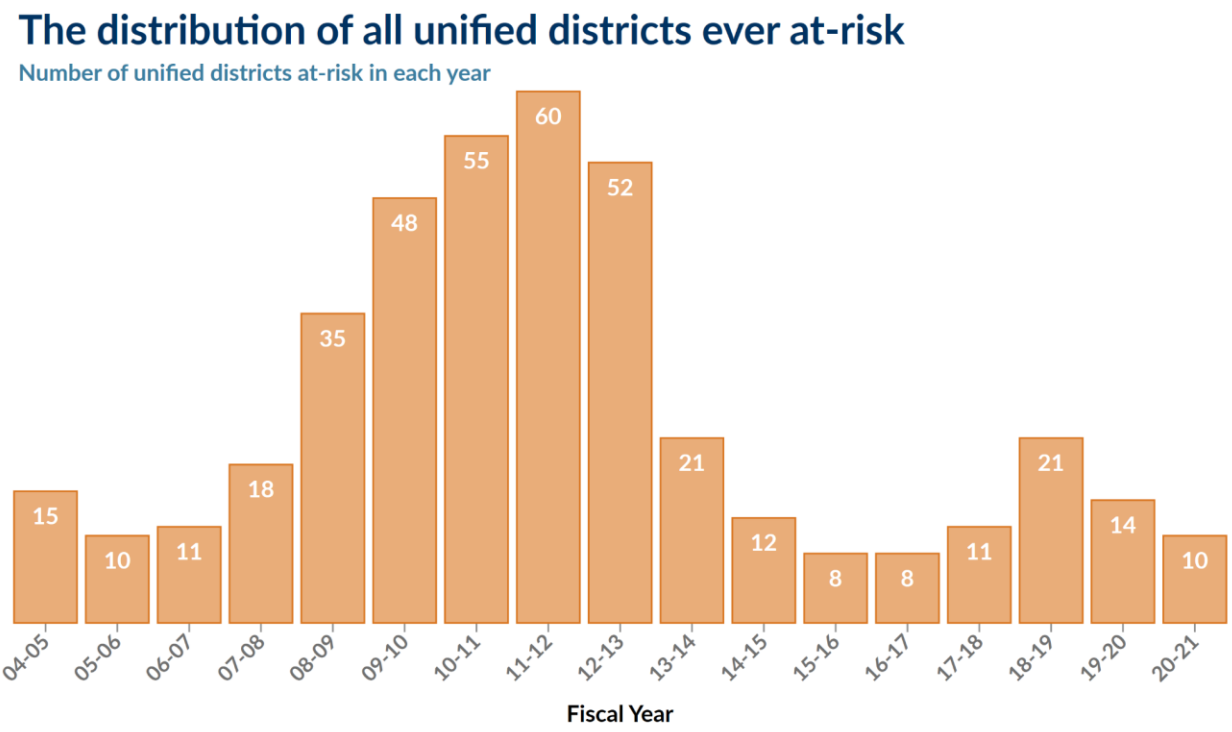
We first review the descriptive characteristics of at-risk districts by looking at the change in all unified districts at-risk of insolvency over time, and then look at our cohort of 86 districts to compare their enrollment and demographic characteristics to districts that remained in good

financial standing. As shown in Figure 1[17], in the time leading up to Great Recession, the number of districts ever at risk of financial insolvency was modest—just 15 unified districts were at-risk in 2004-05, only 10 unified districts were at-risk during 2005-06, 11 in 2006-07, and just 18 districts were at-risk during 2007-08. In 2008-09, the first year of the Great Recession, the number of at-risk unified districts nearly doubled over the previous year and continued to rise until 2011-12, reaching a peak of 60 unified districts that became at-risk of financial insolvency. By the time Proposition 30 and the LCFF were implemented, the number of at-risk unified districts dropped dramatically, falling to 21 districts in 2013-14 and staying within that threshold into 2020-21.

Appendix Table 2 lists the 86 districts in our sample and their at-risk status over time. Nearly every district in our at-risk sample had a 'clean record' of insolvency risk prior to the Great Recession, with just a handful of districts experiencing at-risk status in 2004-05 or 2005-06 (note that we intentionally identified this sample by excluding districts with an at-risk flag in 2006-07 and/or 2007-08). Notably many of the districts experienced several years of insolvency risk during the Great Recession period, with some districts such as Inglewood, Los Angeles Unified, and San Diego Unified remaining in at-risk status several years after the recession period ended. Moreover, many of the districts at-risk in more recent years are districts in our sample that were at-risk of financial insolvency during the Great Recession period, suggesting that districts that experienced at-risk status during the Great Recession may be likely candidates to continue experiencing at-risk status. Nine of the 21 districts at-risk of financial insolvency in 2018-19, 10 of the 14 districts in 2019-20, and 5 of the 10 districts in 2020-21 are in our study sample.

Figure 1

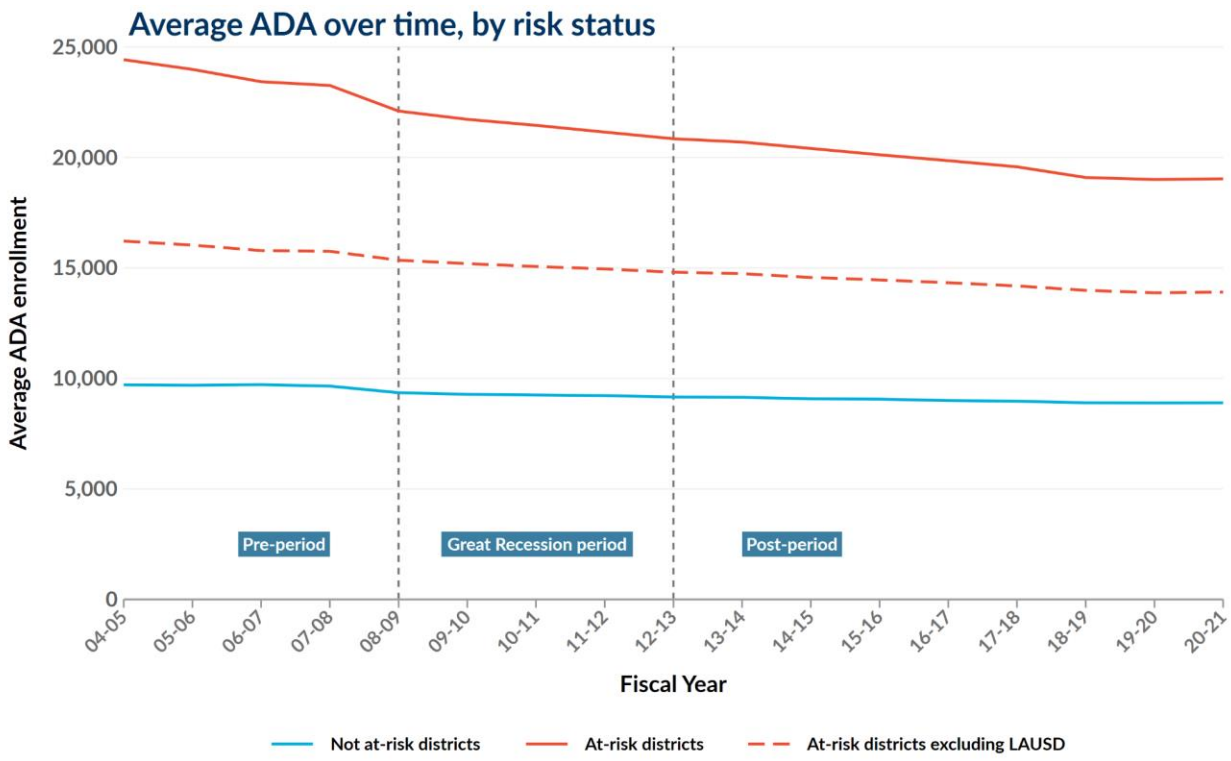
[17] Note that Figure 1 is not representative of our study sample; Figure 1 shows any unified district ever at-risk over time, including unified districts with fewer than 250 ADA or districts that had an at-risk flag in 2006-07 and/or 2007-08.



Source: Authors' analysis using interim fiscal reports and the SACS dataset from the California Department of Education.
Notes: This figure includes any unified district ever at-risk, including those with fewer than 250 ADA or districts with a history of insolvency risk prior to the Great Recession. Our at-risk definition includes unified districts that received at least three consecutive qualified or one negative certification. For districts that received at least three consecutive qualified certifications, the year they recieved at least two of the three qualified certifications is the year they are flagged as at-risk.

Figure 2 shows average daily attendance (ADA) with and without LAUSD. As shown, district enrollment starts at about 9,700 students for the not-at-risk district cohort at the beginning of the pre-period, with slight declines over time to roughly 9,160 students by the end of the recession period in 2012-13, and just under 9,000 students by the end of the post-period in 2020-21. Including LAUSD, the at-risk district cohort consistently enrolled at least twice the number of students over time. At the beginning of the pre-period, the at-risk district cohort including LAUSD enrolled an average of nearly 24,500 students; by the end of the recession period in 2012-13 they enrolled about 21,000 students, and in the post-period the at-risk cohort enrolled an average of roughly 19,000 students in 2020-21. Results for the at-risk cohort excluding LAUSD are also shown; while the overall enrollment size of the at-risk group does reduce substantially, the at-risk cohort without LAUSD still is larger than the comparison group across all years by at least a 5,000 ADA margin.

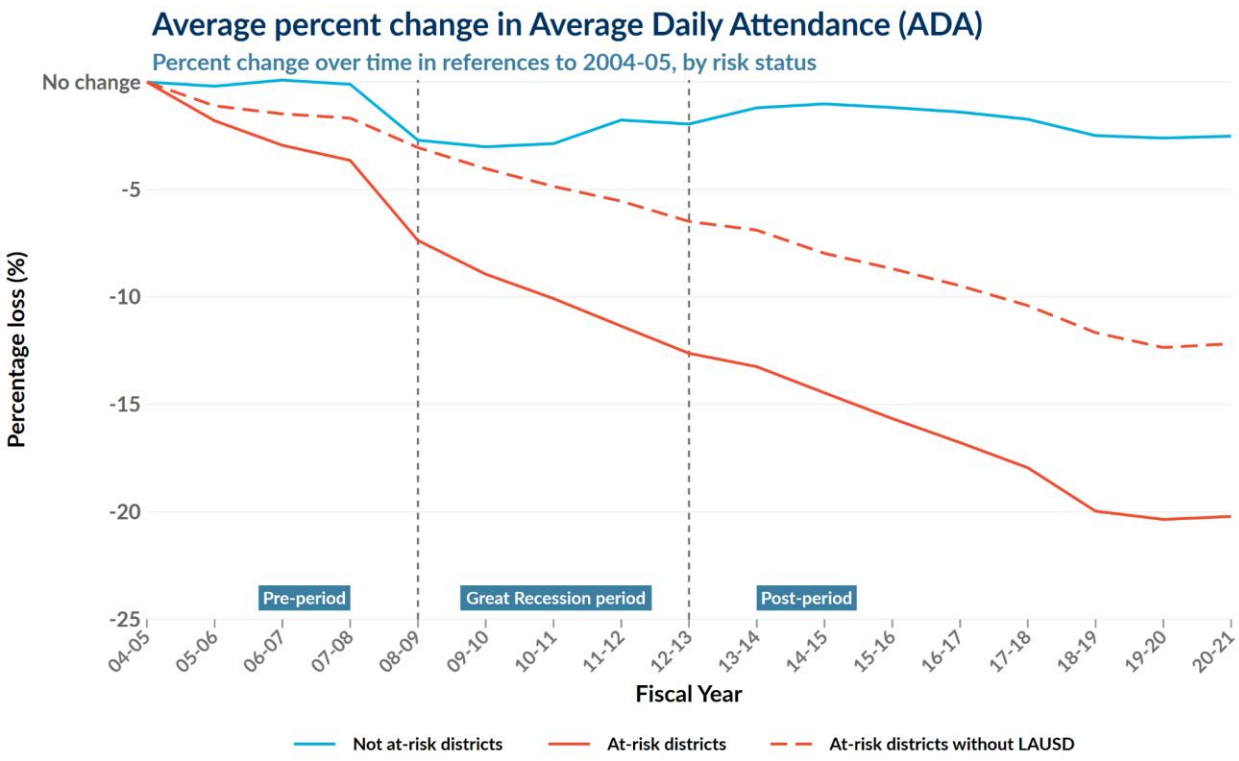
Figure 2



Source: Authors' analysis using interim fiscal reports and ADA data from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13).

Given that enrollment declines have been a growing concern for California school districts, we next look at percent change in enrollment over time. Figure 3 shows enrollment change measured against the baseline year 2004-05. As shown, enrollment declines have been occurring over time for both the at-risk cohort and the comparison districts, but the at-risk cohort has experienced consistently more dramatic losses, particularly during the Great recession period and post-period. The group of not-at-risk districts experienced a sharp enrollment decline in 2008-09 and continued to experience losses throughout the recession, but enrollment losses stabilized around 1-2% for much of the post-period, with 2-3% losses from 2018-19 onward relative to 2004-05. The at-risk district cohort also experienced a dramatic enrollment decline at the onset of the recession, but their losses continued to worsen over time. By the end of the post-period, at-risk districts including LAUSD were experiencing 20% enrollment loss from 2004-05; excluding LAUSD, it was about a 12% loss.

Figure 3

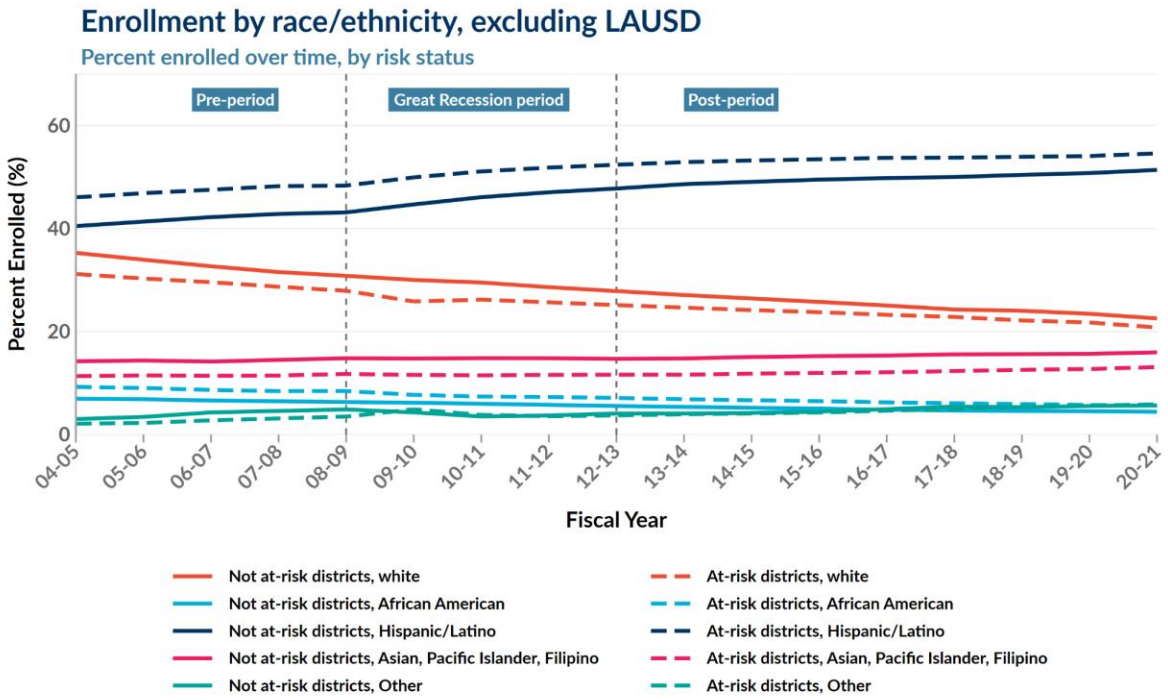


Source: Authors' analysis using interim fiscal reports and ADA data from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13).

Next, Figures 4-6 show demographic data by risk status.[18] Figure 4 shows the racial/ethnic characteristics of the at-risk district cohort compared to not-at-risk districts (without LAUSD). Both types of districts have experienced an increase in Hispanic/Latino and Asian, Pacific Islander, and Filipino students over time, and a decrease in white and African American students. But notably, at-risk districts serve a higher proportion of Hispanic/Latino and Black students and fewer white and Asian, Pacific Islander and Filipino students than districts that are not at-risk. Figure 5 shows that at-risk districts serve a higher percentage of students eligible for free or reduced priced meals (FRPM)—a proxy for low-income status—over time both with and without LAUSD. Notably, the proportion of students eligible for FRPM have been on the rise for both types of districts across time, particularly during the Great Recession period. Figure 6 shows that the at-risk district cohort serves slightly more English Language Learner (ELL) students than not-at-risk districts with and without LAUSD, with the ELL population on the decline for both types of districts over time.

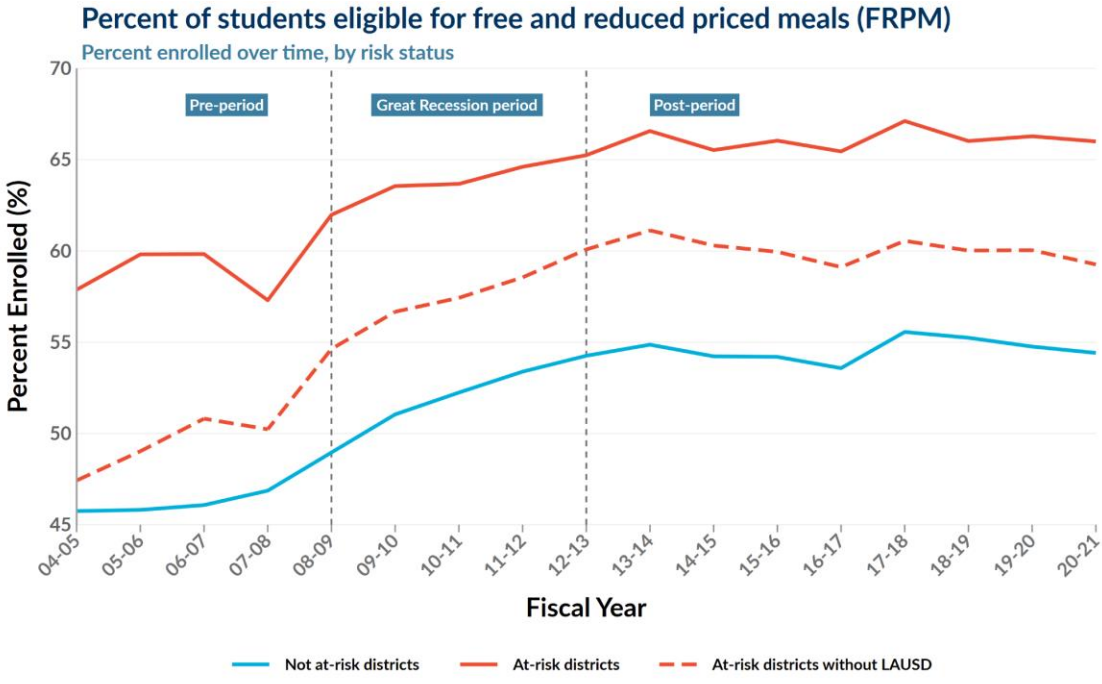
[18] Note that the following figures use enrollment data rather than ADA data to calculate percentages.

Figure 4



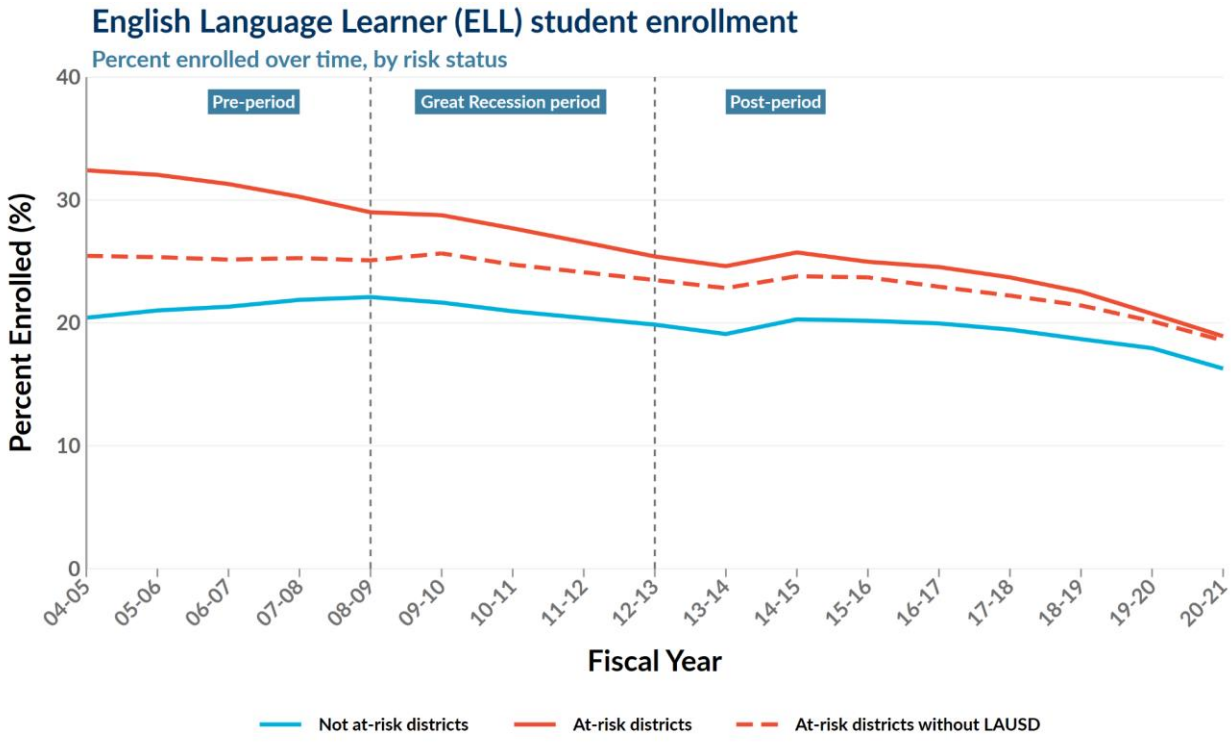
Source: Authors' analysis using interim fiscal reports and enrollment data from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). Charter schools were excluded from this analysis.

Figure 5



Source: Authors' analysis using interim fiscal reports and FRPM data from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). Charter schools were excluded from this analysis.

Figure 6



Source: Authors' analysis using interim fiscal reports, ELL and enrollment data from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). Charter schools were excluded from this analysis. We impute data for 2011 as the average of 2010 and 2012 due to a data anomaly.

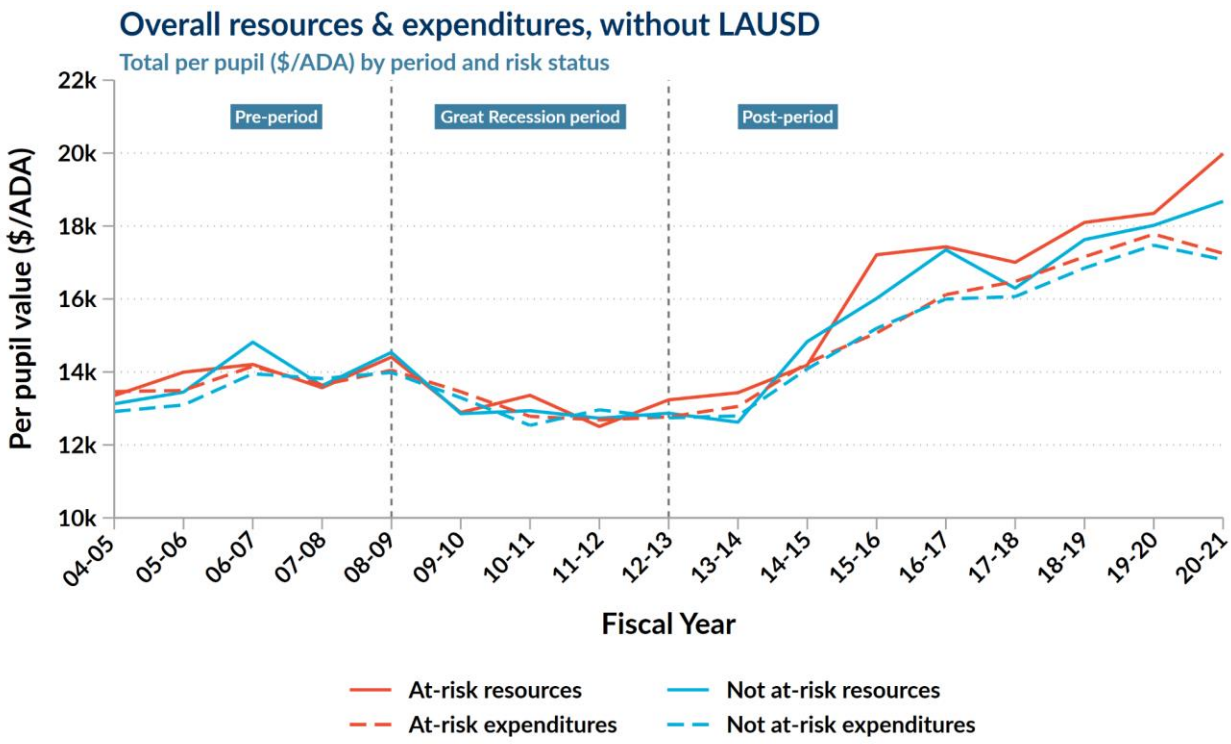
Overview of district finances

Now we turn to a breakdown of the overall resources and expenditures between our at-risk district sample and the comparison group. Figure 7 shows the total of all per pupil resources and expenditures for at-risk versus not-at-risk districts over time for both capital and operating funds (for a list of all funds used, see Table A3 in the Appendix). The figure excludes LAUSD from the at-risk cohort since the district is an outlier in the sample (however, see Appendix Figure 4 that replicates this figure with LAUSD). As shown, total resources and expenditures for both types of districts generally track one another across time. Resources and expenditures declined slightly for both groups during the Great Recession period and hit a low-point in 2011-12, but began to recover and increase in the post period. On the whole, per pupil funding greatly increased in the post period for both types of districts, with the at-risk group consistently receiving more resources per student beginning in 2015-16.

On the expenditure side, both groups experienced a modest deficit during two years of the recession period—2009-10 and 2011-12. The not-at-risk districts also experienced a very modest deficit in 2007-08 and 2013-14, but both groups appear to be consistently in balance during the post-period by 2014-15. Appendix Figures 1-3 tell more about the periods of deficit experienced by each type of district. Figure A1 shows all operating funds over time (including the General Fund) and A2 shows capital funds only, and A3 shows the General Fund alone since this is the largest fund

districts use. There are slight deficits in operating funds and the General Fund during the Great Recession period, but far more variation is seen on figure A2 in the capital funds.

Figure 7



Source: Authors' analysis using interim fiscal reports and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). All values have been adjusted to 2021 dollars using the CPI.

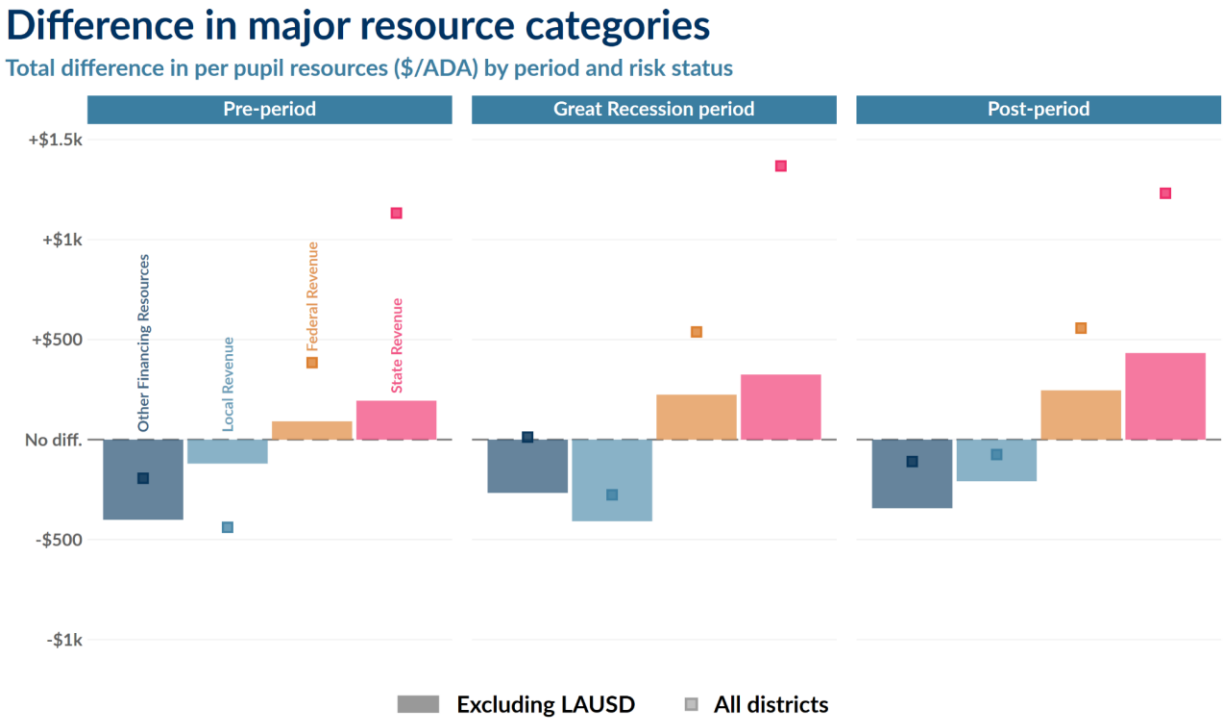
Resources

Next, we narrow in on major resource categories to identify differences in the funding composition between at-risk and not-at-risk districts. As shown in Figure 8, the at-risk district cohort is, on average, receiving more Federal and State resources, with a modest increase in each resource across the three periods. Notably, State funding for the at-risk cohort is about $194/ADA more in the pre-period (excluding LAUSD), $325/ADA more in the recession period, and rises for the at-risk cohort in the post-period to about $433 per ADA more than the comparison group. Federal resources increase from an average of $91 per ADA in the pre-period (or $385 per ADA with LAUSD), to $225 per ADA during the recession period ($538 per ADA with LAUSD), and $246 per ADA in the post-period ($557 per ADA with LAUSD).

On the other hand, the at-risk district cohort receives less Local Revenue and Other Financing Resources in all three periods. Local Revenue includes revenue from property taxes and other county and district taxes. The at-risk district cohort received about $120 per ADA less from Local Revenue (excluding LAUSD) in the pre-period, $406 per ADA less in the Great Recession period, and $209 per ADA less in the post-period period. Other Financing Resources are primarily resources generated from capital projects, such as proceeds from the sale of bonds, proceeds from

capital leases, funds from lapsed or reorganized LEAs, or the disposal of capital assets.[19] Other Financing resources are lower for the at-risk cohort, with roughly $400 per ADA less in the pre-period (excluding LAUSD), $267 per ADA less in the Great Recession period, and $344 per ADA less in the post-period.

Figure 8



Source: Authors' analysis using interim fiscal reports, ADA data, and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). All dollars have been adjusted for inflation to 2021 dollars using the CPI. Note that we shift county & local taxes from a state to local source.

Next, we look at major categories of state resources. As shown in Figure 9, there is no difference in per ADA resources from tax relief subventions (including for capital projects) in any of the periods, nor any difference driven from miscellaneous funds.[20] There are differences, however, in the principal apportionment that increases across each of the three periods, and other state revenue, which also slightly increases across time (excluding LAUSD). Each of these categories include several individual object codes. We show any object code with a difference between the two groups that is larger than $50/ADA or smaller than -$50/ADA in Appendix Table 6. We provide

[19] Note that only about half of our sample reported observations for the Other Financing Resources category. The number of at-risk districts ranged from 37-60 districts, and the comparison group ranges from 77-114 depending on the fiscal year.

[20] Note that these categories have less than the full sample of unified districts reporting. In other words, not all districts used this set of object codes and therefore the difference presented is from fewer districts than the full sample.

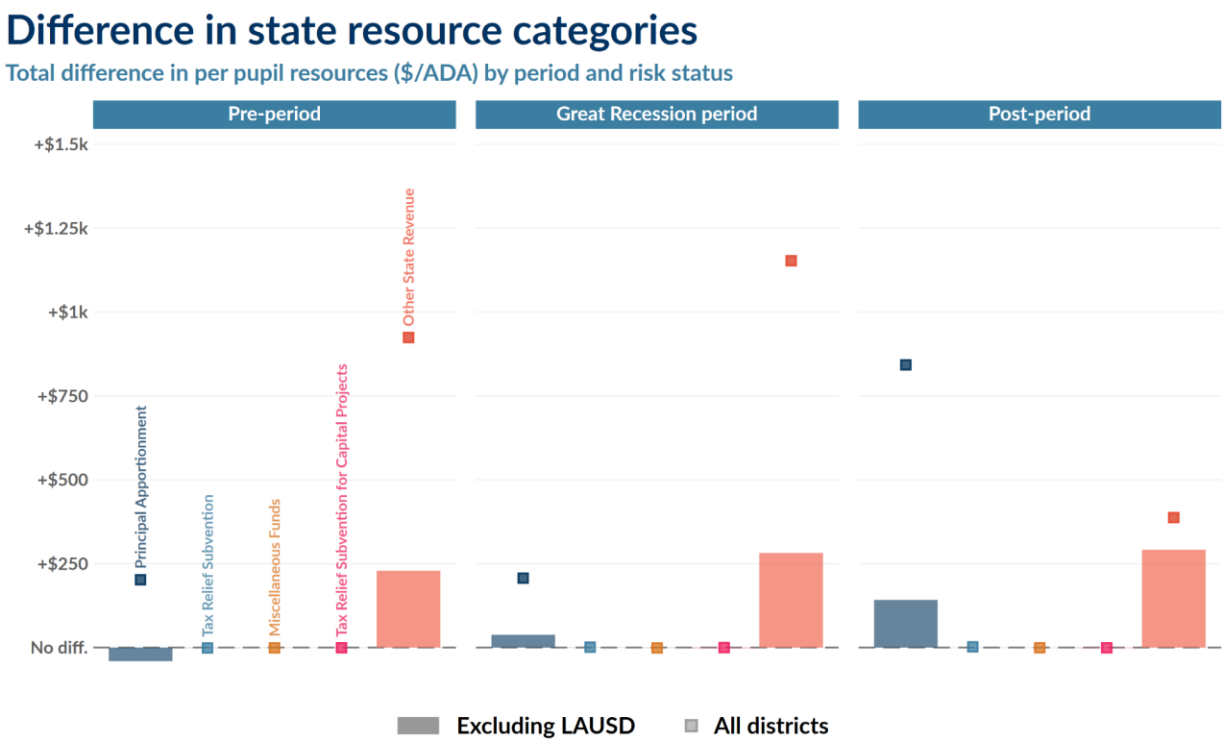
this information to give more detail about the individual object codes likely driving the trends in the larger categories.[21]

Within the principal apportionment category, LCFF state aid (object code 8011) appears to be the main driver of the difference. In the pre-period, the at-risk cohort received about $44 less than the comparison group, but in the Great Recession period, the at-risk cohort received $90 more, and by the post-period, the at-risk cohort received about $127 more per pupil than the comparison group (excluding LAUSD). The per pupil increase over the not-at-risk districts in the post-period is likely due to the supplemental and concentration grants that are part of the LCFF. Notably, as shown in Figure 5 above, both groups of districts enroll a high proportion of high-need students that would make them eligible for the supplemental and concentration funding part of LCFF. The not-at-risk cohort enrolled an average of 55% of high-needs students in the post-period, which meets the threshold of eligibility for both the supplemental and concentration grants. Therefore, there are not large differences in LCFF state aid, despite the fact that the at-risk districts do enroll proportionately more high-needs students overall.

Within the category of Other State Revenue, Appendix Table 6 shows that Other State Apportionments (object code 8311) and All Other State Revenue (object code 8590) are the biggest drivers, showing positive differences in each period. At-risk districts may have received more revenue from these sources for special programs, such as special education, after school programs, ELL, and career and technical education programs.

Figure 9

[21] Note that the individual object codes listed in the appendix table do not include every single object code within each of the broader categories, nor do they represent all object codes part of the SACS chart of accounts since we exclude any missing values, or very small values less than $50/ADA or larger than -$50/ADA.



Source: Authors' analysis using interim fiscal reports, ADA data, and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). All dollars have been adjusted for inflation to 2021 dollars using the CPI.

Figure 10 illustrates differences in major local revenue categories. The largest differences in each of the periods are driven by Other Local Revenue, Local Voter Initiatives, and County and District Taxes. As shown, the at-risk district cohort has less per ADA resources than the comparison group from Other Local Revenue in the pre-period, and the difference widens throughout the Great Recession and post-period. In the pre- and Great Recession period, the at-risk cohort also has less per ADA funding from Voter Passed Initiatives, but this changes in the post-period when on average, the at-risk cohort has a slight increase over the comparison group. County and District Taxes experienced the sharpest drop during the Great Recession period for the at-risk cohort, which received about $159 per ADA less than the comparison group (or $320 per ADA less with LAUSD).

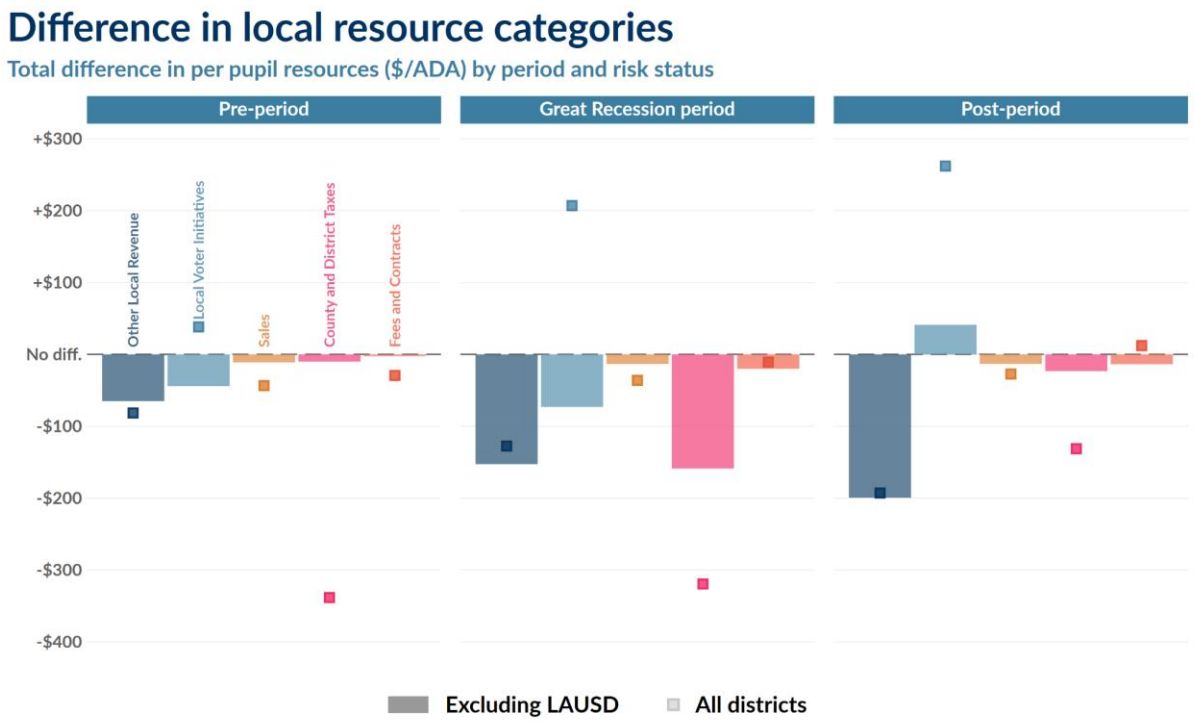
As shown in Appendix Table 6, the main object code driving the trend in the Other Local Revenue category is the all other local revenue object code (8699), which includes revenue collected from library fines, contributions and gifts, insurance recoveries, and reimbursement for practice teaching. In the pre-period, the at-risk cohort had about $58 per ADA less than the comparison group; during the Great Recession, this gap began to widen with the at-risk group collecting about $113 per ADA less than the comparison group, and $165 per ADA less than the not-at-risk districts in the post-period. It is likely that the group of districts that remained in good financial standing were able to fundraise locally from such revenue sources during the Great Recession period and into the post-period.

Within the category of Local Voter Initiatives, the at-risk cohort was primarily raising less revenue from parcel taxes (object code 8621) and other non-ad-valorem taxes (object code 8622). Even before the recession, the at-risk cohort raised about $288 per ADA less than the not-at-risk

group from parcel taxes; during the recession, the at-risk cohort was raising $483 less, and in the post-period the at-risk cohort raised an average of roughly $500 per ADA less than the comparison group (see Appendix Table 6). The not-at-risk districts also were more successful at raising other non-ad-valorem taxes, such as local sales taxes, maintenance assessment district funds or Mello-Roos special tax receipts; during the Great Recession period, the not-at-risk districts raised about $233 per ADA more than the at-risk cohort, and roughly $381 per ADA more in the post-period.

Notably, there is almost no difference in the category of County and District Taxes in both the pre- and post-periods. There is a drop, however, during the Great Recession period when the at-risk cohort was receiving about $170 per ADA less than the not-at-risk districts in this category. Digging deeper, districts' secured roll taxes (object code 8041)—or rather, property taxes—is driving this trend alongside revenue from the Education Revenue Augmentation Fund (ERAF, object code 8045). During the Great Recession period, the at-risk districts had about $73 per ADA less from property taxes than the comparison group, and about $69 per ADA less during the post-period. This indicates that the not-at-risk districts may be located in areas with more property wealth than the at-risk cohort, which may be why the not-at-risk districts have slightly higher revenue from this source. ERAF is a mechanism that shifts local tax revenues from cities, counties, and special districts to a countywide account to be used for schools, and a weaker local property tax base may also be why the at-risk cohort had lower ERAF contributions than the comparison group during the Great Recession period. In the Great Recession period, the at-risk group received $74 per ADA less than the comparison group, and $95 per ADA less in the post-period from ERAF.

Figure 10



Source: Authors' analysis using interim fiscal reports, ADA data, and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13).
All dollars have been adjusted for inflation to 2021 dollars using the CPI.

Federal and Other Financing sources

As we saw in Figure 8 above, the at-risk cohort received more revenue from Federal sources than the comparison group, and also received an increase of Federal revenue relative to the comparison group over time. The main object codes driving these trends in Federal revenue are child nutrition programs (object 8220), pass-through revenues from federal sources (object 8287) and all other federal revenue (object 8290), as shown in Appendix Table 6. Much of this federal funding is targeted to low-income students and high poverty schools; it is likely that the at-risk cohort received more from these federal sources given that Figure 5 above shows that the at-risk cohort serves proportionately more low-income students than the comparison group.

Figure 8 also showed that the at-risk districts received less from the category of Other Financing Sources across all three periods. Within this category, there are several object codes on Appendix Table 6 with larger differences than many of the other findings; however, the sample sizes associated with each object code is moderate to very small and results should be interpreted with caution. We draw attention to proceeds from the sale of bonds (object 8951) and all other financing sources (object 8979), which have the most robust sample size, with about one-third of each group of districts reporting. The at-risk cohort had less per ADA funding from the sale of bonds in each period (object 8951), with $355 per ADA less than the comparison group during the recession period. The SACS handbook indicates that proceeds from the sale of bonds should be deposited into a districts' building fund, so it is likely that the not-at-risk group was issuing general obligation bonds during the recession, perhaps to keep ongoing or backlogged capital projects in motion despite the state budget condition. The group of districts in good financial standing also had more revenue per pupil from all other financing sources (object 8979), which represents the revenue collected from bonds that are sold at a premium. School districts can sell bonds at a premium when market interest rates are lower than the bond's stated interest rate on the day of issuance, and therefore the bonds are more in demand and investors are willing to pay a premium to buy them. The premium, or rather the amount sold above the par value, is recorded as revenue in this object code. During the recession period, the at-risk cohort received about $347 per ADA less than the comparison group from this source, and about $285 per ADA less during the post-period (excluding LAUSD), which indicates that the financially healthy group of districts sold more bonds at a premium than the at-risk group.

Expenditures

Next, we look at district expenditures. In Figure 11, the difference between at-risk and not-at-risk district operating expenditures are shown across major categories using all funds. The first category shown—Services and Other Operating Expenditures—shows an increase in per pupil spending between the pre- and recession-period, with the at-risk cohort spending about $17/ADA more in the pre-period, $51/ADA more in the recession period, and then spending about on par with the comparison group in the post-period (excluding LAUSD). Appendix Table 6 provides more information about which object codes within this category may be driving the difference, and subagreements for services (5100) shows up as a leading candidate. This object codes documents spending on contracts awarded to third parties for instruction or a support activity, and the at-risk cohort was spending more on such services across all three periods.

Average spending differences on Classified Personnel Salaries was higher for the at-risk cohort in the pre-period and remained higher in the Great Recession period at about $50/ADA; however, spending on Classified Personnel Salaries was nearly on par with the comparison group in the post- period, with the at-risk cohort spending just $25/ADA more (excluding LAUSD). Spending within this category is driven by classified support salaries, as documented in Appendix Table 6 (object code 2200). Notably, we find little to no difference between the two groups' spending on Certificate Personnel Salaries across all three periods.

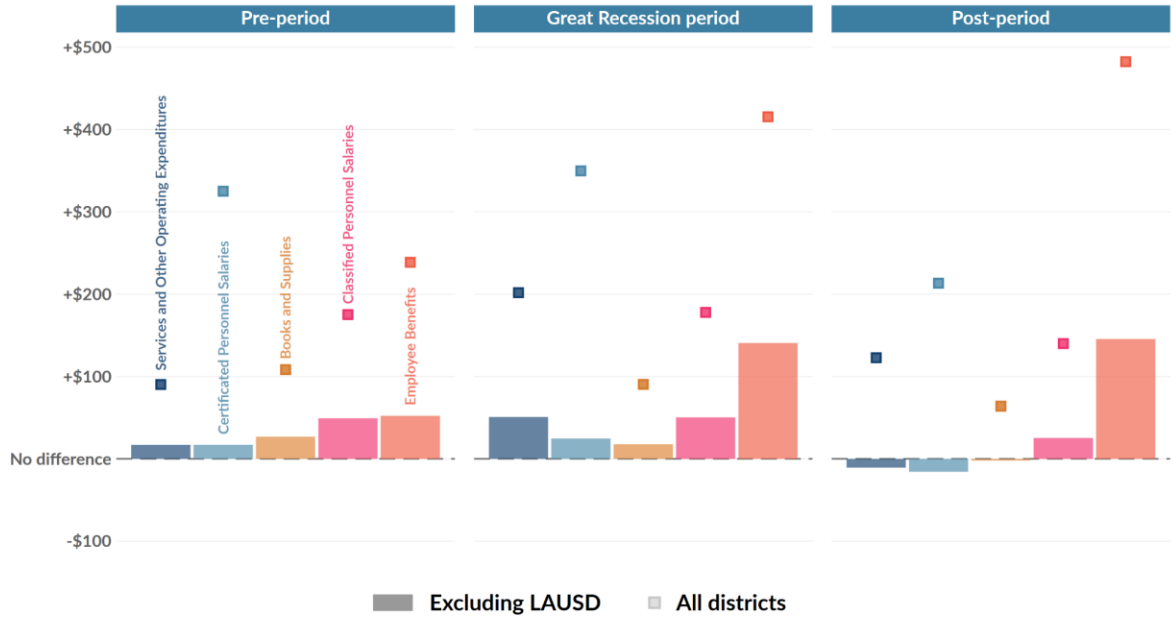
We do find, however, that spending on Employee Benefits was higher over time for the at-risk cohort. This category includes spending on health and welfare benefits, the State Teachers' Retirement System and Public Employees' Retirement System, and other employee benefits for both certificated and classified positions. The at-risk districts spent about $52/ADA more than the comparison group in the pre-period (or about $240/ADA more if LAUSD is included), and the difference in benefit expenditures rose to about $140/ADA - $145/ADA more for the at-risk cohort during the Great Recession and post-period (or between $400-$500/ADA more if including LAUSD). There is no single object code within the benefits category that stands out as the driver of this trend; rather, it is the accumulation of spending on all employee benefit object codes (3000-3999) that account for these differences.

These findings suggest that the at-risk district cohort had slightly higher average operating expenditures in the pre-period, and their costs increased during the Great Recession in contrast to the comparison group, particularly for services and other operating expenditures and employee benefits. Notably, spending on benefits continues to be higher for the at-risk cohort in the post-period. The at-risk district cohort did, however, begin to reduce expenditures on classified personnel salaries in the post-period in reference to the comparison group. One possible explanation may be that employee bargaining units in the at-risk cohort had secured higher pay and benefits for some employees in reference to the comparison group, which may be one reason why classified personnel salaries and employee benefits are higher for the at-risk cohort.

Figure 11

Difference in major operating expenditures

Total difference in per pupil expenditures ($/ADA) by period and risk status



Source: Authors' analysis using interim fiscal reports, ADA data, and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13).
All dollars have been adjusted for inflation to 2021 dollars using the CPI.

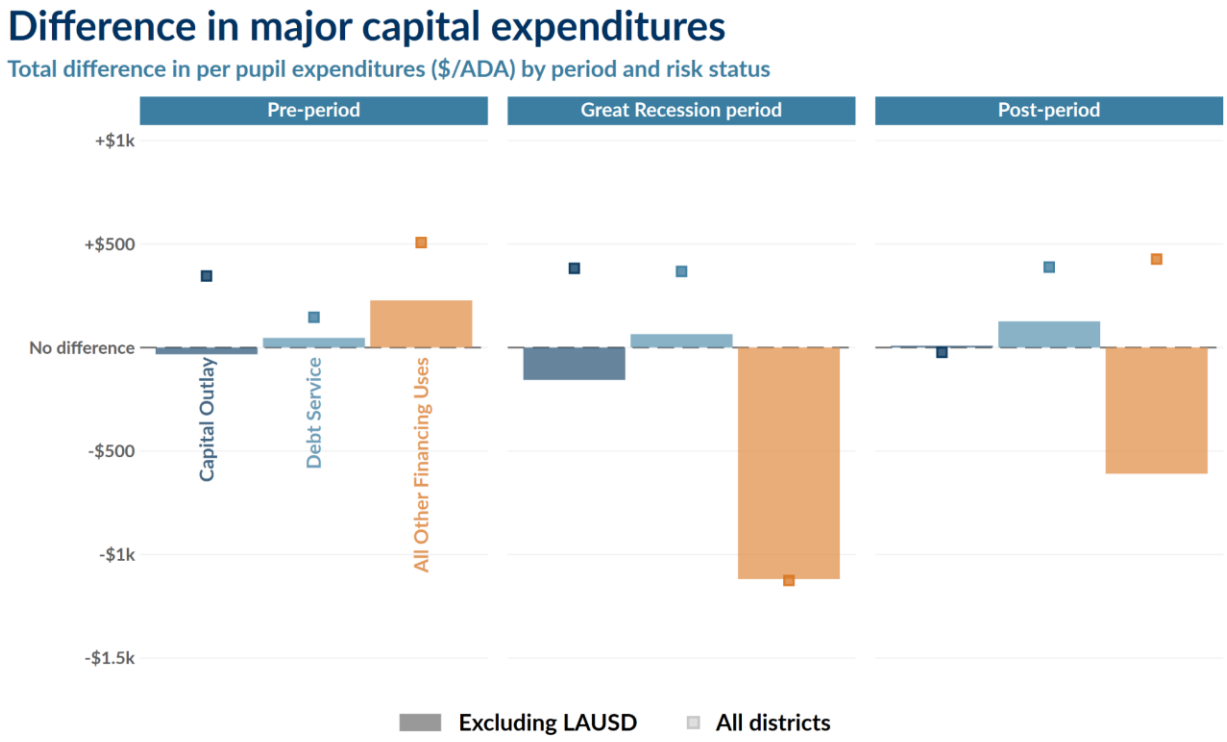
Figure 12 analyzes the difference in major capital expenditures between the at-risk district cohort and the comparison group. The biggest difference by far between per pupil spending averages is in the All Other Financing Uses category. Yet a note of caution when interpreting this category: there are very few districts that reported any data for All Other Financing Uses (object codes 7630-7699).[22] Having said that, in the pre-period, the at-risk cohort spent about $227/ADA more from the All Other Financing Uses category than the comparison group, but by the Great Recession period, the at-risk cohort spent $1,118/ADA less, and in the post-period they spent $610/ADA less. Appendix Table 6 shows that object code 7699 for all other financing uses is the main driver of this trend. This object code represents long-term debt, such as bonds, that are issued at a discount. Bonds are not always sold at face value and may be sold at a discount, meaning that the selling price is lower than face value. This occurs when the market interest rates are higher than the bonds' stated interest rate on the day of issuance, and the bond price is lowered or discounted to make the bond more attractive to investors. The discount is considered an expenditure and documented in this object code. This finding suggests that the comparison group was selling more bonds at a discount, which is recognized as an expenditure in object code 7699.

Capital Outlay is another expenditure category that changes during the Great Recession for the at-risk cohort, largely due to object code 6200 for buildings and the improvement of buildings (as shown in Appendix Table 6). The at-risk cohort spent less on building projects during the Great Recession than the comparison group; in the pre-period the at-risk group was spending roughly the same as the comparison group (without LAUSD), but by the recession period, they were spending

[22] Between 5-14 at-risk districts reported this data and just 12-29 of the comparison districts depending on the fiscal year.

$131/ADA less. The difference in debt service spending generally stayed the same throughout the Great Recession period, but slightly increased for the at-risk cohort during the post-period (see Appendix Table 6 for associated object codes underlying this trend).

Figure 12



Source: Authors' analysis using interim fiscal reports, ADA data, and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). All dollars have been adjusted for inflation to 2021 dollars using the CPI.

Operational Decision-Making

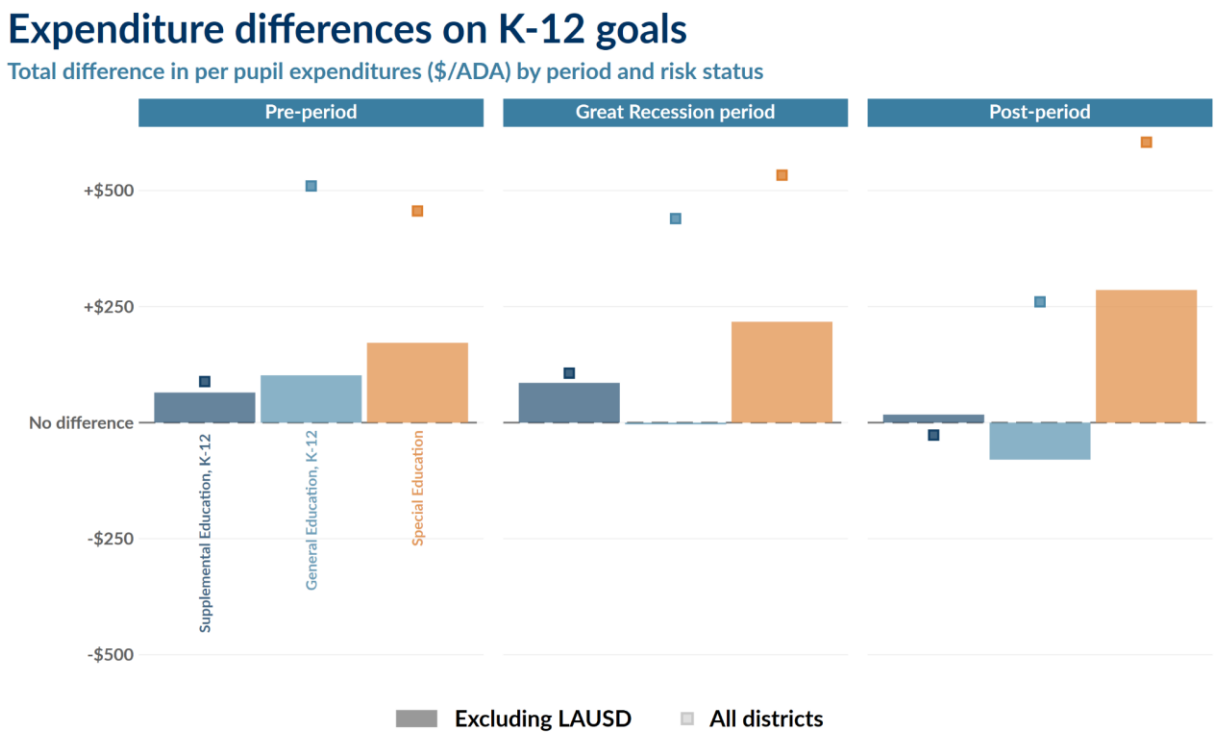
Next, we analyzed the Goal field that is part of the SACS dataset that defines objectives for the district. We use the goal field to determine if educational priorities changed over time. Specifically, we narrow in on the expenditure side of K-12 instructional goals to understand whether there were differences between the two groups' spending on K-12 General Education (including regular education as well as special schools), K-12 Supplemental Education (which includes bilingual and migrant education), or Special Education.[23]

As shown in Figure 13, at-risk districts' average per pupil spending on Supplemental Education was slightly higher than the comparison group in the pre-period for the at-risk cohort and increased slightly in the Great Recession period before dropping to almost no difference with the comparison group in the post-period.[24] Despite enrolling a higher percentage of ELL students (as shown in Figure 6 above), the at-risk cohort appears to spend roughly on par with the comparison

[23] Districts are required to report all expenditures associated with the goal field, but not the balance sheet or revenue associated with the goal field (except for special education revenue, which is required).
[24] Note that the Supplemental Education category has about half of the districts in our sample reporting.

group (similar $/ADA) across all of the periods. Spending on General Education was higher for the at-risk cohort in the pre-period and spending was nearly on par with the comparison group in the recession period before falling slightly behind the comparison group's spending level in the post-period. Spending on Special Education was higher for the at-risk cohort in the pre-period and the difference in per pupil spending increases over time growing to nearly a $300/ADA difference in the post-period (excluding LAUSD), signaling that Special Education costs are consistently higher and growing for the at-risk cohort in reference to the comparison group.

Figure 13



Source: Authors' analysis using interim fiscal reports, ADA data, and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13).
All dollars have been adjusted for inflation to 2021 dollars using the CPI.

Salary & Benefit Schedule (J-90)

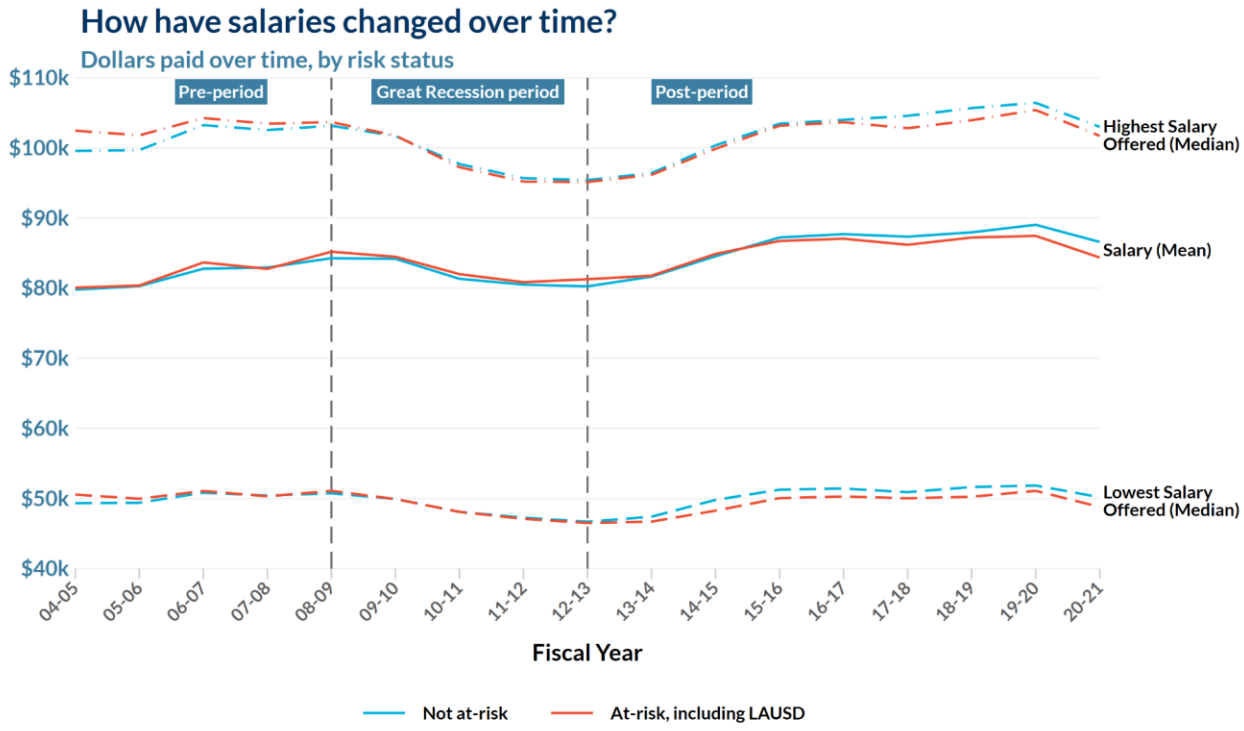
The SACS dataset is limited in that it cannot show what *cuts* may have been made to full-time employee positions, salaries, or instructional time during the Great Recession period. To supplement, in Figures 14-17 we use J-90 data from the California Department of Education that reports salary and benefit schedules from collective bargaining units.

Figure 14 shows the average certificated salary over time, along with the highest salary paid and lowest salary offered, adjusted for inflation (certificated employees include nurses, librarians, and counselors in addition to teachers).[25] The patterns in all three trend lines are nearly the same

[25] The average salary is the average salary paid to an employee on the certificated salary schedule and is determined by dividing the total salary schedule cost by the FTE. The lowest salary offered is the lowest salary that

for both the at-risk cohort and the comparison group. During the pre-period, the at-risk cohort offered slightly higher average salaries and highest salaries; the lowest salary offered at both types of districts was nearly the same. During the Great Recession period, average, lowest and highest salaries for teachers at both types of districts began to drop in 2009-10 and did not recover to pre-recession levels until 2015-16. The most notable cut was made to the highest salaries offered, which dropped to a low of roughly $95,000 for both groups of districts at the end of the Great Recession period in 2012-13, about an 8 percent cut from 2008-09. Notably, in the post-period, the not-at-risk group of districts offer slightly higher low and high salaries.

Figure 14



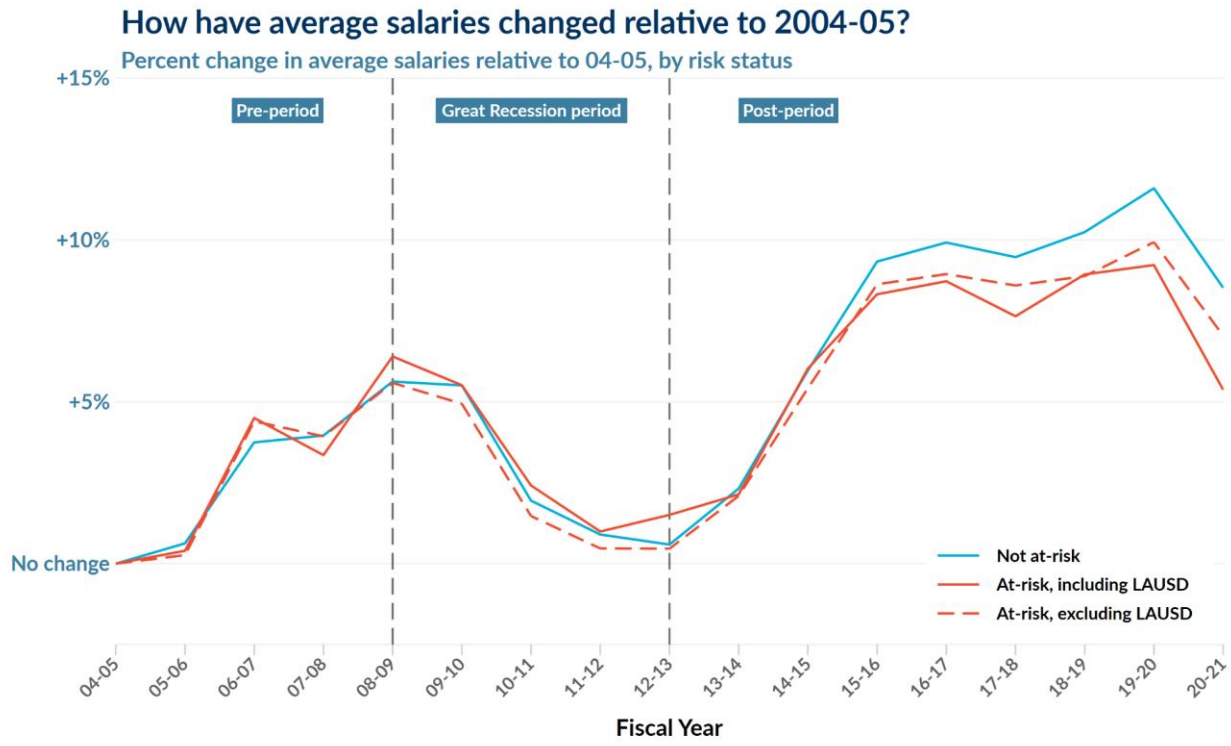
Source: Authors' analysis using interim fiscal reports and the J-90 data reported to the California Department of Education.
Notes: Median salaries offered (low and high) show the 50th percentile of salaries offered across all districts in the sample. Mean salaries are weighted by FTE. For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). All dollars have been adjusted for inflation to 2021 dollars using the CPI.

Figure 15 looks at the percent change in the salary schedule from 2004-05, adjusted for inflation. As shown, both the at-risk cohort and the comparison group generally track pay raises and cuts over time until the post-period when the not-at-risk group outpaces the at-risk cohort in pay raises. During the Great Recession period, both the not-at-risk and at-risk districts (excluding LAUSD) experienced several years of downward changes in the salary schedule, and by 2012-13, average salaries were nearly what they were in 2004-05. In the post-period, salaries began to increase in 2013-14 and in 2019-20, salaries reached a high point when they increased about 12% over 2004-05 pay for the not-at-risk group, and increased about 10% for the at-risk cohort relative to 2004-05 (excluding LAUSD). Since 2019-20, however, average salaries have decreased relative to

would be paid to an employee from the certificated salary schedule (we show the median), whereas the highest salary offered is the maximum salary that would be paid to an employee from the certificated salary schedule (we show the median). For more information, see https://www.cde.ca.gov/ds/fd/cs/documents/j90summary1920.pdf.

2004-05. Notably, since the recession period the salary increases for at-risk districts have slightly lagged behind the not-at-risk group.

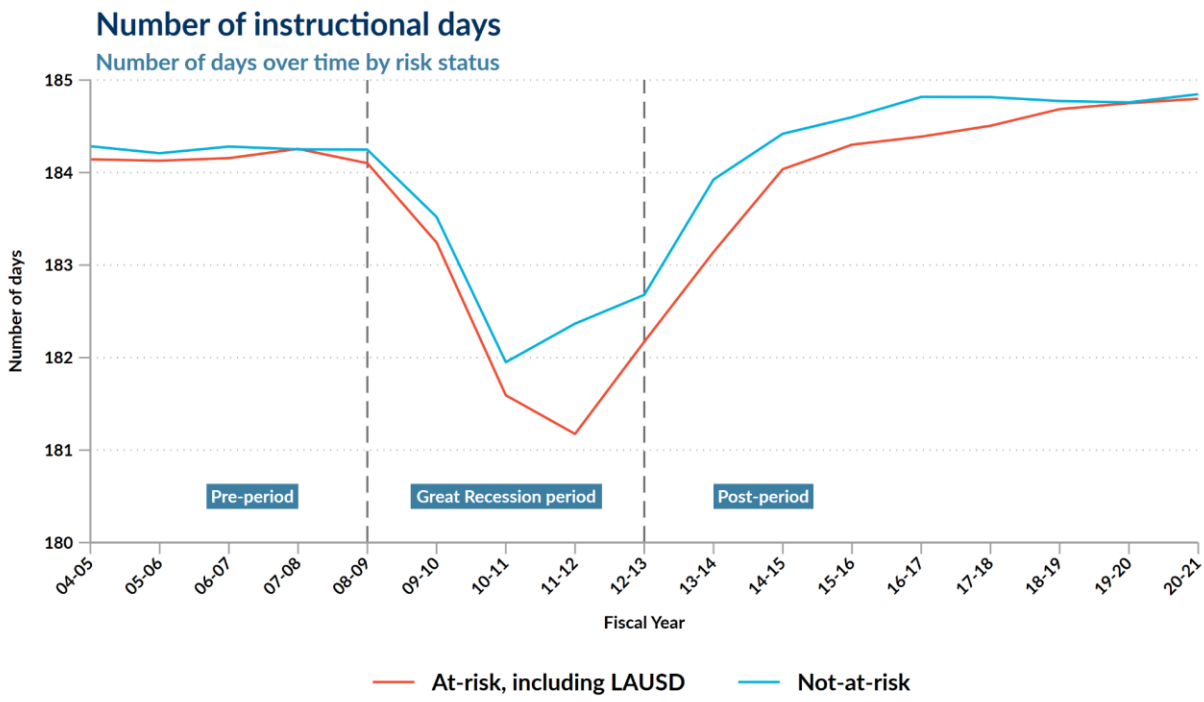
Figure 15



Source: Authors' analysis using interim fiscal reports and the J-90 data reported to the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). All dollars have been adjusted for inflation to 2021 dollars using the CPI.

Figure 16 reports the average number of instructional days offered by each group of districts over time. During the Great Recession, both at-risk and not-at-risk districts cut instructional time, but districts that remained in good financial standing cut fewer days. At the lowest point, in 2010-11, not-at-risk districts cut about two instructional days but rebounded to pre-recession levels by about 2013-14. At-risk districts did not hit their trough until 2011-12 and cut nearly three instructional days on average, and the gap between not-at-risk and at-risk districts reached its widest point at a difference of over 1-day of instruction. The at-risk cohort also had a longer recovery time than districts in good financial standing; at-risk districts did not return instructional time to pre-recession levels until 2015-16, and did not "catch up" with the not-at-risk cohort until just recently in 2019-20.

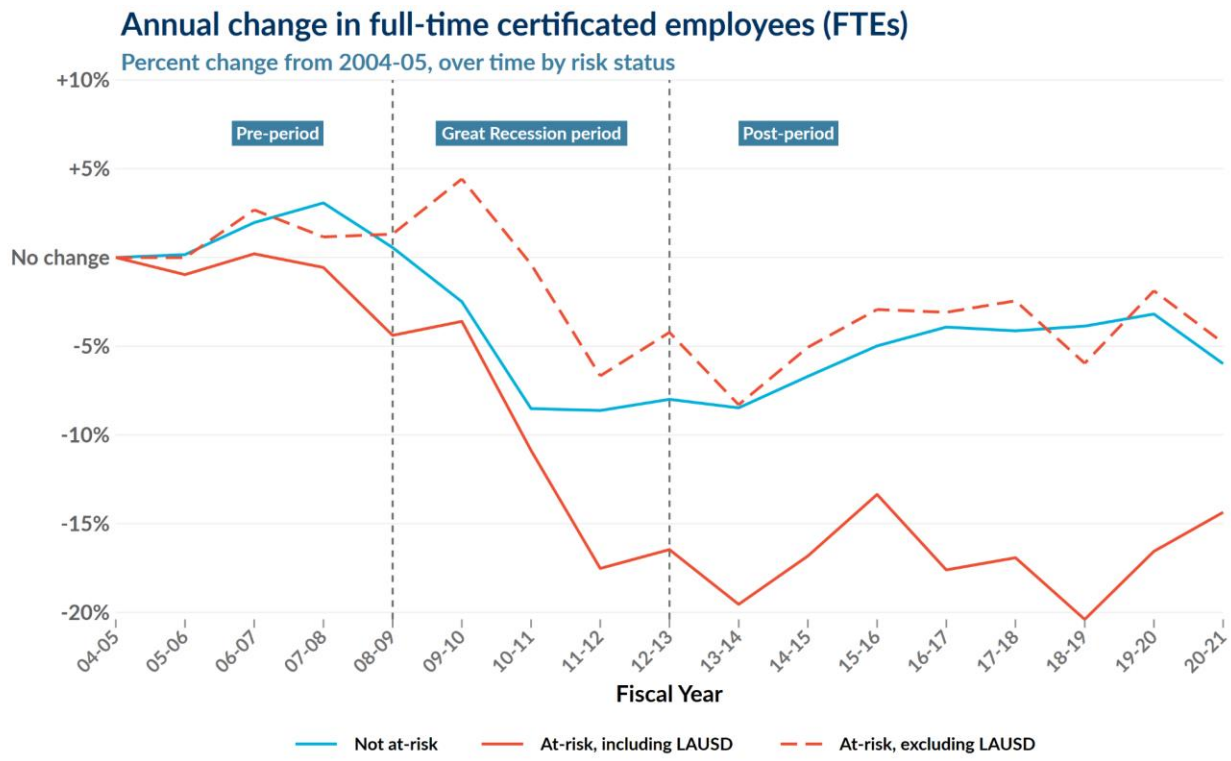
Figure 16



Source: Authors' analysis using interim fiscal reports and the J-90 data reported to the California Department of Education.
Notes: For unified districts larger than 250 students, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13).

Figure 17 tracks changes to full-time certificated positions over time for at-risk districts and the comparison group, which includes positions for teachers, nurses, librarians, and counselors. In the pre-period, our at-risk sample had an average of 776 FTEs and the comparison group had an average of 510 FTEs (not shown in the figure). As shown in the pre-period, the at-risk cohort without LAUSD and the comparison group experienced modest gains in the number of FTEs employed compared to the 2004-05 base year (excluding LAUSD, the at-risk cohort experienced modest losses). During the Great Recession, both the at-risk and not-at-risk districts lost FTEs, but the not-at-risk districts shed proportionately more positions, perhaps in an effort to keep their budgets balanced. By the end of the Great Recession period, the not-at-risk district lost an average of 8% of their FTEs compared to 2004-05, whereas the at-risk cohort excluding LAUSD lost about 5% of FTEs compared to the base year. The story changes, however, if including LAUSD; in this case, the at-risk cohort lost 15% of their FTEs by the end of the Great Recession period. In all groups of districts, FTEs never fully recovered to their 2004-05 levels in the post-period.

Figure 17



Source: Authors' analysis using interim fiscal reports and J-90 data from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13).

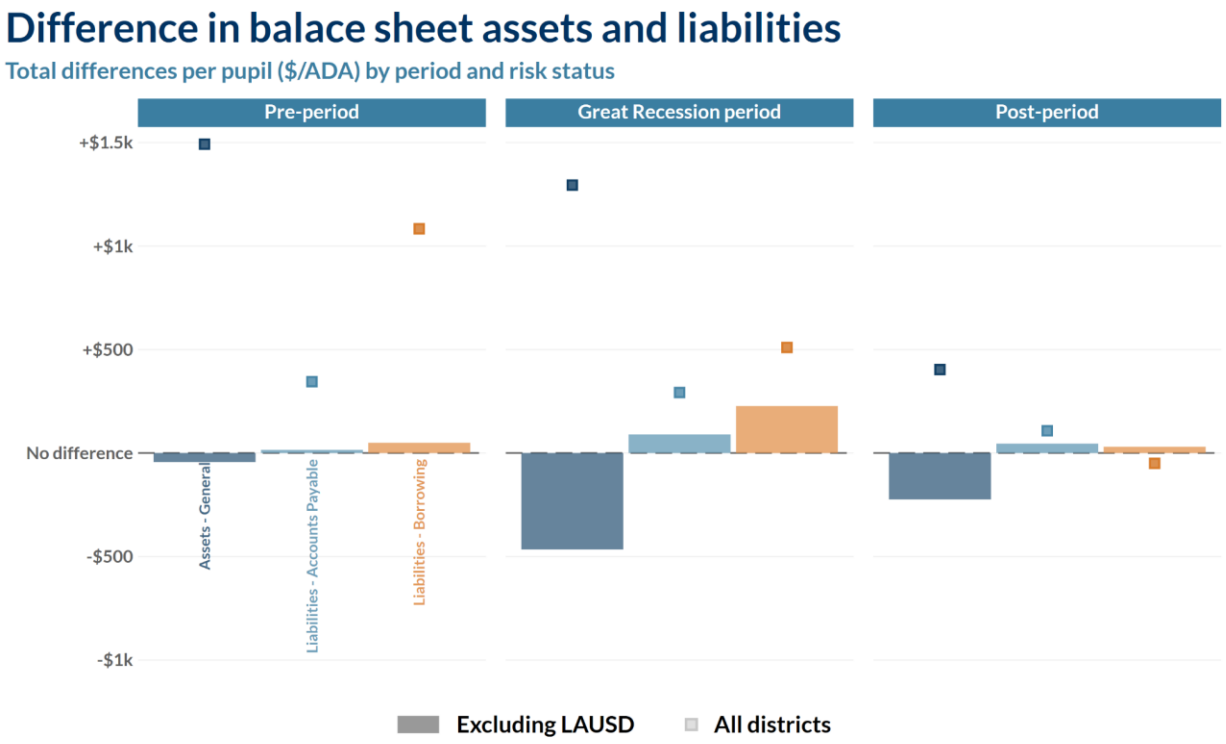
Balance sheet

In this final section, we analyze differences in the balance sheet for the at-risk cohort and comparison group. Figure 18 shows the major categories of assets and liabilities. There was little difference in general assets between the two groups in the pre-period. That story changes in the Great Recession when the at-risk cohort has about $466/ADA less than the comparison group (excluding LAUSD), and into the post-period when the at-risk cohort has about $225/ADA less. Appendix Table 6 sheds light on the particular object codes underlying these changes, specifically, object code 9110 (cash in the county treasury) appears to be driving this trend. This finding suggests that the at-risk cohort entered the recession with less cash on hand than districts that remained in good financial standing, and this worsened during the recession period when the available cash on hand was reduced by more than double to $630 per ADA less than the comparison group. In the post-period, the at-risk cohort still greatly lags the comparison group in available cash (the at-risk cohort had $443/ADA less than the comparison group, excluding LAUSD). There was little to no difference in the category of Accounts Payable over time.

Figure 18 also shows that the category of external borrowing was higher for the at-risk cohort during the recession period in reference to the not-at-risk districts, by about $227 per ADA. In the pre-period, the at-risk cohort had far fewer loans (object code 9640) than the comparison group (as shown on Appendix Table 6). During the recession period, the at-risk districts took on an average of $203/ADA more loans than the comparison group, and also engaged in more interfund borrowing (object code 9610), at about $92/ADA more. This suggests that the at-risk districts were

not only borrowing more than the comparison group but were taking on riskier forms of borrowing by shifting resources between internal funds that may otherwise be allocated for specific purposes, or issuing short-term Tax Revenue Anticipation Notes (TRANs) that can be riskier for districts with lower bond ratings—such as districts at-risk of financial insolvency–since they may carry higher interest rates for districts that are financially troubled.

Figure 18

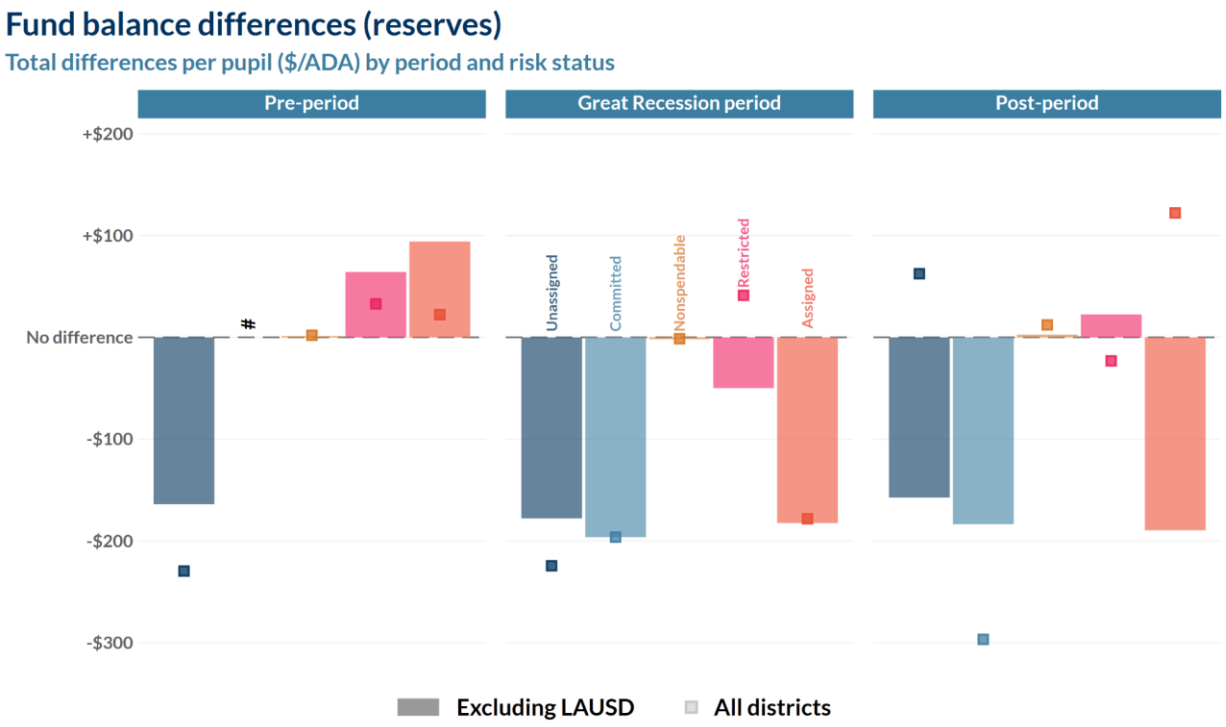


Source: Authors' analysis using interim fiscal reports, ADA data, and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 ADA, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13).
All dollars have been adjusted for inflation to 2021 dollars using the CPI.

Next, we analyze the fund balance difference between the two types of districts using the General Fund (fund 1) and the special reserve fund (fund 17) per best practices (Kapphahn, 2015; LAO 2020; Lafortune, Mehlotra, & Paluch, 2020). The fund balance is required to be reported in two major categories, assigned and unassigned, with other sub-categories. Assigned reserves refer to funding that is allocated to nonspendable or restricted purposes and cannot be drawn upon to manage cash flow issues. Assigned reserves include *nonspendable* reserves that are the portion of the fund balance reflecting nonspendable assets (either because they will not convert to cash or must remain intact because they have legal or contractual requirements), and *restricted reserves*, which are typically earmarked for a specific purpose. Unassigned fund balances are considered the reserves that districts have on hand to manage cash flow, save for large purchases, or address unexpected funding volatility. While there may be some constraints, unassigned fund balances are generally controlled by the district and include *committed* reserves that are earmarked for a specific purpose, *assigned* reserves that are designated for a specific purpose by a district employee, and *unassigned* reserves, which are available for spending on any purpose.

In Figure 19, we show the difference in fund balances between the at-risk cohort and the comparison group. In the pre-period, the at-risk districts had slightly more assigned and restricted reserves. On the other hand, the at-risk cohort had fewer resources on hand from the unassigned reserves. During the Great Recession, the reserve picture for the at-risk cohort changed; the at-risk cohort had fewer unassigned fund balances (committed, assigned, and unassigned reserves) than the not-at-risk districts. In total, the at-risk cohort had $557 per ADA less in reserves during the Great Recession period, which could be a contributing factor in their at-risk status (this includes the difference in the unassigned, committed, and assigned fund balances, excluding LAUSD). The reserve picture in the post-period looks much the same for the at-risk cohort as it did during the Great Recession, with the at-risk cohort having fewer committed, assigned, and unassigned reserves. This finding suggests that the reserve picture of the at-risk districts was arguably thrown off balance during the Great Recession and never fully recovered in the post-period. For specific object code trends in the fund balance, see Appendix Table 7.

Figure 19



Source: Authors' analysis using interim fiscal reports, ADA data, and the SACS dataset from the California Department of Education.
Notes: For unified districts larger than 250 students, our at-risk definition includes those that received at least three consecutive qualified certifications or one negative certification at any point during the Great Recession period (2008-09 to 2012-13). All dollars have been adjusted for inflation to 2021 dollars using the CPI. The pound ('#') sign denotes missing values for that category in a given period.

Discussion

The intent of this paper is to gain a descriptive understanding of unified districts that were financially healthy before the onset of the recession, but became at-risk of financial insolvency when the recession and state budget crisis hit. Specifically, we intend to understand how at-risk district enrollment and demographic patterns, operational decisions, and budgets changed over time in comparison to districts that remained in financially good-standing during the Great Recession period. To do so, we identify a cohort of 86 unified districts that became at-risk of financial insolvency during the Great Recession period and compare them to 217 districts that remained in good financial standing. While we cannot make causal claims about why some districts became at-risk of financial insolvency during the Great Recession, or why a district might become at-risk during a future fiscal crisis, the descriptive analysis reveals a few noteworthy trends that we discuss here in the context of today's policy climate and other relevant research. We also offer policy recommendations to address the issue of at-risk school districts going forward.

At-risk districts were larger, served more disadvantaged students and students of color, and experienced sharper declining enrollment

Our first inquiry aims to understand the enrollment and demographic characteristics of districts that were at-risk of insolvency during the Great Recession period. We find that districts that became at-risk tended to serve more students and enrolled a higher proportion of low-income, ELL, and students of color than districts that remained in good financial standing. This finding adds to a growing evidence-base that districts in California that serve minority and low-income students are more likely to experience negative financial effects and diminishing school quality during state budget crises (Knight, 2016; Lafortune, Mehlotra, & Paluch, 2020; Rogers et al., 2010; Shambaugh et al., 2011). If another economic downturn were to occur in California, we recommend that lawmakers and education leaders first consider the equity effects that any state budgeting maneuvers such as payment deferrals or per pupil funding cuts will have on low-income students and students of color.

We also find that districts that were at-risk of financial insolvency during the Great Recession experienced sharper rates of enrollment declines than districts that remained in good financial health during the Great Recession period. Notably, when looking at enrollment changes in the post period, enrollment declines continue for the cohort of at-risk districts we follow. Declining enrollment across all California's school districts has surfaced as a particularly concerning trend for school district budgets in recent years. Up until the COVID-19 pandemic, student attendance in K-12 schools had been in decline for at least half of all districts (Warren & LaFortune, 2020). With the onset of the COVID-19 pandemic, declining enrollment trends have accelerated (Legislative Analyst's Office, 2022). Notably, other researchers have found that declining enrollment is a characteristic of districts that have received at-risk classifications in recent years while the economy has been strong (Hahnel & Melnicoe, 2019; Kappahan, Li, & Resnikoff, 2020); this could be a contributing factor as to why the cohort of at-risk districts we follow also became at-risk during the recession period.

In light of these enrollment trends, to improve school funding stability in the years ahead, in the final 2022-23 budget, legislators will allow districts to use the greater of the current or prior year average daily attendance or an average of the three prior years' average daily attendance to

calculate LCFF funding (California Department of Finance, 2022). While this change to ADA reporting will certainly help districts adjust their funding to declining enrollment, going forward, any district experiencing sharp enrollment declines in the long-run will have to make due with fewer state dollars and may have to make budget cuts or find ways to raise new revenue to backfill their budgets for fixed costs. We recommend that policymakers and education leaders flag districts with high rates of declining enrollment as potential contenders of at-risk status, especially as student enrollment losses are expected to continue in the upcoming years.

Marginal differences between overall revenue and expenditures

Our second inquiry aims to understand the budgets of districts that became at-risk of financial insolvency during the Great Recession in comparison to districts that remained in good financial standing. We find that there was little-to-no difference in most years for total expenditures and resources across at-risk status (excluding LAUSD as an outlier)**.** Over each period, the at-risk cohort and comparison group received nearly the same amount of resources as the comparison group, and also spent nearly the same. Any variation in overall resources or expenditures between the two groups was largely due to capital funds rather than operating funds.

Differences emerge in types of resources by risk status: At-risk district cohort slightly more reliant on state and federal funding; less reliant on local and other revenue

On the revenue side, we find that overall, at-risk districts received more funds from state and federal sources relative to the comparison group, and less revenue from local and other sources than the not-at-risk districts. The findings show that the at-risk districts received slightly more per pupil funding from the LCFF in the post-period and also received more pass-through state grants for special programs than the comparison group. In addition, the at-risk cohort received more federal funds across all three periods targeted at low-income students. We find that districts that remained in good financial standing raised slightly more local revenue from parcel taxes, other ad-valorem taxes, or other local fundraising than the at-risk cohort. We also find that districts at-risk of financial insolvency had slightly weaker property tax revenue receipts during the Great Recession period and a lower contribution from ERAF, suggesting that at-risk districts were located in areas with weaker property tax bases. In terms of other local revenue, we find that the not-at-risk districts raised more per pupil from the sale of bonds than the at-risk cohort.

The revenue composition of school districts could be another contributing factor to why some districts become at-risk of financial insolvency. One hypothesis is that districts that are more reliant on state funding than local funding are more susceptible to state deferrals, and therefore more likely to rely on their own borrowing or reserves to maintain current operations, which may contribute to their at-risk status. Our data is limited in its ability to explore the relationship between district reliance on state spending and deferrals since deferrals are not directly captured in the SACS chart of accounts. However, we can infer from other research that some districts in California are more likely to be impacted by deferrals than others—as shown in a recent report from the Public Policy Institute of California (PPIC) that analyzes the 2020-21 payment deferrals to school districts during the COVID-19 recession (Lafortune, Mehlotra, & Paluch, 2020). PPIC found that districts with more revenue from local sources receive smaller payments from the state to meet their LCFF funding levels, and therefore districts with higher local property wealth and tax collections have less of their LCFF funding deferred during economic downturns. We did see in our data that the at-risk

cohort had slightly weaker property tax revenue and ERAF contributions. We also could see that the balance sheet and district reserves for the at-risk cohort were impacted during the Great Recession—the at-risk cohort had less cash on hand and lower reserves than the comparison group. The at-risk cohort also engaged more in internal borrowing from other funds and borrowed more from external sources. Connecting the dots, one could infer that the statewide deferrals may have impacted district budgets that were more reliant on state funding with weaker local property tax bases. In lieu of local fundraising, this prompted the at-risk districts to draw on their reserves or engage in internal and external borrowing to make ends meet.

This resonates with other research examining the effects of the Great Recession on state revenue composition. At the national level, researchers have found that states more reliant on state revenue rather than local property taxes to fund public education in 2008 tended to experience larger school spending reductions during the Great Recession, reducing student test scores and school quality, especially for low-income students (Evans, Schwab and Wagner, 2017; Jackson, Wigger, & Xiong, 2019). Unlike other states that can adjust local property tax rates during recessions in response to state cuts (Chakrabarti, Livingston, & Roy, 2014), Proposition 13 limits local actors' ability to alter property tax rates and therefore local districts have limited options to increase revenue on their own. Given that there is growing evidence that revenue composition does appear to affect how different districts respond to recessions (both in California and nationally), lawmakers and county offices of education may want to monitor districts that are more reliant on state funds with weaker local revenue bases and identify them as vulnerable to state deferrals and at-risk status if a future economic downturn were to occur. We also encourage other researchers to continue exploring this topic with both quantitative and qualitative methodologies to more deeply understand how revenue composition affects district budgets during recessions.

At-risk districts have higher operating expenditures, less capital expenditures; at-risk districts also made more drastic operational decisions

Our third inquiry aimed to narrow in on the operational decision-making between the groups of districts to understand how they attempted to stay afloat financially during the crisis. On the expenditure side of our analysis, we find that the at-risk cohort had higher expenditures on subagreements for services, classified support staff salaries, employee benefit costs, and higher spending on special education costs. Managing such costs may be another contributing factor as to why some school districts became at-risk of financial insolvency. On the other hand, the not-at-risk districts spent far more on bonds sold at a discount, meaning they were sold for less than par value, likely as a way to finance new or ongoing capital projects. Interestingly, the analysis of the J-90 data also showed that the not-at-risk districts shed proportionately more FTE positions in comparison to the at-risk cohort without LAUSD, made salary cuts during the recession that were on par with the at-risk cohort, and were able to raise salaries above the at-risk cohort in the post-recession period. Together, these findings indicate that districts that remained in good financial standing perhaps made decisions during the recession period to balance the budget by cutting more FTE positions and taking on more long-term debt to finance capital projects. That is not to say, however, that the at-risk cohort did not also make difficult spending decisions. During the Great Recession period, the at-risk cohort scaled back spending on building projects in reference to the comparison group, made spending cuts to teacher salaries that were on par with the not-at-risk districts, and scaled back spending on general K-12 educational goals in reference to the comparison group.

As recent research indicates, there are several common cost pressures on the rise across many districts in California, including the cost of pensions, employee benefits, school facilities, special education, and declining student enrollment (Anderson & Li, 2019; Bruno, 2019; Kapphahn, 2017; Kapphahn, Li, & Resnikoff, 2020; Koedel & Gassman, 2018; Lin, 2018; Lopes & Ugo, 2017; Melnicoe, Hahnel, & Koedel, 2019; Warren & LaFortune, 2020). In recent years, lawmakers have attempted to address rising district expenditures by using one-time funds to pay down fixed costs such as pension obligations and facilities (Cabral, 2022; Hollingshead, 2022a). Lawmakers have also used ongoing funds to increase district Cost of Living Adjustments (COLAs) to help offset rising employee benefit and salary expenditures, or increase ongoing special education funding to address demands in special education enrollment (Cabral, 2022). Yet our findings suggest that such cost pressures are experienced differently across districts. This indicates that lawmakers may not be doing enough to address the full range and extent of cost pressures across districts. Escalating cost pressures are concerning in the current budget environment where revenue shortfalls are predicted over the next several years. These are trends for lawmakers and education leaders to flag as an indicator of districts that could become at-risk of financial insolvency.

A weakened Balance Sheet

Findings from the balance sheet reveal other interesting trends. As we find, districts that remained in good financial standing during the Great Recession had more cash in the county treasury, more dollars per ADA in their reserves, and more overall assets and fewer liabilities than the at-risk cohort. At-risk districts, on the other hand, engaged in riskier budgeting practices by borrowing more from different internal funds and borrowing from external sources, they kept fewer dollars per ADA in reserves, and kept less cash on hand in the county treasury. The weakened balance sheet persisted for the at-risk cohort into the post-period; we find that the at-risk cohort continues to have fewer dollars per ADA in reserves during the post-period than the comparison group.

Going into the COVID recession, the LAO estimated that most districts had about 17 percent of their operating budget in reserves and that district reserves were stronger than they were headed into the 2008 Great Recession (LAO, 2020). Yet districts face new cost pressures that were not present prior to the Great Recession that could destabilize district budgets, even if the economy remains strong (Krausen & Willis, 2018; Kapphahn, Li, & Resnikoff, 2020). We caution that reserves alone may not protect most districts from moderate revenue declines, and a more prolonged economic downturn could lead to harmful spending cuts at the district level. We recommend that County Offices of Education and district administrators closely monitor districts cash flow and reserve levels going forward.

A note on revenue (in)stability

While there has been a significant effort in California to focus on student equity in school finance, far less attention has been paid to the importance of stable funding for schools, and therefore, how revenue volatility may affect student equity. As we reviewed at the beginning of the paper, recessions are particularly harmful for K-12 districts because the majority of school funding is legally bound to the state's extremely volatile General Fund. Moreover, property tax revenue—typically a stable revenue source for schools, especially during recessions (Chakrabarti, Livingston, & Roy, 2014)—is limited in California because of Proposition 13, which makes many districts more

reliant on volatile state funds. Adding another layer to the revenue instability problem for school districts, Proposition 13 also makes it more difficult for local governments to pass new revenue measures during economic downturns in order to backfill declining state funding, with inequalities in the types of districts that are successful at local fundraising (Brunner 2001; Brunner & Imazeki, 2003; Brunner & Sonstelie, 1996; Chavez & Freedberg, 2013; Sonstelie, 2014; Weston, Cook, Murphy, & Ugo, 2015; Zimmer, Krop, & Brewer, 2003).

The issue at hand is that California's unstable revenue system, and the subsequent budgeting decisions made by lawmakers in order to address this instability, have had unequal effects on school districts. During the Great Recession, lawmakers pushed much of the state budget problem down to schools by deferring funding, engaging in funding swaps, cutting per pupil funding, or suspending the Proposition 98 guarantee, and districts were left with major cash flow issues. As we find in this paper, districts that became at-risk of financial insolvency served more low-income, ELL students, and students of color, and had higher rates of declining enrollment. The at-risk districts were more reliant on state and federal funding and raised less revenue locally overall than districts that remained in good financial standing. At-risk districts had slightly higher operating expenditures than the comparison group, and spent less per pupil to finance capital projects. Moreover, districts that became at-risk had less in their unassigned reserves during the recession period and engaged in more internal and external borrowing than the comparison group.

Such findings underscore how budget decisions made by state lawmakers to manage state revenue volatility have had an unequal effect on districts. Together, the budgeting maneuvers leveraged by state lawmakers alongside the enrollment declines different districts were experiencing, the composition of district revenue and expenditures, and the reserve picture may have created a perfect storm of conditions that pushed many districts that were otherwise financially healthy to the brink of financial insolvency at the onset of the financial crisis. As we find, it was larger unified districts serving a higher proportion of low-income students and students of color that were more likely to become at-risk during the Great Recession. Notably, the at-risk cohort also had weaker fund balances in the post-period and some districts in our sample continued to experience at-risk status after the recession's end, indicating that such decisions made by lawmakers during a recession can have long-lasting effects and throw many districts off balance in the long-run.

California has recently experienced multiple annual budget surpluses, but the state's fiscal future is highly uncertain over the next several years, with the Legislative Analyst's Office predicting a $24 billion shortfall expected in the next fiscal year alone, and several years of potential deficits ahead (Hollingshead, 2022a). However, the LAO report cautions that the estimates do not account for a recession, in which case the state's general fund revenue estimates could be much lower and the state's rainy day funds may not be able to cover deficits (Hollingshead, 2022a; Murphy, Paluch & Mehlotra, 2019). If the broader economy does, indeed, experience a recession and the state's rainy day funds fall short of covering current funding levels for districts, we recommend that lawmakers avoid payment deferrals, or at a minimum, make districts at-risk of financial insolvency exempt from deferrals using the waiver process established in 2010-11 (Cabral, 2011). We also caution lawmakers to consider the uneven effects state budgeting maneuvers can have on different types of school districts. Findings from this study and others (Freelon, Bertrand & Rogers, 2012; Knight, 2017; Lafortune, Mehlotra, & Paluch, 2020; Shambaugh, et al., 2011) provide evidence that the most harmful effects of California's past funding cuts and deferrals tend to be experienced

within districts that serve higher proportions of low-income students and students of color. Lastly, voters and lawmakers must seriously consider the structure of the state budget and its volatility going forward, and ask whether reforms to Proposition 13 or Proposition 98 will be necessary to stabilize funding for K-12 districts in the long-run.

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