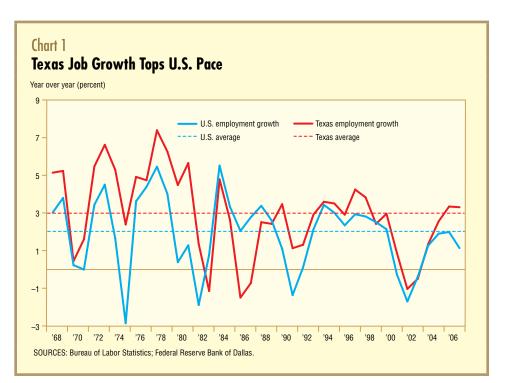
Keys to Economic Growth: What Drives Texas?

By Jason L. Saving

Can Texas preserve a business climate that has kept it ahead of other states? exas continued to grow after the nation sank into recession in December 2007. Staying up so long in down times adds to the state's reputation for superior economic performance. For the past 40 years, employment has consistently grown faster in Texas than the U.S.—by 1 percentage point a year on average (*Chart 1*).

In looking at the drivers of economic growth, recent research has put increasing emphasis on human capital and institutions, such as taxes and public spending. These factors partly explain why some U.S. states and regions have managed to maintain business climates conducive to faster growth.

Various studies have tied Texas' edge over the rest of the nation to such advantages as low tax burdens and flexible labor markets. The challenge will be to preserve these features while positioning the state to compete in a more knowledge-intensive economy.



Texas faces issues in public finance, education, changing demographics and infrastructure. How the state addresses them will help determine whether it can maintain its edge.

Factors Behind Growth

We can't dissect regional performance without first understanding some general principles of economic growth. Traditional theory suggests the most important factor is physical capital—tangible investments such as buildings and machinery.

Economies can permanently improve their long-run growth paths by investing resources in physical capital rather than consuming them. Saving more today in the name of greater growth tomorrow enables future generations to enjoy higher living standards.¹

In this light, the industrialized West's economic success relative to the rest of the world is a simple story revolving around choices about investment and consumption. Yet this view can't account for lagging economic development in many countries including China, which experienced anemic growth rates until recent times despite extremely high savings.

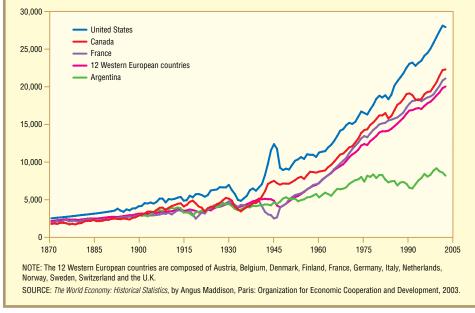
While investment in physical capital is important, economists eventually realized that it couldn't be the whole story. Two primary ideas arose to explain where traditional theory fell short.

One holds that the missing link is human capital. It came out of pioneering work by Paul Romer, which has been extended by Ed Glaeser.² These economists show that differences in education and skill levels across countries are strongly related to economic growth, with highly educated countries faring well even when their physical capital is low, and vice versa.

The human capital theory, too, has flaws. If skills and education were the missing link, how could countries like Argentina, with high levels of physical and human

Chart 2 Argentina Lags Behind Other Countries in Growth

GDP per capita, 1990 Geary–Khamis international dollars



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capital, suffer through decades of sluggish growth, falling from the world's seventh most prosperous country in 1914 to the 60th today (*Chart 2*)?

That brings us to the second idea—institutions. Pioneered by economic historian Douglass North and pushed most forcefully in recent times by development economist Daron Acemoglu, this theory holds that rules, laws, customs and regulations—what North called the "humanly devised constraints that shape human interaction," i.e., government—have profound effects on economic growth.³

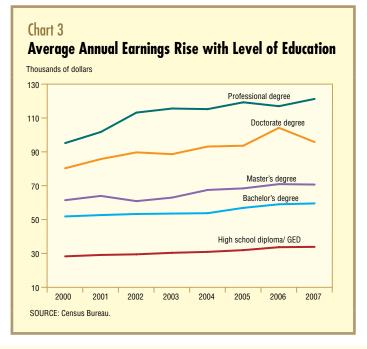
If Argentina's growth didn't measure up to its physical and human capital endowments, it's in large measure because rules and laws shackled economic activity and slowed growth. And if China's economy expanded rapidly following Deng Xiaoping's endorsement of private enterprise and regulation, it's because customs changed in a way that unlocked the productive potential of the Chinese people.

Economists differ on which theory is correct. What's clear to a growing number of researchers, however, is that both human capital and institutions play important roles in creating the growth gaps we see today. Education and training certainly boost potential productivity, but the potential can be most effectively unleashed in economies with institutions that encourage rewarding higher productivity with higher compensation. In other words, the institutions should be market friendly.

Business Climate

Looking beyond physical capital to human capital and institutions provides a more robust grasp of what matters for economic growth. But what do the theories look like in practice? What aspects of human capital have been shown to boost economic growth? And what specific institutional setups have had the greatest payoff?

Education improves human capital and makes people more productive, which pays dividends in the form of higher gross domestic product (GDP). Studies have shown that individuals with more years of schooling enjoy large lifetime earnings premiums (Chart 3). A college degree bestows an average of \$20,000 a year in additional earnings over a high school education. A Ph.D. means \$40,000 more a year, and a professional



When we look at the U.S., we do see a strong correlation between favorable business climates and above-average economic growth, with Texas generally scoring high on both counts. degree, such as law or medicine, an added \$20,000.4

These facts suggest a justification for spending on education. However, more money for schools doesn't directly translate into an improved educational product and may not achieve a more skilled and educated citizenry.⁵

A 2005 Organization for Economic Cooperation and Development report, for example, finds that the U.S. spends more per pupil than any country except Switzerland. Yet the U.S. doesn't score particularly well on cross-country standardized tests.⁶ Within the U.S., there's virtually no relationship between per capita state educational spending and workers' knowledge, let alone between those outlays and economic growth.

Part of the reason is that high-spending states devote a greater portion of their educational budgets to noneducators than lowspending states do, often asking schools to take on social-service roles. Clusters of households with low incomes or weak parental involvement require more public education dollars to achieve a desired level of student performance.

The key insight from this research is that productive schooling successfully bestows human capital, even when poorly funded, while unproductive schooling doesn't, even when amply funded.⁷

Why has the U.S. grown more quickly than other developed nations over the past few decades despite a middle-of-the-pack K–12 education system?

Two factors are especially relevant. First, the U.S. has an advanced university system characterized by strong competition and invested students, making it much more effective than the noncompetitive K–12 system. Second, the nation's marketfriendly public policies enable residents to leverage their educational investments in ways few other countries can match.⁸

Researchers also find nuances in institutional arrangements. Marginal tax rates, for example, affect incentives to work.⁹ Several recent studies conclude that a high tax rate, not a more sophisticated appreciation of art and culture or an innate preference for leisure, is the primary reason Europeans work fewer hours than Americans.¹⁰ Less work means slower growth, supporting the idea that low marginal tax rates stimulate growth.

The conflict between high taxes and growth doesn't necessarily imply that government spending retards growth. About 20 years ago, a seminal paper found that government typically uses capital more productively than the private sector, suggesting that resource transfers from businesses and individuals to the public sector boost economic growth.¹¹ If true, this conclusion would justify large increases in the size of government, so this paper stimulated a vast amount of public finance research.

Economists, by and large, concluded that government could use capital effectively under some circumstances but would generally be expected to use it less productively than the private sector.¹²

Where Does Texas Rank?

The theories and practical applications suggest a potential for business climate differences to affect growth rates—both between nations and within a single country. And when we look at the U.S., we do see a strong correlation between favorable business climates and above-average economic growth, with Texas generally scoring high on both counts.

State business climates differ dramatically in terms of taxes, according to groups such as the nonpartisan Tax Foundation. The organization's most recent evaluation of state business-tax climates places Texas seventh, with top 10 rankings for individual income and unemployment-insurance taxes.¹³

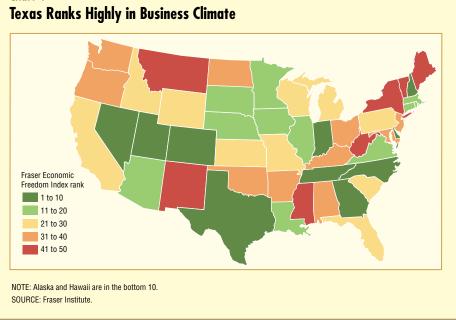
Texas has no individual income tax. At first blush, it may seem odd to put individual income taxes in a business ranking, but it's important to remember that sole proprietorships make up three-quarters of American enterprises. Their income almost always appears on individual rather than corporate returns.

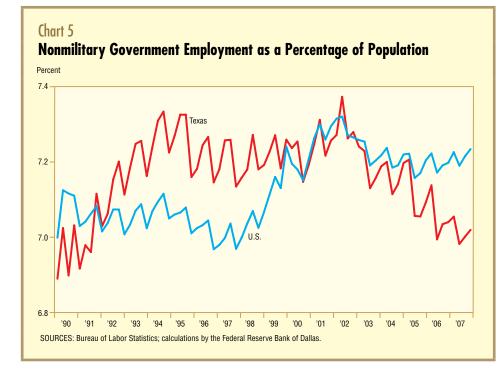
Researchers have found that levies on individuals' incomes are among the worst in terms of distorting economic activity. They discourage production and savings as well as work. That's why onerous state income tax systems are among the biggest determinants of state economic growth.

Texas doesn't fare as well on sales and property tax burdens. It sinks to the middle of the pack, with fairly high rates offset by tax bases somewhat smaller than most other states. The sales tax rate of 8.25 percent for most of urban Texas is among the nation's highest, though still less than several large-city rates, including Chicago's 10.25 percent.

Texas' revised franchise tax has a top rate of 1 percent of gross receipts, the

Chart 4





country's highest. Deductions and exemptions ensure that most Texas businesses won't actually pay 1 percent, but the Tax Foundation's study takes these factors into account in finding Texas' business tax significantly more burdensome than the norm.

State tax revenue must come from somewhere, so it's inevitable that no state will fare well on every measure. For a broader look at business climates, we turn to the Fraser Institute's "Economic Freedom in North America" report and its state rankings (*Chart 4*). This publication shows that with the exception of tiny Delaware, Texas enjoys the nation's best business climate.

And the report cites Texas as one of seven states that combine exceptional economic-freedom scores with growth rates at least 1 percentage point above the national average over the past quarter century. The others are Colorado, Georgia, Delaware, New Hampshire, North Carolina and Tennessee.

Areas in which Fraser finds Texas par-

ticularly competitive include aggregate tax regime, overall tax burden and labor market flexibility. The latter involves the ease with which businesses can adjust their employment and individuals can move freely between jobs.

Only in government employment per capita does Texas rank in the middle, suggesting to Fraser that government may impose a larger burden on the economic activity of ordinary Texans than the overall tax environment suggests (*Chart 5*).

Another picture comes from the Beacon Hill Institute, which uses a broad and eclectic set of variables to identify states primed for growth.¹⁴ Its study echoes Fraser in determining that Texas fares well relative to other states in taxation and spending.

But the study identifies significant weaknesses in Texas, including a low rate of health insurance coverage and low number of college degrees awarded per inhabitant (*Chart 6*). Beacon Hill also identifies infrastructure as a weakness, with commute times longer than the national average and growing.

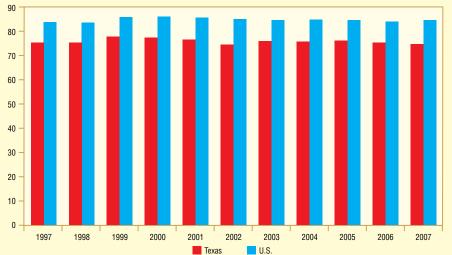
While these negatives are partly due to factors beyond the state's control, continued demographic change and movement toward a knowledge-based economy suggest the issues could become more significant impediments to growth—if nothing is done to address them.

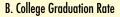
Two more direct measures define the business climate: whether individuals are moving into the state and whether the state tends to grow faster than others on a per capita basis.

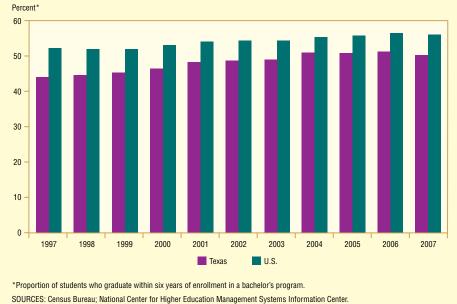
Basic economic theory holds that individuals will, all else equal, move to areas with strong prospects and depart from areas with weak prospects. The 2000 census shows every state's population increased between 1990 and 2000. But Texas grew faster than all but seven and placed in the top third for per capita GDP growth. Part of Texas' attraction has been its low cost of living and doing business.

Texas' performance is even more impressive given the ever-present challenge of rapid demographic change. Much of the state's population growth has stemmed from the arrival of low-skilled workers from Mexico. These immigrants earn below-average wages and may bring down per capita GDP until they or their descendants acquire the skills to prosper in the information-age economy. However, they also foster business activity by reducing labor costs and









freeing the native-born to engage in more productive activities, which benefits natives and immigrants alike.

Challenges Facing Texas

At least three-quarters of U.S. states found themselves confronted with budget deficits over the last 12 months, either for fiscal 2009 or 2010 or both. By the middle of this fiscal year, the states faced a shortfall of \$48 billion and needed to make \$24 billion in further adjustments as the fiscal year unfolded, forcing governments to squeeze out more revenue or cut services.¹⁵ Texas began the fiscal year with a surplus, but the state's descent into recession has begun to worsen its financial picture. Increased spending on education and Medicaid will weigh on the state budget. Ongoing recession will likely take a toll on the revenue side, though the recently passed U.S. stimulus plan should help the state balance sheet.

Several public policy issues bear on Texas' ability to preserve its favorable business climate:

The tax environment. As policymakers debate whether and how to reform

the newly revised franchise tax, they must evaluate how to lessen the burden without crippling government's ability to fulfill vital state needs. This ties into the infrastructure debate, which challenges the state to maintain and expand its road-and-rail system without jeopardizing its tax climate.

Education. Texas faces tough decisions on whether and how to facilitate greater private-sector involvement in K-12 schooling as well as foster the emergence of a fourth or even fifth tier 1 university. California has nine such institutions and New York seven. University of Texas at Dallas president David Daniel notes that more than 10,000 Texas teens leave the state each year to attend college, while only 4,000 teens enter the state for this purpose-a disparity that puts Texas at a disadvantage in developing and retaining top intellectual talent.16 Physical capacity constraints ensure that the proportion of Texas students attending tier 1 universities will fall over time unless more of these facilities emerge.

Demographics. It seems certain Texas will continue to attract a large number of low-skilled Mexican immigrants. This trend will factor into the education system because the children of immigrants, by law, must be educated in public schools. Immigration could also dramatically impact health coverage because the uninsured population comes predominantly from the low-skilled ranks.

Infrastructure. Texas has lacked the resources to fully fund desired road and bridge work. Transportation experts generally foresee a gradual decline in infrastructure spending—and a not-so-gradual increase in urban road congestion—unless infrastructure investments are made. It isn't clear how they should be financed. Options include selling tollway rights to private firms, reducing funds for such programs as prisons and social services and increasing the state gasoline tax.

The list shows that Texas faces many public policy issues in the years ahead. But Texas has consistently grown faster than other large states confronted with similar challenges. Its strong business climate gives it a head start as it seeks to address these issues in ways that will help it continue to prosper in the 21st century.

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Notes

¹ See "A Contribution to the Theory of Economic Growth," by Robert M. Solow, *Quarterly Journal of Economics*, vol. 70, no 1, 1956, pp. 65–94.

² See "Increasing Returns and Long-Run Growth," by Paul M. Romer, 1986, *Journal of Political Economy*, vol. 94, no. 5, 1986, pp. 1002–37.

³ See *Institutions, Institutional Change, and Economic Performance*, by Douglass C. North, New York: Cambridge University Press, 1990.

⁴ This is the raw premium observed in the data.

Sociodemographic factors help explain part of the gap, though the fundamental point that education raises lifetime income is true under virtually any model.

⁵ An example is "Where Has All the Education Gone?" by Lant Pritchett, *World Bank Economic Review*, vol. 15, no. 3, 2001, pp. 367–91.

⁶ See *Education at a Glance: OECD Indicators 2005*, Organization for Economic Cooperation and Development.
⁷ See "The Failure of Input-Based Schooling Policies," by Eric A. Hanushek, *Economic Journal*, vol. 113, no. 485, 2003, pp. 64–98.

⁸ See "Directly Unproductive Schooling: How Country Characteristics Affect the Impact of Schooling on Growth," by Mark Rogers, *European Economic Review*, vol. 52, no. 2, 2008, pp. 356–85. ⁹ See "Interstate Business Differentials and New Firm Location: Evidence from Panel Data," by Leslie E. Papke, *Journal of Public Economics*, vol. 45, no. 1, 1991, pp. 47–68.

 ¹⁰ For example, see "Why Do Europeans Work (Much) Less? It Is Taxes and Spending," by Tine Dhont and Freddy Heylen, *Economic Inquiry*, vol. 46, no. 2, 2008, pp. 197–207.
 Also see "Why Do Americans Work So Much More than Europeans?" by Edward C. Prescott, National Bureau of Economic Research, NBER Working Paper no. 10316, 2004.
 ¹¹ See "Is Public Expenditure Productive?" by David Alan Aschauer, *Journal of Monetary Economics*, vol. 23, no. 2, 1989, pp. 177–200.

¹² See "Public-Sector Capital and the Productivity Puzzle," by Douglas Holtz-Eakin, *Review of Economics and Statistics*, vol. 76, no. 1, 1994, pp. 12–21.

¹³ The rankings are listed in "2009 State Business Tax Climate Index," by Joshua Barro, Tax Foundation, Background Paper no. 58, October 2008.

¹⁴ See "State Competitiveness Report 2007," Beacon Hill Institute, Suffolk University, Boston.

¹⁵ See "State Budget Troubles Worsen," by Elizabeth C. McNichol and Iris J. Lav, Center on Budget and Policy Priorities, November 2008.

¹⁶ Refer to "Thoughts on Creating More Tier One Universities in Texas," by David E. Daniel, testimony before the 75th session of the Texas Senate, May 2008.