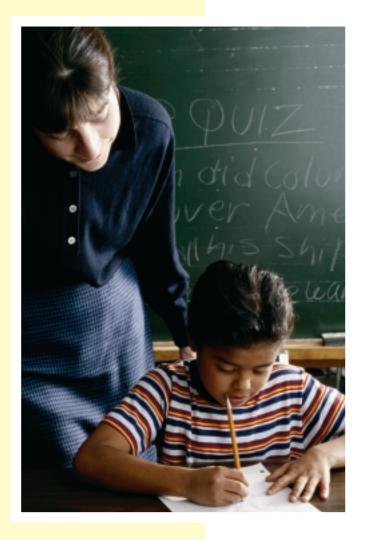
# Southwest Economy



# Improving Public School Financing in Texas

The Texas Legislature will spend more than \$11 billion this year to fund public schools. Over the years, the state has helped educate millions of children, enhancing the productivity of the workforce and the vitality of the economy. Public education has been a good investment for the state. But disbursing \$11 billion is no easy task. Texas' finance formula has been subject to recurrent legal challenges. Recently, the state Legislature formed a special committee to evaluate the way funds are distributed and to possibly recommend improvements.

The state has an ambitious finance formula that distributes funds based on a school district's size, property wealth and other factors. Some districts receive substantial aid. Part of the formula—nicknamed Robin Hood—requires districts that are considered wealthy to give money to help other districts. Although it is intensely controversial, the Texas plan has bolstered many of the state's poorest schools and garnered national acclaim in so doing.

As the state takes a fresh look at public school financing, it is a good time to explore the economics (Continued on page 2)

INSIDE:
Tough Decisions
for Argentina

# Down but Not Out: The U.S. Economy after Sept. 11

The terrorist attacks of Sept. 11 have profoundly affected the well-being of U.S. citizens. Our sense of invulnerability is gone. Comparable events are the October 1973 Arab oil embargo, which challenged our assumptions about the continued availability of abundant, cheap energy, and the October 1957 Sputnik launch, which raised fears of intercontinental missile attack. Both of those shocks triggered important changes in spending priorities. Both hit a U.S. economy that had already been slowing. Both were accompanied or promptly followed by recessions.

We can never know with certainty how the economy would have evolved had the Sputnik launch, the oil embargo or the Sept. 11 attacks not occurred. Such events are rare, and each has unique aspects. Moreover, our

(Continued on page 6)

of school finance. Texas has a strong educational funding system. That system can be further strengthened by addressing some of its unintended consequences.

# Public Education Can Be a Profitable Investment

Most people agree that there is an important role for the public funding of education.1 The public benefits when individuals invest in themselves.2 Communities with lots of highly educated residents tend to have higher property values, higher average wages and more productive businesses. Educated individuals' increased earnings lead them to contribute more income, sales, payroll and property taxes. Educated individuals are less likely to receive welfare, Medicaid or unemployment compensation. They and their children tend to be healthier, which should reduce their use of the public health system. Studies suggest that their children are less likely to live in poverty or suffer from severe child abuse—situations that can have grave social consequences as well as be a drain on the public purse.

Society also benefits because education fosters technological change and economic growth. Education boosts worker productivity and earnings. (For example, the lifetime earnings of a high school graduate are nearly twice those of a drop-

out.) Moreover, well-educated workers can help the people and machines around them become more productive. Educated workers are better able to move from job to job, which helps speed the economic transition that occurs when older industries fade and are replaced by newer industries. In a sense, then, education greases the wheels of economic growth by facilitating the churning of jobs and industries.

Clearly, education's public benefits are substantial and widespread. They also spill across school district boundaries as children move away, taking their education with them. One-third of U.S. adults do not live in the state in which they attended high school, much less the same city or school district. To match the benefits with the taxes, public school finance must also spill across school district boundaries and be handled by state and federal as well as local governments.

# A U.S. Tradition

The United States has a rich history of public education. When the country was established, U.S. political and social leaders believed that a minimum level of education was necessary to unite people of diverse backgrounds, forge stronger communities and maintain a stable democracy.<sup>3</sup> As the country grew,

many state constitutions contained explicit provisions for public education. States entering the union after the Civil War were required to make constitutional provisions for the equitable provision of education, though the implementation of these provisions varied from state to state.<sup>4</sup>

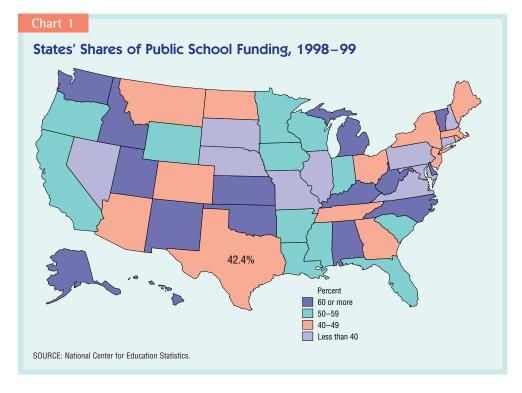
From those initial one-room school-houses, public education in the United States has grown into a big business, with more than 5 million employees and yearly spending exceeding \$300 billion. Each year, 45 million students (almost 90 percent of school-age children) collect their supplies and run to catch the bell at one of our nation's 88,000 public schools.

Those schools are financed through a labyrinth of federal, state and local funding formulas. On average, local governments finance 45 percent of school budgets, state governments 48 percent and the federal government 7 percent. State governments' share varies from less than 10 percent in New Hampshire to almost 90 percent in Hawaii (*Chart 1*). The patchwork of funding methods merely hints at the vigorous debate that has occurred as states strive to find fair and equitable finance formulas.

# **Public Education, Texas Style**

Like many states, Texas has a constitutional commitment to public education. The Texas Supreme Court has interpreted the state's constitution as requiring that "districts must have substantially equal access to similar revenues per pupil at similar levels of tax effort." In response, the Texas Legislature designed a complex formula that distributes general state revenues and property tax revenues across the state. (See the box titled "Impact of the Texas School Finance Formula.")

The formula has successfully equalized, in rough terms, the amount of money any given district can raise per student. In particular, the state guarantees that each additional penny in tax per hundred dollars of taxable property will give the district between \$24.70 and \$29.50 in additional spending per pupil. If the district is unable to raise at least \$24.70, the state makes up the difference. If the district is wealthy enough that it raises more than \$29.50, the state



# Impact of the Texas School Finance Formula

One measure of a school finance formula is its impact on the price taxpayers pay for each dollar of revenue. A district's average tax price is its local tax revenues divided by its spending.¹ Districts with an average tax price above \$1 raise more money than they spend, with the difference going to help fund state education spending in other Texas districts. School districts with an average tax price below \$1 spend more money than they raise, with the difference coming from state and federal subsidies. The lower the average tax price, the more a district benefits from the school finance formula.

Most Texas school districts have an average tax price substantially below \$1. Average tax prices in 2000–01 ranged from 2 cents in Boles ISD to just over \$3 in Palo Pinto, Sabine Pass and Kenedy County ISDs. As the chart illustrates, average tax prices increase with property wealth and are higher in the Robin Hood districts than in other districts. This is also evident in the table, which presents average tax prices for the largest Robin Hood and non-Robin Hood districts.

Interestingly, even Robin Hood districts can have tax prices below \$1. In 2000–01, the tax price for Austin ISD was 96 cents because the district received more money from the state and federal government than it paid to the state to help other Texas school districts.

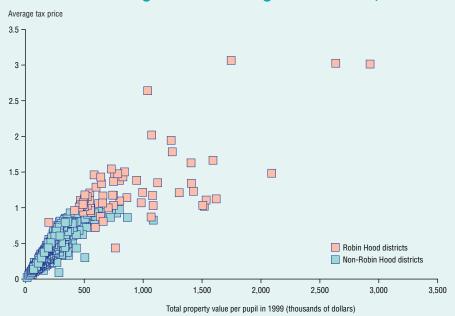
Average tax prices do not tell the whole story, however. Spending from the district's fund balance (accumulated reserves) lowers the average tax price, while adding to the fund balance boosts the average tax price. According to a district official, if spending from the fund balance were included as local revenue, Richardson ISD's average tax price for 2000–01 would increase from \$1.01 to \$1.05.2

In addition, average tax prices say little about the formula's effect on additional revenue a district might choose to raise. As the district's tax base gets farther above the guaranteed tax base, an increasing share of local revenue must be paid to the state in Robin Hood payments. For example, the Grapevine—Colleyville ISD currently must raise \$1.42 for each additional dollar the district wishes to spend.

# Notes

- For our measure, both revenues and expenditures exclude bonds and are based on budget figures reported to the Texas Education Agency.
- Data constraints limit our ability to incorporate changes in fund balance for all districts.

# Distribution of Average Tax Price Among School Districts, 2000-01



SOURCES: Texas Education Agency; authors' calculations.

# **Average Tax Prices for Texas' Largest School Districts**

	Envollment	Averege toy price	Robin Hood payment
Lavasat Dahin Haad Districts	Enrollment	Average tax price	(millions of dollars)
Largest Robin Hood Districts			
Highland Park (Dallas)	5,848	2.02	41.1
Eanes	7,392	1.46	27.3
Deer Park	11,428	1.43	40.9
La Porte	7,632	1.34	24.8
Carrollton-Farmers Branch	24,134	1.18	45.0
Texas City	5,817	1.15	9.6
Coppell	9,243	1.12	16.6
Grapevine-Colleyville	13,584	1.08	20.0
Plano	47,161	1.05	75.3
Brazosport	13,161	1.04	8.5
Richardson	35,138	1.01	30.4
Austin	77,816	.96	30.8
Largest Non-Robin Hood Districts			
Dallas	161,548	.79	0
Arlington	58,866	.67	0
North East	50,875	.65	0
Houston	208,462	.60	0
Cypress-Fairbanks	63,497	.60	0
Northside (San Antonio)	63,739	.51	0
Fort Bend	53,999	.51	0
Fort Worth	79,661	.44	0
Garland	50,312	.43	0
El Paso	62,325	.38	0
Aldine	52,520	.32	0
San Antonio	57,273	.30	0
Ysleta	46,394	.22	0

SOURCES: Texas Education Agency; authors' calculations.

requires districts in effect to give the difference to poorer districts in what have come to be called Robin Hood payments.

Texas school finance equalization appears to have achieved dramatic results. The proportion of economically disadvantaged students passing all tests on the Texas Assessment of Academic Skills (TAAS) has increased from 39 percent to 73.6 percent since the wealthequalization formula was implemented.8 For example, the property-poor Ysleta Independent School District (ISD) in El Paso raised its passing rate on the TAAS from 47.5 percent to 84.6 percent. Similarly situated, the Aldine ISD in Houston increased its passing rate from 50.7 percent to 84.1 percent. While not every property-poor district achieved such remarkable gains in student performance, the evidence is clear that some districts were able to use their newfound wealth to give students a better education.

As poorer districts in Texas have improved, the nation has taken notice. A recent study by the Texas Educational Excellence Project lauded the Texas system for largely eliminating the impact of school district wealth on student performance. Noted education analyst Lawrence O. Picus called Texas' school finance law "an excellent system of equity." And a representative of the National Conference of State Legislatures went so far as to say that many states now look to the Texas formula as a model because it is "one of the best systems out there as far as equity is concerned."

# **Unintended Consequences**

There is little question that the Texas school funding system has helped promote a more equitable distribution of education across the state. In fact, the Texas system generally follows the basic principles of effective public finance (see the box titled "Four Principles of Public School Finance"). Yet there is reason to believe that some aspects of the Texas system are in need of revision. Several property-wealthy districts recently challenged the constitutionality of Robin Hood, and while the state Supreme Court dismissed their challenge, it pointedly did not dismiss the schools' concerns about Robin Hood payments.

The Robin Hood portion of the system is only a small part of the total Texas

# Four Principles of Public School Finance

# 1. Treat equals equally.

Similar individuals should be charged the same price for basic educational services.

Several factors affect the cost of educating children, including variations in the cost of living or in the needs of students. Finance formulas should recognize variations in these costs and direct additional resources to high cost-of-education areas.

In addition, wide disparities in property tax base raise practical concerns about tax equity. School districts with ample commercial, industrial or mineral property wealth can reduce the homeowner's tax bill by taxing these sources, while residents of bedroom communities must foot the entire education bill themselves. Residents should be able to profit from variations in property wealth that arise from local school district policies but not variations that arise from other factors.

# 2. Respect local tastes.

A community that wishes to purchase a high level of education for its children should be allowed to do so.

Some parents strongly support education and are willing to tax themselves accordingly. It is inappropriate for the state to prevent these taxpayers from devoting extra resources to the educational needs of their children.

# 3. Match benefits with taxes.

Whoever receives the benefit should pay the taxes.

The benefits of education fall first and foremost to students and their families, and the lion's share of education costs also fall to them. In the high schools, between one-half and two-thirds of U.S. school resources come from the forgone earnings of students. Families also pay school taxes directly and pick up much of the school tax burden that originates at the business level.

The public benefits of education spill over school district boundaries. Ideally, municipal, state and federal governments should pick up part of the tab according to how far outside the local school district boundary the benefits of education reach.

# 4. Avoid unintended consequences of redistribution.

Be sure that school finance formulas preserve economic incentives.

Income redistribution can harm school efficiency by reducing local involvement in public schools. As the local share of school finance falls, residents have less incentive to monitor school performance because residents reap fewer rewards from such monitoring. A recent study suggests that the larger the state share in educational finance, the less efficient the public schools.<sup>2</sup>

Redistribution can also reduce economic output by fostering public policies harmful to business. As long as school district revenue is tied to the policies districts choose to pursue, school districts have an incentive to choose wisely. Redistribution severs this link by sending one district's gains across an entire state, making any particular district less likely to care about how its policies affect economic output in its district.

#### **Notes**

- Because capital must earn a comparable after-tax rate of return in all parts of the world, taxes on business capital or business income are actually paid by the people who work for the firm or buy its products.
- Thomas A. Husted and Lawrence W. Kenny (2000), "Evidence on the Impact of State Government on Primary and Secondary Education and the Equity—Efficiency Trade-Off," *Journal of Law and Economics*, vol. 43 (April), pp. 285—308.

educational funding system; 73 districts paid \$538 million during the 2000–01 school year, which is less than 5 percent of the state's \$11 billion education budget. However, the amount of money raised from property-wealthy districts rose by more than 10 percent from the previous year and has been predicted to rise by as much as 20 percent in the 2001–02 school year. Robin Hood payments will play an increasingly important role in Texas school finance in coming years. This suggests to many that the finance formula's problems will become increasingly severe if not corrected soon.

There are four areas of concern. The finance formula weakens the link between success and funding, reduces spending on education in some districts, doesn't keep pace with the economy and distorts educational decision-making.

Weaker Link Between Success and Funding. The Texas school funding formula gives districts less financial incentive to improve their educational quality. A city that improves itself attracts families to the area, driving up property values and raising the amount of money that flows into city coffers. In Texas, increases in property value generate no

new revenue for most school districts. If property values rise in a Robin Hood school district, it is stripped of any additional revenue it might collect, even if the revenue stems from the district's successful efforts to offer a better education to its students. If property values rise in a property-poor district, local tax payments will increase, but any additional revenue results in a dollar-for-dollar decline in state aid. Thus, for most districts, funding is unchanged regardless of district performance.

Lower Spending on Education. Many districts face a financial incentive to reduce their educational expenditures. A Texas city that wishes to spend more on police or fire protection simply raises its tax rate by the appropriate amount and then spends the money. A propertywealthy school district, however, must give more revenue to the state if it chooses to raise its tax rate. Taxpayers can be understandably reluctant to support local tax increases when they result in larger payments to the state. This discourages school administrators from suggesting increased educational expenditures and discourages voters from supporting such increases. For districts that must pay money to the state, the Robin Hood portion of the finance formula has the same effect as a tax on education.

Furthermore, school districts are not allowed to raise their tax rate above \$1.50 per \$100 valuation for the operations portion of their budget. This cap prevents some residents from purchasing the higher level of public education they desire.

Slow to Change. The static nature of the finance formula may distribute revenue in ways the Legislature did not intend. Texas is one of the few states to adjust its school finance formula to reflect regional variations in the cost of education. Unfortunately, the formula has not been updated in the last decade, so it currently distributes revenue based on an outdated pattern of cost differentials. For example, the cost-of-education index treats Carroll ISD as a school district with less than 2,000 students, even though enrollment now tops 6,600. The finance formula also suffers from bracket creep. In 2000, the median home price in Texas increased by 13 percent, but the effective tax base for determining revenues under the school finance formula didn't increase at all. Districts received less state aid, and some started making Robin Hood payments simply because a rising economic tide lifted their boat along with all the others.

**Distorted Decision-Making.** While most revenue and tax sources are included in the revenue-sharing portion of the Texas funding formula, taxes levied to build schools or facilities are not. This gives affluent districts an incentive to spend money on buildings rather than on teachers or books because issuing long-term debt does not increase their Robin Hood liability to the state.

## Conclusion

Texas has developed a complex formula for disbursing and reallocating funds to the state's 1,041 traditional school districts. This formula helps thousands of Texas children receive a better education and has garnered national accolades for its role in equalizing educational opportunities. However, the formula has also produced unintended side effects that likely reduce the demand for education in some districts and lower the incentive for some schools to improve educational quality.

These problems do not negate the significant benefits poor and average-income districts reap from the Texas funding formula. But they do suggest opportunities to further improve the school finance system in Texas. Mending these frayed edges can make an already strong educational funding system even stronger and help the citizens of Texas meet the challenges of the 21st century.

— Jason L. Saving Fiona Sigalla Lori L. Taylor

Saving and Sigalla are economists and Taylor is a senior economist and policy advisor in the Research Department of the Federal Reserve Bank of Dallas.

## **Notes**

- 1 There is great debate over whether governments should do this by providing public schools or by offering vouchers, but this debate is beyond the scope of this paper.
- <sup>2</sup> For a more complete discussion of the social benefits of education, see Lori L. Taylor, "The Government's Role in Primary and Secondary Education," Federal Reserve Bank of Dallas *Economic Review*, First Quarter 1999, pp. 15–24.

- <sup>3</sup> Andrew J. Coulson (1999), Market Education: The Unknown History (New Brunswick, N.J.: Transaction Publishers), p. 75. It should be noted that U.S. policymakers did not always live up to these lofty ideals, such as the separate but equal educational system for Southern blacks that persisted for a century after the Civil War.
- <sup>4</sup> David Tyack, Thomas James and Aaron Benavot (1987), Law and the Shaping of Public Education, 1785–1954 (Madison: University of Wisconsin Press), pp. 20–21.
- <sup>5</sup> Edgewood Independent School District v. Kirby, 777 S.W. 2d 391 (Tex. 1989).
- The Texas school finance formula has two major components. The first part, "Tier I," provides a minimum level of funding for all school districts that levy a property tax rate of 86 cents per \$100 of property valuation. Each district's Tier I funding is determined by adjusting a basic allotment per pupil to reflect three factors: a cost-of-education index, the size of the district and the presence of expensive-to-educate students such as those with learning disabilities. The state calculates each district's Tier I level of funding, subtracts the local share (86 cents times the value of taxable property in the district) and makes up the difference.

The second part of the formula, "Tier II," guarantees that school districts will raise roughly comparable revenue per pupil (adjusted for factors such as expensive-to-educate students) for each penny increase in their property tax rate between 86 cents and the statewide cap of \$1.50. In effect, the state guarantees that each district can behave as if it had a tax base of at least \$247,000 per weighted pupil and no more than \$295,000 per weighted pupil. (Although the law provides a guarantee of \$24.99, according to the Texas Education Agency, other costs reduced the guarantee to \$24.70.)

- <sup>7</sup> The formula is adjusted for variations in the cost of providing educational services. For example, expensive-to-educate students (such as those with learning disabilities) count as more than one pupil for funding purposes.
- <sup>8</sup> Nearly half of Texas schoolchildren are considered economically disadvantaged. The passing rate for all children increased from 56 percent to 82.1 percent between the 1993–94 school year and the 2000–01 school year.
- <sup>9</sup> Texas Educational Excellence Project (1999), "Examining the Effects of School Finance Reform in Texas," http://bush.tamu.edu/kmeier/teep/ reports.htm.
- Jacques Steinberg (2001), "NY on a Familiar Road to School Financing Reform," *Dallas Morning News*, January 19, p. 10A.
- Associated Press (2001), "Group Praises State for School Funding," Dallas Morning News, October 27, p. 37A.
- The number of Robin Hood contributors is expected to rise from 73 to 101 and the amount of revenue raised may be as high as \$650 million in the 2001–02 school year.