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Aggregate output and total population are primary forces driving the real estate industry. Understanding these variables at the state level and their relationships to the national economy provides insight into business conditions and the outlook for the state's real estate industry.

An ongoing research program at the Real Estate Center monitors both the Texas and U.S. economies, focusing on the two broadest measures of Texas' aggregate economy: gross domestic product (GDP) and gross domestic product per capita.

Table 1. 2006 GDP by Country

	Country	GDP, \$Billion		
1	United States	13,149		
2	Japan	4,340		
3	Germany	2,907		
4	China	2,668		
5	United Kingdom	2,345		
6	France	2,232		
7	Italy	1,845		
8	Canada	1,251		
9	Spain	1,224		
10	Brazil	1,068		
	Texas	1,066		
11	Russia	987		
12	India	906		

Sources: World Bank and U.S. Bureau of Economic Analysis

Table 2. Top 15 States Ranked by 2006 GDP						
	2000	6	2005			
State	Total GDP Percent (in millions) of Total		Total GDP (in millions)	Percent of Total		
United States	\$13,149,033	100.0	\$12,372,850	100.0		
California	1,727,355	13.1	1,616,351	13.1		
Texas	1,065,891	8.1	989,333	8.0		
New York	1,021,944	7.8	961,385	7.8		
Florida	713,505	5.4	666,639	5.4		
Illinois	589,598	4.5	555,599	4.5		
Pennsylvania	510,293	3.9	486,139	3.9		
Ohio	461,302	3.5	442,243	3.6		
New Jersey	453,177	3.4	427,654	3.5		
Michigan	381,003	2.9	372,148	3.0		
Georgia	379,550	2.9	358,365	2.9		
North Carolina	374,525	2.8	350,700	2.8		
Virginia	369,260	2.8	350,692	2.8		
Massachusetts	337,570	2.6	320,050	2.6		
Washington	293,531	2.2	271,381	2.2		
Indiana	2/8 915	1 0	236 357	1 0		

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

### **Texas Gross Domestic Product**

The U.S. gross domestic product is defined by the U.S. Bureau of Economic Analysis (BEA) as "output of goods and services produced by labor and property located in the United States." The nation's GDP is estimated each quarter.

The BEA also offers GDP data (previously called GSP or gross state product) for all states. State GDP, like the GDP for the nation, is the broadest measure of economic activity for a state economy and is estimated annually with a lag of two years. In 2008, 2006 state GDPs are available along with more detailed GDPs by industry for 2005.

Despite the lag in dissemination, Texas GDP data is a useful resource for comparing Texas' economic performance with the nation's, other states in the United States and even other nations. As Table 1 shows, Texas' economic output in 2006 ranked 11<sup>th</sup> when compared with world economies, just after Brazil, generating more than \$1 trillion of output.

**Table 3. Private GDP Components, 2005** 

	Private GDP	Percentages of Private GDP			
	as Percent Total GDP	Employee Compensation	Taxes	Gross Profit	
United States	88.0	52.3	8.1	39.6	
California	88.8	52.2	7.2	40.6	
Texas	89.2	46.6	8.5	44.9	
New York	89.6	52.9	8.4	38.7	
Florida	88.6	51.6	11.2	37.3	
Illinois	90.1	55.1	8.1	36.7	
Pennsylvania	90.0	55.3	7.6	37.2	
Ohio	89.0	54.1	7.6	38.3	
New Jersey	89.7	53.2	9.6	37.2	
Michigan	89.2	58.2	8.6	33.2	
Georgia	87.0	52.7	7.2	40.1	
North Carolina	87.2	47.9	7.5	44.6	
Virginia	82.7	53.1	7.3	39.5	
Massachusetts	91.2	60.0	6.4	33.6	
Washington	86.0	52.8	10.3	36.9	
Indiana	89.9	53.3	7.3	39.4	

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

The 2006 Texas GDP ranked second among the states after California and was followed by New York (Table 2). The state's GDP accounted for 8.1 percent of the nation's GDP, slightly more than the 8 percent posted in 2005 (Table 2). Four states — California, Texas, New York and Florida — generated 34.4 percent of the total economy in 2006.

Monitoring the government's share in the national and state economies is important because too little or too much government control are both harmful to economic growth and prosperity. Too little government control breeds anarchy and lawlessness and allows minimal accumulation of capital stock and wealth. Too much government, as the experiences of former communist countries revealed, chokes individual and group initiatives and economic growth.

According to late economist Milton Friedman, the government has a positive role in a nation's economic growth when

Table 4. Real GDP Growth Rates by State

	2006	1997	1997–2006
State	Millions of 2	Growth Rate (Percent)	
United States	11,291,375	8,620,955	31.0
California	1,518,917	1,043,477	45.6
Texas	867,918	627,501	38.3
New York	899,993	670,980	34.1
Florida	609,958	414,710	47.1
Illinois	507,037	425,023	19.3
Pennsylvania	433,280	362,900	19.4
Ohio	397,243	350,603	13.3
New Jersey	391,599	316,128	23.9
Michigan	337,885	317,263	6.5
Georgia	331,129	250,758	32.1
North Carolina	323,163	239,698	34.8
Virginia	318,727	226,029	41.0
Massachusetts	300,753	227,074	32.4
Washington	253,374	188,481	34.4
Indiana	215,025	176,853	21.6

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

its share of national output or income is between 15 and 50 percent — in other words, as long as the private sector's share is between 50 and 85 percent of GDP.

Texas' private sector share of the state's economy was 89.2 percent in 2005, compared with 88 percent for the United States (Table 3). The government sector (federal, state and local) represented 10.8 percent of the Texas economy in 2005, less than the national average of 12 percent.

Then we buy an item at the store, the price we pay is the sum of sales tax, profit and labor costs. The GDP also consists of three components: employee compensation, taxes on production and imports, and gross operating surplus (profits).

In 2005, employee compensation accounted for 46.6 percent of the private sector GDP in Texas compared with 52.3 percent for the United States (Table 3). Taxes on production and imports (mainly sales tax) made up 8.5 percent of the Texas GDP compared with 8.1 percent of the national GDP (Table 3). The share of profit in the state's GDP was 44.9 percent compared with 39.6 percent for the United States. Texas provides a

more profitable environment because of lower taxes and labor costs and lower cost of living for workers.

ver time, variations in the state GDP growth rate result in changes in the relative importance of state economies. From 1997 to 2006 the total GDP of Texas (adjusted for inflation) rose 38.3 percent compared with a 31 percent increase for the United States as a whole (Table 4).

While the growth rate of Texas' total GDP from 1997 to 2006 was higher than that for the United States, the growth rate of the state's per capita income (total GDP divided by total population) was lower than the national average. Texas' GDP per capita rose 16.1 percent from 1996 to 2006 compared with an increase of 19.3 percent for the nation (Table 5). This is explained by Texas' higher population growth rate.

From 1997 to 2006 the state's population increased 19 percent while the U.S. population increased only 9.8 percent.

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Table 5.	GDP	Per	Capita	ın	2001	Dollars

State	2006	1997	1997–2006 Growth Rate (Percent)
United States	\$37,714	\$31,619	19.3
California	41,663	32,121	29.7
Texas	36,920	31,788	16.1
New York	46,617	35,965	29.6
Florida	33,718	27,308	23.5
Illinois	39,514	34,879	13.3
Pennsylvania	34,828	29,678	17.4
Ohio	34,609	31,089	11.3
New Jersey	44,885	38,464	16.7
Michigan	33,468	32,344	3.5
Georgia	35,362	32,629	8.4
North Carolina	36,489	31,305	16.6
Virginia	41,702	33,098	26.0
Massachusetts	46,721	36,472	28.1
Washington	39,616	33,214	19.3
Indiana	34,058	29,697	14.7

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

Table 6. Ratios of Texas to U.S. GDP, GDP Per Capita, and Population

Year	GDP	GDP per Capita	Population
1997	7.3	100.5	7.2
1998	7.4	101.3	7.3
1999	7.4	100.9	7.4
2000	7.5	100.5	7.4
2001	7.6	101.2	7.5
2002	7.6	100.9	7.6
2003	7.5	99.1	7.6
2004	7.6	99.3	7.7
2005	7.6	98.5	7.7
2006	7.7	97.9	7.9

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

Texas' share of the nation's GDP rose from 7.3 percent in 1997 to 7.7 percent in 2006, but the ratio of the Texas per capita GDP to the U.S. per capita GDP fell from 100.5 percent in 1997 to 97.9 percent in 2006. The increasing Texas population

caused this fall, as the state's population rose from 7.2 percent of the U.S. population in 1997 to 7.9 percent in 2006 (Table 6).

## **GDP** of Texas Metro Areas

Houston–Sugar Land–Baytown and Dallas–Fort Worth–Arlington generated 32 and 31.9 percent of the Texas GDP in 2005, respectively (Table 7). At that time, San Antonio and Austin–Round Rock accounted for 6.8 percent and 6.7 percent of the state's total GDP. These four metro areas accounted for 77.4 percent of the Texas GDP.

The concentration of more than three-fourths of the state's GDP in the San Antonio-Dallas-Houston triangle has

Table 7. Texas and Texas Metro Area GDP, 2005

Area	\$Million	Percent of Total
Texas	989,333	100.0
Abilene	4,538	0.5
Amarillo	8,002	0.8
Austin–Round Rock	65,813	6.7
Beaumont-Port Arthur	12,100	1.2
Brownsville-Harlingen	6,125	0.6
College Station–Bryan	5,363	0.5
Corpus Christi	13,203	1.3
Dallas–Fort Worth–Arlington	315,544	31.9
El Paso	21,984	2.2
Houston-Sugar Land-Baytown	316,332	32.0
Killeen-Temple-Fort Hood	10,894	1.1
Laredo	5,129	0.5
Longview	7,461	0.8
Lubbock	8,150	0.8
McAllen-Edinburg-Mission	11,059	1.1
Midland	7,709	0.8
Odessa	4,149	0.4
San Angelo	3,150	0.3
San Antonio	67,006	6.8
Sherman-Denison	2,854	0.3
Tyler	7,280	0.7
Victoria	4,316	0.4
Waco	6,863	0.7
Wichita Falls	4,946	0.5

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

important implications for the growth of local real estate markets in Texas. The higher GDP in this area is expected to produce increased demand for properties, resulting in higher price growth rates, particularly for land.

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# THE TAKEAWAY

State GDP data are useful for comparing Texas' economic performance with that of the nation, other states and even other countries. Texas' 2006 state GDP ranked second among the states, after California. More than three-fourths of the state's GDP is concentrated in the San Antonio–Dallas–Houston triangle, a fact that has significant implications for the growth of Texas real estate markets.



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Tierra Grande (ISSN 1070-0234) is published quarterly by the Real Estate Center at Texas A&M University, College Station, Texas 77843-2115. Subscriptions are free to Texas real estate licensees. Other subscribers, \$20 per year. Views expressed are those of the authors and do not imply endorsement by the Real Estate Center, Mays Business School or Texas A&M University. The Texas A&M University System serves people of all ages, regardless of socioeconomic level, race, color, sex, religion, disability or national origin. Photography/Illustrations: JP Beato III., p. 1.