# Taking a Fresh Look at Educational Spending

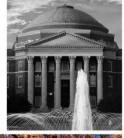
### **Texas at a Turning Point**

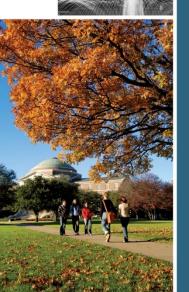
Texas Public Policy Foundation Austin, Texas April 16, 2014

### **Richard Alm**

William J. O'Neil Center for Global Markets and Freedom SMU Cox School of Business









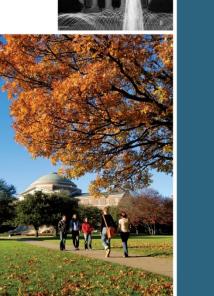
## W. Michael Cox

Director O'Neil Center for Global Markets and Freedom





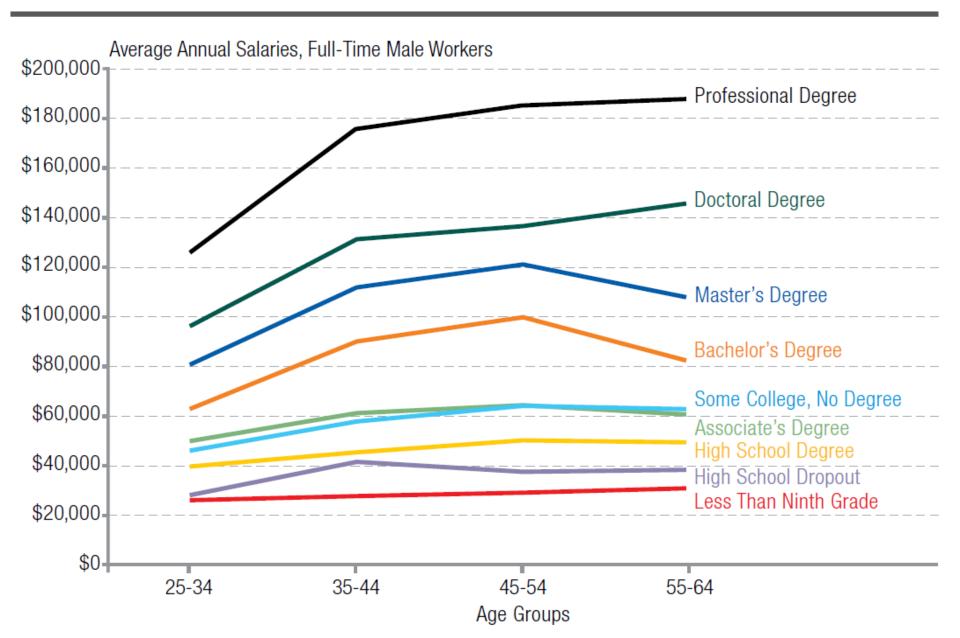




# <u>Education</u>: Good for Individuals, Good for Society



## Income by Education and Age









<u>Education</u>: Good for Individuals, Good for Society

### So Spend More on it!



#### New York New Jersey Alaska Vermont Wyoming Connecticut Massachusetts Rhode Island Maryland Pennsylvania Hawaii Maine Delaware New Hampshire Minnesota Wisconsin Virginia Illinois Ohio Louisiana Michigan West Virginia North Dakota Montana Nebraska Kansas Oregon lowa California Georgia Washington Missouri New Mexico Indiana South Carolina Alabama Florida Kentucky Colorado Arkansas North Carolina Texas South Dakota Nevada Mississippi Tennessee Oklahoma Arizona Idaho Utah

\$0

\$4,000

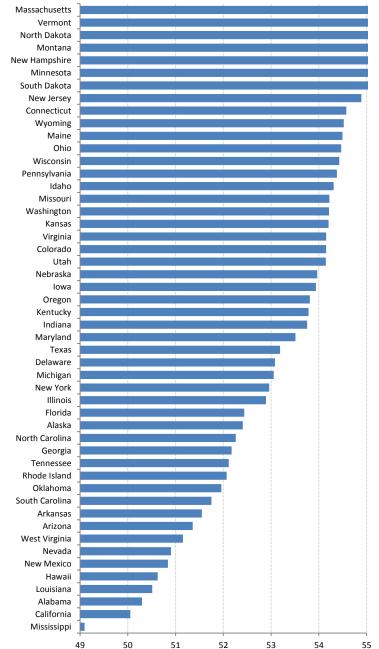
\$8,000

\$12,000

\$16,000

\$20,000

#### Eighth-Grade Test Score in Math, Reading, Science



#### New York New Jersey Alaska Vermont Wyoming Connecticut Massachusetts Rhode Island Maryland Pennsylvania Hawaii Maine Delaware New Hampshire Minnesota Wisconsin Virginia Illinois Ohio Louisiana Michigan West Virginia North Dakota Montana Nebraska Kansas Oregon lowa California Georgia Washington Missouri New Mexico Indiana South Carolina Alabama Florida Kentucky Colorado Arkansas North Carolina Texas South Dakota Nevada Mississippi Tennessee Oklahoma Arizona Idaho Utah

\$0

\$4,000

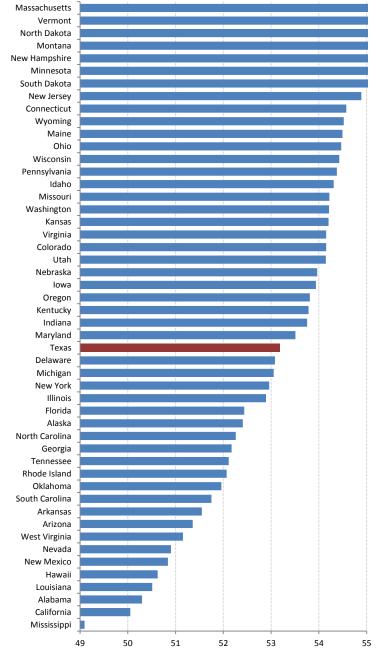
\$8,000

\$12,000

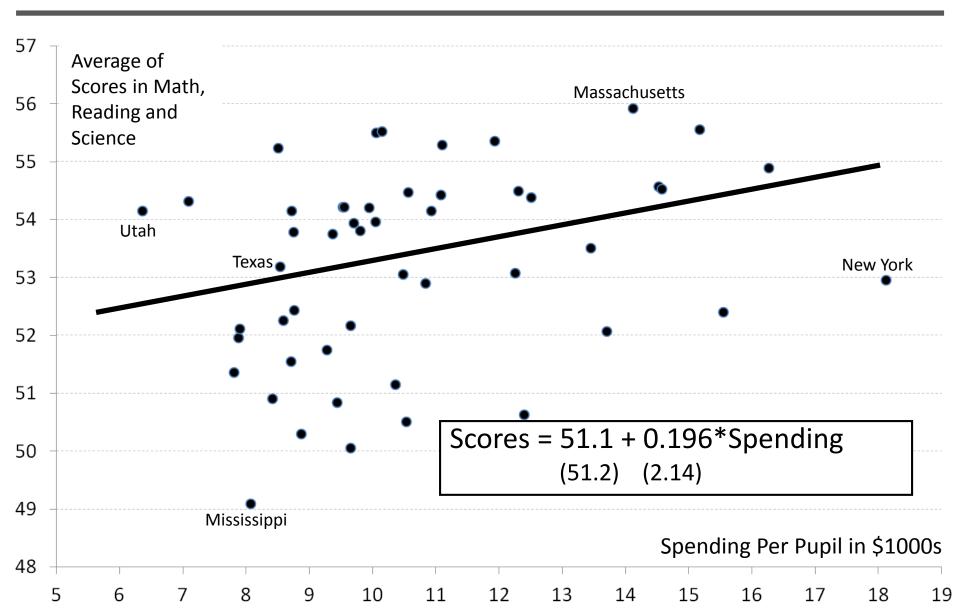
\$16,000

\$20,000

#### Eighth-Grade Test Score in Math, Reading, Science



### Do States that Spend More Have Better Schools?





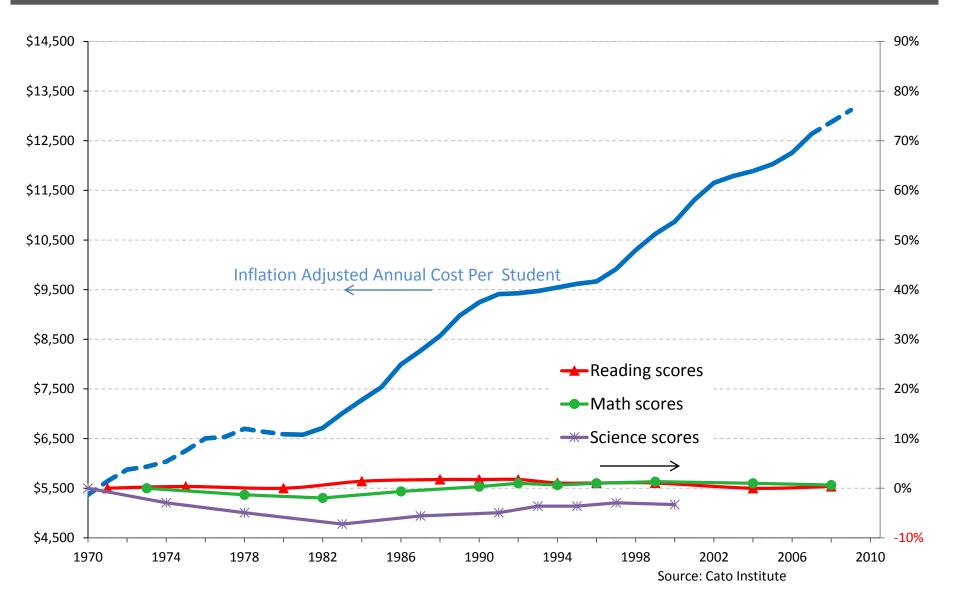




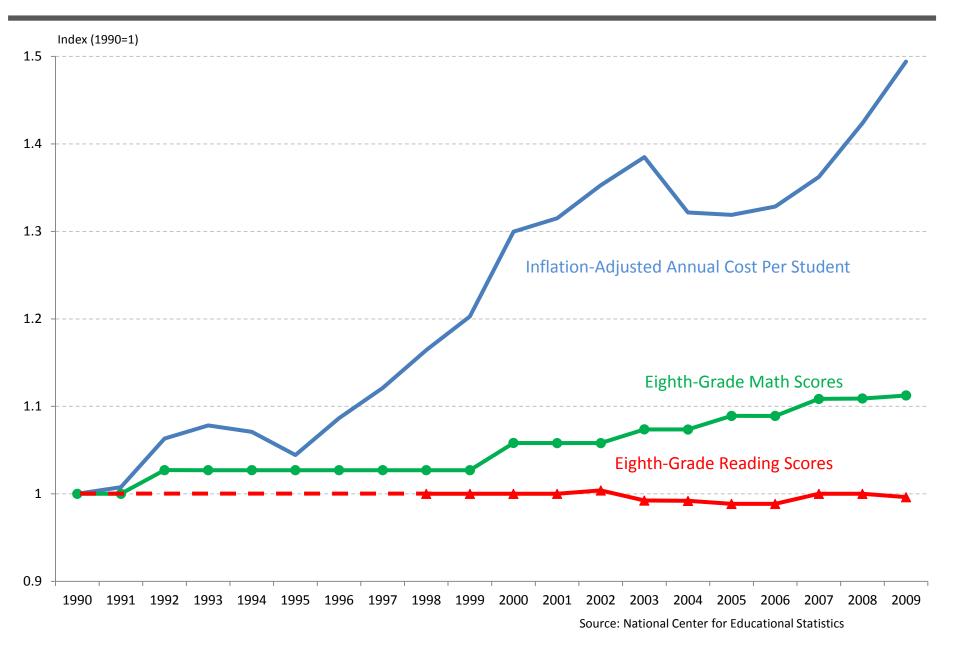
This would end a happy story except for an inconvenient truth --Spending more money hasn't improved education.



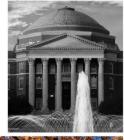
### U.S. Spending, Test Scores



### Texas Spending, Test Scores











# Fatal Flaws in How We Measure Spending, Student Performance:



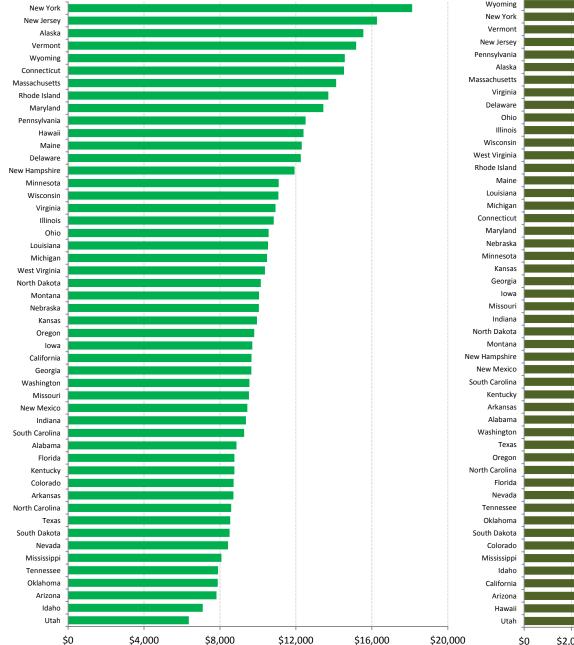




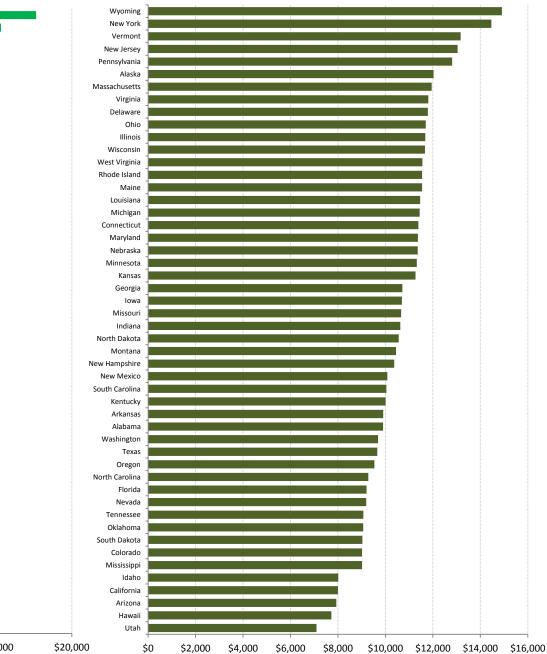


Flaws in Measurement of Spending, Student Performance: → Cost of Living Varies

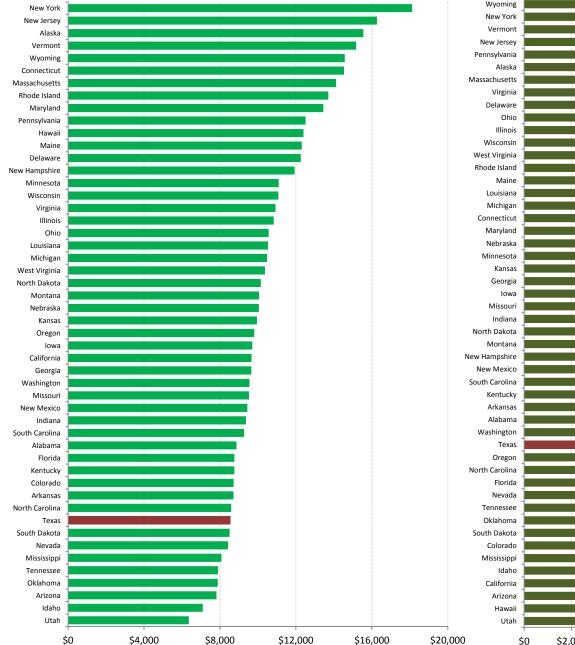
#### **Actual Spending Per Student**



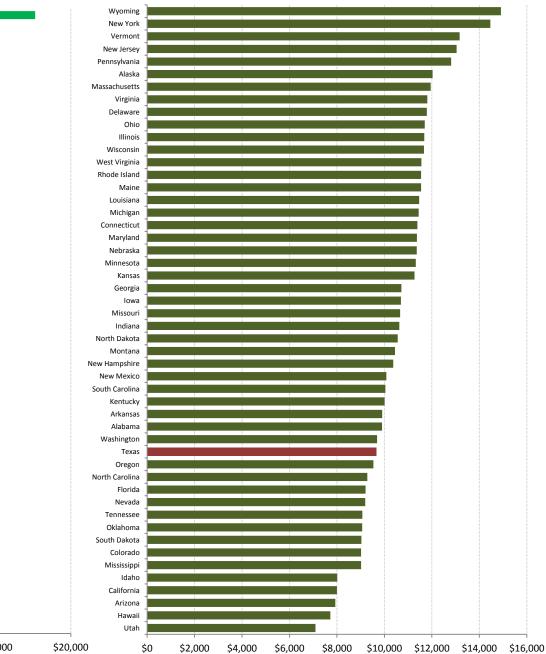
**COLA-Adjusted Spending Per Student** 



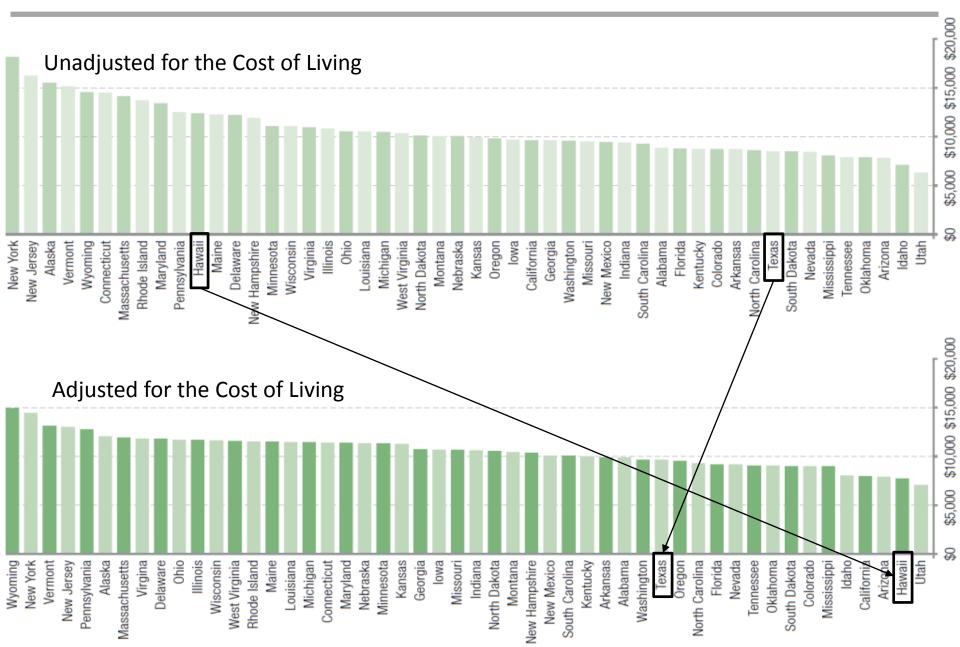
#### **Actual Spending Per Student**



**COLA-Adjusted Spending Per Student** 



# Fixing the Spending-per-Pupil Data



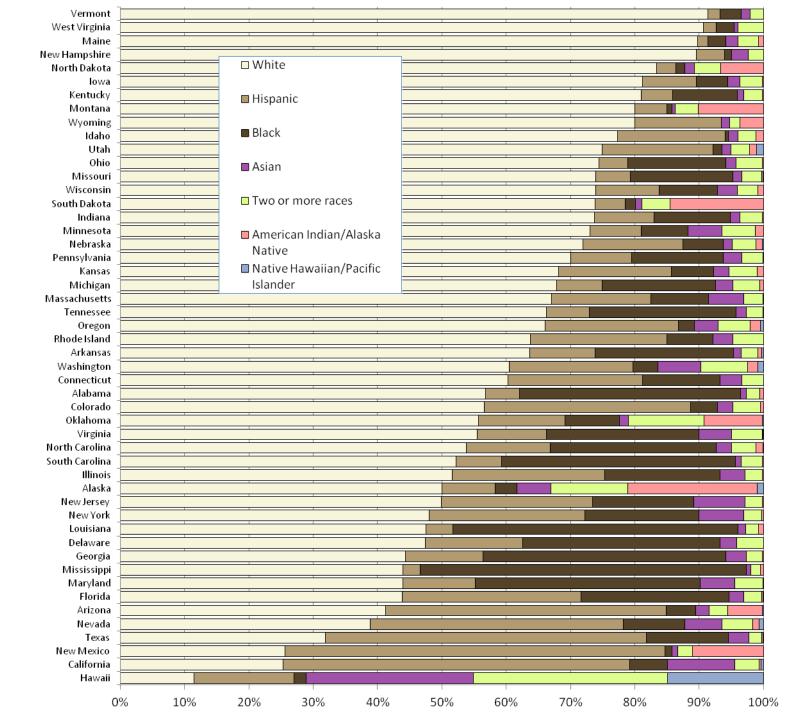


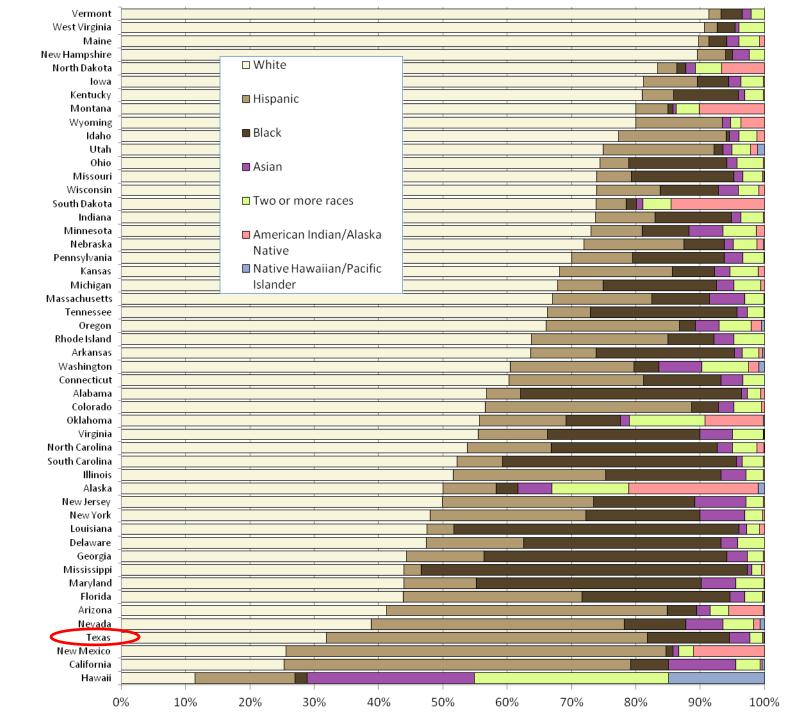




Flaws in Measurement of
Spending, Student Performance:
→ Cost of Living Varies
→ Demographics Vary

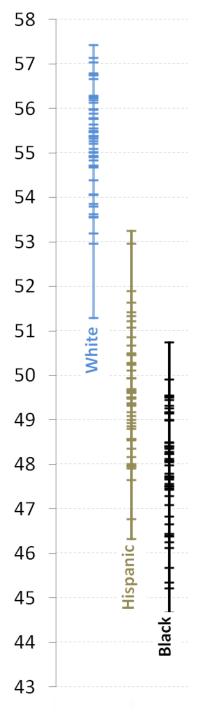








RACIAL OR ETHNIC GROUP	ACTUAL	ADJUSTED
WHITE	55.3	59.3
HISPANIC	21.4	23.0
BLACK	16.5	17.7
ASIAN/PACIFIC ISLANDER	5.0	0.0
AMERICAN INDIAN/ALASKAN NATIVE	1.2	0.0
TWO OR MORE RACES	0.6	0.0
TOTAL	100.0	100.0

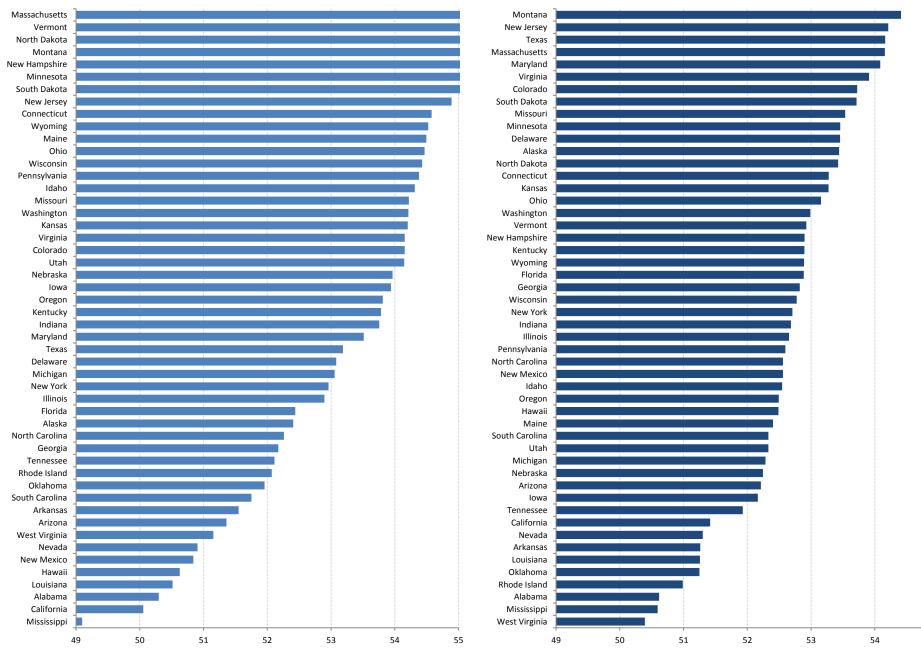


#### Eighth-Grade Test Score in Math, Reading, Science



**Constant Demographics** 

55

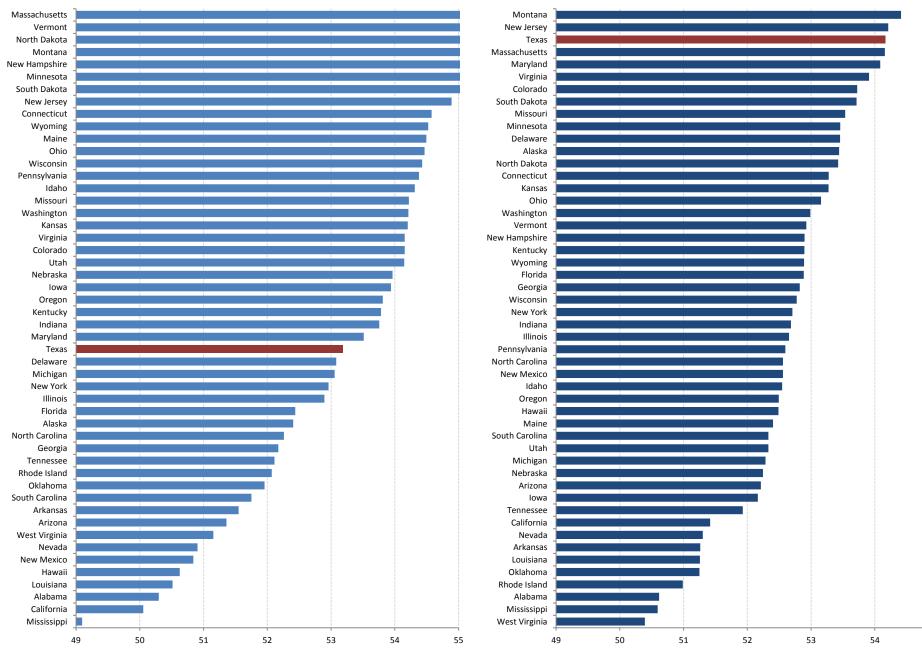


#### Eighth-Grade Test Score in Math, Reading, Science

Varied Demographics

**Constant Demographics** 

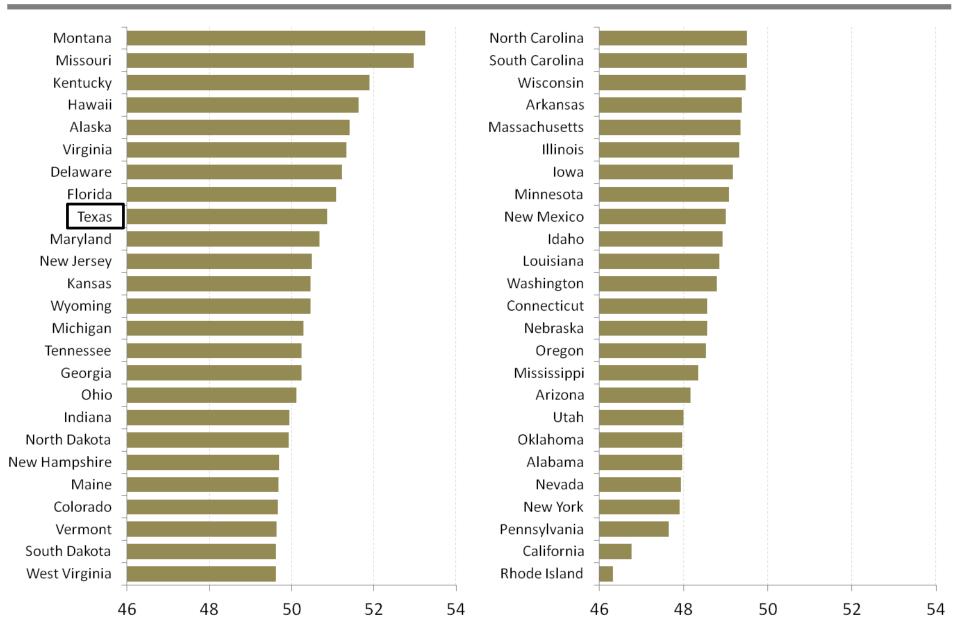
55



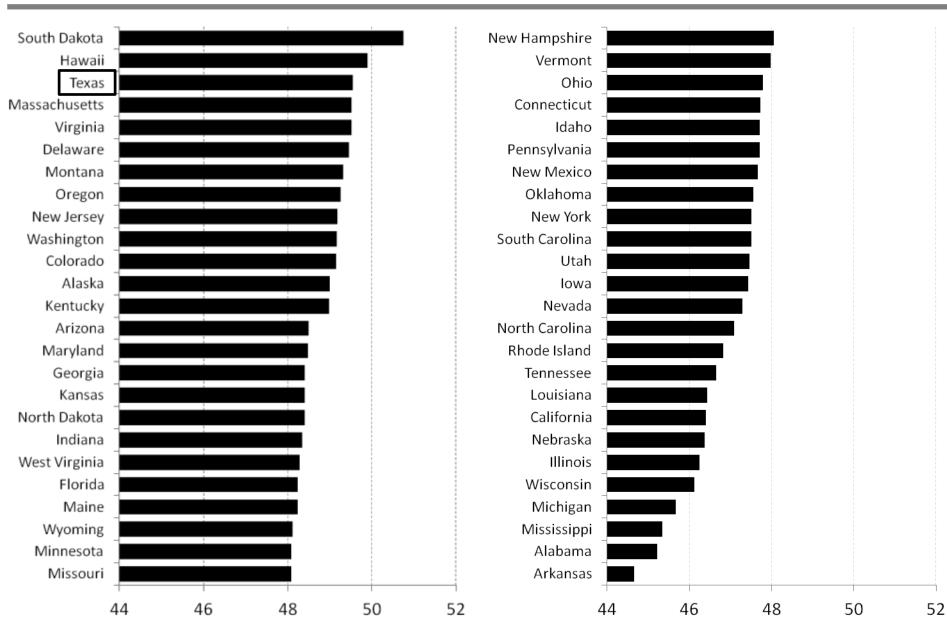
### Average Scores of White 8<sup>th</sup> Grade Public School Students Across Math, Reading and Science

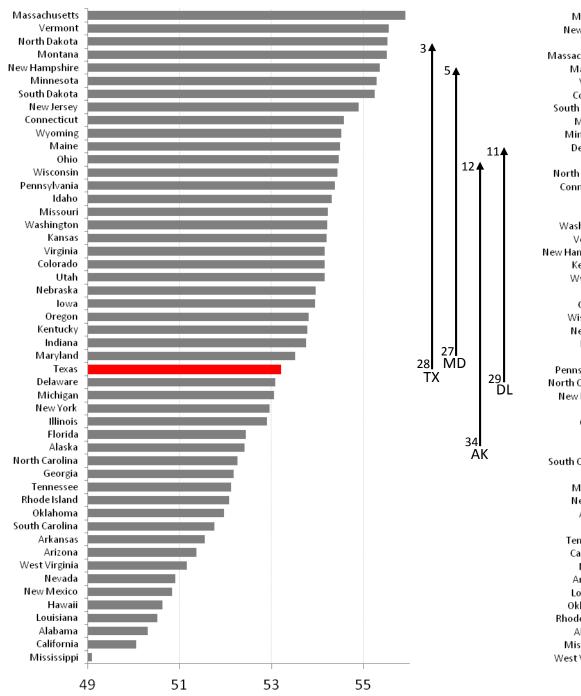
Massachusetts		1		1		New Mexico	, ]		1		
New Jersey						North Carolina			1		
Maryland		I		I		Missouri	i 📃				
Texas		i	i			Wyoming		i			
Connecticut						Georgia		i			
Minnesota						Oregon		i			
Colorado						Indiana					
Montana						Michigan					
North Dakota	-					Arizona					
South Dakota	-					Florida	1 T				
Virginia						South Carolina					
New York						California			 		
Pennsylvania						lowa			   		
Wisconsin						Maine					
Ohio						Kentucky	,				
Illinois						Tennessee					
Kansas						Rhode Island					
Washington						Arkansas	; -				
Vermont						Nevada		!			
New Hampshire						Oklahoma		1			
Alaska						Louisiana		1			
Delaware						Hawaii	i –	1			
Utah						Alabama			1		
Nebraska						Mississippi	i –		-		
Idaho	-	1				West Virginia	-				
					ì	5					1
	50	52	54	56	58		50	52	54	56	58

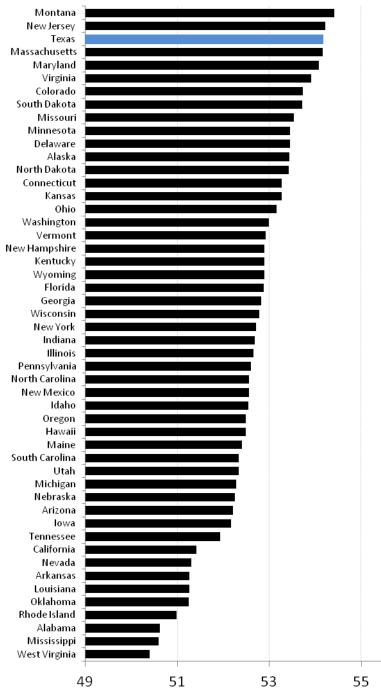
### Average Scores of Hispanic 8<sup>th</sup> Grade Public School Students Across Math, Reading and Science

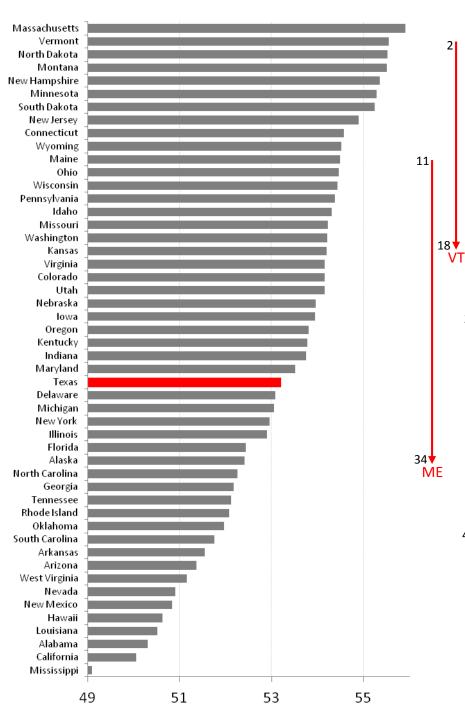


### Average Scores of Black 8<sup>th</sup> Grade Public School Students Across Math, Reading and Science

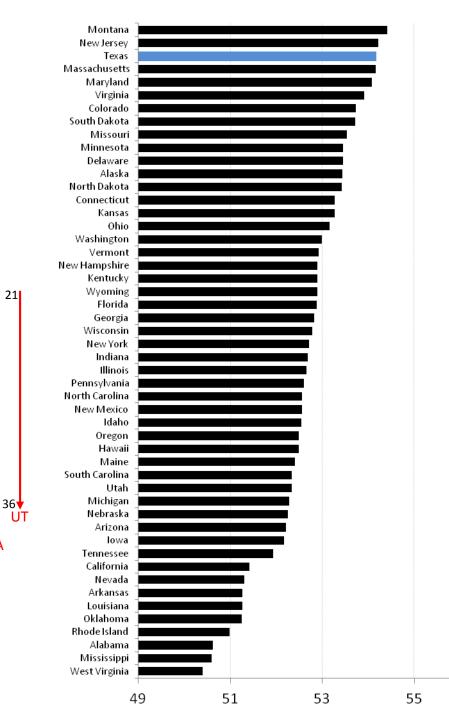








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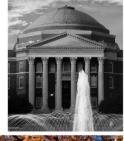






# If not money, what explains differences in test scores?







If not money, what explains differences in test scores?

In a word, parents.



# What the Data Says

Spent inside a **public** school system, more money does not improve students' scores. The education and income of the children's parents matter for scores, but not school spending.

			<b>D</b>
Explanatory Variable	Coefficients	t Stat	P-value
Intercept	47.04	40.10	1.96E-37
COLA Income of Parents	0.060	1.96	0.05567
Education of Parents	0.115	4.76	1.98E-05
COLA Expenditures per Pupil	0.018	0.25	0.807013
School spending var	iable is statistically in	nsignificant	
School spending var Explanatory Variable	iable is statistically in Coefficients	nsignificant t Stat	P-value
	-		
Explanatory Variable	Coefficients	t Stat	1.01E-38
<i>Explanatory Variable</i> Intercept	<i>Coefficients</i> 47.10	<i>t Stat</i> 41.57	1.01E-38



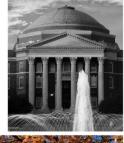




### SMU COX

### If not money, what will improve America's schools?







If not money, what will improve America's schools?

In two words, choice and competition.



# How You Get More Money: Public vs. Private Sector

Public vs. private—how do the two systems allocate resources to suppliers?

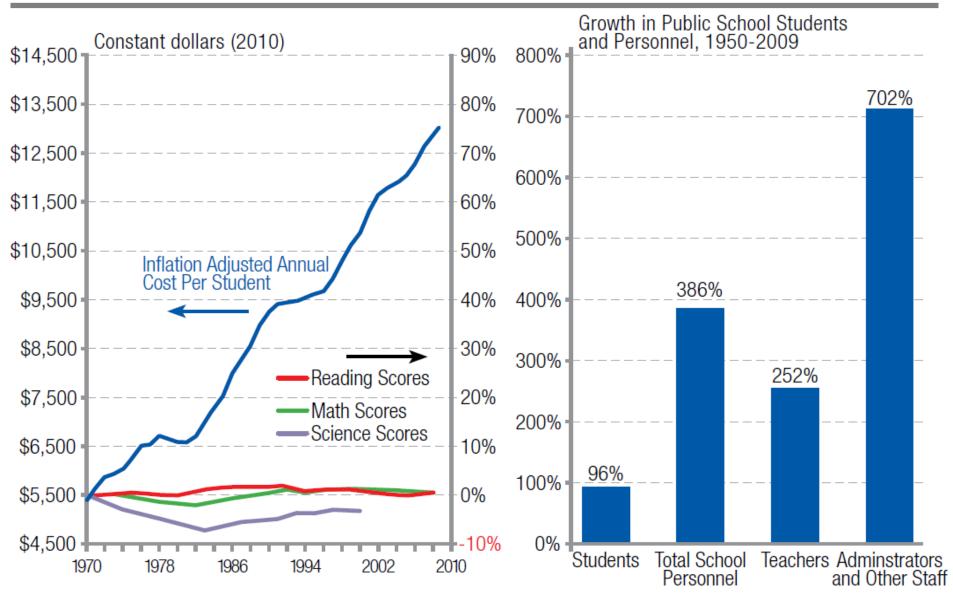
In a market-based (**private**) system, those who provide a quality product at a good price gain customers and resources. Those who don't, fail. The economy's resources and production are constantly reorganized to deliver ever-higher quality at an everlower price.

# How You Get More Money: Public vs. Private Sector

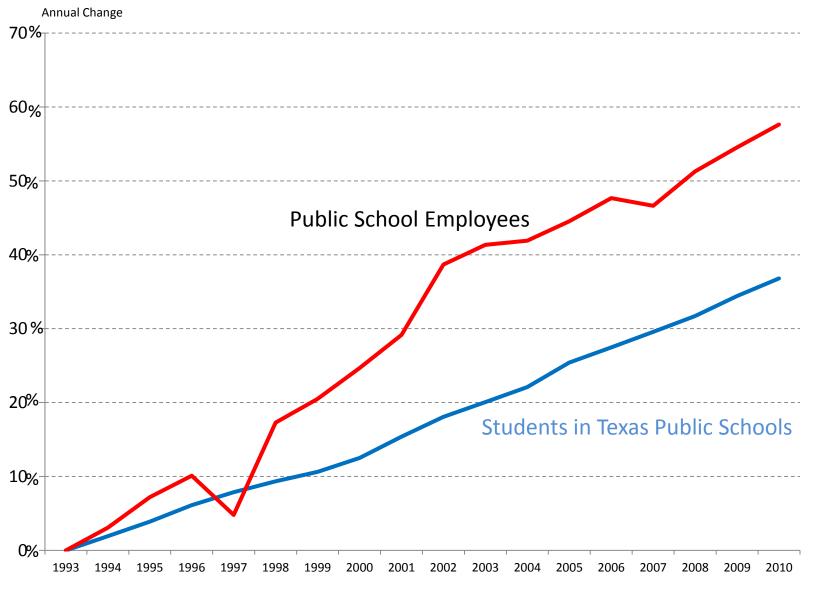
Public vs. private—how do the two systems allocate resources to suppliers?

In the **public** sector, government doles out resources to those who "need" them. "**Need**" is determined on the basis of performance. If your school is underperforming relative to average, then you are tagged as needing more resources, and vice versa. Resources are thus constantly reshuffled to subsidize ever-*lower* quality at an ever-higher price.

## More Spending = Lower Scores + Bigger Bureaucracy



### Texas School Jobs, Enrollment



Source: National Center for Educational Statistics

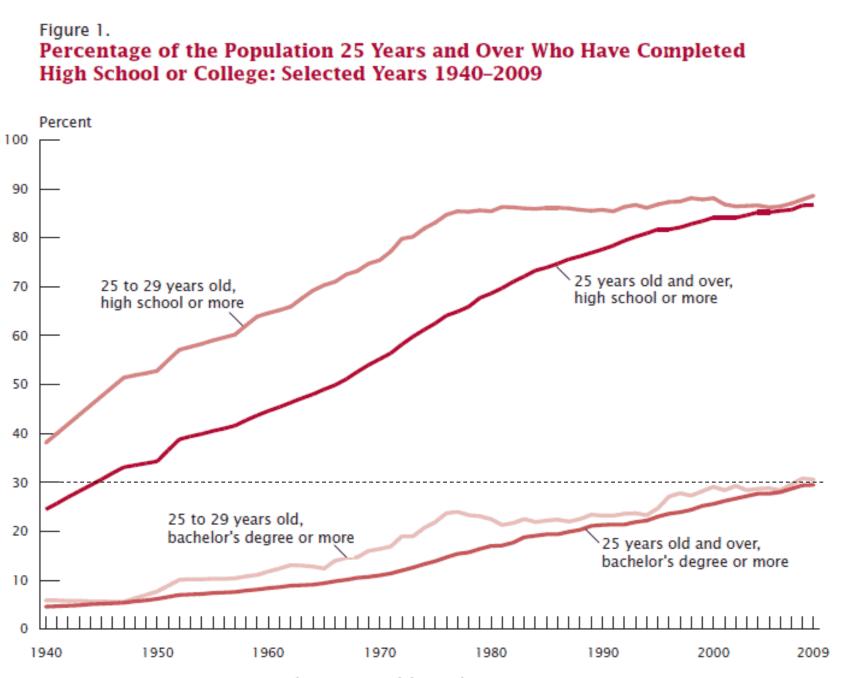
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### The Masses Don't Go on to Higher Education

