AN ECONOMIC REPORT TO THE GOVERNOR OF THE STATE OF TENNESSEE

On the State’s Economic Outlook

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GOVERNOR
OF THE
STATE OF TENNESSEE

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Prepared by the
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Preface

This 2007 volume of An Economic Report to the Governor of the State of Tennessee is the thirty-first in a series of annual reports compiled in response to requests by state government officials for assistance in achieving greater interdepartmental consistency in planning and budgeting efforts sensitive to the overall economic environment. Both short-term, or business cycle-sensitive forecasts, and longer-term, or trend forecasts, are provided in this report.

The quarterly state forecast through the first quarter of 2009 and annual forecast through 2016 represent the collective judgment of the staff of the University of Tennessee’s Center for Business and Economic Research in conjunction with the Quarterly and Annual Tennessee Econometric Models. The national forecasts were prepared by Global Insight, Inc. Tennessee forecasts, current as of January 2007, are based on an array of assumptions, particularly at the national level, which are described in Chapter One. Chapter Two details evaluations for major sectors of the Tennessee economy, with an agriculture section provided by the University of Tennessee Agricultural Policy Analysis Center. Chapter Three presents the long-run outlook and forecast for the state. Chapter Four discusses the environmental challenges confronting Tennessee today, including issues relating to air pollution, water pollution, and preservation of the Great Smoky Mountains National Park.

The primary purpose of this annual volume—published, distributed, and financed through the Tennessee Department of Finance and Administration, Tennessee Department of Economic and Community Development, the Tennessee Department of Revenue, the Tennessee Department of Labor and Workforce Development, and the Appalachian Regional Commission—is to provide wide public dissemination of the most-current possible economic analysis to planners and decision-makers in the public and private sectors.

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The Tennessee Economy: Long-Term Outlook

3.1. Introduction

The focus of this chapter falls on long-term historical trends and long-term projections for the Tennessee economy. Short-term forecasts—like those included in Chapters 1 and 2—emphasize the economy’s performance over the ups and downs of the classic business cycle that includes recession and expansion. Long-term forecasts, on the other hand, emphasize the influence of major trends like population growth that affect labor markets and thus economic performance. No recession is built into the outlook that extends to 2016 since recessions are inherently unpredictable. There is an old joke—and a bad one at that—that economists have predicted ten of the last six recessions. In all likelihood an economic downturn will take place sometime over the course of the next ten years. The 1950s, 1960s and 1980s each included two recessions, while there was one recession in the 1970s and one in the 1990s. With only one recession having occurred in this decade (March-November, 2001), it is quite possible that another will transpire over the long-term outlook horizon. However, current economic conditions (see chapters 1 and 2) suggest a recession in the near-term is highly unlikely.
3.1. Introduction, continued

The following discussion begins with long-term historical trends, with an emphasis on state labor markets, per capita personal income, state gross domestic product and population. The next section of the chapter presents the long-term economic outlook for the state. A special feature of this year’s long-term outlook is a spotlight on the distribution of income and important changes in income distribution that have taken place over time. There is much talk in the popular media about earnings stagnation for low-skilled workers, the growing concentration of wealth among top income earners and the rise of a new class called the ultra rich. The final section of this chapter is devoted to this emerging topic of interest.
3.2. Long-Term Historical Trends

The changing face of the Tennessee economy

In the years immediately following World War II, Tennessee’s economic foundation was still based heavily on agriculture. As industry began to develop and then flourish, most of the new job creation was in the nondurable goods manufacturing sector, notably textiles and apparel. The state economy benefited from low-priced land and an abundant—albeit poorly skilled—labor force. In short, the low cost associated with doing business in Tennessee proved to be the state’s key comparative advantage to the job creation and economic development processes. Employment in the durable goods sector grew in importance in the 1970s and 1980s, and by the early 1990s durable goods employment exceeded employment in nondurable goods. The ascendancy of transportation equipment was instrumental to the growth of the durable goods sector. These shifts in the structure of manufacturing were accompanied by the rising dominance of the service sector, especially in metropolitan areas of the state.

In today’s global economy, Tennessee can no longer effectively compete for business and industry on the basis of low costs. Low land prices may translate into land that is not suitable for development; low labor costs may reflect a workforce that is not competitive in the global marketplace. While low taxes enhance the attractiveness of the state, they also constrain the state’s ability to provide important services like education and training that are valued by both businesses and families. Tennessee is rapidly shedding jobs in sectors of the economy like textiles and apparel where low costs were historically an important asset. The jobs are being lost to technology, but also to lower-cost production sites in other parts of the world, especially developing countries.

Economic growth occurs through growth in the labor force, improvements in worker skills and training, new investments in business capital and public infrastructure, and technological change brought to bear at the workplace. This is where the focus of economic development policy must fall, not simply on maintaining low costs of doing business. Quality of life issues have become increasingly important to the economic development process in recent years. In the past people were willing to move where jobs were located, as with the population movement to the upper Midwest in the post-World War II era. Today people give greater consideration to amenities like climate when making migration and job choices. Tennessee has many amenities that enhance the attractiveness of the state as a place to live, work and play. Quality of life considerations will likely rise further in prominence in the years ahead.
3.2. Long-Term Historical Trends, continued

**Labor markets and population**

In 1990, 27.1 percent of Tennessee’s nonfarm jobs were in the “goods-producing” sector of the economy, which includes manufacturing, construction and natural resources/mining. For the U.S. the comparable figure was 21.7 percent. By 2006, goods-producing jobs accounted for only 19.1 percent of jobs in the state versus 16.5 percent for the national economy. Not only did the state’s goods-producing sector lose market share, it also lost over 62 thousand jobs during this period of time, while jobs in the service-producing sector advanced by 647 thousand. Both durable goods and nondurable goods employment have fallen. In 1990 there were 254,301 jobs in the durable goods sector; in 2006 the figure was 251,600. In 1990 the nondurable goods sector accounted for 239,151 jobs, slipping to 152,100 in 2006. The natural resources and mining sector has also contracted, while the state’s construction sector has experienced relatively healthy job growth. In the service-producing sector, only federal government employment saw contraction between 1990 and 2006.

Figure 3.1 provides the most recent snapshot available for the share of jobs in the service-producing sector at the county level in Tennessee. (The data are confined to privately-owned businesses.) Eleven counties—most of which are urban—have service-producing shares in excess of 75 percent. These same counties will likely benefit from the long-term expansion of the service sector. On the other hand, thirteen counties have service-producing shares that fall short of 50 percent, which translates into a disproportionate reliance on the manufacturing sector which is in long-term decline. These counties will likely encounter transitional economic development problems in the years to come.

**Figure 3.1. Share of service-providing jobs by county, 2005***

*Employment in privately-owned establishments only.

Source: Bureau of Labor Statistics
3.2. Long-Term Historical Trends, continued

A complementary perspective on job growth is offered by population trends. Population growth supports growth in the labor force and thus the job and income creation process. Job growth and population growth go hand in hand: employers are drawn to where there is a productive workforce, and people are drawn to places where there are good job opportunities and a high quality of life. Population trends for the U.S. and Southeastern states dating back to 1950 are shown by decade in Table 3.1. If population growth is a sign of being a winner, Florida certainly receives top billing with growth of 542.0 percent since 1950 (over 15 million new residents). Tennessee’s population growth of 81.1 percent since 1950 places it in the middle of the Southeastern states and translates into nearly 2.7 million new residents. The state’s strongest population growth spurts occurred in the 1970s and the 1990s with growth rates approaching 17 percent. West Virginia has experienced three decades of population contraction and population growth for the first half of the current decade is rather anemic. West Virginia is the only state in the region to see its population shrink since 1950 (down by over 189 thousand people).

State unemployment rates generally move in tandem with unemployment rates for the national economy over the ups and downs of the business cycle. Tennessee’s unemployment rate fared very well compared to the nation in the early 1990s as both economies expanded; the state also enjoyed stronger job growth than the nation in the early 1990s. At the peak of the expansion in 2000, the nation and state each saw the unemployment rate slip to a remarkable low of 4.0 percent. The recession year of 2001 pushed unemployment rates to 4.7 percent, with further increases in 2002 and 2003 during what was referred to as the “jobless expansion.”

Table 3.1. Population growth, 1950 to 2005

<table>
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<td>18.5</td>
<td>11.4</td>
<td>9.8</td>
<td>13.1</td>
<td>5.3</td>
<td>95.9</td>
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<td>Alabama</td>
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<td>5.4</td>
<td>13.1</td>
<td>3.8</td>
<td>10.1</td>
<td>2.5</td>
<td>48.9</td>
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<tr>
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<td>13.7</td>
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<td>3.3</td>
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<td>1.2</td>
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<td>10.5</td>
<td>2.7</td>
<td>34.1</td>
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<td>North Carolina</td>
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<td>11.6</td>
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<td>12.8</td>
<td>21.3</td>
<td>7.9</td>
<td>113.8</td>
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<td>0.8</td>
<td>0.5</td>
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</tbody>
</table>

Source: U.S. Census Bureau
3.2. Long-Term Historical Trends, continued

Income and output
Tennessee inflation-adjusted per capita income stood at $22,819 in 1994, which represented 92.4 percent of per capita income for the nation. State per capita income reached $28,338 in 2006, representing 1.8 percent compound annual growth (CAGR). U.S. inflation-adjusted per capita income advanced 2.1 percent (CAGR) over the same period eroding the state’s relative standing to 89.3 percent of the national average.

The Bureau of Economic Analysis has discarded the term gross state product and now refers to the total value of output produced by the states as state gross domestic product (GDP). While this is consistent with the term used for output at the national level, the same label can also lead to some confusion. U.S. GDP can be measured in terms of income, or equivalently, the value of all goods and services produced in the economy. Because of data limitations on expenditures, state GDP is estimated using income data rather than data on expenditures; it is the sum of income earned by workers (including wages, salaries and fringe benefits), income earned by entrepreneurs and other businesses, and business taxes paid to federal, state and local governments. Under the North American Industrial Classification system (NAICS) accounting scheme, historical data on state GDP by sector extends back only to 1997. The most recent historical data on state GDP by sector are for 2004, though some aggregate data are available for 2005.

Tennessee inflation-adjusted GDP grew at a 3.1 percent compound annual growth rate (CAGR) between 1997 and 2005, matching the rate of growth of the nation. During the expansion years of 1997 to 2000, U.S. GDP grew more rapidly than state GDP (4.1 percent versus 2.3 percent CAGRs). However, since 2001 the tables have been reversed and the state has seen much stronger output growth than the nation (4.3 percent versus 2.8 percent CAGRs). Despite the ongoing loss of manufacturing jobs, the value of industrial production actually grew from 20.1 percent of state GDP in 1997 to 20.8 percent of GDP in 2005.
3.3. Long-Term Economic Outlook

The trend economic outlook presented here extends to 2016. Nonfarm job growth is projected to advance at a 1.4 percent CAGR between 2006 and 2016. This is well ahead of the pace of job creation that took place between 1996 and 2006 largely because of the weak job growth that transpired in the aftermath of the 2001 recession. Job growth during the expansion period of 1994 to 2000 was much stronger at 2.0 percent (CAGR). State job growth will be roughly similar to national job growth through 2010, but in the years after the state will enjoy stronger job growth than its national counterpart. U.S. inflation-adjusted GDP should see 2.8 percent growth while state GDP will grow 3.4 percent. Like job growth, U.S. GDP growth will slow appreciably in 2011 and the years that follow.

Jobs and the unemployment rate

State job growth will continue to be driven by strong growth in services at the same time the manufacturing sector continues to contract. In 2006, manufacturing will account for 14.5 percent of all state jobs versus 10.5 percent of the nation’s job base. By 2016 manufacturing job losses, coupled with growth in service sector jobs, will push this figure to 12.3 percent in Tennessee and 9.1 percent for the U.S. (See Figure 3.2.) The state economy will likely see the loss of 13,300 manufacturing jobs over this period. Jobs in the state’s durable goods sector should see some growth, but this growth will be overwhelmed by setbacks in nondurable goods manufacturing.

Professional and business services will see especially strong growth in the years ahead,

Figure 3.2. Distribution of nonfarm jobs, Tennessee, 2016

![Figure 3.2](image-url)
3.3. Long-Term Economic Outlook, continued

generating nearly 93 thousand new jobs by 2016. Growth in construction, wholesale trade, transportation and utilities, education and health services, and leisure and hospitality services jobs will surpass the state average. Natural resources and mining, information services, other services and government job growth will lag the state average. The retail trade sector is expected to have job growth that roughly mirrors overall state job growth.

Tennessee’s unemployment rate is projected to rise slightly to 5.0 percent in 2010 and rest at that level for the remainder of the long-term outlook period. The U.S. unemployment rate will range between 4.4 percent 4.9 percent from 2010 forward.

Over the short term, civilian labor force growth in Tennessee will slow to 1.2 percent in 2008 from the heated 2.4 percent pace of expansion in 2006. Over the entire 2006 to 2016 period, labor force growth should tally 1.3 percent. U.S. labor force growth will be below 1.0 percent over the long term. The labor force participation rate in Tennessee is projected to reach 65.2 percent in 2016 the highest rate since 1999. The underlying population forecast used in these estimates is the most recent forecast of the U.S. Bureau of the Census. The Census projections of population are somewhat lower than those produced by the Center for Business and Economic Research in December of 2003. The Census data are used here as they rely on more recent data.

**Income and output**

Tennessee inflation-adjusted personal income will gather some steam in 2008 yielding 3.3 percent compound growth between 2006 and 2016. U.S. personal income will experience similar growth over the long term. Tennessee wage and salary income will advance 5.1 percent; rent, interest and dividend income will be up 5.8 percent; and proprietors’ income will grow 5.1 percent (CAGRs) by 2016.

Inflation-adjusted per capita personal income will reach $36,104 by 2016 in Tennessee, versus $40,465 for the nation. State per capita income will be 89.2 percent of the national average in 2016.

As noted above, U.S. inflation-adjusted GDP should see 2.8 percent growth over the long term, compared to 3.4 percent state GDP growth. The state’s manufacturing sector will see strong growth in output despite the declining job base. Manufacturing’s output
3.3. Long-Term Economic Outlook, continued

share in Tennessee was 20.9 percent in 2006; by 2016 manufacturing’s output share will have grown to 22.9 percent as shown in Figure 3.3. This anticipated trend reflects the likelihood of strong productivity gains in the state’s manufacturing sector. This should help shore up earnings for production workers. The output share in the durable goods sector will grow from 13.9 percent in 2006 to 17.5 percent in 2016. However, the nondurable goods sector will see its output share contract from 7.2 percent to 5.4 percent. While nondurable goods will see output growth expand in each year of the forecast horizon, growth will lag overall growth in state GDP.

Output growth in information services and professional and business services will be especially strong. For information services, much of the growth will be due to strong productivity gains; for professional and business services, the sources of output growth will be more balanced between more workers and productivity gains.

Figure 3.3. Tennessee inflation-adjusted gross domestic product by sector, 2016
3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S.

Issues related to the distribution of income have surfaced prominently at the national level in recent years due in part to the increasing concentration of income in the top portion of the distribution. Throughout the popular media, the theme of thriving, high paid executives and superstar entertainers and athletes clashes with low-skilled workers whose job prospects and earnings are eroding. A new class of American society—the ultra rich—has now emerged. The plight of low-skilled workers has contributed to growing concerns over the distribution of income. Low-skilled workers recognize the increased outsourcing of jobs and growing immigration and perceive each as a threat to their job security.

Income distribution issues are not confined to the national arena, they apply to Tennessee as well. While per capita income in Tennessee has gradually approached that of the U.S. over the past 25 years, a substantial gap remains. Within the state there have long been substantial disparities in income across counties. For example, in 2004, Williamson County enjoyed the highest per capita income of any county in the state at $44,298 while per capita income in Hancock County was only $14,885. And the state’s distribution of income for high versus low income individuals is more skewed than the average state.

Top income earners

In the early portion of the twentieth century, wealthy individuals were able to live off of income generated by accumulated fortunes. Times have changed, and today’s wealthy individuals typically earn income from being in the workforce. In 1916 only 20.0 percent of the richest one percent of the country earned income from paid work (The Economist, 2006). Instead of wages and salaries, these people derived income from stocks, bonds, and so on. Today, 60.0 percent of the richest one percent work for their income, earning wages and salaries (The Economist, 2006).

In the U.S., the top one percent of earners received 7.5 percent of all national after-tax income in 1979 (Shapiro, 2005). By 2002, this group’s share of total national income grew to 11.4 percent. In fact, during this 24-year period, the average after-tax income of the top one percent of the population rose from $298,900 in 1979 to $631,700 in 2002 (111.0 percent), while for the poorest fifth of the country’s earners after-tax income rose only 5.0 percent, or $600 over this time (inflation-adjusted 2002 dollars). For the middle fifth of the population, average after-tax income increased modestly from $38,000 to $43,700 (15.0 percent). Most studies find that in the early years of this new century, income is more concentrated than in any years dating back to the Great Depression.

According to a recent study, the income share of the top decile of taxpayers from 1917 to 1998 illustrates a “U-shaped” curve over time (Piketty and Saez, 2003). (A “taxpayer” is defined as a married couple living together with dependents or a single adult with dependents.) A reproduction of this curve is shown in Figure 3.4. World War II substantially decreased the share of income devoted to the top decile by some 30.0 percent. Following this decline, the rate stabilized at around 32.0 percent, and then steadily increased from the 1970s through the late 1990s. The sharpest increase occurred just after the Tax Reform Act of 1986, which sharply cut the top marginal income tax rates.
3.4. **Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued**

Due to two major shocks in the last century (the Great Depression and World War II), the top of the income distribution saw an erosion in its income share. But the top share remained low until the 1970s when a resurgence occurred. Two factors prolonged this resurgence. First was a more even distribution of rent, interest and dividend income across income classes. Second are steeply progressive income tax rates and the estate tax which have served to redistribute some income away from top earners.

Following the 2003 tax season, the Statistics of Income (SOI) Division of the IRS provided a report in response to requests regarding the 400 individual income tax returns reporting the highest adjusted gross incomes (AGI) for nine straight years, 1992 through 2000. There were 113,604,503 total tax returns in 1992 and 129,373,500 in 2000. Because an increasing number of individuals filed taxes each year, the top 400 returns with the highest AGI represent a declining share of the total number of filed tax returns. Each year the top 400 tax returns were calculated, rather than a fixed group of taxpayers over time; less than 25.0 percent of the taxpayers appeared in the top 400 more than once over the nine year period (Parisi and Strudler, 2003).

The average AGI of the 400 “ultra-rich” soared from about $60 million in 1992 to $223 million in 2000 (inflation-adjusted 2002 dollars). In fact, the percentage of income concentrated within the top 400 tax returns relative to all income increased from 0.5 percent to 1.1 percent. Figure 3.5 illustrates the salaries and wages of the top 400 earners as a share of their AGI over time. From 1996 to 2000, salaries and wages have gradually become a larger share of AGI for the top 400 earners.

**Figure 3.4. The top decile income share in the U.S., 1917-2004**

![Graph showing the top decile income share in the U.S., 1917-2004](Source: Pickety and Saez (2003))
3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued

As income has become increasingly concentrated at the top of the income distribution, the natural question arises as to who the relative losers are. The answer is provided in Figure 3.6 which illustrates the change in income shares for income quintiles, as well as the top 5 percent of the income distribution, between 1967 to 2001. As is clear from the figure, the increased concentration of income in the top quintile (a gain of 14.4 percent) has come at the expense of all other quintiles which lost income share during the period shown. The largest setbacks were in the second and third quintile. The last bar in the figure illustrates the increased concentration of income for the top five percent of all households, a gain of 28 percentage points.

Figure 3.5. Salaries and wages of the top 400 earners as a percent of AGI, 1992-2003

![Bar chart showing salaries and wages of the top 400 earners as a percent of AGI, 1992-2003.](source: Parisi and Strudler (2003)]

Figure 3.6. Changes in household shares of aggregate income by quintiles of the income distribution, 1967-2001

![Bar chart showing changes in household shares of aggregate income by quintiles of the income distribution, 1967-2001.](source: U.S. Census Bureau)
Factors affecting the widening income gap

There are many factors that affect individual earnings, including education, ability, effort, family wealth, luck and opportunity. America has always been viewed as the land of opportunity, a view still shared by most. In fact, eight out of ten U.S. citizens believe that one can start poor and end up rich, a number that has increased by 20.0 percent since 1980 (The Economist, 2006). Instead of worrying about how the economy is divided, citizens of the U.S. want to join the rich rather than lay blame on them. Rather than hold the rich responsible for the widening gap, many Americans tend to blame poor foreign countries who can offer cheap labor (The Economist, 2006).

The widening income gap has occurred because the rich have become richer while at the same time the rest of the population has seen relatively little growth in income, leading to the pattern shown in Figure 3.6. There are many explanations for why the rich are getting richer at a quicker rate compared to middle and lower income individuals. However, not all of these explanations have merit and additional research will be needed to identify the underlying causes of the widening income gap. New puzzles are emerging as these questions are studied, like education’s role in promoting income growth. According to the U.S. Census Bureau, employees with four-year college degrees, particularly doctoral degrees or specialty degrees, actually received a 3.1 percent drop in inflation-adjusted wages from 2000 to 2005 (Hall, 2006). Some statistics suggest, at least recently, stronger earnings patterns for high school graduates compared to individuals with a college degree (The Economist, 2006). Also, since 2000 high school dropouts performed better than those with some college experience but no degree (The Economist, 2006). Few believe that this pattern will be sustained and most think the premium to greater investments in education will be restored.

Global competition has certainly slowed wage growth for lower-skilled workers in the U.S. American corporations have far less market power than they did in the 1960s and 1970s and the influence of unions has diminished, potentially dampening earnings for a wide class of workers. One poll found that nearly 90.0 percent of individuals worry about their jobs going offshore, which means they are less likely to push for strong wage gains (The Economist, 2006).

A general consensus is that enhanced technological progress has allowed the most skilled workers to gain the most, particularly among chief executives (The Economist, 2006). Today, CEOs in the U.S. earn 300 times the wage of the average worker, a number that has increased tenfold over the past 30 years (The Economist, 2006). In addition, many chief executives are offered contracts that are tied to the performance of the company stock. Arguments have been made that top managers are becoming more mobile due to developed technology and the openness of the global economy, increasing the market for chief executives around the world and bidding up their paychecks (The Economist, 2006). As the demand for skilled workers has increased relative to the supply dating back to the 1980s, freer trade has developed to complement the widened income gap in America.

Another argument is that the rising income gap reflects the aging of the population and the increased returns to education. In short, older people who are educated have had more time to realize strong returns on their educational investment (Cowen, 2007).
3.4. **Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued**

There is also the proposition that the effects of soaring earnings for athletes, entertainers, and other individuals with truly unique skills over time have contributed to the widening income gap (Hall, 2006). Athletes such as Tiger Woods earn significant portions of income from advertisements and promotions, as well as athletics. Add in technological advancements that allow entertainers to widen their audience to the global market, and further income is generated atop the distribution. Michael Jordan’s athletic ability differentiated himself from others, pushing his salary up. Nick Saban’s unique coaching skills have proven to be so valuable that his new contract with the University of Alabama makes him the highest paid college football coach in the U.S. (Pasquarelli, 2007).

### An International Perspective

While the income distribution is skewed in the U.S. and in Tennessee, this trend is even more dramatic at the international level. For example, in 2005, Luxembourg enjoyed the highest per capita income at $65,630, while Burundi held the bottom spot at $100 (Finfacts, 2006). For residents of Burundi, this translates into about 25 cents per person, per day.

In a unique study focused on the international aspects of income distribution, the Helsinki-based World Institute for Development Economics Research of the United Nations University found that more than half of all global household wealth is owned by the richest two percent of adults in the world, where wealth is simply defined by the value of physical and financial assets less debts. The richest 10.0 percent of adults own 85.0 percent of the world’s assets, while the bottom half of the world’s adult population owns just over one percent of global wealth (Davies et al., 2006). In terms of concentration atop the distribution, in 2000 approximately $500,000 in assets was needed to earn a spot in the richest one percent of the global population, a group that is not so exclusive, containing 37 million members worldwide.

The share of the income distribution represented by the top 10.0 percent of wealth holders within countries varies across nations but generally is found to be high. The share of income held by the top 10.0 percent of wealth holders ranges from around 40.0 percent in China to as high as 70.0 percent in the U.S. (Davies et al., 2006). Although Japan and the U.S. are similar in that they have high wealth relative to other countries, the U.S. was found to have significantly higher levels of wealth inequality. When compared to other developed countries, the share of income received by the top 0.1 percent of citizens in America is double that of its British equivalent and triple that of its French equivalent (Pickety and Saez, 2003).
3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued

Comparing Tennessee with the U.S. and other Southeastern states

Income distribution issues at the state and local level often focus on differences in aggregate measures of wellbeing, like per capita income which has been referred to above. Per capita personal income includes wage and salary disbursements, supplements to wages and salaries, proprietors’ income, rental income, dividend income, interest income, and transfer receipts, minus contributions for government social insurance. This income is assigned to individuals based on where they live rather than where they work. Tennessee, like most states in the southeastern region, has generally had lower levels of per capita income than the nation. A primary explanation is relatively lower levels of educational attainment for the workforce in the southeast which have in turn supported low-skill jobs. Figure 3.7 illustrates Tennessee’s per capita income as a share of U.S. per capita income from 1980 to 2005. From 1980 to 1995, Tennessee per capita income approached U.S. per capita income levels, but the performance since 1995 has been mixed.

Since 1980, per capita personal income has increased by approximately $24,300 (241.0 percent) for the U.S. and nearly $23,700 (275.0 percent) for Tennessee (inflation-adjusted dollars). Since 2000, U.S. per capita personal income has increased by 15.6 percent while Tennessee has seen an 18.6 percent rise. Tennessee did enjoy a better annual change in per capita income relative to the U.S. in all but one year from 2001 to 2005 (2004) making up for some of the ground lost in the years immediately following 1995. In 2006, U.S. per capita income stood at $34,495 compared to $30,952 for Tennessee.

Figure 3.7. Tennessee’s per capita personal income as a share of the U.S., 1980-2005
3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued

Figure 3.8 illustrates the percent change in the per capita personal income levels from 2000 to 2005 for the U.S. and the 12 southeastern states including Tennessee. Relative to the U.S., most southeastern states have performed well since the start of the new millennium with a cumulative average rate of growth in per capita income of about 17.2 percent. Only Louisiana, Georgia, North Carolina, and South Carolina had slower rates of growth than the U.S. average, while Alabama, Arkansas, and Virginia had relatively high increases in per capita income. It is worth noting that states with per capita income levels that lag the nation must have stronger growth rates in order to catch up to national levels of income.

Figure 3.9 illustrates each of the southeastern states per capita income as a share of the U.S. per capita income for 2005. Only Virginia has a higher 2005 per capita income level than the U.S. Tennessee’s relative per capita income is just below 90.0 percent, ranked fifth among the southeastern states behind Virginia, Florida, Georgia, and North Carolina.

A measure of in-state income disparity is shown in Figure 3.10 where the ratio of the lowest county per capita personal income to the highest county per capita personal income for all southeastern states in 2004 is presented. Tennessee ranks tenth out of twelve southeastern states with a ratio of around 34.0 percent, suggesting that a large gap in income does exist compared to other states in the region. Louisiana had the least variation in per capita income across counties, with a ratio of 55.5 percent, while Virginia showed the largest gap with a ratio of 31.3 percent.

The Corporation for Enterprise Development (2006) has published a measure of household income distribution at the state level that is equal to the ratio of family pre-tax income for the top 20.0 percent of households to family pre-tax income for the bottom 20.0 percent of households. A higher ratio means a more skewed distribution of income and greater income concentration in the top quintile. Table 3.2 shows this ratio from 2002 for each of the southeastern states. It is evident that as a group, the southeastern states generally have large differences between family incomes at the top quintile compared to the bottom quintile. For Tennessee, the ratio was 12.29 in 2005, suggesting a more highly skewed distribution than in other states. Table 3.2 also shows the national rank of this measure for each southeastern state, where a higher rank indicates a more skewed distribution of income. Half of the southeastern states rank in the worst fifth of the country and Tennessee ranks 45th. Perhaps of more concern, the income gaps between the richest 20.0 percent and the poorest 20.0 percent of households increased for all states in the southeast from 1999 to 2002, with the exception of Georgia. Tennessee saw a 9.3 percent increase in their income gap over the three-year period, which ranks 35th in the nation. Wyoming ranks first in the country with a ratio of 7.51 and New York ranks last with a ratio of 13.65.
3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued

Figure 3.8. Percent change in nominal per capita personal income, 2000-2005

![Bar chart showing percent change in nominal per capita personal income for various U.S. states, with the highest percentage increase in Alabama and the lowest in Louisiana. Source: Bureau of Economic Analysis]

Figure 3.9. Per capita personal income as a share of U.S. per capita personal income, 2005

![Bar chart showing per capita personal income as a share of U.S. per capita personal income for various U.S. states, with the highest percentage of U.S. income in Virginia and the lowest in West Virginia. Source: Bureau of Economic Analysis]
3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued

Figure 3.10. Ratio of the lowest county per capita income to the highest county per capita income, 2004

![Bar chart showing the ratio of the lowest county per capita income to the highest county per capita income for different states in 2004.]

Source: U.S. Census Bureau

Table 3.2. Income distribution measures and rankings, 2002

<table>
<thead>
<tr>
<th>State</th>
<th>Ratio</th>
<th>Rank</th>
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</thead>
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<tr>
<td>Georgia</td>
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<td>22</td>
</tr>
<tr>
<td>Virginia</td>
<td>10.81</td>
<td>33</td>
</tr>
<tr>
<td>South Carolina</td>
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<tr>
<td>Alabama</td>
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<td>37</td>
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<td>38</td>
</tr>
<tr>
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<tr>
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<td>12.07</td>
<td>41</td>
</tr>
<tr>
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</tr>
<tr>
<td>Louisiana</td>
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<td>49</td>
</tr>
</tbody>
</table>

Source: Corporation for Enterprise Development (2006)
3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued

*Per Capita Income in Tennessee: MSAs, Urban/Rural Areas, and Counties*

Substantial differences in per capita income exist across metropolitan and non-metropolitan areas, as well as urban versus rural areas of Tennessee. Per capita income for Tennessee, the state’s major Metropolitan Statistical Areas (MSAs) and the U.S. from 2000 to 2004 is shown in Figure 3.11. Nashville’s per capita income level remained superior to all other areas throughout the time period. In 2004, Nashville’s per capita income was 17.0 percent higher than Tennessee’s overall per capita income. The Tri-Cities MSA was far below the other areas, although Tri-Cities showed growth trends similar to other MSAs. In 2004, the Tri-Cities had per capita income about 12.0 percent lower than Tennessee’s per capita income.

Urban and rural areas tend to have significant differences in per capita personal income. Figure 3.11 provides indirect evidence of this fact since all MSAs other than the Tri-Cities have per capita incomes that exceed the state average. The income differences arise for many reasons, but especially important are different mixes of jobs and different levels of educational attainment for the adult population. The Census defines the urban population as those individuals who live in core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. Tennessee contains 70 rural counties and 25 urban counties as defined by the census. When all 95 of Tennessee’s counties are ranked by per capita personal income for 2004, only 12 out of the top 35 counties are rural and none of the top six counties are rural. In fact, in the bottom 59 counties ranked by per capita income, only two counties are defined as urban counties according to the census definition. Williamson County ranks first with a per capita income of $44,298 compared to Hancock County, which ranks last with a per capita income of $14,885. Williamson County is part of the Nashville MSA, which ranked 53rd out of 3,111 counties nationwide and 50th out of 362 MSAs nationwide in per capita income for 2004.

*Figure 3.11. Per capita personal income (nominal dollars), 2000-2004*

![Figure 3.11. Per capita personal income (nominal dollars), 2000-2004](source: Bureau of Economic Analysis)
3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued

References


3.4. Shifting Fortunes: The Long-Term Picture of Income Distribution in the U.S., continued


Suggestions for Further Reading

On Wage Inequality:

On Top Wealth Shares:

On Tax Cuts and Income Distribution: