# AN ECONOMIC REPORT TO THE GOVERNOR OF THE STATE OF TENNESSEE
## On the State's Economic Outlook

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# FOREWORD

This nineteenth volume in a series of annual reports entitled *An Economic Report to the Governor of the State of Tennessee* has been 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 1994 report.

The quarterly state forecast through the fourth quarter of 1995 and annual forecasts through 2002 represent the collective judgement of the staff of the Center for Business and Economic Research, College of Business Administration, at The University of Tennessee, Knoxville, in conjunction with the Quarterly and Annual Tennessee Econometric Models. The national forecasts were prepared by the WEFA Group in Bala Cynwyd, Pennsylvania. Both the quarterly U.S. forecast and the annual U.S. forecast are current as of November 1993. Tennessee forecasts, also current as of November 1993, are based on an array of assumptions, particularly at the national level, which are described in Chapter 1. Chapter 2 provides detailed evaluations for each major sector of the Tennessee economy, and Chapter 3 presents the long-run forecast and outlook for the state. This year Chapter 4 concerns composite indexes of economic indicators for Tennessee metropolitan areas. To measure variations in cyclical patterns in economic activity within Tennessee, CBER has developed composite indexes of indicators for the five major Metropolitan areas in Tennessee: Chattanooga, Knoxville, Nashville, Memphis, and the Tri-Cities. To provide a ready comparison of regional versus state economic performance across regions, these indexes will be compiled on a monthly basis by the Center for Business and Economic Research and will be published in conjunction with the state composite indexes.

The primary purpose of this annual volume–published, distributed, and financed through the Tennessee State Planning Office–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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# CONTENTS

## CONTENTS (Continued)

# TABLES

| Table | | Page |
|---|---|---|



# FIGURES

**Figure** **Page**

# EXECUTIVE SUMMARY

## U.S. Outlook

As the new year begins, virtually all of the major economic indicators, ranging from employment to personal income to gross domestic product to inflation, show improvement relative to last year. In a superficial sense, it is tempting to simply draw the inference, "more of the same, only a little better." This inference, however, masks a variety of fundamental changes that are occurring in the United States economy. Several key dimensions of this change are illustrated by the following conditions: (1) U.S. goods and services are competing in an increasingly global economy; (2) uncertainty and change in economic markets are becoming certain and constant; and, (3) productivity of economic inputs provides the critical linkage to success in markets. Whether and how we respond as an economy to these economic realities will fundamentally determine the economic path for the U.S. economy as we head into the next century.

The broadest measure of economic activity–given by the gross domestic product (GDP)–is comprised of economic activity in four areas: consumption, government, investment, and net foreign trade. Together these four components determine the total level of economic activity registered at the national level. Following a decline in consumer spending in 1991, consumer spending has rebounded and appears to be growing at a 3 percent annual rate. This growth rate, which is a major catalyst to the current economic expansion, appears to be driven by a combination of rising personal incomes, low interest rates, and a (short-run) propensity of consumers to raise their consumption at a rate faster than incomes are rising. Investment spending is the other major catalyst to the current economic expansion. Investment spending growth exceeded 11 percent in 1993. With recent growth in industrial production, increased capacity utilization rates, and low interest rates, the outlook for continued growth in investment is bright. For 1994, investment growth should again be near the double-digit mark.

While major changes in the federal budget occurred in 1993 to reduce long-run deficits, their consequences for macroeconomic growth are mixed. In the short run, the federal government freeze on discretionary domestic expenditures will lead to reduced government stimulus. Reductions in the federal deficit, however, will reduce the public sector's demand for loanable funds, laying the foundation for low interest rates and the prospect of sustained long-run economic growth. Finally, the combination of a lackluster growth by our major trading partners and a growing demand for imports will lead to a deterioration of the U.S. trade deficit in

1994. Together, the combined strength of consumption and investment will lead to inflation-adjusted GDP growth of 3 percent for 1994, with real disposable income growth of 3.2 percent. Unemployment will remain relatively low, and inflation should remain under 3 percent in 1994.

### Tennessee Short-Term Outlook

For the first time in several years, the short-term outlook for Tennessee is positive, with few reservations. Revised data show that the state economy gained strength in 1992 that was not evident at that time, and this strength continued to build throughout 1993. Personal income growth in Tennessee has been close to the long-run average over the most recent six quarters, which end in the second quarter of 1993, for which data are available. Employment growth is still below the long-run average but appears to be accelerating, and the unemployment rate has dropped substantially. There is also a short-term boom taking place in consumption, indicated by rapid taxable sales growth during the past year.

Accordingly, the short-term forecast predicts continuing growth in Tennessee. In 1994, growth should be slightly stronger than 1993, and 1995 will see even stronger growth rates. The two-year forecast horizon covering 1994 and 1995 will not be a boom period for the state. Recovery from the 1990-91 recession has been gradual and will continue at a gradual pace, but the forecast predicts a mild acceleration in the pace of the recovery. There is no evidence that the extraordinarily rapid growth rates that usually follow a recession will occur over the next two years. The only exceptionally strong growth rates that have appeared to date are in taxable sales, and the boom periods in taxable sales always dissipate rapidly. Hence the short-term forecast scenario is best described as a period of positive sustained growth for Tennessee, but this is a significant improvement from the doldrums of 1990 and 1991.

Highlights of the short-term forecast include the following:

- Continuing growth in nonagricultural employment, with growth accelerating from the expected 1993 rate of 1.7 percent to 2.1 percent in 1994 and 2.6 percent in 1995.
- Small declines in Tennessee's unemployment rate from the already low 5.6 percent average in the third quarter of 1993, but remaining above 5 percent.
- Inflation-adjusted personal income growth of 3.5 percent when all of the data are available for 1993, increasing to the 4 percent range for 1994 and 1995.

- In current dollars, personal income growth is forecast to increase to 7.1 percent in 1994 and 7.6 percent in 1995 as inflation accelerates slightly.
- Taxable sales growth averaging 7.8 percent for all of 1993, and then declining steadily to 7.1 percent in 1994 and 6.3 percent in 1995.

**Tennessee Long-Term Outlook**

Three important trends that will influence the state's long-term outlook include declining rates of population and labor force growth; structural change in the Tennessee economy; and increased competition from domestic and international trading partners. The importance of these trends lies in their impact on the current and future economic environments. Lower rates of labor force growth will reduce overall rates of economic growth relative to the past 30 years. This demographic trend, coupled with ongoing structural adjustments in the Tennessee economy and increased global competition, will require that Tennessee continue its investments in education and public infrastructure to ensure the well-being of the state's residents.

The 1960s and 1970s were characterized by exceptionally strong growth in the labor force for both Tennessee and the U.S., but lower rates of population growth for the 1970s and 1980s will mean fewer new entrants to the labor force in the 1990s. As female labor force participation rates approach those of their male counterparts, less rapid growth can be expected in the future. Together, these trends will lead to relatively lower rates of employment and economic growth in the years to come.

With slower rates of labor force growth projected for future years, other engines of growth must be identified. One prime candidate is education, due to the strong linkage between education and individual well-being, and education and economy-wide productivity. The state has made important strides in recent years to improve the quality of education and improve the quality of the state's labor force. The new Basic Education Program is a recent initiative that should better prepare our youth for the jobs of tomorrow.

One of the more wrenching transformations Tennessee has endured in recent history is structural change in the economy. Since the 1960s there have been rather dramatic shifts in the composition of state economic activity, as measured by employment and output. These trends have had their most pronounced effects on the services and manufacturing sectors. Service sector employment has climbed steadily since 1960, increasing its share of overall state employment from 13.0 percent to 24.3 percent in 1993. Over the same period, employment in durable goods manufacturing has been flat and employment in the nondurable goods sector has been in decline.

Tennessee is facing ever stiffer competition from its domestic and international trading partners. This competition represents a threat to Tennessee, but offers many opportunities as well. Rather than respond passively to these competitive pressures–or worse yet, seek isolation–Tennessee must continue to integrate itself more fully into the world economy. Tennessee's markets are already highly integrated with the international community. In 1989 Tennessee ranked 19th in the U.S. in terms of employment related to manufactured exports, with 5.1 percent of state employment engaged directly or indirectly in the production of goods for export. The North American Free Trade Agreement (NAFTA), the agreement amongst members of the forum on Asia-Pacific Economic Cooperation (APEC), and the General Agreement on Tariffs and Trade (GATT) should all have a positive impact on Tennessee in the years to come. While competition may lead to job losses for some, new opportunities should offset these losses. Structural adjustments and competitive forces have been instrumental to the improving productivity position of the state and national economies, and projected gains in productivity should further bolster our economic position.

The long-term forecast projects that output of the Tennessee economy, as measured by gross state product (GSP), will grow at a 3.8 percent compound annual growth rate (CAGR) between 1993 and 2002, surpassing national growth by a full percentage point. Output of the state's pivotal manufacturing sector accounted for 30.7 percent of GSP in 1993. Output will grow at a 5.0 percent CAGR though the forecast period, and by 2003, the manufacturing sector will account for 33.8 percent of total production.

The Tennessee economy is expected to create a net increase of 610,000 new jobs by 2002 (representing a CAGR of 2.7 percent). The state unemployment rate will dip to 5.2 percent, comparing favorably with the U.S. Above-average growth is anticipated over the forecast period for the trade sector, with over 150,000 new jobs being created. The manufacturing sector, which accounted for 516,800 jobs in 1993, will experience below-average growth through 2002. Nonetheless, the durable goods manufacturing sector is expected to create 43,900 new jobs and the nondurable goods sector, 12,400 new jobs by 2002.

Tennessee's personal income is forecast to grow by 2.9 percent a year (adjusted for inflation), exceeding national growth rates in personal income. Aggregate wage and salary income, the largest component of personal income, will also grow at a 2.9 percent inflation-adjusted rate. The average annual wage and salary in Tennessee stood at $19,034 in 1993, and will grow at a meager 0.2 percent CAGR (inflation-adjusted) through 2002.

### Monthly Indicators

Chapter 4 has two components. The first is a series of monthly indicators to be released on Tennessee's urban economies and the second is a description of the methodology used in the development of the indexes. Subsequent releases will be available around the 20th of each month from the Center for Business and Economic Research.■

# CHAPTER 1

# THE U.S. ECONOMIC OUTLOOK

## Introduction

A casual examination of the major economic indicators this year tends to provoke the inference, "more of the same, only a little better." Indeed, the major economic indicators–unemployment, the growth rate of gross domestic product (GDP), inflation, interest rates, personal income growth, and so on–virtually all show modest improvements relative to the past few years. For example, the unemployment rate, which averaged 7.4 percent in 1992, has now fallen to 6.4 percent. Similarly, the GDP, which grew at an inflation–adjusted average rate of 0.95 percent over the 1991-1992 period, will grow approximately 2.8 percent in 1993.

*The U.S. economy is experiencing a number of profound economic changes that are fundamentally altering the nature of future economic activity in the U.S.*

While economic activity has in fact improved modestly over the past year, a first impression of the major economic indicators and the corresponding inference of "a little better" masks a much more important message–that the U.S. economy is experiencing a number of profound economic changes that are fundamentally altering the nature of future economic activity in the U.S. The purpose of this chapter, then, is to identify and discuss some of these fundamental economic changes that are occurring at the national level, and then to describe how these forces, together with immediate (and perhaps ephemeral) factors, are shaping current and anticipated economic activity in the United States.

## Fundamental Changes in the U.S. Economy

While a certain amount of comfort can be taken from the improvement in the economy over the past year, there are a number of basic changes occurring in the nature of the U.S. economy that will inexorably alter the nature of U.S. economic activity in the future. While it is possible to identify a number of individual dimensions of this change, we focus on three simple related facts:

(1) U.S. goods and services are competing in increasingly global markets; (2) uncertainty and change in economic markets are becoming certain and constant; and, (3) productivity of economic inputs holds the critical linkage to success in markets.

We deal with these issues in turn.

**The Globalization of Markets**

The passage of the North American Free Trade Agreement (NAFTA), President Clinton's attendance at the Forum on Asia-Pacific Economic Cooperation (APEC) meetings, and the most recent and visible round of the General Agreement on Tariffs and Trade (GATT) talks has created a growing awareness that trade among nations will affect life in the United States and (as discussed in more detail in Chapter 3) in Tennessee. The trend toward the globalization of markets, however, is not a new phenomenon. As seen in Figure 1.1, both U.S. imports and exports have grown considerably over the past twenty years. Moreover, the degree of openness of the U.S. economy, proxied by the ratio of international trade activities (the dollar value of exports plus imports) to GDP, has grown considerably as well. (See Figure 1.2).

While the trend toward globalization of markets is not new, it is profound in several respects. Domestic firms increasingly face both the peril and promise of international trade. The peril, of course, stems from the growing prevalence of competition from foreign producers. While

FIGURE 1.1
Growth of U.S. Imports and Exports

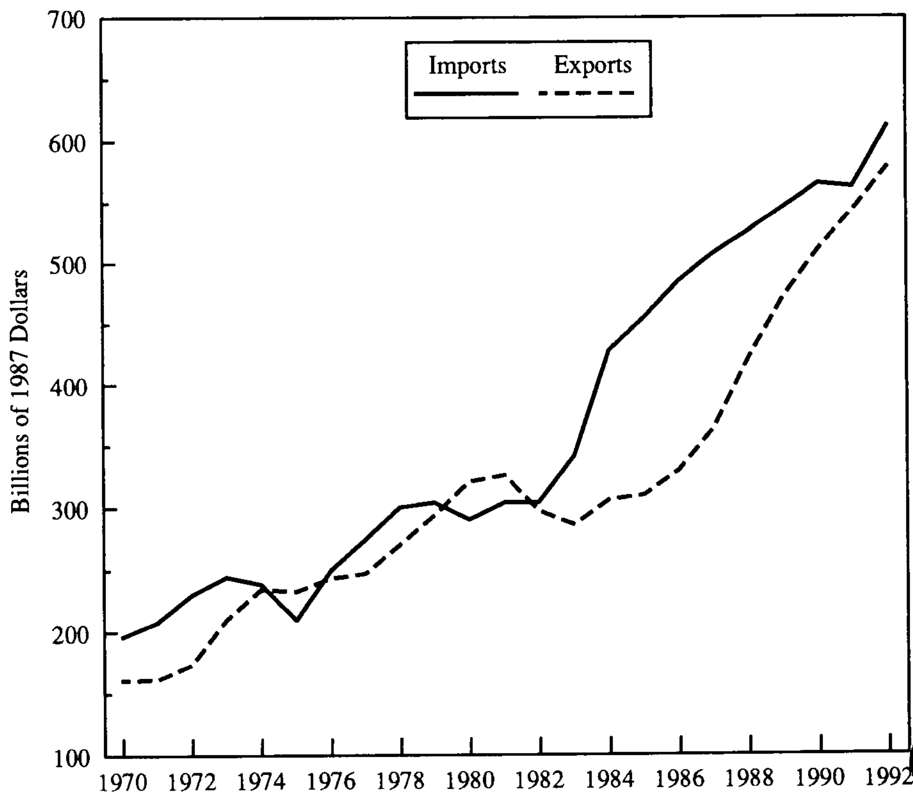
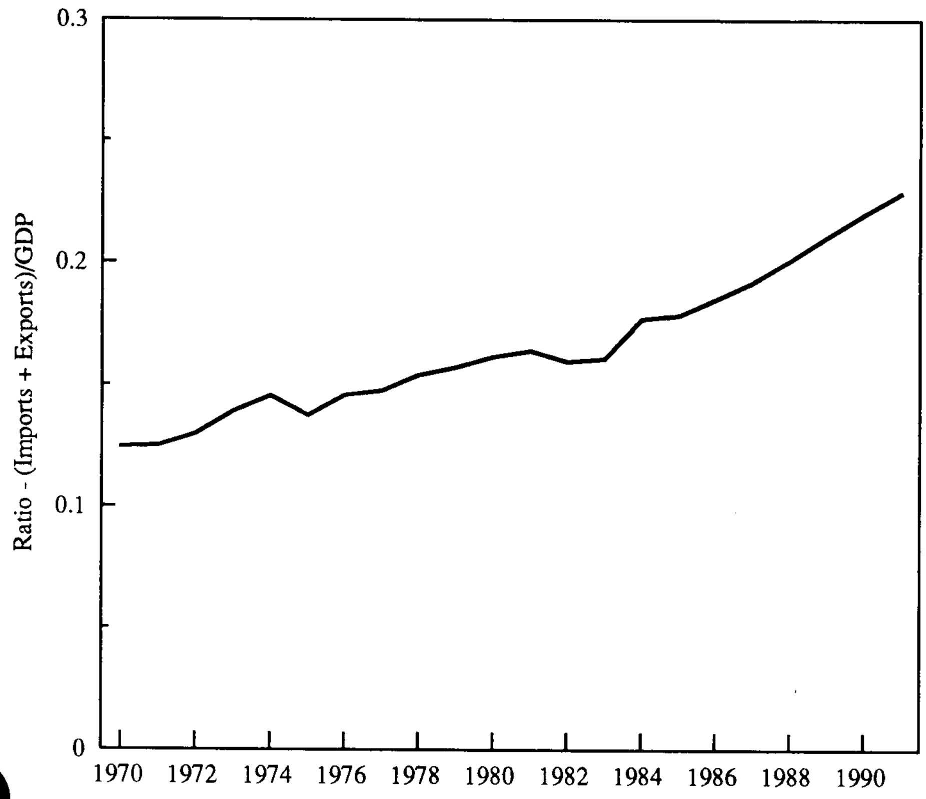


FIGURE 1.2
"Openness" of the U.S. Economy




firms in the automobile and textile industries have long been familiar with the competitive pressures of foreign producers, other domestic industries are increasingly vulnerable as well.[1] This increased foreign competition manifests itself by presenting domestic firms with an apparent choice of two unpalatable alternatives. Specifically, such firms must seemingly reduce prices (or limit increases) or must accept reductions in domestic market shares. The promise of international trade is that domestic producers may gain access to foreign markets. Sales in foreign markets, in turn, generate increased profits for domestic firms, and bring incomes and expanded employment. An attractive strategy for business growth is to look for expanding markets. A casual examination of Figure 1.3 reveals the promise of participating in foreign markets, particularly the Pacific Basin and Latin America.

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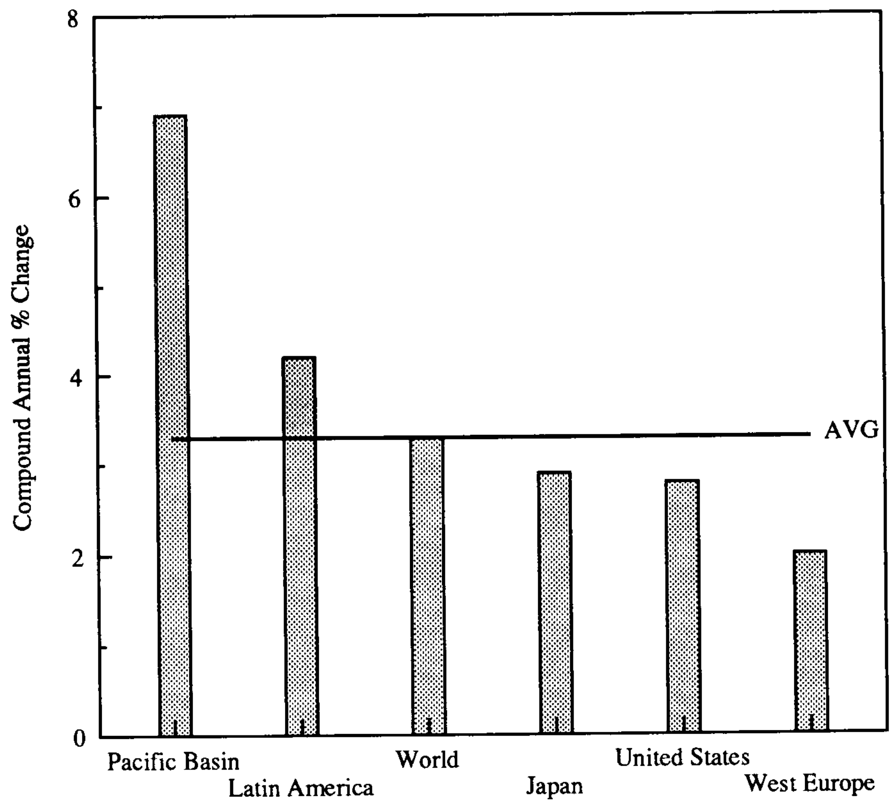
[1]Note, though, that not all domestic industries are equally vulnerable to import competition. (For a relative ranking of domestic manufacturing industries that are the most and least vulnerable to import competition, see Don P. Clark, David L. Kaserman and John W. Mayo, "Barriers to Trade and the Import Vulnerability of U.S. Manufacturing Industries," *Journal of Industrial Economics*, June 1990, pp. 433-448.)

FIGURE 1.3
World GDP Growth by Region, 1992-98




Whether, and to what extent, this globalization of markets represents more promise than peril was the subject of intense discussion in this fall's NAFTA debate. The intensity of the debate has now faded, but the fundamental question of whether to embrace or retreat from the globalization of markets will undoubtedly continue to surface.

To the extent that we choose as a nation to embrace the internationalization challenge, it is important to note that most economists believe that the keys to economic success have shifted from former times. This perspective has, for instance, been proffered by Harvard University economist Michael Porter:

> The old paradigm was one where success was based on access to natural resources, pools of labor, scientific knowledge. The old paradigm was one where companies that could enjoy a large home market gained economies of scale and prospered. We did well at this old paradigm. But this old paradigm has been superseded by the globalization of competition and by the advance of technology.[2]

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2. Michael Porter, Comments in *President Clinton's New Beginning*, conducted by President Bill Clinton, Donald I. Fine, Inc., 1992, p. 41.

It is widely acknowledged that on a prospective basis, technological innovation, creativity, and nimble firm organizations offer the promise of economic competitiveness in a world of global competition.

## The Certainty of Uncertainty

Along with the globalization of markets has come a fundamental shift in the stability of markets. Specifically, in a world economy firms are increasingly finding themselves subject to global (as opposed to domestic) shifts in demand and technology. To the extent that technology-based product changes occur in Japan, Sweden, or Brazil, they will very shortly appear on domestic markets. The simple and profound fact is that resources are far more mobile today than ever before. This means that for domestic firms to successfully compete they will have to be on, or at least have access to, the cutting edge of technology-based changes in their markets. Moreover, rapid technological change has the potential to not only shift comparative advantages, but to create or completely displace markets. Imagine, for instance, how the demand for video rentals may be affected by the advent of "video to the home" which appears to be lurking on the not-so-distant horizon. Similarly, in a global market, demand shifts are felt far more acutely than in local markets. Thus, whether considering raw resources, labor, or final goods and services, unless prices are established at competitive levels the entire market may simply vanish. Together the rapid pace of technological change and the potential for large-scale demand shifts is creating a certainty of uncertainty. To be successful as individual firms or as a whole economy in this new environment will require a highly skilled and adaptable workforce. While the movement toward that goal has been a bit slow in arriving, recognizing this new environment, both large and small domestic firms have begun the sometimes painful process of restructuring to become leaner and more nimble in the face of rapidly changing markets.

## Productivity as a Fundamental Determinant of Long-run Growth

Over thirty years ago, Nobel Laureate Robert Solow identified the critical linkage between technological change and productivity. Others have argued that investment in the nation's capital stock provides an important determinant in our ability as a nation to improve productivity and grow. More recently, several prominent economists have noted that while investment in the U.S. has been anemic relative to our major international competitors, it is not investment in physical capital alone that holds the key to economic growth. Rather, investment must be viewed in a much broader context to include investments in human capital, in the form of strong basic skill development in primary and secondary schooling, strong technical and vocational training for those who are not college bound, a renewed emphasis on quality higher education, and support for retraining of displaced workers. While such investments are neither simple to make nor are the benefits transparent, the consequences could not be more profound. For example, with the productivity growth rates that were sustained in the 1950s and 1960s, the standard of living doubled in roughly one generation. That is, children during this period could, on average, expect to enjoy a standard of living that was twice that of their parents. Conversely, with the growth rates of productivity sustained during the 1970s and 1980s, the "doubling rate" fell to two-hundred years. That is, with the growth rates in productivity sustained during the 1970s and 1980s, it would take roughly 200 years to double a family's standard of living.

In sum, markets are increasingly global and will inevitably create both economic opportunities and risks for the U.S. economy. Rapidly evolving markets and change will be the hallmark of economic activity for the foreseeable future. From an economic perspective, it is simply not possible to hide from these changes. How the U.S. economy fares in the next decade will be determined in good measure by our ability to adapt to the necessity of competing in a global environment.

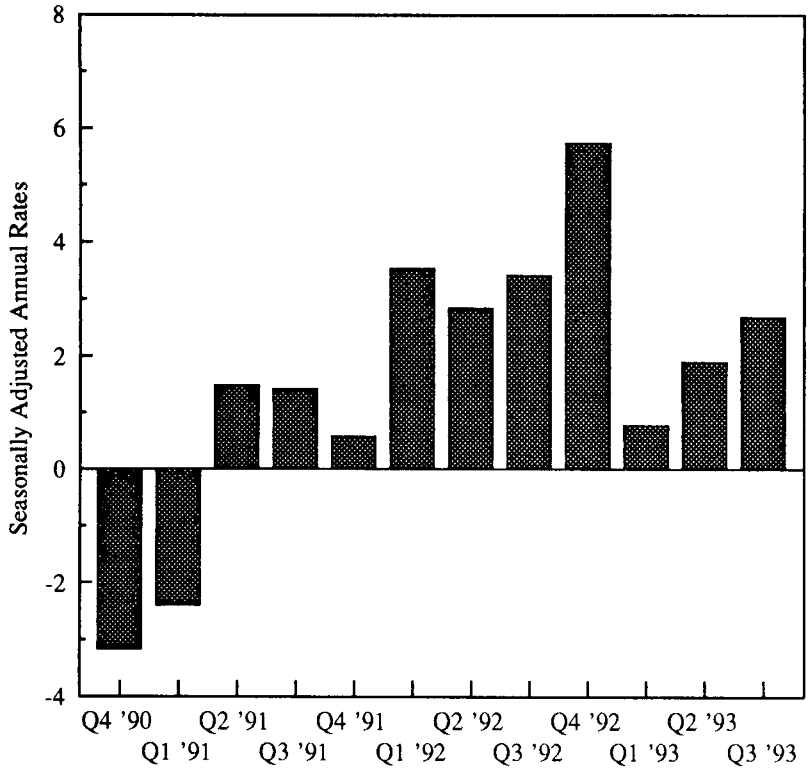
## The U.S. Economic Outlook

The broadest-based measure of the health of the U.S. economy is given by the inflation-adjusted GDP. When GDP is growing, jobs are created, personal incomes tend to rise, and the real wealth of the economy expands. Conversely, when GDP falls, or growth is slow, not enough jobs are created to handle new labor market entrants, layoffs occur, and incomes fall. GDP growth over the past several quarters is shown in Figure 1.4. To get a better handle on the underlying sources of GDP movement, we rely on a basic accounting identity. Specifically, GDP is comprised of four components that, together, fully determine GDP. These are (1) consumption; (2) government; (3) investment; and, (4) net trade. We deal with each of these components in turn.

### Consumption

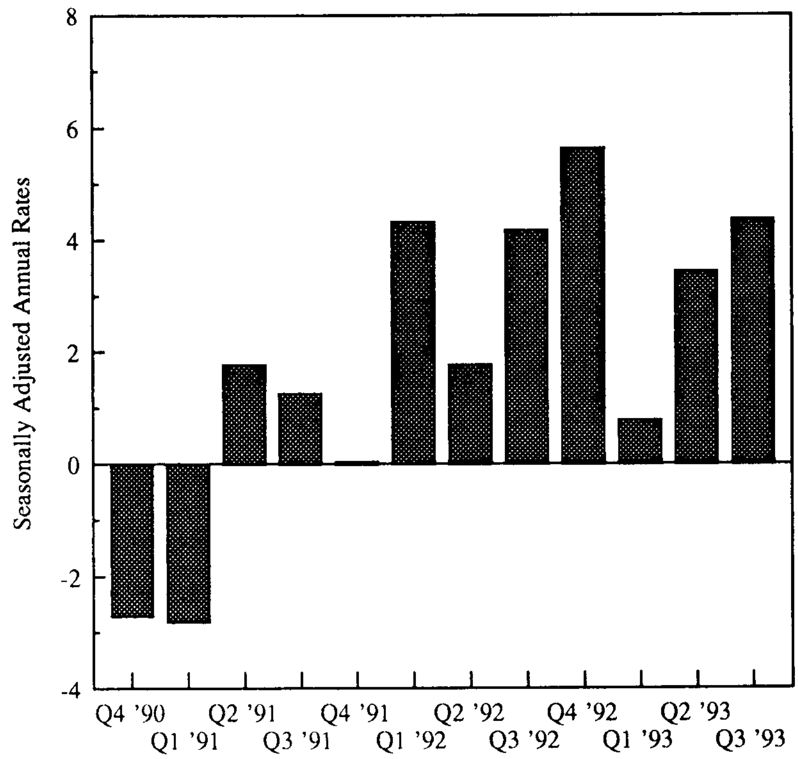
Consumption is the largest component of GDP, comprising roughly two-thirds of total economic activity. It should not be surprising that as consumer spending growth rates were in the 3-5 percent range during the mid-1980s, the economy grew at a very healthy overall rate, and when consumer spending growth slowed to a trickle in the late 1980s and early 1990s, economic growth became anemic. The linkage between consumption and aggregate economic activity is straightforward. As consumer

FIGURE 1.4
Real GDP Growth, by Quarter



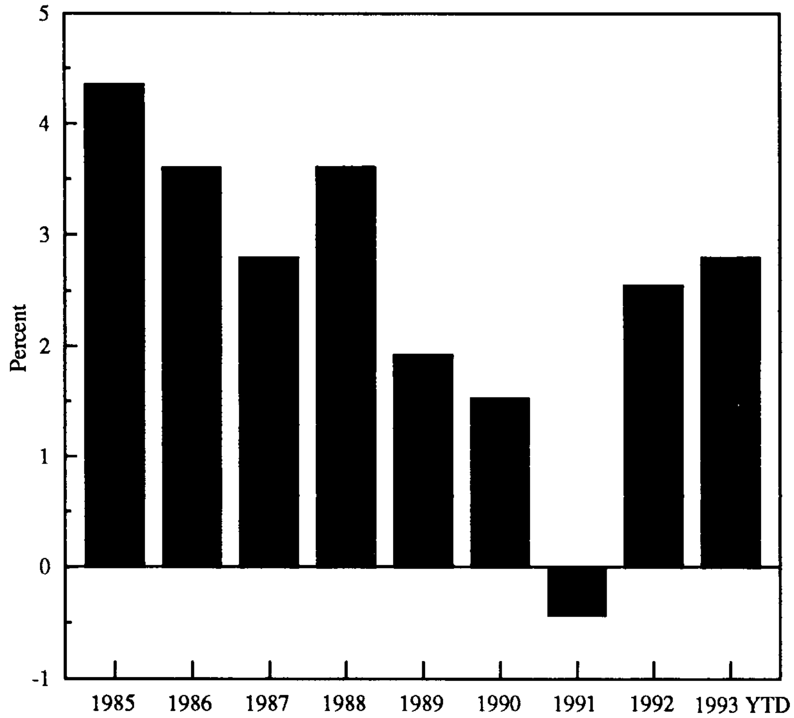

spending grows, income is generated for businesses and their owners. Owners can, in turn, spend more money as consumers and investors, and their employees are likely to work longer hours. As consumer spending increases further, businesses add employees, further generating income, and prompting additional spending. It would seem that, once started, the process of consumer spending growth, income growth, and overall economic expansion would be self-sustaining. As with many fundamental economic characteristics of the U.S. economy, however, consumer spending patterns have historically been too fickle to understand completely, much less stimulate on queue. Figure 1.5, which shows the quarterly growth rates of inflation-adjusted consumer spending gives some sense of this volatility over the last several quarters. Annual growth rates shown in Figure 1.6 are a bit more stable, and reveal the bouncing-back nature of real consumer spending in the 1992-1993 period. Specifically, after a decline in consumer spending in 1991, real consumer spending has grown at a relatively healthy rate of roughly 3 percent in 1993.

FIGURE 1.5
Growth in Real Personal Consumption Expenditures
(Quarterly growth rates)




In what may be the clearest signal that the recovery is now on more solid footing than last year, retail sales increased in each of the latest eight months. This consistent growth, together with very positive early data on the Christmas shopping season, indicate that the economic recovery is on considerably more solid ground this year than in 1992. Of particular note, sales of durable goods (long-lasting items such as autos, furniture, and household appliances) have increased significantly during the past year. The increase is driven by at least three factors. First, inflation-adjusted disposable incomes grew at a rate of 2.9 percent in 1992. This increase, together with real disposable income increases of between 1.5 and 2.0 percent in 1993, have put additional resources in household budgets that consumers are spending. Second, while incomes have risen, the propensity of consumers to spend has increased more rapidly. That is, the growth of consumer spending has outpaced the growth of income growth. This signals a confidence on the part of consumers to draw down savings, at least temporarily, to support increased consumption. Finally, interest rates have reached the lowest level in the past twenty years. At a household level, the reduced cost of financial capital makes the purchase of durable goods considerably more attractive, as interest-associated payments have fallen.

FIGURE 1.6
Growth in Real Personal Consumption Expenditures
(Annual growth rates)




While aggregate consumer spending now appears to be solidly growing, this growth is not uniform. In Table 1.1 we compare the growth rate of inflation adjusted sales of various industries relative to their performance in former recoveries. Specifically, the figures in the first column are the average growth rate in real sales during the past three recoveries. The second column shows the same calculation for the eight quarters of this recovery. The final column simply shows the growth rate during this recovery relative to former recoveries (column 1 divided by column 2). We see that several industries (e.g., apparel, railroads, computers, and trucking) have done very well in this recovery. Other industries have fared considerably less well. This diversity suggests, as we indicated earlier in this chapter, that the economy and will continue to experience fundamental structural change for the foreseeable future.

All current indications are that the current pattern of consumer spending growth will continue for the next several quarters. Indeed, the growth rate of inflation-adjusted consumer spending should be in the 3 percent range through 1995. Two significant caveats to the optimistic outlook for con-

TABLE 1.1
Growth in First Eight Quarters of Recovery

| | Average of Prior | 91q2-93q2 | Current as Percent of Average |
|---|---|---|---|
| Apparel | 18.0 | 34.3 | 190.6 |
| Railroads | 5.8 | 9.3 | 160.5 |
| | | | |
| Computers | 63.0 | 72.0 | 114.4 |
| Trucking | 18.4 | 20.2 | 109.9 |
| Health Services | 8.7 | 9.3 | 107.2 |
| Radio and TV Broadcasting | 13.1 | 13.7 | 104.7 |
| Stone, Clay, and Glass | 15.9 | 14.7 | 92.3 |
| | | | |
| Electrical Equipment | 21.2 | 14.6 | 68.9 |
| Business Services | 16.5 | 11.3 | 68.8 |
| Air Transportation | 15.1 | 10.3 | 68.5 |
| Primary Metals | 15.0 | 8.0 | 53.3 |
| Construction | 18.8 | 10.1 | 53.4 |
| Telephone, Telegraph | 14.3 | 6.3 | 44.1 |
| Fabricated Metals | 18.9 | 7.7 | 40.5 |
| Industrial Machinery | 15.0 | 6.3 | 41.8 |
| Furniture | 30.3 | 10.8 | 35.5 |
| Motor Vehicles | 74.9 | 26.4 | 35.3 |
| Food | 10.9 | 3.7 | 33.7 |
| | | | |
| Chemicals | 18.5 | 5.5 | 29.9 |
| Textiles | 22.6 | 6.6 | 29.4 |
| Consumer Services | 9.2 | 1.9 | 20.3 |
| Paper | 13.8 | 1.8 | 13.2 |
| Rubber and Plastics | 34.0 | 2.5 | 7.3 |
| Finance, Insurance, Real Estate | 8.5 | 0.4 | 4.6 |
| Wholesale and Retail | 14.0 | 0.6 | 4.5 |
| Utilities | 6.7 | 0.1 | 1.8 |
| | | | |
| Lumber | 25.1 | -6.0 | |
| Printing and Publishing | 16.8 | -3.1 | |
| Petroleum Refining | 11.3 | -4.4 | |
| Instruments | 17.3 | -3.7 | |
| Agricultural and Mining | -1.1 | -2.1 | |
| Tobacco | -2.2 | -16.8 | |
| Other Transportation Equipment | -0.2 | -13.6 | |

Source: *U.S. Economic Outlook*, the WEFA group, November 1993.

sumer spending are in order. First, if interest rates unexpectedly rise, consumers may retrench in the purchase of consumer durables. Because durables have been the primary spark in this recovery, such a softening of consumer growth on durables would significantly impact the growth that we anticipate. Second, consumer growth of spending cannot indefinitely outpace income growth. A prolonged period of consumption in excess of income occurred in the 1980s, with relatively severe retrenchment by consumers in 1991. While it is unclear how long the current pattern of consumer spending in excess of incomes can continue, *sustained* growth in consumer spending is fundamentally dependent on continued employment and income growth.

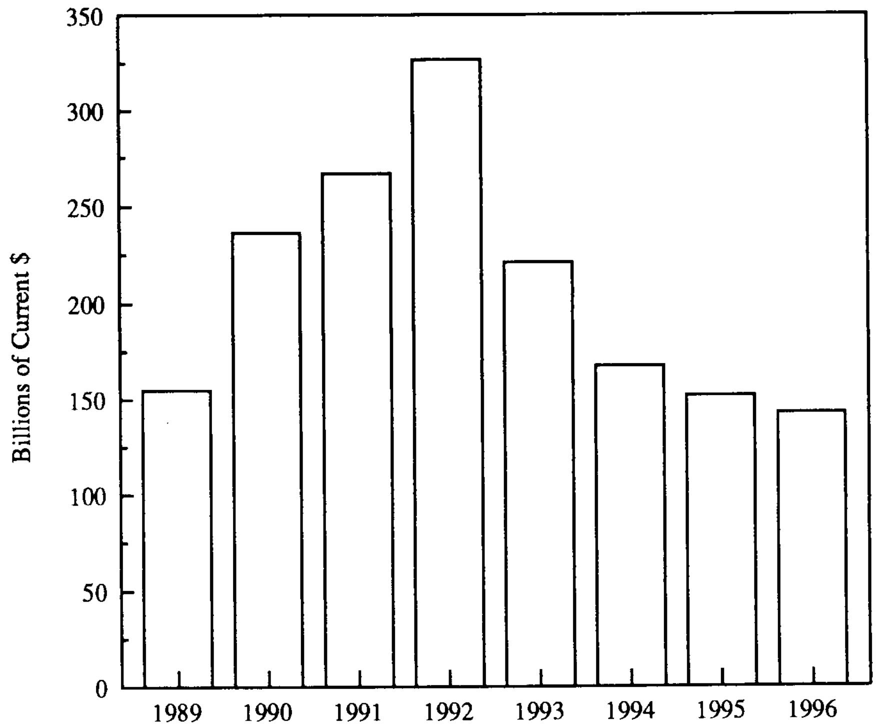
### Government

For the first time in several years, the federal budget outlook changed significantly in 1993. This change stems from several sources. First, the projected costs associated with the savings and loan bailout have proven notoriously difficult to project. Fortunately, initial estimates, which were incorporated into Administration estimates of the deficit, have proven to be too high. Second, interest rates have fallen faster than projected. The consequence is that net interest payments by the federal government will be lower than anticipated. The most significant source of change in the fiscal situation, however, comes from the passage of the Deficit Reduction Package, which was signed into law this fall. The multiyear package includes spending cuts and tax increases that cumulatively are projected to lower the federal deficit by roughly $430 billion between fiscal year 1994 and 1998. Historical and projected federal budget deficits are shown in Figure 1.7.

### Investment

Several fundamental determinants of investment have provided the foundation for solid improvements in business and household investment. First, as seen in Figure 1.8, the capacity utilization rate in U.S. manufacturing industries has increased sharply over the past year. By November, the capacity utilization rate had reached 83 percent, which is its highest level since August 1989. This is important because, as capacity utilization rates rise on existing plant, businesses are increasingly likely to invest in new plant and equipment. Second, interest rates have fallen considerably over the past several years. The prime commercial bank rate, which stood at almost 11 percent in 1989, has fallen steadily in subsequent years and closes 1993 at 6.0 percent. Because durable plant and equipment are typically funded through external financing, these declines in prevailing interest rates have sharply lowered the cost of capital.

FIGURE 1.7
Federal Budget Deficits, Unified Basis




The combination of increased industrial production, higher capacity utilization rates, and historically low rates of interest have combined to prompt a healthy rate of investment spending in 1993. After a 6.0 percent decline in 1991 and a moderate increase of 2.9 percent in 1992, real business-fixed investment grew by 11 percent in 1993. While investment in all forms of producers' durable equipment grew, it is particularly noteworthy that investment in information processing and related (computer) equipment has been particularly robust. In the third quarter of 1993, real investment in computer and related peripheral equipment grew at the remarkable rate of 30 percent. This investment holds the potential of ultimately stimulating labor productivity, which, as noted earlier, is a fundamental key to long-term economic growth.

The primary form of household investment comes in the form of housing. Housing starts have grown for eight consecutive months and are now at levels considerably above 1992, as shown in Figure 1.9. Clearly, the combination of low mortgage interest rates and pent-up demand from the early 1990s has contributed to not only the upsurge in housing starts but

FIGURE 1.8
U.S. Manufacturing Capacity Utilization Rate

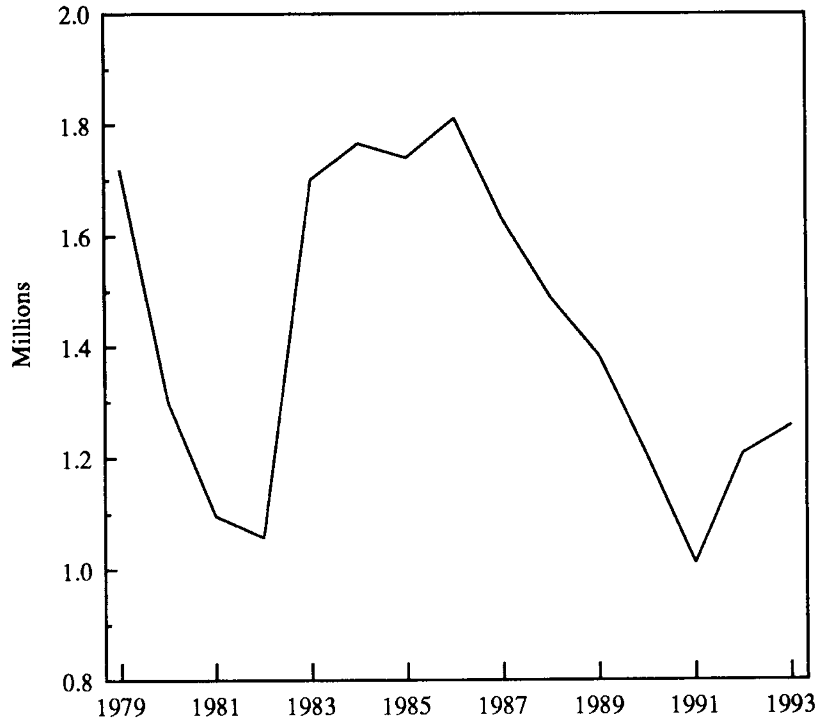

also a strong growth of existing home sales. The decline in residential mortgage yields is shown in Figure 1.10.

Looking ahead, we can see that virtually all of the key determinants of healthy investment growth are in place. Business fixed investment should rise at near double-digit level again in 1994, while inflation-adjusted residential investment should rise at a respectable 7 percent.

### Net Trade

As noted at the outset of this chapter, issues surrounding international trade have captured far more attention this year than in the past. The contribution of international trade to economic growth is straightforward. Exports of U.S. goods and services lead to increased domestic production, income, and employment. Conversely, in an economy that is open to foreign trade, some part of domestic expenditures–both consumption and investments–will be for imports. The contribution to gross domestic product of international trade is simply given by net exports (gross exports minus gross imports).

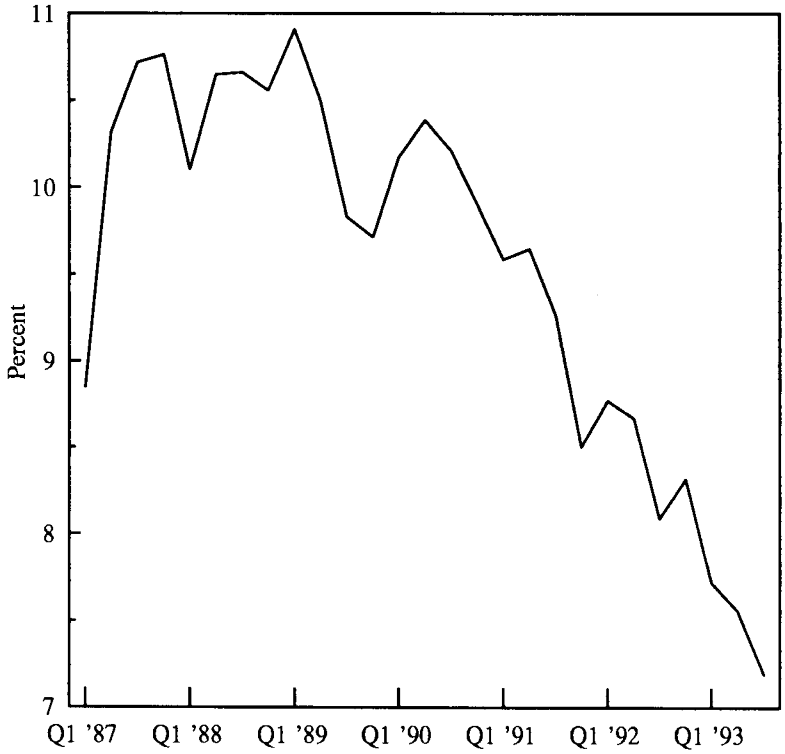
FIGURE 1.9
U.S. Total Housing Starts




During 1993, international trade deteriorated. In 1992, the trade deficit was $34 billion. For 1993, the trade deficit will be roughly $80 billion. This deterioration stems from two sources. First, export growth has slowed. While exports grew at a 6.4 percent rate in 1992, exports grew at a much more modest 2.3 percent for 1993. The primary reason for this slippage in export growth appears to be slow economic growth among our major trading partners. The shares of U.S. exports going abroad is shown in Figure 1.11. The major trading partners, Western Europe, Japan, and Canada, which collectively account for 57 percent of our exports, have all been experiencing slow growth or contractions in economic activity. On the other hand, import growth into the U.S. has accelerated to nearly 10 percent over the past year.

With little on the horizon that suggests economic expansion by our major trading partners in 1994, export growth should continue to be soft over the next year. Similarly, there is no indication that Americans' taste for imports will subside. Finally, the outlook is for modest strengtheni[ng] of the dollar against major foreign currencies over the next year. Accor[d-]

FIGURE 1.10
Residential Mortgage Yield,
FHA, Secondary Market




ingly, the most likely scenario is that the international trade picture will deteriorate somewhat further in 1994, with an aggregate trade deficit of roughly $110 billion.

## Conclusion

At this time last year, the outlook was for continued growth, and in that respect this year's forecast is similar to last year's outlook. As seen in Figure 1.12, the Index of Leading Economic Indicators (while seesawing somewhat) has risen considerably in the past two years and now points toward relatively steady growth for 1994. Real gross domestic product should grow at roughly 3 percent during 1994, and real disposable income growth nationwide should be slightly higher (3.2 percent). The primary drivers behind 1994 will be growth in real consumer expenditures of 3 percent and business fixed investment of nearly 10 percent, with considerable strength in equipment investment. A relatively strong demand for imports should lead to a growth in the net export deficit to roughly $110 billion (about 1.8 percent of total economic activity). Inflation-adjusted govern-

FIGURE 1.11
Shares of U.S. Exports, 1992

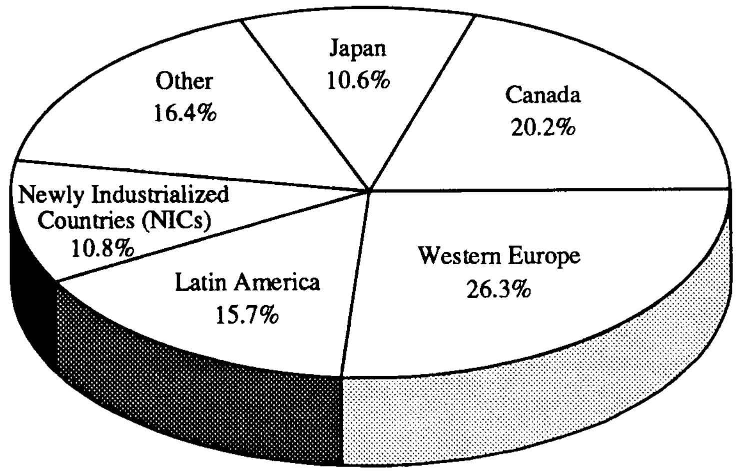



FIGURE 1.12
U.S. Leading Indicators

ment expenditures are expected to remain steady for 1994 while economic growth along with the changes to the tax rates enacted in the 1993 Deficit Reduction Package will raise government receipts. The result is, of course, a mixed blessing. The lack of government stimulus may lead to slower growth than might be sustained in the short run by increasing government spending. Deficit reduction, though, eases competition for loanable funds in financial markets and may contribute significantly to low interest rates and sustained growth in the long run.

The overall pace of economic growth should lead to employment growth of 2.1 percent in 1994, with similar growth expected in 1995. Finally, while recent upward movement in the capacity utilization rate might otherwise be thought to generate some concern about a resurgence of inflation, the soft world economy and domestic competitive pressure on costs seem likely to keep inflation in the 2.8-3.0 range for 1994. ■

# CHAPTER 2

# SHORT-TERM TENNESSEE OVERVIEW

After two years of discouraging economic news and continuing uncertainty, the Tennessee economy finally regained strength during 1992. Despite some lingering concerns that existed at the end of that year, this renewed vitality continued more strongly than expected into 1993. At this writing, the latest available data are for the third quarter of 1993, during which Tennessee's economy was robust. Hence current indications are for the state to enjoy a year of economic gains in 1994. There are no known negative factors substantial enough to impede continuing growth through 1995. Accordingly, a period of sustained positive growth is expected throughout the short-term forecast horizon. The recent history that underlies this optimism is the subject of the next section, which is followed by a section that presents the forecast detail for 1994 and 1995. The chapter concludes with a discussion of the agricultural outlook for 1994 and 1995.

## Recent Economic History

At the end of the second quarter of 1992, Tennessee personal income, adjusted for inflation, stood only 2.8 percent above the level of one year earlier, in contrast to average long-run growth of 4.5 percent. Total nonagricultural employment had grown a meager 0.6 percent over the four quarters ending with the third quarter of 1992, representing a bleak performance compared with normal long-run growth of 2.4 percent. Manufacturing employment had shown no growth during the most recent four quarters, and the Tennessee unemployment rate still averaged a recessionary 6.4 percent in the third quarter of 1992. Despite these gloomy statistics, the preliminary evidence for the third quarter of 1992 suggested that an acceleration was beginning and that improvement could be expected for 1993, so the forecast presented in the 1993 *Economic Report to the Governor* reflected a cautious optimism.

Two major changes have occurred in Tennessee's economic scenario during the four quarters that have elapsed since the previous *Report.* First, both personal income and employment were revised upward, showing that substantially more strength developed during 1992 than was evident at this time last year. Current statistics show that inflation-adjusted personal income actually grew 4.8 percent from the second quarter of 1991 to the second quarter of 1992, slightly above the long-run average. Revised estimates for Tennessee nonagricultural employment show that growth of 2.4 percent occurred between the third quarter of 1991 and the third quarter of 1992, exactly the long-run average. Hence it is now known that 1992 was an average year, far from the lackluster initial indications. For a year of recovery, 1992 must still be regarded as languid, since above-average growth normally occurs in the first two years of an economic expansion, but the revised statistics demonstrate that 1992 definitely was not a year in which Tennessee continued to be mired in recession.

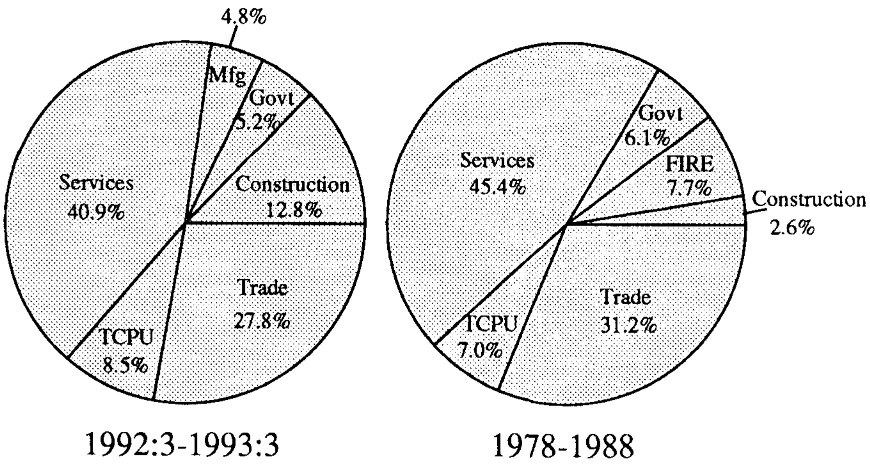
The second major change in Tennessee's economic scenario is represented by the overall positive trends that developed during 1993. After a slow start, inflation-adjusted personal income in Tennessee rebounded impressively in the second quarter, resulting in overall growth of 4.4 percent from the second quarter of 1992 to the second quarter of 1993. It should be noted that the weak first quarter income data for 1993 are a statistical anomaly that does not indicate weakness in the economy. Anticipating tax increases under the new Clinton administration, many businesses paid year-end bonuses during the fourth quarter of 1992 that would normally have been paid during the first quarter of 1993, thereby sparing their employees from the effects of higher tax brackets on 1993 income. The result was a substantial overstatement of income relative to historic patterns in the fourth quarter of 1992 and an offsetting understatement in the first quarter of 1993. The 4.4 percent growth mentioned above encompasses both of these quarters, thereby giving a better measure of the actual economic strength during this time than the single-quarter data.

Employment continued to grow in 1993 as well, although its growth has not been as impressive as income growth. Third-quarter statistics for 1993 show Tennessee nonagricultural employment 1.7 percent above the same quarter in 1992, and the most recent monthly data show employment growth accelerating. Manufacturing employment has grown only slightly, but once again the most recent monthly data suggest an acceleration is underway. Tennessee's unemployment rate dropped to an average 5.6 percent during the third quarter of 1993, the lowest quarterly average since the third quarter of 1990. Moreover, Tennessee's employment growth has been much better than the nation's. Tennessee's growth during the economic expansion has averaged 2.4 percent versus the nation's 1.1 percent.

Other signs of strength for Tennessee at this writing include booming consumer spending and the optimistic outlook for the national economy discussed in Chapter 1. The boom in consumer spending is reflected in Tennessee taxable sales, which grew 10.4 percent from the third quarter of 1992 to the third quarter of 1993. Long-run average growth for taxable sales is 8.5 percent, but the distinction between this and the recent 10.4 percent growth is more substantial than first appearances suggest because the long-run average includes some periods of significantly higher inflation than the most recent quarters. Adjusted for inflation, taxable sales grew by 7.5 percent from the third quarter of 1992 to the third quarter of 1993, triple the long-run inflation-adjusted average of 2.5 percent. It should be noted, however, that large increases in consumption spending are a normal phenomena during the recovery phase of the business cycle. For example, inflation-adjusted taxable sales grew 11 percent in 1984, following the 1982 recession, but growth slowed to 5.6 percent in 1985. Hence the growth rates that have occurred during 1993 will not continue through 1994 and beyond.

Figure 2.1 illustrates the relative contributions of Tennessee's major industries to the employment growth that has occurred since last year. The largest contributor is services, where 40.9 percent of the employment growth occurred from the third quarter of 1992 to the third quarter of 1993. While it is still the most substantial source of employment growth for Tennessee, services is not as preeminent as it once was. The figure shows that 45.5 percent of the employment growth in Tennessee occurred in services

FIGURE 2.1
Industrial Percent Distribution of
Tennessee Nonagricultural Employment Growth



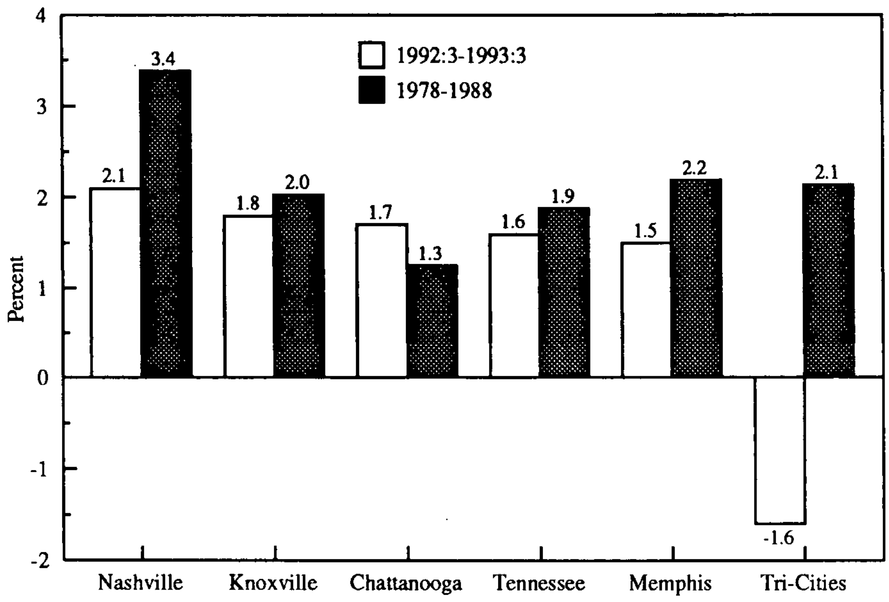
during the decade from 1978 to 1988, 4.5 percentage points higher than in the most recent year. Similarly, the large trade sector is not as dominant, contributing 27.8 percent of employment growth in the most recent year, compared to 31.2 percent during the decade ending in 1988. Another sector that has become less influential on total employment growth in Tennessee consists of the finance, insurance, and real estate industries. From 1978 to 1988 this sector was responsible for 7.7 percent of Tennessee's employment growth, but it contributed nothing to employment growth during the year ending in the third quarter of 1993.

Offsetting the sectors that are losing influence are two major sectors of Tennessee's economy that are now contributing more employment growth than they did from 1978 to 1988. During the most recent year, 4.8 percent of Tennessee employment growth occurred in manufacturing. This is a substantial change, since manufacturing overall contributed no net jobs to workers in Tennessee from 1978 to 1988. Of course, certain manufacturing subsectors, most notably transportation equipment, performed well during this decade. But the losses in other manufacturing subsectors offset any gains, so that manufacturing as a whole was not previously, but is now, a source of employment growth. Construction is the other sector that is currently a more robust source of employment growth than it was from 1978 to 1988. Construction employment growth accounted for only 2.6 percent of total Tennessee employment growth during the decade ending in 1988, but is responsible for 12.8 percent of the employment growth over the past year. Both manufacturing and construction are cyclically sensitive sectors of the economy, so the gains in these sectors will not be as strong in the long run as they are in a recovery year like 1993. However, the improvements are still important because they signal the reemergence of traditional industries that pay above-average wages to Tennesseans.

Figures 2.2 and 2.3 show the contributions of Tennessee's geographic areas to growth over the past year. Total employment growth was generally slower during the year ending in the third quarter of 1993 than during the decade 1978-1988, as shown in Figure 2.2. However, Chattanooga is an exception, enjoying stronger employment growth recently. Only the Tri-Cities continued to suffer employment losses during the most recent year, although growth in Nashville remains more than a percentage point slower than the robust growth experienced from 1978 to 1988. Employment growth in Nashville is still the highest in the state, but is now much closer to the state average than it was during the 1980s.

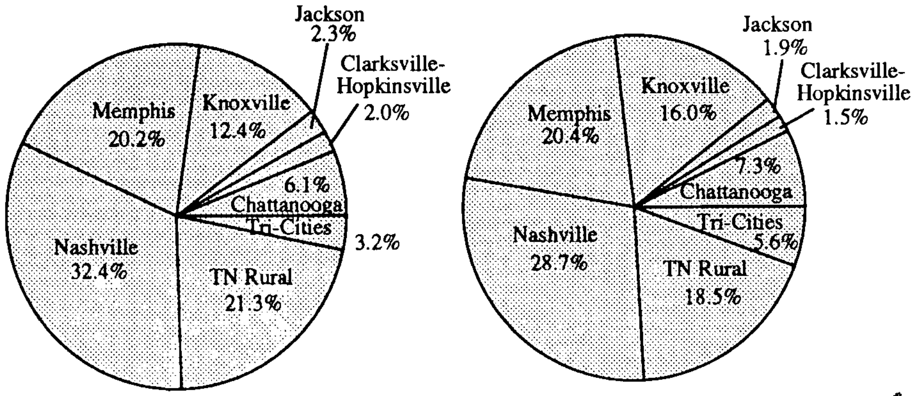
A somewhat different view of the relative contributions to state economic growth by Tennessee's geographic areas is presented in Figure 2.3. Using taxable sales as the measure of contribution to state

FIGURE 2.2
Tennessee and MSA Average Annual
Nonagricultural Employment Growth




economic growth, we see that Nashville once again was the largest contributor from 1978 to 1988 and also during the most recent year. But, unlike the tendency toward average growth displayed by employment in Nashville, Nashville's importance as a source of taxable sales growth is greater now than it was from 1978 to 1988. During this decade 28.7 percent of Tennessee taxable sales growth occurred in Nashville, while 32.4 percent of the same growth, a 3.7 percentage point improvement, occurred in Nashville from the third quarter of 1992 to the third quarter of 1993. The rural areas in Tennessee also gained influence in the most recent year, contributing 21.3 percent of taxable sales growth compared to 18.5 percent from 1978 to 1988. This makes the rural areas the second most important contributor to taxable sales growth during the past year, surpassing Memphis. Knoxville remains the fourth most important source of taxable sales growth but the importance of Knoxville declined noticeably, from 16 percent during 1978-1988 to 12.4 percent in the year ending with the third quarter of 1993. Chattanooga and the Tri-Cities also declined in importance, while no substantial change occurred in Memphis, Jackson, and Clarksville-Hopkinsville.

FIGURE 2.3
Geographic Percent Distribution of Tennessee Taxable Sales Growth




1992:3-1993:3 1978-1988

The data confirm that all of Tennessee is sharing in recent improvements, an observation bolstered by the wide geographic dispersion of reductions in unemployment rates. In November of 1986 there were 39 Tennessee counties whose unemployment rates exceeded 10 percent. The most recent data for November of 1993 show that only one county continues to endure unemployment above 10 percent. Another evidence is that Tennessee rural counties have benefitted from the good growth in sales as reported above.

Recent data bolster the view that Tennessee's economy will continue to improve in 1994. Table 2.1 shows the state economic indicators, seasonally adjusted, for October 1993. The Tennessee coincident index–which serves as a barometer of current economic conditions–rose at a seasonally adjusted annual rate (SAAR) of 7.5 percent. This continues an upward trend in the state's coincident index. The increase in the index was engineered by increases in two of its three seasonally adjusted components. The counterpart of the state's coincident index, the U.S. coincident index rose 3.3 percent (SAAR) in October. The U.S. coincident index has i

# TABLE 2.1
## Tennessee Economic Indicators
## Seasonally Adjusted

| | 10/92 | 11/92 | 12/92 | 1/93 | 2/93 | 3/93 | 4/93 | 5/93 | 6/93 | 7/93 | 8/93 | 9/93 | 10/93 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| US Personal Income (BIL 82 $) (1) | 3697.3 | 3689.1 | 3872.9 | 3656.9 | 3660.5 | 3683.3 | 3720.9 | 3726.0 | 3721.3 | 3711.5 | 3747.1 | 3752.6 | 3759.9 | 3575.0 | 3559.6 | 3663.8 |
| % Chg Prev Month SAAR | 10.84 | -2.65 | 79.25 | -49.78 | 1.18 | 7.73 | 12.99 | 1.66 | -1.51 | -3.13 | 12.13 | 1.78 | 2.37 | 1.25 | -0.43 | 2.93 |
| % Chg Same Month Last Yr | 3.56 | 3.67 | 7.46 | 1.85 | 1.06 | 1.54 | 2.47 | 2.27 | 2.08 | 1.75 | 3.15 | 2.37 | 1.69 | 1.25 | -0.43 | 2.93 |
| US CPI,All Urban Consumers (1982-84=100) | 141.7 | 142.0 | 142.2 | 142.9 | 143.4 | 143.6 | 144.2 | 144.4 | 144.4 | 144.5 | 144.9 | 144.9 | 145.5 | 130.7 | 136.3 | 140.4 |
| % Chg Prev Month SAAR | 5.22 | 2.57 | 1.70 | 6.07 | 4.28 | 1.69 | 5.13 | 1.68 | 0.00 | 0.83 | 3.37 | 0.00 | 5.08 | 5.39 | 4.23 | 3.03 |
| % Chg Same Month Last Yr | 3.20 | 3.05 | 2.97 | 3.18 | 3.31 | 3.09 | 3.22 | 3.22 | 3.00 | 2.77 | 2.84 | 2.69 | 2.68 | 5.39 | 4.23 | 3.03 |
| TN Nonag Employment (THOU) (2) | 2239.4 | 2242.3 | 2244.0 | 2258.9 | 2259.5 | 2260.7 | 2264.1 | 2263.2 | 2262.7 | 2270.7 | 2269.9 | 2274.6 | 2293.2 | 2193.2 | 2183.5 | 2231.9 |
| % Chg Prev Month SAAR | 2.06 | 1.57 | 0.91 | 8.27 | 0.32 | 0.64 | 1.82 | -0.48 | -0.26 | 4.33 | -0.42 | 2.51 | 10.27 | 1.21 | -0.44 | 2.22 |
| % Chg Same Month Last Yr | 1.94 | 1.84 | 1.87 | 2.09 | 1.94 | 0.99 | 1.71 | 1.53 | 1.47 | 1.52 | 1.69 | 1.74 | 2.40 | 1.21 | -0.44 | 2.22 |
| US Nonag Employment (MIL) | 108.8 | 108.9 | 109.1 | 109.2 | 109.5 | 109.6 | 109.8 | 110.1 | 110.1 | 110.3 | 110.3 | 110.5 | 110.6 | 109.4 | 108.3 | 108.5 |
| % Chg Prev Month SAAR | 1.28 | 1.47 | 1.75 | 1.73 | 3.39 | 0.29 | 2.83 | 2.63 | 0.47 | 2.61 | -0.36 | 2.16 | 1.61 | 1.42 | -1.06 | 0.24 |
| % Chg Same Month Last Yr | 0.53 | 0.76 | 0.89 | 1.10 | 1.38 | 1.30 | 1.36 | 1.46 | 1.52 | 1.60 | 1.56 | 1.68 | 1.71 | 1.42 | -1.06 | 0.24 |
| TN Unemployment Rate (%) (2) | 5.7 | 6.0 | 6.0 | 6.6 | 5.9 | 6.2 | 6.8 | 6.1 | 6.0 | 5.6 | 5.5 | 5.6 | 5.2 | 5.2 | 6.6 | 6.4 |
| US Unemployment Rate (%) | 7.3 | 7.2 | 7.2 | 7.0 | 6.9 | 6.9 | 6.9 | 6.8 | 6.9 | 6.8 | 6.7 | 6.6 | 6.7 | 5.4 | 6.7 | 7.3 |
| Bank Prime Interest Rate (%) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 10.0 | 8.5 | 6.3 |
| US Coincident Composite Index (1982=100) | 107.1 | 107.4 | 109.5 | 107.6 | 107.9 | 108.1 | 108.6 | 108.8 | 108.9 | 108.6 | 109.2 | 109.5 | 109.8 | 106.7 | 105.1 | 106.5 |
| % Chg Prev Month SAAR | 6.97 | 3.41 | 26.16 | -18.95 | 3.40 | 2.25 | 5.69 | 2.23 | 1.11 | -3.26 | 6.84 | 3.35 | 3.34 | 0.90 | -1.49 | 1.32 |
| % Chg Same Month Last Yr | 1.61 | 2.09 | 3.99 | 2.38 | 2.18 | 2.17 | 2.45 | 2.54 | 2.64 | 2.07 | 2.63 | 2.82 | 2.52 | 0.90 | -1.49 | 1.32 |
| US Leading Composite Index (1982=100) | 98.0 | 98.2 | 99.2 | 98.9 | 99.1 | 98.4 | 98.4 | 98.1 | 98.1 | 97.9 | 98.4 | 98.6 | 99.1 | 98.4 | 97.1 | 98.1 |
| % Chg Prev Month SAAR | 2.48 | 2.48 | 12.93 | -3.57 | 2.45 | -8.15 | 0.00 | -3.60 | 0.00 | -2.42 | 6.30 | 2.47 | 6.26 | -1.24 | -1.32 | 1.00 |
| % Chg Same Month Last Yr | 0.41 | 0.82 | 2.06 | 1.44 | 1.33 | 0.31 | 0.31 | -0.20 | -0.10 | -0.20 | 0.51 | 0.82 | 1.12 | -1.24 | -1.32 | 1.00 |
| TN Coincident Composite Index (1/74=100) | 131.2 | 131.3 | 133.7 | 132.3 | 132.8 | 133.9 | 133.9 | 134.3 | 134.4 | 135.7 | 136.6 | 136.5 | 137.3 | 130.2 | 126.7 | 129.8 |
| % Chg Prev Month SAAR | 18.31 | 0.37 | 25.27 | -12.45 | 4.93 | 10.57 | -0.14 | 3.26 | 1.19 | 12.32 | 8.32 | -0.83 | 7.47 | 0.29 | -2.68 | 2.40 |
| % Chg Same Month Last Yr | 2.94 | 4.14 | 5.93 | 4.40 | 4.12 | 3.69 | 3.48 | 3.11 | 4.31 | 4.82 | 4.96 | 5.51 | 4.66 | 0.29 | -2.68 | 2.40 |
| TN Leading Composite Index (1/74=100) | 111.7 | 111.9 | 112.9 | 111.7 | 112.6 | 111.7 | 112.2 | 112.2 | 112.2 | 112.4 | 112.7 | 113.4 | 112.9 | 110.7 | 109.3 | 111.2 |
| % Chg Prev Month SAAR | 7.43 | 1.56 | 11.62 | -12.52 | 9.97 | -8.89 | 5.87 | 0.19 | -0.01 | 1.52 | 3.81 | 7.60 | -5.24 | -1.48 | -1.21 | 1.72 |
| % Chg Same Month Last Yr | 1.45 | 2.14 | 3.03 | 0.96 | 1.42 | -0.04 | 1.44 | 1.25 | 1.37 | 1.16 | 2.45 | 2.10 | 1.04 | -1.48 | -1.21 | 1.72 |
| TN Comm & Ind Elect Consumption (MIL KWH) (3) | 2641 | 2680 | 2710 | 2685 | 2707 | 2849 | 2778 | 2755 | 2737 | 2840 | 2822 | 2799 | 2754 | 28615 | 29124 | 31183 |
| % Chg Prev Month SAAR | 40.48 | 19.40 | 14.02 | -10.52 | 10.29 | 85.12 | -26.09 | -9.85 | -7.51 | 55.81 | -7.06 | -9.49 | -17.54 | 3.07 | 1.78 | 7.07 |
| % Chg Same Month Last Yr | 6.75 | 9.37 | 10.97 | 8.62 | 8.94 | 12.11 | 8.01 | 3.17 | 5.98 | 8.09 | 7.11 | 9.03 | 4.30 | 3.07 | 1.78 | 7.07 |
| Help Wanted Index,Memphis (1967=100) (4) | 110 | 104 | 107 | 113 | 114 | 113 | 113 | 117 | 119 | 130 | 136 | 133 | 145 | 127 | 99 | 104 |
| % Chg Prev Month SAAR | 147.46 | -48.99 | 40.67 | 92.46 | 11.15 | -10.03 | 0.00 | 51.81 | 22.56 | 188.91 | 71.85 | -23.48 | 181.97 | -10.92 | -22.28 | 4.81 |
| % Chg Same Month Last Yr | 10.00 | 16.85 | 17.58 | 18.95 | 16.33 | 3.67 | 5.61 | 9.35 | 20.20 | 31.31 | 28.30 | 30.39 | 31.82 | -10.92 | -22.28 | 4.81 |
| TN Mfg Employment (THOU) (2) | 513.0 | 512.9 | 514.6 | 518.2 | 517.1 | 517.9 | 518.2 | 518.3 | 515.5 | 517.1 | 515.9 | 515.7 | 517.3 | 520.3 | 502.6 | 512.9 |
| % Chg Prev Month SAAR | 1.18 | -0.23 | 4.05 | 8.73 | -2.52 | 1.87 | 0.70 | 0.23 | -6.29 | 3.79 | -2.75 | -0.46 | 3.79 | -0.80 | -3.39 | 2.05 |
| % Chg Same Month Last Yr | 1.64 | 1.24 | 1.92 | 1.65 | 1.39 | 1.27 | 0.84 | 1.07 | 0.39 | -0.08 | 0.51 | 0.62 | 0.84 | -0.80 | -3.39 | 2.05 |
| US Mfg Employment (MIL) | 17.9 | 17.9 | 17.9 | 17.9 | 18.0 | 17.9 | 17.9 | 17.8 | 17.8 | 17.8 | 17.7 | 17.7 | 17.7 | 19.1 | 18.4 | 18.0 |
| % Chg Prev Month SAAR | -2.51 | 0.40 | -0.27 | 1.55 | 1.21 | -1.26 | -4.71 | -2.39 | -3.71 | -0.74 | -2.80 | -1.35 | 0.82 | -1.62 | -3.51 | -1.98 |
| % Chg Same Month Last Yr | -2.21 | -1.94 | -1.73 | -1.18 | -1.07 | -1.11 | -1.44 | -1.56 | -1.67 | -1.73 | -1.52 | -1.40 | -1.12 | -1.62 | -3.51 | -1.98 |
| TN Mfg Avg Weekly Hours (2) | 40.7 | 40.6 | 40.8 | 40.8 | 41.0 | 40.6 | 41.3 | 40.8 | 40.7 | 40.7 | 40.9 | 40.4 | 40.4 | 38.6 | 39.6 | 40.3 |
| % Chg Prev Month SAAR | 25.20 | -1.12 | 6.32 | -0.56 | 4.85 | -11.47 | 24.86 | -13.83 | -4.07 | 1.62 | 4.36 | -13.26 | -0.24 | -5.38 | 2.57 | 1.83 |
| % Chg Same Month Last Yr | 1.77 | 1.12 | 1.54 | 1.95 | 1.65 | 1.05 | 2.78 | 0.93 | 0.76 | 1.75 | 1.02 | 1.20 | -0.70 | -5.38 | 2.57 | 1.83 |
| TN Taxable Sales (MIL $) (5) | 3970 | 3973 | 4156 | 4002 | 4049 | 4061 | 4179 | 4129 | 4159 | 4258 | 4175 | 4455 | 4269 | 43560 | 44162 | 46967 |
| % Chg Prev Month SAAR | 12.45 | 0.78 | 71.80 | -36.37 | 14.84 | 3.59 | 41.28 | -13.40 | 8.86 | 32.72 | -21.00 | 117.63 | -40.01 | 4.10 | 1.38 | 6.35 |
| % Chg Same Month Last Yr | 1.99 | 5.49 | 10.18 | 1.07 | 2.40 | 5.10 | 9.64 | 9.41 | 7.39 | 10.16 | 8.82 | 13.31 | 7.53 | 4.10 | 1.38 | 6.35 |
| TN Taxable Sales (MIL 82 $) (5) | 2802 | 2798 | 2923 | 2801 | 2823 | 2828 | 2898 | 2860 | 2880 | 2947 | 2881 | 3074 | 2934 | 33330 | 32403 | 33450 |
| % Chg Prev Month SAAR | 6.87 | -1.74 | 68.92 | -40.01 | 10.12 | 1.87 | 34.39 | -14.83 | 8.86 | 31.62 | -23.58 | 117.63 | -42.91 | -1.18 | -2.78 | 3.23 |
| % Chg Same Month Last Yr | -1.17 | 2.37 | 7.00 | -2.04 | -0.88 | 1.96 | 6.22 | 6.00 | 4.27 | 7.18 | 5.81 | 10.34 | 4.72 | -1.18 | -2.78 | 3.23 |
| Initial Claims For TN UI (THOU) (2) | 34.8 | 33.8 | 38.7 | 32.6 | 30.6 | 42.3 | 34.3 | 30.5 | 38.4 | 38.2 | 35.6 | 36.7 | 35.2 | 561.7 | 561.8 | 486.3 |
| % Chg Prev Month SAAR | -81.6 | -29.9 | 403.9 | -87.1 | -53.3 | 4755.1 | -91.8 | -76.1 | 1509.4 | -7.9 | -55.9 | 44.0 | -40.6 | 20.9 | 0.0 | -13.4 |
| % Chg Same Month Last Yr | -25.90 | -29.44 | -20.57 | -28.52 | -34.71 | 1.04 | -19.06 | -21.82 | -8.25 | -5.58 | -13.06 | -8.35 | 1.06 | 20.87 | 0.01 | -13.43 |
| Continued Weeks Claimed For TN UI (THOU) (2) | 194.2 | 204.0 | 207.9 | 173.2 | 178.0 | 194.3 | 176.1 | 173.6 | 204.9 | 181.5 | 205.9 | 193.3 | 173.9 | 2691.5 | 3260.7 | 2742.6 |
| % Chg Prev Month SAAR | -91.3 | 80.5 | 25.4 | -88.8 | 38.8 | 185.7 | -69.3 | -15.7 | 630.6 | -76.6 | 352.9 | -53.2 | -71.8 | 23.9 | 21.1 | -15.9 |
| % Chg Same Month Last Yr | -28.71 | -13.72 | -22.30 | -31.57 | -28.73 | -20.97 | -27.23 | -21.83 | -15.13 | -19.47 | -5.76 | -18.82 | -10.45 | 23.93 | 21.15 | -15.89 |
| Total TN Construction Potentials (6) | 443.2 | 393.3 | 416.8 | 383.6 | 394.0 | 416.3 | 406.0 | 413.3 | 437.7 | 458.4 | 453.5 | 494.9 | 425.0 | 4906.5 | 4474.4 | 4927.1 |
| % Chg Prev Month SAAR | 230.6 | -76.1 | 100.6 | -63.1 | 37.6 | 93.6 | -26.0 | 23.9 | 99.1 | 74.2 | -12.2 | 184.9 | -83.9 | -5.7 | -8.8 | 10.1 |
| % Chg Same Month Last Yr | 21.74 | 6.02 | 9.73 | -6.69 | -11.66 | -9.35 | 10.96 | 0.07 | 12.42 | -2.56 | 42.83 | 23.35 | -4.10 | -5.74 | -8.81 | 10.12 |
| TN Cnstr Potentials,Value (MIL 82 $,NSA) (6) | 467 | 232 | 296 | 208 | 243 | 264 | 283 | 281 | 427 | 329 | 303 | 418 | 296 | 3353 | 3124 | 3741 |
| % Chg Prev Month SAAR | 48614.1 | -100.0 | 1730.9 | -98.6 | 565.0 | 170.9 | 128.7 | -8.9 | 15170.2 | -95.6 | -63.7 | 4758.9 | -98.4 | -17.3 | -6.8 | 19.7 |
| % Chg Same Month Last Yr | 53.68 | 23.64 | 21.78 | -21.16 | -0.26 | -13.77 | -0.71 | -8.99 | -7.81 | 12.20 | 0.06 | 49.86 | -36.70 | -17.28 | -6.82 | 19.75 |

| | 90/III | 90/IV | 91/I | 91/II | 91/III | 91/IV | 92/I | 92/II | 92/III | 92/IV | 93/I | 93/II | 93/III | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| US GDP (BIL 87 $) (1) | 4906.5 | 4867.2 | 4837.8 | 4855.6 | 4872.6 | 4879.6 | 4922.0 | 4956.5 | 4998.2 | 5068.3 | 5078.2 | 5102.1 | 5135.8 | 4897.3 | 4861.4 | 4986.2 |
| % Chg Prev Qtr SAAR | -0.86 | -3.17 | -2.39 | 1.48 | 1.41 | 0.58 | 3.52 | 2.83 | 3.41 | 5.73 | 0.78 | 1.90 | 2.67 | 1.22 | -0.73 | 2.57 |
| % Chg Same Qtr Last Yr | 1.39 | 0.22 | -1.24 | -1.25 | -0.69 | 0.25 | 1.74 | 2.08 | 2.58 | 3.87 | 3.17 | 2.94 | 2.75 | 1.22 | -0.73 | 2.57 |
| US Personal Income (BIL 87 $) (1) | 4067.4 | 4050.3 | 4037.0 | 4048.1 | 4038.9 | 4062.2 | 4096.2 | 4121.2 | 4141.7 | 4252.4 | 4163.8 | 4230.9 | 4246.5 | 4067.0 | 4046.6 | 4152.9 |
| % Chg Prev Qtr SAAR | -1.36 | -1.67 | -1.30 | 1.10 | -0.90 | 2.33 | 3.38 | 2.47 | 2.00 | 11.14 | -8.08 | 6.60 | 1.49 | 1.46 | -0.50 | 2.63 |
| % Chg Same Qtr Last Yr | 1.75 | 0.59 | -0.78 | -0.81 | -0.70 | 0.29 | 1.46 | 1.81 | 2.54 | 4.68 | 1.65 | 2.66 | 2.53 | 1.46 | -0.50 | 2.63 |
| TN Personal Income (MIL $) (1) | 78080 | 78781 | 80109 | 81092 | 81952 | 83724 | 85806 | 87599 | 88686 | 92243 | 91608 | 93922 | NA | 77493 | 81719 | 88584 |
| % Chg Prev Qtr SAAR | 6.67 | 3.64 | 6.92 | 5.00 | 4.31 | 8.93 | 10.32 | 8.62 | 5.06 | 17.03 | -2.73 | 10.49 | NA | 6.48 | 5.45 | 8.40 |
| % Chg Same Qtr Last Yr | 6.93 | 6.00 | 5.02 | 5.55 | 4.96 | 6.27 | 7.11 | 8.02 | 8.22 | 10.18 | 6.76 | 7.22 | NA | 6.48 | 5.45 | 8.40 |
| TN Personal Income (MIL 87 $) (1) | 67543 | 67048 | 67603 | 67916 | 68123 | 69022 | 70046 | 70873 | 71463 | 73618 | 72590 | 73954 | NA | 67432 | 68166 | 71500 |
| % Chg Prev Qtr SAAR | 0.54 | -2.90 | 3.35 | 1.87 | 1.22 | 5.39 | 6.06 | 4.81 | 3.37 | 12.62 | -5.47 | 7.74 | NA | 1.25 | 1.09 | 4.89 |
| % Chg Same Qtr Last Yr | 1.57 | 0.13 | -0.12 | 3.69 | 0.86 | 2.95 | 3.61 | 4.35 | 4.90 | 6.66 | 3.63 | 4.35 | NA | 1.25 | 1.09 | 4.89 |

1. Annual Rate.
2. Source: Tennessee Department of Employment Security.
3. Calculated from data provided by the Tennessee Department of Employment Security.
4. Calculated from data provided by the Tennessee Department of Revenue.
5. Calculated from data provided by the Tennessee Valley Authority.
6. Calculated from data provided by the F.W. Dodge Division of McGraw-Hill Information Services Company.

creased for three successive months. The other favorable component of the state's coincident index, the Memphis help-wanted index, has increased in five of the last six months, in October achieving its highest level since May of 1989. The last component, Tennessee commercial and industrial electrical consumption, declined for the third successive month, establishing a troublesome downward trend in the component.

The Tennessee leading index–which acts as a signal of the health of the state's economy six to nine months ahead–declined in October by 5.2 percent (SAAR) after increasing in each of the three previous months. This occurred despite the fact that the U.S. leading index, the national counterpart and a component of the state's leading index, rose 6.3 percent (SAAR). October marks the third consecutive month that the U.S. leading index has risen. The decline in the state's leading index was the result of decreases in three of the four seasonally adjusted Tennessee specific components. Both of the inflation-adjusted tax components, Tennessee taxable mortgages and sales, fell in October. The third negatively performing state-specific component of the state's leading index was total Tennessee construction potentials, which declined moderately after increasing in September. The last component, initial claims for Tennessee unemployment insurance, fell from 36,700 claims in September to 35,200 claims in October. Given the other positive developments, the poor performance of Tennessee's leading index in October is probably an anomaly that will dissipate in coming months, and is only a serious concern if a downward trend develops.

The month of October displayed promising accounts of Tennessee employment conditions. Every Tennessee-specific employment related statistic was favorable. As previously noted, both the Memphis help wanted index and initial claims for Tennessee unemployment were improved. Furthermore, the Tennessee unemployment rate fell from 5.6 percent in September to 5.2 percent in October, the lowest level since August of 1990. Most importantly, both Tennessee nonagricultural employment and manufacturing employment increased significantly in October, although neither employment statistic has increased steadily. This favorable showing compares with an increase in the U.S. unemployment rate by a tenth of a percentage point to 6.7 percent, and a less robust increase in U.S. nonagricultural employment.

Tennessee's improving economic growth can be attributed to a number of factors. First, Tennessee like most other states has shared in the strengthening national economic expansion. Second, much of the manufacturing restructuring that took place in the 1980s has ended, as evidenced by accelerating employment growth in Tennessee. Third, employment across all industries and particularly in the automobile, other manufacturing, and transportation sectors has benefitted from Tennessee's central geographic location. Finally, Tennessee has undertaken and continued a number of policies to enhance its economic vitality. Examples include enhancement of the labor force through reforms in the delivery of education services and in education finance, significant highway improvements, and low taxes.

## Short-Term Forecast

Since momentum continues to build in Tennessee's economy, the short-term forecast consists of two years of meaningful growth for the state. No boom is expected, largely because the only current evidence for rapid growth in Tennessee is the strength in taxable sales. As discussed above, all of the other major economic statistics are performing well but are not posting the exceptional growth rates that sometimes occur in recovery years. Moreover, history clearly teaches that the boom in taxable sales cannot be relied upon to continue, although sales should grow at long-run average rates in 1994 and 1995. Hence the recent history suggests a period of sustained, positive, but not spectacular, growth for the next two years. Table 2.2 presents a summary of the short-term forecast for Tennessee.

### Employment

In the 1993 *Economic Report to the Governor*, we said "The most fundamental piece of the aggregate economic scenario in Tennessee is employment . . . (which) has not established a clear upward trend . . . ." This problem is now mostly resolved. Commensurate with improving labor markets at the national level and the improvements in Tennessee discussed above, growth in Tennessee nonagricultural employment should accelerate in 1994, exceeding 2 percent for most of the year. This produces annual average growth of 2.1 percent for 1994. While still below long-run average growth rates (see the discussion of labor force trends in Chapter 3), this 1994 employment growth is an improvement over the expected annual average growth of 1.7 percent for 1993. Moreover, the trend is toward faster growth rates, and employment growth above 2.5 percent is predicted for the second half of 1994 and into 1995. Hence annual average employment growth of 2.6 percent is forecast for 1995.

The state and national unemployment rates were approximately the same in 1991. Since that time, Tennessee's unemployment rate dropped by 0.2 percent in 1992 and another 0.6 percent in 1993. The national rate, on the other hand, was higher in 1993 than in 1991. As a result, Tennessee's unemployment rate is now more than 1.0 percentage points below the national rate. Our expectation is that the state's unemployment rate will con-

# TABLE 2.2
## Tennessee Econometric Model November 1993 Update
## Selected U.S. and Tennessee Economic Indicators
## Seasonally Adjusted

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| US GDP (BIL87$) SAAR............ | 5102.1 | 5138.0 | 5181.7 | 5220.6 | 5258.1 | 5297.8 | 5338.9 | 5374.6 | 5411.8 | 5453.4 | 5496.9 | 5125.0 | 5278.8 | 5434.2 |
| % CHG PREV QTR SAAR........... | 1.90 | 2.84 | 3.45 | 3.03 | 2.91 | 3.06 | 3.13 | 2.70 | 2.80 | 3.11 | 3.23 | 2.78 | 3.00 | 2.94 |
| % CHG SAME QTR LAST YR........ | 2.94 | 2.80 | 2.24 | 2.80 | 3.06 | 3.11 | 3.03 | 2.95 | 2.92 | 2.94 | 2.96 | 2.78 | 3.00 | 2.94 |
| US GDP (BIL$) SAAR.............. | 6327.6 | 6396.3 | 6484.7 | 6588.6 | 6688.1 | 6790.7 | 6894.3 | 6997.1 | 7100.6 | 7208.4 | 7323.5 | 6367.5 | 6740.5 | 7157.4 |
| % CHG PREV QTR SAAR........... | 4.28 | 4.41 | 5.64 | 6.57 | 6.18 | 6.28 | 6.25 | 6.10 | 6.05 | 6.21 | 6.54 | 5.45 | 5.86 | 6.19 |
| % CHG SAME QTR LAST YR........ | 5.61 | 5.56 | 4.69 | 5.22 | 5.70 | 6.17 | 6.32 | 6.20 | 6.17 | 6.15 | 6.22 | 5.45 | 5.86 | 6.19 |
| IMPLICIT DEFLATOR,GDP........... | 124.0 | 124.5 | 125.1 | 126.2 | 127.2 | 128.2 | 129.1 | 130.2 | 131.2 | 132.2 | 133.2 | 124.2 | 127.7 | 131.7 |
| % CHG PREV QTR SAAR........... | 2.29 | 1.62 | 2.09 | 3.43 | 3.18 | 3.12 | 3.02 | 3.30 | 3.16 | 3.01 | 3.21 | 2.61 | 2.77 | 3.15 |
| % CHG SAME QTR LAST YR........ | 2.56 | 2.72 | 2.41 | 2.36 | 2.58 | 2.95 | 3.19 | 3.16 | 3.15 | 3.12 | 3.17 | 2.61 | 2.77 | 3.15 |
| US PERS CONS DEFL (1987=100).... | 127.0 | 127.4 | 128.2 | 129.3 | 130.4 | 131.6 | 132.7 | 133.9 | 135.0 | 136.2 | 137.4 | 127.2 | 131.0 | 135.6 |
| % CHG PREV QTR SAAR........... | 2.56 | 1.27 | 2.52 | 3.63 | 3.34 | 3.58 | 3.61 | 3.46 | 3.53 | 3.40 | 3.73 | 2.68 | 3.00 | 3.52 |
| % CHG SAME QTR LAST YR........ | 2.75 | 2.66 | 2.31 | 2.49 | 2.68 | 3.27 | 3.54 | 3.50 | 3.54 | 3.50 | 3.53 | 2.68 | 3.00 | 3.52 |
| TN PERSONAL INCOME (MIL87$) SAAR | 73954 | 74456 | 75043 | 75910 | 76570 | 77324 | 78082 | 78878 | 79522 | 80300 | 81263 | 74011 | 76971 | 79991 |
| % CHG PREV QTR SAAR........... | 7.74 | 2.74 | 3.19 | 4.70 | 3.52 | 4.00 | 3.98 | 4.14 | 3.31 | 3.97 | 4.88 | 3.51 | 4.00 | 3.92 |
| % CHG SAME QTR LAST YR........ | 4.35 | 4.19 | 1.94 | 4.57 | 3.54 | 3.85 | 4.05 | 3.91 | 3.86 | 3.85 | 4.07 | 3.51 | 4.00 | 3.92 |
| US PERSONAL INCOME (BIL87$) SAAR | 4230.9 | 4246.2 | 4287.5 | 4326.6 | 4358.2 | 4394.4 | 4429.6 | 4466.8 | 4497.5 | 4537.0 | 4581.0 | 4232.1 | 4377.2 | 4520.6 |
| % CHG PREV QTR SAAR........... | 6.60 | 1.46 | 3.95 | 3.69 | 2.95 | 3.36 | 3.25 | 3.40 | 2.78 | 3.56 | 3.94 | 1.91 | 3.43 | 3.28 |
| % CHG SAME QTR LAST YR........ | 2.66 | 2.52 | 0.83 | 3.91 | 3.01 | 3.49 | 3.31 | 3.24 | 3.20 | 3.25 | 3.42 | 1.91 | 3.43 | 3.28 |
| TN PERSONAL INCOME (MIL$) SAAR.. | 93922 | 94857 | 96201 | 98184 | 99855 | 101730 | 103641 | 105591 | 107380 | 109340 | 111668 | 94147 | 100852 | 108495 |
| % CHG PREV QTR SAAR........... | 10.49 | 4.04 | 5.79 | 8.50 | 6.98 | 7.73 | 7.73 | 7.74 | 6.95 | 7.50 | 8.79 | 6.28 | 7.12 | 7.58 |
| % CHG SAME QTR LAST YR........ | 7.22 | 6.96 | 4.29 | 7.18 | 6.32 | 7.25 | 7.73 | 7.54 | 7.54 | 7.48 | 7.75 | 6.28 | 7.12 | 7.58 |
| US PERSONAL INCOME (BIL$) SAAR.. | 5373.2 | 5409.7 | 5496.4 | 5596.1 | 5683.5 | 5781.4 | 5879.6 | 5979.5 | 6073.0 | 6177.8 | 6295.1 | 5383.5 | 5735.2 | 6131.3 |
| % CHG PREV QTR SAAR........... | 9.33 | 2.75 | 6.56 | 7.46 | 6.40 | 7.07 | 6.97 | 6.97 | 6.40 | 7.08 | 7.81 | 4.64 | 6.53 | 6.91 |
| % CHG SAME QTR LAST YR........ | 5.49 | 5.25 | 3.15 | 6.50 | 5.78 | 6.87 | 6.97 | 6.85 | 6.85 | 6.86 | 7.07 | 4.64 | 6.53 | 6.91 |
| TN NONAGRIC JOBS (THOUS)........ | 2263.3 | 2271.7 | 2282.2 | 2295.0 | 2309.0 | 2323.6 | 2338.6 | 2353.5 | 2368.3 | 2383.4 | 2399.3 | 2269.2 | 2316.6 | 2376.1 |
| % CHG PREV QTR SAAR........... | 0.64 | 1.49 | 1.86 | 2.25 | 2.48 | 2.55 | 2.59 | 2.59 | 2.53 | 2.58 | 2.70 | 1.67 | 2.08 | 2.57 |
| % CHG SAME QTR LAST YR........ | 1.57 | 1.65 | 1.80 | 1.56 | 2.02 | 2.28 | 2.47 | 2.55 | 2.56 | 2.57 | 2.60 | 1.67 | 2.08 | 2.57 |
| US NONAGRIC JOBS (MIL).......... | 110.0 | 110.4 | 111.0 | 111.6 | 112.2 | 112.8 | 113.4 | 114.1 | 114.8 | 115.4 | 116.0 | 110.2 | 112.5 | 115.1 |
| % CHG PREV QTR SAAR........... | 2.01 | 1.35 | 2.18 | 2.30 | 2.27 | 2.21 | 2.11 | 2.44 | 2.36 | 2.25 | 2.10 | 1.54 | 2.11 | 2.28 |
| % CHG SAME QTR LAST YR........ | 1.45 | 1.59 | 1.86 | 1.96 | 2.02 | 2.24 | 2.22 | 2.26 | 2.28 | 2.29 | 2.29 | 1.54 | 2.11 | 2.28 |
| TN UNEMPLOYMENT RATE (%)........ | 6.1 | 5.6 | 5.2 | 5.2 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.8 | 5.1 | 5.1 |
| US UNEMPLOYMENT RATE (%)........ | 7.0 | 6.7 | 6.6 | 6.5 | 6.4 | 6.4 | 6.5 | 6.4 | 6.3 | 6.3 | 6.3 | 6.8 | 6.4 | 6.3 |
| BANK PRIME INTEREST RATE (%).... | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.2 | 6.5 | 6.5 | 6.8 | 7.0 | 6.0 | 6.0 | 6.7 |
| TN MFG JOBS (THOUS)............. | 517.3 | 516.2 | 515.9 | 516.8 | 518.6 | 520.1 | 521.6 | 522.8 | 523.7 | 524.8 | 526.4 | 516.8 | 519.3 | 524.4 |
| % CHG PREV QTR SAAR........... | -0.31 | -0.85 | -0.25 | 0.70 | 1.37 | 1.22 | 1.13 | 0.89 | 0.74 | 0.83 | 1.21 | 0.75 | 0.48 | 0.99 |
| % CHG SAME QTR LAST YR........ | 0.77 | 0.35 | 0.47 | -0.18 | 0.24 | 0.76 | 1.10 | 1.15 | 0.99 | 0.90 | 0.92 | 0.75 | 0.48 | 0.99 |
| TN TAXABLE SALES (MIL87$)....... | 9514 | 9775 | 9845 | 9912 | 9976 | 10061 | 10107 | 10189 | 10246 | 10329 | 10363 | 38463 | 40056 | 41127 |
| % CHG PREV QTR SAAR........... | 8.1 | 11.5 | 2.9 | 2.8 | 2.6 | 3.4 | 1.8 | 3.3 | 2.3 | 3.3 | 1.3 | 4.8 | 4.1 | 2.7 |
| % CHG SAME QTR LAST YR........ | 5.7 | 7.5 | 6.2 | 6.2 | 4.9 | 2.9 | 2.7 | 2.8 | 2.7 | 2.7 | 2.5 | 4.8 | 4.1 | 2.7 |
| TN TAXABLE SALES (MIL$)......... | 12082 | 12454 | 12620 | 12821 | 13010 | 13237 | 13415 | 13639 | 13836 | 14065 | 14240 | 48931 | 52482 | 55779 |
| % CHG PREV QTR SAAR........... | 10.9 | 12.9 | 5.5 | 6.5 | 6.0 | 7.1 | 5.5 | 6.9 | 5.9 | 6.8 | 5.1 | 7.6 | 7.3 | 6.3 |
| % CHG SAME QTR LAST YR........ | 8.6 | 10.4 | 8.6 | 8.9 | 7.7 | 6.3 | 6.3 | 6.4 | 6.3 | 6.3 | 6.1 | 7.6 | 7.3 | 6.3 |
| TN AVG ANNUAL WAGE,NONAG (87$).. | 19169 | 19174 | 19201 | 19265 | 19317 | 19375 | 19434 | 19479 | 19512 | 19550 | 19571 | 19032 | 19348 | 19528 |
| % CHG PREV QTR SAAR........... | 13.3 | 0.1 | 0.6 | 1.3 | 1.1 | 1.2 | 1.2 | 0.9 | 0.7 | 0.8 | 0.4 | 1.3 | 1.7 | 0.9 |
| % CHG SAME QTR LAST YR........ | 3.0 | 2.5 | -1.3 | 3.7 | 0.8 | 1.0 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 1.3 | 1.7 | 0.9 |
| TN AVG ANNUAL WAGE,NONAG ($).... | 24345 | 24428 | 24614 | 24917 | 25191 | 25491 | 25796 | 26075 | 26347 | 26620 | 26894 | 24209 | 25349 | 2648[illegible] |
| % CHG PREV QTR SAAR........... | 16.2 | 1.4 | 3.1 | 5.0 | 4.5 | 4.8 | 4.9 | 4.4 | 4.2 | 4.2 | 4.2 | 4.0 | 4.7 | 4.[illegible] |
| % CHG SAME QTR LAST YR........ | 5.8 | 5.2 | 1.0 | 6.3 | 3.5 | 4.4 | 4.8 | 4.6 | 4.6 | 4.4 | 4.3 | 4.0 | 4.7 | 4.5 |

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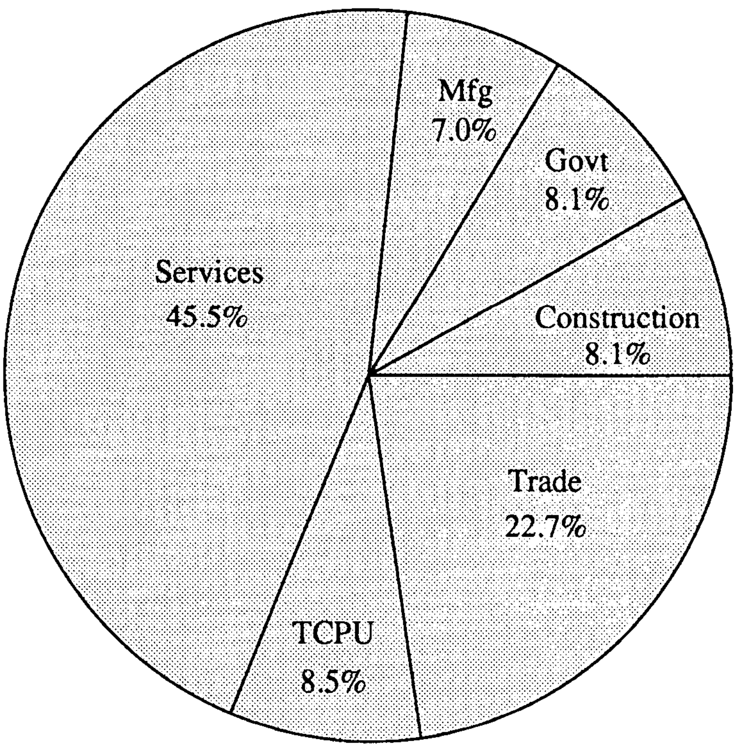
tinue its steep decline in 1994, as it averages 0.7 percent less than in 1993. Tennessee's rate is expected to be 1.3 percent lower than the national rate in 1994.

It is difficult to state with precision a reasonable unemployment estimate for growth years. The most recent study attempting to identify the unemployment rate that would prevail in Tennessee due solely to frictional and structural causes, with the economy at "full employment," was published by the Center for Business and Economic Research at UT-Knoxville in 1985 and is therefore somewhat dated. That study estimated Tennessee's full employment unemployment rate (FEUR) to be 7.6 percent in 1983, and foreshadowed that some of the factors that caused the FEUR to rise to 7.6 percent would ameliorate as structural changes in the economy were resolved during the 1980s. Hindsight shows that this foreshadowing was correct, as Tennessee's quarterly average unemployment rate has not been as high as 7.6 percent since the third quarter of 1986. While the structural problems of the 1980s, particularly in manufacturing, appear to be largely resolved, there are new sources of structural

FIGURE 2.4
Industrial Percent Distribution of Tennessee
Nonagricultural Employment Growth, 1994 and 1995



unemployment that became apparent during the 1990-91 recession. National statistics show that this was a "white collar" recession to a greater extent than any previous U.S. recession. The white collar unemployed are clearly being absorbed back into the labor force, as indicated by growing employment and falling unemployment rates. However, anecdotal evidence suggests that these workers are frequently re-employed at different jobs for which, at least initially, they are not as skilled. This white collar job shifting may be a source of structural unemployment during the next decade. It is partly for this reason that Tennessee's unemployment rate is not forecast to drop below 5 percent for any sustained period during the forecast horizon. It should be noted, however, that these structural problems are difficult to forecast and that a faster resolution of structural unemployment may occur. For example, Tennessee's unemployment rate was near 5 percent in both October and November of 1993. If this strength continues, the unemployment rate in 1994 and 1995 may be lower than 5 percent.

Figure 2.4 illustrates the relative contributions of Tennessee's major industries to the employment growth forecast. As a contributor to employment growth, the services sector will regain a share close to its historical norm. Underlying this, however, is annual services employment growth of 4.1 and 4.7 percent in 1994 and 1995, respectively, which is slower than the 5.0 percent average annual growth that occurred from 1978 to 1988. The relative contribution of services returns to 45.5 percent in 1994 and 1995 because total employment growth in growing sectors of Tennessee's economy is expected to be somewhat slower than the average annual rate from 1978-1988. Manufacturing is forecast to be the source for 7 percent of the employment growth in 1994 and 1995, continuing the gains already displayed in 1993. The cyclically sensitive trade and construction sectors will grow faster in 1994 and 1995 than in 1993, but will contribute smaller shares to total employment growth as services and manufacturing gain strength. The other major industrial sectors will contribute approximately the same shares to employment growth during the forecast horizon as they did in 1993.

### Income

Growth in wage and salary income can be a consequence of growth in employment, increases in average wages paid to employees, or both. Accelerating employment growth throughout the forecast horizon will contribute to Tennessee wage and salary income growth in 1994 and 1995. However, average wages adjusted for inflation grew very fast during 1992 and cannot be expected to maintain that pace in the near future. Hence slower forecast wage growth in 1994 and 1995 combines with the accelerating employment growth to produce growth in wage and salary income that is slower in 1994 and 1995, at 3.8 and 3.5 percent respectively, than the 1992 growth of 4.7 percent. Inflation also contributes to the dollar value of wage and salary income. Measured by the U.S. personal consumption deflator, inflation is forecast to remain between 3 and 4 percent throughout the forecast horizon. This leads to predicted growth in current dollar wage and salary income of 6.9 and 7.2 percent in 1994 and 1995, respectively.

Two other sources of earned income contribute to total personal income in Tennessee. The first, fringe benefits, has posted growth rates exceeding 10 percent in recent years due largely to escalating costs of employer-provided health insurance. This rapid growth is expected to continue in the near future, although health care reform could substantially affect this component of the forecast. The second earned income source is the earnings of self-employed persons (proprietors). This income fluctuates dramatically during business cycles, as small businesses suffer heavily during recessions but enjoy brisk business during recoveries. Accordingly, proprietors' income is forecast to grow rapidly, by 9.6 and 10.3 percent in 1994 and 1995, respectively.

Completing the forecast of personal income in Tennessee are two sources of unearned income. Unearned income from dividends, interest, and rental property will recover from the almost-zero growth of 1991 and 1992, but will still grow more slowly in the near future than before the recession. This is due to lower interest rates. Transfer payments are income sources to individuals that come from governments, and consist in part of unemployment insurance and welfare. Growth in both of these components will slow as the economy recovers, so total transfer payment growth is forecast at 7.3 and 8.0 percent in 1994 and 1995, respectively, down from the 11 to 13 percent growth rates of the last three years.

Adding all of these components, and adjusting for social security taxes and the incomes of those individuals who work but do not live in Tennessee, yields the total personal income of Tennessee residents. These components combine in the current forecast to predict total Tennessee personal income growth of 7.1 percent in 1994 and 7.6 percent in 1995, about the same as the 7.3 percent average annual growth expected for the 1992-1993 period. After adjusting for inflation, Tennessee personal income should grow by 4.0 and 3.9 percent in 1994 and 1995, respectively, as inflation will be slightly higher in 1995.

As mentioned in the discussion of recent economic history, taxable sales cannot be expected to maintain the 1993 pace of growth. In normal growth years, consumption is closely linked to income. Since taxable sales represent a part of consumption, a fairly stable long-run relationship exists between personal income growth and taxable sales growth. During the decade from 1978 to 1988 taxable sales increased 8.8 percent for every 10 percent increase in personal income. This sales response to income fluctuates dramatically in the short-run, however, as sales plummet in recessions and then boom in recovery years. Between 1978 and 1988 the increase in taxable sales in response to a 10 percent increase in personal income was as low as 0.5 percent in 1980 and as high as 14.0 percent in 1984. When all of the data is compiled for 1993, the taxable sales response is expected to be a much higher than average 12.4 percent. The forecast predicts taxable sales growth of 7.8 percent for 1994, which, when combined with the personal income forecast implies a taxable sales response of 10.0 percent for every 10 percent increase in personal income. While slower than the 1993 pace, this is still a very robust consumption response to income growth. In 1995 the taxable sales response is expected to return near the long-run average, at 8.3 percent. It should be noted that there is no precedent in Tennessee for taxable sales to grow faster than income for more than two consecutive years. Hence, the forecast for 1993 and 1994, when the taxable sales response to a 10 percent increase in income is larger than 10 percent, is optimistic. Taxable sales growth could slow more rapidly than the forecast suggests.

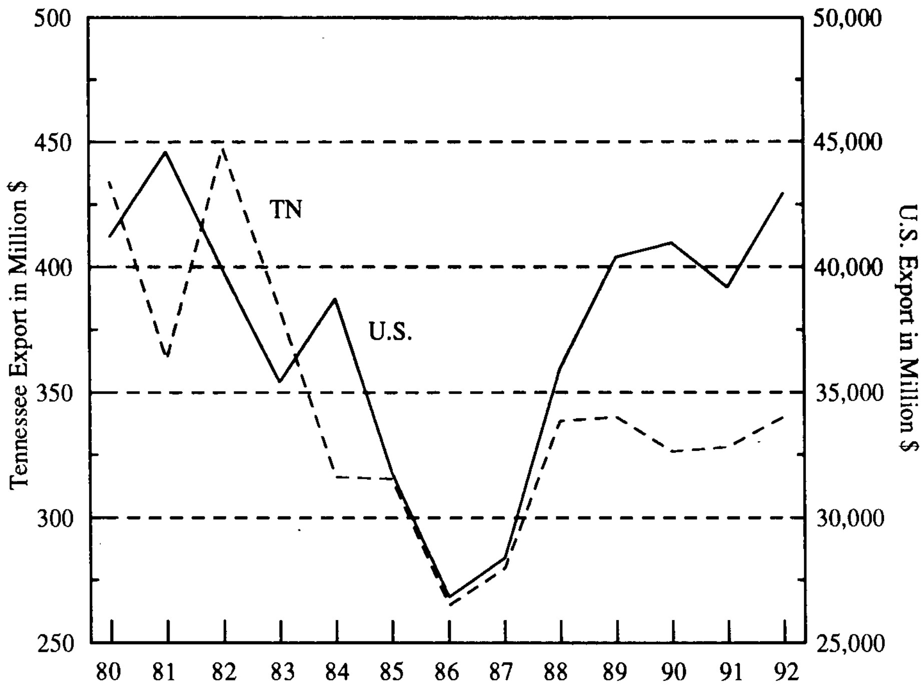
Mirroring the improving employment and income forecasts, Tennessee Gross State Product (GSP) will also display accelerating growth during the forecast horizon. After adjusting for inflation, annual average growth in GSP for 1993 is expected to be 3.1 percent. This growth is forecast to quicken in 1994 to 3.7 percent and increase further in 1995 to 3.9 percent.

### Short-Term Forecast for Tennessee Agriculture

To say that Mother Nature was unkind to U.S. agriculture in 1993 is something of an understatement. Devastating summer flooding in the Midwest severely damaged farm production in nine states, while the Southeast endured a long, hot, dry growing season. This unusual weather combination will have major impacts on the U.S. and Tennessee farm economies, at least in the short run.

While lower production of some crops due to the floods and drought likely will prompt short-term price increases, events occurring in international markets may have the power to shape agriculture during the longer term. For example, the productive capacity of international competitors growing, and long-run projections suggest a sluggish future for agriculture

FIGURE 2.5
Value of Tennessee and U.S. Agricultural Exports
1980-1992



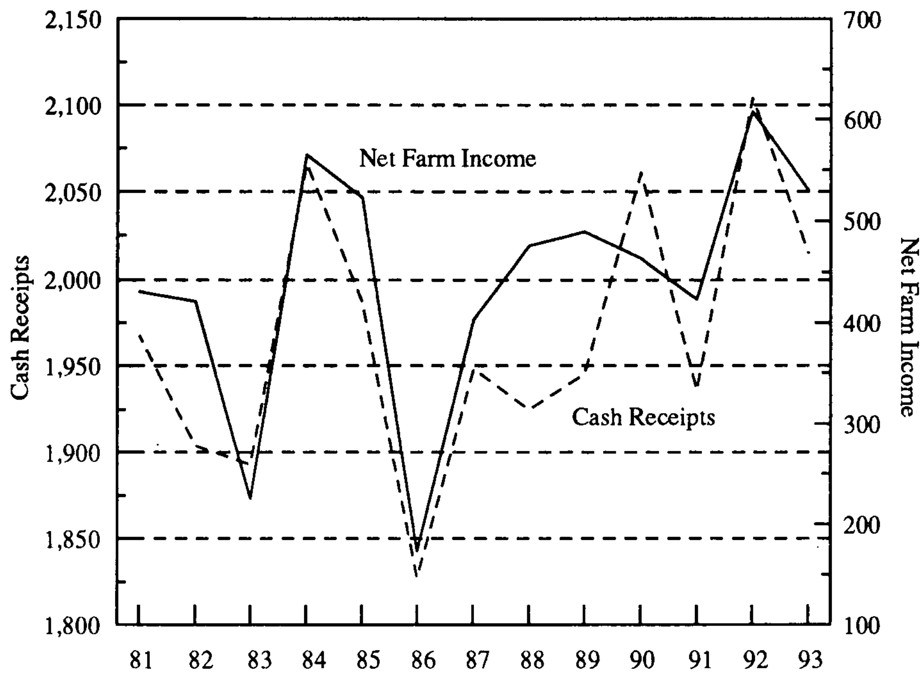

exports. The slow recovery of U.S. consumer confidence and this year's passage of the North American Free Trade Agreement (NAFTA) may come as a relief to many farmers; however, whether confidence will completely return to pre-recession levels and whether NAFTA will yield early benefits for U.S. farmers is still unclear.

It is within this general uncertain environment that the outlook for Tennessee agriculture during 1994 will be examined. Before discussing the state projections, we will examine the recent trends and forces which affect them to place this discussion in a more complete framework.

**Recent Trends in U.S. Agriculture**

Demand for U.S. agricultural exports began declining after hitting a record level in 1982 (Figure 2.5). This decline was caused in part by increased production capacity by international competitors and growing self-sufficiency in food production by some former U.S. customers. Also, marked appreciation in the value of the U.S. dollar during this time diminished the U.S.'s competitive position in world grain markets. As a

FIGURE 2.6
Total Farm Cash Receipts and Net Income
in Tennessee, 1981-1993




result of these factors, coupled with large U.S. grain stocks, market prices began to fall.

Despite falling program crop prices, U.S. net farm income rose from an annual average of $23 billion during the early half of the 1980s to an average $43 billion during the remainder of the decade. This income jump was the result of record increases in cash receipts for nonprogram crops, lower production costs, and higher livestock cash receipts. Declining feed grain prices during the mid- and late-1980s greatly benefited livestock industries in terms of lower feed costs.

U.S. farm exports hit their lowest level of the 1980s in 1986; subsequently, agricultural export values began to rise (Figure 2.5). By 1992, the value of U.S. farm exports had nearly returned to 1982 levels, largely due to substantial growth in high-value agricultural exports. At the national level, the early 1990s have seen declining commodity prices, flat to higher input prices, and flat net income.

## Recent Trends in Tennessee Agriculture

Agriculture is a sizable industry in Tennessee, but the state's agricultural production is only a small portion of the nation's total agricultural production. Further, the market conditions of most Tennessee agricultural commodities are determined nationally. Federal farm policy and the wide variety of economic forces affecting the national scene also affect Tennessee's agricultural sector.

During the first half of the 1980s, Tennessee experienced noticeable fluctuations in agricultural cash receipts and net farm income (Figure 2.6). Both receipts and income plunged to their lowest levels in 1986, primarily because of large stocks, lower national exports, and lower prices. After 1986, state cash receipts and net farm income steadily increased, with the exception of 1991, to a record high in 1992.

This steady increase in receipts and income occurred despite a slight downsizing of traditional Tennessee commodities like corn, soybeans, and beef. Substantial growth in the tobacco, cotton, and broiler industries made up for these declines. During the past three years, tobacco has been the state's number-one crop and ranks behind beef and dairy products in terms of cash receipts.

Following national trends, almost all major Tennessee crops produced record yields in 1992, generated record cash receipts and, in turn, contributed to record net farm income. But in 1993, corn, soybeans, and cotton experienced the lowest yields in recent history because of this summer's drought. Gross corn, soybean, and cotton production, respectively, are estimated to fall 42 percent, 15 percent, and 22 percent from 1992 levels. Also following the national trend, government payments have fallen since their peak in the late 1980s.

## 1993 Flood and Drought Impacts on Tennessee

In terms of the Tennessee agriculture sector's overall performance in 1993, the year's flood and drought conditions were partially offsetting factors. While the floods prompted national and state market price increases, drought conditions in Tennessee resulted in lower production for some crops. The University of Tennessee's Agricultural Policy Center[1] (APAC) estimates that drought-related crop damage resulted in a 10.9 percent drop in total crop cash receipts, from an average-production-year level of $1,073 million to $956 million. On the other hand, flood-related price increases are expected to increase state crop cash receipts 4.2 percent ($40

1. M. G. Bhat, D. M., Chembezi, D. G. De La Torre Ugarte, and D. E. Ray, "Regional Impacts of the 1993 Midwest Flood: The Case of Tennessee Agriculture," Agricultural Policy Analysis Center Staff Paper (forthcoming).

million), recovering about 34.2 percent of the receipts lost due to drought conditions.

If the floods or drought had not occurred, APAC estimates, then Tennessee net farm income in 1993 would have been about $623.5 million. Suppose that only the drought but not the flood had occurred; then 1993 net farm income would have been $471.2 million, which is a 24.4 percent ($152 million) drop from the income level of $623.5 million with no floods or drought. However, the actual net farm income in 1993, under the influence of both the drought and the flood, is estimated at $533.2 million, which is 13.2 percent ($62 million) more than the drought-affected level of $471.2 million. This $62 million income increase is due to flood-driven crop price increases and accounts for 40.8 percent of the income loss of $152 million if only the drought but not the flood had occurred. The drought-related income losses are most likely to occur in West Tennessee, where the major portion of the crops affected by the drought are grown.

### Prospects for Tennessee Agricultural Exports

The value of U.S. agricultural exports, not adjusted for inflation, has nearly doubled since 1975, reaching a 1992 level of $42.93 billion. But agricultural exports as a share of total U.S. exports has fallen by half during the same time. The dominant trend in U.S. agricultural exports since the mid-1980s has been the emergence of high-value agricultural products and the decline of bulk commodities. High-value products generally are fresh fruits and nuts as well as value-added products like processed grains, oilseeds, animal products, manufactured tobacco, and processed fruit, vegetable, and wood products. During 1986-91, the value of these highly diversified exports jumped 64 percent–to $21.4 billion.

In Tennessee, the composition of agricultural exports also has changed dramatically since the early 1980s. Early in the last decade, soybeans and soybean products were the single largest commodity group in the state's export portfolio. But by the 1990s, cotton and tobacco had far exceeded soybeans in terms of exports (Figure 2.7).

However, Tennessee is a long way from diversifying its export base to include high-value products. Tennessee farm exports nearly mirrored national export trends until 1988 (Figure 2.5). After 1988, the state's farm exports remained steady while national agricultural export values increased. The world market for conventional, bulk commodities will con-

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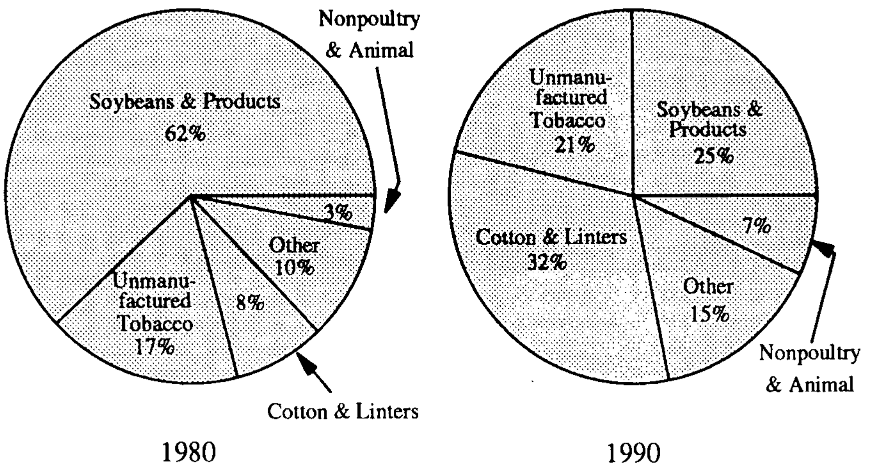
2. The pact also includes Canada, but trade barriers between the U.S. and Canada were addressed in the Canada-U.S. Trade Agreement.
3. Barkema, Alan. "The North American Free Trade Agreement: What is at Stake for U.S. Agriculture?" *Federal Reserve Bank of Kansas City Economic Review*, Third Quarter 1992. pp. 5-20.

FIGURE 2.7
Tennessee's Agricultural Export Mix, 1980 and 1990




tinue to be highly competitive, and the U.S. and Tennessee, in particular, may need to consider diversification and how to take full advantage of the current cost-efficient food processing and handling technology.

## NAFTA's Impact on Agriculture

NAFTA's passage during the final quarter of 1993 promises to eliminate several tariff and nontariff trade barriers between the U.S. and Mexico.[2] Mexico traditionally has restricted U.S. farm imports–especially dairy and meat products, grains and oilseeds, and horticultural products–to protect that country's small farmers. The U.S. also has maintained several restrictions on food imports from Mexico.

The U.S. will gain direct and indirect benefits from NAFTA.[3] The trade pact will allow small gains in net exports of the major commodities sold to Mexico. Indirectly, low-cost U.S.-grown food will become available in Mexican marketplaces, and Mexico's middle- and lower-class incomes will grow rapidly, increasing long-term demand for U.S. food.

However, NAFTA will eliminate trade barriers gradually. As Barkema suggests, many significant farm trade barriers are global rather than regional in nature. The round of GATT negotiations will also help reduce trade restrictions worldwide by pulling down tariff and nontariff barriers–such as production and export subsidies–and by standardizing technical regulations. The NAFTA and GATT agreements will make further changes in the production and export policies currently necessary to compete under current world market conditions.

NAFTA's short-term impacts on Tennessee agriculture will be minimal at most. In the longer run, because grain farmers and livestock producers are expected to be the big winners under NAFTA, it could be assumed that Tennessee will receive some benefits as the trade pact is implemented. The removal of substantial horticultural product tariffs would open the Mexican market wider for Tennessee nursery and greenhouse products, which grew quickly in the late 1970s, although they have seen little continued growth in recent years.

**Tennessee's Agricultural Sector in 1994-95**

Generally, the short-term outlook for Tennessee agriculture is good, as receipts are projected to outpace production costs slightly during 1994-95. Gains in the state agricultural sector, however, are driven primarily by gains in the livestock industry. For most products–except cotton and tobacco–market revenues also are expected to remain steady or increase slightly during 1994-95.

*Soybeans.* Soybean acreage and cash receipts, in particular, are expected to rebound slightly during the 1990s after continuous declines during the 1980s. This growth in soybean acreage is attributed in part to expected increases in soybean prices. Another reason for increased acreage is the transfer of land from traditional program crops to soybeans as a result of the 1990 Farm Bill's flexible planting provisions.

*Cotton.* Cotton acreage and cash receipts are expected to increase slightly during 1994, mainly due to an expected increase in next year's price caused by this year's lower production. However, prices are expected to decline from 1995 through the end of the decade as cotton becomes less competitive due to increasing production costs, falling international demand, higher production by competing countries, and declining prices.

*Tobacco.* It is uncertain at best whether tobacco will continue to top Tennessee crop cash receipts. Current legislation does require increased use of domestically grown tobacco in U.S.-manufactured cigarettes, but

1993 tobacco prices were lower than the previous year's prices. The portent of a stiff federal excise tax increase–which could be imposed by the Clinton Administration to finance health care reform–is expected to exacerbate already declining cigarette production. Also, higher world supplies could tighten U.S. exports of both manufactured and unmanufactured tobacco.

*Livestock.* The Tennessee beef industry was down slightly in 1993, but beef and nearly all major livestock products have a good short- and long-run outlook. Flood-related grain price increases will impact on production costs in 1994 but the record 1992 ending stocks and the availability of substitute feeds will ease this impact. The beef industry will recover slowly in the near term, and cash receipts for beef are projected to be flat in 1994-95, while milk cash receipts are expected to rise.

The broiler industry is expected to continue to expand both in terms of prices received and cash receipts, as it has in several southeastern states. Hog prices are expected to follow the traditional three- to four-year hog cycle and grow substantially in 1994 and 1995.

*Overall income.* On balance, Tennessee net farm income is expected to grow 7.6 percent–to \$573.5 million in 1994, and 7.0 percent–to \$613.8 million in 1995. Income increases because gross income–which includes government payments to farmers–rises faster than production expenses during this time. Gross income is expected to grow 3.9 percent in 1994 and 4.1 percent in 1995. During these years, farm production expenditures are expected to grow 3.0 percent and 3.3 percent, respectively.■

# CHAPTER 3

# THE LONG-TERM OUTLOOK FOR TENNESSEE

This chapter examines economic prospects for the U.S. and Tennessee through the year 2002. To place the long-term forecast in proper context, the chapter begins with a discussion of three trends: declining rates of population and labor force growth; structural change in the Tennessee economy; and increased competition from domestic and international trading partners. The importance of these trends lies in their impact on the current and future economic environments. Lower rates of labor force growth will reduce overall rates of economic growth relative to the past 30 years. This demographic trend, coupled with ongoing structural adjustments in the Tennessee economy and increased global competition, will require that Tennessee continue its investments in education and public infrastructure to ensure the well-being of the state's residents. The discussion then turns to the long-term trend forecast. The long-term forecast embodies renewed optimism regarding productivity and the nation's ability to compete, particularly in goods-producing industries. But getting to where we stand today has not been easy, nor will it be easy to remain on the cutting edge.

*Lower rates of labor force growth coupled with ongoing structural adjustments in the Tennessee economy and increased global competition, will require that Tennessee continue its investments in education and public infrastructure to ensure the well-being of the state's residents.*

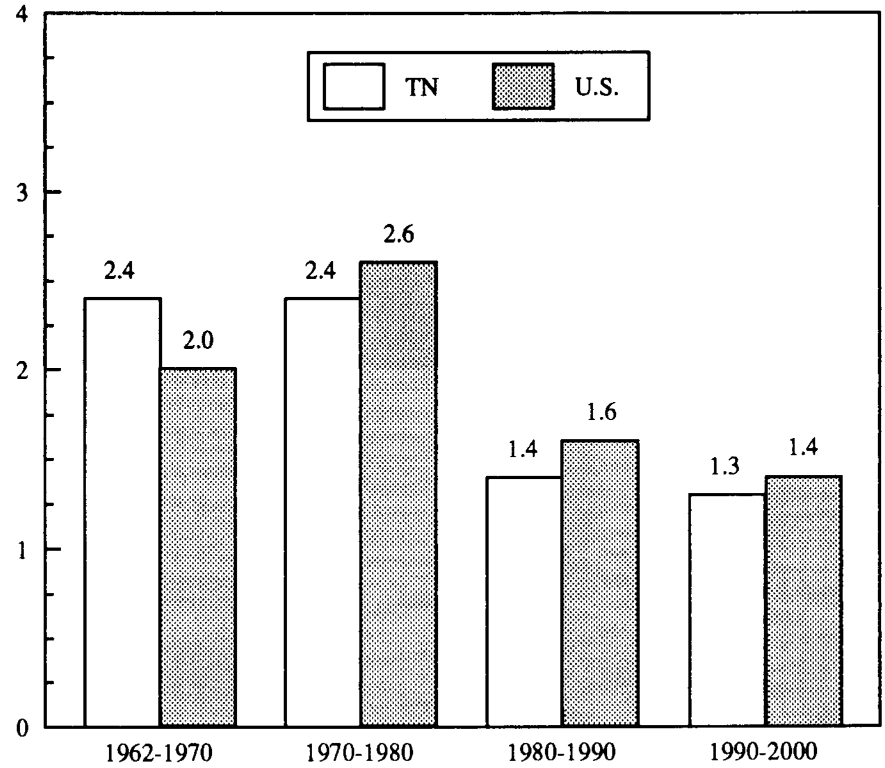
## Historical Considerations

### The Labor Force

Over time the output of the economy grows as a result of increases in the quantity of resources (especially labor) and increases in the productivity of resources. A decomposition of the nation's growth into these two components reveals that 63 percent of the increase in national income (during 1929-1982) was due to increases in the quantity of resources, with the remaining 37 percent attributable to advances in productivity. A similar study conducted for the state of Tennessee for 1950-1967 found that nearly half of the state's growth was due to increases in the quantity of labor inputs. As a result of projected demographic trends, labor force growth will likely contribute less to overall economic growth in future years. Gains in productivity will thus become increasingly important to the health and vitality of the national and state economies.

The 1960s and 1970s were characterized by exceptionally strong growth in the labor force for both Tennessee and the U.S., as illustrated in Figure 3.1. These increases in the labor force in turn translated into very strong rates of economic growth, as measured by traditional indicators

FIGURE 3.1
Labor Force Rates of Growth, by Decade,
Tennessee and U.S.

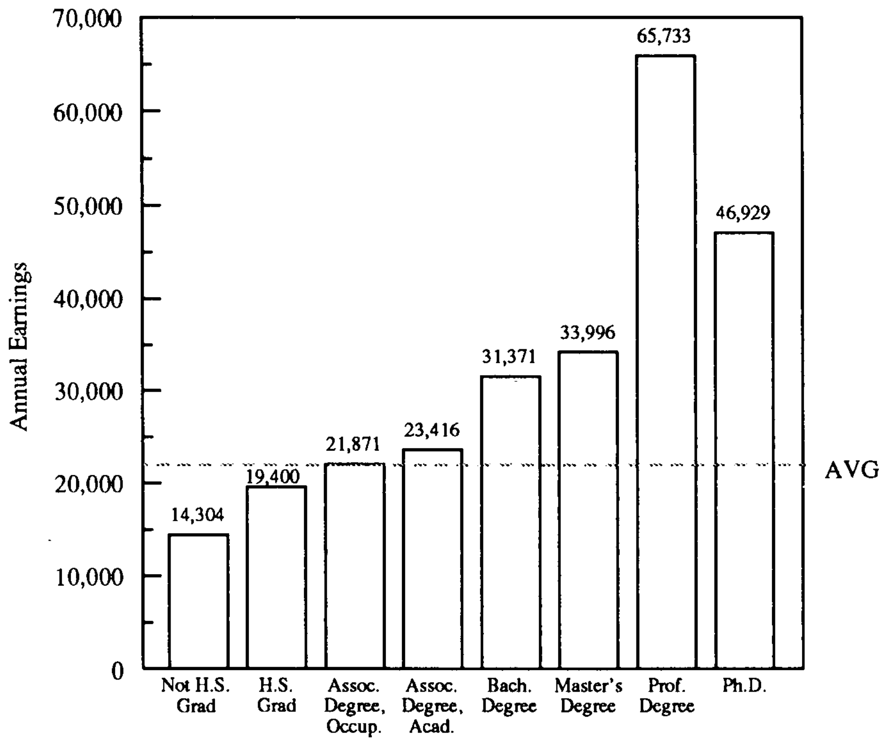



such as gross national product, gross state product, and employment. One important demographic trend, the entry of the baby-boom generation into the labor market through the 1970s, was responsible for much of this growth. But lower rates of population growth for the 1970s and 1980s will mean fewer new entrants to the labor force in the 1990s. As a result, both the state and the nation will have relatively less capacity for economic growth and expansion. A second and contributing factor to overall labor force growth has been the pronounced increase in the rate of labor force participation on the part of women. Between 1948 and 1960 the overall labor force particpation rate was relatively constant, with a slight decline for males being offset by a modest increase for females. But between 1960 and 1990 the participation rate for females spiked from 37.8 percent to 57.5 percent, with women accounting for 60 percent of total labor force growth during this period. As female labor force participation rates approach those of their male counterparts, less rapid growth can be expected in the future. Together these two trends will lead to relatively lower rates of employment and economic growth in the years to come.

With slower rates of labor force growth projected for future years, other engines of economic growth must be identified. One prime candidate is education. Educational attainment is highly correlated with economic performance, whether measured at the level of the nation, state or individual, and is a key determinant of productivity. In Figure 3.2 the relationship between education and individual well-being, as measured by income, is illustrated for Tennesseans in 1990. In constructing this figure we have omitted those younger than 25 years of age, a group including a large proportion of students and characterized by particularly high rates of unemployment. As a result, the figure better portrays the education-earnings relationship for those who are more fully integrated into the labor market and who tend to be full-time workers.

The earnings differentials across levels of educational attainment are striking and clearly demonstrate the high returns to investments in education. In 1989, an adult Tennessean without a high school degree earned only $14,304 per year, less than two-thirds of the state average ($21,844). A high school degree alone yielded a premium of $5,096 per year, or over

FIGURE 3.2
Educational Attainment and Economic Well-Being:
Tennesseans Aged 25 and Older, 1990

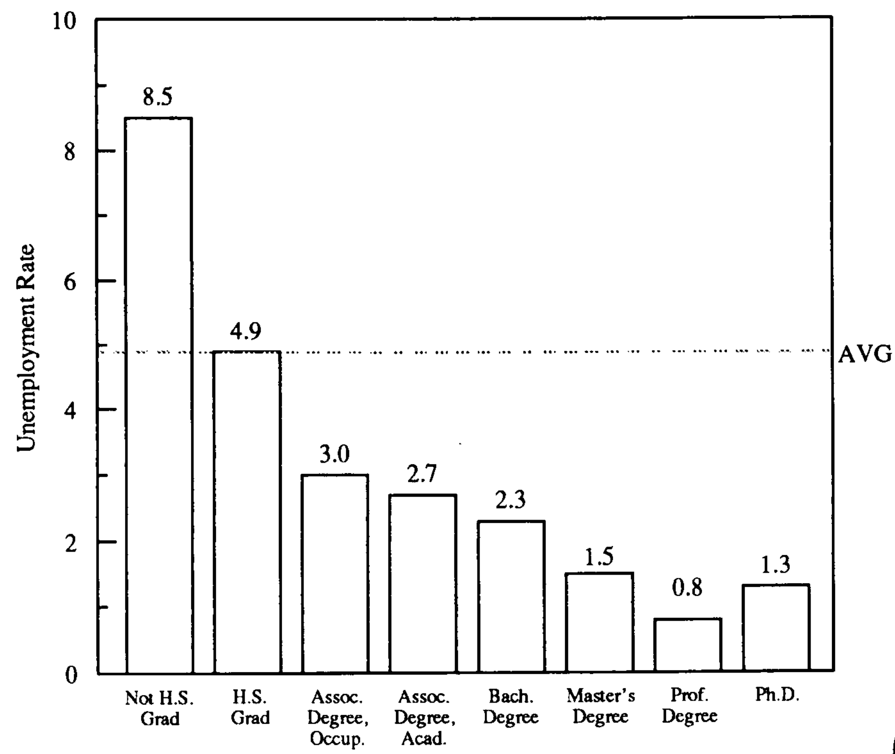



Source: U.S. Department of Commerce, Bureau of the Census, 1990 Census of Population and Housing, Public Use Microdata, File: Tennessee.

$100,000 over 20 years. This differential is more than adequate to accomodate the purchase of a modest home. A four-year college degree provided average annual earnings of $31,371 in 1989, a 61.7 percent premium over a high school degree.

An alternative perspective on the importance of education is offered by Figure 3.3, which portrays unemployment rates for the same categories of educational attainment as used in Figure 3.2. The results are again quite striking. Those without a high school degree are nearly twice as likely to be unemployed as those with a high school degree. (Recall that these data apply to Tennesseans over the age of 25 and are not skewed by the inclusion of unemployed students.) For those with a bachelor's degree, the unemployment rate in 1990 was only 2.3 percent, and for those with a professional degree the unemployment rate was less than 1 per hundred. In addition to lower incomes for the less educated, higher rates of unemployment translate into higher social costs, including foregone production of goods and services and higher transfer payments from the public sector.

FIGURE 3.3
Unemployment Rates by Level of Educational Attainment:
Tennesseans Aged 25 and Older, 1990




Source: U.S. Department of Commerce, Bureau of the Census, 1990 Census of Population and Housing, Public Use Microdata, File: Tennessee.

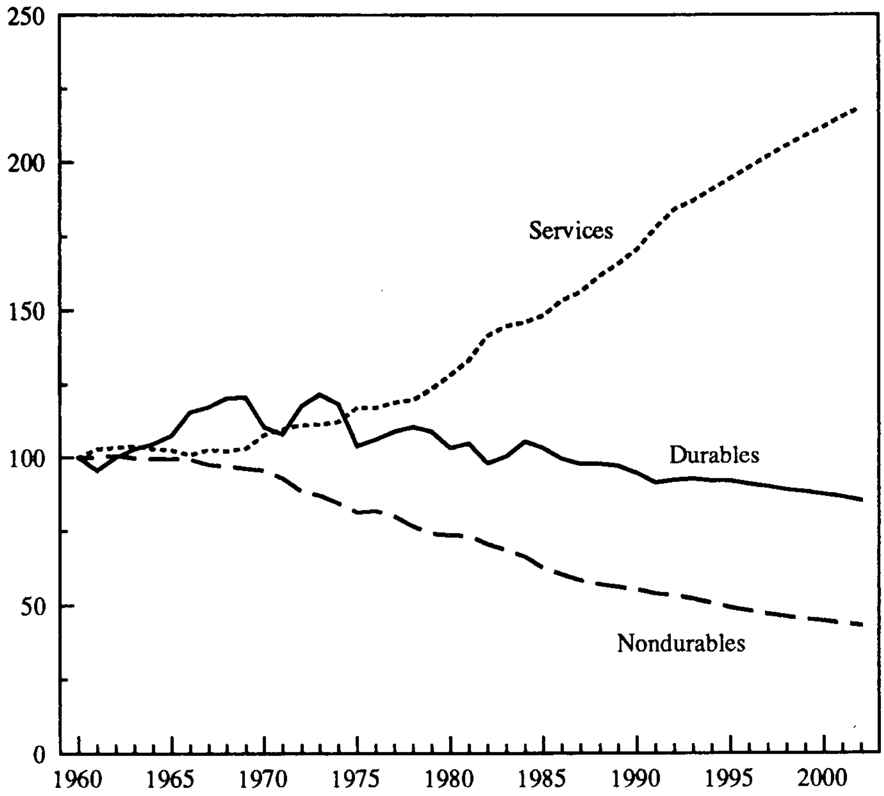
The state has made important strides in recent years to improve the quality of education and improve the quality of the state's labor force. The new Basic Education Program should better prepare today's youth for the jobs of tomorrow. The state's system of higher education has a growing national reputation, and the state's commitment to funding higher education, even in hard times, has attracted national attention. (For example, a recent article in *The Chronicle of Higher Education* noted that Tennessee had tied with Georgia for increased higher education funding in the last two years.) And there are literacy and training programs for adults as well, although these programs could benefit from expansion. More recent policy actions, as well as longer-term commitments to education, have been instrumental to the improving position of education in Tennessee. The commitment to education must be sustained if Tennessee expects to compete and excel in the global economy.

**Structural Change in the Tennessee Economy**

The economy is inherently dynamic, subject to continued transformation in response to market forces. Whether in good times or bad, as the economy adjusts, jobs are simultaneously created and lost. Some industries and regions will prosper, while other sectors and communities will decline. As an illustration, between 1980 and 1986 there was a net increase in employment of over 180,000 jobs in Tennessee. Yet for each 100 *net* new jobs created during this period, there were 122 jobs created by entering firms, 68 jobs created through firm expansion, 38 jobs lost through firm contraction and 51 jobs lost from firm exit. Hence, while economic transformation provides some with new opportunities, others must confront new challenges and obstacles as they witness diminished employment prospects.

One of the more wrenching transformations Tennessee has endured in recent history is structural change in the economy brought about by greater competition, changes in technology and changes in consumer tastes for various products. While structural change has created new jobs and opportunities for many, others have found themselves without a job or with limited job prospects due to skills obsolescence. Since the 1960s there have been rather dramatic shifts in the composition of state economic activity, as measured by employment and output. These trends have had their most pronounced effects on the service and manufacturing sectors, as illustrated by the employment trends in Figure 3.4. Service sector employment has climbed steadily over time, increasing its share of overall state employment from 13.0 percent in 1960 to 24.3 percent in 1993. Over the same period, employment in durable goods manufacturing has been flat and employment in the nondurable goods sector has actually declined. (Because of increases in employment in other sectors of the economy,

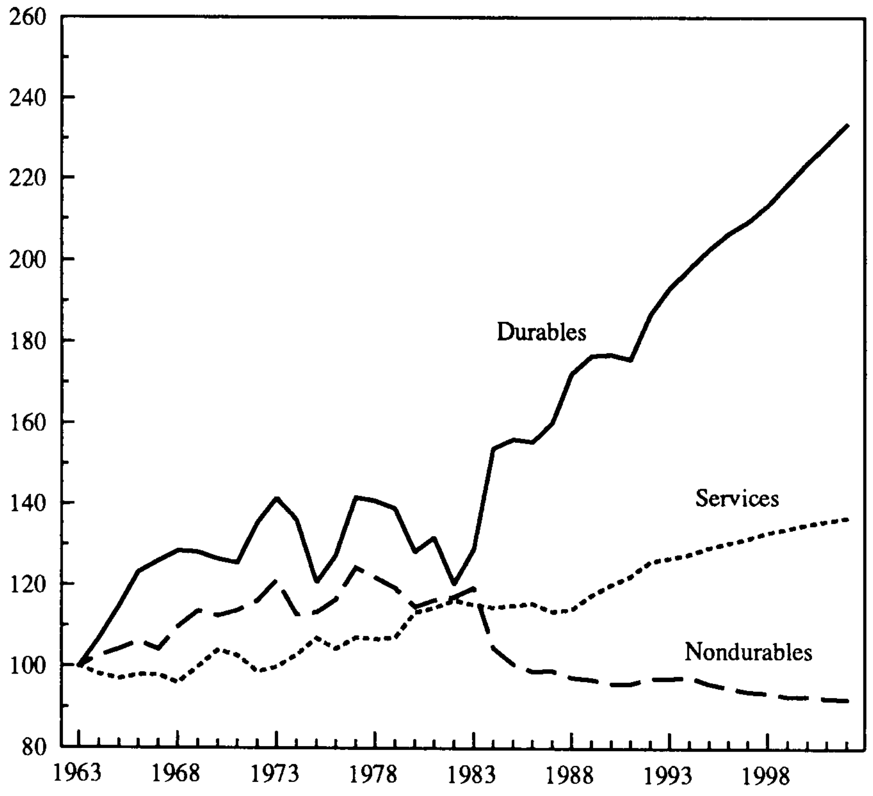
FIGURE 3.4
Tennessee Jobs Index (1960=100)




these forces imply declining employment shares for the state's manufacturing sector.) These trends have had a profoundly negative impact on specific occupations and specific regions of the state, particularly those places characterized by high concentrations of nondurable goods manufacturing.

While these shifts in employment have been taking place, there have been related changes in the output of the services and manufacturing sectors. Figure 3.5 shows long-term trends in inflation-adjusted ouput between 1963 and 2002, the end of the long-term forecast period. Particularly noteworthy is the steep increase in output for the durable goods manufacturing sector, a trend that has been accompanied by little change in employment (as shown in Figure 3.4). The implication is that the durable goods sector has benefited from substantial increases in productivity over time. The output of the nondurable goods sector has actually contracted since 1963. However, the employment losses (see Figure 3.4) are more pronounced than the output losses, implying some producti[illegible] gains. And while service sector output has grown slowly but steadily, it

FIGURE 3.5
Tennessee Inflation-Adjusted Output Index (1963=100)



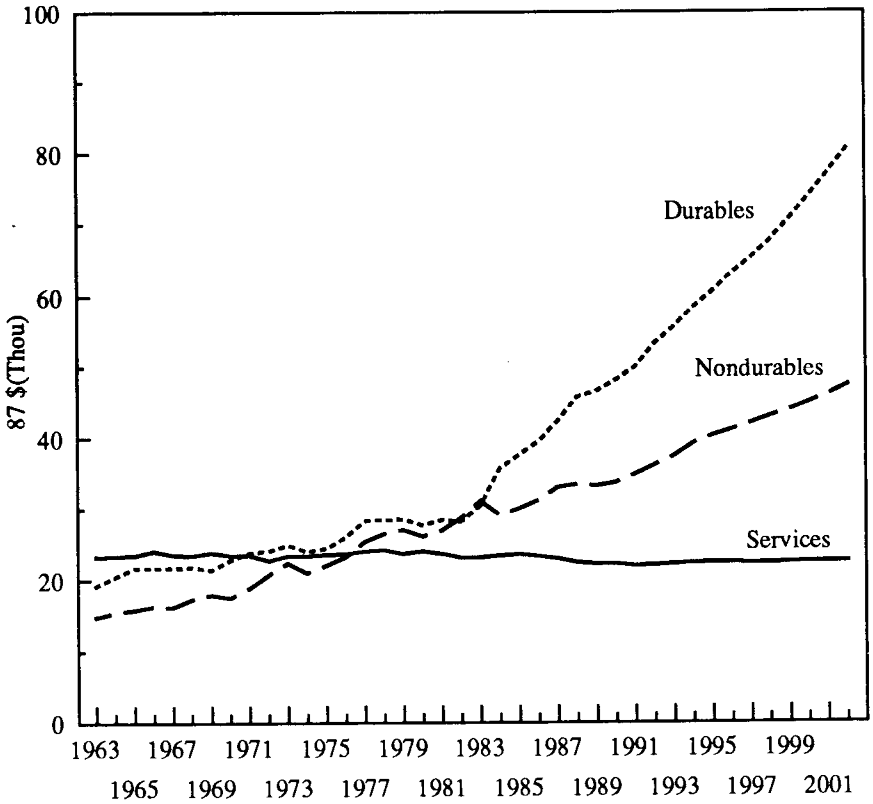

has grown at a much slower pace than employment. This suggests little or no gain in productivity for the service sector.

These implied trends in productivity are summarized graphically in Figure 3.6. A clear turning point in productivity is apparent for the state's durable goods sector in the early 1980s, demonstrating this sector's ability to adapt to a changing environment and compete in the global economy. The weaker improvements in nondurable goods manufacturing and the stagnant productivity performance of the service sector suggest that these same sectors may be subject to further adjustment and transformation in the future. It will be important in the years to come to assist Tennessee industry, communities, and individuals in adapting to these constant external sources of change, and to pursue public policies that can promote further the productivity of the state economy.

### The Forces of Competition

Tennessee is facing ever stiffer competition from its domestic and international trading partners. This competition represents a threat to Ten-

FIGURE 3.6
Tennessee Output Per Worker, 1963-2002




nessee, yet offers many opportunities as well. Rather than respond passively or (worse yet) seek isolation, Tennessee must continue to integrate itself more fully into the world economy so that it may benefit from the gains from freer trade. In simple terms, competition and free trade tend to increase the size of the economic pie, leading to increases in overall production, employment and earnings. And if the state plays its cards right, in part through proper investments in human and physical capital, it stands to gain substantially from more open access to international markets. But while free trade will increase the overall size of the economic pie, the slices of the pie are likely to change as well, giving rise to both winners and losers in the U.S. and Tennessee. Competition will lead to the loss of jobs in many industries and communities, but at the same time will produce job gains in other areas. Efforts to restrict trade to protect those who stand to lose will be self-defeating, with the overall costs of protection (including higher consumer prices, fewer jobs and so on) outweighing any gains. Historically, acts of protectionism have created substantial burdens for the U.S. economy and American consumers. For example, the voluntary export restraints on the part of Japanese auto manufacturers in the 1980s cost American consumers $105,000-160,000 for each job saved in the U.S. auto industry. And steel import quotas cost consumers in this country $750,000 to protect a single job.

Interstate competition for business and industry has always been intense, but recent bidding wars over Mercedez Benz and BMW (to name only two) and the introduction of lucrative economic development incentives by many of our surrounding states (especially Kentucky) have raised this competition to a higher plane. Tennessee has responded to these competitive pressures, in part, by passing its own legislation on economic development incentives. But it is important to recognize, as most policymakers do, that incentives are a small piece of a larger puzzle, and solving this larger puzzle will require that the state keep its entire house in order so that Tennessee can remain an attractive location for doing business. While incentives will help, there is simply no good substitute for a fundamentally strong economy and state government, and a skilled labor force.

Tennessee's markets are already highly integrated with the international community. Employment of Tennesseans in firms controlled by foreign citizens expanded by 57.8 percent between 1980-85 and grew by 71.8 percent between 1985-1991. (The comparable figures for the U.S. over these same periods are 40.7 percent and 68.0 percent, respectively.) In 1989 Tennessee ranked 19th in the U.S. in terms of employment related to manufactured exports, with 5.1 percent of state employment engaged directly or indirectly in the production of goods for export. While many manufacturing sectors have little export orientation, four others had more than 9 percent of employment related to export in 1989: chemicals, transportation equipment, electrical machinery and nonelectrical machinery.

Recent international trade accords will lead to further integration of Tennessee with the global economy. The controversial and highly visible North American Free Trade Agreement (NAFTA) should have a small but positive impact on Tennessee in the years to come. Tennessee currently ranks 14th nationally in exports to Mexico, with merchandise exports to Mexico increasing 188 percent between 1987 and 1991. (U.S. exports to Mexico were up 128 percent over the same period.) Although estimates of the effects of NAFTA vary widely, one study suggests that as many as 500,000 new jobs will be created by the year 2003. If Tennessee gets its "share" of this employment gain, a share consistent with the state's share of national employment, we might expect 10,000 *net* new jobs by 2003. But NAFTA will give rise to job losses as well as gains. The estimates indicate the state may actually realize 14,100 new jobs and lose 4,029 jobs, for a net gain of about 10,000.

Although NAFTA has received considerable attention in the press, it represents the most modest of three international trade accords reached in 1993. Immediately following passage of NAFTA, President Clinton travelled to Seattle for a three-day summit to meet with members of the forum on Asia-Pacific Economic Cooperation (APEC). APEC includes more than a dozen Pacific Rim countries, such as Japan, China, Taiwan and South Korea, and accounts for 40 percent of U.S. international trade. (By contrast, trade with the 12 member nations of the European Community accounts for 35 percent of our international trade.) While no agreement was reached regarding development of a formal trading block, an accord was struck on reducing trade barriers. The last and perhaps most important trade accord was the General Agreement on Tariffs and Trade (GATT). This agreement is expected to have pronounced effects on the state and nation through its halving of tariff barriers between the U.S. and Europe.

Together, competition from other states and foreign trading partners has increased substantially in recent years and will accelerate through the current decade. Since it is impossible and undesirable to insulate ourselves from these forces, we must make the most of those opportunities that arise. Through improvements in the productivity and efficiency of the state economy, Tennessee can minimize any losses and maximize the gains from free trade.

## Future Prospects

In the discussion that follows, the long-term trend forecast is presented for the U.S. and Tennessee economies, extending to the year 2002. The performance of the national economy will be a primary driving force for the state economy throughout the forecast period. The national forecast incorporates recent national and international events (including the Deficit Reduction Bill), long-term trends (such as the demographic and labor force trends discussed above), assumed improvements in productivity consistent with more recent trends, and maintained vigilance against inflation on the part of domestic monetary authorities.

### Production of Goods and Services

*Output of the U.S. Economy.* Inflation-adjusted U.S. gross domestic product (GDP) is expected to grow at a 2.8 percent compound annual growth rate (CAGR) through 2002. As reported in Table 3.1, investment will be one of the most rapidly growing components of GDP, increasing by 7.4 percent between 1992 and 1997. Export strength will also help bu[illegible] the national economy throughout the forecast period. The government s[illegible]tor will act as a drain on the nation's economic performance through 199[illegible]

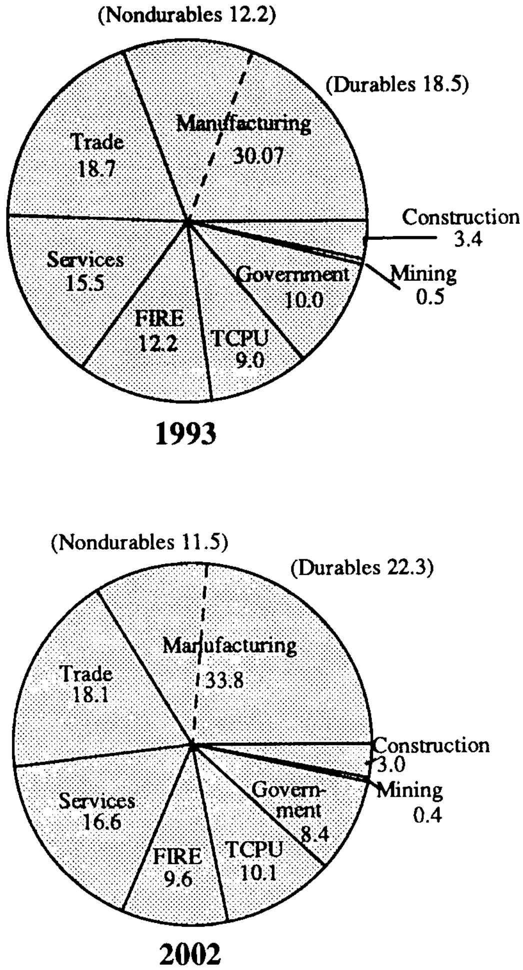
TABLE 3.1
Forecasted Rates of Growth for Gross Domestic Product and Its Key Components

| | Share of GDP in 1992 | Compound Annual Growth Rate 1992-1997 | 1997 2002 | 1992-2002 |
|---|---|---|---|---|
| Gross Domestic Product | -- | 2.9 | 2.7 | 2.8 |
| Consumption | 67.0 | 2.8 | 2.1 | 2.5 |
| Durable Goods | 9.2 | 4.9 | 1.8 | 3.3 |
| Nondurable Goods | 21.3 | 2.2 | 1.6 | 1.9 |
| Services | 36.5 | 2.6 | 2.5 | 2.6 |
| Investment | 14.7 | 7.4 | 3.3 | 5.3 |
| Fixed, Nonresidential | 10.6 | 8.2 | 3.8 | 6.0 |
| Fixed, Residential | 4.0 | 5.4 | 1.6 | 3.5 |
| Business Inventories | 0.1 | -- | -- | -- |
| Government | 19.0 | -0.3 | 1.8 | 0.8 |
| Exports | 11.6 | 6.7 | 7.4 | 7.0 |
| Imports | (12.3) | 7.5 | 4.7 | 6.1 |

as a result of the federal budget accord reached in fall of 1993. Consumption of durable goods is expected to be strong, especially in the near term, benefiting Tennessee's manufacturing sector.

*Output of the Tennessee Economy.* The output of the Tennessee economy, as measured by gross state product (GSP), is forecast to grow at a 3.8 percent CAGR between 1993 and 2002, surpassing national growth by a full percentage point. Output of the state's pivotal manufacturing sector accounted for 30.7 percent of GSP in 1993, as illustrated in Figure 3.7. Output will grow at a 5.0 percent CAGR though the forecast period, and by 2002, the manufacturing sector will account for 33.8 percent of total production. Strongest growth will take place in the durable goods sector, consistent with national trends. Fabricated metals, nonelectrical and electrical machinery, and transportation equipment will perform exceptionally well in Tennessee. Production in the furniture and fixtures and lumber and wood products sectors will grow very little over the long term. Nondurable goods production will expand at a 3.2 percent CAGR, although this sector's share of total state output will decline from 12.2 percent to

FIGURE 3.7
Distribution of Tennessee Nonagricultural Gross State Product by Industry: 1993 and 2002




11.5 percent by 2002. Production is expected to contract in the tobacco, textiles and leather sectors.

Transportation, communication and public utilities (TCPU) and services will perform well over the forecast horizon, with CAGRs of 5.1 percent and 4.7 percent, respectively. Production in the mining sector and in finance, insurance and real estate (FIRE) will be weak, growing by only 1.2 percent a year.

## Employment

*Employment Prospects for the National Economy.* Slower labor force growth will lead to a 1.7 percent CAGR in civilian employment for the U.S. economy through 2002. The national unemployment rate is expected to fall to 5.8 percent. The nation's manufacturing sector is expected to produce no net increase in manufacturing sector jobs through the forecast period.

Productivity, as measured by output per hour, will grow at a 1.5 percent CAGR through 2002, versus historical rates of growth of 0.6 percent for 1972-1982 and 1.3 percent for 1982-1992. Important improvements in U.S. unit labor costs, a measure intended to capture both productivity and labor costs, are expected to continue, enhancing the competitve position of the U.S. economy in international markets.

*Employment Prospects for the State Economy.* The Tennessee economy is expected to create a net increase of 610,000 new jobs by 2002 (representing a CAGR of 2.7 percent), as shown in Table 3.2. The state unemployment rate will dip to 5.2 percent, comparing favorably with the U.S. unemployment rate of 5.7 percent.

The trade sector, including both wholesale and retail trade, surpassed the state's manufacturing sector as the largest employer in 1991. Above-average growth is anticipated over the forecast period for the trade sector, with over 150,000 new jobs being created. The manufacturing sector, which accounted for 516,800 jobs in 1993, will experience below-average growth through 2002. Nonetheless, the durable goods manufacturing sec-

TABLE 3.2
Tennessee Nonagricultural Employment and Employment Growth by Industry: 1993-2002

| Industry | Employment in 1993 (thousands) | Employment in 2002 (thousands) | Employment Gain (thousands) | Compound Annual Growth Rate |
|---|---|---|---|---|
| Mining | 4.5 | 3.4 | -1.1 | -3.1 |
| Construction | 88.5 | 109.4 | 20.9 | 2.4 |
| Manufacturing | 516.8 | 573.0 | 56.2 | 1.2 |
| Durable Goods | 261.5 | 305.4 | 43.9 | 1.7 |
| Nondurable Goods | 255.2 | 267.6 | 12.4 | 0.5 |
| Trade | 528.8 | 680.1 | 151.3 | 2.8 |
| Services | 551.6 | 817.9 | 266.3 | 4.5 |
| FIRE | 100.7 | 104.8 | 4.1 | 0.4 |
| TCPU | 122.7 | 166.5 | 43.8 | 3.4 |
| Government | 355.6 | 424.8 | 69.2 | 2.0 |
| Total Nonagricultural Employment | 2,269.3 | 2,879.8 | 610.5 | 2.7 |

tor is expected to create 43,900 new jobs and the nondurable goods sect 12,400 new jobs by 2002.

Only the state's mining sector will lose jobs, totalling 1,100, over the long-term forecast period. Although this is not a large decline, it will represent hardship for certain individuals and specific communities. Most rapid employment growth will take place in services, where 266,300 new jobs will be created by 2002.

**Income and the Price Level**

*The National Economy.* Inflation, as measured by the implicit deflator for GDP, is expected to remain in the moderate range throughout the forecast period, reflecting in part continued restraint by the monetary authorities. The projected rate of growth of 3.2 percent per year is about one-half a percentage point lower than the experience of the past decade. Inflation-adjusted personal income will grow at a 2.6 CAGR.

*The Tennessee Economy.* Tennessee's personal income is forecast to grow by 2.9 percent a year, exceeding national growth rates in personal income. Aggregate wage and salary income, the largest component of personal income, will grow at a 2.9 percent rate. The average annual wage and salary in Tennessee stood at $19,034 in 1993, and will grow at a meagre 0.2 percent CAGR through 2002. The strongest wage and sala increases are expected in FIRE and manufacturing; workers in the TCPU sector will witness the slowest earnings gains.■

# CHAPTER 4

# COMPOSITE INDEXES OF ECONOMIC INDICATORS FOR TENNESSEE METROPOLITAN AREAS

In the Fall 1988 issue of the *Survey of Business*, the Center for Business and Economic Research (CBER) at The University of Tennessee, Knoxville, began publication of composite indexes of indicators for the Tennessee economy.[1] These indicators were developed to serve as a more accurate gauge of the cyclical patterns in state economic activity than could be gleaned from the national cyclical indicator indexes produced by the United States Commerce Department's Bureau of Economic Analysis (BEA). The national indicators are inadequate signals of state business cycles because economic activity is not uniformly distributed across states. Similarly, since economic activity is not evenly distributed within the state, intrastate regional business cycles may deviate from state business cycles in both timing and magnitude. To provide a measure of these variations in cyclical patterns in economic activity within Tennessee, CBER has developed composite indexes of economic indicators for the five major Metropolitan Statistical Areas (MSAs) in Tennessee: Chattanooga, Knoxville, Nashville, Memphis, and the Tri-Cities.

*To provide a measure of variations in economic activity, CBER has developed indexes of composite indicators for the five major metropolitan areas.*

This chapter has two sections. The first is the inaugural release of the monthly indicators for Tennessee's urban economies and the second is a description of the methodology used in the development of the indexes.

## 1. Inaugural Release of the MSA Indicator Indexes

This section presents the first of the reviews that CBER will release each month on the MSA composite indexes, available monthly through the University of Tennessee News Bureau. Each release will contain current monthly values and values for the previous twelve months that will incorporate any revised data made available after previous releases. Subsequent releases will be available around the 20th of each month from the Center for Business and Economic Research.

To provide a ready comparison of regional versus state economic performance as well as a comparison of economic performance across regions, these indexes will be compiled on a monthly basis beginning in January 1994, and will be published in conjunction with the state com-

1. See Mark L. Burton and David M. Mandy, "Tennessee Composite Economic Indicators," *Survey of Business*, Volume 24, No. 2, Fall 1988, pp. 25-28, Center for Business and Economic Research, College of Business Administration, The University of Tennessee.

posite indexes. By design, the regional indexes will complement the sta[illegible] leading and coincident indexes to provide a coherent system of cyclic[illegible] economic indicators for Tennessee and its metropolitan areas. Because of data limitations outlined in the next section, only one index for each region could be constructed. Hence, there will not be both a coincident and a leading index for each metropolitan area. The indexes that have been constructed for each metropolitan area are best described as "mildly leading" indexes because they generally lead turning points in the metropolitan area economies but do not lead with the same regularity or by as many months as the state and national indexes. These indexes will henceforth be referred to as the MSA (or regional) economic (or composite) indexes.

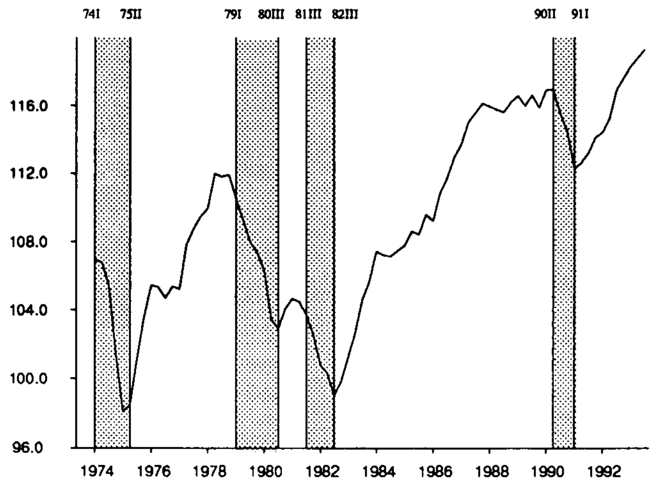
# CHATTANOOGA

The Chattanooga economic index in October continued along its volatile month-to-month course. The index increased at a seasonally adjusted annual rate (SAAR) of 2.0 percent in October to 119.8, marking the third increase in the last four months but only the fourth gain in eight months. Despite the erratic monthly fluctuations in the individual seasonally-adjusted components, the Chattanooga economic index in 1993 has steadfastly remained between 1.8 and 4.3 percent greater than the corresponding months in 1992. The October increase was fueled by a drop in bankruptcies from 411 in September to 342 in October. Chattanooga non-agricultural employment grew a moderate 1.0 percent (SAAR), and commercial electric consumption, which serves as a proxy for industrial activity, grew at 7.5 percent (SAAR).

Despite the overall rise in the index, four of the seven components of the index fell in October. Initial claims for unemployment insurance (UI) increased from 1,760 in September to 1,820 in October, a sixth consecutive monthly increase. Still, initial claims remain 5.3 percent below their level of October 1992. Inflation-adjusted taxable sales fell moderately in October, partially offsetting the large September increase. The number of airport passengers also displayed a modest decline following a large positive fluctuation in September. Even with the October decline, airport passenger traffic remains 10.8 percent above its level at this time last year. Finally, the Tennessee leading index fell 5.2 percent (SAAR) for October after six consecutive months without a decline.

While not an index component, the Chattanooga unemployment rate returned to its August level of 4.7 percent, matching its lowest level in the last twelve months, after increasing to 4.9 percent in September. Labor markets may continue to show strength, since both new incorporations and construction potentials have consistently exceeded their 1992 levels.

FIGURE 4.1
Chattanooga Quarterly Economic Index



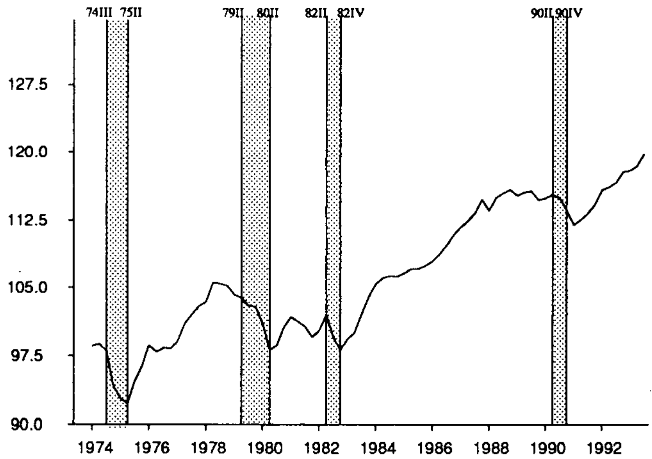

# KNOXVILLE

The Knoxville economic index also rose in October, posting an increase of 7.9 percent (SAAR). October's increase makes the fourth consecutive gain and sixth expansion in seven months. Favorable movements in Knoxville non-agricultural employment and bankruptcies engineered the positive performance of the index. Bankruptcies fell from 465 in September to 334 in October, more than compensating for moderate increases in August and September. Non-agricultural employment rose at a SAAR of 0.5 percent, posting a fourth consecutive increase.

Although the index displayed positive overall growth, four of the six seasonally-adjusted index components entered negatively. The Knoxville help-wanted index, which has shown several large gains in the last twelve months, fell moderately in October. Inflation-adjusted taxable sales also dropped after four consecutive gains. Initial claims for unemployment insurance rose for the fourth consecutive month, showing an increase from 3,940 in September to 3,960 in October. The final index component, the Tennessee leading index, declined by 5.2 percent (SAAR).

Positive signs in the Knoxville labor market corroborate the recent gains in the economic index. The Knoxville unemployment rate dropped to 4.7 percent, its lowest level of the last twelve months, down 0.4 percentage points from its September level. Coupled with the recent performance of Knoxville non-agricultural employment, new incorporations, and the Knoxville help-wanted index, the decline in unemployment bodes well for the health of the Knoxville labor market and overall economy in the immediate future.

FIGURE 4.2
Knoxville Quarterly Economic Index



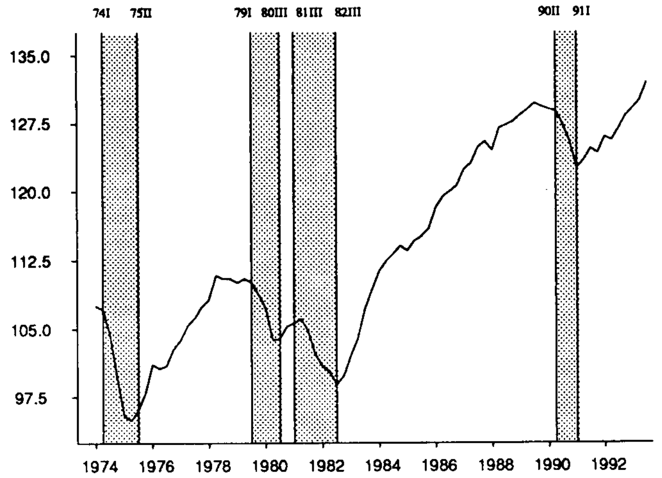
# MEMPHIS

The Memphis economic indicator index in October confirmed continued signs of economic growth in the local economy, posting a small rise of 0.4% (SAAR), the sixth increase in the last seven months. The October gain in the index was concentrated solely in one seasonally-adjusted component–a substantial rise in the Memphis help-wanted index. This component has shown consistent strength over the past year, registering significant gains in eight of the last twelve months for a total increase of 31.8% over its level of October 1992.

The remaining four index components declined in October, accounting for the modest gain in the overall index. The largest offsetting component was a fall in the number of new business incorporations, down from 167 in September to 157 in October, its second consecutive month of decline and third decline since a large increase in June. A second monthly increase in initial claims for unemployment insurance of 9.1% (SAAR), combined with a modest decline of 2.5% (SAAR) in non-agricultural employment and a fall in the Tennessee leading index, also mitigated some of the increase in the help wanted index component.

The October performance of other economic variables reinforces the positive signals suggested by the recent increases in the Memphis economic index. Like Chattanooga and Knoxville, the Memphis unemployment rate also declined in October to 4.9%, its lowest level in twelve months. Bankruptcies fell from 1,142 in September to 1,047 in October. Finally, manufacturing employment increased by 4.5 percent (SAAR), marking a third increase in the past four months.

FIGURE 4.3
Memphis Quarterly Economic Index




# NASHVILLE

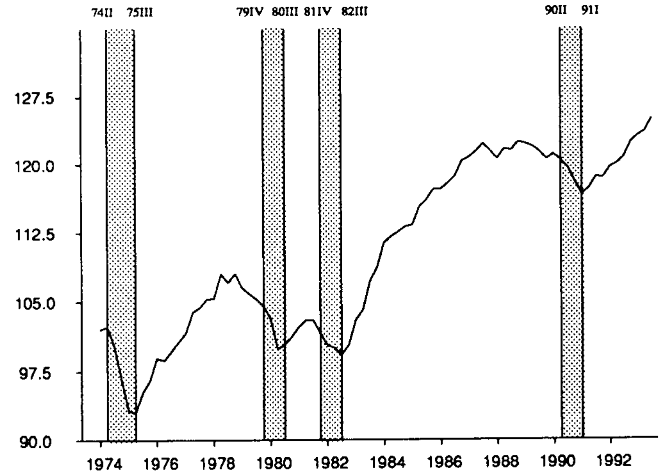
After five consecutive monthly increases, the Nashville economic index posted a decline of 6.3 percent (SAAR) in October, only its fourth decline in the last twelve months. The current index level remains 2.9 percent higher than its level at the same time last year, indicating a clear upward trend in the performance of Nashville's economy throughout 1993.

The October decline in the index was concentrated in three of the index's six seasonally-adjusted components. Nashville construction potentials declined substantially over the month. After experiencing a large gain in September, inflation-adjusted taxable sales fell in October. However, taxable sales remain at their second highest level of the year and exceed October 1992 sales by 4.3 percent. The decline in the Tennessee leading index of 5.2 percent (SAAR) also contributed to the fall in the Nashville economic index.

The remaining three components of the economic index, which are all employment related, reveal favorable Nashville employment conditions. Initial claims for unemployment insurance posted its third straight monthly decline, falling from 5,350 claims in September to 5,170 claims in October. The Nashville help-wanted index, which gives an indication of the number of unfilled jobs that are available, increased for the sixth consecutive month. Finally, non-agricultural employment remained essentially unchanged in October after posting successive gains in the three previous months.

Additional evidence of the strength of the job market in Nashville can be found in the unemployment rate, which declined from 3.9 percent in September to 3.6 percent in October, its lowest level in the last twelve months.

FIGURE 4.4
Nashville Quarterly Economic Index

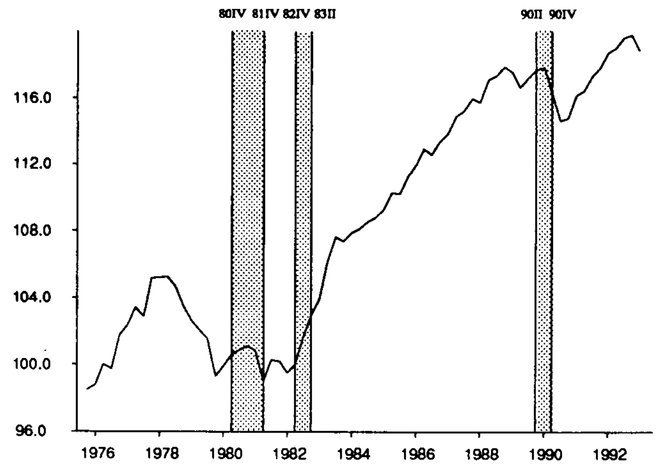


# TRI-CITIES

The Tri-Cities economic index, which experienced a clear upward trend in earlier months of the year, increased again in October by 15.4 percent (SAAR), its second consecutive monthly increase, which suggests that the index may reestablish an upward course. Only one Tri-Cities MSA-specific component acted to partially offset this increase in the regional economic index. Inflation-adjusted taxable sales fell in October and currently lie below 1992 levels, revealing their sluggish performance during 1993. The decline in the Tennessee leading index also acted to mollify the increase in the Tri-Cities economic index.

The remaining four seasonally-adjusted components of the economic index contributed to the improvement in economic conditions. Most notably, the number of bankruptcies fell substantially in October, declining from 465 bankruptcies in September to 334 bankruptcies in October, which is 19 percent below the lowest level achieved over the last twelve months. Adding to the positive news, initial claims for unemployment insurance fell for the second straight month, down 100 claims from 2,950 claims in September. In addition, commercial and industrial electrical consumption gained back some of its September decline. Finally, the employment outlook continued to be favorable as non-agricultural employment increased by 1.7 percent (SAAR), its second consecutive increase and fourth month without a decline. In related employment news, the Tri-Cities unemployment rate held steady at 5.4% in October.

FIGURE 4.5
Tri-Cities Quarterly Economic Index




# TENNESSEE PERSONAL INCOME

| | 91/I | 91/II | 91/III | 91/IV | 92/I | 92/II | 92/III | 92/IV | 93/I | 93/II | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TN Personal Income (MIL $) (1) | 80109 | 81092 | 81952 | 83724 | 85806 | 87599 | 88686 | 92243 | 91608 | 93922 | 77493 | 81719 | 88584 |
| % Chg Prev Qtr SAAR | 6.92 | 5.00 | 4.31 | 8.93 | 10.32 | 8.62 | 5.06 | 17.03 | -2.73 | 10.49 | 6.48 | 5.45 | 8.40 |
| % Chg Same Qtr Last Yr | 5.02 | 5.55 | 4.96 | 6.27 | 7.11 | 8.02 | 8.22 | 10.18 | 6.76 | 7.22 | 6.48 | 5.45 | 8.40 |
| TN Personal Income (MIL 87 $) (1) | 67603 | 67916 | 68123 | 69022 | 70046 | 70873 | 71463 | 73618 | 72590 | 73954 | 67432 | 68166 | 71500 |
| % Chg Prev Qtr SAAR | 3.35 | 1.87 | 1.22 | 5.39 | 6.06 | 4.81 | 3.37 | 12.62 | -5.47 | 7.74 | 1.25 | 1.09 | 4.89 |
| % Chg Same Qtr Last Yr | -0.12 | 0.69 | 0.86 | 2.95 | 3.61 | 4.35 | 4.90 | 6.66 | 3.63 | 4.35 | 1.25 | 1.09 | 4.89 |

# NOTES

The following notes correspond to the MSA Economic Indicator tables 4.1–4.5 on pages 57-61, which show the behavior of the five economic indexes relative to the business cycles defined for the regions..

1. Annual Rate.
2. Source: Tennessee Department of Employment Security.
3. Calculated from data provided by the Tennessee Department of Employment Security.
4. Calculated from data provided by the Tennessee Department of Revenue.
5. Calculated from data provided by the Tennessee Valley Authority.
6. Calculated from data provided by the F.W. Dodge Division of McGraw-Hill Information Services Company.
7. Calculated from data provided by the U.S. Bankruptcy Courts.
8. Calculated from data provided by the Chattanooga Metropolitan Airport Authority.
9. Calculated from data provided by the Tennessee Department of State.
10. Calculated from data provided by the Metropolitan Knoxville Airport Authority.
11. Source: The Conference Board.
12. Calculated from data provided by the Memphis-Shelby County Airport Authority.
13. Calculated from data provided by the Metropolitan Nashville Airport Authority.
14. Calculated from data provided by The Conference Board.
15. Calculated from data provided by the Tri-City Airport Commission.

# TABLE 4.1

## CHATTANOOGA ECONOMIC INDICATORS
SEASONALLY ADJUSTED

| | 199210 | 199211 | 199212 | 199301 | 199302 | 199303 | 199304 | 199305 | 199306 | 199307 | 199308 | 199309 | 199310 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chattanooga Economic Index (1982=100)............ | 116.9 | 117.5 | 118.4 | 118.4 | 118.6 | 117.8 | 119.1 | 118.8 | 118.4 | 119.4 | 118.8 | 119.6 | 119.8 | 116.0 | 113.1 | 116.0 |
| % Chg Prev Month SAAR.......................... | 0.7 | 5.8 | 9.8 | 0.0 | 2.6 | -7.9 | 13.9 | -3.2 | -4.0 | 10.5 | -5.9 | 9.1 | 2.0 | -0.3 | -2.5 | 2.6 |
| % Chg Same Month Last Yr....................... | 2.2 | 3.3 | 3.7 | 4.3 | 3.7 | 2.1 | 4.0 | 2.7 | 2.6 | 1.8 | 1.9 | 2.4 | 2.5 | -0.3 | -2.5 | 2.6 |
| Chattanooga Nonag Employment (THOU) (3).......... | 206.4 | 205.3 | 206.8 | 206.1 | 206.3 | 206.1 | 206.3 | 206.9 | 206.9 | 209.0 | 209.6 | 209.3 | 209.5 | 202.4 | 201.2 | 203.8 |
| % Chg Prev Month SAAR.......................... | 2.8 | -6.2 | 9.1 | -3.8 | 1.2 | -1.2 | 1.4 | 3.0 | 0.2 | 12.7 | 3.8 | -1.7 | 1.0 | 1.2 | -0.6 | 1.3 |
| % Chg Same Month Last Yr....................... | 0.9 | 1.6 | 1.9 | 2.8 | 3.2 | 2.6 | 2.2 | 1.7 | 2.1 | 1.6 | 1.7 | 1.7 | 1.5 | 1.2 | -0.6 | 1.3 |
| Chattanooga Unemployment Rate (%) (3)............ | 5.8 | 5.6 | 5.5 | 6.0 | 5.3 | 5.5 | 5.9 | 5.1 | 5.2 | 4.7 | 4.7 | 4.9 | 4.7 | 4.7 | 6.0 | 6.1 |
| Chattanooga Mfg Employment (THOU) (3)............ | 44.4 | 44.1 | 44.6 | 44.3 | 44.4 | 44.5 | 44.3 | 44.9 | 44.7 | 45.4 | 45.4 | 45.4 | 45.5 | 47.1 | 44.6 | 44.1 |
| % Chg Prev Month SAAR.......................... | 3.3 | -8.4 | 13.7 | -7.0 | 1.9 | 3.3 | -3.8 | 16.0 | -3.9 | 18.5 | 1.4 | -1.1 | 3.1 | -0.6 | -5.3 | -1.3 |
| % Chg Same Month Last Yr....................... | -0.7 | -0.3 | 1.1 | 0.7 | 1.2 | 1.7 | 0.7 | 1.7 | 2.0 | 3.7 | 2.9 | 2.5 | 2.5 | -0.6 | -5.3 | -1.3 |
| Chattanooga Taxable Sales (MIL $) (4)............ | 266 | 263 | 277 | 265 | 271 | 250 | 275 | 273 | 274 | 284 | 273 | 282 | 277 | 3102 | 3089 | 3194 |
| % Chg Prev Month SAAR.......................... | 14.1 | -11.9 | 88.8 | -43.1 | 33.6 | -61.7 | 214.0 | -9.0 | 2.8 | 53.5 | -36.2 | 46.9 | -21.1 | 5.0 | -0.4 | 3.4 |
| % Chg Same Month Last Yr....................... | 3.4 | -2.4 | 4.3 | -1.8 | -11.3 | -6.4 | 4.5 | 12.3 | 5.8 | 10.0 | 4.9 | 7.3 | 4.1 | 5.0 | -0.4 | 3.4 |
| Chattanooga Taxable Sales (MIL 82 $) (4).......... | 188 | 185 | 195 | 185 | 189 | 174 | 191 | 189 | 190 | 196 | 189 | 195 | 190 | 2374 | 2267 | 2275 |
| % Chg Prev Month SAAR.......................... | 8.4 | -14.1 | 85.6 | -46.4 | 28.1 | -62.3 | 198.7 | -10.5 | 2.8 | 52.2 | -38.3 | 46.9 | -24.9 | -0.4 | -4.5 | 0.4 |
| % Chg Same Month Last Yr....................... | 0.2 | -5.3 | 1.2 | -4.8 | -14.1 | -9.2 | 1.2 | 8.8 | 2.8 | 7.0 | 2.0 | 4.5 | 1.4 | -0.4 | -4.5 | 0.4 |
| Chattanooga Bankruptcies (7)...................... | 438 | 399 | 439 | 347 | 407 | 437 | 413 | 414 | 398 | 425 | 399 | 411 | 342 | 5087 | 6113 | 5641 |
| % Chg Prev Month SAAR.......................... | -29.5 | -67.3 | 214.6 | -94.0 | 576.5 | 129.6 | -48.5 | 2.0 | -36.3 | 119.4 | -53.4 | 43.2 | -89.2 | 2.8 | 20.2 | -7.7 |
| % Chg Same Month Last Yr....................... | -20.6 | -17.0 | -13.2 | -37.9 | -28.5 | 11.0 | -21.3 | 2.7 | -21.9 | -8.7 | -17.9 | -8.8 | -22.0 | 2.8 | 20.2 | -7.7 |
| Chattanooga Airport Passengers (THOU) (8)......... | 47.5 | 50.4 | 51.1 | 49.7 | 52.1 | 50.9 | 55.8 | 53.6 | 47.5 | 52.4 | 47.8 | 53.4 | 52.6 | 580.9 | 553.7 | 596.8 |
| % Chg Prev Month SAAR.......................... | -73.1 | 107.6 | 17.3 | -29.5 | 78.3 | -24.6 | 202.8 | -38.2 | -76.9 | 230.1 | -66.8 | 275.7 | -16.4 | -0.6 | -4.7 | 7.8 |
| % Chg Same Month Last Yr....................... | 2.4 | 11.2 | 3.3 | 7.8 | 12.9 | 7.3 | 21.1 | 11.0 | -9.0 | -8.1 | -7.2 | 0.8 | 10.8 | -0.6 | -4.7 | 7.8 |
| Chattanooga Comm & Ind Elec Cons (MIL KWH) (5).... | 240 | 243 | 250 | 251 | 247 | 253 | 248 | 245 | 250 | 254 | 252 | 253 | 255 | 2680 | 2650 | 2835 |
| % Chg Prev Month SAAR.......................... | 27.0 | 15.8 | 40.9 | 6.4 | -20.0 | 35.3 | -19.6 | -17.3 | 27.3 | 22.9 | -8.7 | 6.4 | 7.5 | 0.9 | -1.1 | 7.0 |
| % Chg Same Month Last Yr....................... | 3.3 | 10.0 | 13.6 | 12.9 | 9.7 | 11.1 | 9.8 | 2.0 | 5.8 | 3.3 | 3.7 | 7.6 | 6.1 | 0.9 | -1.1 | 7.0 |
| Initial Claims For Chattanooga UI (THOU) (3)...... | 1.92 | 1.85 | 1.83 | 1.70 | 1.58 | 1.52 | 1.51 | 1.53 | 1.55 | 1.62 | 1.76 | 1.76 | 1.82 | 22.29 | 33.84 | 25.11 |
| % Chg Prev Month SAAR.......................... | -27.3 | -34.7 | -13.9 | -57.7 | -58.4 | -36.6 | -10.5 | 15.9 | 21.4 | 63.8 | 179.2 | 0.1 | 44.7 | 9.2 | 51.8 | -25.8 |
| % Chg Same Month Last Yr....................... | -21.6 | -29.0 | -28.4 | -34.0 | -33.2 | -35.4 | -24.5 | -28.9 | -27.8 | -20.0 | -8.0 | -10.6 | -5.3 | 9.2 | 51.8 | -25.8 |
| Chattanooga New Incorporations (9)................ | 54 | 68 | 63 | 62 | 65 | 59 | 63 | 39 | 71 | 79 | 86 | 92 | 81 | 679 | 747 | 765 |
| % Chg Prev Month SAAR.......................... | 327.4 | 1481.4 | -56.3 | -23.0 | 94.8 | -67.5 | 123.3 | -99.7 | ******* | 263.8 | 194.7 | 118.8 | -77.6 | -12.2 | 10.0 | 2.3 |
| % Chg Same Month Last Yr....................... | -23.4 | -5.3 | -3.2 | -16.0 | -8.8 | -10.9 | 16.1 | -41.9 | 0.8 | 18.4 | 35.0 | 93.6 | 51.4 | -12.2 | 10.0 | 2.3 |
| Chattanooga Construction Potentials (6)........... | 26 | 22 | 32 | 34 | 30 | 25 | 19 | 33 | 28 | 29 | 28 | 29 | 29 | 335 | 263 | 310 |
| % Chg Prev Month SAAR.......................... | -92.1 | -87.5 | 8908.0 | 143.9 | -78.3 | -89.9 | -94.2 | 50591.3 | -82.5 | 53.8 | -50.6 | 65.4 | 3.1 | -2.4 | -21.6 | 17.9 |
| % Chg Same Month Last Yr....................... | 46.6 | -15.2 | 70.4 | 56.3 | 3.4 | -6.6 | -22.0 | 50.5 | 36.7 | -9.6 | 24.2 | -9.4 | 12.2 | -2.4 | -21.6 | 17.9 |
| Chattanooga Cnstr Potentials,Val (MIL 82$,NSA) (6) | 14 | 11 | 15 | 14 | 12 | 10 | 19 | 16 | 20 | 13 | 17 | 17 | 20 | 245 | 197 | 195 |
| % Chg Same Month Last Yr....................... | -7.0 | -10.0 | -6.4 | 28.0 | -3.5 | -37.3 | -8.0 | 8.6 | -3.4 | -45.4 | -19.5 | 25.6 | 44.1 | -12.2 | -19.7 | -0.8 |

TABLE 4.2

KNOXVILLE EC[illegible] INDICATORS
SEASONA[illegible]USTED

| | 199210 | 199211 | 199212 | 199301 | 199302 | 199303 | 199304 | 199305 | 199306 | 199307 | 199308 | 199309 | 199310 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Knoxville Economic Index (1982=100)............... | 117.0 | 117.7 | 118.7 | 117.9 | 118.2 | 117.8 | 118.1 | 118.6 | 118.5 | 119.2 | 119.7 | 120.4 | 121.2 | 114.7 | 113.0 | 116.6 |
| % Chg Prev Month SAAR........................... | -3.2 | 7.2 | 10.5 | -7.8 | 3.5 | -3.8 | 3.0 | 5.2 | -0.9 | 7.5 | 4.7 | 7.5 | 7.9 | -0.5 | -1.5 | 3.2 |
| % Chg Same Month Last Yr....................... | 2.6 | 2.9 | 3.8 | 2.3 | 2.2 | 1.1 | 2.1 | 1.8 | 2.0 | 3.0 | 2.6 | 2.6 | 3.6 | -0.5 | -1.5 | 3.2 |
| Knoxville Nonag Employment (THOU) (3)............ | 290.3 | 288.9 | 289.2 | 290.0 | 290.9 | 289.0 | 289.2 | 290.4 | 287.8 | 290.9 | 292.3 | 293.4 | 293.5 | 269.9 | 274.7 | 287.0 |
| % Chg Prev Month SAAR........................... | 4.8 | -5.6 | 1.3 | 3.2 | 3.8 | -7.5 | 0.7 | 5.3 | -10.2 | 13.3 | 6.0 | 4.5 | 0.5 | 1.5 | 1.8 | 4.5 |
| % Chg Same Month Last Yr....................... | 3.9 | 3.2 | 2.3 | 2.7 | 2.6 | 0.8 | 0.9 | 0.8 | 0.5 | 2.1 | 1.7 | 1.4 | 1.1 | 1.5 | 1.8 | 4.5 |
| Knoxville Unemployment Rate (%) (3)............... | 5.0 | 5.4 | 5.6 | 6.2 | 5.5 | 5.8 | 5.8 | 5.5 | 5.5 | 5.1 | 5.0 | 5.1 | 4.7 | 4.9 | 5.7 | 5.7 |
| Knoxville Mfg Employment (THOU,NSA) (2)........... | 50.8 | 51.0 | 50.9 | 51.0 | 50.6 | 50.6 | 50.5 | 51.2 | 51.3 | 50.9 | 51.3 | 51.1 | 50.6 | 51.1 | 50.6 | 51.0 |
| % Chg Prev Month SAAR........................... | 4.8 | 4.8 | -2.3 | 2.4 | -9.0 | 0.0 | -2.3 | 18.0 | 2.4 | -9.0 | 9.8 | -4.6 | -11.1 | -1.5 | -1.0 | 0.9 |
| % Chg Same Month Last Yr....................... | -0.6 | -1.9 | -1.4 | -1.2 | -0.8 | -0.8 | -1.4 | -0.4 | -0.6 | 0.8 | 1.0 | 1.0 | -0.4 | -1.5 | -1.0 | 0.9 |
| Knoxville Taxable Sales (MIL $) (4)............... | 534 | 531 | 588 | 551 | 551 | 536 | 551 | 544 | 545 | 558 | 560 | 587 | 570 | 6307 | 6346 | 6584 |
| % Chg Prev Month SAAR........................... | -1.2 | -7.4 | 243.7 | -53.9 | -1.5 | -27.6 | 39.3 | -13.6 | 1.4 | 32.6 | 5.2 | 76.4 | -30.0 | 5.5 | 0.6 | 3.7 |
| % Chg Same Month Last Yr....................... | -1.8 | -2.7 | 8.0 | -7.4 | -1.1 | -3.0 | -0.1 | 3.4 | -2.8 | 5.7 | 6.5 | 9.9 | 6.8 | 5.5 | 0.6 | 3.7 |
| Knoxville Taxable Sales (MIL 82 $) (4)............ | 377 | 374 | 414 | 386 | 384 | 373 | 382 | 377 | 377 | 386 | 387 | 405 | 392 | 4826 | 4656 | 4690 |
| % Chg Prev Month SAAR........................... | -6.1 | -9.7 | 237.9 | -56.6 | -5.6 | -28.8 | 32.5 | -15.0 | 1.4 | 31.5 | 1.8 | 76.4 | -33.4 | 0.1 | -3.5 | 0.7 |
| % Chg Same Month Last Yr....................... | -4.9 | -5.6 | 4.9 | -10.2 | -4.2 | -5.9 | -3.3 | 0.2 | -5.6 | 2.8 | 3.6 | 7.0 | 4.0 | 0.1 | -3.5 | 0.7 |
| Knoxville Bankruptcies (7)....................... | 484 | 492 | 474 | 446 | 521 | 411 | 426 | 450 | 439 | 438 | 448 | 465 | 334 | 5376 | 6457 | 5944 |
| % Chg Prev Month SAAR........................... | 22.4 | 24.0 | -37.2 | -51.4 | 547.7 | -94.2 | 54.0 | 93.5 | -25.4 | -2.6 | 28.7 | 59.8 | -98.2 | 11.0 | 20.1 | -7.9 |
| % Chg Same Month Last Yr....................... | -6.5 | -6.0 | -12.2 | -11.9 | 3.2 | -17.9 | -20.4 | -3.8 | -19.1 | -9.3 | -6.5 | -2.1 | -31.0 | 11.0 | 20.1 | -7.9 |
| Knoxville Airport Passengers (THOU) (10).......... | 103.9 | 104.0 | 104.8 | 105.7 | 107.6 | 110.4 | 111.4 | 110.9 | 107.4 | 106.4 | 103.8 | 112.9 | 111.0 | 1162.8 | 1146.7 | 1254.3 |
| % Chg Prev Month SAAR........................... | -55.5 | 1.2 | 9.6 | 11.7 | 24.0 | 36.0 | 11.7 | -5.5 | -32.3 | -10.3 | -25.6 | 174.1 | -18.9 | 3.1 | -1.4 | 9.4 |
| % Chg Same Month Last Yr....................... | 5.6 | 7.9 | 3.4 | 8.5 | 8.8 | 14.9 | 19.1 | 15.4 | -7.8 | -11.5 | -7.0 | 1.6 | 6.8 | 3.1 | -1.4 | 9.4 |
| Knoxville Comm & Ind Elec Cons (MIL KWH) (5)...... | 178 | 176 | 178 | 177 | 179 | 190 | 177 | 180 | 182 | 184 | 185 | 186 | 179 | 1896 | 1911 | 2023 |
| % Chg Prev Month SAAR........................... | 92.6 | -16.8 | 15.6 | -6.7 | 18.9 | 103.3 | -56.9 | 19.9 | 13.3 | 13.8 | 7.0 | 8.4 | -35.2 | 2.7 | 0.8 | 5.8 |
| % Chg Same Month Last Yr....................... | 14.1 | 7.8 | 15.0 | 13.0 | 9.8 | 16.0 | 1.7 | 8.6 | 10.7 | 9.7 | 10.5 | 10.3 | 0.7 | 2.7 | 0.8 | 5.8 |
| Initial Claims For Knoxville UI (THOU) (3)........ | 3.98 | 3.67 | 3.82 | 4.35 | 3.94 | 4.15 | 3.77 | 3.83 | 3.65 | 3.74 | 3.79 | 3.94 | 3.96 | 56.07 | 63.32 | 50.41 |
| % Chg Prev Month SAAR........................... | -4.5 | -62.2 | 61.3 | 379.1 | -69.8 | 87.4 | -67.7 | 19.8 | -44.1 | 32.8 | 18.8 | 57.3 | 8.0 | 3.1 | 12.9 | -20.4 |
| % Chg Same Month Last Yr....................... | -25.3 | -26.5 | -20.7 | -8.4 | -12.4 | -7.8 | -18.6 | -9.1 | -10.4 | -9.7 | -8.8 | -1.4 | -0.4 | 3.1 | 12.9 | -20.4 |
| Knoxville New Incorporations (9).................. | 129 | 119 | 140 | 107 | 144 | 126 | 135 | 140 | 137 | 119 | 216 | 211 | 221 | 1344 | 1414 | 1510 |
| % Chg Prev Month SAAR........................... | 9.4 | -62.4 | 627.0 | -96.2 | 3594.1 | -80.7 | 135.9 | 51.4 | -22.0 | -81.6 | ******* | -25.3 | 80.3 | -3.9 | 5.2 | 6.8 |
| % Chg Same Month Last Yr....................... | 9.1 | -8.0 | 20.8 | -25.0 | 8.7 | -19.4 | 68.6 | -6.0 | 18.7 | 4.3 | 102.2 | 65.1 | 72.1 | -3.9 | 5.2 | 6.8 |
| Help Wanted Index,Knoxville (1967=100) (11)....... | 277 | 327 | 313 | 329 | 351 | 317 | 299 | 353 | 352 | 365 | 389 | 415 | 398 | 312 | 273 | 292 |
| % Chg Prev Month SAAR........................... | -81.6 | 632.5 | -40.8 | 81.9 | 117.4 | -70.6 | -50.4 | 633.2 | -3.3 | 54.5 | 114.7 | 117.4 | -39.5 | -2.6 | -12.4 | 6.8 |
| % Chg Same Month Last Yr....................... | 4.5 | 14.3 | 21.8 | 38.2 | 28.1 | 9.7 | 4.9 | 21.7 | 23.5 | 34.7 | 17.5 | 30.1 | 43.7 | -2.6 | -12.4 | 6.8 |
| Knoxville Construction Potentials (6)............ | 50 | 37 | 61 | 33 | 39 | 45 | 43 | 40 | 48 | 49 | 49 | 62 | 54 | 614 | 526 | 515 |
| % Chg Prev Month SAAR........................... | 6959.9 | -97.9 | 43725.5 | -99.9 | 793.0 | 415.3 | -38.3 | -55.7 | 713.5 | 35.0 | -10.1 | 1933.0 | -83.7 | 7.8 | -14.4 | -2.1 |
| % Chg Same Month Last Yr....................... | 24.2 | -13.4 | 33.3 | -27.4 | -18.6 | -12.5 | 11.6 | -14.1 | 25.5 | 12.1 | 127.8 | 76.5 | 6.4 | 7.8 | -14.4 | -2.1 |
| Knoxville Cnstr Potentials,Val (MIL 82 $) (6)..... | 55 | 38 | 50 | 30 | 42 | 31 | 26 | 32 | 36 | 39 | 40 | 51 | 38 | 459 | 391 | 456 |
| % Chg Same Month Last Yr....................... | 63.6 | 7.2 | 71.7 | -32.6 | 21.6 | -11.8 | -4.4 | 12.5 | -26.2 | 8.0 | 53.1 | 57.8 | -32.3 | -12.9 | -14.8 | 16.6 |

# TABLE 4.3

MEMPHIS ECONOMIC INDICATORS
SEASONALLY ADJUSTED

| | 199210 | 199211 | 199212 | 199301 | 199302 | 199303 | 199304 | 199305 | 199306 | 199307 | 199308 | 199309 | 199310 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Memphis Economic Index (1982=100) | 127.8 | 127.9 | 129.3 | 128.6 | 129.6 | 129.0 | 129.4 | 129.8 | 130.7 | 131.9 | 132.0 | 131.9 | 131.9 | 127.7 | 123.7 | 126.7 |
| % Chg Prev Month SAAR | 3.9 | 0.8 | 13.6 | -6.4 | 10.4 | -5.4 | 3.9 | 3.1 | 8.8 | 11.9 | 1.2 | -1.2 | 0.4 | -1.1 | -3.1 | 2.4 |
| % Chg Same Month Last Yr | 2.3 | 3.5 | 4.2 | 2.8 | 3.0 | 1.6 | 3.3 | 2.7 | 4.3 | 4.3 | 4.2 | 3.5 | 3.2 | -1.1 | -3.1 | 2.4 |
| Memphis Nonag Employment (THOU) (3) | 482.8 | 481.6 | 484.2 | 485.7 | 484.6 | 482.8 | 484.2 | 485.8 | 485.4 | 492.4 | 489.9 | 490.6 | 489.6 | 477.3 | 473.6 | 480.9 |
| % Chg Prev Month SAAR | -3.7 | -3.0 | 6.7 | 3.6 | -2.6 | -4.4 | 3.4 | 4.1 | -0.9 | 18.8 | -6.0 | 1.8 | -2.5 | 1.2 | -0.8 | 1.5 |
| % Chg Same Month Last Yr | 1.3 | 1.0 | 1.3 | 1.4 | 1.1 | 0.6 | 1.5 | 1.5 | 1.7 | 2.0 | 1.1 | 1.3 | 1.4 | 1.2 | -0.8 | 1.5 |
| Memphis Unemployment Rate (%) (3) | 5.3 | 5.5 | 5.5 | 6.0 | 5.7 | 5.8 | 6.2 | 5.5 | 5.4 | 5.2 | 5.0 | 5.1 | 4.9 | 4.6 | 5.7 | 5.7 |
| Memphis Mfg Employment (THOU) (3) | 60.1 | 60.1 | 60.9 | 60.7 | 60.3 | 60.2 | 60.3 | 60.4 | 60.1 | 60.9 | 60.3 | 60.9 | 61.1 | 62.3 | 59.7 | 60.2 |
| % Chg Prev Month SAAR | -4.8 | -1.5 | 19.4 | -5.0 | -7.5 | -2.1 | 2.7 | 2.3 | -7.3 | 18.7 | -12.2 | 13.3 | 4.5 | -0.5 | -4.2 | 0.8 |
| % Chg Same Month Last Yr | 0.1 | -0.1 | 1.9 | 1.1 | 0.6 | 0.5 | 1.1 | 0.4 | -0.4 | 0.5 | 0.6 | 0.9 | 1.6 | -0.5 | -4.2 | 0.8 |
| Memphis Taxable Sales (MIL $) (4) | 667 | 684 | 724 | 591 | 668 | 686 | 676 | 694 | 679 | 690 | 709 | 738 | 704 | 8038 | 8038 | 8062 |
| % Chg Prev Month SAAR | 28.4 | 36.1 | 98.3 | -91.3 | 339.4 | 37.1 | -16.1 | 37.4 | -22.9 | 20.1 | 38.1 | 61.6 | -42.6 | 5.2 | 0.0 | 0.3 |
| % Chg Same Month Last Yr | -2.4 | 3.1 | 5.0 | -16.5 | -4.2 | 2.2 | -1.2 | 20.8 | -3.5 | 6.2 | 9.9 | 13.0 | 5.7 | 5.2 | 0.0 | 0.3 |
| Memphis Taxable Sales (MIL 82 $) (4) | 470 | 482 | 509 | 413 | 466 | 478 | 469 | 481 | 471 | 477 | 489 | 509 | 484 | 6152 | 5898 | 5742 |
| % Chg Prev Month SAAR | 22.1 | 32.6 | 95.0 | -91.8 | 321.3 | 34.9 | -20.2 | 35.2 | -22.9 | 19.1 | 33.6 | 61.6 | -45.4 | -0.2 | -4.1 | -2.6 |
| % Chg Same Month Last Yr | -5.4 | 0.1 | 2.0 | -19.1 | -7.3 | -0.9 | -4.3 | 17.0 | -6.3 | 3.3 | 6.9 | 10.0 | 2.9 | -0.2 | -4.1 | -2.6 |
| Memphis Bankruptcies (7) | 1161 | 1203 | 1180 | 1100 | 1182 | 1215 | 1197 | 1134 | 1199 | 1083 | 1130 | 1142 | 1047 | 11906 | 14586 | 14240 |
| % Chg Prev Month SAAR | -57.5 | 53.2 | -20.9 | -56.9 | 136.6 | 39.6 | -16.4 | -48.1 | 96.7 | -70.6 | 65.7 | 13.9 | -64.9 | 13.2 | 22.5 | -2.4 |
| % Chg Same Month Last Yr | -11.0 | 8.5 | -7.6 | -5.9 | 1.5 | 0.6 | -1.8 | 0.4 | -2.8 | -10.1 | 1.0 | -8.4 | -9.9 | 13.2 | 22.5 | -2.4 |
| Memphis Airport Passengers (THOU) (12) | 626.7 | 645.9 | 681.1 | 696.7 | 693.2 | 688.4 | 680.7 | 647.3 | 620.3 | 631.6 | 603.0 | 652.6 | 615.7 | 8741.3 | 8167.6 | 8146.3 |
| % Chg Prev Month SAAR | -77.2 | 43.5 | 89.2 | 31.2 | -5.8 | -7.9 | -12.7 | -45.4 | -40.0 | 24.3 | -42.7 | 158.5 | -50.3 | -1.4 | -6.6 | -0.3 |
| % Chg Same Month Last Yr | -10.2 | -7.2 | -3.9 | 6.9 | 5.6 | 11.1 | 14.6 | 4.7 | -16.5 | -23.5 | -22.2 | -7.9 | -1.8 | -1.4 | -6.6 | -0.3 |
| Memphis Comm & Ind Elec Cons (MIL KWH) (5) | 513 | 525 | 545 | 441 | 496 | 574 | 540 | 505 | 502 | 576 | 524 | 539 | 527 | 5706 | 5838 | 6194 |
| % Chg Prev Month SAAR | 21.7 | 31.3 | 59.3 | -92.2 | 318.5 | 470.4 | -51.5 | -55.3 | -8.0 | 421.1 | -68.1 | 40.3 | -22.1 | 2.2 | 2.3 | 6.1 |
| % Chg Same Month Last Yr | -2.4 | 11.0 | 12.6 | -8.4 | 4.4 | 11.7 | 5.2 | -5.7 | -3.8 | 7.2 | -0.8 | 6.7 | 2.9 | 2.2 | 2.3 | 6.1 |
| Initial Claims For Memphis UI (THOU) (3) | 5.91 | 5.37 | 5.11 | 5.11 | 4.99 | 4.93 | 4.92 | 4.78 | 4.51 | 4.63 | 4.60 | 4.72 | 4.76 | 66.38 | 85.24 | 72.12 |
| % Chg Prev Month SAAR | 46.3 | -68.2 | -45.2 | -0.2 | -24.7 | -12.0 | -4.3 | -28.1 | -50.6 | 36.6 | -6.5 | 36.3 | 9.1 | 18.7 | 28.4 | -15.4 |
| % Chg Same Month Last Yr | -13.3 | -22.5 | -27.8 | -23.6 | -22.5 | -22.7 | -20.3 | -21.9 | -27.8 | -22.7 | -23.2 | -17.5 | -19.5 | 18.7 | 28.4 | -15.4 |
| Memphis New Incorporations (9) | 176 | 184 | 195 | 139 | 187 | 188 | 186 | 164 | 209 | 183 | 185 | 167 | 157 | 1950 | 1958 | 2007 |
| % Chg Prev Month SAAR | 9.7 | 62.9 | 108.3 | -98.4 | 3491.9 | 9.4 | -11.1 | -77.7 | 1680.4 | -79.4 | 9.7 | -70.3 | -53.7 | 3.2 | 0.4 | 2.5 |
| % Chg Same Month Last Yr | -0.9 | 21.3 | 15.2 | -16.4 | 3.5 | 0.4 | 57.1 | 0.6 | 39.9 | 15.9 | 20.6 | -4.7 | -11.3 | 3.2 | 0.4 | 2.5 |
| Help Wanted Index,Memphis (1967=100) (11) | 110 | 104 | 107 | 113 | 114 | 113 | 113 | 117 | 119 | 130 | 136 | 133 | 145 | 127 | 99 | 104 |
| % Chg Prev Month SAAR | 147.5 | -49.0 | 40.7 | 92.5 | 11.2 | -10.0 | 0.0 | 51.8 | 22.6 | 188.9 | 71.8 | -23.5 | 182.0 | -10.9 | -22.3 | 4.8 |
| % Chg Same Month Last Yr | 10.0 | 16.9 | 17.6 | 18.9 | 16.3 | 3.7 | 5.6 | 9.3 | 20.2 | 31.3 | 28.3 | 30.4 | 31.8 | -10.9 | -22.3 | 4.8 |
| Memphis Construction Potentials (6) | 58 | 50 | 64 | 53 | 61 | 57 | 47 | 62 | 50 | 61 | 59 | 65 | 51 | 535 | 467 | 662 |
| % Chg Prev Month SAAR | 934.7 | -83.4 | 2041.7 | -90.0 | 442.3 | -49.9 | -90.6 | 2573.1 | -91.7 | 855.8 | -26.9 | 192.8 | -93.8 | -12.1 | -12.7 | 41.6 |
| % Chg Same Month Last Yr | 42.0 | 12.8 | 59.2 | 6.9 | 17.0 | -10.5 | -29.5 | 16.5 | -20.9 | 16.0 | 43.4 | 36.6 | -10.9 | -12.1 | -12.7 | 41.6 |
| Memphis Cnstr Potentials,Val (MIL 82 $) (6) | 60 | 57 | 59 | 53 | 58 | 55 | 50 | 48 | 63 | 70 | 51 | 65 | 51 | 754 | 592 | 699 |
| % Chg Same Month Last Yr | 78.1 | 22.6 | 9.7 | -11.2 | 13.4 | -0.2 | -26.2 | -4.8 | -35.3 | 31.1 | 39.2 | 29.3 | -15.4 | -15.1 | -21.4 | 18.0 |

NASHVILLE EC[illegible] INDICATORS
SEASONA[illegible]USTED

| | 199210 | 199211 | 199212 | 199301 | 199302 | 199303 | 199304 | 199305 | 199306 | 199307 | 199308 | 199309 | 199310 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nashville Economic Index (1982=100)............. | 121.8 | 122.1 | 123.4 | 122.8 | 123.3 | 123.3 | 123.1 | 123.8 | 124.0 | 124.3 | 124.8 | 126.0 | 125.3 | 119.8 | 117.8 | 120.7 |
| % Chg Prev Month SAAR......................... | 4.6 | 3.4 | 14.1 | -6.1 | 5.5 | -0.8 | -1.7 | 7.1 | 1.8 | 3.4 | 4.4 | 12.0 | -6.3 | -1.4 | -1.7 | 2.5 |
| % Chg Same Month Last Yr...................... | 2.5 | 3.4 | 3.9 | 3.1 | 2.9 | 2.6 | 3.0 | 3.2 | 2.8 | 2.8 | 3.8 | 3.8 | 2.9 | -1.4 | -1.7 | 2.5 |
| Nashville Nonag Employment (THOU) (3)............ | 520.0 | 519.3 | 523.1 | 525.1 | 525.4 | 524.0 | 524.8 | 528.9 | 526.9 | 531.7 | 532.8 | 533.8 | 533.8 | 502.1 | 500.4 | 513.8 |
| % Chg Prev Month SAAR......................... | 1.1 | -1.6 | 9.0 | 4.9 | 0.6 | -3.1 | 1.7 | 9.8 | -4.5 | 11.6 | 2.5 | 2.4 | -0.1 | 1.0 | -0.3 | 2.7 |
| % Chg Same Month Last Yr...................... | 2.9 | 3.0 | 3.2 | 4.2 | 4.1 | 3.4 | 3.0 | 3.1 | 3.2 | 2.8 | 2.8 | 2.8 | 2.6 | 1.0 | -0.3 | 2.7 |
| Nashville Unemployment Rate (%) (3).............. | 4.5 | 4.6 | 4.6 | 4.9 | 4.5 | 4.6 | 4.8 | 4.3 | 4.3 | 4.1 | 4.0 | 3.9 | 3.6 | 4.0 | 5.0 | 5.0 |
| Nashville Mfg Employment (THOU,NSA) (2).......... | 91.5 | 91.8 | 91.5 | 92.1 | 91.7 | 92.4 | 92.1 | 92.2 | 92.0 | 91.3 | 91.0 | 91.5 | 91.9 | 88.4 | 86.9 | 90.3 |
| % Chg Prev Month SAAR......................... | 5.4 | 4.0 | -3.9 | 8.2 | -5.1 | 9.6 | -3.8 | 1.3 | -2.6 | -8.8 | -3.9 | 6.8 | 5.4 | -2.0 | -1.7 | 3.8 |
| % Chg Same Month Last Yr...................... | 4.5 | 4.3 | 4.1 | 3.8 | 3.1 | 3.5 | 2.7 | 3.6 | 1.7 | 1.1 | 0.2 | 0.4 | 0.4 | -2.0 | -1.7 | 3.8 |
| Nashville Taxable Sales (MIL $) (4).............. | 889 | 894 | 976 | 916 | 917 | 920 | 927 | 910 | 920 | 928 | 913 | 1019 | 951 | 9903 | 10220 | 10725 |
| % Chg Prev Month SAAR......................... | 21.9 | 7.3 | 185.3 | -53.1 | 2.0 | 3.1 | 9.8 | -19.5 | 14.0 | 10.9 | -18.1 | 275.6 | -56.3 | 1.3 | 3.2 | 4.9 |
| % Chg Same Month Last Yr...................... | 2.1 | 3.6 | 10.0 | 1.5 | -2.0 | 3.7 | 3.1 | 6.7 | -1.5 | 8.6 | 10.4 | 16.6 | 7.1 | 1.3 | 3.2 | 4.9 |
| Nashville Taxable Sales (MIL 82 $) (4)........... | 627 | 630 | 686 | 641 | 640 | 640 | 643 | 630 | 637 | 642 | 630 | 703 | 654 | 7577 | 7499 | 7639 |
| % Chg Prev Month SAAR......................... | 15.9 | 4.6 | 180.5 | -55.8 | -2.2 | 1.4 | 4.4 | -20.9 | 14.0 | 10.0 | -20.8 | 275.6 | -58.4 | -3.9 | -1.0 | 1.9 |
| % Chg Same Month Last Yr...................... | -1.1 | 0.5 | 6.9 | -1.6 | -5.1 | 0.6 | -0.1 | 3.4 | -4.4 | 5.6 | 7.4 | 13.5 | 4.3 | -3.9 | -1.0 | 1.9 |
| Nashville Bankruptcies (7)....................... | 843 | 817 | 831 | 714 | 850 | 853 | 900 | 855 | 908 | 863 | 781 | 906 | 729 | 11621 | 12266 | 10884 |
| % Chg Prev Month SAAR......................... | 32.8 | -31.4 | 22.6 | -83.7 | 708.7 | 3.9 | 91.3 | -46.4 | 107.5 | -45.8 | -70.0 | 498.4 | -92.6 | 4.1 | 5.6 | -11.3 |
| % Chg Same Month Last Yr...................... | -13.8 | -12.1 | -13.9 | -29.7 | -4.9 | -10.2 | -6.0 | -3.4 | -3.2 | -10.8 | -18.9 | 10.1 | -13.5 | 4.1 | 5.6 | -11.3 |
| Nashville Airport Passengers (THOU) (13).......... | 817.6 | 814.8 | 834.9 | 817.9 | 794.5 | 839.5 | 824.6 | 799.7 | 745.0 | 709.3 | 685.4 | 755.0 | 738.9 | 7395.8 | 8790.2 | 10226.2 |
| % Chg Prev Month SAAR......................... | -73.3 | -4.0 | 33.9 | -21.9 | -29.4 | 93.9 | -19.4 | -30.7 | -57.3 | -44.6 | -33.7 | 219.7 | -22.9 | -7.1 | 18.9 | 16.3 |
| % Chg Same Month Last Yr...................... | 12.6 | 6.1 | -5.4 | -0.9 | -2.3 | 9.1 | 5.4 | 5.7 | -16.1 | -32.4 | -28.8 | -17.3 | -9.6 | -7.1 | 18.9 | 16.3 |
| Nashville Comm & Ind Elec Cons (MIL KWH) (5)...... | 447 | 452 | 465 | 460 | 460 | 467 | 468 | 466 | 444 | 476 | 481 | 476 | 456 | 4922 | 4966 | 5203 |
| % Chg Prev Month SAAR......................... | 55.9 | 16.3 | 38.2 | -10.4 | -0.6 | 19.6 | 1.7 | -4.5 | -43.6 | 126.7 | 13.4 | -11.7 | -40.1 | 2.5 | 0.9 | 4.8 |
| % Chg Same Month Last Yr...................... | 8.2 | 8.9 | 5.9 | 9.9 | 10.1 | 10.3 | 11.9 | 5.9 | 4.9 | 10.7 | 10.0 | 10.5 | 2.0 | 2.5 | 0.9 | 4.8 |
| Initial Claims For Nashville UI (THOU) (3)........ | 6.83 | 6.21 | 5.84 | 5.43 | 5.26 | 5.26 | 5.30 | 5.38 | 5.39 | 5.80 | 5.67 | 5.35 | 5.17 | 83.39 | 105.60 | 86.23 |
| % Chg Prev Month SAAR......................... | 15.3 | -68.1 | -51.8 | -58.3 | -32.6 | -0.3 | 11.5 | 18.9 | 2.2 | 142.7 | -24.9 | -49.9 | -33.4 | 23.3 | 26.6 | -18.3 |
| % Chg Same Month Last Yr...................... | -11.4 | -26.1 | -29.3 | -34.2 | -36.0 | -34.8 | -28.8 | -28.0 | -26.5 | -15.8 | -18.1 | -20.7 | -24.3 | 23.3 | 26.6 | -18.3 |
| Nashville New Incorporations (9).................. | 255 | 274 | 361 | 257 | 287 | 250 | 263 | 238 | 283 | 280 | 279 | 287 | 284 | 3053 | 3024 | 3295 |
| % Chg Prev Month SAAR......................... | -73.7 | 134.9 | 2652.7 | -98.3 | 287.7 | -81.5 | 90.4 | -71.1 | 704.9 | -9.4 | -4.6 | 40.5 | -11.0 | 2.2 | -0.9 | 8.9 |
| % Chg Same Month Last Yr...................... | -12.4 | 13.4 | 45.9 | -7.0 | 3.9 | -15.4 | 13.4 | -2.9 | 17.2 | -0.7 | 2.6 | 0.8 | 11.6 | 2.2 | -0.9 | 8.9 |
| Help Wanted Index,Nashville (1967=100) (14)....... | 189 | 201 | 199 | 193 | 208 | 216 | 186 | 217 | 228 | 233 | 238 | 240 | 245 | 187 | 158 | 180 |
| % Chg Prev Month SAAR......................... | 9.8 | 103.1 | -13.1 | -27.6 | 146.0 | 56.9 | -83.6 | 527.1 | 79.0 | 33.0 | 30.4 | 6.6 | 30.6 | -13.7 | -15.0 | 13.6 |
| % Chg Same Month Last Yr...................... | 23.1 | 26.7 | 20.5 | 19.3 | 23.6 | 14.9 | 21.1 | 23.0 | 25.9 | 34.3 | 32.2 | 27.5 | 29.3 | -13.7 | -15.0 | 13.6 |
| Nashville Construction Potentials (6)............ | 108 | 94 | 95 | 88 | 81 | 91 | 100 | 101 | 109 | 112 | 130 | 125 | 107 | 1222 | 1104 | 1205 |
| % Chg Prev Month SAAR......................... | 228.4 | -79.8 | 8.7 | -63.0 | -59.5 | 317.5 | 185.1 | 20.7 | 152.2 | 24.7 | 549.7 | -41.6 | -83.1 | -12.0 | -9.7 | 9.2 |
| % Chg Same Month Last Yr...................... | 26.4 | 20.4 | 11.3 | -10.1 | -28.4 | -9.1 | 6.8 | 8.6 | 5.3 | -3.2 | 40.3 | 27.5 | -0.4 | -12.0 | -9.7 | 9.2 |
| Nashville Cnstr Potentials,Val (MIL 82 $) (6)..... | 154 | 84 | 81 | 90 | 76 | 80 | 80 | 75 | 80 | 84 | 54 | 121 | 65 | 880 | 862 | 1111 |
| % Chg Same Month Last Yr...................... | 103.2 | 27.0 | 34.9 | 25.8 | -7.9 | -8.3 | 16.8 | -4.1 | -43.6 | 5.9 | -46.8 | 44.7 | -57.6 | -18.7 | -2.0 | 28.9 |

# TABLE 4.5

TRI-CITIES ECONOMIC INDICATORS
SEASONALLY ADJUSTED

| | 199210 | 199211 | 199212 | 199301 | 199302 | 199303 | 199304 | 199305 | 199306 | 199307 | 199308 | 199309 | 199310 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tri-Cities Economic Index (1982=100)............. | 118.8 | 118.6 | 119.7 | 119.8 | 119.5 | 119.7 | 120.5 | 120.1 | 118.8 | 119.0 | 118.7 | 119.0 | 120.4 | 117.3 | 115.5 | 118.2 |
| % Chg Prev Month SAAR.......................... | -4.4 | -2.0 | 11.1 | 1.3 | -3.2 | 2.2 | 8.7 | -4.0 | -12.5 | 2.5 | -3.4 | 3.3 | 15.4 | -0.1 | -1.5 | 2.4 |
| % Chg Same Month Last Yr....................... | 1.8 | 1.9 | 3.0 | 2.8 | 1.6 | 1.4 | 3.0 | 1.5 | 0.6 | 0.0 | 0.7 | -0.2 | 1.4 | -0.1 | -1.5 | 2.4 |
| Tri-Cities Nonag Employment (THOU) (3)........... | 178.9 | 176.9 | 176.9 | 178.2 | 178.1 | 176.4 | 177.0 | 176.8 | 174.2 | 175.2 | 175.2 | 175.5 | 175.7 | 174.0 | 175.2 | 177.4 |
| % Chg Prev Month SAAR.......................... | 2.1 | -12.6 | 0.1 | 9.1 | -0.8 | -10.8 | 4.4 | -1.7 | -16.4 | 7.6 | 0.0 | 1.8 | 1.7 | 3.0 | 0.7 | 1.2 |
| % Chg Same Month Last Yr....................... | 1.2 | 0.4 | 0.0 | 1.3 | 1.1 | -0.7 | 0.3 | -0.8 | -2.2 | -1.5 | -1.5 | -1.7 | -1.8 | 3.0 | 0.7 | 1.2 |
| Tri-Cities Unemployment Rate (%) (3)............. | 5.4 | 5.6 | 5.6 | 6.1 | 5.3 | 5.6 | 5.9 | 5.9 | 5.7 | 5.6 | 5.4 | 5.4 | 5.4 | 4.6 | 5.6 | 5.8 |
| Tri-Cities Mfg Employment (THOU,NSA) (2).......... | 53.7 | 53.2 | 53.6 | 53.3 | 53.2 | 53.2 | 53.5 | 53.4 | 53.3 | 53.4 | 53.9 | 53.5 | 53.4 | 54.6 | 53.6 | 54.2 |
| % Chg Prev Month SAAR.......................... | -14.4 | -10.6 | 9.4 | -6.5 | -2.2 | 0.0 | 7.0 | -2.2 | -2.2 | 2.3 | 11.8 | -8.6 | -2.2 | 0.9 | -1.8 | 1.0 |
| % Chg Same Month Last Yr....................... | 0.4 | 0.0 | -1.1 | -1.1 | -1.1 | -1.8 | -1.1 | -2.7 | -2.7 | -2.6 | -1.5 | -1.7 | -0.6 | 0.9 | -1.8 | 1.0 |
| Tri-Cities Taxable Sales (MIL $) (4).............. | 229 | 227 | 232 | 227 | 232 | 226 | 240 | 238 | 231 | 235 | 230 | 241 | 235 | 2582 | 2636 | 2771 |
| % Chg Prev Month SAAR.......................... | -8.1 | -7.4 | 28.1 | -23.4 | 29.0 | -27.3 | 107.9 | -9.9 | -31.4 | 23.7 | -21.2 | 71.7 | -27.0 | 3.9 | 2.1 | 5.1 |
| % Chg Same Month Last Yr....................... | 2.2 | 0.6 | 7.9 | -3.1 | -4.6 | -2.4 | 3.5 | 3.1 | -2.0 | 2.5 | 6.8 | 4.4 | 2.4 | 3.9 | 2.1 | 5.1 |
| Tri-Cities Taxable Sales (MIL 82 $) (4)........... | 162 | 160 | 163 | 159 | 162 | 157 | 166 | 165 | 160 | 162 | 159 | 166 | 161 | 1975 | 1934 | 1974 |
| % Chg Prev Month SAAR.......................... | -12.7 | -9.7 | 25.9 | -27.8 | 23.7 | -28.5 | 97.8 | -11.4 | -31.4 | 22.7 | -23.8 | 71.7 | -30.5 | -1.4 | -2.1 | 2.0 |
| % Chg Same Month Last Yr....................... | -1.0 | -2.3 | 4.8 | -6.0 | -7.6 | -5.4 | 0.3 | -0.1 | -4.9 | -0.3 | 3.8 | 1.7 | -0.2 | -1.4 | -2.1 | 2.0 |
| Tri-Cities Bankruptcies (7)...................... | 484 | 492 | 474 | 446 | 521 | 411 | 426 | 450 | 439 | 438 | 448 | 465 | 334 | 5376 | 6457 | 5944 |
| % Chg Prev Month SAAR.......................... | 22.4 | 24.0 | -37.2 | -51.4 | 547.7 | -94.2 | 54.0 | 93.5 | -25.4 | -2.6 | 28.7 | 59.8 | -98.2 | 11.0 | 20.1 | -7.9 |
| % Chg Same Month Last Yr....................... | -6.5 | -6.0 | -12.2 | -11.9 | 3.2 | -17.9 | -20.4 | -3.8 | -19.1 | -9.3 | -6.5 | -2.1 | -31.0 | 11.0 | 20.1 | -7.9 |
| Tri-Cities Airport Passengers (THOU) (15)......... | 38.6 | 37.9 | 37.9 | 37.0 | 37.8 | 37.3 | 37.2 | 36.9 | 36.3 | 36.5 | 35.5 | 39.1 | 37.7 | 430.5 | 425.8 | 469.4 |
| % Chg Prev Month SAAR.......................... | -49.6 | -20.6 | 0.5 | -24.6 | 27.7 | -15.9 | -3.5 | -7.2 | -19.2 | 6.3 | -28.2 | 222.2 | -36.2 | -2.7 | -1.1 | 10.2 |
| % Chg Same Month Last Yr....................... | 5.4 | 6.3 | -4.5 | -0.9 | 1.0 | 0.9 | 3.7 | -1.9 | -14.0 | -18.8 | -15.0 | -4.5 | -2.6 | -2.7 | -1.1 | 10.2 |
| Tri-Cities Comm & Ind Elec Cons (MIL KWH) (5)..... | 49 | 53 | 53 | 53 | 49 | 53 | 53 | 54 | 55 | 53 | 57 | 53 | 55 | 518 | 539 | 596 |
| % Chg Prev Month SAAR.......................... | -50.9 | 163.8 | -3.4 | -2.2 | -60.3 | 121.8 | 19.3 | 5.8 | 28.8 | -34.4 | 119.2 | -48.4 | 30.4 | 1.2 | 4.1 | 10.5 |
| % Chg Same Month Last Yr....................... | 6.9 | 16.4 | 6.9 | 16.1 | 6.1 | 12.4 | 11.4 | 9.2 | 7.4 | 5.5 | 14.1 | 2.2 | 10.9 | 1.2 | 4.1 | 10.5 |
| Initial Claims For Tri-Cities UI (THOU) (3)....... | 2.64 | 2.69 | 2.45 | 2.32 | 2.07 | 2.24 | 2.17 | 2.20 | 2.61 | 2.62 | 3.09 | 2.95 | 2.85 | 28.33 | 36.00 | 32.32 |
| % Chg Prev Month SAAR.......................... | 134.4 | 24.9 | -68.4 | -46.9 | -75.3 | 162.4 | -29.5 | 13.0 | 676.4 | 7.5 | 617.1 | -43.1 | -32.3 | 9.6 | 27.1 | -10.2 |
| % Chg Same Month Last Yr....................... | -9.2 | -3.2 | -21.8 | -28.8 | -28.7 | -20.9 | -23.9 | -22.9 | -3.9 | 16.2 | 27.7 | 19.7 | 7.9 | 9.6 | 27.1 | -10.2 |
| Tri-Cities New Incorporations (9)................ | 44 | 41 | 44 | 38 | 47 | 40 | 27 | 37 | 29 | 36 | 38 | 43 | 32 | 413 | 438 | 457 |
| % Chg Prev Month SAAR.......................... | 7735.9 | -57.4 | 157.4 | -84.5 | 1344.8 | -83.7 | -99.3 | 4641.1 | -93.5 | 939.6 | 135.8 | 336.5 | -97.7 | 2.3 | 5.8 | 4.5 |
| % Chg Same Month Last Yr....................... | 12.3 | 15.5 | 7.3 | -29.2 | 55.7 | 7.5 | -22.7 | 14.8 | -24.4 | -5.7 | 12.6 | 43.6 | -27.2 | 2.3 | 5.8 | 4.5 |
| Tri-Cities Construction Potentials (6)........... | 19 | 14 | 21 | 23 | 20 | 19 | 27 | 15 | 24 | 25 | 19 | 17 | 20 | 235 | 272 | 233 |
| % Chg Prev Month SAAR.......................... | -91.0 | -97.7 | 11131.2 | 351.4 | -84.5 | -27.7 | 4804.8 | -99.9 | 18182.8 | 113.0 | -95.9 | -69.0 | 476.4 | -10.6 | 15.5 | -14.3 |
| % Chg Same Month Last Yr....................... | -28.4 | -52.5 | 0.8 | -2.3 | 13.8 | -12.9 | 79.5 | -38.8 | 55.1 | 19.3 | 20.3 | -25.0 | 6.1 | -10.6 | 15.5 | -14.3 |
| Tri-Cities Cnstr Potentials,Val (MIL82 $,NSA) (6). | 23 | 10 | 19 | 19 | 12 | 18 | 15 | 13 | 40 | 18 | 13 | 35 | 17 | 225 | 236 | 258 |
| % Chg Same Month Last Yr....................... | -5.5 | -26.3 | 32.4 | -69.9 | -3.1 | -9.4 | -6.1 | -64.0 | 156.1 | 17.8 | -3.4 | 130.4 | -23.3 | -31.1 | 4.8 | 9.4 |

## 2. Methodology of Index Construction

In the construction of the regional indexes, the method used for the state indexes has been followed, and this method adheres closely to BEA procedures for constructing the national indexes. However, some modification of this method was required because of difficulties in obtaining satisfactory data at the Metropolitan Statistical Area level of aggregation. Also, BEA's modified method for compiling the national composite indexes has been introduced for both the state and regional indexes. This modified method was implemented by BEA with the release of the national composite indexes for October, 1993 (published in the December, 1993 issue of BEA's *Survey of Current Business*) and should lead to improved signals of turning points in economic activity as reflected in the national, state, and regional indexes.

This section is organized into five subsections. Subsection 1 provides an overview of the BEA method for constructing the national composite indicator indexes and the adjustments made to this method by CBER to compile the state composite indexes. Subsection 2 outlines the BEA's modified method for computing the national composite indexes. Subsection 3 describes the data limitations confronted in compiling regional composite indexes and the consequent adjustments made to the state index method for use at the MSA level. The final MSA economic indexes are presented in Subsection 4, along with some guidance for their interpretation and use. Subsection 5 concludes the chapter.

### 2.1. Construction of Composite Indexes[2]

Since the purpose of the composite indexes is to signal turning points in cyclical economic activity, the first step in constructing the indexes is to identify these turning points. For the national economy, cyclical peaks and troughs are officially designated by the National Bureau of Economic Research (NBER). To date the business cycle, NBER evaluates a wide array of economic time series encompassing all sectors of the economy and subjectively determines when the majority of activity over these sectors has changed direction. The indexes of coincident, leading and lagging indicators then are designed to give appropriate signals of these designated turning points.

An alternative method for dating the business cycle is to use a reference series, a single economic time series that provides a broad measure of

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For more detailed and algebraic descriptions of the BEA method, see "Composite Indexes of Leading, Coincident, and Lagging Indicators: A Brief Explanation of Their Construction," *Handbook of Cyclical Indicators*, 1984; and, George R. Green and Barry A. Beckman, "The Composite Index of Coincident Indicators and Alternative Coincident Indexes," *Survey of Current Business*, June 1992.

economic activity. The cyclical patterns in this broad measure are then used to date turning points in the economy. For the national economy, cyclical patterns in real gross domestic product could be used to date business cycle peaks and troughs, providing a more objective determination than the NBER method described above. However, since real GDP is a summary statistic, it does not reveal the underlying cyclical patterns in sectoral economic activity that would be apparent if a variety of economic variables were examined. Thus there is a trade-off between objectivity and scope in choosing one approach for dating business cycles over the other.

CBER has chosen the more objective reference series approach to define business cycle peaks and troughs for the state economy. Since the broadest measure of state economic activity–real gross state product for Tennessee–is available only on an annual basis, Tennessee real personal income less transfer payments is used as the reference series for the state composite indexes. This series differs from gross state product in that it includes inflows and outflows of income to the Tennessee economy, and individuals' interest and dividend income, but excludes depreciation, business taxes, transfers, and interest, and corporate profits.

To define the state business cycles, turning points in the reference series are established using a procedure outlined by Ilse Mintz in "Dating United States Growth Cycles," *Explorations in Business Cycle Research, Occasional Papers of NBER*, Vol. 1, No. 1, Summer 1974. In brief, this procedure looks at turns identified in a twelve-month moving average and compares these turns to those identified by less smooth moving averages. Potential turning points are then accepted or rejected based on a specific set of rules until final dates are determined. The state leading and coincident indexes are then designed to signal these turning points. Because CBER uses the reference series approach, it must be noted that the state indexes provide information about actual and potential changes in the level of real nontransfer personal income and are generalizable to overall economic activity only to the extent that the reference series is an accurate reflection of aggregate economic activity in the state.

Once these turning points have been identified, the next step is to gather a set of candidate economic indicators and compare the timing of the cyclical turning points in these indicators to the turning points defined above. To give an accurate signal, each of the composite indexes must be comprised of economic variables that display similar timing at business cycle peaks and troughs but are representative of diverse economic activities. Those indicators that tend to lead, coincide with, or lag economic turning points are then compiled into separate leading, coincident, and lagging indexes. These indexes should then provide a better signal of direction hanges in economic activity than any single indicator series because the road coverage of the indicators included should help dampen random variations in some of the component series. For construction of the national indexes, BEA evaluates 113 different candidate variables from seven different economic process categories and each is assigned a "series score" based on the degree to which these seven criteria are met: (1) cyclical timing, (2) economic significance, (3) statistical adequacy, (4) conformity to business cycles, (5) smoothness, (6) prompt availability, and (7) revisions.[3] Currently the eleven highest scoring leading indicators are included in the U. S. leading index and the four highest scoring coincident indicators in the U. S. coincident index.

After selecting appropriate indicator variables for inclusion, these indicators are aggregated into the respective indexes via the following procedure. This discussion is extracted from the sources in footnote 2.

### Step 1: Standardization and Weighting of the Components

A) Symmetrical month-to-month percent changes are computed for each component series to insure identical treatment of positive and negative monthly changes.

B) Standardization factors are computed for each component series over a predefined time period. These factors are calculated by dividing each of the monthly percent changes computed above by the average of their absolute values over the standardization period. This forces the average of the absolute values of these percent changes equal to one. Dividing the monthly changes in each component by these standardization factors prevents more volatile components from dominating the index.

C) A weighted average of the standardized changes calculated in (B) is computed with each component's weight being determined by its "series score" described above.

### Step 2: Standardization and Cumulation of the Index

A) To ensure the usefulness of the indexes as a coherent system, each index is standardized using a procedure similar to step 1 (B). For this step, each of the weighted average monthly changes from step 1 (C) are divided by a standardization factor calculated as the ratio of the average of their absolute values over the standardization period to the corresponding

3. For a list of variables evaluated by BEA and their scores, see the *Handbook of Cyclical Indicators*, 1984.

average for the coincident index. This step equates the long-run average monthly changes in all indexes to that of the coincident index.

B) These standardized average changes are then cumulated into raw indexes by assigning a value of 100 for the initial month. The value for the second month is then calculated by applying the standardized average change from step 2 (A) between months one and two to the assumed month-one value of 100. Values for subsequent months are computed by sequentially applying the standardized average change for the month to the raw index value for the previous month.

**Step 3: Conversion to a Base Year**

Each index is then converted to a base year by dividing each monthly value by the average value of the index in the base year and multiplying by 100. This base year is periodically revised to maintain the currency of the index and facilitate comparison of monthly values over short historical periods.

Prior to December 1993, the BEA procedure outlined above also included a trend adjustment procedure in which the trends in the three composite indexes were adjusted to be equal to the average of the trends of the components of the national coincident index. For the state indexes, CBER used a similar technique except that the trend in the state reference series was used as the target trend instead of the components of the state composite index. The modified method described below eliminates the need for this adjustment procedure.

In constructing the state indexes, data limitations forced some slight modifications of the BEA procedure. First, although candidate indicator variables were sought that meet the seven NBER criterion, no scoring system was used because of the limited availability of state level indicators that meet all of these criterion. Thus all candidate indicators that satisfactorily meet the criterion and display the necessary cyclical behavior to qualify as a leading or coincident indicator received equal weight in the appropriate state index. Unlike the procedure for the U.S., no Tennessee lagging index is compiled, once again because of data limitations and the limited usefulness of lagging indexes. Second, because the state reference series, real nontransfer personal income, is available only on a quarterly basis, definitions of leading and coincident behavior for the monthly indicators had to be modified. A series was defined as a leading indicator if its monthly turning points generally occurred in or before the quarter prior to the cyclical turning points in the reference series. Similarly, a series was defined as a coincident indicator if its turning points generally occurred in the same quarter as those in the reference series. Finally, while BEA once standardized both its leading and lagging indexes to the national composite index, the state leading and coincident composite indexes were both standardized to the state reference series to ensure that these indexes, along with Tennessee real nontransfer personal income, would perform as a coherent system of cyclical indicators for the state. With the implementation of BEA's modified method for the state indexes, however, this difference has since been eliminated.

### 2.2. Modified Method for Constructing Composite Indexes

Historically the national index of coincident indicators has performed quite well in identifying turning points in the business cycle. In all but one of the last eight cycles, turning points in the national coincident index occurred in the same quarter as or an adjacent quarter to the turning points designated by NBER. In the most recent recession, however, while the peak in July 1990 was correctly identified, the trough in the coincident index lagged the designated trough in the economy by ten months. According to the NBER designation, the recession ended in March 1991, but the coincident index did not reach a trough until January 1992.

This error can be traced to a flaw in the BEA method that became apparent only because of the unique nature of the recovery phase of the most recent cycle. In the past, recessions were followed by periods of relatively rapid economic growth which were captured by rapid and sustained growth in the coincident index components. After the last trough, however, these components showed an extended period of very slow growth. The problem with the original BEA method is that the cyclical and trend parts of each of the component indicators are given different weights in the index, the cyclical part being weighted more heavily than the trend because of the past behavior of the components. In periods of slow growth in the components, like that following the March 1991 trough, this weighting procedure does not produce a clear signal of the turning point. Specifically, the coincident index failed to correctly identify the last trough because the most heavily weighted components–employment and income–did not experience the strong cyclical growth (marginal monthly changes much larger than average monthly changes) that they did following past recessions. Thus the cyclical behavior of the index was dampened and no clear turning point could be identified until January 1992, despite the fact that the two other components of the index showed cyclical lows in earlier months. Industrial production and manufacturing and trade sales reached troughs in March 1991 and January 1991, respectively.

The modified method, suggested by James Stock and Mark Watson, removes this flaw by using identical weights for the trend and cyclical parts of the component indicators and forcing the sum of these weights equal to one.[4] As noted above, this revised method eliminates the need for trend adjustment of the indexes. George R. Green and Barry A. Beckman provide an algebraic description of this method (ibid., fn. 2). A similar discussion appears in the December 1993 issue of the same publication. It should be noted that this modified procedure applies to leading and lagging indexes as well as the coincident index, since they too are subject to the flaw discussed above.

## 2.3. Special Considerations in Constructing MSA Composite Indicator Indexes

The counties included in each Tennessee MSA, as defined in 1992 by the U. S. Office of Management and Budget, are listed in Table 4.6. These definitions have changed over time, and CBER has used various statistical techniques to adjust data in an effort to produce time-consistent data that meet these latest definitions.

While some data for these MSA regions are tabulated by state and federal agencies, other data for candidate indicator variables is available only from local sources. This limited data availability induced several compromises in the construction of MSA indexes. First, the smaller Jackson and Clarksville-Hopkinsville MSAs were not included in the analysis. Second, an alternative reference series had to be used to define turning points for the regional economies. Data on personal income for the MSA regions are available only annually, making it impossible to determine cyclical behavior from any income-based data. Third, as mentioned at the outset, only a "mildly leading" index for each MSA was constructed, as the statistical analysis revealed inadequate data to construct separate leading and coincident indexes.

The broadest measure of economic activity available on a timely basis for the MSA regions is total nonagricultural employment, so this series was used as a reference series to define approximate turning points for the Tennessee regions. Total nonagricultural employment, however, cannot be strictly interpreted as a reference series because of its limited scope. In particular, no wage or unearned income information is reflected in employment data. Essentially, the employment data serve as a proxy for some

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4. See the research memorandum, "An Anomaly in the Trough of the Department of Commerce Coincident Index," May 14, 1992, presented to the NBER Business Cycle Dating Committee. This memo is available from NBER.

TABLE 4.6
Counties Included in 1992 MSA Definitions

**Chattanooga MSA**
Tennessee: Hamilton, Marion
Georgia: Catoosa, Dade, Walker

**Clarksville-Hopkinsville MSA**
Tennessee: Montgomery
Kentucky: Christian

**Jackson MSA**
Madison

**Johnson City-Kingsport-Bristol (Tri-Cities) MSA**
Tennessee: Carter, Hawkins, Sullivan, Unicoi, Washington
Virginia: Scott, Washington, Bristol City

**Knoxville MSA**
Anderson, Blount, Knox, Loudon, Sevier, Union

**Memphis MSA**
Tennessee: Fayette, Shelby, Tipton
Arkansas: Crittenden
Mississippi: DeSoto

**Nashville-Davidson MSA**
Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner, Williamson, Wilson

broad but unobservable variable that measures the health of the regional economy.

Because MSA employment is only a proxy for regional economic cycles, a less strict evaluation of candidate indicator variables was warranted. A candidate series was designated a leading variable if the majority of its turning points led turning points in MSA total nonagricultural employment by a reasonable margin. A candidate series was designated a coincident variable if the majority of its turning points occurred in the same three-month window as total nonagricultural employment in the MSA. Furthermore, because total MSA nonagricultural employment meets the seven criteria for a candidate indicator, these data were also considered as candidate indicators for the indexes. Since the composite indexes are designed to give better signals of cyclical economic behavior than could be determined from observing a variety of separate indicators, exclusion from consideration of a variable as important as employment could not be justified. A list of indicators considered and the results of their evaluation appears in the next subsection.

To make the regional economic indexes an integral part of the overall system of indicator indexes for the state, the regional indexes are standardized in step 2 (A) above to the Tennessee coincident index. As mentioned above, in revising the procedure used for compiling the state indexes to incorporate the new BEA method, this standardization technique has also been applied to the state leading and coincident indicator indexes. Thus all of the composite indicator indexes produced by CBER are now standardized to the Tennessee coincident indicator index.

## 2.4. Overview of the MSA Economic Indicator Indexes

A comparison of turning points in nonagricultural employment for each MSA with the cyclical turns identified for the state by Tennessee nontransfer personal income gives a rough indication of how each region fared during the last four business cycles. With the exception of the Tri-Cities MSA, the regional turning points defined using MSA nonagricultural employment as the reference series are quite close to the turning points defined for the state economy. As Table 4.7 shows, peaks and troughs in the regional economies led or lagged corresponding turns in the state economy by at most three quarters, again excluding the Tri-Cities MSA. For the Tri-Cities, historical employment data are unavailable before 1977, so only three business cycles can be defined. The available data show, however, that the Tri-Cities economy peaked and troughed well after the state economy in both the 1979 and 1981 recessions, while its behavior during the 1990 recession was much closer to that of the state and the other regions.

A list of indicators considered for the MSA economic indexes and their status appears in Table 4.8. Where applicable, these variables were adjusted for seasonal variations and inflation. The letters in parentheses indicate that the variable was included in the economic index for the region indicated.

Three of the candidate indicators evaluated–initial claims for unemployment insurance, total nonagricultural employment, and the Tennessee index of leading indicators–appear in the economic indexes for all five regions. While some degree of cyclical behavior could be identified in all of the variables considered, in most cases variables were excluded from the economic indexes because of high volatility or as the result of false or inconsistent signals of the turning points defined for the regions.

Figures 4.1-4.5, given at the beginning of this chapter, show the behavior of the final economic indexes relative to the business cycles defined for the regions. These plots were done on a quarterly basis to illustrate the

TABLE 4.7
Business Cycles in State and Regions Compared to
Specific Turning Point Dates for the State and Regional Economies

**National**[1]

| Peak Date Year/Quarter/Month | | Trough Date Year/Quarter/Month | |
|---|---|---|---|
| 1973 III | (Nov) | 1975 I | (Mar) |
| 1980 I | (Jan) | 1980 III | (Jul) |
| 1981 III | (Jul) | 1982 IV | (Nov) |
| 1990 III | (Jul) | 1991 I | (Mar) |

**State**

| Year/Quarter | Year/Quarter |
|---|---|
| 1973 IV | 1975 I |
| 1979 I | 1980 III |
| 1981 III | 1982 III |
| 1990 III | 1991 I |

**Regions***

| Region | Year/Quarter/Month | | | Year/Quarter/Month | | |
|---|---|---|---|---|---|---|
| **Chattanooga (C)** | | | | | | |
| | 1974 I | (Mar) | (-1) | 1975 II | (Apr) | (-1) |
| | 1979 I | (Feb) | (0) | 1980 III | (Aug) | (0) |
| | 1981 III | (Aug) | (0) | 1982 III | (Aug) | (0) |
| | 1990 II | (Jun) | (+1) | 1991 I | (Mar) | (0) |
| **Knoxville (K)** | | | | | | |
| | 1974 III | (Aug) | (-3) | 1975 II | (May) | (-1) |
| | 1979 II | (Jun) | (-1) | 1980 II | (Jun) | (+1) |
| | 1982 II | (Jun) | (-3) | 1982 IV | (Dec) | (-1) |
| | 1990 II | (Jun) | (+1) | 1990 IV | (Oct) | (+1) |
| **Nashville (N)** | | | | | | |
| | 1974 II | (Jun) | (-2) | 1975 II | (Jun) | (-1) |
| | 1979 IV | (Nov) | (-3) | 1980 III | (Jul) | (0) |
| | 1981 IV | (Oct) | (-1) | 1982 III | (Aug) | (0) |
| | 1990 II | (May) | (+1) | 1991 I | (Feb) | (0) |
| **Memphis (M)** | | | | | | |
| | 1974 II | (Apr) | (-2) | 1975 III | (Jul) | (-2) |
| | 1979 III | (Aug) | (-2) | 1980 III | (Sep) | (0) |
| | 1981 I | (Mar) | (+2) | 1982 III | (Sep) | (0) |
| | 1990 II | (Jun) | (-1) | 1991 I | (Feb) | (0) |
| **Tri-Cities (TC)** | | | | | | |
| | 1980 IV | (Nov) | (-7) | 1981 IV | (Oct) | (-5) |
| | 1982 IV | (Oct) | (-5) | 1983 II | (Jun) | (-3) |
| | 1990 II | (Jun) | (+1) | 1990 IV | (Oct) | (+1) |

1. See *Survey of Current Business*, Bureau of Economic Analysis, April 1993.

*A positive (negative) number in parentheses indicates the number of quarters before (after) the turning point in the state economy.

TABLE 4.8
Candidate Indicators for the Regional Leading Indexes by Economic Activity Category

**Fixed Capital Investment**
- New Business Incorporations (M)
- Home Sales
  - Number
  - Value
- Construction Potentials
  - Number (N)
  - Value

**Industrial Production**
- Large (> 50 KwH/month) Commercial and Industrial Electricity Use
  - Number of Bills
  - KwH Consumed (C, TC)

**Consumption/Income**
- Bankruptcies (C, K, TC)
- Taxable Sales
  - Overall (C, K, N, TC)
  - Lodging
- Tourism
  - National Park Recreational Visits
  - Airport Arriving and Departing Passengers (C)

**Employment**
- Initial Claims for Unemployment Insurance (C, K, N, M, TC)
- Help Wanted Index (K, N, M)
- Total Non-Agricultural Employment (C, K, N, M, TC)

**Relationship to Overall Economic Activity**
- National Index of Leading Indicators
- Tennessee Index of Leading Indicators (C, K, N, M, TC)

turning points. For each region, cyclical turns in the respective composite economic index either lead or coincide with the peaks and troughs identified above. The occasional coincident behavior is due to the compromises imposed by limited data availability. First, recall that MSA total nonagricultural employment was used both to define regional economic cycles and as a component in the indexes. This builds some coincident behavior into the MSA indexes and reinforces the need to interpret the defined turning points for the regions as proxies for actual turning points in economic activity because of the limited scope of the reference series. Second, some of the components included do not always lead but were included anyw because their overall behavior was reasonably consistent across turn points. Thus the MSA indicator indexes must be interpreted as mildly leading indicators for the unobservable cyclical patterns in the regional economies.

In interpreting the future behavior of these indexes (or any other composite index) as signals of directional changes in economic activity, some sort of decison rule must be followed. For the state leading index, a "three-month" criterion is used such that, if the Tennessee economy is in a recession, three consecutive months of increase in the state leading index can be taken as a signal that the economy will reach a trough within a three-quarter window beginning with the quarter in which the first increase occurred. The problems outlined above compel a somewhat looser interpretation of signals from the MSA economic indexes. While the three-month criterion will still be used, three consecutive months of like directional change will be interpreted as a **strong signal** that the particular MSA economy will reach a peak or trough in the six-month window beginning with the first month of directional change. An additional **weak signal** criterion, defined as three out of four months of like directional change, also provides historically reasonable turning point information. That is, three months of similar directional movements, interrupted by a single month of change in the opposite direction, are required before the movement can be considered a **weak signal** of an impending peak or trough in the economy. For example, two consecutive increases in the Chattanooga economic index, followed by a single month of decline and another month of increase, can be taken as a signal that, if the Chattanooga economy is in recession, it will reach a trough in the six-month window following the first month of increase in the economic index.

## 2.5. Conclusion

There are a vast number of difficulties inherent in constructing composite economic indicator indexes for small, sub-state regions. These difficulties arise because evaluating the condition of the economy is always an uncertain task and because a lack of adequate data exists. One can conceive of a multitude of variables that might serve as good indicators of the health of a local economy, but problems inevitably arise because there is no single source of data like the federal government to ensure the timeliness and statistical adequacy of these variables. Most local sources collect data for their own internal use, not for use as an economic indicator, so they do not maintain a long enough historical record of the data to make possible the statistical evaluation of its utility as an indicator variable. Still, by compiling what adequate data are available into composite indexes via the established BEA procedure, a composite overview indicator of the cyclical behavior of the regional economies is produced. Using this composite indicator rather than a large group of disjoint indicators facilitates the evaluation of economic performance both within and across regions.■

# APPENDIX A: FORECAST DATA

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS
SEASONALLY ADJUSTED

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| US GDP (BIL87$) SAAR............ | 5102.1 | 5138.0 | 5181.7 | 5220.6 | 5258.1 | 5297.8 | 5338.9 | 5374.6 | 5411.8 | 5453.4 | 5496.9 | 5125.0 | 5278.8 | 5434.2 |
| % CHG PREV QTR SAAR........... | 1.90 | 2.84 | 3.45 | 3.03 | 2.91 | 3.06 | 3.13 | 2.70 | 2.80 | 3.11 | 3.23 | 2.78 | 3.00 | 2.94 |
| % CHG SAME QTR LAST YR........ | 2.94 | 2.80 | 2.24 | 2.80 | 3.06 | 3.11 | 3.03 | 2.95 | 2.92 | 2.94 | 2.96 | 2.78 | 3.00 | 2.94 |
| US GDP (BIL$) SAAR.............. | 6327.6 | 6396.3 | 6484.7 | 6588.6 | 6688.1 | 6790.7 | 6894.3 | 6997.1 | 7100.6 | 7208.4 | 7323.5 | 6367.5 | 6740.5 | 7157.4 |
| % CHG PREV QTR SAAR........... | 4.28 | 4.41 | 5.64 | 6.57 | 6.18 | 6.28 | 6.25 | 6.10 | 6.05 | 6.21 | 6.54 | 5.45 | 5.86 | 6.19 |
| % CHG SAME QTR LAST YR........ | 5.61 | 5.56 | 4.69 | 5.22 | 5.70 | 6.17 | 6.32 | 6.20 | 6.17 | 6.15 | 6.22 | 5.45 | 5.86 | 6.19 |
| IMPLICIT DEFLATOR,GDP........... | 124.0 | 124.5 | 125.1 | 126.2 | 127.2 | 128.2 | 129.1 | 130.2 | 131.2 | 132.2 | 133.2 | 124.2 | 127.7 | 131.7 |
| % CHG PREV QTR SAAR........... | 2.29 | 1.62 | 2.09 | 3.43 | 3.18 | 3.12 | 3.02 | 3.30 | 3.16 | 3.01 | 3.21 | 2.61 | 2.77 | 3.15 |
| % CHG SAME QTR LAST YR........ | 2.56 | 2.72 | 2.41 | 2.36 | 2.58 | 2.95 | 3.19 | 3.16 | 3.15 | 3.12 | 3.17 | 2.61 | 2.77 | 3.15 |
| US PERS CONS DEFL (1987=100).... | 127.0 | 127.4 | 128.2 | 129.3 | 130.4 | 131.6 | 132.7 | 133.9 | 135.0 | 136.2 | 137.4 | 127.2 | 131.0 | 135.6 |
| % CHG PREV QTR SAAR........... | 2.56 | 1.27 | 2.52 | 3.63 | 3.34 | 3.58 | 3.61 | 3.46 | 3.53 | 3.40 | 3.73 | 2.68 | 3.00 | 3.52 |
| % CHG SAME QTR LAST YR........ | 2.75 | 2.66 | 2.31 | 2.49 | 2.68 | 3.27 | 3.54 | 3.50 | 3.54 | 3.50 | 3.53 | 2.68 | 3.00 | 3.52 |
| TN PERSONAL INCOME (MIL87$) SAAR | 73954 | 74456 | 75043 | 75910 | 76570 | 77324 | 78082 | 78878 | 79522 | 80300 | 81263 | 74011 | 76971 | 79991 |
| % CHG PREV QTR SAAR........... | 7.74 | 2.74 | 3.19 | 4.70 | 3.52 | 4.00 | 3.98 | 4.14 | 3.31 | 3.97 | 4.88 | 3.51 | 4.00 | 3.92 |
| % CHG SAME QTR LAST YR........ | 4.35 | 4.19 | 1.94 | 4.57 | 3.54 | 3.85 | 4.05 | 3.91 | 3.86 | 3.85 | 4.07 | 3.51 | 4.00 | 3.92 |
| US PERSONAL INCOME (BIL87$) SAAR | 4230.9 | 4246.2 | 4287.5 | 4326.6 | 4358.2 | 4394.4 | 4429.6 | 4466.8 | 4497.5 | 4537.0 | 4581.0 | 4232.1 | 4377.2 | 4520.6 |
| % CHG PREV QTR SAAR........... | 6.60 | 1.46 | 3.95 | 3.69 | 2.95 | 3.36 | 3.25 | 3.40 | 2.78 | 3.56 | 3.94 | 1.91 | 3.43 | 3.28 |
| % CHG SAME QTR LAST YR........ | 2.66 | 2.52 | 0.83 | 3.91 | 3.01 | 3.49 | 3.31 | 3.24 | 3.20 | 3.25 | 3.42 | 1.91 | 3.43 | 3.28 |
| TN PERSONAL INCOME (MIL$) SAAR.. | 93922 | 94857 | 96201 | 98184 | 99855 | 101730 | 103641 | 105591 | 107380 | 109340 | 111668 | 94147 | 100852 | 108495 |
| % CHG PREV QTR SAAR........... | 10.49 | 4.04 | 5.79 | 8.50 | 6.98 | 7.73 | 7.73 | 7.74 | 6.95 | 7.50 | 8.79 | 6.28 | 7.12 | 7.58 |
| % CHG SAME QTR LAST YR........ | 7.22 | 6.96 | 4.29 | 7.18 | 6.32 | 7.25 | 7.73 | 7.54 | 7.54 | 7.48 | 7.75 | 6.28 | 7.12 | 7.58 |
| US PERSONAL INCOME (BIL$) SAAR.. | 5373.2 | 5409.7 | 5496.4 | 5596.1 | 5683.5 | 5781.4 | 5879.6 | 5979.5 | 6073.0 | 6177.8 | 6295.1 | 5383.5 | 5735.2 | 6131.3 |
| % CHG PREV QTR SAAR........... | 9.33 | 2.75 | 6.56 | 7.46 | 6.40 | 7.07 | 6.97 | 6.97 | 6.40 | 7.08 | 7.81 | 4.64 | 6.53 | 6.91 |
| % CHG SAME QTR LAST YR........ | 5.49 | 5.25 | 3.15 | 6.50 | 5.78 | 6.87 | 6.97 | 6.85 | 6.85 | 6.86 | 7.07 | 4.64 | 6.53 | 6.91 |
| TN NONAGRIC JOBS (THOUS)........ | 2263.3 | 2271.7 | 2282.2 | 2295.0 | 2309.0 | 2323.6 | 2338.6 | 2353.5 | 2368.3 | 2383.4 | 2399.3 | 2269.2 | 2316.6 | 2376.1 |
| % CHG PREV QTR SAAR........... | 0.64 | 1.49 | 1.86 | 2.25 | 2.48 | 2.55 | 2.59 | 2.59 | 2.53 | 2.58 | 2.70 | 1.67 | 2.08 | 2.57 |
| % CHG SAME QTR LAST YR........ | 1.57 | 1.65 | 1.80 | 1.56 | 2.02 | 2.28 | 2.47 | 2.55 | 2.56 | 2.57 | 2.60 | 1.67 | 2.08 | 2.57 |
| US NONAGRIC JOBS (MIL).......... | 110.0 | 110.4 | 111.0 | 111.6 | 112.2 | 112.8 | 113.4 | 114.1 | 114.8 | 115.4 | 116.0 | 110.2 | 112.5 | 115.1 |
| % CHG PREV QTR SAAR........... | 2.01 | 1.35 | 2.18 | 2.30 | 2.27 | 2.21 | 2.11 | 2.44 | 2.36 | 2.25 | 2.10 | 1.54 | 2.11 | 2.28 |
| % CHG SAME QTR LAST YR........ | 1.45 | 1.59 | 1.86 | 1.96 | 2.02 | 2.24 | 2.22 | 2.26 | 2.28 | 2.29 | 2.29 | 1.54 | 2.11 | 2.28 |
| TN UNEMPLOYMENT RATE (%)........ | 6.1 | 5.6 | 5.2 | 5.2 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.8 | 5.1 | 5.1 |
| US UNEMPLOYMENT RATE (%)........ | 7.0 | 6.7 | 6.6 | 6.5 | 6.4 | 6.4 | 6.5 | 6.4 | 6.3 | 6.3 | 6.3 | 6.8 | 6.4 | 6.3 |
| BANK PRIME INTEREST RATE (%).... | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.2 | 6.5 | 6.5 | 6.8 | 7.0 | 6.0 | 6.0 | 6.7 |
| TN MFG JOBS (THOUS)............. | 517.3 | 516.2 | 515.9 | 516.8 | 518.6 | 520.1 | 521.6 | 522.8 | 523.7 | 524.8 | 526.4 | 516.8 | 519.3 | 524.4 |
| % CHG PREV QTR SAAR........... | -0.31 | -0.85 | -0.25 | 0.70 | 1.37 | 1.22 | 1.13 | 0.89 | 0.74 | 0.83 | 1.21 | 0.75 | 0.48 | 0.99 |
| % CHG SAME QTR LAST YR........ | 0.77 | 0.35 | 0.47 | -0.18 | 0.24 | 0.76 | 1.10 | 1.15 | 0.99 | 0.90 | 0.92 | 0.75 | 0.48 | 0.99 |

(CONTINUED ON NEXT PAGE)

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 1:, SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS (CONT.)
SEASONALLY A[illegible]D

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TN TAXABLE SALES (MIL87$)....... | 9514 | 9775 | 9845 | 9912 | 9976 | 10061 | 10107 | 10189 | 10246 | 10329 | 10363 | 38463 | 40056 | 41127 |
| % CHG PREV QTR SAAR........... | 8.1 | 11.5 | 2.9 | 2.8 | 2.6 | 3.4 | 1.8 | 3.3 | 2.3 | 3.3 | 1.3 | 4.8 | 4.1 | 2.7 |
| % CHG SAME QTR LAST YR........ | 5.7 | 7.5 | 6.2 | 6.2 | 4.9 | 2.9 | 2.7 | 2.8 | 2.7 | 2.7 | 2.5 | 4.8 | 4.1 | 2.7 |
| TN TAXABLE SALES (MIL$)......... | 12082 | 12454 | 12620 | 12821 | 13010 | 13237 | 13415 | 13639 | 13836 | 14065 | 14240 | 48931 | 52482 | 55779 |
| % CHG PREV QTR SAAR........... | 10.9 | 12.9 | 5.5 | 6.5 | 6.0 | 7.1 | 5.5 | 6.9 | 5.9 | 6.8 | 5.1 | 7.6 | 7.3 | 6.3 |
| % CHG SAME QTR LAST YR........ | 8.6 | 10.4 | 8.6 | 8.9 | 7.7 | 6.3 | 6.3 | 6.4 | 6.3 | 6.3 | 6.1 | 7.6 | 7.3 | 6.3 |
| TN AVG ANNUAL WAGE,NONAG (87$).. | 19169 | 19174 | 19201 | 19265 | 19317 | 19375 | 19434 | 19479 | 19512 | 19550 | 19571 | 19032 | 19348 | 19528 |
| % CHG PREV QTR SAAR........... | 13.3 | 0.1 | 0.6 | 1.3 | 1.1 | 1.2 | 1.2 | 0.9 | 0.7 | 0.8 | 0.4 | 1.3 | 1.7 | 0.9 |
| % CHG SAME QTR LAST YR........ | 3.0 | 2.5 | -1.3 | 3.7 | 0.8 | 1.0 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 1.3 | 1.7 | 0.9 |
| TN AVG ANNUAL WAGE,NONAG ($).... | 24345 | 24428 | 24614 | 24917 | 25191 | 25491 | 25796 | 26075 | 26347 | 26620 | 26894 | 24209 | 25349 | 26484 |
| % CHG PREV QTR SAAR........... | 16.2 | 1.4 | 3.1 | 5.0 | 4.5 | 4.8 | 4.9 | 4.4 | 4.2 | 4.2 | 4.2 | 4.0 | 4.7 | 4.5 |
| % CHG SAME QTR LAST YR........ | 5.8 | 5.2 | 1.0 | 6.3 | 3.5 | 4.4 | 4.8 | 4.6 | 4.6 | 4.4 | 4.3 | 4.0 | 4.7 | 4.5 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 2: SELECTED PER CAPITA U.S. AND TENNESSEE ECONOMIC INDICATORS
SEASONALLY ADJUSTED

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| US GDP (87$) SAAR............... | 19783 | 19869 | 19989 | 20087 | 20180 | 20281 | 20387 | 20472 | 20563 | 20670 | 20784 | 19846 | 20233 | 20622 |
| % CHG PREV QTR SAAR........... | 0.79 | 1.74 | 2.45 | 1.97 | 1.86 | 2.02 | 2.10 | 1.69 | 1.79 | 2.11 | 2.22 | 1.69 | 1.95 | 1.92 |
| % CHG SAME QTR LAST YR........ | 1.82 | 1.68 | 1.20 | 1.74 | 2.00 | 2.08 | 1.99 | 1.92 | 1.90 | 1.92 | 1.95 | 1.69 | 1.95 | 1.92 |
| US GDP ($) SAAR................. | 24535 | 24734 | 25015 | 25351 | 25668 | 25996 | 26326 | 26652 | 26979 | 27322 | 27691 | 24658 | 25835 | 27161 |
| % CHG PREV QTR SAAR........... | 3.16 | 3.29 | 4.62 | 5.47 | 5.10 | 5.21 | 5.18 | 5.05 | 5.00 | 5.18 | 5.51 | 4.32 | 4.78 | 5.13 |
| % CHG SAME QTR LAST YR........ | 4.46 | 4.42 | 3.62 | 4.13 | 4.62 | 5.10 | 5.24 | 5.13 | 5.11 | 5.10 | 5.18 | 4.32 | 4.78 | 5.13 |
| TN PERSONAL INCOME (87$) SAAR... | 14553 | 14605 | 14678 | 14803 | 14887 | 14990 | 15093 | 15204 | 15286 | 15393 | 15535 | 14542 | 14943 | 15354 |
| % CHG PREV QTR SAAR........... | 6.35 | 1.43 | 2.00 | 3.45 | 2.30 | 2.79 | 2.79 | 2.97 | 2.16 | 2.83 | 3.75 | 2.18 | 2.76 | 2.75 |
| % CHG SAME QTR LAST YR........ | 2.98 | 2.84 | 0.70 | 3.29 | 2.29 | 2.63 | 2.83 | 2.71 | 2.68 | 2.69 | 2.93 | 2.18 | 2.76 | 2.75 |
| TN PERSONAL INCOME ($) SAAR..... | 18483 | 18607 | 18816 | 19146 | 19414 | 19721 | 20034 | 20353 | 20640 | 20959 | 21347 | 18498 | 19579 | 20825 |
| % CHG PREV QTR SAAR........... | 9.07 | 2.72 | 4.57 | 7.20 | 5.72 | 6.48 | 6.50 | 6.53 | 5.76 | 6.33 | 7.61 | 4.91 | 5.84 | 6.37 |
| % CHG SAME QTR LAST YR........ | 5.81 | 5.57 | 3.02 | 5.86 | 5.04 | 5.99 | 6.47 | 6.31 | 6.32 | 6.28 | 6.56 | 4.91 | 5.84 | 6.37 |
| US PERSONAL INCOME (87$) SAAR... | 16405 | 16420 | 16539 | 16647 | 16726 | 16822 | 16915 | 17014 | 17089 | 17197 | 17321 | 16388 | 16778 | 17155 |
| % CHG PREV QTR SAAR........... | 5.45 | 0.37 | 2.94 | 2.63 | 1.91 | 2.32 | 2.22 | 2.37 | 1.76 | 2.55 | 2.93 | 0.82 | 2.37 | 2.25 |
| % CHG SAME QTR LAST YR........ | 1.55 | 1.41 | -0.20 | 2.83 | 1.96 | 2.45 | 2.27 | 2.20 | 2.17 | 2.23 | 2.40 | 0.82 | 2.37 | 2.25 |
| US PERSONAL INCOME ($) SAAR..... | 20834 | 20919 | 21203 | 21532 | 21812 | 22132 | 22452 | 22776 | 23075 | 23416 | 23802 | 20847 | 21982 | 23267 |
| % CHG PREV QTR SAAR........... | 8.15 | 1.64 | 5.53 | 6.36 | 5.31 | 5.99 | 5.90 | 5.91 | 5.35 | 6.03 | 6.77 | 3.52 | 5.45 | 5.85 |
| % CHG SAME QTR LAST YR........ | 4.34 | 4.11 | 2.11 | 5.39 | 4.69 | 5.80 | 5.89 | 5.78 | 5.79 | 5.80 | 6.02 | 3.52 | 5.45 | 5.85 |
| TN TAXABLE SALES (87$).......... | 1872 | 1918 | 1926 | 1933 | 1940 | 1950 | 1954 | 1964 | 1970 | 1980 | 1981 | 7557 | 7777 | 7894 |
| % CHG PREV QTR SAAR........... | 6.73 | 10.05 | 1.68 | 1.54 | 1.40 | 2.24 | 0.67 | 2.12 | 1.14 | 2.15 | 0.20 | 3.40 | 2.90 | 1.52 |
| % CHG SAME QTR LAST YR........ | 4.28 | 6.13 | 4.89 | 4.94 | 3.60 | 1.72 | 1.46 | 1.61 | 1.54 | 1.52 | 1.40 | 3.40 | 2.90 | 1.52 |
| TN TAXABLE SALES ($)............ | 2378 | 2443 | 2468 | 2500 | 2529 | 2566 | 2593 | 2629 | 2659 | 2696 | 2722 | 9614 | 10189 | 10707 |
| % CHG PREV QTR SAAR........... | 9.46 | 11.44 | 4.24 | 5.22 | 4.79 | 5.91 | 4.30 | 5.66 | 4.70 | 5.62 | 3.93 | 6.19 | 5.98 | 5.08 |
| % CHG SAME QTR LAST YR........ | 7.15 | 8.95 | 7.31 | 7.55 | 6.39 | 5.04 | 5.05 | 5.16 | 5.14 | 5.07 | 4.98 | 6.19 | 5.98 | 5.08 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 3: TENNESSEE PERSONAL [illegible]COME BY COMPONENTS
SEASONALLY ADJUSTE[illegible]AL RATES
MILLIONS OF 1[illegible]LARS

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL PERSONAL INCOME............ | 73954 | 74456 | 75043 | 75910 | 76570 | 77324 | 78082 | 78878 | 79522 | 80300 | 81263 | 74011 | 76971 | 79991 |
| % CHG PREV QTR SAAR.......... | 7.74 | 2.74 | 3.19 | 4.70 | 3.52 | 4.00 | 3.98 | 4.14 | 3.31 | 3.97 | 4.88 | 3.51 | 4.00 | 3.92 |
| % CHG SAME QTR LAST YR....... | 4.35 | 4.19 | 1.94 | 4.57 | 3.54 | 3.85 | 4.05 | 3.91 | 3.86 | 3.85 | 4.07 | 3.51 | 4.00 | 3.92 |
| WAGES AND SALARIES............. | 43980 | 44160 | 44428 | 44819 | 45214 | 45636 | 46067 | 46465 | 46834 | 47225 | 47591 | 43784 | 45434 | 47029 |
| % CHG PREV QTR SAAR.......... | 13.95 | 1.65 | 2.45 | 3.56 | 3.58 | 3.78 | 3.84 | 3.50 | 3.22 | 3.38 | 3.13 | 2.93 | 3.77 | 3.51 |
| % CHG SAME QTR LAST YR....... | 4.52 | 4.12 | 0.54 | 5.29 | 2.81 | 3.34 | 3.69 | 3.67 | 3.58 | 3.48 | 3.31 | 2.93 | 3.77 | 3.51 |
| OTHER LABOR INCOME............. | 5227 | 5316 | 5408 | 5496 | 5602 | 5718 | 5840 | 5950 | 6072 | 6195 | 6317 | 5267 | 5664 | 6134 |
| % CHG PREV QTR SAAR.......... | 8.91 | 6.97 | 7.14 | 6.64 | 8.00 | 8.51 | 8.85 | 7.74 | 8.41 | 8.38 | 8.11 | 8.08 | 7.55 | 8.29 |
| % CHG SAME QTR LAST YR....... | 7.94 | 8.23 | 8.42 | 7.41 | 7.19 | 7.57 | 8.00 | 8.27 | 8.38 | 8.35 | 8.16 | 8.08 | 7.55 | 8.29 |
| PROPRIETORS INCOME............. | 6962 | 7043 | 7153 | 7300 | 7394 | 7562 | 7718 | 7759 | 7867 | 8057 | 8261 | 7043 | 7494 | 7986 |
| % CHG PREV QTR SAAR.......... | -2.76 | 4.75 | 6.40 | 8.45 | 5.26 | 9.41 | 8.50 | 2.12 | 5.67 | 10.02 | 10.55 | 6.08 | 6.41 | 6.57 |
| % CHG SAME QTR LAST YR....... | 5.76 | 7.50 | 3.78 | 4.12 | 6.20 | 7.37 | 7.89 | 6.28 | 6.39 | 6.54 | 7.04 | 6.08 | 6.41 | 6.57 |
| RENT INTEREST DIVIDENDS........ | 9268 | 9327 | 9360 | 9375 | 9390 | 9388 | 9375 | 9389 | 9388 | 9419 | 9439 | 9309 | 9382 | 9409 |
| % CHG PREV QTR SAAR.......... | -0.65 | 2.60 | 1.40 | 0.65 | 0.64 | -0.09 | -0.53 | 0.60 | -0.06 | 1.32 | 0.85 | 2.55 | 0.78 | 0.29 |
| % CHG SAME QTR LAST YR....... | 2.45 | 2.27 | 2.05 | 0.99 | 1.32 | 0.65 | 0.17 | 0.16 | -0.02 | 0.33 | 0.68 | 2.55 | 0.78 | 0.29 |
| TRANSFER PAYMENTS.............. | 13040 | 13172 | 13252 | 13541 | 13617 | 13694 | 13782 | 14081 | 14157 | 14230 | 14514 | 13109 | 13659 | 14245 |
| % CHG PREV QTR SAAR.......... | 2.08 | 4.12 | 2.44 | 9.02 | 2.25 | 2.29 | 2.59 | 8.96 | 2.18 | 2.07 | 8.24 | 3.77 | 4.19 | 4.30 |
| % CHG SAME QTR LAST YR....... | 3.76 | 3.47 | 4.01 | 4.38 | 4.42 | 3.96 | 4.00 | 3.98 | 3.97 | 3.91 | 5.31 | 3.77 | 4.19 | 4.30 |
| LESS:PERS CONT FOR SOC INS..... | 3665 | 3698 | 3692 | 3748 | 3770 | 3792 | 3814 | 3874 | 3897 | 3922 | 3950 | 3655 | 3781 | 3911 |
| % CHG PREV QTR SAAR.......... | 11.35 | 3.68 | -0.67 | 6.29 | 2.38 | 2.25 | 2.41 | 6.37 | 2.49 | 2.59 | 2.86 | 5.48 | 3.44 | 3.43 |
| % CHG SAME QTR LAST YR....... | 6.00 | 6.77 | 5.20 | 5.07 | 2.89 | 2.53 | 3.32 | 3.34 | 3.37 | 3.45 | 3.56 | 5.48 | 3.44 | 3.43 |
| RESIDENCE ADJUSTMENT........... | -857 | -865 | -866 | -872 | -877 | -882 | -887 | -893 | -898 | -902 | -908 | -845 | -880 | -900 |
| % CHG PREV QTR SAAR.......... | 36.58 | 3.53 | 0.58 | 2.75 | 2.30 | 2.33 | 2.43 | 2.44 | 2.23 | 2.12 | 2.65 | 6.21 | 4.05 | 2.35 |
| % CHG SAME QTR LAST YR....... | 9.04 | 7.99 | 1.15 | 9.95 | 2.28 | 1.98 | 2.45 | 2.37 | 2.36 | 2.31 | 2.36 | 6.21 | 4.05 | 2.35 |
| PER CAPITA PERSONAL INCOME ($)... | 14553 | 14605 | 14678 | 14803 | 14887 | 14990 | 15093 | 15204 | 15286 | 15393 | 15535 | 14542 | 14943 | 15354 |
| % CHG PREV QTR SAAR.......... | 6.35 | 1.43 | 2.00 | 3.45 | 2.30 | 2.79 | 2.79 | 2.97 | 2.16 | 2.83 | 3.75 | 2.18 | 2.76 | 2.75 |
| % CHG SAME QTR LAST YR....... | 2.98 | 2.84 | 0.70 | 3.29 | 2.29 | 2.63 | 2.83 | 2.71 | 2.68 | 2.69 | 2.93 | 2.18 | 2.76 | 2.75 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 4: TENNESSEE PERSONAL INCOME BY COMPONENTS
SEASONALLY ADJUSTED ANNUAL RATES
MILLIONS OF CURRENT DOLLARS

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL PERSONAL INCOME............ | 93922 | 94857 | 96201 | 98184 | 99855 | 101730 | 103641 | 105591 | 107380 | 109340 | 111668 | 94147 | 100852 | 108495 |
| % CHG PREV QTR SAAR.......... | 10.49 | 4.04 | 5.79 | 8.50 | 6.98 | 7.73 | 7.73 | 7.74 | 6.95 | 7.50 | 8.79 | 6.28 | 7.12 | 7.58 |
| % CHG SAME QTR LAST YR....... | 7.22 | 6.96 | 4.29 | 7.18 | 6.32 | 7.25 | 7.73 | 7.54 | 7.54 | 7.48 | 7.75 | 6.28 | 7.12 | 7.58 |
| WAGES AND SALARIES............. | 55854 | 56260 | 56954 | 57970 | 58964 | 60040 | 61147 | 62201 | 63241 | 64304 | 65397 | 55697 | 59530 | 63786 |
| % CHG PREV QTR SAAR.......... | 16.87 | 2.94 | 5.03 | 7.32 | 7.04 | 7.50 | 7.58 | 7.08 | 6.86 | 6.90 | 6.98 | 5.68 | 6.88 | 7.15 |
| % CHG SAME QTR LAST YR....... | 7.40 | 6.89 | 2.86 | 7.91 | 5.57 | 6.72 | 7.36 | 7.30 | 7.25 | 7.10 | 6.95 | 5.68 | 6.88 | 7.15 |
| OTHER LABOR INCOME............ | 6638 | 6772 | 6933 | 7108 | 7306 | 7523 | 7752 | 7966 | 8199 | 8436 | 8681 | 6700 | 7422 | 8320 |
| % CHG PREV QTR SAAR.......... | 11.69 | 8.32 | 9.84 | 10.51 | 11.61 | 12.40 | 12.78 | 11.47 | 12.24 | 12.06 | 12.14 | 10.97 | 10.78 | 12.10 |
| % CHG SAME QTR LAST YR....... | 10.91 | 11.11 | 10.92 | 10.09 | 10.06 | 11.09 | 11.82 | 12.06 | 12.22 | 12.13 | 11.98 | 10.97 | 10.78 | 12.10 |
| PROPRIETORS INCOME............ | 8842 | 8973 | 9170 | 9442 | 9643 | 9949 | 10245 | 10387 | 10622 | 10970 | 11352 | 8958 | 9820 | 10833 |
| % CHG PREV QTR SAAR.......... | -0.27 | 6.08 | 9.07 | 12.39 | 8.78 | 13.34 | 12.41 | 5.66 | 9.40 | 13.75 | 14.67 | 8.92 | 9.61 | 10.32 |
| % CHG SAME QTR LAST YR....... | 8.66 | 10.36 | 6.17 | 6.71 | 9.06 | 10.88 | 11.71 | 10.00 | 10.16 | 10.26 | 10.81 | 8.92 | 9.61 | 10.32 |
| RENT INTEREST DIVIDENDS........ | 11770 | 11883 | 11999 | 12126 | 12245 | 12351 | 12444 | 12569 | 12677 | 12825 | 12970 | 11842 | 12291 | 12760 |
| % CHG PREV QTR SAAR.......... | 1.89 | 3.90 | 3.95 | 4.30 | 4.00 | 3.49 | 3.06 | 4.08 | 3.46 | 4.76 | 4.61 | 5.29 | 3.80 | 3.81 |
| % CHG SAME QTR LAST YR....... | 5.27 | 4.99 | 4.41 | 3.51 | 4.04 | 3.94 | 3.71 | 3.66 | 3.52 | 3.84 | 4.23 | 5.29 | 3.80 | 3.81 |
| TRANSFER PAYMENTS.............. | 16561 | 16782 | 16988 | 17515 | 17758 | 18016 | 18293 | 18849 | 19116 | 19376 | 19944 | 16676 | 17896 | 19321 |
| % CHG PREV QTR SAAR.......... | 4.70 | 5.44 | 5.02 | 12.98 | 5.67 | 5.95 | 6.30 | 12.72 | 5.79 | 5.53 | 12.27 | 6.55 | 7.31 | 7.97 |
| % CHG SAME QTR LAST YR....... | 6.62 | 6.22 | 6.42 | 6.98 | 7.23 | 7.36 | 7.68 | 7.62 | 7.65 | 7.54 | 9.02 | 6.55 | 7.31 | 7.97 |
| LESS:PERS CONT FOR SOC INS..... | 4654 | 4711 | 4733 | 4848 | 4917 | 4988 | 5063 | 5185 | 5263 | 5341 | 5428 | 4650 | 4954 | 5304 |
| % CHG PREV QTR SAAR.......... | 14.20 | 5.00 | 1.83 | 10.14 | 5.80 | 5.92 | 6.11 | 10.05 | 6.10 | 6.07 | 6.69 | 8.31 | 6.54 | 7.07 |
| % CHG SAME QTR LAST YR....... | 8.92 | 9.61 | 7.63 | 7.69 | 5.65 | 5.88 | 6.98 | 6.95 | 7.03 | 7.07 | 7.22 | 8.31 | 6.54 | 7.07 |
| RESIDENCE ADJUSTMENT........... | -1089 | -1102 | -1110 | -1128 | -1144 | -1161 | -1178 | -1195 | -1212 | -1229 | -1248 | -1076 | -1153 | -1221 |
| % CHG PREV QTR SAAR.......... | 40.08 | 4.84 | 3.11 | 6.48 | 5.72 | 5.99 | 6.12 | 5.99 | 5.84 | 5.59 | 6.48 | 9.03 | 7.15 | 5.95 |
| % CHG SAME QTR LAST YR....... | 12.04 | 10.86 | 3.49 | 12.68 | 5.03 | 5.32 | 6.08 | 5.95 | 5.99 | 5.88 | 5.97 | 9.03 | 7.15 | 5.95 |
| PER CAPITA PERSONAL INCOME ($)... | 18483 | 18607 | 18816 | 19146 | 19414 | 19721 | 20034 | 20353 | 20640 | 20959 | 21347 | 18498 | 19579 | 20825 |
| % CHG PREV QTR SAAR.......... | 9.07 | 2.72 | 4.57 | 7.20 | 5.72 | 6.48 | 6.50 | 6.53 | 5.76 | 6.33 | 7.61 | 4.91 | 5.84 | 6.37 |
| % CHG SAME QTR LAST YR....... | 5.81 | 5.57 | 3.02 | 5.86 | 5.04 | 5.99 | 6.47 | 6.31 | 6.32 | 6.28 | 6.56 | 4.91 | 5.84 | 6.37 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 5: TENNESSEE NONAGRICULTURAL EMPLOYMENT BY SECTOR
THOUSANDS O[illegible]S

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL NONAGRICULTURAL........... | 2270.2 | 2282.0 | 2300.6 | 2259.6 | 2316.2 | 2333.6 | 2357.3 | 2316.9 | 2375.7 | 2393.9 | 2418.5 | 2269.3 | 2316.7 | 2376.3 |
| % CHG SAME QTR LAST YR.... | 1.56 | 1.65 | 1.78 | 1.59 | 2.03 | 2.26 | 2.47 | 2.54 | 2.57 | 2.58 | 2.60 | 1.67 | 2.09 | 2.57 |
| MINING........................ | 4.7 | 4.5 | 4.4 | 4.1 | 4.3 | 4.3 | 4.2 | 4.0 | 4.2 | 4.2 | 4.1 | 4.5 | 4.2 | 4.1 |
| % CHG SAME QTR LAST YR.... | -8.50 | -11.18 | -11.01 | -7.87 | -7.50 | -4.19 | -3.85 | -3.51 | -3.18 | -2.88 | -2.63 | -9.26 | -5.88 | -3.05 |
| CONSTRUCTION.................. | 88.8 | 93.7 | 91.9 | 84.8 | 94.2 | 98.1 | 95.8 | 88.7 | 98.4 | 102.4 | 99.7 | 88.5 | 93.3 | 97.3 |
| % CHG SAME QTR LAST YR.... | 1.25 | 5.36 | 8.44 | 6.50 | 6.06 | 4.70 | 4.30 | 4.49 | 4.44 | 4.34 | 4.11 | 3.74 | 5.34 | 4.34 |
| MANUFACTURING................. | 518.5 | 517.6 | 517.8 | 512.9 | 519.7 | 521.1 | 523.5 | 518.8 | 524.8 | 525.8 | 528.3 | 516.8 | 519.3 | 524.4 |
| % CHG SAME QTR LAST YR.... | 0.76 | 0.35 | 0.44 | -0.08 | 0.23 | 0.69 | 1.11 | 1.15 | 0.99 | 0.90 | 0.92 | 0.74 | 0.49 | 0.99 |
| DURABLE GOODS............... | 263.1 | 261.3 | 263.0 | 261.4 | 265.4 | 265.3 | 268.4 | 267.7 | 272.1 | 272.0 | 275.0 | 261.5 | 265.1 | 271.7 |
| % CHG SAME QTR LAST YR.... | 1.87 | 1.91 | 2.40 | 1.01 | 0.87 | 1.52 | 2.05 | 2.43 | 2.52 | 2.52 | 2.45 | 2.07 | 1.36 | 2.48 |
| NONDURABLE GOODS............ | 255.4 | 256.2 | 254.8 | 251.5 | 254.3 | 255.8 | 255.1 | 251.1 | 252.7 | 253.8 | 253.4 | 255.2 | 254.2 | 252.8 |
| % CHG SAME QTR LAST YR.... | -0.36 | -1.20 | -1.51 | -1.19 | -0.43 | -0.15 | 0.13 | -0.18 | -0.60 | -0.78 | -0.69 | -0.59 | -0.41 | -0.56 |
| TRADE......................... | 525.5 | 534.2 | 542.7 | 522.9 | 537.1 | 545.7 | 555.7 | 535.5 | 550.2 | 558.9 | 569.0 | 528.8 | 540.4 | 553.4 |
| % CHG SAME QTR LAST YR.... | 1.68 | 2.00 | 2.32 | 1.99 | 2.22 | 2.14 | 2.39 | 2.41 | 2.44 | 2.42 | 2.39 | 1.97 | 2.19 | 2.41 |
| SERVICES...................... | 554.3 | 559.4 | 556.9 | 551.8 | 575.8 | 585.5 | 582.9 | 577.7 | 602.8 | 613.0 | 610.3 | 551.6 | 574.0 | 600.9 |
| % CHG SAME QTR LAST YR.... | 3.18 | 2.84 | 2.76 | 2.97 | 3.87 | 4.67 | 4.68 | 4.68 | 4.69 | 4.69 | 4.70 | 3.20 | 4.06 | 4.69 |
| FIN,INS,REAL EST............. | 101.1 | 101.5 | 100.4 | 99.1 | 100.6 | 101.1 | 100.0 | 98.7 | 100.2 | 100.7 | 99.6 | 100.7 | 100.2 | 99.8 |
| % CHG SAME QTR LAST YR.... | -0.16 | -0.10 | -0.20 | -0.93 | -0.44 | -0.41 | -0.36 | -0.39 | -0.39 | -0.38 | -0.39 | 0.00 | -0.53 | -0.39 |
| TRANS,COMM,PUB UTIL........... | 121.5 | 123.9 | 125.4 | 123.5 | 125.9 | 127.8 | 130.0 | 128.4 | 131.0 | 133.1 | 135.2 | 122.7 | 126.8 | 131.9 |
| % CHG SAME QTR LAST YR.... | 2.21 | 2.65 | 2.61 | 2.92 | 3.57 | 3.20 | 3.67 | 3.93 | 4.08 | 4.09 | 4.02 | 2.57 | 3.34 | 4.03 |
| GOVERNMENT.................... | 355.8 | 347.3 | 361.2 | 360.4 | 358.6 | 350.0 | 365.1 | 365.2 | 364.1 | 355.9 | 372.2 | 355.6 | 358.5 | 364.3 |
| % CHG SAME QTR LAST YR.... | 0.57 | 0.56 | 0.34 | 0.62 | 0.79 | 0.77 | 1.09 | 1.35 | 1.52 | 1.70 | 1.93 | 0.08 | 0.82 | 1.63 |
| FEDERAL,CIVILIAN............ | 57.6 | 56.8 | 56.5 | 57.0 | 57.5 | 57.3 | 57.1 | 57.5 | 58.0 | 57.8 | 57.6 | 57.2 | 57.2 | 57.7 |
| % CHG SAME QTR LAST YR.... | -1.82 | -2.24 | -1.33 | -1.22 | -0.28 | 0.94 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | -2.00 | 0.08 | 0.92 |
| STATE AND LOCAL............. | 298.2 | 290.5 | 304.6 | 303.4 | 301.1 | 292.7 | 308.1 | 307.7 | 306.1 | 298.1 | 314.6 | 298.4 | 301.3 | 306.6 |
| % CHG SAME QTR LAST YR.... | 1.05 | 1.13 | 0.66 | 0.97 | 0.99 | 0.74 | 1.13 | 1.43 | 1.63 | 1.86 | 2.12 | 0.48 | 0.96 | 1.76 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 6: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF JOBS

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL DURABLE GOODS............. | 263.1 | 261.3 | 263.0 | 261.4 | 265.4 | 265.3 | 268.4 | 267.7 | 272.1 | 272.0 | 275.0 | 261.5 | 265.1 | 271.7 |
| % CHG SAME QTR LAST YR...... | 1.87 | 1.91 | 2.40 | 1.01 | 0.87 | 1.52 | 2.05 | 2.43 | 2.52 | 2.52 | 2.45 | 2.07 | 1.36 | 2.48 |
| LUMBER AND WOOD............... | 18.8 | 18.9 | 18.4 | 18.2 | 18.8 | 18.9 | 18.3 | 18.1 | 18.7 | 18.9 | 18.3 | 18.6 | 18.5 | 18.5 |
| % CHG SAME QTR LAST YR...... | 0.53 | 0.00 | -0.64 | -0.36 | -0.24 | -0.27 | -0.53 | -0.72 | -0.30 | 0.16 | 0.27 | 0.42 | -0.35 | -0.14 |
| FURNITURE AND FIXTURES........ | 28.9 | 28.2 | 28.7 | 28.2 | 28.5 | 28.2 | 28.8 | 28.4 | 28.7 | 28.3 | 29.0 | 28.5 | 28.4 | 28.6 |
| % CHG SAME QTR LAST YR...... | 5.87 | 3.30 | 2.68 | 0.36 | -1.22 | 0.02 | 0.57 | 0.54 | 0.65 | 0.58 | 0.50 | 4.23 | -0.07 | 0.57 |
| STONE,CLAY AND GLASS.......... | 14.5 | 14.7 | 14.6 | 14.4 | 14.8 | 15.1 | 15.0 | 14.8 | 15.3 | 15.6 | 15.5 | 14.5 | 14.8 | 15.3 |
| % CHG SAME QTR LAST YR...... | 2.84 | 3.51 | 2.53 | 1.07 | 2.59 | 2.45 | 3.07 | 3.13 | 3.19 | 3.20 | 3.08 | 3.43 | 2.30 | 3.15 |
| PRIMARY METALS................ | 15.2 | 15.1 | 15.4 | 15.1 | 15.2 | 15.1 | 15.4 | 15.3 | 15.4 | 15.4 | 15.6 | 15.2 | 15.2 | 15.4 |
| % CHG SAME QTR LAST YR...... | -0.87 | 0.44 | 1.03 | -0.46 | -0.46 | 0.08 | 0.53 | 1.03 | 1.28 | 1.40 | 1.28 | 0.31 | -0.08 | 1.25 |
| FABRICATED METALS............. | 42.0 | 42.4 | 42.8 | 42.0 | 42.4 | 42.6 | 43.0 | 42.2 | 42.6 | 42.8 | 43.2 | 42.2 | 42.5 | 42.7 |
| % CHG SAME QTR LAST YR...... | 0.88 | 1.84 | 1.52 | 0.55 | 0.76 | 0.40 | 0.54 | 0.53 | 0.51 | 0.48 | 0.46 | 1.38 | 0.56 | 0.49 |
| NONELECTRICAL MACHINERY....... | 37.8 | 35.4 | 35.8 | 37.3 | 37.6 | 35.6 | 36.0 | 37.5 | 37.8 | 35.7 | 36.1 | 36.5 | 36.6 | 36.7 |
| % CHG SAME QTR LAST YR...... | -1.65 | -0.56 | 1.77 | 0.87 | -0.36 | 0.36 | 0.43 | 0.38 | 0.34 | 0.30 | 0.23 | -0.82 | 0.32 | 0.31 |
| ELECTRICAL MACHINERY.......... | 36.4 | 36.8 | 37.1 | 36.6 | 37.0 | 37.7 | 38.5 | 38.2 | 38.8 | 39.6 | 40.4 | 36.6 | 37.4 | 39.2 |
| % CHG SAME QTR LAST YR...... | 2.34 | 1.94 | 2.67 | 1.23 | 1.55 | 2.48 | 3.75 | 4.48 | 4.87 | 5.06 | 4.93 | 2.14 | 2.26 | 4.84 |
| TRANSPORTATION EQUIPMENT...... | 48.3 | 48.6 | 49.2 | 48.7 | 49.8 | 50.8 | 51.9 | 52.0 | 53.1 | 53.9 | 54.9 | 48.3 | 50.3 | 53.5 |
| % CHG SAME QTR LAST YR...... | 7.10 | 5.73 | 5.56 | 3.11 | 3.20 | 4.59 | 5.34 | 6.76 | 6.59 | 6.17 | 5.96 | 6.54 | 4.07 | 6.36 |
| INSTRUMENTS................... | 9.5 | 9.5 | 9.4 | 9.3 | 9.5 | 9.5 | 9.5 | 9.5 | 9.7 | 9.7 | 9.7 | 9.5 | 9.4 | 9.6 |
| % CHG SAME QTR LAST YR...... | -8.95 | -6.54 | -2.75 | -1.70 | -0.50 | -0.20 | 1.10 | 1.79 | 2.22 | 2.22 | 2.23 | -7.03 | -0.33 | 2.12 |
| MISCELLANEOUS................. | 11.8 | 11.7 | 11.7 | 11.5 | 11.9 | 11.9 | 12.0 | 11.7 | 12.2 | 12.1 | 12.2 | 11.6 | 11.8 | 12.1 |
| % CHG SAME QTR LAST YR...... | 0.28 | 1.74 | 4.22 | 1.74 | 1.26 | 1.86 | 2.43 | 2.23 | 2.12 | 1.95 | 1.94 | 2.22 | 1.82 | 2.06 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 7: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT

THOUSANDS O

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL NONDURABLE GOODS.......... | 255.4 | 256.2 | 254.8 | 251.5 | 254.3 | 255.8 | 255.1 | 251.1 | 252.7 | 253.8 | 253.4 | 255.2 | 254.2 | 252.8 |
| % CHG SAME QTR LAST YR...... | -0.36 | -1.20 | -1.51 | -1.19 | -0.43 | -0.15 | 0.13 | -0.18 | -0.60 | -0.78 | -0.69 | -0.59 | -0.41 | -0.56 |
| FOOD.......................... | 35.7 | 36.9 | 36.3 | 35.8 | 36.1 | 36.6 | 36.2 | 35.5 | 35.8 | 36.2 | 35.7 | 36.0 | 36.2 | 35.8 |
| % CHG SAME QTR LAST YR...... | 0.09 | 2.03 | 1.97 | 1.70 | 1.11 | -0.70 | -0.45 | -0.73 | -1.04 | -1.27 | -1.40 | 0.51 | 0.40 | -1.11 |
| TOBACCO....................... | 1.0 | 1.1 | 1.2 | 1.4 | 1.1 | 1.1 | 1.2 | 1.4 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 |
| % CHG SAME QTR LAST YR...... | -6.06 | -3.03 | -2.69 | 2.21 | 5.16 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -4.14 | 1.84 | 0.00 |
| TEXTILES...................... | 20.9 | 20.8 | 20.6 | 20.2 | 20.5 | 20.5 | 20.2 | 19.8 | 20.0 | 20.0 | 19.7 | 20.7 | 20.4 | 19.9 |
| % CHG SAME QTR LAST YR...... | 1.29 | -1.11 | -0.18 | -1.31 | -2.26 | -1.46 | -1.58 | -2.04 | -2.39 | -2.63 | -2.68 | 0.44 | -1.65 | -2.44 |
| APPAREL....................... | 59.9 | 58.9 | 59.2 | 58.0 | 58.7 | 58.4 | 59.2 | 57.7 | 57.7 | 57.1 | 57.9 | 59.6 | 58.6 | 57.6 |
| % CHG SAME QTR LAST YR...... | -2.12 | -4.18 | -4.62 | -4.04 | -2.02 | -0.81 | -0.01 | -0.60 | -1.72 | -2.31 | -2.24 | -2.57 | -1.73 | -1.72 |
| PAPER......................... | 21.8 | 22.8 | 22.0 | 21.3 | 22.0 | 23.1 | 22.2 | 21.5 | 22.2 | 23.2 | 22.3 | 21.9 | 22.2 | 22.3 |
| % CHG SAME QTR LAST YR...... | -0.61 | 0.00 | -1.55 | 1.01 | 1.09 | 1.20 | 0.93 | 0.85 | 0.78 | 0.54 | 0.55 | -0.69 | 1.06 | 0.68 |
| PRINTING AND PUBLISHING....... | 36.8 | 37.0 | 37.0 | 36.7 | 36.9 | 37.1 | 37.2 | 37.0 | 37.2 | 37.5 | 37.7 | 36.9 | 37.0 | 37.3 |
| % CHG SAME QTR LAST YR...... | 1.19 | 0.27 | 0.28 | -0.06 | 0.05 | 0.24 | 0.58 | 0.76 | 0.94 | 1.12 | 1.27 | 0.78 | 0.20 | 1.02 |
| CHEMICALS..................... | 39.9 | 39.5 | 39.2 | 39.6 | 39.8 | 39.5 | 39.4 | 39.7 | 39.8 | 39.5 | 39.4 | 39.7 | 39.6 | 39.6 |
| % CHG SAME QTR LAST YR...... | -0.17 | -0.84 | -1.91 | -1.36 | -0.27 | 0.14 | 0.58 | 0.17 | 0.00 | -0.14 | -0.02 | -0.33 | -0.23 | 0.00 |
| PETROLEUM REFINING............ | 0.7 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.9 | 0.8 | 0.7 | 0.8 | 0.8 |
| % CHG SAME QTR LAST YR...... | -4.76 | 14.29 | 23.45 | 24.10 | 19.79 | 5.86 | 3.86 | 2.81 | 2.19 | 1.96 | 1.78 | 1.51 | 12.26 | 2.15 |
| RUBBER AND PLASTICS........... | 30.5 | 30.6 | 30.7 | 30.2 | 30.7 | 30.8 | 30.9 | 30.2 | 30.5 | 30.6 | 30.8 | 30.5 | 30.6 | 30.5 |
| % CHG SAME QTR LAST YR...... | 1.33 | -0.33 | -0.29 | -0.64 | 0.50 | 0.72 | 0.57 | 0.08 | -0.72 | -0.64 | -0.05 | 1.11 | 0.29 | -0.33 |
| LEATHER....................... | 8.0 | 7.9 | 7.9 | 7.6 | 7.7 | 7.9 | 7.8 | 7.7 | 7.7 | 7.9 | 7.9 | 8.0 | 7.8 | 7.8 |
| % CHG SAME QTR LAST YR...... | -5.51 | -8.85 | -8.21 | -6.36 | -3.70 | -0.41 | -0.31 | 0.09 | 0.42 | 0.65 | 0.49 | -5.90 | -2.73 | 0.41 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 8: TENNESSEE NONAGRICULTURAL EMPLOYMENT BY SECTOR
THOUSANDS OF SEASONALLY ADJUSTED JOBS

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL NONAGRICULTURAL........... | 2263.3 | 2271.7 | 2282.2 | 2295.0 | 2309.0 | 2323.6 | 2338.6 | 2353.5 | 2368.3 | 2383.4 | 2399.3 | 2269.2 | 2316.6 | 2376.1 |
| % CHG PREV QTR SAAR....... | 0.64 | 1.49 | 1.86 | 2.25 | 2.48 | 2.55 | 2.59 | 2.59 | 2.53 | 2.58 | 2.70 | 1.67 | 2.08 | 2.57 |
| % CHG SAME QTR LAST YR.... | 1.57 | 1.65 | 1.80 | 1.56 | 2.02 | 2.28 | 2.47 | 2.55 | 2.56 | 2.57 | 2.60 | 1.67 | 2.08 | 2.57 |
| MINING........................ | 4.6 | 4.4 | 4.3 | 4.3 | 4.3 | 4.2 | 4.2 | 4.1 | 4.1 | 4.1 | 4.1 | 4.5 | 4.2 | 4.1 |
| % CHG PREV QTR SAAR....... | -5.59 | -16.29 | -4.67 | -4.37 | -4.04 | -3.68 | -3.30 | -3.00 | -2.73 | -2.48 | -2.31 | -9.32 | -5.91 | -3.05 |
| % CHG SAME QTR LAST YR.... | -8.61 | -11.41 | -10.66 | -7.87 | -7.50 | -4.19 | -3.85 | -3.51 | -3.18 | -2.88 | -2.63 | -9.32 | -5.91 | -3.05 |
| CONSTRUCTION.................. | 87.5 | 89.6 | 90.9 | 91.7 | 92.8 | 93.8 | 94.8 | 95.9 | 96.9 | 97.8 | 98.7 | 88.5 | 93.3 | 97.3 |
| % CHG PREV QTR SAAR....... | 6.34 | 9.96 | 6.00 | 3.79 | 4.61 | 4.40 | 4.42 | 4.54 | 4.42 | 3.96 | 3.52 | 3.70 | 5.37 | 4.34 |
| % CHG SAME QTR LAST YR.... | 1.20 | 5.66 | 8.58 | 6.50 | 6.06 | 4.70 | 4.30 | 4.49 | 4.44 | 4.34 | 4.11 | 3.70 | 5.37 | 4.34 |
| MANUFACTURING................. | 517.3 | 516.2 | 515.9 | 516.8 | 518.6 | 520.1 | 521.6 | 522.8 | 523.7 | 524.8 | 526.4 | 516.8 | 519.3 | 524.4 |
| % CHG PREV QTR SAAR....... | -0.31 | -0.85 | -0.25 | 0.70 | 1.37 | 1.22 | 1.13 | 0.89 | 0.74 | 0.83 | 1.21 | 0.75 | 0.48 | 0.99 |
| % CHG SAME QTR LAST YR.... | 0.77 | 0.35 | 0.47 | -0.18 | 0.24 | 0.76 | 1.10 | 1.15 | 0.99 | 0.90 | 0.92 | 0.75 | 0.48 | 0.99 |
| DURABLE GOODS............... | 261.7 | 261.7 | 262.2 | 262.9 | 264.1 | 265.8 | 267.6 | 269.3 | 270.8 | 272.5 | 274.1 | 261.6 | 265.1 | 271.7 |
| % CHG PREV QTR SAAR....... | 1.44 | -0.05 | 0.80 | 1.06 | 1.80 | 2.63 | 2.68 | 2.63 | 2.19 | 2.55 | 2.39 | 2.11 | 1.33 | 2.48 |
| % CHG SAME QTR LAST YR.... | 1.91 | 1.92 | 2.47 | 0.81 | 0.90 | 1.57 | 2.04 | 2.43 | 2.53 | 2.51 | 2.44 | 2.11 | 1.33 | 2.48 |
| NONDURABLE GOODS............ | 255.6 | 254.5 | 253.7 | 253.9 | 254.5 | 254.3 | 254.0 | 253.4 | 252.9 | 252.3 | 252.3 | 255.2 | 254.2 | 252.8 |
| % CHG PREV QTR SAAR....... | -2.06 | -1.66 | -1.32 | 0.32 | 0.92 | -0.23 | -0.47 | -0.91 | -0.78 | -0.99 | -0.05 | -0.60 | -0.40 | -0.56 |
| % CHG SAME QTR LAST YR.... | -0.38 | -1.22 | -1.52 | -1.18 | -0.44 | -0.08 | 0.13 | -0.18 | -0.60 | -0.79 | -0.68 | -0.60 | -0.40 | -0.56 |
| TRADE......................... | 526.8 | 530.4 | 532.5 | 535.6 | 538.5 | 541.8 | 545.2 | 548.5 | 551.6 | 554.9 | 558.3 | 528.7 | 540.3 | 553.3 |
| % CHG PREV QTR SAAR....... | 1.25 | 2.81 | 1.58 | 2.32 | 2.17 | 2.49 | 2.58 | 2.39 | 2.30 | 2.41 | 2.47 | 1.97 | 2.19 | 2.41 |
| % CHG SAME QTR LAST YR.... | 1.67 | 2.01 | 2.31 | 1.99 | 2.22 | 2.14 | 2.39 | 2.41 | 2.44 | 2.42 | 2.39 | 1.97 | 2.19 | 2.41 |
| SERVICES...................... | 549.4 | 551.5 | 557.8 | 564.2 | 570.7 | 577.2 | 583.9 | 590.6 | 597.4 | 604.3 | 611.3 | 551.7 | 574.0 | 600.9 |
| % CHG PREV QTR SAAR....... | 1.07 | 1.51 | 4.66 | 4.67 | 4.67 | 4.67 | 4.69 | 4.69 | 4.70 | 4.70 | 4.70 | 3.21 | 4.05 | 4.69 |
| % CHG SAME QTR LAST YR.... | 3.23 | 2.87 | 2.76 | 2.97 | 3.87 | 4.67 | 4.68 | 4.68 | 4.69 | 4.69 | 4.70 | 3.21 | 4.05 | 4.69 |
| FIN,INS,REAL EST.............. | 100.7 | 100.6 | 100.4 | 100.4 | 100.3 | 100.2 | 100.1 | 100.0 | 99.9 | 99.8 | 99.7 | 100.8 | 100.2 | 99.8 |
| % CHG PREV QTR SAAR....... | -2.35 | -0.53 | -0.47 | -0.37 | -0.39 | -0.41 | -0.28 | -0.48 | -0.39 | -0.36 | -0.34 | 0.03 | -0.54 | -0.39 |
| % CHG SAME QTR LAST YR.... | -0.17 | -0.10 | -0.08 | -0.93 | -0.44 | -0.41 | -0.36 | -0.39 | -0.39 | -0.38 | -0.39 | 0.03 | -0.54 | -0.39 |
| TRANS,COMM,PUB UTIL........... | 121.7 | 123.4 | 124.1 | 125.0 | 126.1 | 127.3 | 128.6 | 129.9 | 131.2 | 132.5 | 133.8 | 122.7 | 126.8 | 131.9 |
| % CHG PREV QTR SAAR....... | 0.88 | 5.48 | 2.32 | 3.07 | 3.45 | 3.95 | 4.20 | 4.14 | 4.02 | 3.98 | 3.95 | 2.54 | 3.34 | 4.03 |
| % CHG SAME QTR LAST YR.... | 2.21 | 2.66 | 2.51 | 2.92 | 3.57 | 3.20 | 3.67 | 3.93 | 4.08 | 4.08 | 4.02 | 2.54 | 3.34 | 4.03 |
| GOVERNMENT.................... | 355.3 | 355.7 | 356.2 | 357.0 | 358.0 | 359.0 | 360.1 | 361.8 | 363.4 | 365.1 | 367.1 | 355.6 | 358.5 | 364.3 |
| % CHG PREV QTR SAAR....... | 0.00 | 0.41 | 0.64 | 0.81 | 1.13 | 1.18 | 1.26 | 1.83 | 1.82 | 1.93 | 2.13 | 0.09 | 0.81 | 1.63 |
| % CHG SAME QTR LAST YR.... | 0.59 | 0.55 | 0.36 | 0.47 | 0.75 | 0.94 | 1.09 | 1.35 | 1.52 | 1.71 | 1.93 | 0.09 | 0.81 | 1.63 |
| FEDERAL,CIVILIAN............ | 57.3 | 56.8 | 56.9 | 57.0 | 57.1 | 57.3 | 57.4 | 57.5 | 57.7 | 57.8 | 57.9 | 57.1 | 57.2 | 57.7 |
| % CHG PREV QTR SAAR....... | -2.91 | -3.56 | 0.84 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | -2.00 | 0.09 | 0.92 |
| % CHG SAME QTR LAST YR.... | -1.73 | -2.32 | -1.37 | -1.20 | -0.24 | 0.90 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | -2.00 | 0.09 | 0.92 |
| STATE AND LOCAL............. | 297.8 | 299.5 | 299.4 | 300.0 | 300.8 | 301.7 | 302.7 | 304.2 | 305.7 | 307.3 | 309.1 | 298.4 | 301.3 | 306.6 |
| % CHG PREV QTR SAAR....... | 1.09 | 2.27 | -0.21 | 0.79 | 1.17 | 1.23 | 1.32 | 2.00 | 1.99 | 2.12 | 2.36 | 0.50 | 0.96 | 1.76 |
| % CHG SAME QTR LAST YR.... | 1.06 | 1.12 | 0.65 | 0.98 | 1.00 | 0.74 | 1.13 | 1.43 | 1.63 | 1.86 | 2.12 | 0.50 | 0.96 | 1.76 |
| [illegible]ATISTICAL DISCREPANCY..... | 0.2 | -0.6 | 0.0 | 0.0 | 0[illegible] | [illegible].0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 9: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF SEASONAL[illegible]USTED JOBS

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL DURABLE GOODS............. | 261.7 | 261.7 | 262.2 | 262.9 | 264.1 | 265.8 | 267.6 | 269.3 | 270.8 | 272.5 | 274.1 | 261.6 | 265.1 | 271.7 |
| % CHG PREV QTR SAAR......... | 1.44 | -0.05 | 0.80 | 1.06 | 1.80 | 2.63 | 2.68 | 2.63 | 2.19 | 2.55 | 2.39 | 2.11 | 1.33 | 2.48 |
| % CHG SAME QTR LAST YR...... | 1.91 | 1.92 | 2.47 | 0.81 | 0.90 | 1.57 | 2.04 | 2.43 | 2.53 | 2.51 | 2.44 | 2.11 | 1.33 | 2.48 |
| LUMBER AND WOOD............... | 18.6 | 18.6 | 18.6 | 18.6 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.6 | 18.5 | 18.5 |
| % CHG PREV QTR SAAR......... | -2.12 | -0.43 | 0.43 | 0.68 | -1.50 | -0.73 | -0.54 | -0.08 | 0.16 | 1.12 | -0.13 | 0.43 | -0.35 | -0.15 |
| % CHG SAME QTR LAST YR...... | 0.59 | -0.04 | -0.66 | -0.37 | -0.21 | -0.29 | -0.53 | -0.72 | -0.30 | 0.16 | 0.27 | 0.43 | -0.35 | -0.15 |
| FURNITURE AND FIXTURES........ | 28.7 | 28.4 | 28.4 | 28.4 | 28.4 | 28.4 | 28.5 | 28.5 | 28.6 | 28.6 | 28.7 | 28.5 | 28.4 | 28.6 |
| % CHG PREV QTR SAAR......... | 6.43 | -4.16 | -1.02 | 0.57 | -0.15 | 0.68 | 1.20 | 0.45 | 0.28 | 0.39 | 0.89 | 4.23 | -0.06 | 0.57 |
| % CHG SAME QTR LAST YR...... | 5.90 | 3.30 | 2.62 | 0.38 | -1.21 | 0.02 | 0.57 | 0.54 | 0.65 | 0.58 | 0.50 | 4.23 | -0.06 | 0.57 |
| STONE,CLAY AND GLASS.......... | 14.4 | 14.5 | 14.6 | 14.7 | 14.8 | 14.9 | 15.0 | 15.1 | 15.3 | 15.4 | 15.5 | 14.5 | 14.8 | 15.3 |
| % CHG PREV QTR SAAR......... | -3.14 | 3.32 | 1.18 | 2.99 | 2.88 | 2.67 | 3.74 | 3.24 | 3.10 | 2.72 | 3.24 | 3.44 | 2.29 | 3.15 |
| % CHG SAME QTR LAST YR...... | 2.83 | 3.47 | 2.59 | 1.06 | 2.59 | 2.43 | 3.07 | 3.13 | 3.19 | 3.20 | 3.08 | 3.44 | 2.29 | 3.15 |
| PRIMARY METALS................ | 15.3 | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | 15.3 | 15.3 | 15.4 | 15.4 | 15.5 | 15.2 | 15.2 | 15.4 |
| % CHG PREV QTR SAAR......... | 0.35 | -1.72 | -0.21 | -0.32 | 0.37 | 0.62 | 1.46 | 1.65 | 1.39 | 1.12 | 0.95 | 0.31 | -0.08 | 1.25 |
| % CHG SAME QTR LAST YR...... | -0.89 | 0.51 | 1.03 | -0.48 | -0.47 | 0.12 | 0.53 | 1.03 | 1.28 | 1.40 | 1.28 | 0.31 | -0.08 | 1.25 |
| FABRICATED METALS............. | 42.1 | 42.3 | 42.3 | 42.4 | 42.4 | 42.5 | 42.6 | 42.6 | 42.7 | 42.7 | 42.8 | 42.2 | 42.5 | 42.7 |
| % CHG PREV QTR SAAR......... | -0.28 | 2.10 | 0.00 | 0.50 | 0.49 | 0.61 | 0.55 | 0.47 | 0.39 | 0.49 | 0.47 | 1.39 | 0.57 | 0.49 |
| % CHG SAME QTR LAST YR...... | 0.90 | 1.84 | 1.47 | 0.58 | 0.77 | 0.40 | 0.54 | 0.53 | 0.51 | 0.48 | 0.46 | 1.39 | 0.57 | 0.49 |
| NONELECTRICAL MACHINERY....... | 36.8 | 36.5 | 36.5 | 36.6 | 36.6 | 36.7 | 36.7 | 36.7 | 36.7 | 36.8 | 36.8 | 36.5 | 36.6 | 36.7 |
| % CHG PREV QTR SAAR......... | 5.47 | -2.90 | 0.43 | 0.50 | 0.41 | 0.41 | 0.42 | 0.27 | 0.24 | 0.28 | 0.14 | -0.79 | 0.32 | 0.31 |
| % CHG SAME QTR LAST YR...... | -1.74 | -0.41 | 1.81 | 0.83 | -0.40 | 0.44 | 0.43 | 0.38 | 0.34 | 0.30 | 0.23 | -0.79 | 0.32 | 0.31 |
| ELECTRICAL MACHINERY.......... | 36.6 | 36.6 | 36.7 | 36.9 | 37.2 | 37.6 | 38.1 | 38.5 | 39.0 | 39.5 | 39.9 | 36.6 | 37.4 | 39.2 |
| % CHG PREV QTR SAAR......... | 2.31 | 0.05 | 0.49 | 2.15 | 3.53 | 3.82 | 5.53 | 5.03 | 5.11 | 4.58 | 4.99 | 2.14 | 2.26 | 4.84 |
| % CHG SAME QTR LAST YR...... | 2.33 | 1.95 | 2.66 | 1.24 | 1.54 | 2.49 | 3.75 | 4.48 | 4.87 | 5.06 | 4.93 | 2.14 | 2.26 | 4.84 |
| TRANSPORTATION EQUIPMENT...... | 48.2 | 48.6 | 48.9 | 49.1 | 49.7 | 50.8 | 51.5 | 52.4 | 53.0 | 53.9 | 54.6 | 48.3 | 50.3 | 53.5 |
| % CHG PREV QTR SAAR......... | 4.84 | 3.41 | 2.99 | 1.35 | 5.25 | 8.63 | 6.26 | 6.94 | 4.59 | 6.92 | 5.40 | 6.53 | 4.07 | 6.36 |
| % CHG SAME QTR LAST YR...... | 7.19 | 5.60 | 5.51 | 3.14 | 3.24 | 4.52 | 5.34 | 6.76 | 6.59 | 6.17 | 5.96 | 6.53 | 4.07 | 6.36 |
| INSTRUMENTS................... | 9.5 | 9.5 | 9.4 | 9.4 | 9.4 | 9.5 | 9.5 | 9.6 | 9.6 | 9.7 | 9.7 | 9.5 | 9.4 | 9.6 |
| % CHG PREV QTR SAAR......... | -3.75 | -0.06 | -2.62 | -0.21 | 0.76 | 1.40 | 2.45 | 2.55 | 2.49 | 1.41 | 2.49 | -7.02 | -0.33 | 2.12 |
| % CHG SAME QTR LAST YR...... | -9.01 | -6.50 | -2.75 | -1.67 | -0.54 | -0.18 | 1.10 | 1.79 | 2.22 | 2.22 | 2.23 | -7.02 | -0.33 | 2.12 |
| MISCELLANEOUS................. | 11.6 | 11.6 | 11.6 | 11.7 | 11.8 | 11.8 | 11.9 | 12.0 | 12.0 | 12.1 | 12.1 | 11.6 | 11.8 | 12.1 |
| % CHG PREV QTR SAAR......... | 4.53 | -0.49 | 0.27 | 2.62 | 2.69 | 1.92 | 2.50 | 1.83 | 2.23 | 1.23 | 2.48 | 2.22 | 1.82 | 2.06 |
| % CHG SAME QTR LAST YR...... | 0.28 | 1.76 | 4.23 | 1.71 | 1.26 | 1.87 | 2.43 | 2.23 | 2.12 | 1.95 | 1.94 | 2.22 | 1.82 | 2.06 |
| STATISTICAL DISCREPANCY....... | 0.0 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 10: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF SEASONALLY ADJUSTED JOBS

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL NONDURABLE GOODS.......... | 255.6 | 254.5 | 253.7 | 253.9 | 254.5 | 254.3 | 254.0 | 253.4 | 252.9 | 252.3 | 252.3 | 255.2 | 254.2 | 252.8 |
| % CHG PREV QTR SAAR......... | -2.06 | -1.66 | -1.32 | 0.32 | 0.92 | -0.23 | -0.47 | -0.91 | -0.78 | -0.99 | -0.05 | -0.60 | -0.40 | -0.56 |
| % CHG SAME QTR LAST YR...... | -0.38 | -1.22 | -1.52 | -1.18 | -0.44 | -0.08 | 0.13 | -0.18 | -0.60 | -0.79 | -0.68 | -0.60 | -0.40 | -0.56 |
| FOOD......................... | 35.8 | 36.4 | 36.3 | 36.2 | 36.2 | 36.1 | 36.1 | 36.0 | 35.9 | 35.7 | 35.6 | 36.0 | 36.2 | 35.8 |
| % CHG PREV QTR SAAR......... | 2.33 | 6.49 | -1.42 | -0.36 | -0.05 | -1.01 | -0.38 | -1.48 | -1.27 | -1.96 | -0.90 | 0.50 | 0.41 | -1.11 |
| % CHG SAME QTR LAST YR...... | 0.11 | 2.01 | 1.95 | 1.72 | 1.12 | -0.71 | -0.45 | -0.73 | -1.04 | -1.27 | -1.40 | 0.50 | 0.41 | -1.11 |
| TOBACCO...................... | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| % CHG PREV QTR SAAR......... | -8.90 | 21.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -4.13 | 1.81 | 0.00 |
| % CHG SAME QTR LAST YR...... | -6.49 | -3.37 | -2.46 | 2.50 | 4.92 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -4.13 | 1.81 | 0.00 |
| TEXTILES..................... | 20.9 | 20.6 | 20.5 | 20.5 | 20.4 | 20.3 | 20.2 | 20.1 | 19.9 | 19.8 | 19.7 | 20.7 | 20.4 | 19.9 |
| % CHG PREV QTR SAAR......... | 2.54 | -4.95 | -1.70 | -0.92 | -1.30 | -2.12 | -1.97 | -2.77 | -2.68 | -3.10 | -2.17 | 0.45 | -1.65 | -2.43 |
| % CHG SAME QTR LAST YR...... | 1.36 | -1.20 | -0.18 | -1.29 | -2.23 | -1.51 | -1.58 | -2.04 | -2.39 | -2.63 | -2.68 | 0.45 | -1.65 | -2.43 |
| APPAREL...................... | 59.9 | 59.2 | 58.5 | 58.5 | 58.7 | 58.7 | 58.5 | 58.1 | 57.7 | 57.3 | 57.2 | 59.6 | 58.6 | 57.6 |
| % CHG PREV QTR SAAR......... | -6.24 | -5.17 | -4.34 | -0.28 | 1.88 | -0.36 | -1.26 | -2.59 | -2.65 | -2.74 | -0.97 | -2.56 | -1.74 | -1.72 |
| % CHG SAME QTR LAST YR...... | -2.12 | -4.16 | -4.64 | -4.03 | -2.02 | -0.80 | -0.01 | -0.60 | -1.72 | -2.31 | -2.24 | -2.56 | -1.74 | -1.72 |
| PAPER........................ | 21.9 | 21.9 | 22.0 | 22.1 | 22.1 | 22.2 | 22.2 | 22.3 | 22.3 | 22.3 | 22.4 | 21.9 | 22.2 | 22.3 |
| % CHG PREV QTR SAAR......... | 0.54 | 0.60 | 2.01 | 0.87 | 1.02 | 0.79 | 1.04 | 0.57 | 0.72 | -0.16 | 1.08 | -0.70 | 1.06 | 0.68 |
| % CHG SAME QTR LAST YR...... | -0.53 | -0.05 | -1.57 | 1.00 | 1.12 | 1.17 | 0.93 | 0.85 | 0.78 | 0.54 | 0.55 | -0.70 | 1.06 | 0.68 |
| PRINTING AND PUBLISHING....... | 36.9 | 36.9 | 36.9 | 36.9 | 36.9 | 37.0 | 37.1 | 37.2 | 37.3 | 37.4 | 37.5 | 36.9 | 37.0 | 37.3 |
| % CHG PREV QTR SAAR......... | -0.11 | 0.02 | -0.54 | 0.35 | 0.48 | 0.63 | 0.87 | 1.04 | 1.22 | 1.35 | 1.48 | 0.78 | 0.20 | 1.02 |
| % CHG SAME QTR LAST YR...... | 1.24 | 0.25 | 0.26 | -0.07 | 0.08 | 0.23 | 0.58 | 0.76 | 0.94 | 1.12 | 1.27 | 0.78 | 0.20 | 1.02 |
| CHEMICALS.................... | 39.7 | 39.5 | 39.4 | 39.5 | 39.6 | 39.6 | 39.6 | 39.6 | 39.6 | 39.6 | 39.6 | 39.7 | 39.6 | 39.6 |
| % CHG PREV QTR SAAR......... | -3.71 | -1.63 | -1.77 | 1.61 | 0.71 | 0.16 | -0.14 | -0.06 | 0.03 | -0.39 | 0.34 | -0.34 | -0.23 | 0.00 |
| % CHG SAME QTR LAST YR...... | -0.18 | -0.78 | -1.90 | -1.39 | -0.28 | 0.17 | 0.58 | 0.17 | 0.00 | -0.14 | -0.02 | -0.34 | -0.23 | 0.00 |
| PETROLEUM REFINING............ | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 |
| % CHG PREV QTR SAAR......... | 20.11 | 69.81 | 9.45 | 6.34 | 4.33 | 2.56 | 2.28 | 2.07 | 1.83 | 1.64 | 1.58 | 0.36 | 12.62 | 2.18 |
| % CHG SAME QTR LAST YR...... | -4.70 | 13.80 | 23.76 | 24.13 | 19.83 | 5.64 | 3.86 | 2.81 | 2.19 | 1.96 | 1.78 | 0.36 | 12.62 | 2.18 |
| RUBBER AND PLASTICS........... | 30.6 | 30.5 | 30.4 | 30.5 | 30.7 | 30.7 | 30.6 | 30.5 | 30.5 | 30.5 | 30.6 | 30.5 | 30.6 | 30.5 |
| % CHG PREV QTR SAAR......... | -1.88 | -0.88 | -0.89 | 1.08 | 2.87 | -0.19 | -1.42 | -0.88 | -0.37 | 0.12 | 0.94 | 1.12 | 0.29 | -0.33 |
| % CHG SAME QTR LAST YR...... | 1.39 | -0.34 | -0.32 | -0.65 | 0.53 | 0.71 | 0.57 | 0.08 | -0.72 | -0.64 | -0.05 | 1.12 | 0.29 | -0.33 |
| LEATHER...................... | 8.1 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 8.0 | 7.8 | 7.8 |
| % CHG PREV QTR SAAR......... | -11.42 | -12.51 | -0.39 | -0.52 | -0.70 | -0.10 | 0.08 | 1.07 | 0.62 | 0.84 | -0.56 | -5.87 | -2.77 | 0.41 |
| % CHG SAME QTR LAST YR...... | -5.47 | -8.87 | -8.19 | -6.38 | -3.67 | -0.43 | -0.31 | 0.09 | 0.42 | 0.65 | 0.49 | -5.87 | -2.77 | 0.41 |
| STATISTICAL DISCREPANCY....... | 0.1 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 11: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR

1987 DOL[illegible]

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL NONAGRICULTURAL........... | 19112 | 19087 | 19048 | 19566 | 19257 | 19292 | 19280 | 19787 | 19450 | 19464 | 19416 | 19031 | 19349 | 19529 |
| % CHG SAME QTR LAST YR.... | 2.99 | 2.46 | -1.28 | 3.65 | 0.76 | 1.07 | 1.22 | 1.13 | 1.01 | 0.89 | 0.71 | 1.28 | 1.67 | 0.93 |
| MINING........................ | 26659 | 26153 | 26149 | 27155 | 25730 | 25489 | 25816 | 27062 | 25756 | 25598 | 25958 | 26256 | 26047 | 26093 |
| % CHG SAME QTR LAST YR.... | 17.52 | 11.87 | 4.96 | 4.20 | -3.48 | -2.54 | -1.28 | -0.34 | 0.10 | 0.43 | 0.55 | 10.40 | -0.79 | 0.18 |
| CONSTRUCTION.................. | 21442 | 20725 | 21386 | 23307 | 21240 | 20656 | 21465 | 23509 | 21463 | 20895 | 21686 | 21689 | 21667 | 21888 |
| % CHG SAME QTR LAST YR.... | 7.54 | 5.21 | -2.59 | 0.44 | -0.94 | -0.34 | 0.37 | 0.87 | 1.05 | 1.16 | 1.03 | 4.51 | -0.11 | 1.02 |
| MANUFACTURING................. | 21620 | 21678 | 21745 | 22053 | 21910 | 21989 | 22029 | 22289 | 22079 | 22102 | 22075 | 21484 | 21995 | 22136 |
| % CHG SAME QTR LAST YR.... | 2.26 | 2.27 | -2.69 | 5.55 | 1.34 | 1.43 | 1.30 | 1.07 | 0.77 | 0.51 | 0.21 | 0.06 | 2.38 | 0.64 |
| DURABLE GOODS............... | 22649 | 22897 | 22894 | 23146 | 22963 | 23186 | 23137 | 23330 | 23063 | 23218 | 23091 | 22583 | 23108 | 23175 |
| % CHG SAME QTR LAST YR.... | 3.97 | 4.30 | -2.12 | 5.73 | 1.38 | 1.26 | 1.06 | 0.80 | 0.44 | 0.14 | -0.20 | 1.56 | 2.32 | 0.29 |
| NONDURABLE GOODS............ | 20560 | 20435 | 20559 | 20917 | 20812 | 20749 | 20863 | 21179 | 21021 | 20905 | 20972 | 20358 | 20835 | 21019 |
| % CHG SAME QTR LAST YR.... | 0.31 | -0.07 | -3.53 | 5.23 | 1.22 | 1.54 | 1.48 | 1.25 | 1.01 | 0.75 | 0.52 | -1.69 | 2.35 | 0.88 |
| TRADE......................... | 14684 | 14497 | 14351 | 14993 | 14717 | 14629 | 14521 | 15176 | 14867 | 14741 | 14566 | 14459 | 14715 | 14838 |
| % CHG SAME QTR LAST YR.... | 3.53 | 2.49 | -3.56 | 4.82 | 0.23 | 0.91 | 1.18 | 1.22 | 1.02 | 0.77 | 0.32 | 0.38 | 1.77 | 0.83 |
| SERVICES...................... | 18379 | 18253 | 18577 | 18985 | 18473 | 18459 | 18812 | 19277 | 18752 | 18721 | 19068 | 18437 | 18682 | 18955 |
| % CHG SAME QTR LAST YR.... | 2.00 | 2.04 | 0.17 | 2.41 | 0.51 | 1.13 | 1.27 | 1.54 | 1.51 | 1.42 | 1.36 | 1.45 | 1.33 | 1.46 |
| FIN,INS,REAL EST.............. | 23770 | 23823 | 24049 | 24340 | 23988 | 23930 | 24247 | 24660 | 24354 | 24327 | 24631 | 23533 | 24126 | 24493 |
| % CHG SAME QTR LAST YR.... | 5.62 | 3.01 | -2.40 | 8.23 | 0.92 | 0.45 | 0.82 | 1.31 | 1.52 | 1.66 | 1.58 | 1.15 | 2.52 | 1.52 |
| TRANS,COMM,PUB UTIL........... | 25605 | 25168 | 24956 | 25452 | 25207 | 25088 | 24974 | 25585 | 25374 | 25288 | 25164 | 25251 | 25180 | 25353 |
| % CHG SAME QTR LAST YR.... | 3.80 | 1.01 | -2.60 | 0.69 | -1.55 | -0.32 | 0.07 | 0.52 | 0.66 | 0.80 | 0.76 | 1.03 | -0.28 | 0.69 |
| GOVERNMENT.................... | 18915 | 19547 | 18843 | 19256 | 19454 | 20028 | 19293 | 19460 | 19646 | 20228 | 19464 | 19037 | 19508 | 19700 |
| % CHG SAME QTR LAST YR.... | 2.70 | 3.46 | 3.47 | 2.19 | 2.85 | 2.46 | 2.39 | 1.06 | 0.98 | 1.00 | 0.88 | 3.63 | 2.47 | 0.98 |
| FEDERAL,CIVILIAN............ | 28909 | 29314 | 29517 | 29661 | 29489 | 29613 | 29821 | 29968 | 29790 | 29937 | 30084 | 29293 | 29646 | 29945 |
| % CHG SAME QTR LAST YR.... | 2.22 | 2.39 | 2.53 | 0.79 | 2.00 | 1.02 | 1.03 | 1.04 | 1.02 | 1.09 | 0.88 | 2.84 | 1.21 | 1.01 |
| STATE AND LOCAL............. | 16983 | 17638 | 16862 | 17301 | 17539 | 18151 | 17343 | 17496 | 17723 | 18345 | 17519 | 17073 | 17584 | 17771 |
| % CHG SAME QTR LAST YR.... | 3.21 | 4.21 | 4.04 | 2.92 | 3.28 | 2.90 | 2.85 | 1.13 | 1.05 | 1.07 | 1.02 | 4.21 | 2.99 | 1.07 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 12: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
SEASONALLY ADJUSTED 1987 DOLLARS

| | HISTORY 199302 | FORECAST - DATA 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | ANNUAL 1993 | 1994 | 1995 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL NONAGRICULTURAL........... | 19169 | 19174 | 19201 | 19265 | 19317 | 19375 | 19434 | 19479 | 19512 | 19550 | 19571 | 19032 | 19348 | 19528 |
| % CHG PREV QTR SAAR....... | 13.26 | 0.10 | 0.56 | 1.34 | 1.08 | 1.22 | 1.23 | 0.92 | 0.68 | 0.79 | 0.43 | 1.27 | 1.66 | 0.93 |
| % CHG SAME QTR LAST YR.... | 2.98 | 2.46 | -1.29 | 3.67 | 0.77 | 1.05 | 1.22 | 1.11 | 1.01 | 0.90 | 0.70 | 1.27 | 1.66 | 0.93 |
| MINING........................ | 27046 | 26747 | 26406 | 26185 | 26103 | 26068 | 26069 | 26095 | 26129 | 26180 | 26213 | 26332 | 26106 | 26154 |
| % CHG PREV QTR SAAR....... | 34.15 | -4.34 | -5.01 | -3.31 | -1.24 | -0.54 | 0.01 | 0.41 | 0.52 | 0.78 | 0.50 | 10.55 | -0.86 | 0.18 |
| % CHG SAME QTR LAST YR.... | 17.66 | 12.15 | 4.56 | 4.20 | -3.48 | -2.54 | -1.28 | -0.34 | 0.10 | 0.43 | 0.55 | 10.55 | -0.86 | 0.18 |
| CONSTRUCTION.................. | 21777 | 21690 | 21614 | 21557 | 21572 | 21616 | 21694 | 21744 | 21798 | 21867 | 21917 | 21636 | 21610 | 21832 |
| % CHG PREV QTR SAAR....... | 5.98 | -1.59 | -1.39 | -1.05 | 0.27 | 0.83 | 1.43 | 0.93 | 1.01 | 1.27 | 0.92 | 4.36 | -0.12 | 1.03 |
| % CHG SAME QTR LAST YR.... | 7.61 | 4.90 | -2.71 | 0.44 | -0.94 | -0.34 | 0.37 | 0.87 | 1.05 | 1.16 | 1.03 | 4.36 | -0.12 | 1.03 |
| MANUFACTURING................. | 21668 | 21734 | 21824 | 21885 | 21957 | 22032 | 22109 | 22119 | 22126 | 22145 | 22156 | 21485 | 21996 | 22136 |
| % CHG PREV QTR SAAR....... | 19.77 | 1.23 | 1.66 | 1.12 | 1.33 | 1.37 | 1.41 | 0.17 | 0.13 | 0.34 | 0.20 | 0.05 | 2.38 | 0.64 |
| % CHG SAME QTR LAST YR.... | 2.25 | 2.27 | -2.72 | 5.66 | 1.33 | 1.37 | 1.31 | 1.07 | 0.77 | 0.51 | 0.21 | 0.05 | 2.38 | 0.64 |
| DURABLE GOODS............... | 22768 | 22865 | 22963 | 23008 | 23076 | 23141 | 23208 | 23190 | 23174 | 23176 | 23164 | 22578 | 23108 | 23176 |
| % CHG PREV QTR SAAR....... | 20.78 | 1.73 | 1.72 | 0.78 | 1.20 | 1.12 | 1.17 | -0.32 | -0.27 | 0.02 | -0.20 | 1.52 | 2.35 | 0.29 |
| % CHG SAME QTR LAST YR.... | 3.93 | 4.29 | -2.18 | 5.94 | 1.36 | 1.21 | 1.07 | 0.79 | 0.42 | 0.15 | -0.19 | 1.52 | 2.35 | 0.29 |
| NONDURABLE GOODS............ | 20541 | 20571 | 20646 | 20721 | 20795 | 20873 | 20952 | 20981 | 21004 | 21031 | 21060 | 20363 | 20835 | 21019 |
| % CHG PREV QTR SAAR....... | 18.41 | 0.58 | 1.47 | 1.46 | 1.43 | 1.50 | 1.52 | 0.56 | 0.45 | 0.52 | 0.55 | -1.67 | 2.32 | 0.88 |
| % CHG SAME QTR LAST YR.... | 0.32 | -0.05 | -3.52 | 5.23 | 1.24 | 1.47 | 1.48 | 1.25 | 1.00 | 0.76 | 0.52 | -1.67 | 2.32 | 0.88 |
| TRADE......................... | 14647 | 14600 | 14626 | 14638 | 14681 | 14733 | 14799 | 14817 | 14830 | 14846 | 14845 | 14460 | 14713 | 14835 |
| % CHG PREV QTR SAAR....... | 21.02 | -1.28 | 0.71 | 0.32 | 1.18 | 1.44 | 1.79 | 0.48 | 0.37 | 0.42 | -0.02 | 0.37 | 1.75 | 0.83 |
| % CHG SAME QTR LAST YR.... | 3.55 | 2.48 | -3.55 | 4.82 | 0.23 | 0.91 | 1.18 | 1.22 | 1.02 | 0.77 | 0.32 | 0.37 | 1.75 | 0.83 |
| SERVICES...................... | 18543 | 18514 | 18546 | 18568 | 18638 | 18724 | 18782 | 18853 | 18919 | 18990 | 19037 | 18434 | 18678 | 18950 |
| % CHG PREV QTR SAAR....... | 9.41 | -0.62 | 0.69 | 0.47 | 1.51 | 1.85 | 1.25 | 1.53 | 1.41 | 1.49 | 1.01 | 1.44 | 1.32 | 1.46 |
| % CHG SAME QTR LAST YR.... | 1.96 | 2.01 | 0.16 | 2.41 | 0.51 | 1.13 | 1.27 | 1.54 | 1.51 | 1.42 | 1.36 | 1.44 | 1.32 | 1.46 |
| FIN,INS,REAL EST.............. | 23857 | 24037 | 24038 | 24028 | 24075 | 24144 | 24236 | 24343 | 24442 | 24545 | 24619 | 23533 | 24121 | 24488 |
| % CHG PREV QTR SAAR....... | 33.37 | 3.05 | 0.02 | -0.17 | 0.80 | 1.14 | 1.53 | 1.78 | 1.64 | 1.69 | 1.22 | 1.14 | 2.50 | 1.52 |
| % CHG SAME QTR LAST YR.... | 5.62 | 3.01 | -2.51 | 8.23 | 0.92 | 0.45 | 0.82 | 1.31 | 1.52 | 1.66 | 1.58 | 1.14 | 2.50 | 1.52 |
| TRANS,COMM,PUB UTIL........... | 25563 | 25270 | 25212 | 25151 | 25165 | 25190 | 25231 | 25283 | 25332 | 25391 | 25423 | 25256 | 25184 | 25357 |
| % CHG PREV QTR SAAR....... | 9.68 | -4.50 | -0.91 | -0.96 | 0.22 | 0.39 | 0.65 | 0.83 | 0.78 | 0.92 | 0.52 | 1.05 | -0.28 | 0.69 |
| % CHG SAME QTR LAST YR.... | 3.81 | 1.00 | -2.51 | 0.69 | -1.55 | -0.32 | 0.07 | 0.52 | 0.66 | 0.80 | 0.76 | 1.05 | -0.28 | 0.69 |
| GOVERNMENT.................... | 18942 | 19085 | 19104 | 19441 | 19489 | 19522 | 19560 | 19648 | 19681 | 19717 | 19733 | 19031 | 19503 | 19695 |
| % CHG PREV QTR SAAR....... | -1.11 | 3.07 | 0.38 | 7.25 | 1.00 | 0.68 | 0.77 | 1.80 | 0.68 | 0.74 | 0.33 | 3.62 | 2.48 | 0.98 |
| % CHG SAME QTR LAST YR.... | 2.68 | 3.47 | 3.46 | 2.35 | 2.89 | 2.29 | 2.39 | 1.06 | 0.98 | 1.00 | 0.89 | 3.62 | 2.48 | 0.98 |
| FEDERAL,CIVILIAN............ | 29092 | 29320 | 29343 | 29658 | 29662 | 29631 | 29645 | 29965 | 29965 | 29955 | 29906 | 29296 | 29649 | 29948 |
| % CHG PREV QTR SAAR....... | -4.54 | 3.17 | 0.32 | 4.36 | 0.06 | -0.41 | 0.19 | 4.38 | 0.01 | -0.13 | -0.65 | 2.84 | 1.20 | 1.01 |
| % CHG SAME QTR LAST YR.... | 2.13 | 2.48 | 2.57 | 0.77 | 1.96 | 1.06 | 1.03 | 1.04 | 1.02 | 1.09 | 0.88 | 2.84 | 1.20 | 1.01 |
| STATE AND LOCAL............. | 17001 | 17107 | 17158 | 17499 | 17557 | 17604 | 17648 | 17697 | 17742 | 17792 | 17827 | 17067 | 17577 | 17764 |
| % CHG PREV QTR SAAR....... | -0.05 | 2.52 | 1.20 | 8.19 | 1.33 | 1.07 | 1.00 | 1.11 | 1.01 | 1.14 | 0.80 | 4.21 | 2.99 | 1.07 |
| % CHG SAME QTR LAST YR.... | 3.20 | 4.21 | 4.04 | 2.92 | 3.27 | 2.90 | 2.85 | 1.13 | 1.05 | 1.07 | 1.02 | 4.21 | 2.99 | 1.07 |

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 13: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR

CURRENT DOLLARS

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL NONAGRICULTURAL........... | 24272 | 24317 | 24418 | 25307 | 25113 | 25382 | 25591 | 26488 | 26264 | 26503 | 26681 | 24208 | 25348 | 26484 |
| % CHG SAME QTR LAST YR.... | 5.82 | 5.19 | 1.00 | 6.23 | 3.46 | 4.38 | 4.80 | 4.66 | 4.59 | 4.42 | 4.26 | 3.99 | 4.71 | 4.48 |
| MINING......................... | 33857 | 33319 | 33522 | 35122 | 33555 | 33534 | 34266 | 36227 | 34779 | 34856 | 35670 | 33397 | 34119 | 35383 |
| % CHG SAME QTR LAST YR.... | 20.75 | 14.84 | 7.39 | 6.79 | -0.89 | 0.65 | 2.22 | 3.14 | 3.65 | 3.94 | 4.10 | 13.35 | 2.16 | 3.70 |
| CONSTRUCTION.................. | 27231 | 26404 | 27416 | 30145 | 27699 | 27175 | 28491 | 31471 | 28982 | 28452 | 29800 | 27584 | 28378 | 29676 |
| % CHG SAME QTR LAST YR.... | 10.50 | 8.00 | -0.34 | 2.94 | 1.72 | 2.92 | 3.92 | 4.40 | 4.63 | 4.70 | 4.59 | 7.28 | 2.88 | 4.58 |
| MANUFACTURING................. | 27458 | 27618 | 27876 | 28524 | 28573 | 28930 | 29240 | 29838 | 29814 | 30094 | 30334 | 27330 | 28817 | 30020 |
| % CHG SAME QTR LAST YR.... | 5.07 | 4.99 | -0.44 | 8.18 | 4.06 | 4.75 | 4.89 | 4.61 | 4.34 | 4.03 | 3.74 | 2.73 | 5.44 | 4.18 |
| DURABLE GOODS............... | 28765 | 29171 | 29349 | 29937 | 29945 | 30504 | 30711 | 31231 | 31142 | 31615 | 31731 | 28728 | 30274 | 31430 |
| % CHG SAME QTR LAST YR.... | 6.83 | 7.08 | 0.14 | 8.36 | 4.10 | 4.57 | 4.64 | 4.32 | 4.00 | 3.64 | 3.32 | 4.27 | 5.38 | 3.82 |
| NONDURABLE GOODS............ | 26111 | 26034 | 26355 | 27055 | 27141 | 27297 | 27692 | 28352 | 28385 | 28465 | 28818 | 25896 | 27296 | 28505 |
| % CHG SAME QTR LAST YR.... | 3.07 | 2.59 | -1.30 | 7.85 | 3.94 | 4.85 | 5.07 | 4.79 | 4.59 | 4.28 | 4.07 | 0.94 | 5.41 | 4.43 |
| TRADE.......................... | 18648 | 18469 | 18398 | 19392 | 19193 | 19246 | 19274 | 20316 | 20075 | 20071 | 20016 | 18392 | 19276 | 20120 |
| % CHG SAME QTR LAST YR.... | 6.38 | 5.21 | -1.33 | 7.43 | 2.92 | 4.21 | 4.76 | 4.76 | 4.60 | 4.29 | 3.85 | 3.06 | 4.81 | 4.38 |
| SERVICES....................... | 23342 | 23254 | 23814 | 24556 | 24091 | 24285 | 24970 | 25805 | 25322 | 25492 | 26203 | 23451 | 24475 | 25705 |
| % CHG SAME QTR LAST YR.... | 4.80 | 4.75 | 2.48 | 4.96 | 3.21 | 4.43 | 4.86 | 5.09 | 5.11 | 4.97 | 4.94 | 4.17 | 4.37 | 5.02 |
| FIN,INS,REAL EST.............. | 30188 | 30351 | 30829 | 31482 | 31283 | 31483 | 32184 | 33011 | 32885 | 33125 | 33846 | 29937 | 31608 | 33217 |
| % CHG SAME QTR LAST YR.... | 8.52 | 5.75 | -0.15 | 10.93 | 3.63 | 3.73 | 4.39 | 4.86 | 5.12 | 5.22 | 5.17 | 3.86 | 5.58 | 5.09 |
| TRANS,COMM,PUB UTIL........... | 32518 | 32064 | 31992 | 32920 | 32872 | 33007 | 33149 | 34250 | 34263 | 34433 | 34580 | 32118 | 32987 | 34382 |
| % CHG SAME QTR LAST YR.... | 6.66 | 3.70 | -0.35 | 3.20 | 1.09 | 2.94 | 3.62 | 4.04 | 4.23 | 4.32 | 4.32 | 3.72 | 2.70 | 4.23 |
| GOVERNMENT.................... | 24022 | 24903 | 24156 | 24906 | 25370 | 26349 | 25609 | 26051 | 26528 | 27543 | 26746 | 24215 | 25558 | 26717 |
| % CHG SAME QTR LAST YR.... | 5.53 | 6.21 | 5.86 | 4.74 | 5.61 | 5.81 | 6.01 | 4.60 | 4.56 | 4.53 | 4.44 | 6.41 | 5.55 | 4.53 |
| FEDERAL,CIVILIAN............ | 36715 | 37346 | 37840 | 38364 | 38456 | 38960 | 39583 | 40117 | 40227 | 40764 | 41340 | 37260 | 38841 | 40612 |
| % CHG SAME QTR LAST YR.... | 5.03 | 5.12 | 4.90 | 3.30 | 4.74 | 4.32 | 4.61 | 4.57 | 4.60 | 4.63 | 4.44 | 5.59 | 4.24 | 4.56 |
| STATE AND LOCAL............. | 21568 | 22471 | 21616 | 22378 | 22873 | 23880 | 23020 | 23422 | 23932 | 24979 | 24074 | 21717 | 23038 | 24102 |
| % CHG SAME QTR LAST YR.... | 6.05 | 6.98 | 6.44 | 5.49 | 6.05 | 6.27 | 6.50 | 4.67 | 4.63 | 4.60 | 4.58 | 7.00 | 6.08 | 4.62 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 14: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
SEASONALLY ADJUSTED CURRENT DOLLARS

| | HISTORY | FORECAST - DATA | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL NONAGRICULTURAL........... | 24345 | 24428 | 24614 | 24917 | 25191 | 25491 | 25796 | 26075 | 26347 | 26620 | 26894 | 24209 | 25349 | 26484 |
| % CHG PREV QTR SAAR....... | 16.16 | 1.36 | 3.09 | 5.01 | 4.46 | 4.85 | 4.88 | 4.41 | 4.23 | 4.21 | 4.18 | 3.98 | 4.71 | 4.48 |
| % CHG SAME QTR LAST YR.... | 5.82 | 5.18 | 0.99 | 6.25 | 3.47 | 4.35 | 4.80 | 4.65 | 4.59 | 4.43 | 4.26 | 3.98 | 4.71 | 4.48 |
| MINING........................ | 34348 | 34076 | 33851 | 33868 | 34041 | 34296 | 34602 | 34933 | 35283 | 35648 | 36020 | 33497 | 34202 | 35471 |
| % CHG PREV QTR SAAR....... | 37.59 | -3.13 | -2.62 | 0.20 | 2.06 | 3.03 | 3.62 | 3.88 | 4.06 | 4.21 | 4.24 | 13.50 | 2.10 | 3.71 |
| % CHG SAME QTR LAST YR.... | 20.90 | 15.13 | 6.97 | 6.79 | -0.89 | 0.65 | 2.22 | 3.14 | 3.65 | 3.94 | 4.10 | 13.50 | 2.10 | 3.71 |
| CONSTRUCTION.................. | 27656 | 27633 | 27708 | 27882 | 28132 | 28439 | 28795 | 29108 | 29435 | 29775 | 30118 | 27521 | 28312 | 29609 |
| % CHG PREV QTR SAAR....... | 8.69 | -0.34 | 1.09 | 2.54 | 3.62 | 4.45 | 5.09 | 4.42 | 4.57 | 4.71 | 4.68 | 7.12 | 2.87 | 4.58 |
| % CHG SAME QTR LAST YR.... | 10.57 | 7.69 | -0.47 | 2.94 | 1.72 | 2.92 | 3.92 | 4.40 | 4.63 | 4.70 | 4.59 | 7.12 | 2.87 | 4.58 |
| MANUFACTURING................. | 27518 | 27689 | 27977 | 28306 | 28634 | 28986 | 29346 | 29610 | 29877 | 30153 | 30445 | 27331 | 28818 | 30021 |
| % CHG PREV QTR SAAR....... | 22.83 | 2.51 | 4.22 | 4.79 | 4.72 | 5.01 | 5.07 | 3.64 | 3.67 | 3.74 | 3.93 | 2.72 | 5.44 | 4.18 |
| % CHG SAME QTR LAST YR.... | 5.06 | 4.99 | -0.47 | 8.29 | 4.06 | 4.68 | 4.89 | 4.61 | 4.34 | 4.03 | 3.75 | 2.72 | 5.44 | 4.18 |
| DURABLE GOODS............... | 28915 | 29130 | 29437 | 29759 | 30094 | 30445 | 30805 | 31043 | 31293 | 31557 | 31831 | 28723 | 30276 | 31431 |
| % CHG PREV QTR SAAR....... | 23.87 | 3.01 | 4.28 | 4.44 | 4.58 | 4.75 | 4.82 | 3.13 | 3.25 | 3.42 | 3.52 | 4.23 | 5.41 | 3.82 |
| % CHG SAME QTR LAST YR.... | 6.79 | 7.07 | 0.08 | 8.58 | 4.08 | 4.51 | 4.65 | 4.32 | 3.98 | 3.65 | 3.33 | 4.23 | 5.41 | 3.82 |
| NONDURABLE GOODS............ | 26088 | 26208 | 26467 | 26801 | 27119 | 27461 | 27810 | 28086 | 28362 | 28637 | 28940 | 25903 | 27298 | 28507 |
| % CHG PREV QTR SAAR....... | 21.44 | 1.85 | 4.02 | 5.14 | 4.82 | 5.14 | 5.18 | 4.04 | 3.99 | 3.93 | 4.30 | 0.96 | 5.38 | 4.43 |
| % CHG SAME QTR LAST YR.... | 3.08 | 2.61 | -1.29 | 7.85 | 3.95 | 4.78 | 5.07 | 4.79 | 4.58 | 4.28 | 4.06 | 0.96 | 5.38 | 4.43 |
| TRADE......................... | 18602 | 18601 | 18750 | 18933 | 19145 | 19384 | 19643 | 19835 | 20026 | 20215 | 20400 | 18394 | 19276 | 20119 |
| % CHG PREV QTR SAAR....... | 24.12 | -0.03 | 3.25 | 3.96 | 4.56 | 5.07 | 5.46 | 3.96 | 3.91 | 3.83 | 3.71 | 3.05 | 4.79 | 4.37 |
| % CHG SAME QTR LAST YR.... | 6.40 | 5.20 | -1.33 | 7.43 | 2.92 | 4.21 | 4.76 | 4.76 | 4.60 | 4.29 | 3.85 | 3.05 | 4.79 | 4.37 |
| SERVICES...................... | 23550 | 23587 | 23775 | 24016 | 24305 | 24633 | 24930 | 25238 | 25547 | 25857 | 26160 | 23448 | 24471 | 25701 |
| % CHG PREV QTR SAAR....... | 12.21 | 0.64 | 3.23 | 4.12 | 4.90 | 5.51 | 4.90 | 5.04 | 4.99 | 4.94 | 4.77 | 4.16 | 4.36 | 5.02 |
| % CHG SAME QTR LAST YR.... | 4.76 | 4.72 | 2.48 | 4.96 | 3.21 | 4.43 | 4.86 | 5.09 | 5.11 | 4.97 | 4.94 | 4.16 | 4.36 | 5.02 |
| FIN,INS,REAL EST.............. | 30298 | 30623 | 30815 | 31078 | 31397 | 31764 | 32169 | 32588 | 33005 | 33421 | 33831 | 29938 | 31602 | 33211 |
| % CHG PREV QTR SAAR....... | 36.79 | 4.36 | 2.54 | 3.45 | 4.17 | 4.77 | 5.20 | 5.30 | 5.22 | 5.14 | 4.99 | 3.84 | 5.56 | 5.09 |
| % CHG SAME QTR LAST YR.... | 8.52 | 5.75 | -0.26 | 10.93 | 3.63 | 3.73 | 4.39 | 4.86 | 5.12 | 5.22 | 5.17 | 3.84 | 5.56 | 5.09 |
| TRANS,COMM,PUB UTIL........... | 32464 | 32194 | 32321 | 32531 | 32818 | 33141 | 33490 | 33846 | 34207 | 34573 | 34936 | 32126 | 32995 | 34390 |
| % CHG PREV QTR SAAR....... | 12.49 | -3.29 | 1.59 | 2.63 | 3.57 | 3.99 | 4.28 | 4.32 | 4.33 | 4.35 | 4.27 | 3.74 | 2.71 | 4.23 |
| % CHG SAME QTR LAST YR.... | 6.66 | 3.69 | -0.26 | 3.20 | 1.09 | 2.94 | 3.62 | 4.04 | 4.23 | 4.32 | 4.32 | 3.74 | 2.71 | 4.23 |
| GOVERNMENT.................... | 24056 | 24315 | 24490 | 25145 | 25416 | 25684 | 25963 | 26302 | 26576 | 26848 | 27117 | 24208 | 25552 | 26711 |
| % CHG PREV QTR SAAR....... | 1.42 | 4.38 | 2.91 | 11.15 | 4.37 | 4.29 | 4.41 | 5.33 | 4.23 | 4.16 | 4.07 | 6.40 | 5.55 | 4.53 |
| % CHG SAME QTR LAST YR.... | 5.51 | 6.22 | 5.85 | 4.90 | 5.65 | 5.63 | 6.02 | 4.60 | 4.56 | 4.53 | 4.44 | 6.40 | 5.55 | 4.53 |
| FEDERAL,CIVILIAN............ | 36946 | 37353 | 37617 | 38360 | 38682 | 38984 | 39349 | 40113 | 40462 | 40789 | 41096 | 37265 | 38844 | 40615 |
| % CHG PREV QTR SAAR....... | -2.09 | 4.48 | 2.85 | 8.14 | 3.40 | 3.16 | 3.81 | 7.99 | 3.53 | 3.26 | 3.05 | 5.59 | 4.24 | 4.56 |
| % CHG SAME QTR LAST YR.... | 4.94 | 5.20 | 4.94 | 3.28 | 4.70 | 4.36 | 4.61 | 4.57 | 4.60 | 4.63 | 4.44 | 5.59 | 4.24 | 4.56 |
| STATE AND LOCAL............. | 21591 | 21794 | 21996 | 22634 | 22896 | 23160 | 23425 | 23690 | 23957 | 24226 | 24498 | 21710 | 23029 | 24093 |
| % CHG PREV QTR SAAR....... | 2.51 | 3.81 | 3.75 | 12.12 | 4.72 | 4.69 | 4.65 | 4.61 | 4.58 | 4.58 | 4.55 | 7.00 | 6.08 | 4.62 |
| % CHG SAVE QTR LAST YR.... | 6.04 | 6.98 | 6.45 | 5.48 | 6.04 | 6.27 | 6.50 | 4.67 | 4.63 | 4.60 | 4.58 | 7.00 | 6.08 | 4.62 |

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 15: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| CIVILIAN LABOR FORCE (THOUS).... | 2452 | 2500 | 2537 | 2472 | 2516 | 2538 | 2532 | 2502 | 2547 | 2569 | 2564 | 2480 | 2515 | 2546 |
| % CHG SAME QTR LAST YR...... | 0.96 | 1.27 | 2.68 | 1.68 | 2.62 | 1.54 | -0.23 | 1.21 | 1.22 | 1.22 | 1.30 | 1.64 | 1.39 | 1.24 |
| EMPLOYED PERSONS (THOUS)...... | 2294 | 2364 | 2417 | 2334 | 2380 | 2412 | 2414 | 2366 | 2411 | 2442 | 2445 | 2336 | 2385 | 2416 |
| % CHG SAME QTR LAST YR...... | 1.08 | 2.18 | 3.40 | 2.91 | 3.77 | 2.02 | -0.11 | 1.34 | 1.29 | 1.24 | 1.29 | 2.22 | 2.11 | 1.29 |
| UNEMPLOYED PERSONS (THOUS).... | 158 | 136 | 121 | 138 | 136 | 126 | 118 | 137 | 136 | 128 | 119 | 144 | 130 | 130 |
| % CHG SAME QTR LAST YR...... | -0.80 | -12.24 | -9.83 | -15.41 | -13.99 | -6.85 | -2.59 | -0.97 | 0.07 | 0.93 | 1.51 | -6.82 | -10.33 | 0.33 |
| PARTICIPATION RATE (PERCENT).... | 60.4 | 61.3 | 62.0 | 60.2 | 61.0 | 61.4 | 61.0 | 60.1 | 60.9 | 61.3 | 60.9 | 61.0 | 60.9 | 60.8 |
| % CHG SAME QTR LAST YR...... | -0.70 | -0.37 | 1.12 | 0.12 | 1.08 | 0.06 | -1.68 | -0.24 | -0.21 | -0.18 | -0.09 | 0.00 | -0.12 | -0.18 |
| UNEMPLOYMENT RATE (PERCENT)..... | 6.4 | 5.4 | 4.8 | 5.6 | 5.4 | 5.0 | 4.6 | 5.5 | 5.3 | 5.0 | 4.7 | 5.8 | 5.2 | 5.1 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 16: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE
SEASONALLY ADJUSTED

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| CIVILIAN LABOR FORCE (THOUS).... | 2445 | 2481 | 2532 | 2503 | 2510 | 2518 | 2526 | 2534 | 2541 | 2549 | 2558 | 2479 | 2514 | 2546 |
| % CHG PREV QTR SAAR......... | -2.41 | 5.96 | 8.51 | -4.41 | 1.12 | 1.31 | 1.15 | 1.31 | 1.14 | 1.30 | 1.45 | 1.61 | 1.42 | 1.24 |
| % CHG SAME QTR LAST YR...... | 0.83 | 1.34 | 2.62 | 1.77 | 2.67 | 1.53 | -0.24 | 1.22 | 1.23 | 1.22 | 1.30 | 1.61 | 1.42 | 1.24 |
| EMPLOYED PERSONS (THOUS)...... | 2295 | 2342 | 2400 | 2373 | 2381 | 2390 | 2397 | 2405 | 2412 | 2419 | 2428 | 2336 | 2385 | 2416 |
| % CHG PREV QTR SAAR......... | -1.99 | 8.59 | 10.22 | -4.38 | 1.30 | 1.47 | 1.29 | 1.29 | 1.10 | 1.27 | 1.49 | 2.23 | 2.12 | 1.29 |
| % CHG SAME QTR LAST YR...... | 1.07 | 2.24 | 3.40 | 2.91 | 3.77 | 2.02 | -0.11 | 1.34 | 1.29 | 1.24 | 1.29 | 2.23 | 2.12 | 1.29 |
| UNEMPLOYED PERSONS (THOUS).... | 150 | 138 | 132 | 130 | 129 | 129 | 128 | 129 | 129 | 130 | 130 | 143 | 129 | 130 |
| % CHG PREV QTR SAAR......... | -8.48 | -28.59 | -17.58 | -4.96 | -2.17 | -1.75 | -1.45 | 1.54 | 1.98 | 1.68 | 0.83 | -7.50 | -10.04 | 0.38 |
| % CHG SAME QTR LAST YR...... | -2.63 | -11.83 | -9.83 | -15.41 | -13.99 | -6.85 | -2.59 | -0.97 | 0.07 | 0.93 | 1.51 | -7.50 | -10.04 | 0.38 |
| PARTICIPATION RATE (PERCENT).... | 60.2 | 60.9 | 61.9 | 61.0 | 60.9 | 60.9 | 60.8 | 60.8 | 60.8 | 60.8 | 60.8 | 61.0 | 60.9 | 60.8 |
| % CHG PREV QTR SAAR......... | -3.98 | 4.27 | 6.95 | -5.84 | -0.37 | -0.16 | -0.29 | -0.11 | -0.26 | -0.08 | 0.09 | -0.03 | -0.09 | -0.18 |
| % CHG SAME QTR LAST YR...... | -0.82 | -0.30 | 1.06 | 0.21 | 1.14 | 0.04 | -1.69 | -0.23 | -0.20 | -0.19 | -0.09 | -0.03 | -0.09 | -0.18 |
| UNEMPLOYMENT RATE (PERCENT)..... | 6.1 | 5.6 | 5.2 | 5.2 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.8 | 5.1 | 5.1 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 17: TENNESSEE TAXABLE SALES
MILLIONS OF 19[illegible]LARS

| | HISTORY | | [illegible]ORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL............................ | 9725 | 10012 | 10380 | 8919 | 10194 | 10298 | 10654 | 9174 | 10470 | 10570 | 10926 | 38525 | 40065 | 41140 |
| % CHG SAME QTR LAST YR...... | 5.77 | 7.61 | 6.15 | 6.06 | 4.83 | 2.86 | 2.65 | 2.86 | 2.70 | 2.64 | 2.55 | 4.99 | 4.00 | 2.68 |
| AUTO DEALERS.................. | 1120 | 1162 | 1012 | 1064 | 1193 | 1201 | 1048 | 1118 | 1240 | 1243 | 1058 | 4259 | 4506 | 4659 |
| % CHG SAME QTR LAST YR...... | 21.68 | 21.43 | 10.25 | 10.24 | 6.49 | 3.33 | 3.56 | 5.05 | 3.98 | 3.54 | 0.92 | 14.31 | 5.78 | 3.41 |
| PURCHASES FROM MANUFACTURERS.. | 645 | 643 | 638 | 565 | 678 | 684 | 680 | 604 | 726 | 732 | 725 | 2450 | 2607 | 2787 |
| % CHG SAME QTR LAST YR...... | 0.98 | 5.26 | 5.54 | 7.85 | 5.11 | 6.35 | 6.44 | 6.90 | 7.07 | 7.01 | 6.67 | 1.50 | 6.37 | 6.92 |
| MISC DURABLE GOODS............ | 1606 | 1592 | 1547 | 1335 | 1665 | 1620 | 1556 | 1331 | 1654 | 1608 | 1553 | 5965 | 6176 | 6147 |
| % CHG SAME QTR LAST YR...... | 9.31 | 10.11 | 10.95 | 9.48 | 3.65 | 1.80 | 0.56 | -0.28 | -0.63 | -0.75 | -0.23 | 7.34 | 3.55 | -0.48 |
| EATING AND DRINKING PLACES.... | 795 | 828 | 793 | 733 | 837 | 856 | 819 | 759 | 868 | 888 | 849 | 3105 | 3246 | 3364 |
| % CHG SAME QTR LAST YR...... | 1.82 | 4.48 | 4.31 | 6.35 | 5.32 | 3.41 | 3.26 | 3.53 | 3.66 | 3.66 | 3.74 | 2.07 | 4.51 | 3.65 |
| FOOD STORES................... | 1256 | 1326 | 1192 | 1126 | 1214 | 1303 | 1180 | 1117 | 1209 | 1299 | 1175 | 4919 | 4823 | 4800 |
| % CHG SAME QTR LAST YR...... | -10.25 | 5.54 | -7.67 | -1.57 | -3.36 | -1.74 | -1.05 | -0.74 | -0.41 | -0.35 | -0.40 | -4.72 | -1.95 | -0.47 |
| LIQUOR STORES................. | 50 | 48 | 63 | 46 | 48 | 46 | 60 | 45 | 46 | 44 | 58 | 209 | 200 | 193 |
| % CHG SAME QTR LAST YR...... | -5.90 | -6.64 | -9.06 | -3.69 | -4.33 | -5.07 | -4.18 | -3.86 | -3.52 | -3.46 | -3.51 | -7.84 | -4.31 | -3.58 |
| HOTELS AND MOTELS............. | 300 | 346 | 279 | 217 | 314 | 355 | 287 | 223 | 325 | 368 | 297 | 1133 | 1173 | 1215 |
| % CHG SAME QTR LAST YR...... | 25.83 | 12.65 | 7.54 | 4.75 | 4.62 | 2.57 | 2.69 | 3.14 | 3.64 | 3.70 | 3.65 | 15.49 | 3.54 | 3.57 |
| OTHER RETAIL AND SERVICE...... | 2558 | 2700 | 3341 | 2484 | 2815 | 2797 | 3436 | 2549 | 2886 | 2868 | 3531 | 10845 | 11531 | 11834 |
| % CHG SAME QTR LAST YR...... | 6.72 | 8.23 | 8.95 | 10.55 | 10.04 | 3.58 | 2.85 | 2.64 | 2.55 | 2.55 | 2.76 | 6.28 | 6.32 | 2.63 |
| MISC NONDURABLE GOODS......... | 821 | 807 | 948 | 746 | 816 | 826 | 970 | 764 | 835 | 847 | 997 | 3286 | 3358 | 3443 |
| % CHG SAME QTR LAST YR...... | 1.92 | -0.44 | -3.34 | 5.09 | -0.63 | 2.43 | 2.27 | 2.35 | 2.43 | 2.51 | 2.78 | -1.54 | 2.19 | 2.53 |
| TRANSPORTATION,COMMUNICATION.. | 574 | 558 | 566 | 603 | 616 | 608 | 620 | 664 | 679 | 672 | 684 | 2354 | 2447 | 2698 |
| % CHG SAME QTR LAST YR...... | 16.79 | -3.08 | 30.64 | -8.04 | 7.25 | 9.00 | 9.56 | 10.08 | 10.28 | 10.40 | 10.29 | 15.28 | 3.96 | 10.27 |
| PER CAPITA ($).................. | 1914 | 1964 | 2030 | 1739 | 1982 | 1996 | 2060 | 1768 | 2012 | 2026 | 2089 | 7568 | 7777 | 7896 |
| % CHG SAME QTR LAST YR...... | 4.38 | 6.22 | 4.86 | 4.76 | 3.57 | 1.65 | 1.45 | 1.68 | 1.53 | 1.49 | 1.41 | 3.63 | 2.76 | 1.52 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 18: TENNESSEE TAXABLE SALES
MILLIONS OF SEASONALLY ADJUSTED 1987 DOLLARS

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL............................ | 9514 | 9775 | 9845 | 9912 | 9976 | 10061 | 10107 | 10189 | 10246 | 10329 | 10363 | 38463 | 40056 | 41127 |
| % CHG PREV QTR SAAR......... | 8.12 | 11.47 | 2.87 | 2.77 | 2.61 | 3.44 | 1.83 | 3.29 | 2.27 | 3.28 | 1.30 | 4.76 | 4.14 | 2.67 |
| % CHG SAME QTR LAST YR...... | 5.67 | 7.52 | 6.18 | 6.24 | 4.86 | 2.92 | 2.66 | 2.79 | 2.71 | 2.67 | 2.53 | 4.76 | 4.14 | 2.67 |
| AUTO DEALERS.................. | 1058 | 1090 | 1106 | 1108 | 1126 | 1128 | 1146 | 1164 | 1171 | 1168 | 1156 | 4260 | 4509 | 4660 |
| % CHG PREV QTR SAAR......... | 22.86 | 12.83 | 5.96 | 0.55 | 6.88 | 0.72 | 6.25 | 6.47 | 2.60 | -0.99 | -4.10 | 13.91 | 5.84 | 3.36 |
| % CHG SAME QTR LAST YR...... | 21.62 | 21.79 | 10.07 | 10.24 | 6.47 | 3.49 | 3.56 | 5.05 | 3.98 | 3.54 | 0.92 | 13.91 | 5.84 | 3.36 |
| PURCHASES FROM MANUFACTURERS.. | 615 | 616 | 628 | 636 | 646 | 656 | 668 | 680 | 691 | 702 | 713 | 2448 | 2606 | 2786 |
| % CHG PREV QTR SAAR......... | 18.72 | 0.71 | 7.53 | 5.43 | 6.24 | 6.89 | 7.23 | 7.26 | 6.91 | 6.66 | 5.88 | 1.24 | 6.44 | 6.91 |
| % CHG SAME QTR LAST YR...... | 0.65 | 5.60 | 5.58 | 7.90 | 4.94 | 6.52 | 6.44 | 6.90 | 7.07 | 7.01 | 6.67 | 1.24 | 6.44 | 6.91 |
| MISC DURABLE GOODS............ | 1491 | 1517 | 1534 | 1545 | 1544 | 1544 | 1542 | 1541 | 1535 | 1533 | 1539 | 5952 | 6176 | 6147 |
| % CHG PREV QTR SAAR......... | 24.49 | 7.29 | 4.44 | 3.09 | -0.20 | -0.01 | -0.60 | -0.29 | -1.60 | -0.49 | 1.49 | 6.92 | 3.77 | -0.47 |
| % CHG SAME QTR LAST YR...... | 9.25 | 10.13 | 10.94 | 9.51 | 3.62 | 1.81 | 0.56 | -0.28 | -0.63 | -0.75 | -0.23 | 6.92 | 3.77 | -0.47 |
| EATING AND DRINKING PLACES.... | 766 | 787 | 796 | 801 | 807 | 814 | 822 | 830 | 837 | 844 | 852 | 3103 | 3244 | 3363 |
| % CHG PREV QTR SAAR......... | 6.87 | 11.55 | 4.31 | 2.85 | 2.92 | 3.53 | 3.75 | 3.92 | 3.43 | 3.53 | 4.10 | 1.94 | 4.56 | 3.65 |
| % CHG SAME QTR LAST YR...... | 1.87 | 4.46 | 4.27 | 6.34 | 5.35 | 3.40 | 3.26 | 3.53 | 3.66 | 3.66 | 3.74 | 1.94 | 4.56 | 3.65 |
| FOOD STORES................... | 1240 | 1247 | 1207 | 1203 | 1199 | 1224 | 1194 | 1194 | 1194 | 1220 | 1189 | 4916 | 4821 | 4798 |
| % CHG PREV QTR SAAR......... | 6.04 | 2.09 | -12.29 | -1.11 | -1.24 | 8.43 | -9.46 | 0.13 | 0.05 | 8.71 | -9.65 | -4.87 | -1.94 | -0.48 |
| % CHG SAME QTR LAST YR...... | -10.14 | 5.35 | -7.63 | -1.56 | -3.30 | -1.83 | -1.05 | -0.74 | -0.41 | -0.35 | -0.40 | -4.87 | -1.94 | -0.48 |
| LIQUOR STORES................. | 52 | 52 | 51 | 51 | 50 | 50 | 49 | 49 | 48 | 48 | 48 | 209 | 200 | 193 |
| % CHG PREV QTR SAAR......... | -1.92 | -1.20 | -6.74 | -4.69 | -4.84 | -3.78 | -3.39 | -3.41 | -3.49 | -3.56 | -3.56 | -7.75 | -4.31 | -3.59 |
| % CHG SAME QTR LAST YR...... | -6.02 | -6.53 | -9.05 | -3.67 | -4.39 | -5.02 | -4.18 | -3.86 | -3.52 | -3.46 | -3.51 | -7.75 | -4.31 | -3.59 |
| HOTELS AND MOTELS............. | 278 | 287 | 289 | 290 | 291 | 294 | 297 | 299 | 302 | 305 | 307 | 1131 | 1172 | 1213 |
| % CHG PREV QTR SAAR......... | 1.88 | 12.45 | 3.08 | 1.99 | 1.67 | 3.27 | 3.85 | 3.76 | 3.67 | 3.52 | 3.64 | 15.56 | 3.65 | 3.53 |
| % CHG SAME QTR LAST YR...... | 25.84 | 12.50 | 7.49 | 4.76 | 4.71 | 2.50 | 2.69 | 3.14 | 3.64 | 3.70 | 3.65 | 15.56 | 3.65 | 3.53 |
| OTHER RETAIL AND SERVICE...... | 2608 | 2790 | 2828 | 2854 | 2871 | 2890 | 2909 | 2929 | 2944 | 2963 | 2989 | 10808 | 11523 | 11825 |
| % CHG PREV QTR SAAR......... | 3.96 | 31.09 | 5.55 | 3.70 | 2.38 | 2.69 | 2.62 | 2.86 | 2.04 | 2.67 | 3.50 | 5.97 | 6.61 | 2.63 |
| % CHG SAME QTR LAST YR...... | 6.83 | 8.22 | 8.93 | 10.51 | 10.09 | 3.57 | 2.85 | 2.64 | 2.55 | 2.55 | 2.76 | 5.97 | 6.61 | 2.63 |
| MISC NONDURABLE GOODS......... | 841 | 821 | 827 | 833 | 836 | 841 | 846 | 852 | 856 | 862 | 870 | 3283 | 3356 | 3441 |
| % CHG PREV QTR SAAR......... | 26.93 | -9.29 | 3.15 | 2.49 | 1.74 | 2.37 | 2.48 | 2.82 | 2.03 | 2.71 | 3.56 | -1.52 | 2.24 | 2.52 |
| % CHG SAME QTR LAST YR...... | 1.96 | -0.43 | -3.32 | 5.04 | -0.61 | 2.44 | 2.27 | 2.35 | 2.43 | 2.51 | 2.78 | -1.52 | 2.24 | 2.52 |
| TRANSPORTATION,COMMUNICATION.. | 564 | 567 | 579 | 591 | 605 | 619 | 635 | 651 | 667 | 683 | 700 | 2354 | 2449 | 2701 |
| % CHG PREV QTR SAAR......... | -41.22 | 2.62 | 8.65 | 8.46 | 9.50 | 9.92 | 10.37 | 10.55 | 10.28 | 10.40 | 9.95 | 15.24 | 4.06 | 10.27 |
| % CHG SAME QTR LAST YR...... | 16.83 | -2.85 | 30.68 | -8.18 | 7.27 | 9.13 | 9.56 | 10.08 | 10.28 | 10.40 | 10.29 | 15.24 | 4.06 | 10.27 |
| PER CAPITA ($).................. | 1872 | 1918 | 1926 | 1933 | 1940 | 1950 | 1954 | 1964 | 1970 | 1980 | 1981 | 7557 | 7777 | 7894 |
| % CHG PREV QTR SAAR......... | 6.73 | 10.05 | 1.68 | 1.54 | 1.40 | 2.24 | 0.67 | 2.12 | 1.14 | 2.15 | 0.20 | 3.40 | 2.90 | 1.52 |
| % CHG SAME QTR LAST YR...... | 4.28 | 6.13 | 4.89 | 4.94 | 3.60 | 1.72 | 1.46 | 1.61 | 1.54 | 1.52 | 1.40 | 3.40 | 2.90 | 1.52 |

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 19: TENNESSEE TAXABLE SALES
MILLIONS OF CURRENT DOLLARS

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL............................ | 12351 | 12755 | 13306 | 11536 | 13294 | 13548 | 14142 | 12281 | 14137 | 14393 | 15014 | 49024 | 52520 | 55825 |
| % CHG SAME QTR LAST YR...... | 8.68 | 10.47 | 8.61 | 8.70 | 7.64 | 6.22 | 6.28 | 6.46 | 6.34 | 6.23 | 6.16 | 7.81 | 7.13 | 6.29 |
| AUTO DEALERS.................. | 1423 | 1480 | 1297 | 1376 | 1556 | 1580 | 1391 | 1496 | 1675 | 1693 | 1453 | 5418 | 5903 | 6318 |
| % CHG SAME QTR LAST YR...... | 25.03 | 24.66 | 12.80 | 12.99 | 9.35 | 6.71 | 7.23 | 8.73 | 7.67 | 7.16 | 4.48 | 17.39 | 8.94 | 7.03 |
| PURCHASES FROM MANUFACTURERS.. | 819 | 820 | 818 | 730 | 884 | 900 | 902 | 808 | 980 | 997 | 996 | 3118 | 3417 | 3782 |
| % CHG SAME QTR LAST YR...... | 3.75 | 8.06 | 7.98 | 10.54 | 7.93 | 9.82 | 10.21 | 10.64 | 10.87 | 10.76 | 10.44 | 4.24 | 9.58 | 10.68 |
| MISC DURABLE GOODS............ | 2040 | 2028 | 1984 | 1727 | 2171 | 2132 | 2065 | 1782 | 2234 | 2190 | 2133 | 7591 | 8095 | 8340 |
| % CHG SAME QTR LAST YR...... | 12.31 | 13.04 | 13.51 | 12.21 | 6.43 | 5.13 | 4.12 | 3.21 | 2.90 | 2.73 | 3.29 | 10.23 | 6.65 | 3.02 |
| EATING AND DRINKING PLACES.... | 1009 | 1055 | 1016 | 949 | 1091 | 1127 | 1087 | 1016 | 1171 | 1209 | 1167 | 3951 | 4254 | 4564 |
| % CHG SAME QTR LAST YR...... | 4.62 | 7.26 | 6.72 | 8.99 | 8.15 | 6.79 | 6.92 | 7.15 | 7.33 | 7.28 | 7.40 | 4.82 | 7.66 | 7.30 |
| FOOD STORES................... | 1596 | 1690 | 1528 | 1456 | 1583 | 1715 | 1566 | 1496 | 1633 | 1768 | 1615 | 6257 | 6320 | 6512 |
| % CHG SAME QTR LAST YR...... | -7.78 | 8.35 | -5.53 | 0.88 | -0.76 | 1.47 | 2.46 | 2.74 | 3.12 | 3.14 | 3.11 | -2.16 | 1.01 | 3.03 |
| LIQUOR STORES................. | 63 | 61 | 80 | 60 | 62 | 60 | 80 | 60 | 62 | 60 | 80 | 266 | 262 | 261 |
| % CHG SAME QTR LAST YR...... | -3.31 | -4.15 | -6.96 | -1.29 | -1.76 | -1.97 | -0.78 | -0.49 | -0.10 | -0.09 | -0.10 | -5.39 | -1.40 | -0.19 |
| HOTELS AND MOTELS............. | 381 | 441 | 358 | 280 | 410 | 467 | 381 | 299 | 439 | 502 | 409 | 1442 | 1538 | 1649 |
| % CHG SAME QTR LAST YR...... | 29.09 | 15.64 | 10.03 | 7.36 | 7.43 | 5.92 | 6.33 | 6.74 | 7.31 | 7.33 | 7.30 | 18.52 | 6.68 | 7.21 |
| OTHER RETAIL AND SERVICE...... | 3248 | 3440 | 4283 | 3212 | 3670 | 3680 | 4560 | 3412 | 3898 | 3905 | 4852 | 13806 | 15123 | 16067 |
| % CHG SAME QTR LAST YR...... | 9.66 | 11.11 | 11.46 | 13.31 | 12.99 | 6.96 | 6.49 | 6.23 | 6.19 | 6.13 | 6.39 | 9.12 | 9.54 | 6.24 |
| MISC NONDURABLE GOODS......... | 1042 | 1028 | 1215 | 965 | 1064 | 1087 | 1287 | 1022 | 1128 | 1154 | 1369 | 4182 | 4403 | 4673 |
| % CHG SAME QTR LAST YR...... | 4.72 | 2.20 | -1.11 | 7.70 | 2.04 | 5.78 | 5.89 | 5.93 | 6.06 | 6.09 | 6.40 | 1.07 | 5.29 | 6.14 |
| TRANSPORTATION,COMMUNICATION.. | 729 | 711 | 725 | 780 | 803 | 801 | 823 | 889 | 917 | 915 | 940 | 2993 | 3206 | 3660 |
| % CHG SAME QTR LAST YR...... | 20.00 | -0.50 | 33.65 | -5.75 | 10.13 | 12.56 | 13.44 | 13.94 | 14.19 | 14.26 | 14.18 | 18.40 | 7.12 | 14.14 |
| PER CAPITA ($).................. | 2430 | 2502 | 2603 | 2249 | 2585 | 2626 | 2734 | 2367 | 2717 | 2759 | 2870 | 9630 | 10194 | 10714 |
| % CHG SAME QTR LAST YR...... | 7.26 | 9.04 | 7.29 | 7.37 | 6.35 | 4.98 | 5.04 | 5.24 | 5.13 | 5.04 | 4.99 | 6.41 | 5.86 | 5.09 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 20: TENNESSEE TAXABLE SALES
MILLIONS OF SEASONALLY ADJUSTED CURRENT DOLLARS

| | HISTORY | | FORECAST - DATA | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199302 | 199303 | 199304 | 199401 | 199402 | 199403 | 199404 | 199501 | 199502 | 199503 | 199504 | 1993 | 1994 | 1995 |
| TOTAL........................... | 12082 | 12454 | 12620 | 12821 | 13010 | 13237 | 13415 | 13639 | 13836 | 14065 | 14240 | 48931 | 52482 | 55779 |
| % CHG PREV QTR SAAR......... | 10.89 | 12.88 | 5.46 | 6.50 | 6.04 | 7.15 | 5.50 | 6.86 | 5.88 | 6.79 | 5.07 | 7.58 | 7.26 | 6.28 |
| % CHG SAME QTR LAST YR...... | 8.57 | 10.38 | 8.63 | 8.89 | 7.68 | 6.28 | 6.30 | 6.39 | 6.35 | 6.26 | 6.15 | 7.58 | 7.26 | 6.28 |
| AUTO DEALERS.................. | 1344 | 1389 | 1418 | 1433 | 1469 | 1485 | 1521 | 1558 | 1582 | 1591 | 1589 | 5420 | 5907 | 6320 |
| % CHG PREV QTR SAAR......... | 26.00 | 14.26 | 8.63 | 4.20 | 10.45 | 4.33 | 10.09 | 10.16 | 6.22 | 2.38 | -0.53 | 16.97 | 9.00 | 6.98 |
| % CHG SAME QTR LAST YR...... | 24.97 | 25.03 | 12.61 | 12.98 | 9.33 | 6.87 | 7.23 | 8.73 | 7.67 | 7.16 | 4.48 | 16.97 | 9.00 | 6.98 |
| PURCHASES FROM MANUFACTURERS.. | 781 | 785 | 804 | 822 | 842 | 864 | 887 | 910 | 933 | 957 | 979 | 3115 | 3415 | 3779 |
| % CHG PREV QTR SAAR......... | 21.76 | 1.98 | 10.23 | 9.25 | 9.79 | 10.72 | 11.10 | 10.97 | 10.68 | 10.28 | 9.82 | 3.99 | 9.63 | 10.67 |
| % CHG SAME QTR LAST YR...... | 3.42 | 8.41 | 8.01 | 10.58 | 7.76 | 10.00 | 10.21 | 10.64 | 10.87 | 10.76 | 10.44 | 3.99 | 9.63 | 10.67 |
| MISC DURABLE GOODS............ | 1893 | 1933 | 1966 | 1999 | 2014 | 2032 | 2047 | 2063 | 2073 | 2087 | 2114 | 7572 | 8092 | 8337 |
| % CHG PREV QTR SAAR......... | 27.68 | 8.65 | 7.07 | 6.83 | 3.13 | 3.58 | 2.99 | 3.16 | 1.87 | 2.89 | 5.27 | 9.82 | 6.86 | 3.03 |
| % CHG SAME QTR LAST YR...... | 12.26 | 13.06 | 13.50 | 12.23 | 6.40 | 5.14 | 4.12 | 3.21 | 2.90 | 2.73 | 3.29 | 9.82 | 6.86 | 3.03 |
| EATING AND DRINKING PLACES.... | 973 | 1003 | 1020 | 1037 | 1053 | 1071 | 1091 | 1111 | 1130 | 1149 | 1171 | 3947 | 4251 | 4561 |
| % CHG PREV QTR SAAR......... | 9.60 | 12.96 | 6.93 | 6.58 | 6.36 | 7.24 | 7.49 | 7.51 | 7.07 | 7.05 | 7.98 | 4.69 | 7.69 | 7.29 |
| % CHG SAME QTR LAST YR...... | 4.67 | 7.24 | 6.68 | 8.99 | 8.18 | 6.78 | 6.92 | 7.15 | 7.33 | 7.28 | 7.40 | 4.69 | 7.69 | 7.29 |
| FOOD STORES................... | 1575 | 1588 | 1547 | 1556 | 1564 | 1610 | 1585 | 1599 | 1613 | 1661 | 1634 | 6253 | 6315 | 6507 |
| % CHG PREV QTR SAAR......... | 8.76 | 3.39 | -10.08 | 2.48 | 2.06 | 12.32 | -6.19 | 3.59 | 3.58 | 12.40 | -6.29 | -2.31 | 1.00 | 3.03 |
| % CHG SAME QTR LAST YR...... | -7.66 | 8.15 | -5.50 | 0.89 | -0.70 | 1.38 | 2.46 | 2.74 | 3.12 | 3.14 | 3.11 | -2.31 | 1.00 | 3.03 |
| LIQUOR STORES................. | 67 | 67 | 66 | 66 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 266 | 262 | 261 |
| % CHG PREV QTR SAAR......... | 0.59 | 0.05 | -4.39 | -1.23 | -1.66 | -0.33 | 0.10 | -0.07 | -0.09 | -0.29 | 0.03 | -5.27 | -1.45 | -0.20 |
| % CHG SAME QTR LAST YR...... | -3.44 | -4.05 | -6.95 | -1.27 | -1.82 | -1.92 | -0.78 | -0.49 | -0.10 | -0.09 | -0.10 | -5.27 | -1.45 | -0.20 |
| HOTELS AND MOTELS............. | 353 | 365 | 370 | 375 | 380 | 387 | 394 | 401 | 408 | 415 | 422 | 1438 | 1536 | 1646 |
| % CHG PREV QTR SAAR......... | 4.49 | 13.88 | 5.68 | 5.69 | 5.07 | 6.98 | 7.59 | 7.35 | 7.32 | 7.04 | 7.50 | 18.62 | 6.75 | 7.17 |
| % CHG SAME QTR LAST YR...... | 29.30 | 15.49 | 9.98 | 7.37 | 7.52 | 5.85 | 6.33 | 6.74 | 7.31 | 7.33 | 7.30 | 18.62 | 6.75 | 7.17 |
| OTHER RETAIL AND SERVICE...... | 3312 | 3555 | 3625 | 3691 | 3744 | 3802 | 3861 | 3921 | 3975 | 4035 | 4107 | 13750 | 15097 | 16039 |
| % CHG PREV QTR SAAR......... | 6.62 | 32.75 | 8.21 | 7.47 | 5.80 | 6.37 | 6.32 | 6.42 | 5.63 | 6.16 | 7.35 | 8.83 | 9.79 | 6.23 |
| % CHG SAME QTR LAST YR...... | 9.76 | 11.09 | 11.44 | 13.27 | 13.05 | 6.96 | 6.49 | 6.23 | 6.19 | 6.13 | 6.39 | 8.83 | 9.79 | 6.23 |
| MISC NONDURABLE GOODS......... | 1069 | 1046 | 1061 | 1077 | 1090 | 1107 | 1123 | 1141 | 1157 | 1174 | 1195 | 4176 | 4397 | 4667 |
| % CHG PREV QTR SAAR......... | 30.18 | -8.14 | 5.75 | 6.21 | 5.14 | 6.04 | 6.18 | 6.37 | 5.63 | 6.20 | 7.42 | 1.12 | 5.30 | 6.12 |
| % CHG SAME QTR LAST YR...... | 4.76 | 2.22 | -1.08 | 7.65 | 2.05 | 5.79 | 5.89 | 5.93 | 6.06 | 6.09 | 6.40 | 1.12 | 5.30 | 6.12 |
| TRANSPORTATION,COMMUNICATION.. | 716 | 723 | 742 | 764 | 788 | 814 | 842 | 871 | 900 | 931 | 962 | 2993 | 3210 | 3664 |
| % CHG PREV QTR SAAR......... | -39.72 | 3.92 | 11.38 | 12.40 | 13.16 | 13.86 | 14.35 | 14.37 | 14.17 | 14.15 | 14.04 | 18.36 | 7.23 | 14.15 |
| % CHG SAME QTR LAST YR...... | 20.05 | -0.27 | 33.69 | -5.89 | 10.15 | 12.70 | 13.44 | 13.94 | 14.19 | 14.26 | 14.18 | 18.36 | 7.23 | 14.15 |
| PER CAPITA ($).................. | 2378 | 2443 | 2468 | 2500 | 2529 | 2566 | 2593 | 2629 | 2659 | 2696 | 2722 | 9614 | 10189 | 10707 |
| % CHG PREV QTR SAAR......... | 9.46 | 11.44 | 4.24 | 5.22 | 4.79 | 5.91 | 4.30 | 5.66 | 4.70 | 5.62 | 3.93 | 6.19 | 5.98 | 5.08 |
| % CHG SAME QTR LAST YR...... | 7.15 | 8.95 | 7.31 | 7.55 | 6.39 | 5.04 | 5.05 | 5.16 | 5.14 | 5.07 | 4.98 | 6.19 | 5.98 | 5.08 |

TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| US GDP (BIL87$) | 5125.3 | 5279.2 | 5434.6 | 5594.2 | 5743.5 | 5885.8 | 6047.9 | 6220.2 | 6394.6 | 6567.9 |
| PERCENTAGE CHANGE | 2.77 | 3.00 | 2.94 | 2.94 | 2.67 | 2.48 | 2.75 | 2.85 | 2.80 | 2.71 |
| TN GSP (MIL82$) | 80409.1 | 83408.6 | 86684.2 | 89830.8 | 92956.8 | 96238.0 | 100011.3 | 103834.2 | 107998.4 | 112330.2 |
| PERCENTAGE CHANGE | 3.14 | 3.73 | 3.93 | 3.63 | 3.48 | 3.53 | 3.92 | 3.82 | 4.01 | 4.01 |
| US GDP (BIL$) | 6367.5 | 6740.5 | 7157.4 | 7604.3 | 8059.7 | 8529.0 | 9064.5 | 9640.7 | 10236.1 | 10859.9 |
| PERCENTAGE CHANGE | 5.45 | 5.86 | 6.19 | 6.24 | 5.99 | 5.82 | 6.28 | 6.36 | 6.18 | 6.09 |
| TN GSP (MIL$) | 113758.6 | 120985.7 | 129133.1 | 137556.0 | 146554.8 | 156326.1 | 167235.3 | 178797.6 | 191459.6 | 205077.6 |
| PERCENTAGE CHANGE | 6.00 | 6.35 | 6.73 | 6.52 | 6.54 | 6.67 | 6.98 | 6.91 | 7.08 | 7.11 |
| IMPLICIT DEFLATOR,GDP | 124.2 | 127.7 | 131.7 | 135.9 | 140.3 | 144.9 | 149.9 | 155.0 | 160.1 | 165.3 |
| PERCENTAGE CHANGE | 2.61 | 2.77 | 3.15 | 3.21 | 3.23 | 3.26 | 3.43 | 3.41 | 3.28 | 3.29 |
| IMPLICIT DEFLATOR,GSP | 141.5 | 145.1 | 149.0 | 153.1 | 157.7 | 162.4 | 167.2 | 172.2 | 177.3 | 182.6 |
| PERCENTAGE CHANGE | 2.77 | 2.53 | 2.70 | 2.79 | 2.96 | 3.03 | 2.94 | 2.98 | 2.95 | 2.98 |
| US PERS CONS DEFL (1987=100) | 127.2 | 131.0 | 135.6 | 140.6 | 145.9 | 151.5 | 157.4 | 163.4 | 169.3 | 175.4 |
| PERCENTAGE CHANGE | 2.68 | 3.00 | 3.52 | 3.69 | 3.77 | 3.81 | 3.88 | 3.81 | 3.65 | 3.62 |
| TN PERSONAL INCOME (MIL$) | 94147 | 100852 | 108495 | 115626 | 123133 | 130698 | 139261 | 148337 | 157955 | 168304 |
| PERCENTAGE CHANGE | 6.28 | 7.12 | 7.58 | 6.57 | 6.49 | 6.14 | 6.55 | 6.52 | 6.48 | 6.55 |
| US PERSONAL INCOME (BIL$) | 5383.5 | 5735.2 | 6131.3 | 6567.2 | 6983.7 | 7385.4 | 7831.4 | 8323.7 | 8835.7 | 9377.0 |
| PERCENTAGE CHANGE | 4.64 | 6.53 | 6.91 | 7.11 | 6.34 | 5.75 | 6.04 | 6.29 | 6.15 | 6.13 |
| TN PERSONAL INCOME (MIL87$) | 74016 | 76979 | 80000 | 82226 | 84382 | 86280 | 88496 | 90806 | 93292 | 95935 |
| PERCENTAGE CHANGE | 3.50 | 4.00 | 3.92 | 2.78 | 2.62 | 2.25 | 2.57 | 2.61 | 2.74 | 2.83 |
| US PERSONAL INCOME (BIL87$) | 4232.3 | 4377.6 | 4521.0 | 4670.2 | 4785.9 | 4875.4 | 4976.6 | 5095.4 | 5218.6 | 5345.0 |
| PERCENTAGE CHANGE | 1.90 | 3.43 | 3.28 | 3.30 | 2.48 | 1.87 | 2.08 | 2.39 | 2.42 | 2.42 |
| TN NONAGRIC JOBS (THOUS) | 2269.3 | 2316.7 | 2376.3 | 2439.8 | 2504.2 | 2572.7 | 2645.4 | 2721.7 | 2799.1 | 2879.8 |
| PERCENTAGE CHANGE | 1.67 | 2.09 | 2.57 | 2.67 | 2.64 | 2.74 | 2.83 | 2.88 | 2.84 | 2.88 |
| US NONAGRIC JOBS (MIL) | 110.2 | 112.5 | 115.1 | 117.6 | 119.8 | 121.7 | 123.6 | 125.7 | 127.8 | 129.6 |
| PERCENTAGE CHANGE | 1.54 | 2.11 | 2.28 | 2.19 | 1.84 | 1.59 | 1.63 | 1.68 | 1.63 | 1.46 |
| TN UNEMPLOYMENT RATE (%) | 5.8 | 5.2 | 5.1 | 5.1 | 5.0 | 5.0 | 5.0 | 5.1 | 5.1 | 5.2 |
| US UNEMPLOYMENT RATE (%) | 6.8 | 6.4 | 6.3 | 6.3 | 6.3 | 6.2 | 6.1 | 5.9 | 5.8 | 5.7 |
| BANK PRIME INTEREST RATE (%) | 6.0 | 6.0 | 6.7 | 7.2 | 7.9 | 8.2 | 8.4 | 8.7 | 8.8 | 8.8 |
| TN MFG JOBS (THOUS) | 516.8 | 519.3 | 524.4 | 530.1 | 534.6 | 541.7 | 549.9 | 558.5 | 565.8 | 573.0 |
| PERCENTAGE CHANGE | 0.74 | 0.49 | 0.99 | 1.09 | 0.84 | 1.33 | 1.51 | 1.55 | 1.32 | 1.26 |

(CONTINUED ON NEXT PAGE)

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS (CONT.)

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TN TAXABLE SALES (MIL$)............. | 49024 | 52520 | 55825 | 58793 | 62005 | 65223 | 68566 | 72163 | 76021 | 80169 |
| PERCENTAGE CHANGE................. | 7.81 | 7.13 | 6.29 | 5.32 | 5.46 | 5.19 | 5.12 | 5.25 | 5.35 | 5.46 |
| TN TAXABLE SALES (MIL87$)........... | 38541 | 40088 | 41163 | 41810 | 42491 | 43057 | 43571 | 44175 | 44900 | 45698 |
| PERCENTAGE CHANGE................. | 4.99 | 4.01 | 2.68 | 1.57 | 1.63 | 1.33 | 1.19 | 1.39 | 1.64 | 1.78 |
| TN MFG OUTPUT/EMPLOYEE (THOUS82$)... | 46.7 | 49.0 | 50.8 | 52.5 | 54.1 | 55.9 | 58.0 | 60.1 | 62.5 | 65.0 |
| PERCENTAGE CHANGE................. | 4.40 | 4.97 | 3.70 | 3.34 | 3.10 | 3.28 | 3.71 | 3.75 | 3.88 | 4.11 |
| TN AVERAGE ANNUAL WAGE,NONAG ($).... | 24211 | 25350 | 26485 | 27303 | 28242 | 29257 | 30419 | 31530 | 32732 | 34012 |
| PERCENTAGE CHANGE................. | 3.98 | 4.70 | 4.48 | 3.09 | 3.44 | 3.59 | 3.97 | 3.65 | 3.81 | 3.91 |
| TN AVERAGE ANNUAL WAGE,NONAG (87$).. | 19034 | 19349 | 19529 | 19416 | 19354 | 19314 | 19330 | 19301 | 19332 | 19387 |
| PERCENTAGE CHANGE................. | 1.27 | 1.66 | 0.93 | -0.58 | -0.32 | -0.21 | 0.08 | -0.15 | 0.16 | 0.29 |
| TN TOTAL POPULATION (THOUS)......... | 5090 | 5151 | 5210 | 5266 | 5320 | 5373 | 5424 | 5474 | 5523 | 5571 |
| PERCENTAGE CHANGE................. | 1.32 | 1.20 | 1.14 | 1.08 | 1.03 | 0.99 | 0.95 | 0.92 | 0.90 | 0.88 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 2: SELECTED PER CAPITA U.S. AND TENNESSEE ECONOMIC INDICATORS

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TN GSP (82 $) | 15798 | 16193 | 16639 | 17059 | 17472 | 17912 | 18438 | 18968 | 19554 | 20162 |
| PERCENTAGE CHANGE | 1.80 | 2.50 | 2.76 | 2.52 | 2.42 | 2.52 | 2.94 | 2.88 | 3.09 | 3.11 |
| TN GSP ($) | 22351 | 23488 | 24788 | 26122 | 27546 | 29095 | 30832 | 32663 | 34666 | 36808 |
| PERCENTAGE CHANGE | 4.62 | 5.09 | 5.53 | 5.38 | 5.45 | 5.62 | 5.97 | 5.94 | 6.13 | 6.18 |
| US GDP (87 $) | 19820 | 20209 | 20599 | 21000 | 21358 | 21688 | 22086 | 22517 | 22950 | 23372 |
| PERCENTAGE CHANGE | 1.65 | 1.97 | 1.93 | 1.95 | 1.71 | 1.54 | 1.84 | 1.95 | 1.92 | 1.84 |
| US GDP ($) | 24623 | 25803 | 27129 | 28545 | 29971 | 31427 | 33102 | 34899 | 36737 | 38646 |
| PERCENTAGE CHANGE | 4.31 | 4.79 | 5.14 | 5.22 | 5.00 | 4.86 | 5.33 | 5.43 | 5.27 | 5.20 |
| TN PERSONAL INCOME (87 $) | 14542 | 14945 | 15356 | 15614 | 15860 | 16058 | 16315 | 16588 | 16891 | 17219 |
| PERCENTAGE CHANGE | 2.16 | 2.77 | 2.75 | 1.68 | 1.57 | 1.25 | 1.60 | 1.67 | 1.83 | 1.94 |
| TN PERSONAL INCOME ($) | 18497 | 19580 | 20826 | 21957 | 23144 | 24325 | 25674 | 27098 | 28599 | 30208 |
| PERCENTAGE CHANGE | 4.90 | 5.85 | 6.37 | 5.43 | 5.40 | 5.11 | 5.55 | 5.55 | 5.54 | 5.63 |
| US PERSONAL INCOME (87 $) | 16366 | 16758 | 17136 | 17531 | 17797 | 17965 | 18174 | 18445 | 18729 | 19021 |
| PERCENTAGE CHANGE | 0.80 | 2.39 | 2.26 | 2.30 | 1.52 | 0.94 | 1.16 | 1.49 | 1.54 | 1.56 |
| US PERSONAL INCOME ($) | 20818 | 21955 | 23240 | 24652 | 25970 | 27213 | 28599 | 30131 | 31711 | 33369 |
| PERCENTAGE CHANGE | 3.50 | 5.46 | 5.85 | 6.08 | 5.35 | 4.79 | 5.09 | 5.36 | 5.24 | 5.23 |
| TN TAXABLE SALES (87 $) | 7572 | 7783 | 7901 | 7940 | 7987 | 8014 | 8033 | 8070 | 8130 | 8202 |
| PERCENTAGE CHANGE | 3.62 | 2.78 | 1.52 | 0.48 | 0.59 | 0.34 | 0.24 | 0.46 | 0.74 | 0.89 |
| TN TAXABLE SALES ($) | 9632 | 10196 | 10716 | 11165 | 11654 | 12139 | 12641 | 13183 | 13764 | 14389 |
| PERCENTAGE CHANGE | 6.40 | 5.86 | 5.09 | 4.19 | 4.39 | 4.16 | 4.13 | 4.29 | 4.41 | 4.54 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 3: TENNESSEE PERSONAL INCOME BY COMPONENTS
MILLIONS OF 1987 DOLLARS

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TOTAL PERSONAL INCOME............... | 74016 | 76979 | 80000 | 82226 | 84382 | 86280 | 88496 | 90806 | 93292 | 95935 |
| PERCENTAGE CHANGE............... | 3.50 | 4.00 | 3.92 | 2.78 | 2.62 | 2.25 | 2.57 | 2.61 | 2.74 | 2.83 |
| WAGES AND SALARIES................ | 43787 | 45439 | 47033 | 48013 | 49122 | 50363 | 51826 | 53240 | 54841 | 56581 |
| PERCENTAGE CHANGE............... | 2.92 | 3.77 | 3.51 | 2.08 | 2.31 | 2.53 | 2.90 | 2.73 | 3.01 | 3.17 |
| OTHER LABOR INCOME................ | 5267 | 5665 | 6135 | 6548 | 6728 | 6775 | 6974 | 7178 | 7359 | 7574 |
| PERCENTAGE CHANGE............... | 8.07 | 7.56 | 8.29 | 6.73 | 2.74 | 0.71 | 2.93 | 2.93 | 2.53 | 2.92 |
| PROPRIETORS INCOME................ | 7043 | 7495 | 7988 | 8225 | 8470 | 8571 | 8644 | 8824 | 9083 | 9329 |
| PERCENTAGE CHANGE............... | 6.07 | 6.42 | 6.57 | 2.97 | 2.99 | 1.18 | 0.86 | 2.09 | 2.93 | 2.70 |
| RENT INTEREST DIVIDENDS........... | 9310 | 9382 | 9409 | 9360 | 9599 | 9886 | 10169 | 10440 | 10664 | 10861 |
| PERCENTAGE CHANGE............... | 2.54 | 0.78 | 0.29 | -0.51 | 2.55 | 2.99 | 2.86 | 2.67 | 2.14 | 1.84 |
| TRANSFER PAYMENTS................. | 13110 | 13659 | 14247 | 14974 | 15518 | 15938 | 16351 | 16802 | 17251 | 17738 |
| PERCENTAGE CHANGE............... | 3.77 | 4.19 | 4.30 | 5.11 | 3.63 | 2.71 | 2.59 | 2.76 | 2.67 | 2.82 |
| LESS:PERS CONT FOR SOC INS........ | 3656 | 3781 | 3911 | 3984 | 4124 | 4297 | 4487 | 4675 | 4880 | 5096 |
| PERCENTAGE CHANGE............... | 5.48 | 3.44 | 3.43 | 1.85 | 3.52 | 4.20 | 4.42 | 4.20 | 4.38 | 4.42 |
| RESIDENCE ADJUSTMENT.............. | -846 | -880 | -900 | -911 | -931 | -955 | -981 | -1004 | -1028 | -1053 |
| PERCENTAGE CHANGE............... | 6.18 | 4.04 | 2.35 | 1.19 | 2.23 | 2.58 | 2.69 | 2.33 | 2.39 | 2.44 |
| PER CAPITA PERSONAL INCOME ($)...... | 14542 | 14945 | 15356 | 15614 | 15860 | 16058 | 16315 | 16588 | 16891 | 17219 |
| PERCENTAGE CHANGE............... | 2.16 | 2.77 | 2.75 | 1.68 | 1.57 | 1.25 | 1.60 | 1.67 | 1.83 | 1.94 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 4: TENNESSEE PERSONAL INCOME BY COMPONENTS
MILLIONS OF CURRENT DOLLARS

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TOTAL PERSONAL INCOME ............. | 94147 | 100852 | 108495 | 115626 | 123133 | 130698 | 139261 | 148337 | 157955 | 168304 |
| PERCENTAGE CHANGE.............. | 6.28 | 7.12 | 7.58 | 6.57 | 6.49 | 6.14 | 6.55 | 6.52 | 6.48 | 6.55 |
| WAGES AND SALARIES............... | 55697 | 59530 | 63786 | 67516 | 71681 | 76290 | 81556 | 86971 | 92853 | 99264 |
| PERCENTAGE CHANGE.............. | 5.68 | 6.88 | 7.15 | 5.85 | 6.17 | 6.43 | 6.90 | 6.64 | 6.76 | 6.90 |
| OTHER LABOR INCOME............... | 6700 | 7422 | 8320 | 9208 | 9817 | 10263 | 10974 | 11726 | 12461 | 13288 |
| PERCENTAGE CHANGE.............. | 10.97 | 10.78 | 12.10 | 10.67 | 6.62 | 4.54 | 6.93 | 6.85 | 6.26 | 6.64 |
| PROPRIETORS INCOME............... | 8958 | 9820 | 10833 | 11565 | 12360 | 12983 | 13602 | 14415 | 15379 | 16366 |
| PERCENTAGE CHANGE.............. | 8.92 | 9.61 | 10.32 | 6.76 | 6.87 | 5.04 | 4.77 | 5.97 | 6.69 | 6.42 |
| RENT INTEREST DIVIDENDS.......... | 11842 | 12291 | 12760 | 13163 | 14008 | 14976 | 16003 | 17055 | 18056 | 19054 |
| PERCENTAGE CHANGE.............. | 5.29 | 3.80 | 3.81 | 3.15 | 6.42 | 6.91 | 6.86 | 6.58 | 5.87 | 5.53 |
| TRANSFER PAYMENTS................ | 16676 | 17896 | 19321 | 21057 | 22644 | 24142 | 25731 | 27448 | 29209 | 31119 |
| PERCENTAGE CHANGE.............. | 6.55 | 7.31 | 7.97 | 8.98 | 7.54 | 6.62 | 6.58 | 6.67 | 6.42 | 6.54 |
| LESS:PERS CONT FOR SOC INS....... | 4650 | 4954 | 5304 | 5602 | 6017 | 6509 | 7061 | 7637 | 8262 | 8940 |
| PERCENTAGE CHANGE.............. | 8.31 | 6.54 | 7.07 | 5.61 | 7.42 | 8.17 | 8.48 | 8.17 | 8.19 | 8.20 |
| RESIDENCE ADJUSTMENT............. | -1076 | -1153 | -1221 | -1281 | -1359 | -1447 | -1544 | -1640 | -1740 | -1847 |
| PERCENTAGE CHANGE.............. | 9.03 | 7.15 | 5.95 | 4.92 | 6.09 | 6.48 | 6.68 | 6.23 | 6.12 | 6.15 |
| PER CAPITA PERSONAL INCOME ($)..... | 18497 | 19580 | 20826 | 21957 | 23144 | 24325 | 25674 | 27098 | 28599 | 30208 |
| PERCENTAGE CHANGE.............. | 4.90 | 5.85 | 6.37 | 5.43 | 5.40 | 5.11 | 5.55 | 5.55 | 5.54 | 5.63 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 5: TENNESSEE WAGE AND SALARY EMPLOYMENT BY SECTOR
THOUSANDS OF JOBS



| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TOTAL NONAGRICULTURAL.............. | 2269.3 | 2316.7 | 2376.3 | 2439.8 | 2504.2 | 2572.7 | 2645.4 | 2721.7 | 2799.1 | 2879.8 |
| PERCENTAGE CHANGE............ | 1.67 | 2.09 | 2.57 | 2.67 | 2.64 | 2.74 | 2.83 | 2.88 | 2.84 | 2.88 |
| MINING............................ | 4.5 | 4.2 | 4.1 | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 |
| PERCENTAGE CHANGE............ | -9.26 | -5.88 | -3.05 | -2.31 | -2.37 | -2.62 | -2.90 | -3.21 | -3.40 | -3.43 |
| CONSTRUCTION...................... | 88.5 | 93.3 | 97.3 | 99.3 | 101.3 | 102.4 | 103.6 | 105.4 | 107.4 | 109.4 |
| PERCENTAGE CHANGE............ | 3.74 | 5.34 | 4.34 | 2.08 | 1.97 | 1.05 | 1.23 | 1.76 | 1.83 | 1.87 |
| MANUFACTURING..................... | 516.8 | 519.3 | 524.4 | 530.1 | 534.6 | 541.7 | 549.9 | 558.5 | 565.8 | 573.0 |
| PERCENTAGE CHANGE............ | 0.74 | 0.49 | 0.99 | 1.09 | 0.84 | 1.33 | 1.51 | 1.55 | 1.32 | 1.26 |
| DURABLE GOODS.................. | 261.5 | 265.1 | 271.7 | 276.0 | 280.1 | 284.9 | 290.5 | 295.9 | 300.7 | 305.4 |
| PERCENTAGE CHANGE............ | 2.07 | 1.36 | 2.48 | 1.58 | 1.49 | 1.70 | 1.99 | 1.84 | 1.64 | 1.56 |
| NONDURABLE GOODS............... | 255.2 | 254.2 | 252.8 | 254.1 | 254.5 | 256.9 | 259.4 | 262.6 | 265.1 | 267.6 |
| PERCENTAGE CHANGE............ | -0.59 | -0.41 | -0.56 | 0.55 | 0.13 | 0.93 | 0.99 | 1.23 | 0.97 | 0.93 |
| TRADE............................. | 528.8 | 540.4 | 553.4 | 568.8 | 585.2 | 602.0 | 620.0 | 639.1 | 659.1 | 680.1 |
| PERCENTAGE CHANGE............ | 1.97 | 2.19 | 2.41 | 2.78 | 2.88 | 2.88 | 2.98 | 3.08 | 3.13 | 3.18 |
| SERVICES.......................... | 551.6 | 574.0 | 600.9 | 628.9 | 657.7 | 687.3 | 718.0 | 750.0 | 783.2 | 817.9 |
| PERCENTAGE CHANGE............ | 3.20 | 4.06 | 4.69 | 4.66 | 4.57 | 4.51 | 4.47 | 4.45 | 4.43 | 4.43 |
| FIN,INS,REAL EST................. | 100.7 | 100.2 | 99.8 | 99.7 | 99.8 | 100.2 | 101.0 | 102.2 | 103.4 | 104.8 |
| PERCENTAGE CHANGE............ | 0.00 | -0.53 | -0.39 | -0.14 | 0.13 | 0.39 | 0.83 | 1.14 | 1.20 | 1.38 |
| TRANS,COMM,PUB UTIL.............. | 122.7 | 126.8 | 131.9 | 137.3 | 142.1 | 146.6 | 151.5 | 156.4 | 161.5 | 166.5 |
| PERCENTAGE CHANGE............ | 2.57 | 3.34 | 4.03 | 4.08 | 3.47 | 3.22 | 3.29 | 3.29 | 3.21 | 3.10 |
| GOVERNMENT........................ | 355.6 | 358.5 | 364.3 | 371.6 | 379.7 | 388.7 | 397.7 | 406.6 | 415.3 | 424.8 |
| PERCENTAGE CHANGE............ | 0.08 | 0.82 | 1.63 | 2.00 | 2.16 | 2.38 | 2.32 | 2.23 | 2.15 | 2.27 |
| FEDERAL,CIVILIAN............... | 57.2 | 57.2 | 57.7 | 58.3 | 58.8 | 59.4 | 60.0 | 60.7 | 61.3 | 62.0 |
| PERCENTAGE CHANGE............ | -2.00 | 0.08 | 0.92 | 0.92 | 0.92 | 0.97 | 1.04 | 1.11 | 1.12 | 1.10 |
| STATE AND LOCAL................ | 298.4 | 301.3 | 306.6 | 313.4 | 320.9 | 329.3 | 337.7 | 345.9 | 354.0 | 362.8 |
| PERCENTAGE CHANGE............ | 0.48 | 0.96 | 1.76 | 2.21 | 2.39 | 2.63 | 2.55 | 2.43 | 2.33 | 2.48 |
| FARM.............................. | 15.1 | 14.5 | 13.9 | 13.5 | 13.1 | 12.7 | 12.3 | 11.9 | 11.5 | 11.1 |
| PERCENTAGE CHANGE............ | -0.18 | -4.27 | -3.86 | -3.01 | -2.85 | -3.07 | -3.16 | -3.29 | -3.41 | -3.58 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 6: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT

THOUSANDS O

FORECAST-DATA

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL DURABLE GOODS................. | 261.5 | 265.1 | 271.7 | 276.0 | 280.1 | 284.9 | 290.5 | 295.9 | 300.7 | 305.4 |
| PERCENTAGE CHANGE............... | 2.07 | 1.36 | 2.48 | 1.58 | 1.49 | 1.70 | 1.99 | 1.84 | 1.64 | 1.56 |
| LUMBER AND WOOD.................... | 18.6 | 18.5 | 18.5 | 18.5 | 18.7 | 18.7 | 18.8 | 18.7 | 18.7 | 18.6 |
| PERCENTAGE CHANGE............... | 0.42 | -0.35 | -0.14 | 0.19 | 0.86 | 0.25 | 0.26 | -0.28 | -0.27 | -0.56 |
| FURNITURE AND FIXTURES............ | 28.5 | 28.4 | 28.6 | 28.8 | 29.1 | 29.3 | 29.8 | 30.1 | 30.4 | 30.8 |
| PERCENTAGE CHANGE............... | 4.23 | -0.07 | 0.57 | 0.54 | 1.14 | 0.89 | 1.55 | 1.14 | 1.01 | 1.04 |
| STONE,CLAY AND GLASS.............. | 14.5 | 14.8 | 15.3 | 15.5 | 15.4 | 15.3 | 15.4 | 15.4 | 15.4 | 15.4 |
| PERCENTAGE CHANGE............... | 3.43 | 2.30 | 3.15 | 1.16 | -0.64 | -0.88 | 1.00 | -0.10 | -0.17 | 0.43 |
| PRIMARY METALS.................... | 15.2 | 15.2 | 15.4 | 15.6 | 15.6 | 15.7 | 15.8 | 15.9 | 16.0 | 16.1 |
| PERCENTAGE CHANGE............... | 0.31 | -0.08 | 1.25 | 1.04 | 0.20 | 0.38 | 0.69 | 0.70 | 0.66 | 0.73 |
| FABRICATED METALS................. | 42.2 | 42.5 | 42.7 | 43.1 | 43.9 | 44.9 | 46.0 | 47.1 | 48.2 | 49.2 |
| PERCENTAGE CHANGE............... | 1.38 | 0.56 | 0.49 | 1.06 | 1.83 | 2.21 | 2.37 | 2.45 | 2.35 | 2.15 |
| NONELECTRICAL MACHINERY........... | 36.5 | 36.6 | 36.7 | 37.0 | 37.0 | 37.2 | 37.4 | 37.5 | 37.7 | 37.7 |
| PERCENTAGE CHANGE............... | -0.82 | 0.32 | 0.31 | 0.61 | 0.13 | 0.49 | 0.46 | 0.41 | 0.36 | 0.03 |
| ELECTRICAL MACHINERY.............. | 36.6 | 37.4 | 39.2 | 40.0 | 40.1 | 40.3 | 40.7 | 40.9 | 40.9 | 41.0 |
| PERCENTAGE CHANGE............... | 2.14 | 2.26 | 4.84 | 2.02 | 0.11 | 0.56 | 0.91 | 0.59 | 0.05 | 0.20 |
| TRANSPORTATION EQUIPMENT.......... | 48.3 | 50.3 | 53.5 | 55.2 | 57.6 | 59.9 | 62.4 | 65.2 | 67.8 | 70.4 |
| PERCENTAGE CHANGE............... | 6.54 | 4.07 | 6.36 | 3.16 | 4.29 | 4.13 | 4.18 | 4.43 | 3.97 | 3.78 |
| INSTRUMENTS....................... | 9.5 | 9.4 | 9.6 | 9.9 | 10.2 | 10.7 | 11.1 | 11.6 | 12.0 | 12.4 |
| PERCENTAGE CHANGE............... | -7.03 | -0.33 | 2.12 | 2.90 | 2.97 | 4.31 | 4.38 | 3.84 | 3.69 | 3.43 |
| MISCELLANEOUS..................... | 11.6 | 11.8 | 12.1 | 12.4 | 12.5 | 12.9 | 13.2 | 13.5 | 13.7 | 13.9 |
| PERCENTAGE CHANGE............... | 2.22 | 1.82 | 2.06 | 2.73 | 1.29 | 2.72 | 2.54 | 1.86 | 1.73 | 1.40 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 7: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF JOBS



| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TOTAL NONDURABLE GOODS | 255.2 | 254.2 | 252.8 | 254.1 | 254.5 | 256.9 | 259.4 | 262.6 | 265.1 | 267.6 |
| PERCENTAGE CHANGE | -0.59 | -0.41 | -0.56 | 0.55 | 0.13 | 0.93 | 0.99 | 1.23 | 0.97 | 0.93 |
| FOOD | 36.0 | 36.2 | 35.8 | 35.7 | 36.1 | 36.5 | 37.0 | 37.4 | 37.7 | 38.1 |
| PERCENTAGE CHANGE | 0.51 | 0.40 | -1.11 | -0.30 | 1.14 | 1.26 | 1.19 | 1.09 | 0.89 | 1.06 |
| TOBACCO | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| PERCENTAGE CHANGE | -4.14 | 1.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TEXTILES | 20.7 | 20.4 | 19.9 | 19.2 | 18.4 | 17.8 | 17.1 | 16.5 | 15.9 | 15.4 |
| PERCENTAGE CHANGE | 0.44 | -1.65 | -2.44 | -3.54 | -3.93 | -3.45 | -3.99 | -3.36 | -3.39 | -3.46 |
| APPAREL | 59.6 | 58.6 | 57.6 | 57.4 | 56.1 | 55.3 | 54.8 | 54.5 | 54.0 | 53.5 |
| PERCENTAGE CHANGE | -2.57 | -1.73 | -1.72 | -0.33 | -2.29 | -1.34 | -1.00 | -0.52 | -0.92 | -0.87 |
| PAPER | 21.9 | 22.2 | 22.3 | 23.1 | 23.4 | 24.3 | 25.0 | 25.9 | 26.7 | 27.6 |
| PERCENTAGE CHANGE | -0.69 | 1.06 | 0.68 | 3.28 | 1.34 | 4.13 | 2.91 | 3.38 | 3.06 | 3.30 |
| PRINTING AND PUBLISHING | 36.9 | 37.0 | 37.3 | 38.0 | 38.8 | 39.8 | 40.9 | 42.2 | 43.5 | 44.8 |
| PERCENTAGE CHANGE | 0.78 | 0.20 | 1.02 | 1.63 | 2.13 | 2.57 | 2.89 | 3.05 | 3.12 | 3.13 |
| CHEMICALS | 39.7 | 39.6 | 39.6 | 39.9 | 40.1 | 40.4 | 40.6 | 41.2 | 41.7 | 42.0 |
| PERCENTAGE CHANGE | -0.33 | -0.23 | 0.00 | 0.70 | 0.66 | 0.76 | 0.54 | 1.44 | 1.13 | 0.62 |
| PETROLEUM REFINING | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| PERCENTAGE CHANGE | 1.51 | 12.26 | 2.15 | 1.32 | 0.77 | 0.66 | 0.40 | 0.16 | -0.19 | -0.15 |
| RUBBER AND PLASTICS | 30.5 | 30.6 | 30.5 | 31.2 | 32.2 | 33.4 | 34.7 | 35.7 | 36.5 | 37.3 |
| PERCENTAGE CHANGE | 1.11 | 0.29 | -0.33 | 2.34 | 2.99 | 3.85 | 3.80 | 2.83 | 2.38 | 2.10 |
| LEATHER | 8.0 | 7.8 | 7.8 | 7.9 | 7.5 | 7.3 | 7.3 | 7.3 | 7.2 | 7.0 |
| PERCENTAGE CHANGE | -5.90 | -2.73 | 0.41 | 0.71 | -4.05 | -2.79 | 0.14 | -0.34 | -2.11 | -2.51 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 8:, TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR

1987 DO[illegible]

FORECAST-DATA

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL NONAGRICULTURAL............... | 19034 | 19349 | 19529 | 19416 | 19354 | 19314 | 19330 | 19301 | 19332 | 19387 |
| PERCENTAGE CHANGE............ | 1.27 | 1.66 | 0.93 | -0.58 | -0.32 | -0.21 | 0.08 | -0.15 | 0.16 | 0.29 |
| MINING............................ | 26258 | 26035 | 26082 | 26216 | 26368 | 26445 | 26616 | 26839 | 27065 | 27273 |
| PERCENTAGE CHANGE............ | 10.46 | -0.85 | 0.18 | 0.51 | 0.58 | 0.29 | 0.65 | 0.84 | 0.84 | 0.77 |
| CONSTRUCTION...................... | 21637 | 21617 | 21840 | 21847 | 21839 | 21874 | 21952 | 22093 | 22271 | 22473 |
| PERCENTAGE CHANGE............ | 4.38 | -0.09 | 1.03 | 0.03 | -0.03 | 0.16 | 0.36 | 0.64 | 0.80 | 0.91 |
| MANUFACTURING..................... | 21487 | 21997 | 22136 | 22189 | 22161 | 22194 | 22298 | 22331 | 22400 | 22516 |
| PERCENTAGE CHANGE............ | 0.05 | 2.37 | 0.64 | 0.24 | -0.13 | 0.15 | 0.47 | 0.15 | 0.31 | 0.52 |
| DURABLE GOODS.................. | 22588 | 23110 | 23176 | 23133 | 23118 | 23185 | 23337 | 23349 | 23415 | 23491 |
| PERCENTAGE CHANGE............ | 1.55 | 2.31 | 0.29 | -0.19 | -0.06 | 0.29 | 0.66 | 0.05 | 0.28 | 0.32 |
| NONDURABLE GOODS............... | 20359 | 20836 | 21019 | 21164 | 21108 | 21094 | 21134 | 21184 | 21249 | 21403 |
| PERCENTAGE CHANGE............ | -1.71 | 2.34 | 0.88 | 0.69 | -0.27 | -0.06 | 0.19 | 0.24 | 0.31 | 0.72 |
| TRADE............................. | 14461 | 14713 | 14834 | 14686 | 14612 | 14538 | 14504 | 14419 | 14475 | 14547 |
| PERCENTAGE CHANGE............ | 0.35 | 1.74 | 0.82 | -0.99 | -0.50 | -0.51 | -0.24 | -0.58 | 0.39 | 0.49 |
| SERVICES.......................... | 18437 | 18682 | 18954 | 18938 | 19012 | 19072 | 19182 | 19151 | 19146 | 19165 |
| PERCENTAGE CHANGE............ | 1.44 | 1.33 | 1.46 | -0.08 | 0.39 | 0.31 | 0.58 | -0.16 | -0.03 | 0.10 |
| FIN,INS,REAL EST.................. | 23538 | 24125 | 24493 | 23745 | 23884 | 23999 | 24178 | 24426 | 24701 | 25013 |
| PERCENTAGE CHANGE............ | 1.15 | 2.50 | 1.52 | -3.05 | 0.59 | 0.48 | 0.75 | 1.03 | 1.13 | 1.26 |
| TRANS,COMM,PUB UTIL............... | 25250 | 25180 | 25353 | 24908 | 24646 | 24490 | 24405 | 24404 | 24472 | 24533 |
| PERCENTAGE CHANGE............ | 0.98 | -0.28 | 0.69 | -1.76 | -1.05 | -0.64 | -0.34 | -0.01 | 0.28 | 0.25 |
| GOVERNMENT........................ | 19033 | 19504 | 19696 | 19596 | 19397 | 19223 | 19102 | 19046 | 19051 | 19082 |
| PERCENTAGE CHANGE............ | 3.64 | 2.48 | 0.98 | -0.51 | -1.02 | -0.89 | -0.63 | -0.29 | 0.02 | 0.16 |
| FEDERAL,CIVILIAN................ | 29290 | 29646 | 29945 | 30027 | 30063 | 29930 | 29829 | 29778 | 29753 | 29795 |
| PERCENTAGE CHANGE............ | 2.84 | 1.22 | 1.01 | 0.27 | 0.12 | -0.44 | -0.34 | -0.17 | -0.08 | 0.14 |
| STATE AND LOCAL................. | 17069 | 17579 | 17767 | 17657 | 17442 | 17293 | 17197 | 17165 | 17196 | 17251 |
| PERCENTAGE CHANGE............ | 4.22 | 2.99 | 1.07 | -0.62 | -1.21 | -0.85 | -0.56 | -0.19 | 0.18 | 0.32 |
| AGRICULTURE......................... | 6265 | 6402 | 6512 | 6561 | 6598 | 6652 | 6713 | 6784 | 6866 | 6962 |
| PERCENTAGE CHANGE............ | 1.28 | 2.19 | 1.71 | 0.75 | 0.57 | 0.82 | 0.91 | 1.06 | 1.21 | 1.39 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 9: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
CURRENT DOLLARS

FORECAST-DATA

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL NONAGRICULTURAL............... | 24211 | 25350 | 26485 | 27303 | 28242 | 29257 | 30419 | 31530 | 32732 | 34012 |
| PERCENTAGE CHANGE........... | 3.98 | 4.70 | 4.48 | 3.09 | 3.44 | 3.59 | 3.97 | 3.65 | 3.81 | 3.91 |
| MINING............................ | 33400 | 34108 | 35372 | 36864 | 38477 | 40059 | 41885 | 43843 | 45824 | 47846 |
| PERCENTAGE CHANGE........... | 13.42 | 2.12 | 3.70 | 4.22 | 4.38 | 4.11 | 4.56 | 4.68 | 4.52 | 4.41 |
| CONSTRUCTION...................... | 27522 | 28321 | 29619 | 30721 | 31869 | 33135 | 34545 | 36091 | 37708 | 39426 |
| PERCENTAGE CHANGE............. | 7.18 | 2.90 | 4.58 | 3.72 | 3.74 | 3.97 | 4.26 | 4.48 | 4.48 | 4.56 |
| MANUFACTURING..................... | 27332 | 28818 | 30021 | 31202 | 32338 | 33620 | 35089 | 36480 | 37926 | 39500 |
| ERCENTAGE CHANGE............ | 2.73 | 5.44 | 4.17 | 3.93 | 3.64 | 3.96 | 4.37 | 3.96 | 3.97 | 4.15 |
| DURABLE GOODS.................... | 28732 | 30277 | 31431 | 32530 | 33735 | 35122 | 36725 | 38143 | 39645 | 41211 |
| PERCENTAGE CHANGE............. | 4.27 | 5.38 | 3.81 | 3.49 | 3.71 | 4.11 | 4.56 | 3.86 | 3.94 | 3.95 |
| NONDURABLE GOODS................ | 25897 | 27297 | 28506 | 29761 | 30801 | 31954 | 33258 | 34606 | 35977 | 37548 |
| PERCENTAGE CHANGE............. | 0.93 | 5.41 | 4.43 | 4.40 | 3.49 | 3.74 | 4.08 | 4.05 | 3.96 | 4.37 |
| TRADE............................. | 18394 | 19275 | 20117 | 20652 | 21322 | 22022 | 22824 | 23555 | 24509 | 25520 |
| PERCENTAGE CHANGE............. | 3.04 | 4.79 | 4.37 | 2.66 | 3.25 | 3.28 | 3.64 | 3.20 | 4.05 | 4.13 |
| SERVICES.......................... | 23452 | 24475 | 25705 | 26631 | 27743 | 28890 | 30186 | 31285 | 32417 | 33623 |
| PERCENTAGE CHANGE............. | 4.16 | 4.37 | 5.02 | 3.60 | 4.18 | 4.13 | 4.49 | 3.64 | 3.62 | 3.72 |
| FIN,INS,REAL EST.................. | 29940 | 31607 | 33217 | 33390 | 34852 | 36353 | 38048 | 39901 | 41822 | 43881 |
| PERCENTAGE CHANGE............. | 3.86 | 5.57 | 5.09 | 0.52 | 4.38 | 4.31 | 4.66 | 4.87 | 4.81 | 4.93 |
| TRANS,COMM,PUB UTIL............... | 32118 | 32989 | 34384 | 35025 | 35965 | 37097 | 38406 | 39866 | 41433 | 43039 |
| PERCENTAGE CHANGE............. | 3.69 | 2.71 | 4.23 | 1.86 | 2.68 | 3.15 | 3.53 | 3.80 | 3.93 | 3.88 |
| GOVERNMENT........................ | 24210 | 25553 | 26712 | 27556 | 28304 | 29120 | 30060 | 31114 | 32255 | 33476 |
| PERCENTAGE CHANGE............. | 6.43 | 5.55 | 4.54 | 3.16 | 2.72 | 2.88 | 3.23 | 3.51 | 3.67 | 3.79 |
| FEDERAL,CIVILIAN................ | 37257 | 38840 | 40611 | 42224 | 43869 | 45339 | 46940 | 48644 | 50376 | 52271 |
| PERCENTAGE CHANGE............. | 5.60 | 4.25 | 4.56 | 3.97 | 3.90 | 3.35 | 3.53 | 3.63 | 3.56 | 3.76 |
| STATE AND LOCAL................. | 21711 | 23030 | 24095 | 24829 | 25452 | 26196 | 27062 | 28040 | 29115 | 30264 |
| PERCENTAGE CHANGE............. | 7.02 | 6.08 | 4.62 | 3.05 | 2.51 | 2.92 | 3.30 | 3.62 | 3.84 | 3.94 |
| AGRICULTURE......................... | 7969 | 8388 | 8831 | 9226 | 9628 | 10077 | 10564 | 11083 | 11625 | 12213 |
| PERCENTAGE CHANGE........... | 4.00 | 5.25 | 5.29 | 4.46 | 4.36 | 4.66 | 4.83 | 4.91 | 4.90 | 5.06 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 10: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| CIVILIAN LABOR FORCE (THOUS)........ | 2480 | 2515 | 2546 | 2575 | 2611 | 2650 | 2692 | 2734 | 2781 | 2827 |
| PERCENTAGE CHANGE............... | 1.64 | 1.39 | 1.24 | 1.16 | 1.38 | 1.50 | 1.59 | 1.55 | 1.73 | 1.66 |
| EMPLOYED PERSONS (THOUS).......... | 2336 | 2385 | 2416 | 2444 | 2481 | 2518 | 2557 | 2593 | 2639 | 2680 |
| PERCENTAGE CHANGE............... | 2.22 | 2.11 | 1.29 | 1.18 | 1.50 | 1.51 | 1.54 | 1.41 | 1.77 | 1.56 |
| UNEMPLOYED PERSONS (THOUS)........ | 144 | 130 | 130 | 131 | 130 | 132 | 135 | 141 | 142 | 147 |
| PERCENTAGE CHANGE............... | -6.82 | -10.33 | 0.33 | 0.81 | -0.86 | 1.30 | 2.67 | 4.18 | 0.85 | 3.68 |
| PARTICIPATION RATE (PERCENT)........ | 61.0 | 60.9 | 60.8 | 60.7 | 60.7 | 60.9 | 61.2 | 61.4 | 61.8 | 62.1 |
| PERCENTAGE CHANGE............... | -0.01 | -0.11 | -0.18 | -0.18 | 0.10 | 0.27 | 0.41 | 0.41 | 0.62 | 0.58 |
| UNEMPLOYMENT RATE (PERCENT)......... | 5.8 | 5.2 | 5.1 | 5.1 | 5.0 | 5.0 | 5.0 | 5.1 | 5.1 | 5.2 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 11: TENNESSEE TAXABLE SALES
MILLIONS OF 1987 DOLLARS

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TOTAL.............................. | 38541 | 40088 | 41163 | 41810 | 42491 | 43057 | 43571 | 44175 | 44900 | 45698 |
| PERCENTAGE CHANGE............... | 4.99 | 4.01 | 2.68 | 1.57 | 1.63 | 1.33 | 1.19 | 1.39 | 1.64 | 1.78 |
| AUTO DEALERS...................... | 4260 | 4506 | 4658 | 4656 | 4646 | 4672 | 4612 | 4572 | 4550 | 4528 |
| PERCENTAGE CHANGE............... | 14.32 | 5.77 | 3.39 | -0.04 | -0.21 | 0.56 | -1.29 | -0.87 | -0.48 | -0.49 |
| PURCHASES FROM MANUFACTURERS...... | 2451 | 2608 | 2788 | 2808 | 2805 | 2796 | 2780 | 2762 | 2749 | 2737 |
| PERCENTAGE CHANGE............... | 1.52 | 6.39 | 6.92 | 0.71 | -0.11 | -0.30 | -0.58 | -0.68 | -0.45 | -0.44 |
| MISC DURABLE GOODS................ | 5967 | 6179 | 6149 | 6091 | 6078 | 6087 | 6100 | 6108 | 6124 | 6161 |
| PERCENTAGE CHANGE............... | 7.35 | 3.54 | -0.48 | -0.95 | -0.21 | 0.15 | 0.21 | 0.13 | 0.26 | 0.61 |
| EATING AND DRINKING PLACES........ | 3106 | 3247 | 3365 | 3478 | 3594 | 3703 | 3823 | 3957 | 4105 | 4262 |
| PERCENTAGE CHANGE............... | 2.08 | 4.52 | 3.65 | 3.36 | 3.33 | 3.02 | 3.25 | 3.51 | 3.74 | 3.81 |
| FOOD STORES....................... | 4919 | 4824 | 4801 | 4781 | 4748 | 4700 | 4651 | 4623 | 4603 | 4584 |
| PERCENTAGE CHANGE............... | -4.72 | -1.93 | -0.47 | -0.42 | -0.69 | -1.01 | -1.05 | -0.60 | -0.45 | -0.41 |
| LIQUOR STORES..................... | 209 | 200 | 193 | 189 | 185 | 181 | 177 | 173 | 170 | 167 |
| PERCENTAGE CHANGE............... | -7.87 | -4.27 | -3.58 | -1.92 | -1.95 | -2.34 | -2.25 | -2.03 | -1.95 | -1.96 |
| HOTELS AND MOTELS................. | 1133 | 1174 | 1216 | 1266 | 1316 | 1362 | 1414 | 1475 | 1541 | 1612 |
| PERCENTAGE CHANGE............... | 15.43 | 3.58 | 3.57 | 4.16 | 3.94 | 3.49 | 3.81 | 4.26 | 4.49 | 4.61 |
| OTHER RETAIL AND SERVICE.......... | 10854 | 11543 | 11847 | 12156 | 12487 | 12686 | 12908 | 13140 | 13399 | 13675 |
| PERCENTAGE CHANGE............... | 6.27 | 6.35 | 2.63 | 2.61 | 2.72 | 1.59 | 1.75 | 1.80 | 1.98 | 2.05 |
| MISC NONDURABLE GOODS............. | 3287 | 3361 | 3446 | 3471 | 3500 | 3522 | 3549 | 3578 | 3611 | 3647 |
| PERCENTAGE CHANGE............... | -1.57 | 2.23 | 2.53 | 0.73 | 0.84 | 0.64 | 0.76 | 0.79 | 0.93 | 1.01 |
| TRANSPORTATION,COMMUNICATION...... | 2353 | 2447 | 2699 | 2912 | 3130 | 3346 | 3556 | 3788 | 4048 | 4325 |
| PERCENTAGE CHANGE............... | 15.30 | 4.00 | 10.27 | 7.92 | 7.49 | 6.88 | 6.27 | 6.52 | 6.87 | 6.85 |
| PER CAPITA TOTAL TAXABLE SALES ($).. | 7572 | 7783 | 7901 | 7940 | 7987 | 8014 | 8033 | 8070 | 8130 | 8202 |
| PERCENTAGE CHANGE............... | 3.62 | 2.78 | 1.52 | 0.48 | 0.59 | 0.34 | 0.24 | 0.46 | 0.74 | 0.89 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 12: TENNESSEE TAXABLE SALES
MILLIONS OF CURRE[illegible]OLLARS

[illegible]O R E C A S T - D A T A

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL.............................. | 49024 | 52520 | 55825 | 58793 | 62005 | 65223 | 68566 | 72163 | 76021 | 80169 |
| PERCENTAGE CHANGE.............. | 7.81 | 7.13 | 6.29 | 5.32 | 5.46 | 5.19 | 5.12 | 5.25 | 5.35 | 5.46 |
| AUTO DEALERS...................... | 5418 | 5903 | 6318 | 6548 | 6780 | 7078 | 7258 | 7469 | 7704 | 7944 |
| PERCENTAGE CHANGE.............. | 17.39 | 8.94 | 7.03 | 3.64 | 3.55 | 4.39 | 2.55 | 2.91 | 3.15 | 3.11 |
| PURCHASES FROM MANUFACTURERS...... | 3118 | 3417 | 3782 | 3949 | 4093 | 4236 | 4375 | 4511 | 4655 | 4802 |
| PERCENTAGE CHANGE.............. | 4.24 | 9.58 | 10.68 | 4.42 | 3.65 | 3.50 | 3.29 | 3.10 | 3.18 | 3.16 |
| MISC DURABLE GOODS................ | 7591 | 8095 | 8340 | 8565 | 8869 | 9221 | 9600 | 9978 | 10368 | 10809 |
| PERCENTAGE CHANGE.............. | 10.23 | 6.65 | 3.02 | 2.70 | 3.56 | 3.97 | 4.11 | 3.94 | 3.91 | 4.25 |
| EATING AND DRINKING PLACES........ | 3951 | 4254 | 4564 | 4891 | 5245 | 5609 | 6016 | 6464 | 6951 | 7476 |
| PERCENTAGE CHANGE.............. | 4.82 | 7.66 | 7.30 | 7.18 | 7.23 | 6.94 | 7.26 | 7.45 | 7.52 | 7.56 |
| FOOD STORES....................... | 6257 | 6320 | 6512 | 6723 | 6929 | 7120 | 7319 | 7553 | 7793 | 8042 |
| PERCENTAGE CHANGE.............. | -2.16 | 1.01 | 3.03 | 3.25 | 3.05 | 2.76 | 2.80 | 3.19 | 3.18 | 3.20 |
| LIQUOR STORES..................... | 266 | 262 | 261 | 266 | 270 | 274 | 278 | 283 | 288 | 292 |
| PERCENTAGE CHANGE.............. | -5.39 | -1.40 | -0.19 | 1.69 | 1.74 | 1.38 | 1.55 | 1.70 | 1.63 | 1.59 |
| HOTELS AND MOTELS................. | 1442 | 1538 | 1649 | 1781 | 1921 | 2064 | 2226 | 2409 | 2609 | 2828 |
| PERCENTAGE CHANGE.............. | 18.52 | 6.68 | 7.21 | 8.01 | 7.86 | 7.44 | 7.84 | 8.23 | 8.30 | 8.39 |
| OTHER RETAIL AND SERVICE.......... | 13806 | 15123 | 16067 | 17094 | 18222 | 19217 | 20312 | 21464 | 22687 | 23990 |
| PERCENTAGE CHANGE.............. | 9.12 | 9.54 | 6.24 | 6.39 | 6.60 | 5.46 | 5.70 | 5.67 | 5.69 | 5.74 |
| MISC NONDURABLE GOODS............. | 4182 | 4403 | 4673 | 4881 | 5108 | 5336 | 5586 | 5844 | 6114 | 6399 |
| PERCENTAGE CHANGE.............. | 1.07 | 5.29 | 6.14 | 4.45 | 4.64 | 4.47 | 4.68 | 4.63 | 4.61 | 4.66 |
| TRANSPORTATION,COMMUNICATION...... | 2993 | 3206 | 3660 | 4095 | 4568 | 5068 | 5595 | 6187 | 6854 | 7588 |
| PERCENTAGE CHANGE.............. | 18.40 | 7.12 | 14.14 | 11.90 | 11.54 | 10.95 | 10.40 | 10.58 | 10.77 | 10.71 |
| PER CAPITA TOTAL TAXABLE SALES ($).. | 9632 | 10196 | 10716 | 11165 | 11654 | 12139 | 12641 | 13183 | 13764 | 14389 |
| PERCENTAGE CHANGE.............. | 6.40 | 5.86 | 5.09 | 4.19 | 4.39 | 4.16 | 4.13 | 4.29 | 4.41 | 4.54 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 13: TENNESSEE GROSS STATE PRODUCT BY SECTOR
MILLIONS OF 1982 DOLLARS

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| GROSS STATE PRODUCT................. | 80409.1 | 83408.6 | 86684.2 | 89830.8 | 92956.8 | 96238.0 | 100011.3 | 103834.2 | 107998.4 | 112330.2 |
| PERCENTAGE CHANGE............ | 3.14 | 3.73 | 3.93 | 3.63 | 3.48 | 3.53 | 3.92 | 3.82 | 4.01 | 4.01 |
| MINING............................ | 361.2 | 354.0 | 360.5 | 369.3 | 376.5 | 383.8 | 389.0 | 393.3 | 397.4 | 400.9 |
| PERCENTAGE CHANGE............ | -5.86 | -2.01 | 1.83 | 2.44 | 1.96 | 1.93 | 1.36 | 1.10 | 1.05 | 0.88 |
| CONSTRUCTION...................... | 2679.2 | 2854.2 | 2961.8 | 3025.5 | 3076.3 | 3100.9 | 3125.6 | 3185.5 | 3231.0 | 3286.7 |
| PERCENTAGE CHANGE............ | 4.62 | 6.53 | 3.77 | 2.15 | 1.68 | 0.80 | 0.80 | 1.91 | 1.43 | 1.72 |
| MANUFACTURING..................... | 24112.8 | 25434.0 | 26635.0 | 27822.3 | 28927.7 | 30274.5 | 31872.7 | 33581.9 | 35345.0 | 37263.2 |
| PERCENTAGE CHANGE............ | 5.17 | 5.48 | 4.72 | 4.46 | 3.97 | 4.66 | 5.28 | 5.36 | 5.25 | 5.43 |
| DURABLE GOODS................... | 14550.2 | 15470.3 | 16462.8 | 17385.7 | 18244.7 | 19251.5 | 20495.0 | 21791.7 | 23139.2 | 24587.7 |
| PERCENTAGE CHANGE............ | 6.63 | 6.32 | 6.42 | 5.61 | 4.94 | 5.52 | 6.46 | 6.33 | 6.18 | 6.26 |
| NONDURABLE GOODS................ | 9562.7 | 9963.7 | 10172.2 | 10436.6 | 10683.0 | 11023.0 | 11377.6 | 11790.2 | 12205.8 | 12675.4 |
| PERCENTAGE CHANGE............ | 3.03 | 4.19 | 2.09 | 2.60 | 2.36 | 3.18 | 3.22 | 3.63 | 3.52 | 3.85 |
| TRADE............................. | 14728.9 | 15189.1 | 15773.8 | 16366.4 | 17035.8 | 17555.1 | 18185.9 | 18662.0 | 19326.6 | 19931.6 |
| PERCENTAGE CHANGE............ | 1.71 | 3.12 | 3.85 | 3.76 | 4.09 | 3.05 | 3.59 | 2.62 | 3.56 | 3.13 |
| SERVICES.......................... | 12190.8 | 12741.5 | 13400.8 | 13998.8 | 14625.5 | 15294.2 | 16012.6 | 16763.6 | 17545.9 | 18360.3 |
| PERCENTAGE CHANGE............ | 3.85 | 4.52 | 5.17 | 4.46 | 4.48 | 4.57 | 4.70 | 4.69 | 4.67 | 4.64 |
| FINANCE,INSURANCE AND REAL ESTATE. | 9582.0 | 9674.5 | 9722.0 | 9775.3 | 9866.5 | 9963.0 | 10094.5 | 10245.1 | 10433.3 | 10635.0 |
| PERCENTAGE CHANGE............ | 1.72 | 0.97 | 0.49 | 0.55 | 0.93 | 0.98 | 1.32 | 1.49 | 1.84 | 1.93 |
| TRANS.,COMM.,AND PUBLIC UTIL...... | 7111.4 | 7370.3 | 7805.3 | 8264.6 | 8691.1 | 9130.6 | 9605.4 | 10080.3 | 10589.4 | 11101.4 |
| PERCENTAGE CHANGE............ | 2.45 | 3.64 | 5.90 | 5.88 | 5.16 | 5.06 | 5.20 | 4.94 | 5.05 | 4.83 |
| GOVERNMENT........................ | 7839.6 | 7959.1 | 8181.9 | 8354.1 | 8491.7 | 8659.9 | 8834.7 | 9019.4 | 9216.8 | 9430.2 |
| PERCENTAGE CHANGE............ | 0.62 | 1.52 | 2.80 | 2.10 | 1.65 | 1.98 | 2.02 | 2.09 | 2.19 | 2.31 |
| FEDERAL CIVILIAN................ | 2622.0 | 2657.0 | 2742.6 | 2825.9 | 2891.1 | 2957.9 | 3020.5 | 3079.8 | 3137.4 | 3193.3 |
| PERCENTAGE CHANGE............ | -0.59 | 1.33 | 3.22 | 3.04 | 2.31 | 2.31 | 2.12 | 1.97 | 1.87 | 1.78 |
| FEDERAL MILITARY................ | 407.2 | 407.2 | 406.7 | 406.2 | 406.1 | 405.4 | 404.8 | 404.2 | 403.3 | 401.9 |
| PERCENTAGE CHANGE............ | -2.58 | 0.01 | -0.13 | -0.12 | -0.03 | -0.18 | -0.14 | -0.15 | -0.21 | -0.36 |
| STATE AND LOCAL................. | 4810.5 | 4894.9 | 5032.6 | 5121.9 | 5194.5 | 5296.6 | 5409.5 | 5535.3 | 5676.1 | 5835.0 |
| PERCENTAGE CHANGE............ | 1.58 | 1.76 | 2.81 | 1.78 | 1.42 | 1.97 | 2.13 | 2.33 | 2.54 | 2.80 |
| AGRICULTURE....................... | 1803.2 | 1831.9 | 1843.1 | 1854.4 | 1865.6 | 1876.1 | 1890.9 | 1903.2 | 1912.9 | 1921.0 |
| PERCENTAGE CHANGE............ | 5.09 | 1.59 | 0.61 | 0.61 | 0.60 | 0.56 | 0.79 | 0.65 | 0.51 | 0.42 |
| FARM............................ | 1504.8 | 1524.3 | 1527.2 | 1531.2 | 1535.9 | 1540.5 | 1549.9 | 1557.4 | 1563.2 | 1567.9 |
| PERCENTAGE CHANGE............ | 5.47 | 1.30 | 0.19 | 0.26 | 0.30 | 0.30 | 0.61 | 0.48 | 0.37 | 0.30 |
| AG SERVICES,FORESTRY,FISHERIES.. | 298.4 | 307.6 | 315.9 | 323.2 | 329.8 | 335.6 | 341.0 | 345.7 | 349.7 | 353.0 |
| PERCENTAGE CHANGE............ | 3.19 | 3.08 | 2.71 | 2.32 | 2.02 | 1.78 | 1.60 | 1.39 | 1.14 | 0.96 |
| [illegible]ITA GROSS STATE PRODUCT ($).. | 15798.2 | 16193.1 | 16639.4 | [illegible] | 17471.9 | 17911.6 | 18438.3 | 18968.4 | 19554.1 | 20161.6 |
| [illegible]ERCENTAGE CHANGE............ | 1.80 | 2.50 | 2.76 | [illegible] | 2.42 | 2.52 | 2.94 | 2.88 | 3.09 | 3.11 |

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 14: TENNESSEE DURABLE GOODS MANUFACTURING GROSS PRODUCT

MILLIONS OF 19[illegible]LLARS

F O R E C A S T - D A T A

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL DURABLE GOODS................. | 14550.2 | 15470.3 | 16462.8 | 17385.7 | 18244.7 | 19251.5 | 20495.0 | 21791.7 | 23139.2 | 24587.7 |
| PERCENTAGE CHANGE............... | 6.63 | 6.32 | 6.42 | 5.61 | 4.94 | 5.52 | 6.46 | 6.33 | 6.18 | 6.26 |
| LUMBER AND WOOD PRODUCTS.......... | 477.2 | 482.1 | 493.5 | 507.4 | 525.6 | 541.8 | 559.3 | 575.0 | 591.4 | 607.1 |
| PERCENTAGE CHANGE............... | 1.68 | 1.04 | 2.36 | 2.82 | 3.60 | 3.08 | 3.23 | 2.80 | 2.86 | 2.64 |
| FURNITURE AND FIXTURES............ | 644.6 | 663.4 | 670.9 | 674.7 | 683.1 | 691.5 | 705.1 | 712.1 | 721.7 | 732.1 |
| PERCENTAGE CHANGE............... | 5.14 | 2.93 | 1.12 | 0.57 | 1.24 | 1.24 | 1.96 | 1.00 | 1.35 | 1.44 |
| STONE,CLAY AND GLASS.............. | 631.6 | 665.1 | 698.1 | 723.1 | 735.0 | 745.1 | 773.0 | 791.1 | 809.0 | 832.4 |
| PERCENTAGE CHANGE............... | 5.46 | 5.31 | 4.96 | 3.58 | 1.65 | 1.38 | 3.74 | 2.34 | 2.27 | 2.88 |
| PRIMARY METALS.................... | 562.6 | 576.3 | 600.3 | 626.0 | 646.8 | 674.5 | 707.9 | 735.8 | 763.9 | 794.4 |
| PERCENTAGE CHANGE............... | 1.45 | 2.45 | 4.16 | 4.28 | 3.31 | 4.29 | 4.96 | 3.94 | 3.82 | 3.99 |
| FABRICATED METAL PRODUCTS......... | 2087.1 | 2207.9 | 2253.8 | 2366.1 | 2502.2 | 2668.0 | 2873.6 | 3072.8 | 3287.5 | 3513.7 |
| PERCENTAGE CHANGE............... | 5.88 | 5.79 | 2.08 | 4.98 | 5.75 | 6.63 | 7.71 | 6.93 | 6.99 | 6.88 |
| NONELECTRICAL MACHINERY........... | 5255.8 | 5673.3 | 6131.2 | 6584.3 | 6978.2 | 7443.8 | 8034.9 | 8672.6 | 9340.4 | 10074.2 |
| PERCENTAGE CHANGE............... | 8.35 | 7.95 | 8.07 | 7.39 | 5.98 | 6.67 | 7.94 | 7.94 | 7.70 | 7.86 |
| ELECTRICAL MACHINERY.............. | 1729.7 | 1832.3 | 1995.7 | 2119.0 | 2206.7 | 2315.7 | 2436.6 | 2558.8 | 2681.3 | 2810.9 |
| PERCENTAGE CHANGE............... | 6.06 | 5.93 | 8.92 | 6.18 | 4.14 | 4.94 | 5.22 | 5.01 | 4.79 | 4.83 |
| TRANSPORTATION EQUIPMENT.......... | 2386.4 | 2556.1 | 2778.2 | 2916.4 | 3078.0 | 3241.4 | 3428.5 | 3665.4 | 3897.8 | 4142.0 |
| PERCENTAGE CHANGE............... | 8.82 | 7.11 | 8.69 | 4.98 | 5.54 | 5.31 | 5.77 | 6.91 | 6.34 | 6.26 |
| INSTRUMENTS....................... | 301.8 | 306.1 | 316.5 | 329.1 | 341.8 | 359.9 | 379.4 | 398.1 | 417.3 | 436.0 |
| PERCENTAGE CHANGE............... | -4.55 | 1.44 | 3.38 | 3.99 | 3.87 | 5.31 | 5.41 | 4.92 | 4.83 | 4.47 |
| MISCELLANEOUS DURABLE GOODS....... | 473.5 | 507.5 | 524.8 | 539.6 | 547.3 | 569.8 | 596.6 | 610.0 | 628.7 | 645.0 |
| PERCENTAGE CHANGE............... | 5.65 | 7.17 | 3.40 | 2.83 | 1.42 | 4.10 | 4.71 | 2.25 | 3.07 | 2.59 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 15: TENNESSEE NONDURABLE GOODS MANUFACTURING GROSS PRODUCT

MILLIONS OF 1982 DOLLARS



| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TOTAL NONDURABLE GOODS.............. | 9562.7 | 9963.7 | 10172.2 | 10436.6 | 10683.0 | 11023.0 | 11377.6 | 11790.2 | 12205.8 | 12675.4 |
| PERCENTAGE CHANGE............... | 3.03 | 4.19 | 2.09 | 2.60 | 2.36 | 3.18 | 3.22 | 3.63 | 3.52 | 3.85 |
| FOOD............................ | 1744.7 | 1819.5 | 1860.2 | 1892.4 | 1952.0 | 2019.5 | 2087.2 | 2153.6 | 2221.1 | 2295.1 |
| PERCENTAGE CHANGE............... | 2.67 | 4.29 | 2.23 | 1.73 | 3.15 | 3.45 | 3.35 | 3.18 | 3.14 | 3.33 |
| TOBACCO......................... | 31.8 | 30.4 | 29.5 | 28.5 | 27.7 | 27.5 | 25.6 | 24.3 | 23.6 | 23.0 |
| PERCENTAGE CHANGE............... | -10.88 | -4.43 | -2.89 | -3.26 | -2.94 | -0.81 | -6.95 | -4.78 | -3.21 | -2.21 |
| TEXTILES........................ | 496.7 | 499.0 | 491.8 | 475.2 | 456.5 | 439.9 | 422.2 | 409.9 | 396.5 | 382.7 |
| PERCENTAGE CHANGE............... | 3.17 | 0.47 | -1.45 | -3.37 | -3.94 | -3.62 | -4.03 | -2.92 | -3.26 | -3.48 |
| APPAREL......................... | 1041.4 | 1043.2 | 1046.0 | 1063.2 | 1054.4 | 1052.7 | 1053.4 | 1058.3 | 1058.5 | 1061.0 |
| PERCENTAGE CHANGE............... | -1.59 | 0.18 | 0.27 | 1.64 | -0.83 | -0.16 | 0.06 | 0.46 | 0.03 | 0.24 |
| PAPER........................... | 1264.0 | 1344.6 | 1389.8 | 1439.5 | 1496.3 | 1583.8 | 1658.6 | 1754.3 | 1862.0 | 1982.6 |
| PERCENTAGE CHANGE............... | 4.24 | 6.38 | 3.36 | 3.57 | 3.95 | 5.84 | 4.72 | 5.77 | 6.14 | 6.48 |
| PRINTING AND PUBLISHING.......... | 813.3 | 836.7 | 863.9 | 885.9 | 906.9 | 931.6 | 963.7 | 998.1 | 1034.5 | 1073.9 |
| PERCENTAGE CHANGE............... | 2.39 | 2.88 | 3.26 | 2.54 | 2.38 | 2.72 | 3.44 | 3.58 | 3.64 | 3.81 |
| CHEMICALS....................... | 2357.8 | 2537.4 | 2608.5 | 2681.9 | 2727.1 | 2795.9 | 2880.1 | 3002.1 | 3125.5 | 3282.5 |
| PERCENTAGE CHANGE............... | 5.75 | 7.62 | 2.80 | 2.81 | 1.69 | 2.52 | 3.01 | 4.23 | 4.11 | 5.02 |
| PETROLEUM REFINING.............. | 19.3 | 22.2 | 23.6 | 24.8 | 25.9 | 27.0 | 28.1 | 29.0 | 29.9 | 30.7 |
| PERCENTAGE CHANGE............... | 2.91 | 15.19 | 6.32 | 5.23 | 4.47 | 4.20 | 3.78 | 3.41 | 2.93 | 2.87 |
| RUBBER AND PLASTICS.............. | 1612.5 | 1652.5 | 1681.7 | 1766.6 | 1864.5 | 1977.9 | 2089.1 | 2190.4 | 2285.9 | 2377.6 |
| PERCENTAGE CHANGE............... | 3.13 | 2.48 | 1.77 | 5.04 | 5.54 | 6.08 | 5.62 | 4.85 | 4.36 | 4.01 |
| LEATHER......................... | 181.2 | 178.1 | 177.2 | 178.6 | 171.6 | 167.1 | 169.7 | 170.2 | 168.3 | 166.2 |
| PERCENTAGE CHANGE............... | -3.43 | -1.70 | -0.55 | 0.84 | -3.96 | -2.62 | 1.57 | 0.28 | -1.11 | -1.25 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 16: TENNESSEE GROSS STATE PRODUCT BY SECTOR
MILLIONS OF CURRENT DOLLARS

| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| GROSS STATE PRODUCT.................. | 113759 | 120986 | 129133 | 137556 | 146555 | 156326 | 167235 | 178798 | 191460 | 205078 |
| PERCENTAGE CHANGE............ | 6.00 | 6.35 | 6.73 | 6.52 | 6.54 | 6.67 | 6.98 | 6.91 | 7.08 | 7.11 |
| MINING............................ | 317 | 311 | 318 | 327 | 334 | 341 | 346 | 351 | 355 | 359 |
| PERCENTAGE CHANGE............ | -5.41 | -1.63 | 2.16 | 2.72 | 2.20 | 2.14 | 1.55 | 1.27 | 1.20 | 1.02 |
| CONSTRUCTION...................... | 4028 | 4407 | 4720 | 4978 | 5248 | 5474 | 5730 | 6060 | 6379 | 6726 |
| PERCENTAGE CHANGE............ | 8.08 | 9.41 | 7.10 | 5.46 | 5.43 | 4.31 | 4.66 | 5.76 | 5.27 | 5.44 |
| MANUFACTURING..................... | 26446 | 28242 | 29939 | 31698 | 33503 | 35825 | 38369 | 41199 | 44293 | 47823 |
| PERCENTAGE CHANGE............ | 6.10 | 6.79 | 6.01 | 5.88 | 5.70 | 6.93 | 7.10 | 7.37 | 7.51 | 7.97 |
| DURABLE GOODS.................. | 13330 | 14167 | 15086 | 15920 | 16774 | 17774 | 18953 | 20133 | 21325 | 22554 |
| PERCENTAGE CHANGE............ | 6.63 | 6.28 | 6.49 | 5.53 | 5.37 | 5.96 | 6.64 | 6.22 | 5.92 | 5.76 |
| NONDURABLE GOODS................ | 13117 | 14076 | 14853 | 15778 | 16730 | 18051 | 19416 | 21066 | 22967 | 25269 |
| PERCENTAGE CHANGE............ | 5.56 | 7.31 | 5.52 | 6.23 | 6.03 | 7.90 | 7.56 | 8.50 | 9.03 | 10.02 |
| TRADE............................. | 19549 | 20653 | 22035 | 23494 | 25131 | 26615 | 28370 | 29949 | 31870 | 33775 |
| PERCENTAGE CHANGE............ | 4.10 | 5.65 | 6.69 | 6.62 | 6.97 | 5.91 | 6.59 | 5.57 | 6.41 | 5.98 |
| SERVICES.......................... | 21935 | 23797 | 26098 | 28479 | 31075 | 33897 | 37040 | 40438 | 44056 | 47978 |
| PERCENTAGE CHANGE............ | 8.10 | 8.49 | 9.67 | 9.12 | 9.12 | 9.08 | 9.27 | 9.17 | 8.95 | 8.90 |
| FINANCE,INSURANCE AND REAL ESTATE. | 17007 | 17812 | 18553 | 19328 | 20207 | 21132 | 22180 | 23323 | 24604 | 25977 |
| PERCENTAGE CHANGE............ | 5.72 | 4.73 | 4.16 | 4.18 | 4.55 | 4.58 | 4.96 | 5.15 | 5.49 | 5.58 |
| TRANS.,COMM.,AND PUBLIC UTIL...... | 8911 | 9411 | 10187 | 11061 | 11945 | 12906 | 13990 | 15116 | 16331 | 17601 |
| PERCENTAGE CHANGE............ | 6.03 | 5.61 | 8.25 | 8.58 | 7.99 | 8.04 | 8.40 | 8.06 | 8.03 | 7.78 |
| GOVERNMENT........................ | 13485 | 14218 | 15169 | 16059 | 16936 | 17922 | 18954 | 20065 | 21236 | 22465 |
| PERCENTAGE CHANGE............ | 5.06 | 5.43 | 6.69 | 5.87 | 5.46 | 5.82 | 5.76 | 5.86 | 5.84 | 5.79 |
| FEDERAL CIVILIAN................ | 4479 | 4697 | 4999 | 5290 | 5567 | 5850 | 6119 | 6400 | 6673 | 6932 |
| PERCENTAGE CHANGE............ | 4.68 | 4.87 | 6.42 | 5.84 | 5.24 | 5.08 | 4.58 | 4.59 | 4.28 | 3.87 |
| FEDERAL MILITARY................ | 630 | 650 | 671 | 695 | 721 | 748 | 775 | 802 | 828 | 854 |
| PERCENTAGE CHANGE............ | 0.89 | 3.13 | 3.20 | 3.52 | 3.79 | 3.74 | 3.62 | 3.49 | 3.29 | 3.05 |
| STATE AND LOCAL................. | 8376 | 8871 | 9499 | 10074 | 10648 | 11323 | 12060 | 12863 | 13735 | 14680 |
| PERCENTAGE CHANGE............ | 5.59 | 5.91 | 7.09 | 6.05 | 5.69 | 6.34 | 6.51 | 6.66 | 6.77 | 6.88 |
| AGRICULTURE....................... | 2081 | 2135 | 2114 | 2132 | 2175 | 2214 | 2257 | 2297 | 2335 | 2373 |
| PERCENTAGE CHANGE............ | 7.47 | 2.60 | -0.96 | 0.83 | 2.01 | 1.79 | 1.94 | 1.79 | 1.65 | 1.63 |
| FARM............................ | 1659 | 1699 | 1667 | 1672 | 1702 | 1728 | 1759 | 1788 | 1816 | 1845 |
| PERCENTAGE CHANGE............ | 8.51 | 2.40 | -1.86 | 0.32 | 1.78 | 1.55 | 1.78 | 1.65 | 1.55 | 1.57 |
| AG SERVICES,FORESTRY,FISHERIES.. | 422 | 436 | 447 | 460 | 473 | 485 | 497 | 509 | 519 | 529 |
| PERCENTAGE CHANGE............ | 3.57 | 3.40 | 2.55 | 2.73 | 2.82 | 2.66 | 2.50 | 2.29 | 2.03 | 1.84 |
| PER CAPITA GROSS STATE PRODUCT ($).. | 22351 | 23488 | 24788 | 26122 | 27546 | 29095 | 30832 | 32663 | 34666 | 36808 |
| PERCENTAGE CHANGE............ | 4.62 | 5.09 | 5.53 | 5.38 | 5.45 | 5.62 | 5.97 | 5.94 | 6.13 | 6.18 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 17: TENNESSEE DURABLE GOODS MANUFACTURING GROSS PRODUCT
MILLIONS OF CURRENT DOLLARS



| | FORECAST-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TOTAL DURABLE GOODS................. | 13330 | 14167 | 15086 | 15920 | 16774 | 17774 | 18953 | 20133 | 21325 | 22554 |
| PERCENTAGE CHANGE............... | 6.63 | 6.28 | 6.49 | 5.53 | 5.37 | 5.96 | 6.64 | 6.22 | 5.92 | 5.76 |
| LUMBER AND WOOD PRODUCTS.......... | 649 | 669 | 699 | 733 | 774 | 813 | 854 | 892 | 933 | 972 |
| PERCENTAGE CHANGE............... | 4.89 | 3.16 | 4.50 | 4.83 | 5.55 | 5.03 | 5.05 | 4.54 | 4.54 | 4.19 |
| FURNITURE AND FIXTURES............ | 838 | 857 | 863 | 868 | 881 | 899 | 928 | 952 | 983 | 1018 |
| PERCENTAGE CHANGE............... | 4.35 | 2.22 | 0.74 | 0.49 | 1.57 | 2.05 | 3.23 | 2.61 | 3.23 | 3.55 |
| STONE,CLAY AND GLASS.............. | 723 | 786 | 837 | 878 | 903 | 923 | 964 | 990 | 1014 | 1043 |
| PERCENTAGE CHANGE............... | 8.99 | 8.68 | 6.40 | 4.91 | 2.85 | 2.29 | 4.40 | 2.64 | 2.45 | 2.84 |
| PRIMARY METALS.................... | 764 | 795 | 849 | 909 | 967 | 1038 | 1122 | 1201 | 1280 | 1366 |
| PERCENTAGE CHANGE............... | 2.61 | 4.13 | 6.73 | 7.14 | 6.29 | 7.36 | 8.17 | 6.99 | 6.60 | 6.72 |
| FABRICATED METAL PRODUCTS......... | 2374 | 2543 | 2647 | 2783 | 2950 | 3153 | 3408 | 3646 | 3895 | 4156 |
| PERCENTAGE CHANGE............... | 6.76 | 7.12 | 4.07 | 5.13 | 6.02 | 6.87 | 8.07 | 7.01 | 6.83 | 6.68 |
| NONELECTRICAL MACHINERY........... | 2718 | 2879 | 3045 | 3190 | 3317 | 3473 | 3652 | 3829 | 4004 | 4165 |
| PERCENTAGE CHANGE............... | 5.97 | 5.93 | 5.75 | 4.79 | 3.97 | 4.69 | 5.17 | 4.84 | 4.56 | 4.04 |
| ELECTRICAL MACHINERY.............. | 1862 | 1990 | 2191 | 2365 | 2513 | 2695 | 2892 | 3092 | 3287 | 3494 |
| PERCENTAGE CHANGE............... | 7.69 | 6.89 | 10.09 | 7.94 | 6.29 | 7.23 | 7.32 | 6.90 | 6.31 | 6.32 |
| TRANSPORTATION EQUIPMENT.......... | 2577 | 2780 | 3054 | 3252 | 3490 | 3739 | 4022 | 4363 | 4698 | 5049 |
| PERCENTAGE CHANGE............... | 9.98 | 7.85 | 9.87 | 6.48 | 7.31 | 7.13 | 7.58 | 8.47 | 7.69 | 7.48 |
| INSTRUMENTS....................... | 353 | 366 | 387 | 412 | 438 | 472 | 510 | 548 | 589 | 630 |
| PERCENTAGE CHANGE............... | -2.39 | 3.71 | 5.65 | 6.39 | 6.36 | 7.83 | 7.96 | 7.60 | 7.48 | 6.94 |
| MISCELLANEOUS DURABLE GOODS....... | 471 | 501 | 515 | 531 | 542 | 570 | 602 | 620 | 642 | 660 |
| PERCENTAGE CHANGE............... | 5.18 | 6.30 | 2.80 | 3.00 | 2.06 | 5.18 | 5.61 | 3.02 | 3.59 | 2.78 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 18: TENNESSEE NONDURABLE GOODS MANUFACTURING GROSS PRODUCT
MILLIONS OF CURRENT DOLLARS

| | F O R E C A S T - D A T A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| TOTAL NONDURABLE GOODS | 13117 | 14076 | 14853 | 15778 | 16730 | 18051 | 19416 | 21066 | 22967 | 25269 |
| PERCENTAGE CHANGE | 5.56 | 7.31 | 5.52 | 6.23 | 6.03 | 7.90 | 7.56 | 8.50 | 9.03 | 10.02 |
| FOOD | 2202 | 2314 | 2392 | 2469 | 2590 | 2732 | 2884 | 3037 | 3191 | 3357 |
| PERCENTAGE CHANGE | 3.67 | 5.05 | 3.41 | 3.21 | 4.91 | 5.49 | 5.53 | 5.31 | 5.10 | 5.20 |
| TOBACCO | 478 | 604 | 763 | 959 | 1163 | 1534 | 1869 | 2337 | 2998 | 3903 |
| PERCENTAGE CHANGE | 15.86 | 26.36 | 26.24 | 25.76 | 21.32 | 31.83 | 21.89 | 25.03 | 28.26 | 30.19 |
| TEXTILES | 648 | 658 | 655 | 639 | 619 | 602 | 583 | 570 | 556 | 541 |
| PERCENTAGE CHANGE | 4.29 | 1.52 | -0.46 | -2.44 | -3.05 | -2.76 | -3.20 | -2.12 | -2.49 | -2.75 |
| APPAREL | 1236 | 1251 | 1255 | 1287 | 1290 | 1298 | 1308 | 1322 | 1328 | 1336 |
| PERCENTAGE CHANGE | -0.33 | 1.24 | 0.34 | 2.55 | 0.18 | 0.66 | 0.76 | 1.04 | 0.48 | 0.63 |
| PAPER | 1949 | 2165 | 2338 | 2529 | 2743 | 3032 | 3310 | 3651 | 4034 | 4469 |
| PERCENTAGE CHANGE | 7.50 | 11.11 | 7.98 | 8.18 | 8.45 | 10.54 | 9.16 | 10.28 | 10.49 | 10.79 |
| PRINTING AND PUBLISHING | 1502 | 1606 | 1734 | 1861 | 1995 | 2152 | 2338 | 2543 | 2766 | 3013 |
| PERCENTAGE CHANGE | 5.85 | 6.90 | 8.01 | 7.31 | 7.20 | 7.84 | 8.66 | 8.76 | 8.77 | 8.93 |
| CHEMICALS | 3204 | 3512 | 3684 | 3874 | 4035 | 4244 | 4489 | 4803 | 5129 | 5521 |
| PERCENTAGE CHANGE | 7.91 | 9.60 | 4.89 | 5.16 | 4.16 | 5.18 | 5.77 | 7.00 | 6.78 | 7.65 |
| PETROLEUM REFINING | 16 | 18 | 20 | 21 | 22 | 23 | 24 | 26 | 27 | 28 |
| PERCENTAGE CHANGE | 3.41 | 15.08 | 7.04 | 5.78 | 5.59 | 5.48 | 5.06 | 4.70 | 4.18 | 3.82 |
| RUBBER AND PLASTICS | 1628 | 1691 | 1749 | 1866 | 2002 | 2163 | 2328 | 2488 | 2644 | 2803 |
| PERCENTAGE CHANGE | 4.57 | 3.87 | 3.44 | 6.68 | 7.28 | 8.09 | 7.63 | 6.83 | 6.30 | 6.01 |
| LEATHER | 254 | 257 | 263 | 273 | 270 | 270 | 282 | 290 | 294 | 298 |
| PERCENTAGE CHANGE | -0.23 | 1.39 | 2.45 | 3.78 | -1.24 | 0.07 | 4.30 | 2.91 | 1.43 | 1.22 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 19: TENNESSEE ENERGY CONSUMPTION - SELECTED CATEGORIES

| | F O R E C A S T - D A T A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| ELECTRICITY (MIL. KWH).............. | 77036 | 79779 | 82145 | 84292 | 86312 | 88479 | 90804 | 93240 | 95655 | 98171 |
| PERCENTAGE CHANGE............... | 5.63 | 3.56 | 2.97 | 2.61 | 2.40 | 2.51 | 2.63 | 2.68 | 2.59 | 2.63 |
| RESIDENTIAL....................... | 28601 | 29360 | 30092 | 30643 | 31154 | 31595 | 32077 | 32559 | 33060 | 33574 |
| PERCENTAGE CHANGE............... | 0.40 | 2.65 | 2.49 | 1.83 | 1.67 | 1.42 | 1.53 | 1.51 | 1.54 | 1.56 |
| COMMERCIAL & INDUSTRIAL (<=50 KWH) | 6454 | 6694 | 6921 | 7144 | 7376 | 7641 | 7909 | 8199 | 8500 | 8811 |
| PERCENTAGE CHANGE............... | 27.72 | 3.72 | 3.39 | 3.22 | 3.25 | 3.60 | 3.50 | 3.67 | 3.67 | 3.66 |
| COMMERCIAL & INDUSTRIAL (> 50 KWH) | 32821 | 34167 | 35337 | 36547 | 37702 | 39038 | 40460 | 41962 | 43416 | 44942 |
| PERCENTAGE CHANGE............... | 5.24 | 4.10 | 3.43 | 3.42 | 3.16 | 3.54 | 3.64 | 3.71 | 3.47 | 3.52 |
| DIRECTLY SERVED COMM AND IND...... | 9159 | 9558 | 9795 | 9959 | 10080 | 10205 | 10359 | 10520 | 10680 | 10843 |
| PERCENTAGE CHANGE............... | 11.65 | 4.36 | 2.47 | 1.67 | 1.22 | 1.24 | 1.51 | 1.55 | 1.52 | 1.53 |
| GASOLINE (MIL. GAL.)................ | 2566 | 2595 | 2570 | 2534 | 2525 | 2518 | 2527 | 2528 | 2530 | 2530 |
| PERCENTAGE CHANGE............... | 2.34 | 1.10 | -0.94 | -1.41 | -0.33 | -0.31 | 0.38 | 0.03 | 0.10 | 0.00 |
| MOTOR VEHICLE REGISTRATIONS......... | 4776 | 4908 | 5042 | 5179 | 5317 | 5458 | 5600 | 5745 | 5892 | 6041 |
| PERCENTAGE CHANGE............... | 2.81 | 2.77 | 2.74 | 2.71 | 2.67 | 2.64 | 2.61 | 2.58 | 2.56 | 2.53 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

# APPENDIX B: HISTORICAL DATA

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS
SEASONALLY ADJUSTED



| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| US GDP (BIL87$) SAAR............ | 4906.5 | 4867.2 | 4837.8 | 4855.6 | 4872.6 | 4879.6 | 4922.0 | 4956.5 | 4998.2 | 5068.3 | 5078.2 | 4897.3 | 4861.4 | 4986.2 |
| % CHG PREV QTR SAAR........... | -0.86 | -3.17 | -2.39 | 1.48 | 1.41 | 0.58 | 3.52 | 2.83 | 3.41 | 5.73 | 0.78 | 1.22 | -0.73 | 2.57 |
| % CHG SAME QTR LAST YR........ | 1.39 | 0.22 | -1.24 | -1.25 | -0.69 | 0.25 | 1.74 | 2.08 | 2.58 | 3.87 | 3.17 | 1.22 | -0.73 | 2.57 |
| US GDP (BIL$) SAAR.............. | 5583.8 | 5597.9 | 5631.7 | 5697.7 | 5758.6 | 5803.7 | 5908.7 | 5991.4 | 6059.5 | 6194.4 | 6261.6 | 5546.1 | 5722.9 | 6038.5 |
| % CHG PREV QTR SAAR........... | 3.13 | 1.01 | 2.44 | 4.77 | 4.34 | 3.17 | 7.44 | 5.72 | 4.62 | 9.21 | 4.41 | 5.62 | 3.19 | 5.51 |
| % CHG SAME QTR LAST YR........ | 5.78 | 4.74 | 3.11 | 2.83 | 3.13 | 3.68 | 4.92 | 5.15 | 5.23 | 6.73 | 5.97 | 5.62 | 3.19 | 5.51 |
| IMPLICIT DEFLATOR,GDP........... | 113.8 | 115.0 | 116.4 | 117.3 | 118.2 | 118.9 | 120.0 | 120.9 | 121.2 | 122.2 | 123.3 | 113.3 | 117.7 | 121.1 |
| % CHG PREV QTR SAAR........... | 3.96 | 4.29 | 4.96 | 3.13 | 3.10 | 2.39 | 3.75 | 3.03 | 1.00 | 3.34 | 3.65 | 4.33 | 3.93 | 2.87 |
| % CHG SAME QTR LAST YR........ | 4.31 | 4.45 | 4.39 | 4.08 | 3.87 | 3.39 | 3.09 | 3.07 | 2.54 | 2.78 | 2.75 | 4.33 | 3.93 | 2.87 |
| US PERS CONS DEFL (1987=100).... | 115.6 | 117.5 | 118.5 | 119.4 | 120.3 | 121.3 | 122.5 | 123.6 | 124.1 | 125.3 | 126.2 | 114.9 | 119.9 | 123.9 |
| % CHG PREV QTR SAAR........... | 6.11 | 6.74 | 3.45 | 3.07 | 3.05 | 3.37 | 4.02 | 3.64 | 1.63 | 3.92 | 2.90 | 5.17 | 4.31 | 3.34 |
| % CHG SAME QTR LAST YR........ | 5.28 | 5.86 | 5.15 | 4.83 | 4.07 | 3.23 | 3.38 | 3.52 | 3.16 | 3.30 | 3.02 | 5.17 | 4.31 | 3.34 |
| TN PERSONAL INCOME (MIL87$) SAAR | 67543 | 67048 | 67603 | 67916 | 68123 | 69022 | 70046 | 70873 | 71463 | 73618 | 72590 | 67432 | 68166 | 71500 |
| % CHG PREV QTR SAAR........... | 0.54 | -2.90 | 3.35 | 1.87 | 1.22 | 5.39 | 6.06 | 4.81 | 3.37 | 12.62 | -5.47 | 1.25 | 1.09 | 4.89 |
| % CHG SAME QTR LAST YR........ | 1.57 | 0.13 | -0.12 | 0.69 | 0.86 | 2.95 | 3.61 | 4.35 | 4.90 | 6.66 | 3.63 | 1.25 | 1.09 | 4.89 |
| US PERSONAL INCOME (BIL87$) SAAR | 4067.4 | 4050.3 | 4037.0 | 4048.1 | 4038.9 | 4062.2 | 4096.2 | 4121.2 | 4141.7 | 4252.4 | 4163.8 | 4067.0 | 4046.6 | 4152.9 |
| % CHG PREV QTR SAAR........... | -1.36 | -1.67 | -1.30 | 1.10 | -0.90 | 2.33 | 3.38 | 2.47 | 2.00 | 11.14 | -8.08 | 1.46 | -0.50 | 2.63 |
| % CHG SAME QTR LAST YR........ | 1.75 | 0.59 | -0.78 | -0.81 | -0.70 | 0.29 | 1.46 | 1.81 | 2.54 | 4.68 | 1.65 | 1.46 | -0.50 | 2.63 |
| TN PERSONAL INCOME (MIL$) SAAR.. | 78080 | 78781 | 80109 | 81092 | 81952 | 83724 | 85806 | 87599 | 88686 | 92243 | 91608 | 77493 | 81719 | 88584 |
| % CHG PREV QTR SAAR........... | 6.67 | 3.64 | 6.92 | 5.00 | 4.31 | 8.93 | 10.32 | 8.62 | 5.06 | 17.03 | -2.73 | 6.48 | 5.45 | 8.40 |
| % CHG SAME QTR LAST YR........ | 6.93 | 6.00 | 5.02 | 5.55 | 4.96 | 6.27 | 7.11 | 8.02 | 8.22 | 10.18 | 6.76 | 6.48 | 5.45 | 8.40 |
| US PERSONAL INCOME (BIL$) SAAR.. | 4701.9 | 4759.1 | 4783.9 | 4833.4 | 4858.8 | 4927.5 | 5017.8 | 5093.8 | 5139.8 | 5328.3 | 5254.7 | 4673.8 | 4850.9 | 5144.9 |
| % CHG PREV QTR SAAR........... | 4.67 | 4.96 | 2.10 | 4.20 | 2.12 | 5.78 | 7.53 | 6.20 | 3.66 | 15.50 | -5.41 | 6.70 | 3.79 | 6.06 |
| % CHG SAME QTR LAST YR........ | 7.12 | 6.48 | 4.32 | 3.98 | 3.34 | 3.54 | 4.89 | 5.39 | 5.78 | 8.13 | 4.72 | 6.70 | 3.79 | 6.06 |
| TN NONAGRIC JOBS (THOUS)........ | 2193.6 | 2188.1 | 2176.1 | 2173.8 | 2183.6 | 2200.5 | 2222.5 | 2228.4 | 2234.9 | 2241.9 | 2259.7 | 2193.2 | 2183.5 | 2231.9 |
| % CHG PREV QTR SAAR........... | -1.01 | -0.99 | -2.17 | -0.43 | 1.82 | 3.14 | 4.06 | 1.07 | 1.16 | 1.26 | 3.21 | 1.21 | -0.44 | 2.22 |
| % CHG SAME QTR LAST YR........ | 0.72 | 0.21 | -0.71 | -1.15 | -0.46 | 0.57 | 2.13 | 2.51 | 2.35 | 1.88 | 1.67 | 1.21 | -0.44 | 2.22 |
| US NONAGRIC JOBS (MIL).......... | 109.6 | 109.1 | 108.6 | 108.2 | 108.2 | 108.1 | 108.1 | 108.4 | 108.6 | 108.9 | 109.4 | 109.4 | 108.3 | 108.5 |
| % CHG PREV QTR SAAR........... | -0.57 | -1.60 | -2.05 | -1.47 | 0.02 | -0.09 | -0.21 | 1.25 | 0.77 | 1.10 | 1.91 | 1.42 | -1.06 | 0.24 |
| % CHG SAME QTR LAST YR........ | 1.42 | 0.56 | -0.65 | -1.42 | -1.28 | -0.90 | -0.44 | 0.24 | 0.43 | 0.73 | 1.26 | 1.42 | -1.06 | 0.24 |
| TN UNEMPLOYMENT RATE (%)........ | 5.2 | 6.0 | 6.5 | 6.5 | 6.8 | 6.7 | 6.7 | 6.4 | 6.4 | 5.9 | 6.2 | 5.2 | 6.6 | 6.4 |
| US UNEMPLOYMENT RATE (%)........ | 5.6 | 6.0 | 6.5 | 6.7 | 6.8 | 7.0 | 7.2 | 7.5 | 7.6 | 7.3 | 7.0 | 5.5 | 6.7 | 7.4 |
| BANK PRIME INTEREST RATE (%).... | 10.0 | 10.0 | 9.2 | 8.7 | 8.4 | 7.6 | 6.5 | 6.5 | 6.0 | 6.0 | 6.0 | 10.0 | 8.5 | 6.3 |
| TN MFG JOBS (THOUS)............. | 517.5 | 513.5 | 503.5 | 499.6 | 502.2 | 505.4 | 510.4 | 513.4 | 514.4 | 513.5 | 517.7 | 520.3 | 502.7 | 512.9 |
| % CHG PREV QTR SAAR........... | -5.16 | -3.03 | -7.61 | -3.06 | 2.10 | 2.60 | 4.02 | 2.37 | 0.81 | -0.72 | 3.34 | -0.80 | -3.39 | 2.05 |
| % CHG SAME QTR LAST YR........ | -1.71 | -2.30 | -4.22 | -4.74 | -2.96 | -1.58 | 1.38 | 2.77 | 2.44 | 1.60 | 1.44 | -0.80 | -3.39 | 2.05 |

(CONTINUED ON NEXT PAGE)

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 1: , SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS (CONT.)

SEASONALLY A[illegible]D

| | [illegible]STORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TN TAXABLE SALES (MIL87$)....... | 9009 | 8865 | 8724 | 8904 | 8913 | 8994 | 9350 | 9003 | 9091 | 9272 | 9330 | 36582 | 35534 | 36717 |
| % CHG PREV QTR SAAR........... | -10.1 | -6.3 | -6.2 | 8.5 | 0.4 | 3.7 | 16.8 | -14.0 | 4.0 | 8.2 | 2.5 | -1.1 | -2.9 | 3.3 |
| % CHG SAME QTR LAST YR........ | -3.6 | -3.3 | -7.8 | -3.8 | -1.1 | 1.5 | 7.2 | 1.1 | 2.0 | 3.1 | -0.2 | -1.1 | -2.9 | 3.3 |
| TN TAXABLE SALES (MIL$)......... | 10414 | 10416 | 10338 | 10631 | 10722 | 10909 | 11454 | 11128 | 11282 | 11618 | 11774 | 42025 | 42601 | 45482 |
| % CHG PREV QTR SAAR........... | -4.6 | 0.1 | -3.0 | 11.8 | 3.5 | 7.2 | 21.5 | -10.9 | 5.7 | 12.4 | 5.5 | 4.0 | 1.4 | 6.8 |
| % CHG SAME QTR LAST YR........ | 1.5 | 2.3 | -3.0 | 0.9 | 3.0 | 4.7 | 10.8 | 4.7 | 5.2 | 6.5 | 2.8 | 4.0 | 1.4 | 6.8 |
| TN AVG ANNUAL WAGE,NONAG (87$).. | 18406 | 18152 | 18319 | 18328 | 18284 | 18353 | 18389 | 18614 | 18714 | 19452 | 18582 | 18308 | 18321 | 18792 |
| % CHG PREV QTR SAAR........... | 2.6 | -5.4 | 3.7 | 0.2 | -1.0 | 1.5 | 0.8 | 5.0 | 2.2 | 16.7 | -16.7 | -0.6 | 0.1 | 2.6 |
| % CHG SAME QTR LAST YR........ | 0.3 | -1.2 | -0.4 | 0.2 | -0.7 | 1.1 | 0.4 | 1.6 | 2.4 | 6.0 | 1.0 | -0.6 | 0.1 | 2.6 |
| TN AVG ANNUAL WAGE,NONAG ($).... | 21277 | 21329 | 21708 | 21884 | 21996 | 22262 | 22526 | 23007 | 23224 | 24374 | 23450 | 21039 | 21962 | 23283 |
| % CHG PREV QTR SAAR........... | 8.8 | 1.0 | 7.3 | 3.3 | 2.1 | 4.9 | 4.8 | 8.8 | 3.8 | 21.3 | -14.3 | 4.5 | 4.4 | 6.0 |
| % CHG SAME QTR LAST YR........ | 5.6 | 4.6 | 4.8 | 5.1 | 3.4 | 4.4 | 3.8 | 5.1 | 5.6 | 9.5 | 4.1 | 4.5 | 4.4 | 6.0 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 2: SELECTED PER CAPITA U.S. AND TENNESSEE ECONOMIC INDICATORS

SEASONALLY ADJUSTED

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| US GDP (87$) SAAR............... | 19602 | 19391 | 19220 | 19245 | 19259 | 19226 | 19347 | 19430 | 19539 | 19752 | 19744 | 19593 | 19238 | 19517 |
| % CHG PREV QTR SAAR........... | -1.96 | -4.24 | -3.48 | 0.52 | 0.29 | -0.69 | 2.55 | 1.71 | 2.28 | 4.42 | -0.15 | 0.19 | -1.81 | 1.45 |
| % CHG SAME QTR LAST YR........ | 0.34 | -0.82 | -2.33 | -2.31 | -1.75 | -0.85 | 0.66 | 0.96 | 1.45 | 2.73 | 2.05 | 0.19 | -1.81 | 1.45 |
| US GDP ($) SAAR................. | 22308 | 22302 | 22375 | 22583 | 22761 | 22867 | 23226 | 23486 | 23688 | 24140 | 24345 | 22189 | 22647 | 23635 |
| % CHG PREV QTR SAAR........... | 1.98 | -0.11 | 1.30 | 3.78 | 3.19 | 1.88 | 6.43 | 4.56 | 3.48 | 7.85 | 3.44 | 4.55 | 2.06 | 4.37 |
| % CHG SAME QTR LAST YR........ | 4.68 | 3.65 | 1.96 | 1.73 | 2.03 | 2.53 | 3.81 | 4.00 | 4.07 | 5.57 | 4.82 | 4.55 | 2.06 | 4.37 |
| TN PERSONAL INCOME (87$) SAAR... | 13798 | 13651 | 13718 | 13736 | 13729 | 13861 | 14018 | 14132 | 14202 | 14576 | 14331 | 13789 | 13761 | 14232 |
| % CHG PREV QTR SAAR........... | -0.52 | -4.20 | 1.97 | 0.52 | -0.20 | 3.91 | 4.59 | 3.31 | 1.99 | 10.96 | -6.56 | 0.50 | -0.20 | 3.42 |
| % CHG SAME QTR LAST YR........ | 0.80 | -0.80 | -1.23 | -0.58 | -0.50 | 1.54 | 2.18 | 2.89 | 3.45 | 5.16 | 2.24 | 0.50 | -0.20 | 3.42 |
| TN PERSONAL INCOME ($) SAAR..... | 15951 | 16040 | 16256 | 16400 | 16516 | 16814 | 17172 | 17467 | 17625 | 18264 | 18086 | 15845 | 16496 | 17632 |
| % CHG PREV QTR SAAR........... | 5.55 | 2.25 | 5.49 | 3.60 | 2.85 | 7.41 | 8.79 | 7.07 | 3.65 | 15.31 | -3.84 | 5.68 | 4.11 | 6.88 |
| % CHG SAME QTR LAST YR........ | 6.13 | 5.00 | 3.85 | 4.22 | 3.54 | 4.82 | 5.63 | 6.51 | 6.71 | 8.62 | 5.32 | 5.68 | 4.11 | 6.88 |
| US PERSONAL INCOME (87$) SAAR... | 16250 | 16137 | 16039 | 16045 | 15964 | 16006 | 16101 | 16155 | 16191 | 16572 | 16189 | 16271 | 16013 | 16255 |
| % CHG PREV QTR SAAR........... | -2.46 | -2.76 | -2.40 | 0.14 | -2.00 | 1.05 | 2.41 | 1.35 | 0.89 | 9.76 | -8.94 | 0.43 | -1.59 | 1.51 |
| % CHG SAME QTR LAST YR........ | 0.69 | -0.45 | -1.89 | -1.88 | -1.76 | -0.81 | 0.39 | 0.69 | 1.42 | 3.54 | 0.54 | 0.43 | -1.59 | 1.51 |
| US PERSONAL INCOME ($) SAAR..... | 18785 | 18961 | 19006 | 19157 | 19205 | 19415 | 19724 | 19968 | 20093 | 20765 | 20430 | 18698 | 19196 | 20137 |
| % CHG PREV QTR SAAR........... | 3.50 | 3.79 | 0.97 | 3.22 | 0.99 | 4.45 | 6.52 | 5.04 | 2.53 | 14.06 | -6.29 | 5.61 | 2.66 | 4.91 |
| % CHG SAME QTR LAST YR........ | 6.01 | 5.38 | 3.16 | 2.86 | 2.23 | 2.40 | 3.78 | 4.23 | 4.63 | 6.95 | 3.58 | 5.61 | 2.66 | 4.91 |
| TN TAXABLE SALES (87$).......... | 1840 | 1805 | 1770 | 1801 | 1796 | 1806 | 1871 | 1795 | 1807 | 1836 | 1842 | 7481 | 7173 | 7309 |
| % CHG PREV QTR SAAR........... | -11.01 | -7.51 | -7.44 | 7.06 | -1.00 | 2.22 | 15.20 | -15.26 | 2.58 | 6.59 | 1.35 | -1.85 | -4.11 | 1.89 |
| % CHG SAME QTR LAST YR........ | -4.35 | -4.25 | -8.78 | -4.97 | -2.40 | 0.07 | 5.70 | -0.30 | 0.59 | 1.64 | -1.56 | -1.85 | -4.11 | 1.89 |
| TN TAXABLE SALES ($)............ | 2128 | 2121 | 2098 | 2150 | 2161 | 2191 | 2292 | 2219 | 2242 | 2300 | 2325 | 8594 | 8600 | 9054 |
| % CHG PREV QTR SAAR........... | -5.58 | -1.27 | -4.25 | 10.35 | 2.02 | 5.67 | 19.83 | -12.17 | 4.25 | 10.77 | 4.29 | 3.19 | 0.07 | 5.28 |
| % CHG SAME QTR LAST YR........ | 0.70 | 1.35 | -4.09 | -0.38 | 1.57 | 3.31 | 9.27 | 3.20 | 3.76 | 4.99 | 1.41 | 3.19 | 0.07 | 5.28 |

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TABLE 3: TENNESSEE PERSONAL INCOME BY COMPONENTS
SEASONALLY ADJUSTED ANNUAL RATES
MILLIONS OF 19[illegible] DOLLARS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL PERSONAL INCOME............ | 67543 | 67048 | 67603 | 67916 | 68123 | 69022 | 70046 | 70873 | 71463 | 73618 | 72590 | 67432 | 68166 | 71500 |
| % CHG PREV QTR SAAR.......... | 0.54 | -2.90 | 3.35 | 1.87 | 1.22 | 5.39 | 6.06 | 4.81 | 3.37 | 12.62 | -5.47 | 1.25 | 1.09 | 4.89 |
| % CHG SAME QTR LAST YR....... | 1.57 | 0.13 | -0.12 | 0.69 | 0.86 | 2.95 | 3.61 | 4.35 | 4.90 | 6.66 | 3.63 | 1.25 | 1.09 | 4.89 |
| WAGES AND SALARIES............. | 40988 | 40316 | 40480 | 40456 | 40531 | 40990 | 41471 | 42078 | 42413 | 44190 | 42567 | 40771 | 40614 | 42538 |
| % CHG PREV QTR SAAR.......... | 1.38 | -6.40 | 1.64 | -0.23 | 0.74 | 4.61 | 4.78 | 5.98 | 3.23 | 17.84 | -13.90 | 0.62 | -0.38 | 4.74 |
| % CHG SAME QTR LAST YR....... | 1.09 | -0.96 | -1.10 | -0.96 | -1.11 | 1.67 | 2.45 | 4.01 | 4.64 | 7.81 | 2.64 | 0.62 | -0.38 | 4.74 |
| OTHER LABOR INCOME............. | 4285 | 4285 | 4405 | 4475 | 4549 | 4655 | 4751 | 4842 | 4911 | 4988 | 5116 | 4270 | 4521 | 4873 |
| % CHG PREV QTR SAAR.......... | 4.30 | -0.03 | 11.68 | 6.49 | 6.84 | 9.64 | 8.47 | 7.90 | 5.83 | 6.39 | 10.71 | 4.37 | 5.89 | 7.78 |
| % CHG SAME QTR LAST YR....... | 4.13 | 2.98 | 3.21 | 5.53 | 6.16 | 8.64 | 7.85 | 8.21 | 7.95 | 7.15 | 7.69 | 4.37 | 5.89 | 7.78 |
| PROPRIETORS INCOME............. | 5858 | 5894 | 5927 | 6108 | 6150 | 6290 | 6527 | 6583 | 6552 | 6893 | 7011 | 5968 | 6119 | 6639 |
| % CHG PREV QTR SAAR.......... | -7.24 | 2.45 | 2.26 | 12.82 | 2.75 | 9.46 | 15.90 | 3.53 | -1.89 | 22.51 | 7.03 | -1.37 | 2.53 | 8.50 |
| % CHG SAME QTR LAST YR....... | -1.42 | -3.30 | -3.62 | 2.32 | 4.98 | 6.73 | 10.12 | 7.78 | 6.54 | 9.58 | 7.42 | -1.37 | 2.53 | 8.50 |
| RENT INTEREST DIVIDENDS........ | 9729 | 9660 | 9507 | 9379 | 9199 | 9171 | 8976 | 9046 | 9120 | 9172 | 9283 | 9697 | 9314 | 9078 |
| % CHG PREV QTR SAAR.......... | 1.11 | -2.80 | -6.20 | -5.30 | -7.45 | -1.18 | -8.28 | 3.18 | 3.31 | 2.28 | 4.94 | -0.45 | -3.95 | -2.53 |
| % CHG SAME QTR LAST YR....... | -0.18 | -0.44 | -1.93 | -3.34 | -5.45 | -5.06 | -5.59 | -3.54 | -0.85 | 0.00 | 3.42 | -0.45 | -3.95 | -2.53 |
| TRANSFER PAYMENTS.............. | 10779 | 10949 | 11422 | 11608 | 11779 | 12026 | 12494 | 12567 | 12731 | 12741 | 12973 | 10795 | 11709 | 12633 |
| % CHG PREV QTR SAAR.......... | 2.04 | 6.44 | 18.43 | 6.68 | 6.02 | 8.64 | 16.51 | 2.37 | 5.31 | 0.31 | 7.50 | 5.57 | 8.47 | 7.90 |
| % CHG SAME QTR LAST YR....... | 5.91 | 6.25 | 6.50 | 8.23 | 9.27 | 9.83 | 9.38 | 8.26 | 8.08 | 5.95 | 3.84 | 5.57 | 8.47 | 7.90 |
| LESS:PERS CONT FOR SOC INS..... | 3263 | 3213 | 3322 | 3330 | 3342 | 3364 | 3432 | 3457 | 3463 | 3509 | 3567 | 3247 | 3340 | 3465 |
| % CHG PREV QTR SAAR.......... | 3.80 | -6.01 | 14.36 | 0.92 | 1.41 | 2.75 | 8.26 | 2.98 | 0.72 | 5.40 | 6.80 | 0.56 | 2.86 | 3.77 |
| % CHG SAME QTR LAST YR....... | 1.32 | 0.15 | 1.33 | 3.01 | 2.41 | 4.72 | 3.30 | 3.82 | 3.64 | 4.30 | 3.95 | 0.56 | 2.86 | 3.77 |
| RESIDENCE ADJUSTMENT........... | -834 | -843 | -816 | -780 | -743 | -746 | -740 | -786 | -801 | -856 | -793 | -820 | -771 | -796 |
| % CHG PREV QTR SAAR.......... | 18.69 | 4.63 | -12.36 | -16.64 | -17.49 | 1.59 | -3.01 | 27.26 | 7.61 | 30.66 | -26.40 | 3.01 | -5.98 | 3.21 |
| % CHG SAME QTR LAST YR....... | 3.34 | 5.19 | 1.40 | -2.40 | -10.88 | -11.54 | -9.27 | 0.86 | 7.78 | 14.78 | 7.13 | 3.01 | -5.98 | 3.21 |
| PER CAPITA PERSONAL INCOME ($)... | 13798 | 13651 | 13718 | 13736 | 13729 | 13861 | 14018 | 14132 | 14202 | 14576 | 14331 | 13789 | 13761 | 14232 |
| % CHG PREV QTR SAAR.......... | -0.52 | -4.20 | 1.97 | 0.52 | -0.20 | 3.91 | 4.59 | 3.31 | 1.99 | 10.96 | -6.56 | 0.50 | -0.20 | 3.42 |
| % CHG SAME QTR LAST YR....... | 0.80 | -0.80 | -1.23 | -0.58 | -0.50 | 1.54 | 2.18 | 2.89 | 3.45 | 5.16 | 2.24 | 0.50 | -0.20 | 3.42 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 4: TENNESSEE PERSONAL INCOME BY COMPONENTS
SEASONALLY ADJUSTED ANNUAL RATES
MILLIONS OF CURRENT DOLLARS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL PERSONAL INCOME............ | 78080 | 78781 | 80109 | 81092 | 81952 | 83724 | 85806 | 87599 | 88686 | 92243 | 91608 | 77493 | 81719 | 88584 |
| % CHG PREV QTR SAAR.......... | 6.67 | 3.64 | 6.92 | 5.00 | 4.31 | 8.93 | 10.32 | 8.62 | 5.06 | 17.03 | -2.73 | 6.48 | 5.45 | 8.40 |
| % CHG SAME QTR LAST YR....... | 6.93 | 6.00 | 5.02 | 5.55 | 4.96 | 6.27 | 7.11 | 8.02 | 8.22 | 10.18 | 6.76 | 6.48 | 5.45 | 8.40 |
| WAGES AND SALARIES............. | 47382 | 47371 | 47969 | 48305 | 48759 | 49721 | 50802 | 52008 | 52635 | 55370 | 53719 | 46852 | 48689 | 52704 |
| % CHG PREV QTR SAAR.......... | 7.57 | -0.09 | 5.15 | 2.83 | 3.81 | 8.13 | 8.98 | 9.84 | 4.91 | 22.46 | -11.40 | 5.82 | 3.92 | 8.25 |
| % CHG SAME QTR LAST YR....... | 6.43 | 4.84 | 3.99 | 3.83 | 2.91 | 4.96 | 5.91 | 7.67 | 7.95 | 11.36 | 5.74 | 5.82 | 3.92 | 8.25 |
| OTHER LABOR INCOME............. | 4954 | 5035 | 5220 | 5343 | 5473 | 5647 | 5820 | 5985 | 6095 | 6250 | 6457 | 4907 | 5421 | 6038 |
| % CHG PREV QTR SAAR.......... | 10.67 | 6.70 | 15.53 | 9.76 | 10.09 | 13.34 | 12.83 | 11.83 | 7.56 | 10.57 | 13.92 | 9.75 | 10.46 | 11.38 |
| % CHG SAME QTR LAST YR....... | 9.63 | 9.01 | 8.52 | 10.62 | 10.48 | 12.15 | 11.49 | 12.02 | 11.36 | 10.68 | 10.95 | 9.75 | 10.46 | 11.38 |
| PROPRIETORS INCOME............. | 6772 | 6925 | 7023 | 7293 | 7398 | 7630 | 7995 | 8137 | 8131 | 8637 | 8848 | 6857 | 7336 | 8225 |
| % CHG PREV QTR SAAR.......... | -1.58 | 9.35 | 5.78 | 16.29 | 5.88 | 13.15 | 20.55 | 7.30 | -0.29 | 27.31 | 10.14 | 3.71 | 6.99 | 12.12 |
| % CHG SAME QTR LAST YR....... | 3.79 | 2.37 | 1.34 | 7.27 | 9.24 | 10.18 | 13.84 | 11.57 | 9.91 | 13.20 | 10.67 | 3.71 | 6.99 | 12.12 |
| RENT INTEREST DIVIDENDS........ | 11247 | 11351 | 11266 | 11198 | 11066 | 11125 | 10995 | 11181 | 11318 | 11492 | 11715 | 11144 | 11164 | 11247 |
| % CHG PREV QTR SAAR.......... | 7.29 | 3.75 | -2.96 | -2.39 | -4.63 | 2.15 | -4.59 | 6.94 | 4.99 | 6.29 | 7.99 | 4.70 | 0.18 | 0.74 |
| % CHG SAME QTR LAST YR....... | 5.09 | 5.39 | 3.11 | 1.33 | -1.61 | -1.99 | -2.41 | -0.15 | 2.28 | 3.30 | 6.55 | 4.70 | 0.18 | 0.74 |
| TRANSFER PAYMENTS.............. | 12461 | 12865 | 13535 | 13860 | 14170 | 14587 | 15305 | 15533 | 15799 | 15964 | 16372 | 12407 | 14038 | 15650 |
| % CHG PREV QTR SAAR.......... | 8.27 | 13.61 | 22.52 | 9.96 | 9.25 | 12.30 | 21.19 | 6.09 | 7.03 | 4.24 | 10.62 | 11.04 | 13.14 | 11.48 |
| % CHG SAME QTR LAST YR....... | 11.51 | 12.48 | 11.98 | 13.46 | 13.71 | 13.39 | 13.08 | 12.07 | 11.50 | 9.44 | 6.97 | 11.04 | 13.14 | 11.48 |
| LESS:PERS CONT FOR SOC INS..... | 3772 | 3775 | 3937 | 3976 | 4020 | 4081 | 4204 | 4273 | 4298 | 4397 | 4502 | 3731 | 4004 | 4293 |
| % CHG PREV QTR SAAR.......... | 10.14 | 0.32 | 18.30 | 4.02 | 4.50 | 6.21 | 12.61 | 6.73 | 2.36 | 9.54 | 9.90 | 5.76 | 7.30 | 7.23 |
| % CHG SAME QTR LAST YR....... | 6.67 | 6.01 | 6.55 | 7.98 | 6.57 | 8.11 | 6.78 | 7.47 | 6.92 | 7.74 | 7.09 | 5.76 | 7.30 | 7.23 |
| RESIDENCE ADJUSTMENT........... | -964 | -991 | -967 | -931 | -894 | -905 | -907 | -972 | -994 | -1073 | -1001 | -943 | -924 | -987 |
| % CHG PREV QTR SAAR.......... | 25.93 | 11.68 | -9.34 | -14.08 | -14.97 | 5.01 | 0.89 | 31.90 | 9.37 | 35.79 | -24.26 | 8.36 | -1.99 | 6.74 |
| % CHG SAME QTR LAST YR....... | 8.80 | 11.35 | 6.62 | 2.31 | -7.26 | -8.68 | -6.20 | 4.40 | 11.19 | 18.56 | 10.36 | 8.36 | -1.99 | 6.74 |
| PER CAPITA PERSONAL INCOME ($)... | 15951 | 16040 | 16256 | 16400 | 16516 | 16814 | 17172 | 17467 | 17625 | 18264 | 18086 | 15845 | 16496 | 17632 |
| % CHG PREV QTR SAAR.......... | 5.55 | 2.25 | 5.49 | 3.60 | 2.85 | 7.41 | 8.79 | 7.07 | 3.65 | 15.31 | -3.84 | 5.68 | 4.11 | 6.88 |
| % CHG SAME QTR LAST YR....... | 6.13 | 5.00 | 3.85 | 4.22 | 3.54 | 4.82 | 5.63 | 6.51 | 6.71 | 8.62 | 5.32 | 5.68 | 4.11 | 6.88 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 5: TENNESSEE NONAGRICULTURAL EMPLOYMENT BY SECTOR

THOUSANDS OF

| | TORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL NONAGRICULTURAL........... | 2203.4 | 2205.7 | 2142.1 | 2180.4 | 2193.5 | 2218.4 | 2187.6 | 2235.3 | 2245.1 | 2260.2 | 2224.3 | 2193.2 | 2183.6 | 2232.1 |
| % CHG SAME QTR LAST YR.... | 0.72 | 0.23 | -0.73 | -1.16 | -0.45 | 0.58 | 2.13 | 2.52 | 2.35 | 1.88 | 1.67 | 1.20 | -0.44 | 2.22 |
| MINING........................ | 6.3 | 6.1 | 5.6 | 5.7 | 5.5 | 5.3 | 4.8 | 5.1 | 5.1 | 4.9 | 4.5 | 6.2 | 5.5 | 5.0 |
| % CHG SAME QTR LAST YR.... | -2.08 | -4.71 | -6.67 | -9.57 | -12.23 | -12.64 | -14.29 | -10.00 | -7.88 | -6.92 | -6.25 | -2.89 | -10.30 | -9.82 |
| CONSTRUCTION.................. | 95.2 | 91.5 | 81.4 | 88.6 | 90.1 | 85.8 | 79.9 | 87.7 | 89.0 | 84.7 | 79.7 | 92.3 | 86.5 | 85.3 |
| % CHG SAME QTR LAST YR.... | -8.14 | -8.01 | -9.29 | -4.59 | -5.36 | -6.23 | -1.80 | -1.02 | -1.29 | -1.32 | -0.33 | -5.02 | -6.33 | -1.35 |
| MANUFACTURING................. | 518.8 | 515.4 | 499.2 | 500.7 | 503.5 | 507.3 | 506.1 | 514.6 | 515.8 | 515.5 | 513.3 | 520.3 | 502.7 | 513.0 |
| % CHG SAME QTR LAST YR.... | -1.69 | -2.27 | -4.26 | -4.73 | -2.96 | -1.57 | 1.37 | 2.78 | 2.44 | 1.62 | 1.42 | -0.81 | -3.39 | 2.05 |
| DURABLE GOODS.............. | 257.4 | 256.2 | 245.9 | 248.2 | 248.1 | 252.0 | 253.4 | 258.3 | 256.4 | 256.8 | 258.7 | 258.4 | 248.6 | 256.2 |
| % CHG SAME QTR LAST YR.... | -1.54 | -1.98 | -4.87 | -5.07 | -3.61 | -1.61 | 3.05 | 4.06 | 3.34 | 1.90 | 2.09 | -1.25 | -3.80 | 3.08 |
| NONDURABLE GOODS........... | 261.4 | 259.2 | 253.3 | 252.5 | 255.4 | 255.3 | 252.6 | 256.3 | 259.3 | 258.7 | 254.5 | 261.9 | 254.1 | 256.7 |
| % CHG SAME QTR LAST YR.... | -1.84 | -2.56 | -3.65 | -4.39 | -2.31 | -1.52 | -0.26 | 1.52 | 1.55 | 1.33 | 0.75 | -0.36 | -2.98 | 1.04 |
| TRADE......................... | 522.7 | 525.9 | 500.5 | 508.9 | 513.4 | 523.5 | 503.3 | 516.8 | 523.8 | 530.4 | 512.7 | 517.2 | 511.6 | 518.6 |
| % CHG SAME QTR LAST YR.... | 1.85 | 1.06 | -0.45 | -1.67 | -1.77 | -0.44 | 0.56 | 1.55 | 2.02 | 1.32 | 1.87 | 1.73 | -1.09 | 1.37 |
| SERVICES...................... | 495.3 | 489.4 | 482.4 | 504.8 | 516.3 | 517.2 | 515.0 | 537.2 | 544.0 | 542.0 | 535.9 | 486.3 | 505.2 | 534.5 |
| % CHG SAME QTR LAST YR.... | 3.60 | 3.10 | 2.45 | 3.08 | 4.25 | 5.69 | 6.76 | 6.42 | 5.35 | 4.78 | 4.06 | 4.09 | 3.88 | 5.81 |
| FIN,INS,REAL EST.............. | 104.2 | 103.0 | 101.0 | 101.8 | 102.1 | 101.4 | 99.5 | 101.2 | 101.6 | 100.6 | 100.0 | 103.1 | 101.6 | 100.7 |
| % CHG SAME QTR LAST YR.... | -0.19 | 0.42 | -0.66 | -1.55 | -2.02 | -1.52 | -1.48 | -0.59 | -0.49 | -0.79 | 0.47 | -0.35 | -1.44 | -0.84 |
| TRANS,COMM,PUB UTIL........... | 117.6 | 117.6 | 116.4 | 116.7 | 117.3 | 119.1 | 116.7 | 118.9 | 120.7 | 122.2 | 120.0 | 116.4 | 117.4 | 119.6 |
| % CHG SAME QTR LAST YR.... | 0.54 | -0.87 | 2.17 | 0.09 | -0.20 | 1.22 | 0.32 | 1.91 | 2.84 | 2.60 | 2.83 | 0.55 | 0.81 | 1.92 |
| GOVERNMENT.................... | 343.4 | 356.9 | 355.5 | 353.2 | 345.2 | 358.8 | 362.3 | 353.8 | 345.3 | 359.9 | 358.2 | 351.4 | 353.2 | 355.3 |
| % CHG SAME QTR LAST YR.... | 1.84 | 1.63 | 1.15 | -0.21 | 0.51 | 0.52 | 1.89 | 0.17 | 0.04 | 0.33 | -1.13 | 2.08 | 0.49 | 0.61 |
| FEDERAL,CIVILIAN............ | 63.4 | 62.3 | 62.4 | 61.9 | 61.5 | 60.9 | 59.2 | 58.7 | 58.1 | 57.3 | 57.7 | 63.6 | 61.7 | 58.3 |
| % CHG SAME QTR LAST YR.... | 4.05 | 1.85 | -0.74 | -5.93 | -2.94 | -2.35 | -5.07 | -5.17 | -5.63 | -5.86 | -2.59 | 3.00 | -3.03 | -5.43 |
| STATE AND LOCAL............. | 280.0 | 294.6 | 293.1 | 291.3 | 283.7 | 297.9 | 303.0 | 295.1 | 287.3 | 302.6 | 300.5 | 287.8 | 291.5 | 297.0 |
| % CHG SAME QTR LAST YR.... | 1.35 | 1.59 | 1.56 | 1.10 | 1.30 | 1.13 | 3.38 | 1.30 | 1.27 | 1.59 | -0.85 | 1.88 | 1.27 | 1.89 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 6: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF JOBS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL DURABLE GOODS............ | 257.4 | 256.2 | 245.9 | 248.2 | 248.1 | 252.0 | 253.4 | 258.3 | 256.4 | 256.8 | 258.7 | 258.4 | 248.6 | 256.2 |
| % CHG SAME QTR LAST YR...... | -1.54 | -1.98 | -4.87 | -5.07 | -3.61 | -1.61 | 3.05 | 4.06 | 3.34 | 1.90 | 2.09 | -1.25 | -3.80 | 3.08 |
| LUMBER AND WOOD............... | 20.4 | 19.0 | 18.1 | 18.4 | 18.6 | 18.1 | 17.9 | 18.7 | 18.9 | 18.5 | 18.3 | 20.2 | 18.3 | 18.5 |
| % CHG SAME QTR LAST YR...... | -4.08 | -7.33 | -11.40 | -12.68 | -8.67 | -4.39 | -1.10 | 1.81 | 1.79 | 2.02 | 1.86 | -3.88 | -9.40 | 1.14 |
| FURNITURE AND FIXTURES........ | 27.0 | 27.2 | 25.4 | 26.0 | 25.9 | 27.2 | 26.7 | 27.3 | 27.3 | 27.9 | 28.1 | 27.1 | 26.1 | 27.3 |
| % CHG SAME QTR LAST YR...... | 0.37 | 0.25 | -5.80 | -4.41 | -4.07 | 0.00 | 5.11 | 4.74 | 5.28 | 2.70 | 5.11 | -0.21 | -3.57 | 4.43 |
| STONE,CLAY AND GLASS.......... | 14.4 | 13.9 | 12.9 | 13.5 | 13.8 | 13.7 | 13.6 | 14.1 | 14.2 | 14.2 | 14.2 | 14.3 | 13.5 | 14.0 |
| % CHG SAME QTR LAST YR...... | -2.49 | -5.67 | -10.80 | -7.53 | -4.18 | -1.44 | 4.90 | 4.20 | 3.39 | 4.15 | 4.91 | -2.93 | -6.05 | 4.15 |
| PRIMARY METALS................ | 15.6 | 15.9 | 15.3 | 15.0 | 15.0 | 15.2 | 15.1 | 15.4 | 15.1 | 15.2 | 15.2 | 15.6 | 15.1 | 15.2 |
| % CHG SAME QTR LAST YR...... | -1.06 | 1.92 | 0.00 | -2.59 | -3.85 | -4.19 | -1.52 | 2.22 | 0.44 | -0.22 | 0.66 | -1.32 | -2.68 | 0.22 |
| FABRICATED METALS............. | 43.5 | 43.2 | 41.1 | 41.6 | 41.6 | 42.4 | 41.2 | 41.7 | 41.6 | 42.1 | 41.8 | 43.2 | 41.7 | 41.7 |
| % CHG SAME QTR LAST YR...... | 1.56 | 0.46 | -3.74 | -3.55 | -4.44 | -2.00 | 0.24 | 0.16 | 0.08 | -0.55 | 1.29 | 0.64 | -3.44 | -0.02 |
| NONELECTRICAL MACHINERY....... | 36.5 | 36.7 | 36.4 | 36.2 | 34.4 | 34.4 | 38.0 | 38.4 | 35.6 | 35.2 | 37.0 | 38.1 | 35.4 | 36.8 |
| % CHG SAME QTR LAST YR...... | -10.09 | -7.71 | -9.59 | -7.03 | -5.84 | -6.35 | 4.30 | 6.18 | 3.59 | 2.33 | -2.63 | -5.04 | -7.26 | 4.13 |
| ELECTRICAL MACHINERY.......... | 36.7 | 36.1 | 34.9 | 35.0 | 35.7 | 36.4 | 35.6 | 35.6 | 36.1 | 36.1 | 36.1 | 37.3 | 35.5 | 35.8 |
| % CHG SAME QTR LAST YR...... | -9.09 | -9.90 | -9.66 | -7.81 | -2.64 | 0.92 | 1.91 | 1.52 | 1.03 | -0.82 | 1.59 | -6.59 | -4.91 | 0.89 |
| TRANSPORTATION EQUIPMENT...... | 40.2 | 41.2 | 40.0 | 40.7 | 41.5 | 42.9 | 43.8 | 45.1 | 45.9 | 46.6 | 47.3 | 39.4 | 41.3 | 45.4 |
| % CHG SAME QTR LAST YR...... | 13.03 | 10.96 | 9.90 | 2.43 | 3.32 | 4.29 | 9.67 | 10.82 | 10.59 | 8.62 | 7.83 | 6.66 | 4.87 | 9.91 |
| INSTRUMENTS................... | 11.1 | 11.0 | 10.7 | 10.9 | 10.8 | 10.7 | 10.5 | 10.4 | 10.2 | 9.6 | 9.5 | 11.0 | 10.8 | 10.2 |
| % CHG SAME QTR LAST YR...... | 1.53 | 3.12 | -1.53 | -0.61 | -2.71 | -3.02 | -1.87 | -4.28 | -5.26 | -9.97 | -9.52 | 2.81 | -1.97 | -5.34 |
| MISCELLANEOUS................. | 12.1 | 12.0 | 11.0 | 10.9 | 10.9 | 11.0 | 11.0 | 11.7 | 11.5 | 11.2 | 11.3 | 12.2 | 10.9 | 11.4 |
| % CHG SAME QTR LAST YR...... | -3.46 | -6.02 | -11.08 | -12.57 | -10.19 | -8.36 | 0.00 | 7.65 | 5.52 | 2.43 | 2.74 | -1.15 | -10.57 | 3.89 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 7: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT

THOUSANDS O[illegible]S

| | [illegible]STORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL NONDURABLE GOODS.......... | 261.4 | 259.2 | 253.3 | 252.5 | 255.4 | 255.3 | 252.6 | 256.3 | 259.3 | 258.7 | 254.5 | 261.9 | 254.1 | 256.7 |
| % CHG SAME QTR LAST YR...... | -1.84 | -2.56 | -3.65 | -4.39 | -2.31 | -1.52 | -0.26 | 1.52 | 1.55 | 1.33 | 0.75 | -0.36 | -2.98 | 1.04 |
| FOOD.......................... | 39.0 | 38.1 | 37.1 | 37.5 | 37.5 | 37.0 | 35.9 | 35.7 | 36.2 | 35.6 | 35.2 | 38.8 | 37.3 | 35.8 |
| % CHG SAME QTR LAST YR...... | -0.59 | -1.97 | -4.55 | -4.01 | -3.84 | -3.06 | -3.15 | -4.72 | -3.64 | -3.61 | -2.04 | -0.09 | -3.87 | -3.78 |
| TOBACCO....................... | 1.2 | 1.3 | 1.5 | 1.2 | 1.2 | 1.3 | 1.4 | 1.1 | 1.1 | 1.2 | 1.3 | 1.4 | 1.3 | 1.2 |
| % CHG SAME QTR LAST YR...... | 19.35 | -5.00 | -8.00 | -11.90 | -5.41 | 0.00 | -8.70 | -10.81 | -5.71 | -5.26 | -4.76 | 18.44 | -6.59 | -7.69 |
| TEXTILES...................... | 20.6 | 20.6 | 20.0 | 20.0 | 20.4 | 20.3 | 20.1 | 20.7 | 21.1 | 20.6 | 20.5 | 20.8 | 20.2 | 20.6 |
| % CHG SAME QTR LAST YR...... | -8.16 | -3.59 | -4.30 | -4.60 | -1.13 | -1.29 | 0.33 | 3.16 | 3.27 | 1.31 | 1.82 | -6.41 | -2.85 | 2.02 |
| APPAREL....................... | 62.6 | 63.3 | 61.0 | 60.4 | 60.2 | 61.0 | 60.0 | 61.2 | 61.5 | 62.1 | 60.5 | 64.2 | 60.6 | 61.2 |
| % CHG SAME QTR LAST YR...... | -6.05 | -6.09 | -7.44 | -7.31 | -3.94 | -3.53 | -1.53 | 1.32 | 2.16 | 1.75 | 0.72 | -2.29 | -5.59 | 0.92 |
| PAPER......................... | 22.2 | 21.2 | 20.6 | 21.4 | 22.6 | 21.8 | 21.3 | 21.9 | 22.8 | 22.4 | 21.1 | 21.4 | 21.6 | 22.1 |
| % CHG SAME QTR LAST YR...... | 2.78 | 0.63 | -0.80 | 0.63 | 1.80 | 2.83 | 3.40 | 2.65 | 0.88 | 2.44 | -0.63 | 2.89 | 1.13 | 2.32 |
| PRINTING AND PUBLISHING....... | 37.8 | 37.9 | 37.4 | 37.1 | 36.7 | 36.7 | 36.2 | 36.4 | 36.9 | 36.9 | 36.7 | 37.6 | 37.0 | 36.6 |
| % CHG SAME QTR LAST YR...... | 2.16 | 1.16 | 0.90 | -1.24 | -2.91 | -3.17 | -3.12 | -1.89 | 0.45 | 0.54 | 1.38 | 2.06 | -1.62 | -1.01 |
| CHEMICALS..................... | 39.8 | 39.3 | 39.4 | 39.4 | 39.0 | 38.9 | 39.5 | 40.0 | 39.8 | 39.9 | 40.1 | 39.7 | 39.2 | 39.8 |
| % CHG SAME QTR LAST YR...... | 0.76 | -0.67 | -0.50 | -1.42 | -2.18 | -1.10 | 0.17 | 1.52 | 2.14 | 2.66 | 1.60 | 1.13 | -1.30 | 1.62 |
| PETROLEUM REFINING............ | 1.0 | 1.0 | 0.8 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 1.0 | 0.9 | 0.7 |
| % CHG SAME QTR LAST YR...... | 0.00 | -3.33 | -7.69 | 0.00 | -6.67 | -20.69 | -12.50 | -30.00 | -25.00 | -21.74 | -23.81 | 0.00 | -8.70 | -22.86 |
| RUBBER AND PLASTICS........... | 28.2 | 27.9 | 27.3 | 26.3 | 28.2 | 29.0 | 29.3 | 30.1 | 30.7 | 30.8 | 30.4 | 28.1 | 27.7 | 30.2 |
| % CHG SAME QTR LAST YR...... | 1.08 | -0.59 | -2.15 | -7.93 | 0.24 | 3.82 | 7.33 | 14.58 | 8.62 | 6.09 | 3.87 | 2.06 | -1.54 | 9.06 |
| LEATHER....................... | 8.8 | 8.6 | 8.2 | 8.2 | 8.6 | 8.5 | 8.2 | 8.5 | 8.7 | 8.6 | 8.2 | 9.0 | 8.4 | 8.5 |
| % CHG SAME QTR LAST YR...... | -10.17 | -12.29 | -12.72 | -10.58 | -2.26 | -1.17 | 0.00 | 3.67 | 0.39 | 1.18 | -0.81 | -5.93 | -6.86 | 1.29 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 8: TENNESSEE NONAGRICULTURAL EMPLOYMENT BY SECTOR
THOUSANDS OF SEASONALLY ADJUSTED JOBS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL NONAGRICULTURAL........... | 2193.6 | 2188.1 | 2176.1 | 2173.8 | 2183.6 | 2200.5 | 2222.5 | 2228.4 | 2234.9 | 2241.9 | 2259.7 | 2193.2 | 2183.5 | 2231.9 |
| % CHG PREV QTR SAAR....... | -1.01 | -0.99 | -2.17 | -0.43 | 1.82 | 3.14 | 4.06 | 1.07 | 1.16 | 1.26 | 3.21 | 1.21 | -0.44 | 2.22 |
| % CHG SAME QTR LAST YR.... | 0.72 | 0.21 | -0.71 | -1.15 | -0.46 | 0.57 | 2.13 | 2.51 | 2.35 | 1.88 | 1.67 | 1.21 | -0.44 | 2.22 |
| MINING........................ | 6.2 | 6.0 | 5.9 | 5.6 | 5.4 | 5.2 | 5.0 | 5.0 | 5.0 | 4.9 | 4.7 | 6.2 | 5.5 | 5.0 |
| % CHG PREV QTR SAAR....... | -2.13 | -10.38 | -8.60 | -16.98 | -13.54 | -11.79 | -16.68 | 2.69 | -5.19 | -7.81 | -15.45 | -2.89 | -10.28 | -10.11 |
| % CHG SAME QTR LAST YR.... | -2.12 | -4.76 | -6.38 | -9.68 | -12.43 | -12.78 | -14.77 | -10.12 | -8.02 | -7.01 | -6.67 | -2.89 | -10.28 | -10.11 |
| CONSTRUCTION.................. | 90.9 | 90.2 | 88.1 | 87.4 | 85.9 | 84.7 | 86.5 | 86.4 | 84.8 | 83.7 | 86.1 | 92.4 | 86.5 | 85.3 |
| % CHG PREV QTR SAAR....... | -3.72 | -2.90 | -9.13 | -3.14 | -6.84 | -5.33 | 8.78 | -0.31 | -7.49 | -4.94 | 12.15 | -5.01 | -6.35 | -1.35 |
| % CHG SAME QTR LAST YR.... | -8.43 | -7.99 | -8.83 | -4.76 | -5.54 | -6.13 | -1.82 | -1.11 | -1.28 | -1.18 | -0.42 | -5.01 | -6.35 | -1.35 |
| MANUFACTURING................. | 517.5 | 513.5 | 503.5 | 499.6 | 502.2 | 505.4 | 510.4 | 513.4 | 514.4 | 513.5 | 517.7 | 520.3 | 502.7 | 512.9 |
| % CHG PREV QTR SAAR....... | -5.16 | -3.03 | -7.61 | -3.06 | 2.10 | 2.60 | 4.02 | 2.37 | 0.81 | -0.72 | 3.34 | -0.80 | -3.39 | 2.05 |
| % CHG SAME QTR LAST YR.... | -1.71 | -2.30 | -4.22 | -4.74 | -2.96 | -1.58 | 1.38 | 2.77 | 2.44 | 1.60 | 1.44 | -0.80 | -3.39 | 2.05 |
| DURABLE GOODS............... | 257.8 | 255.3 | 247.8 | 246.9 | 248.4 | 251.2 | 255.4 | 256.8 | 256.8 | 255.9 | 260.8 | 258.4 | 248.6 | 256.2 |
| % CHG PREV QTR SAAR....... | -3.54 | -3.77 | -11.29 | -1.45 | 2.56 | 4.47 | 6.86 | 2.32 | -0.10 | -1.34 | 7.88 | -1.25 | -3.80 | 3.08 |
| % CHG SAME QTR LAST YR.... | -1.57 | -2.03 | -4.81 | -5.09 | -3.62 | -1.62 | 3.07 | 4.04 | 3.35 | 1.88 | 2.13 | -1.25 | -3.80 | 3.08 |
| NONDURABLE GOODS............ | 259.7 | 258.2 | 255.7 | 252.7 | 253.7 | 254.2 | 255.0 | 256.6 | 257.7 | 257.6 | 256.9 | 261.9 | 254.1 | 256.7 |
| % CHG PREV QTR SAAR....... | -6.73 | -2.29 | -3.87 | -4.61 | 1.65 | 0.79 | 1.26 | 2.43 | 1.73 | -0.10 | -1.03 | -0.35 | -2.98 | 1.03 |
| % CHG SAME QTR LAST YR.... | -1.85 | -2.55 | -3.63 | -4.39 | -2.31 | -1.55 | -0.26 | 1.53 | 1.55 | 1.32 | 0.74 | -0.35 | -2.98 | 1.03 |
| TRADE......................... | 518.9 | 516.2 | 512.5 | 510.2 | 509.7 | 513.8 | 515.5 | 518.1 | 520.0 | 520.5 | 525.1 | 517.2 | 511.6 | 518.5 |
| % CHG PREV QTR SAAR....... | 0.08 | -2.09 | -2.84 | -1.76 | -0.39 | 3.20 | 1.33 | 2.09 | 1.45 | 0.36 | 3.64 | 1.73 | -1.09 | 1.36 |
| % CHG SAME QTR LAST YR.... | 1.85 | 1.04 | -0.43 | -1.66 | -1.77 | -0.47 | 0.58 | 1.55 | 2.01 | 1.30 | 1.88 | 1.73 | -1.09 | 1.36 |
| SERVICES...................... | 487.6 | 490.3 | 493.6 | 500.2 | 508.7 | 518.1 | 526.8 | 532.3 | 536.1 | 542.8 | 548.0 | 486.3 | 505.2 | 534.5 |
| % CHG PREV QTR SAAR....... | 1.83 | 2.23 | 2.66 | 5.51 | 6.94 | 7.63 | 6.86 | 4.22 | 2.94 | 5.09 | 3.84 | 4.10 | 3.87 | 5.81 |
| % CHG SAME QTR LAST YR.... | 3.69 | 3.07 | 2.43 | 3.05 | 4.32 | 5.67 | 6.73 | 6.40 | 5.39 | 4.77 | 4.02 | 4.10 | 3.87 | 5.81 |
| FIN,INS,REAL EST.............. | 103.3 | 103.0 | 102.3 | 101.5 | 101.2 | 101.4 | 100.8 | 100.9 | 100.7 | 100.5 | 101.3 | 103.1 | 101.6 | 100.7 |
| % CHG PREV QTR SAAR....... | 1.04 | -1.03 | -2.56 | -3.34 | -1.18 | 0.79 | -2.09 | 0.13 | -0.79 | -0.53 | 3.09 | -0.35 | -1.42 | -0.84 |
| % CHG SAME QTR LAST YR.... | -0.16 | 0.36 | -0.58 | -1.49 | -2.03 | -1.59 | -1.47 | -0.59 | -0.49 | -0.82 | 0.46 | -0.35 | -1.42 | -0.84 |
| TRANS,COMM,PUB UTIL........... | 117.0 | 116.6 | 117.8 | 116.8 | 116.8 | 117.9 | 118.2 | 119.1 | 120.2 | 121.0 | 121.5 | 116.4 | 117.4 | 119.6 |
| % CHG PREV QTR SAAR....... | 1.03 | -1.36 | 4.18 | -3.24 | 0.00 | 3.82 | 0.91 | 3.08 | 3.63 | 2.92 | 1.44 | 0.55 | 0.81 | 1.94 |
| % CHG SAME QTR LAST YR.... | 0.54 | -0.93 | 2.14 | 0.11 | -0.14 | 1.14 | 0.34 | 1.94 | 2.85 | 2.63 | 2.76 | 0.55 | 0.81 | 1.94 |
| GOVERNMENT.................... | 352.2 | 352.2 | 352.5 | 352.4 | 353.7 | 354.0 | 359.3 | 353.2 | 353.7 | 355.0 | 355.3 | 351.4 | 353.1 | 355.3 |
| % CHG PREV QTR SAAR....... | -0.75 | 0.04 | 0.34 | -0.08 | 1.45 | 0.30 | 6.16 | -6.62 | 0.61 | 1.40 | 0.38 | 2.08 | 0.50 | 0.61 |
| % CHG SAME QTR LAST YR.... | 1.70 | 1.62 | 1.18 | -0.11 | 0.44 | 0.50 | 1.93 | 0.22 | 0.01 | 0.28 | -1.11 | 2.08 | 0.50 | 0.61 |
| FEDERAL,CIVILIAN........... | 63.6 | 62.8 | 62.4 | 61.4 | 61.6 | 61.3 | 59.2 | 58.3 | 58.1 | 57.7 | 57.7 | 63.6 | 61.7 | 58.3 |
| % CHG PREV QTR SAAR....... | -9.29 | -4.48 | -3.03 | -6.23 | 1.67 | -2.00 | -12.99 | -6.14 | -1.23 | -2.97 | 0.22 | 2.98 | -3.01 | -5.43 |
| % CHG SAME QTR LAST YR.... | 3.98 | 1.70 | -0.65 | -5.79 | -3.06 | -2.44 | -5.05 | -5.02 | -5.71 | -5.94 | -2.56 | 2.98 | -3.01 | -5.43 |
| STATE AND LOCAL............. | 289.1 | 289.5 | 289.8 | 290.8 | 292.6 | 292.8 | 299.5 | 294.7 | 296.2 | 297.4 | 297.0 | 287.8 | 291.5 | 297.0 |
| % CHG PREV QTR SAAR....... | 2.36 | 0.63 | 0.36 | 1.41 | 2.46 | 0.35 | 9.50 | -6.28 | 2.00 | 1.69 | -0.52 | 1.87 | 1.27 | 1.88 |
| % CHG SAME QTR LAST YR.... | 1.20 | 1.63 | 1.54 | 1.19 | 1.21 | 1.14 | 3.37 | 1.35 | 1.24 | 1.57 | -0.83 | 1.87 | 1.27 | 1.88 |
| STATISTICAL DISCREPANCY..... | -0.5 | -0.2 | 0.4 | 0.3 | -0[illegible] | [illegible].2 | 0.5 | 0.2 | -0.6 | -0.1 | 0.6 | 0.0 | 0.0 | 0.0 |

TABLE 9: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF SEASONALLY ADJUSTED JOBS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL DURABLE GOODS............ | 257.8 | 255.3 | 247.8 | 246.9 | 248.4 | 251.2 | 255.4 | 256.8 | 256.8 | 255.9 | 260.8 | 258.4 | 248.6 | 256.2 |
| % CHG PREV QTR SAAR......... | -3.54 | -3.77 | -11.29 | -1.45 | 2.56 | 4.47 | 6.86 | 2.32 | -0.10 | -1.34 | 7.88 | -1.25 | -3.80 | 3.08 |
| % CHG SAME QTR LAST YR...... | -1.57 | -2.03 | -4.81 | -5.09 | -3.62 | -1.62 | 3.07 | 4.04 | 3.35 | 1.88 | 2.13 | -1.25 | -3.80 | 3.08 |
| LUMBER AND WOOD............... | 20.0 | 19.2 | 18.6 | 18.1 | 18.2 | 18.3 | 18.3 | 18.5 | 18.6 | 18.7 | 18.7 | 20.2 | 18.3 | 18.5 |
| % CHG PREV QTR SAAR......... | -14.36 | -14.74 | -12.37 | -8.91 | 2.34 | 2.29 | 0.04 | 2.83 | 2.10 | 2.98 | -0.51 | -3.89 | -9.40 | 1.11 |
| % CHG SAME QTR LAST YR...... | -4.03 | -7.35 | -11.49 | -12.63 | -8.65 | -4.39 | -1.17 | 1.87 | 1.81 | 1.98 | 1.84 | -3.89 | -9.40 | 1.11 |
| FURNITURE AND FIXTURES........ | 27.2 | 27.0 | 25.6 | 25.9 | 26.1 | 26.9 | 26.9 | 27.1 | 27.5 | 27.6 | 28.3 | 27.1 | 26.1 | 27.3 |
| % CHG PREV QTR SAAR......... | 1.97 | -3.63 | -19.31 | 5.46 | 3.34 | 13.07 | -0.53 | 3.46 | 5.86 | 1.63 | 9.85 | -0.21 | -3.57 | 4.45 |
| % CHG SAME QTR LAST YR...... | 0.46 | 0.05 | -5.70 | -4.37 | -4.05 | -0.14 | 5.22 | 4.72 | 5.35 | 2.58 | 5.15 | -0.21 | -3.57 | 4.45 |
| STONE,CLAY AND GLASS.......... | 14.2 | 13.8 | 13.2 | 13.5 | 13.6 | 13.6 | 13.8 | 14.0 | 14.0 | 14.2 | 14.5 | 14.3 | 13.5 | 14.0 |
| % CHG PREV QTR SAAR......... | -10.46 | -10.48 | -15.57 | 7.36 | 3.94 | 1.05 | 6.88 | 4.80 | 0.79 | 4.70 | 9.39 | -2.91 | -6.09 | 4.13 |
| % CHG SAME QTR LAST YR...... | -2.46 | -5.44 | -10.90 | -7.67 | -4.17 | -1.22 | 4.78 | 4.15 | 3.35 | 4.27 | 4.88 | -2.91 | -6.09 | 4.13 |
| PRIMARY METALS................ | 15.6 | 15.7 | 15.4 | 15.1 | 15.0 | 15.1 | 15.2 | 15.4 | 15.1 | 15.0 | 15.3 | 15.6 | 15.2 | 15.2 |
| % CHG PREV QTR SAAR......... | 3.72 | 2.71 | -8.03 | -8.35 | -0.81 | 0.79 | 2.32 | 6.62 | -7.07 | -2.25 | 5.86 | -1.32 | -2.66 | 0.21 |
| % CHG SAME QTR LAST YR...... | -1.02 | 1.92 | -0.01 | -2.66 | -3.74 | -4.19 | -1.60 | 2.19 | 0.54 | -0.23 | 0.63 | -1.32 | -2.66 | 0.21 |
| FABRICATED METALS............. | 43.5 | 42.9 | 41.5 | 41.7 | 41.5 | 42.0 | 41.6 | 41.7 | 41.6 | 41.7 | 42.2 | 43.1 | 41.7 | 41.7 |
| % CHG PREV QTR SAAR......... | 2.92 | -5.20 | -12.96 | 2.05 | -1.12 | 4.45 | -3.84 | 1.51 | -1.61 | 1.46 | 4.12 | 0.64 | -3.43 | -0.01 |
| % CHG SAME QTR LAST YR...... | 1.53 | 0.28 | -3.58 | -3.51 | -4.47 | -2.13 | 0.34 | 0.20 | 0.08 | -0.65 | 1.35 | 0.64 | -3.43 | -0.01 |
| NONELECTRICAL MACHINERY....... | 37.4 | 37.3 | 35.8 | 35.3 | 35.3 | 35.0 | 37.3 | 37.4 | 36.6 | 35.9 | 36.3 | 38.1 | 35.4 | 36.8 |
| % CHG PREV QTR SAAR......... | -6.42 | -1.07 | -15.12 | -5.76 | 0.11 | -3.04 | 28.33 | 1.34 | -8.00 | -8.05 | 4.48 | -5.09 | -7.25 | 4.07 |
| % CHG SAME QTR LAST YR...... | -10.05 | -7.37 | -9.82 | -7.23 | -5.65 | -6.13 | 4.09 | 6.00 | 3.78 | 2.41 | -2.72 | -5.09 | -7.25 | 4.07 |
| ELECTRICAL MACHINERY.......... | 36.5 | 35.7 | 35.2 | 35.3 | 35.6 | 36.0 | 35.9 | 35.8 | 35.9 | 35.7 | 36.4 | 37.4 | 35.5 | 35.8 |
| % CHG PREV QTR SAAR......... | -16.66 | -8.97 | -5.69 | 0.97 | 3.55 | 5.30 | -2.06 | -0.52 | 1.55 | -2.28 | 8.00 | -6.56 | -4.93 | 0.89 |
| % CHG SAME QTR LAST YR...... | -9.14 | -9.92 | -9.63 | -7.80 | -2.66 | 0.95 | 1.90 | 1.52 | 1.03 | -0.84 | 1.61 | -6.56 | -4.93 | 0.89 |
| TRANSPORTATION EQUIPMENT...... | 40.3 | 41.0 | 40.2 | 40.5 | 41.6 | 42.7 | 44.1 | 44.9 | 46.0 | 46.4 | 47.6 | 39.3 | 41.3 | 45.4 |
| % CHG PREV QTR SAAR......... | 9.49 | 7.17 | -7.93 | 2.76 | 12.02 | 10.89 | 13.58 | 7.67 | 9.79 | 3.31 | 11.00 | 6.64 | 4.88 | 9.92 |
| % CHG SAME QTR LAST YR...... | 13.03 | 10.68 | 9.97 | 2.65 | 3.24 | 4.12 | 9.73 | 11.02 | 10.46 | 8.53 | 7.90 | 6.64 | 4.88 | 9.92 |
| INSTRUMENTS................... | 11.0 | 11.1 | 10.8 | 10.9 | 10.7 | 10.7 | 10.6 | 10.4 | 10.1 | 9.7 | 9.6 | 11.0 | 10.8 | 10.2 |
| % CHG PREV QTR SAAR......... | 0.16 | 3.50 | -10.96 | 4.93 | -7.13 | 2.13 | -6.61 | -5.66 | -10.38 | -16.79 | -4.52 | 2.82 | -1.98 | -5.35 |
| % CHG SAME QTR LAST YR...... | 1.54 | 3.24 | -1.49 | -0.80 | -2.65 | -2.98 | -1.81 | -4.39 | -5.24 | -9.97 | -9.47 | 2.82 | -1.98 | -5.35 |
| MISCELLANEOUS................. | 12.0 | 11.9 | 11.2 | 10.8 | 10.8 | 10.9 | 11.2 | 11.6 | 11.4 | 11.2 | 11.5 | 12.2 | 10.9 | 11.3 |
| % CHG PREV QTR SAAR......... | -9.42 | -4.63 | -20.94 | -14.49 | 1.44 | 2.66 | 12.14 | 14.93 | -6.15 | -8.91 | 13.18 | -1.11 | -10.59 | 3.86 |
| % CHG SAME QTR LAST YR...... | -3.28 | -6.04 | -11.19 | -12.58 | -10.07 | -8.40 | -0.04 | 7.63 | 5.56 | 2.45 | 2.69 | -1.11 | -10.59 | 3.86 |
| STATISTICAL DISCREPANCY....... | 0.0 | -0.3 | 0.4 | -0.1 | -0.1 | -0.2 | 0.5 | -0.1 | -0.2 | -0.2 | 0.5 | 0.0 | 0.0 | 0.0 |

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 10: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF SEASONALLY ADJUSTED JOBS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL NONDURABLE GOODS.......... | 259.7 | 258.2 | 255.7 | 252.7 | 253.7 | 254.2 | 255.0 | 256.6 | 257.7 | 257.6 | 256.9 | 261.9 | 254.1 | 256.7 |
| % CHG PREV QTR SAAR......... | -6.73 | -2.29 | -3.87 | -4.61 | 1.65 | 0.79 | 1.26 | 2.43 | 1.73 | -0.10 | -1.03 | -0.35 | -2.98 | 1.03 |
| % CHG SAME QTR LAST YR...... | -1.85 | -2.55 | -3.63 | -4.39 | -2.31 | -1.55 | -0.26 | 1.53 | 1.55 | 1.32 | 0.74 | -0.35 | -2.98 | 1.03 |
| FOOD........................ | 38.5 | 38.1 | 37.5 | 37.6 | 37.0 | 36.9 | 36.4 | 35.8 | 35.7 | 35.6 | 35.6 | 38.8 | 37.3 | 35.9 |
| % CHG PREV QTR SAAR......... | -6.39 | -3.89 | -6.07 | 0.38 | -5.42 | -1.32 | -5.89 | -6.09 | -1.23 | -1.20 | 0.57 | -0.08 | -3.88 | -3.77 |
| % CHG SAME QTR LAST YR...... | -0.46 | -2.07 | -4.53 | -4.03 | -3.78 | -3.15 | -3.10 | -4.70 | -3.66 | -3.63 | -2.02 | -0.08 | -3.88 | -3.77 |
| TOBACCO..................... | 1.4 | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.4 | 1.3 | 1.2 |
| % CHG PREV QTR SAAR......... | -35.29 | -35.89 | 16.88 | 17.62 | -14.73 | -10.50 | -20.00 | 0.24 | 6.24 | -3.67 | -18.00 | 19.10 | -6.83 | -7.78 |
| % CHG SAME QTR LAST YR...... | 16.77 | -3.37 | -6.96 | -13.10 | -6.89 | 1.21 | -7.94 | -11.55 | -6.55 | -4.82 | -4.23 | 19.10 | -6.83 | -7.78 |
| TEXTILES.................... | 20.5 | 20.6 | 20.3 | 20.0 | 20.2 | 20.3 | 20.4 | 20.6 | 20.9 | 20.6 | 20.8 | 20.8 | 20.2 | 20.6 |
| % CHG PREV QTR SAAR......... | -7.36 | 0.72 | -5.18 | -6.31 | 5.84 | 1.09 | 1.54 | 4.54 | 5.30 | -5.69 | 3.65 | -6.41 | -2.85 | 2.02 |
| % CHG SAME QTR LAST YR...... | -8.44 | -3.51 | -4.12 | -4.58 | -1.35 | -1.26 | 0.44 | 3.23 | 3.10 | 1.33 | 1.85 | -6.41 | -2.85 | 2.02 |
| APPAREL..................... | 62.8 | 62.6 | 61.4 | 60.5 | 60.4 | 60.3 | 60.5 | 61.2 | 61.7 | 61.3 | 60.9 | 64.2 | 60.6 | 61.2 |
| % CHG PREV QTR SAAR......... | -14.07 | -1.67 | -7.17 | -6.03 | -0.50 | -0.38 | 1.00 | 5.18 | 3.15 | -2.38 | -2.80 | -2.27 | -5.60 | 0.92 |
| % CHG SAME QTR LAST YR...... | -6.07 | -6.07 | -7.44 | -7.34 | -3.88 | -3.57 | -1.51 | 1.30 | 2.22 | 1.70 | 0.73 | -2.27 | -5.60 | 0.92 |
| PAPER....................... | 21.4 | 21.3 | 21.3 | 21.4 | 21.8 | 21.9 | 22.0 | 22.0 | 21.9 | 22.4 | 21.9 | 21.3 | 21.6 | 22.1 |
| % CHG PREV QTR SAAR......... | 3.23 | -2.44 | 0.13 | 2.62 | 6.53 | 1.96 | 2.56 | 0.16 | -1.32 | 8.45 | -9.03 | 2.92 | 1.11 | 2.34 |
| % CHG SAME QTR LAST YR...... | 2.63 | 0.57 | -0.84 | 0.86 | 1.66 | 2.78 | 3.40 | 2.78 | 0.83 | 2.40 | -0.63 | 2.92 | 1.11 | 2.34 |
| PRINTING AND PUBLISHING....... | 37.8 | 37.8 | 37.6 | 37.1 | 36.7 | 36.6 | 36.4 | 36.4 | 36.8 | 36.8 | 36.9 | 37.6 | 37.0 | 36.6 |
| % CHG PREV QTR SAAR......... | 2.37 | 0.19 | -1.92 | -5.02 | -4.93 | -0.89 | -1.69 | 0.39 | 4.04 | -0.61 | 1.70 | 2.06 | -1.61 | -1.02 |
| % CHG SAME QTR LAST YR...... | 2.14 | 1.07 | 0.90 | -1.13 | -2.94 | -3.21 | -3.15 | -1.80 | 0.44 | 0.51 | 1.37 | 2.06 | -1.61 | -1.02 |
| CHEMICALS................... | 39.8 | 39.5 | 39.4 | 39.2 | 39.0 | 39.1 | 39.5 | 39.8 | 39.9 | 40.1 | 40.1 | 39.7 | 39.2 | 39.8 |
| % CHG PREV QTR SAAR......... | 0.02 | -2.85 | -0.64 | -2.47 | -2.21 | 1.05 | 4.09 | 3.09 | 0.76 | 2.80 | -0.46 | 1.13 | -1.30 | 1.61 |
| % CHG SAME QTR LAST YR...... | 0.91 | -0.65 | -0.59 | -1.49 | -2.05 | -1.08 | 0.08 | 1.48 | 2.24 | 2.68 | 1.54 | 1.13 | -1.30 | 1.61 |
| PETROLEUM REFINING............ | 0.9 | 1.0 | 0.9 | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 1.0 | 0.9 | 0.7 |
| % CHG PREV QTR SAAR......... | -12.53 | 14.73 | -17.97 | 20.51 | -34.77 | -37.04 | 19.14 | -50.84 | -16.49 | -21.77 | 5.09 | 0.23 | -8.78 | -22.38 |
| % CHG SAME QTR LAST YR...... | -0.42 | -2.64 | -7.46 | -0.20 | -7.26 | -20.18 | -12.37 | -29.97 | -25.51 | -21.35 | -23.78 | 0.23 | -8.78 | -22.38 |
| RUBBER AND PLASTICS........... | 28.1 | 27.7 | 27.6 | 26.3 | 28.2 | 28.8 | 29.6 | 30.1 | 30.6 | 30.5 | 30.7 | 28.1 | 27.7 | 30.2 |
| % CHG PREV QTR SAAR......... | -5.97 | -4.84 | -2.74 | -17.21 | 31.87 | 9.14 | 11.20 | 8.06 | 6.19 | -0.98 | 2.42 | 2.07 | -1.55 | 9.05 |
| % CHG SAME QTR LAST YR...... | 1.11 | -0.69 | -2.17 | -7.87 | 0.26 | 3.76 | 7.29 | 14.68 | 8.63 | 6.02 | 3.86 | 2.07 | -1.55 | 9.05 |
| LEATHER..................... | 8.7 | 8.5 | 8.4 | 8.2 | 8.5 | 8.4 | 8.4 | 8.5 | 8.6 | 8.5 | 8.3 | 9.0 | 8.4 | 8.5 |
| % CHG PREV QTR SAAR......... | -19.68 | -10.10 | -4.72 | -7.15 | 15.14 | -6.46 | 0.02 | 7.14 | 1.33 | -3.33 | -7.97 | -5.83 | -6.93 | 1.30 |
| % CHG SAME QTR LAST YR...... | -10.04 | -12.31 | -12.79 | -10.60 | -2.18 | -1.20 | 0.01 | 3.65 | 0.39 | 1.22 | -0.86 | -5.83 | -6.93 | 1.30 |
| STATISTICAL DISCREPANCY....... | -0.2 | 0.0 | 0.0 | 0.2 | -0.2 | 0.0 | 0.0 | 0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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TABLE 11: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
1987 DOLLA

| | ORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL NONAGRICULTURAL........... | 18323 | 18007 | 18611 | 18273 | 18201 | 18205 | 18682 | 18557 | 18628 | 19294 | 18878 | 18309 | 18322 | 18790 |
| % CHG SAME QTR LAST YR.... | 0.33 | -1.20 | -0.34 | 0.22 | -0.66 | 1.10 | 0.38 | 1.56 | 2.35 | 5.99 | 1.05 | -0.64 | 0.07 | 2.56 |
| MINING......................... | 23881 | 23989 | 24864 | 22613 | 21915 | 21777 | 24150 | 22685 | 23379 | 24913 | 26061 | 24347 | 22792 | 23782 |
| % CHG SAME QTR LAST YR.... | -3.00 | -9.34 | -1.10 | -7.24 | -8.23 | -9.22 | -2.87 | 0.32 | 6.68 | 14.40 | 7.91 | -2.43 | -6.39 | 4.34 |
| CONSTRUCTION.................. | 19066 | 19154 | 21522 | 19673 | 18832 | 19565 | 21426 | 19938 | 19700 | 21954 | 23205 | 19951 | 19898 | 20754 |
| % CHG SAME QTR LAST YR.... | -2.24 | -4.32 | -1.29 | -0.54 | -1.23 | 2.15 | -0.45 | 1.34 | 4.61 | 12.21 | 8.30 | -1.67 | -0.26 | 4.30 |
| MANUFACTURING................. | 20473 | 20188 | 20688 | 20646 | 20721 | 20934 | 21201 | 21143 | 21196 | 22346 | 20893 | 20336 | 20747 | 21472 |
| % CHG SAME QTR LAST YR.... | 1.49 | -0.55 | 1.15 | 2.06 | 1.21 | 3.70 | 2.48 | 2.41 | 2.29 | 6.75 | -1.45 | -0.65 | 2.02 | 3.49 |
| DURABLE GOODS............... | 21331 | 20950 | 21521 | 21309 | 21598 | 21746 | 21823 | 21785 | 21952 | 23389 | 21891 | 21073 | 21543 | 22237 |
| % CHG SAME QTR LAST YR.... | 2.27 | -1.55 | 1.94 | 1.96 | 1.25 | 3.80 | 1.40 | 2.23 | 1.64 | 7.56 | 0.31 | -0.93 | 2.23 | 3.22 |
| NONDURABLE GOODS............ | 19627 | 19435 | 19879 | 19994 | 19869 | 20133 | 20577 | 20496 | 20449 | 21311 | 19877 | 19608 | 19969 | 20708 |
| % CHG SAME QTR LAST YR.... | 0.65 | 0.51 | 0.38 | 2.18 | 1.23 | 3.59 | 3.51 | 2.51 | 2.91 | 5.85 | -3.40 | -0.32 | 1.84 | 3.70 |
| TRADE......................... | 13654 | 13284 | 13926 | 13874 | 13793 | 13865 | 14410 | 14183 | 14145 | 14880 | 14304 | 13758 | 13865 | 14405 |
| % CHG SAME QTR LAST YR.... | -2.00 | -2.90 | -2.30 | 0.25 | 1.02 | 4.38 | 3.48 | 2.23 | 2.55 | 7.32 | -0.74 | -2.19 | 0.78 | 3.90 |
| SERVICES...................... | 17777 | 17833 | 18337 | 17522 | 17382 | 17703 | 18240 | 18019 | 17889 | 18546 | 18538 | 17958 | 17736 | 18173 |
| % CHG SAME QTR LAST YR.... | 1.30 | -0.17 | -1.18 | -0.80 | -2.22 | -0.73 | -0.53 | 2.83 | 2.91 | 4.76 | 1.63 | 0.54 | -1.23 | 2.46 |
| FIN,INS,REAL EST.............. | 21351 | 21350 | 22059 | 21499 | 21721 | 21838 | 22784 | 22506 | 23127 | 24641 | 22488 | 21408 | 21779 | 23264 |
| % CHG SAME QTR LAST YR.... | 0.15 | -1.59 | 2.40 | 0.51 | 1.73 | 2.29 | 3.29 | 4.68 | 6.47 | 12.84 | -1.30 | -1.31 | 1.73 | 6.82 |
| TRANS,COMM,PUB UTIL........... | 24988 | 24345 | 25179 | 24961 | 24711 | 24157 | 24777 | 24667 | 24915 | 25621 | 25277 | 24865 | 24752 | 24995 |
| % CHG SAME QTR LAST YR.... | 1.37 | -0.10 | 0.59 | -0.54 | -1.11 | -0.77 | -1.60 | -1.18 | 0.83 | 6.06 | 2.02 | 0.71 | -0.45 | 0.98 |
| GOVERNMENT.................... | 19461 | 18605 | 18763 | 18758 | 18831 | 18020 | 17957 | 18417 | 18894 | 18211 | 18843 | 18890 | 18593 | 18370 |
| % CHG SAME QTR LAST YR.... | 1.28 | 0.10 | 0.25 | -0.11 | -3.24 | -3.14 | -4.29 | -1.82 | 0.33 | 1.06 | 4.93 | 0.44 | -1.57 | -1.20 |
| FEDERAL,CIVILIAN............ | 28285 | 28413 | 28589 | 27953 | 27977 | 27590 | 28238 | 28283 | 28629 | 28790 | 29430 | 28106 | 28027 | 28485 |
| % CHG SAME QTR LAST YR.... | 3.92 | 3.55 | 1.33 | 1.60 | -1.09 | -2.90 | -1.23 | 1.18 | 2.33 | 4.35 | 4.22 | 2.39 | -0.28 | 1.63 |
| STATE AND LOCAL............. | 17463 | 16529 | 16671 | 16804 | 16847 | 16065 | 15948 | 16455 | 16926 | 16208 | 16810 | 16856 | 16597 | 16384 |
| % CHG SAME QTR LAST YR.... | 0.07 | -1.13 | 0.15 | 0.11 | -3.53 | -2.81 | -4.34 | -2.08 | 0.47 | 0.89 | 5.41 | -0.37 | -1.54 | -1.28 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 12: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
SEASONALLY ADJUSTED 1987 DOLLARS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL NONAGRICULTURAL........... | 18406 | 18152 | 18319 | 18328 | 18284 | 18353 | 18389 | 18614 | 18714 | 19452 | 18582 | 18308 | 18321 | 18792 |
| % CHG PREV QTR SAAR....... | 2.58 | -5.40 | 3.74 | 0.19 | -0.96 | 1.52 | 0.78 | 4.99 | 2.16 | 16.74 | -16.73 | -0.64 | 0.07 | 2.57 |
| % CHG SAME QTR LAST YR.... | 0.33 | -1.18 | -0.36 | 0.22 | -0.66 | 1.11 | 0.38 | 1.56 | 2.35 | 5.99 | 1.05 | -0.64 | 0.07 | 2.57 |
| MINING........................ | 24268 | 24255 | 23734 | 22882 | 22321 | 22054 | 23184 | 22986 | 23850 | 25254 | 25130 | 24308 | 22748 | 23818 |
| % CHG PREV QTR SAAR....... | -5.89 | -0.21 | -8.32 | -13.60 | -9.46 | -4.69 | 22.12 | -3.37 | 15.90 | 25.73 | -1.95 | -2.47 | -6.42 | 4.71 |
| % CHG SAME QTR LAST YR.... | -2.96 | -9.30 | -1.40 | -7.13 | -8.02 | -9.08 | -2.32 | 0.45 | 6.85 | 14.51 | 8.40 | -2.47 | -6.42 | 4.71 |
| CONSTRUCTION.................. | 19975 | 19430 | 19885 | 19951 | 19768 | 19827 | 19799 | 20237 | 20676 | 22217 | 21463 | 19919 | 19858 | 20732 |
| % CHG PREV QTR SAAR....... | -0.98 | -10.49 | 9.72 | 1.33 | -3.62 | 1.19 | -0.55 | 9.15 | 8.95 | 33.31 | -12.90 | -1.56 | -0.31 | 4.40 |
| % CHG SAME QTR LAST YR.... | -1.93 | -4.34 | -1.79 | -0.37 | -1.04 | 2.04 | -0.43 | 1.44 | 4.59 | 12.06 | 8.40 | -1.56 | -0.31 | 4.40 |
| MANUFACTURING................. | 20526 | 20260 | 20514 | 20691 | 20776 | 21013 | 21021 | 21191 | 21251 | 22433 | 20712 | 20337 | 20749 | 21474 |
| % CHG PREV QTR SAAR....... | 5.07 | -5.07 | 5.11 | 3.50 | 1.65 | 4.64 | 0.15 | 3.28 | 1.14 | 24.18 | -27.33 | -0.65 | 2.02 | 3.50 |
| % CHG SAME QTR LAST YR.... | 1.50 | -0.52 | 1.11 | 2.06 | 1.22 | 3.72 | 2.47 | 2.41 | 2.29 | 6.76 | -1.47 | -0.65 | 2.02 | 3.50 |
| DURABLE GOODS............... | 21304 | 21022 | 21362 | 21424 | 21572 | 21821 | 21658 | 21906 | 21924 | 23475 | 21718 | 21075 | 21545 | 22241 |
| % CHG PREV QTR SAAR....... | 5.73 | -5.19 | 6.64 | 1.17 | 2.78 | 4.70 | -2.96 | 4.67 | 0.33 | 31.44 | -26.74 | -0.93 | 2.23 | 3.23 |
| % CHG SAME QTR LAST YR.... | 2.29 | -1.49 | 1.88 | 1.98 | 1.26 | 3.80 | 1.38 | 2.25 | 1.63 | 7.58 | 0.28 | -0.93 | 2.23 | 3.23 |
| NONDURABLE GOODS............ | 19753 | 19507 | 19693 | 19975 | 19997 | 20215 | 20383 | 20475 | 20581 | 21399 | 19692 | 19608 | 19970 | 20709 |
| % CHG PREV QTR SAAR....... | 4.25 | -4.89 | 3.86 | 5.86 | 0.44 | 4.43 | 3.37 | 1.82 | 2.08 | 16.88 | -28.29 | -0.31 | 1.84 | 3.70 |
| % CHG SAME QTR LAST YR.... | 0.66 | 0.51 | 0.35 | 2.18 | 1.23 | 3.63 | 3.51 | 2.50 | 2.92 | 5.86 | -3.39 | -0.31 | 1.84 | 3.70 |
| TRADE......................... | 13753 | 13533 | 13599 | 13837 | 13892 | 14129 | 14069 | 14146 | 14247 | 15165 | 13965 | 13753 | 13864 | 14407 |
| % CHG PREV QTR SAAR....... | -1.51 | -6.25 | 1.98 | 7.19 | 1.60 | 6.98 | -1.67 | 2.19 | 2.91 | 28.38 | -28.09 | -2.20 | 0.81 | 3.91 |
| % CHG SAME QTR LAST YR.... | -2.00 | -2.89 | -2.32 | 0.24 | 1.02 | 4.40 | 3.46 | 2.23 | 2.55 | 7.34 | -0.74 | -2.20 | 0.81 | 3.91 |
| SERVICES...................... | 18056 | 17799 | 17923 | 17684 | 17643 | 17672 | 17833 | 18187 | 18150 | 18516 | 18131 | 17953 | 17731 | 18171 |
| % CHG PREV QTR SAAR....... | 5.34 | -5.55 | 2.82 | -5.25 | -0.91 | 0.66 | 3.68 | 8.19 | -0.81 | 8.31 | -8.07 | 0.54 | -1.24 | 2.49 |
| % CHG SAME QTR LAST YR.... | 1.21 | -0.15 | -1.16 | -0.78 | -2.28 | -0.71 | -0.51 | 2.85 | 2.87 | 4.77 | 1.67 | 0.54 | -1.24 | 2.49 |
| FIN,INS,REAL EST.............. | 21537 | 21343 | 21779 | 21576 | 21914 | 21845 | 22490 | 22587 | 23334 | 24657 | 22200 | 21411 | 21778 | 23267 |
| % CHG PREV QTR SAAR....... | 1.06 | -3.56 | 8.43 | -3.67 | 6.41 | -1.25 | 12.35 | 1.74 | 13.88 | 24.69 | -34.29 | -1.32 | 1.72 | 6.83 |
| % CHG SAME QTR LAST YR.... | 0.12 | -1.52 | 2.33 | 0.45 | 1.75 | 2.35 | 3.27 | 4.69 | 6.48 | 12.87 | -1.29 | -1.32 | 1.72 | 6.83 |
| TRANS,COMM,PUB UTIL........... | 25109 | 24561 | 24872 | 24925 | 24817 | 24390 | 24469 | 24625 | 25019 | 25861 | 24979 | 24864 | 24751 | 24994 |
| % CHG PREV QTR SAAR....... | 0.66 | -8.44 | 5.16 | 0.85 | -1.73 | -6.71 | 1.31 | 2.57 | 6.55 | 14.16 | -12.97 | 0.72 | -0.46 | 0.98 |
| % CHG SAME QTR LAST YR.... | 1.36 | -0.04 | 0.62 | -0.57 | -1.16 | -0.70 | -1.62 | -1.20 | 0.82 | 6.03 | 2.08 | 0.72 | -0.46 | 0.98 |
| GOVERNMENT.................... | 18978 | 18853 | 18925 | 18797 | 18378 | 18264 | 18106 | 18447 | 18445 | 18466 | 18995 | 18887 | 18591 | 18366 |
| % CHG PREV QTR SAAR....... | 3.03 | -2.61 | 1.53 | -2.66 | -8.62 | -2.46 | -3.43 | 7.75 | -0.04 | 0.45 | 11.96 | 0.43 | -1.57 | -1.21 |
| % CHG SAME QTR LAST YR.... | 1.41 | 0.11 | 0.22 | -0.21 | -3.16 | -3.12 | -4.33 | -1.87 | 0.36 | 1.10 | 4.91 | 0.43 | -1.57 | -1.21 |
| FEDERAL,CIVILIAN............ | 28211 | 28183 | 28608 | 28198 | 27939 | 27391 | 28249 | 28486 | 28611 | 28607 | 29431 | 28112 | 28034 | 28488 |
| % CHG PREV QTR SAAR....... | 6.13 | -0.40 | 6.17 | -5.62 | -3.62 | -7.61 | 13.12 | 3.40 | 1.77 | -0.06 | 12.03 | 2.39 | -0.28 | 1.62 |
| % CHG SAME QTR LAST YR.... | 3.99 | 3.70 | 1.23 | 1.45 | -0.97 | -2.81 | -1.26 | 1.02 | 2.41 | 4.44 | 4.19 | 2.39 | -0.28 | 1.62 |
| STATE AND LOCAL............. | 16917 | 16817 | 16864 | 16831 | 16334 | 16343 | 16133 | 16473 | 16416 | 16491 | 17003 | 16850 | 16593 | 16378 |
| % CHG PREV QTR SAAR....... | 2.15 | -2.33 | 1.12 | -0.78 | -11.30 | 0.21 | -5.03 | 8.70 | -1.39 | 1.85 | 13.01 | -0.38 | -1.52 | -1.29 |
| % CHG SAME QTR LAST YR.... | 0.22 | -1.18 | 0.16 | 0.03 | -3.4[illegible] | [illegible].82 | -4.33 | -2.13 | 0.50 | 0.91 | 5.39 | -0.38 | -1.52 | -1.29 |

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 13: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR

CURRENT DO[illegible]

| | ...STORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL NONAGRICULTURAL........... | 21181 | 21158 | 22053 | 21817 | 21896 | 22082 | 22885 | 22937 | 23118 | 24176 | 23824 | 21038 | 21962 | 23279 |
| % CHG SAME QTR LAST YR.... | 5.63 | 4.59 | 4.79 | 5.06 | 3.38 | 4.37 | 3.77 | 5.13 | 5.58 | 9.48 | 4.10 | 4.49 | 4.39 | 5.99 |
| MINING......................... | 27606 | 28187 | 29464 | 27000 | 26364 | 26415 | 29583 | 28039 | 29013 | 31216 | 32889 | 27973 | 27311 | 29463 |
| % CHG SAME QTR LAST YR.... | 2.13 | -4.03 | 3.99 | -2.76 | -4.50 | -6.29 | 0.40 | 3.85 | 10.05 | 18.18 | 11.17 | 2.56 | -2.37 | 7.88 |
| CONSTRUCTION.................. | 22041 | 22505 | 25504 | 23490 | 22655 | 23732 | 26247 | 24643 | 24447 | 27509 | 29285 | 22912 | 23845 | 25711 |
| % CHG SAME QTR LAST YR.... | 2.92 | 1.28 | 3.79 | 4.26 | 2.79 | 5.45 | 2.91 | 4.91 | 7.91 | 15.91 | 11.57 | 3.38 | 4.07 | 7.83 |
| MANUFACTURING................. | 23667 | 23721 | 24516 | 24651 | 24928 | 25393 | 25971 | 26133 | 26305 | 28000 | 26366 | 23370 | 24872 | 26602 |
| % CHG SAME QTR LAST YR.... | 6.85 | 5.28 | 6.36 | 6.99 | 5.33 | 7.05 | 5.94 | 6.01 | 5.52 | 10.27 | 1.52 | 4.50 | 6.43 | 6.96 |
| DURABLE GOODS............... | 24659 | 24617 | 25503 | 25443 | 25982 | 26377 | 26733 | 26926 | 27243 | 29307 | 27627 | 24218 | 25826 | 27552 |
| % CHG SAME QTR LAST YR.... | 7.67 | 4.21 | 7.19 | 6.89 | 5.37 | 7.15 | 4.82 | 5.83 | 4.85 | 11.11 | 3.34 | 4.20 | 6.64 | 6.68 |
| NONDURABLE GOODS............ | 22689 | 22836 | 23557 | 23872 | 23903 | 24422 | 25206 | 25334 | 25377 | 26702 | 25085 | 22533 | 23938 | 25655 |
| % CHG SAME QTR LAST YR.... | 5.97 | 6.40 | 5.54 | 7.12 | 5.35 | 6.94 | 7.00 | 6.12 | 6.17 | 9.34 | -0.48 | 4.85 | 6.24 | 7.17 |
| TRADE......................... | 15784 | 15609 | 16503 | 16565 | 16593 | 16818 | 17653 | 17530 | 17554 | 18645 | 18051 | 15805 | 16620 | 17845 |
| % CHG SAME QTR LAST YR.... | 3.17 | 2.79 | 2.73 | 5.09 | 5.12 | 7.75 | 6.97 | 5.83 | 5.79 | 10.86 | 2.26 | 2.85 | 5.16 | 7.37 |
| SERVICES...................... | 20551 | 20954 | 21729 | 20922 | 20911 | 21474 | 22344 | 22272 | 22200 | 23238 | 23395 | 20634 | 21259 | 22513 |
| % CHG SAME QTR LAST YR.... | 6.65 | 5.67 | 3.90 | 3.99 | 1.75 | 2.48 | 2.83 | 6.45 | 6.16 | 8.21 | 4.70 | 5.73 | 3.03 | 5.90 |
| FIN,INS,REAL EST.............. | 24682 | 25086 | 26140 | 25669 | 26130 | 26489 | 27910 | 27817 | 28700 | 30875 | 28380 | 24602 | 26107 | 28826 |
| % CHG SAME QTR LAST YR.... | 5.44 | 4.18 | 7.67 | 5.36 | 5.87 | 5.59 | 6.77 | 8.37 | 9.84 | 16.56 | 1.68 | 3.79 | 6.12 | 10.41 |
| TRANS,COMM,PUB UTIL........... | 28886 | 28606 | 29837 | 29803 | 29727 | 29303 | 30351 | 30488 | 30920 | 32104 | 31899 | 28571 | 29667 | 30966 |
| % CHG SAME QTR LAST YR.... | 6.72 | 5.75 | 5.77 | 4.26 | 2.91 | 2.44 | 1.72 | 2.30 | 4.01 | 9.56 | 5.10 | 5.91 | 3.84 | 4.38 |
| GOVERNMENT.................... | 22496 | 21860 | 22234 | 22397 | 22654 | 21858 | 21998 | 22764 | 23447 | 22818 | 23779 | 21710 | 22286 | 22757 |
| % CHG SAME QTR LAST YR.... | 6.63 | 5.96 | 5.41 | 4.71 | 0.70 | -0.01 | -1.06 | 1.64 | 3.50 | 4.39 | 8.10 | 5.63 | 2.65 | 2.11 |
| FEDERAL,CIVILIAN............ | 32697 | 33385 | 33878 | 33376 | 33657 | 33467 | 34592 | 34957 | 35528 | 36073 | 37140 | 32304 | 33594 | 35288 |
| % CHG SAME QTR LAST YR.... | 9.41 | 9.61 | 6.54 | 6.51 | 2.93 | 0.24 | 2.11 | 4.74 | 5.56 | 7.79 | 7.37 | 7.70 | 3.99 | 5.04 |
| STATE AND LOCAL............. | 20187 | 19422 | 19756 | 20064 | 20267 | 19486 | 19536 | 20338 | 21005 | 20308 | 21214 | 19372 | 19893 | 20297 |
| % CHG SAME QTR LAST YR.... | 5.36 | 4.66 | 5.30 | 4.95 | 0.40 | 0.33 | -1.11 | 1.36 | 3.64 | 4.22 | 8.59 | 4.78 | 2.69 | 2.03 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 14: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
SEASONALLY ADJUSTED CURRENT DOLLARS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL NONAGRICULTURAL........... | 21277 | 21329 | 21708 | 21884 | 21996 | 22262 | 22526 | 23007 | 23224 | 24374 | 23450 | 21039 | 21962 | 23283 |
| % CHG PREV QTR SAAR....... | 8.85 | 0.98 | 7.31 | 3.27 | 2.06 | 4.94 | 4.83 | 8.81 | 3.82 | 21.32 | -14.31 | 4.50 | 4.39 | 6.01 |
| % CHG SAME QTR LAST YR.... | 5.63 | 4.61 | 4.77 | 5.06 | 3.38 | 4.38 | 3.77 | 5.13 | 5.58 | 9.48 | 4.10 | 4.50 | 4.39 | 6.01 |
| MINING........................ | 28054 | 28500 | 28125 | 27321 | 26852 | 26752 | 28400 | 28411 | 29597 | 31644 | 31714 | 27937 | 27262 | 29513 |
| % CHG PREV QTR SAAR....... | -0.15 | 6.51 | -5.16 | -10.95 | -6.70 | -1.49 | 27.02 | 0.15 | 17.78 | 30.66 | 0.89 | 2.52 | -2.41 | 8.25 |
| % CHG SAME QTR LAST YR.... | 2.16 | -3.98 | 3.68 | -2.65 | -4.29 | -6.13 | 0.98 | 3.99 | 10.22 | 18.29 | 11.67 | 2.52 | -2.41 | 8.25 |
| CONSTRUCTION.................. | 23091 | 22830 | 23564 | 23822 | 23781 | 24050 | 24254 | 25013 | 25659 | 27838 | 27086 | 22887 | 23804 | 25691 |
| % CHG PREV QTR SAAR....... | 5.06 | -4.46 | 13.50 | 4.44 | -0.68 | 4.59 | 3.45 | 13.12 | 10.72 | 38.54 | -10.37 | 3.51 | 4.01 | 7.93 |
| % CHG SAME QTR LAST YR.... | 3.25 | 1.26 | 3.27 | 4.44 | 2.99 | 5.34 | 2.93 | 5.00 | 7.90 | 15.75 | 11.67 | 3.51 | 4.01 | 7.93 |
| MANUFACTURING................. | 23728 | 23806 | 24309 | 24705 | 24994 | 25489 | 25750 | 26192 | 26373 | 28109 | 26139 | 23373 | 24874 | 26606 |
| % CHG PREV QTR SAAR....... | 11.49 | 1.32 | 8.74 | 6.68 | 4.75 | 8.16 | 4.17 | 7.04 | 2.79 | 29.05 | -25.22 | 4.50 | 6.43 | 6.96 |
| % CHG SAME QTR LAST YR.... | 6.87 | 5.30 | 6.31 | 6.99 | 5.34 | 7.07 | 5.93 | 6.02 | 5.52 | 10.28 | 1.51 | 4.50 | 6.43 | 6.96 |
| DURABLE GOODS............... | 24627 | 24700 | 25314 | 25581 | 25951 | 26468 | 26530 | 27076 | 27208 | 29414 | 27408 | 24222 | 25828 | 27557 |
| % CHG PREV QTR SAAR....... | 12.18 | 1.20 | 10.32 | 4.28 | 5.91 | 8.22 | 0.94 | 8.48 | 1.96 | 36.60 | -24.61 | 4.20 | 6.63 | 6.69 |
| % CHG SAME QTR LAST YR.... | 7.70 | 4.28 | 7.13 | 6.90 | 5.38 | 7.16 | 4.80 | 5.85 | 4.84 | 11.13 | 3.31 | 4.20 | 6.63 | 6.69 |
| NONDURABLE GOODS............ | 22835 | 22921 | 23336 | 23850 | 24057 | 24521 | 24969 | 25307 | 25541 | 26813 | 24851 | 22535 | 23941 | 25658 |
| % CHG PREV QTR SAAR....... | 10.61 | 1.52 | 7.44 | 9.11 | 3.51 | 7.94 | 7.52 | 5.53 | 3.74 | 21.46 | -26.21 | 4.85 | 6.24 | 7.17 |
| % CHG SAME QTR LAST YR.... | 5.98 | 6.40 | 5.52 | 7.11 | 5.35 | 6.98 | 7.00 | 6.11 | 6.17 | 9.35 | -0.47 | 4.85 | 6.24 | 7.17 |
| TRADE......................... | 15898 | 15901 | 16115 | 16522 | 16713 | 17138 | 17235 | 17484 | 17681 | 19002 | 17624 | 15803 | 16622 | 17850 |
| % CHG PREV QTR SAAR....... | 4.51 | 0.07 | 5.50 | 10.48 | 4.70 | 10.58 | 2.28 | 5.91 | 4.58 | 33.42 | -26.00 | 2.85 | 5.18 | 7.39 |
| % CHG SAME QTR LAST YR.... | 3.17 | 2.80 | 2.71 | 5.08 | 5.12 | 7.78 | 6.95 | 5.82 | 5.79 | 10.88 | 2.26 | 2.85 | 5.18 | 7.39 |
| SERVICES...................... | 20872 | 20914 | 21239 | 21114 | 21225 | 21437 | 21845 | 22479 | 22524 | 23200 | 22881 | 20631 | 21254 | 22512 |
| % CHG PREV QTR SAAR....... | 11.77 | 0.81 | 6.36 | -2.34 | 2.11 | 4.05 | 7.84 | 12.13 | 0.80 | 12.56 | -5.40 | 5.73 | 3.02 | 5.92 |
| % CHG SAME QTR LAST YR.... | 6.56 | 5.70 | 3.92 | 4.01 | 1.69 | 2.50 | 2.85 | 6.47 | 6.12 | 8.23 | 4.74 | 5.73 | 3.02 | 5.92 |
| FIN,INS,REAL EST.............. | 24897 | 25078 | 25808 | 25762 | 26362 | 26498 | 27550 | 27918 | 28957 | 30895 | 28016 | 24607 | 26108 | 28830 |
| % CHG PREV QTR SAAR....... | 7.23 | 2.94 | 12.16 | -0.71 | 9.65 | 2.07 | 16.86 | 5.45 | 15.74 | 29.58 | -32.38 | 3.79 | 6.10 | 10.43 |
| % CHG SAME QTR LAST YR.... | 5.41 | 4.24 | 7.59 | 5.30 | 5.89 | 5.66 | 6.75 | 8.37 | 9.84 | 16.60 | 1.69 | 3.79 | 6.10 | 10.43 |
| TRANS,COMM,PUB UTIL........... | 29026 | 28859 | 29474 | 29760 | 29854 | 29585 | 29975 | 30437 | 31049 | 32404 | 31523 | 28574 | 29668 | 30966 |
| % CHG PREV QTR SAAR....... | 6.80 | -2.27 | 8.79 | 3.95 | 1.27 | -3.57 | 5.38 | 6.31 | 8.29 | 18.64 | -10.44 | 5.92 | 3.83 | 4.37 |
| % CHG SAME QTR LAST YR.... | 6.72 | 5.82 | 5.80 | 4.23 | 2.86 | 2.51 | 1.70 | 2.27 | 4.00 | 9.53 | 5.17 | 5.92 | 3.83 | 4.37 |
| GOVERNMENT.................... | 21938 | 22152 | 22426 | 22444 | 22109 | 22155 | 22179 | 22800 | 22890 | 23137 | 23971 | 21706 | 22283 | 22752 |
| % CHG PREV QTR SAAR....... | 9.33 | 3.95 | 5.03 | 0.33 | -5.84 | 0.83 | 0.45 | 11.68 | 1.59 | 4.39 | 15.21 | 5.63 | 2.66 | 2.10 |
| % CHG SAME QTR LAST YR.... | 6.77 | 5.98 | 5.38 | 4.61 | 0.78 | 0.01 | -1.10 | 1.59 | 3.53 | 4.44 | 8.08 | 5.63 | 2.66 | 2.10 |
| FEDERAL,CIVILIAN............ | 32612 | 33116 | 33901 | 33668 | 33610 | 33226 | 34605 | 35209 | 35507 | 35845 | 37142 | 32309 | 33601 | 35291 |
| % CHG PREV QTR SAAR....... | 12.61 | 6.31 | 9.83 | -2.72 | -0.69 | -4.50 | 17.67 | 7.17 | 3.43 | 3.86 | 15.28 | 7.71 | 4.00 | 5.03 |
| % CHG SAME QTR LAST YR.... | 9.49 | 9.77 | 6.44 | 6.35 | 3.06 | 0.33 | 2.08 | 4.58 | 5.64 | 7.88 | 7.33 | 7.71 | 4.00 | 5.03 |
| STATE AND LOCAL............. | 19556 | 19760 | 19984 | 20097 | 19650 | 19824 | 19763 | 20361 | 20372 | 20664 | 21458 | 19364 | 19889 | 20290 |
| % CHG PREV QTR SAAR....... | 8.39 | 4.25 | 4.61 | 2.27 | -8.60 | 3.59 | -1.22 | 12.66 | 0.21 | 5.85 | 16.29 | 4.77 | 2.71 | 2.02 |
| % CHG SAVE QTR LAST YR.... | 5.52 | 4.61 | 5.32 | 4.86 | 0.48 | 0.32 | -1.11 | 1.32 | 3.67 | 4.24 | 8.58 | 4.77 | 2.71 | 2.02 |

TABLE 15: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE

| | ORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| CIVILIAN LABOR FORCE (THOUS).... | 2420 | 2406 | 2386 | 2424 | 2435 | 2420 | 2392 | 2428 | 2469 | 2471 | 2432 | 2397 | 2416 | 2440 |
| % CHG SAME QTR LAST YR...... | 0.90 | 0.96 | 0.91 | 1.06 | 0.63 | 0.58 | 0.27 | 0.19 | 1.38 | 2.12 | 1.65 | 1.22 | 0.79 | 0.99 |
| EMPLOYED PERSONS (THOUS)...... | 2297 | 2273 | 2221 | 2263 | 2273 | 2268 | 2220 | 2269 | 2314 | 2337 | 2268 | 2272 | 2256 | 2285 |
| % CHG SAME QTR LAST YR...... | 0.68 | 0.03 | -0.89 | -0.58 | -1.08 | -0.26 | -0.07 | 0.29 | 1.81 | 3.07 | 2.18 | 1.11 | -0.70 | 1.29 |
| UNEMPLOYED PERSONS (THOUS).... | 122 | 132 | 164 | 161 | 162 | 152 | 172 | 159 | 155 | 134 | 163 | 125 | 160 | 155 |
| % CHG SAME QTR LAST YR...... | 5.28 | 20.09 | 33.72 | 31.53 | 32.76 | 15.02 | 4.85 | -1.20 | -4.76 | -12.03 | -5.17 | 3.31 | 28.00 | -3.13 |
| PARTICIPATION RATE (PERCENT).... | 62.5 | 61.9 | 61.1 | 61.8 | 61.8 | 61.1 | 60.2 | 60.8 | 61.6 | 61.3 | 60.1 | 62.0 | 61.5 | 61.0 |
| % CHG SAME QTR LAST YR...... | -0.06 | -0.24 | -0.51 | -0.55 | -1.08 | -1.15 | -1.47 | -1.58 | -0.39 | 0.32 | -0.06 | 0.27 | -0.82 | -0.78 |
| UNEMPLOYMENT RATE (PERCENT)..... | 5.1 | 5.5 | 6.9 | 6.6 | 6.7 | 6.3 | 7.2 | 6.6 | 6.3 | 5.4 | 6.7 | 5.2 | 6.6 | 6.4 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 16: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE
SEASONALLY ADJUSTED

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| CIVILIAN LABOR FORCE (THOUS).... | 2397 | 2405 | 2414 | 2420 | 2413 | 2417 | 2420 | 2425 | 2448 | 2467 | 2460 | 2397 | 2416 | 2440 |
| % CHG PREV QTR SAAR......... | 0.66 | 1.22 | 1.54 | 0.97 | -1.10 | 0.70 | 0.51 | 0.73 | 3.84 | 3.21 | -1.18 | 1.22 | 0.79 | 0.99 |
| % CHG SAME QTR LAST YR...... | 0.97 | 0.94 | 0.90 | 1.10 | 0.65 | 0.52 | 0.27 | 0.21 | 1.44 | 2.06 | 1.63 | 1.22 | 0.79 | 0.99 |
| EMPLOYED PERSONS (THOUS)...... | 2273 | 2260 | 2256 | 2263 | 2249 | 2256 | 2257 | 2270 | 2291 | 2321 | 2306 | 2272 | 2256 | 2285 |
| % CHG PREV QTR SAAR......... | -0.88 | -2.21 | -0.76 | 1.25 | -2.47 | 1.23 | 0.24 | 2.38 | 3.69 | 5.37 | -2.55 | 1.11 | -0.70 | 1.29 |
| % CHG SAME QTR LAST YR...... | 0.74 | -0.02 | -0.89 | -0.66 | -1.06 | -0.20 | 0.05 | 0.33 | 1.88 | 2.90 | 2.18 | 1.11 | -0.70 | 1.29 |
| UNEMPLOYED PERSONS (THOUS).... | 124 | 144 | 158 | 157 | 164 | 162 | 163 | 154 | 157 | 146 | 154 | 125 | 160 | 155 |
| % CHG PREV QTR SAAR......... | 34.87 | 81.35 | 43.10 | -2.92 | 20.36 | -6.34 | 4.28 | -20.02 | 6.18 | -24.64 | 22.72 | 3.33 | 27.98 | -3.14 |
| % CHG SAME QTR LAST YR...... | 5.39 | 18.68 | 35.99 | 35.77 | 31.96 | 11.87 | 3.36 | -1.53 | -4.57 | -9.62 | -5.86 | 3.33 | 27.98 | -3.14 |
| PARTICIPATION RATE (PERCENT).... | 61.9 | 61.8 | 61.8 | 61.7 | 61.2 | 61.1 | 60.9 | 60.7 | 61.0 | 61.2 | 60.8 | 62.0 | 61.5 | 61.0 |
| % CHG PREV QTR SAAR......... | -0.68 | -0.48 | -0.17 | -0.72 | -2.85 | -1.07 | -1.25 | -1.07 | 2.11 | 1.31 | -2.60 | 0.26 | -0.82 | -0.78 |
| % CHG SAME QTR LAST YR...... | 0.01 | -0.25 | -0.52 | -0.51 | -1.06 | -1.20 | -1.47 | -1.56 | -0.33 | 0.26 | -0.08 | 0.26 | -0.82 | -0.78 |
| UNEMPLOYMENT RATE (PERCENT)..... | 5.2 | 6.0 | 6.5 | 6.5 | 6.8 | 6.7 | 6.7 | 6.4 | 6.4 | 5.9 | 6.2 | 5.2 | 6.6 | 6.4 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 17: TENNESSEE TAXABLE SALES
MILLIONS OF 19[illegible]LARS

| | [illegible]STORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL............................ | 9238 | 9336 | 7842 | 9100 | 9128 | 9488 | 8417 | 9194 | 9304 | 9778 | 8409 | 36522 | 35560 | 36693 |
| % CHG SAME QTR LAST YR...... | -3.87 | -3.30 | -7.41 | -3.99 | -1.19 | 1.63 | 7.33 | 1.03 | 1.92 | 3.05 | -0.10 | -1.24 | -2.64 | 3.19 |
| AUTO DEALERS.................. | 960 | 787 | 785 | 901 | 923 | 789 | 931 | 921 | 957 | 918 | 965 | 3692 | 3398 | 3726 |
| % CHG SAME QTR LAST YR...... | -17.56 | -9.73 | -17.08 | -9.79 | -3.81 | 0.23 | 18.62 | 2.13 | 3.66 | 16.39 | 3.69 | -11.07 | -7.97 | 9.66 |
| PURCHASES FROM MANUFACTURERS.. | 689 | 632 | 531 | 634 | 637 | 620 | 559 | 639 | 611 | 605 | 524 | 2593 | 2422 | 2414 |
| % CHG SAME QTR LAST YR...... | -6.25 | -8.44 | -11.51 | -5.62 | -7.54 | -1.82 | 5.31 | 0.72 | -4.05 | -2.45 | -6.39 | -5.14 | -6.57 | -0.34 |
| MISC DURABLE GOODS............ | 1446 | 1357 | 1119 | 1412 | 1396 | 1329 | 1247 | 1470 | 1446 | 1395 | 1219 | 5687 | 5256 | 5557 |
| % CHG SAME QTR LAST YR...... | -7.83 | -7.19 | -15.41 | -9.57 | -3.43 | -2.07 | 11.50 | 4.05 | 3.53 | 4.95 | -2.24 | -3.33 | -7.58 | 5.73 |
| EATING AND DRINKING PLACES.... | 765 | 712 | 662 | 761 | 781 | 734 | 709 | 780 | 793 | 760 | 690 | 2941 | 2938 | 3042 |
| % CHG SAME QTR LAST YR...... | -0.27 | -3.86 | -3.73 | -1.89 | 2.10 | 3.10 | 7.16 | 2.51 | 1.48 | 3.52 | -2.75 | 0.96 | -0.08 | 3.54 |
| FOOD STORES................... | 1410 | 1297 | 1223 | 1302 | 1388 | 1294 | 1214 | 1400 | 1257 | 1291 | 1144 | 5332 | 5207 | 5162 |
| % CHG SAME QTR LAST YR...... | 0.91 | -2.33 | -3.87 | -3.81 | -1.51 | -0.23 | -0.71 | 7.54 | -9.48 | -0.24 | -5.83 | -1.18 | -2.34 | -0.87 |
| LIQUOR STORES................. | 52 | 69 | 51 | 55 | 53 | 69 | 53 | 53 | 51 | 69 | 48 | 229 | 229 | 226 |
| % CHG SAME QTR LAST YR...... | -4.65 | -1.36 | -4.90 | 1.29 | 1.47 | 1.26 | 3.39 | -4.43 | -2.97 | -0.69 | -9.36 | -1.33 | -0.13 | -1.21 |
| HOTELS AND MOTELS............. | 262 | 216 | 160 | 246 | 273 | 218 | 175 | 239 | 307 | 260 | 207 | 893 | 897 | 981 |
| % CHG SAME QTR LAST YR...... | -2.69 | 1.02 | -5.06 | -0.09 | 4.49 | 0.73 | 9.04 | -2.84 | 12.41 | 19.38 | 18.42 | 1.14 | 0.51 | 9.32 |
| OTHER RETAIL AND SERVICE...... | 2332 | 2842 | 2086 | 2436 | 2338 | 2962 | 2246 | 2397 | 2495 | 3066 | 2247 | 9781 | 9822 | 10205 |
| % CHG SAME QTR LAST YR...... | -2.41 | -1.19 | -2.86 | -0.95 | 0.25 | 4.24 | 7.67 | -1.60 | 6.70 | 3.52 | 0.01 | 0.17 | 0.43 | 3.89 |
| MISC NONDURABLE GOODS......... | 812 | 925 | 718 | 783 | 804 | 946 | 741 | 805 | 810 | 981 | 710 | 3319 | 3251 | 3337 |
| % CHG SAME QTR LAST YR...... | -0.60 | -2.33 | -4.70 | -5.43 | -0.98 | 2.28 | 3.10 | 2.87 | 0.84 | 3.63 | -4.13 | 0.47 | -2.03 | 2.64 |
| TRANSPORTATION,COMMUNICATION.. | 511 | 500 | 507 | 570 | 534 | 527 | 541 | 492 | 576 | 433 | 656 | 2056 | 2137 | 2042 |
| % CHG SAME QTR LAST YR...... | 14.12 | 9.64 | -1.93 | 7.82 | 4.55 | 5.32 | 6.78 | -13.72 | 7.87 | -17.74 | 21.16 | 19.40 | 3.95 | -4.46 |
| PER CAPITA ($)................. | 1887 | 1901 | 1591 | 1841 | 1840 | 1905 | 1684 | 1833 | 1849 | 1936 | 1660 | 7468 | 7177 | 7303 |
| % CHG SAME QTR LAST YR...... | -4.59 | -4.21 | -8.44 | -5.20 | -2.52 | 0.24 | 5.85 | -0.39 | 0.50 | 1.60 | -1.44 | -1.98 | -3.89 | 1.75 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 18: TENNESSEE TAXABLE SALES
MILLIONS OF SEASONALLY ADJUSTED 1987 DOLLARS



| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL............................ | 9009 | 8865 | 8724 | 8904 | 8913 | 8994 | 9350 | 9003 | 9091 | 9272 | 9330 | 36582 | 35534 | 36717 |
| % CHG PREV QTR SAAR......... | -10.06 | -6.25 | -6.19 | 8.50 | 0.41 | 3.67 | 16.83 | -14.03 | 3.96 | 8.18 | 2.52 | -1.12 | -2.86 | 3.33 |
| % CHG SAME QTR LAST YR...... | -3.62 | -3.35 | -7.75 | -3.75 | -1.06 | 1.46 | 7.18 | 1.12 | 2.00 | 3.09 | -0.22 | -1.12 | -2.86 | 3.33 |
| AUTO DEALERS.................. | 887 | 871 | 818 | 851 | 861 | 867 | 969 | 870 | 895 | 1005 | 1005 | 3694 | 3397 | 3740 |
| % CHG PREV QTR SAAR......... | -21.69 | -7.23 | -22.01 | 16.89 | 4.84 | 2.62 | 56.56 | -35.12 | 12.23 | 58.82 | -0.07 | -10.88 | -8.06 | 10.10 |
| % CHG SAME QTR LAST YR...... | -16.82 | -9.95 | -17.61 | -9.79 | -2.96 | -0.49 | 18.45 | 2.24 | 4.00 | 16.00 | 3.68 | -10.88 | -8.06 | 10.10 |
| PURCHASES FROM MANUFACTURERS.. | 652 | 621 | 596 | 610 | 606 | 609 | 629 | 611 | 584 | 594 | 589 | 2597 | 2421 | 2418 |
| % CHG PREV QTR SAAR......... | 2.47 | -17.85 | -15.09 | 9.40 | -2.16 | 1.65 | 13.90 | -10.89 | -16.88 | 7.62 | -3.36 | -5.16 | -6.76 | -0.13 |
| % CHG SAME QTR LAST YR...... | -5.25 | -8.73 | -11.68 | -5.97 | -7.04 | -1.96 | 5.51 | 0.23 | -3.77 | -2.39 | -6.31 | -5.16 | -6.76 | -0.13 |
| MISC DURABLE GOODS............ | 1375 | 1345 | 1295 | 1311 | 1330 | 1317 | 1443 | 1364 | 1377 | 1382 | 1411 | 5706 | 5253 | 5567 |
| % CHG PREV QTR SAAR......... | -19.13 | -8.49 | -14.23 | 5.30 | 5.80 | -3.76 | 43.84 | -20.02 | 3.89 | 1.44 | 8.58 | -3.08 | -7.93 | 5.96 |
| % CHG SAME QTR LAST YR...... | -7.81 | -7.05 | -15.64 | -9.58 | -3.30 | -2.07 | 11.44 | 4.03 | 3.56 | 4.93 | -2.19 | -3.08 | -7.93 | 5.96 |
| EATING AND DRINKING PLACES.... | 727 | 717 | 724 | 733 | 743 | 738 | 775 | 752 | 754 | 763 | 754 | 2942 | 2937 | 3044 |
| % CHG PREV QTR SAAR......... | -9.99 | -5.36 | 4.05 | 5.17 | 5.43 | -2.62 | 21.77 | -11.27 | 0.88 | 5.06 | -4.93 | 1.02 | -0.18 | 3.65 |
| % CHG SAME QTR LAST YR...... | -0.13 | -3.96 | -3.94 | -1.74 | 2.22 | 2.95 | 7.08 | 2.63 | 1.50 | 3.45 | -2.76 | 1.02 | -0.18 | 3.65 |
| FOOD STORES................... | 1338 | 1309 | 1307 | 1280 | 1312 | 1308 | 1298 | 1380 | 1184 | 1306 | 1222 | 5334 | 5207 | 5168 |
| % CHG PREV QTR SAAR......... | 3.80 | -8.36 | -0.59 | -8.20 | 10.51 | -1.13 | -3.22 | 28.00 | -45.94 | 48.38 | -23.33 | -1.15 | -2.38 | -0.76 |
| % CHG SAME QTR LAST YR...... | 0.41 | -2.09 | -3.94 | -3.47 | -1.95 | -0.07 | -0.74 | 7.86 | -9.79 | -0.16 | -5.81 | -1.15 | -2.38 | -0.76 |
| LIQUOR STORES................. | 57 | 56 | 56 | 59 | 58 | 57 | 58 | 56 | 56 | 57 | 53 | 230 | 229 | 226 |
| % CHG PREV QTR SAAR......... | -8.98 | -2.96 | -0.40 | 18.44 | -6.54 | -4.74 | 8.99 | -14.99 | 0.98 | 4.03 | -24.29 | -1.30 | -0.30 | -1.21 |
| % CHG SAME QTR LAST YR...... | -4.39 | -1.29 | -4.98 | 1.03 | 1.70 | 1.23 | 3.54 | -4.70 | -2.83 | -0.67 | -9.32 | -1.30 | -0.30 | -1.21 |
| HOTELS AND MOTELS............. | 217 | 225 | 214 | 227 | 227 | 225 | 234 | 221 | 255 | 269 | 277 | 894 | 893 | 979 |
| % CHG PREV QTR SAAR......... | -14.40 | 13.80 | -17.22 | 25.69 | 0.55 | -3.29 | 16.25 | -20.04 | 76.06 | 23.65 | 13.06 | 1.51 | -0.05 | 9.52 |
| % CHG SAME QTR LAST YR...... | -2.65 | 0.55 | -5.11 | 0.34 | 4.46 | 0.29 | 9.18 | -2.49 | 12.16 | 19.27 | 18.44 | 1.51 | -0.05 | 9.52 |
| OTHER RETAIL AND SERVICE...... | 2415 | 2405 | 2407 | 2473 | 2419 | 2509 | 2584 | 2441 | 2578 | 2596 | 2582 | 9799 | 9807 | 10199 |
| % CHG PREV QTR SAAR......... | -11.41 | -1.74 | 0.33 | 11.58 | -8.59 | 15.76 | 12.56 | -20.38 | 24.48 | 2.82 | -2.12 | 0.28 | 0.09 | 4.00 |
| % CHG SAME QTR LAST YR...... | -2.55 | -0.94 | -3.31 | -0.65 | 0.14 | 4.33 | 7.37 | -1.32 | 6.60 | 3.49 | -0.06 | 0.28 | 0.09 | 4.00 |
| MISC NONDURABLE GOODS......... | 826 | 806 | 804 | 802 | 818 | 825 | 828 | 825 | 825 | 856 | 793 | 3326 | 3249 | 3333 |
| % CHG PREV QTR SAAR......... | -9.30 | -9.14 | -1.01 | -1.37 | 8.46 | 3.69 | 1.05 | -1.14 | -0.27 | 16.03 | -26.43 | 0.63 | -2.31 | 2.59 |
| % CHG SAME QTR LAST YR...... | -0.59 | -2.16 | -5.10 | -5.29 | -0.96 | 2.37 | 2.89 | 2.96 | 0.82 | 3.69 | -4.22 | 0.63 | -2.31 | 2.59 |
| TRANSPORTATION,COMMUNICATION.. | 514 | 510 | 503 | 559 | 539 | 538 | 533 | 482 | 584 | 443 | 644 | 2060 | 2139 | 2043 |
| % CHG PREV QTR SAAR......... | -2.71 | -3.10 | -5.56 | 52.84 | -13.12 | -0.72 | -4.07 | -32.85 | 114.65 | -66.81 | 344.93 | 19.39 | 3.87 | -4.52 |
| % CHG SAME QTR LAST YR...... | 14.62 | 10.43 | -3.09 | 8.01 | 4.99 | 5.63 | 6.05 | -13.67 | 8.24 | -17.69 | 20.79 | 19.39 | 3.87 | -4.52 |
| PER CAPITA ($).................. | 1840 | 1805 | 1770 | 1801 | 1796 | 1806 | 1871 | 1795 | 1807 | 1836 | 1842 | 7481 | 7173 | 7309 |
| % CHG PREV QTR SAAR......... | -11.01 | -7.51 | -7.44 | 7.06 | -1.00 | 2.22 | 15.20 | -15.26 | 2.58 | 6.59 | 1.35 | -1.85 | -4.11 | 1.89 |
| % CHG SAME QTR LAST YR...... | -4.35 | -4.25 | -8.78 | -4.97 | -2.40 | 0.07 | 5.70 | -0.30 | 0.59 | 1.64 | -1.56 | -1.85 | -4.11 | 1.89 |

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 19: TENNESSEE TAXABLE SALES
MILLIONS OF CURR[illegible]LLARS

| | [illegible]STORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL............................ | 10679 | 10970 | 9293 | 10866 | 10982 | 11509 | 10311 | 11364 | 11546 | 12252 | 10612 | 41991 | 42650 | 45473 |
| % CHG SAME QTR LAST YR...... | 1.21 | 2.36 | -2.64 | 0.65 | 2.83 | 4.91 | 10.95 | 4.59 | 5.14 | 6.45 | 2.92 | 3.84 | 1.57 | 6.62 |
| AUTO DEALERS.................. | 1109 | 924 | 930 | 1076 | 1111 | 957 | 1140 | 1138 | 1188 | 1150 | 1218 | 4239 | 4073 | 4616 |
| % CHG SAME QTR LAST YR...... | -13.21 | -4.44 | -12.81 | -5.44 | 0.10 | 3.47 | 22.63 | 5.72 | 6.94 | 20.23 | 6.82 | -6.53 | -3.90 | 13.32 |
| PURCHASES FROM MANUFACTURERS.. | 797 | 742 | 629 | 757 | 766 | 752 | 685 | 789 | 759 | 758 | 661 | 2981 | 2905 | 2991 |
| % CHG SAME QTR LAST YR...... | -1.30 | -3.08 | -6.96 | -1.06 | -3.78 | 1.35 | 8.86 | 4.26 | -1.02 | 0.77 | -3.56 | -0.27 | -2.53 | 2.96 |
| MISC DURABLE GOODS............ | 1671 | 1594 | 1326 | 1686 | 1680 | 1612 | 1528 | 1816 | 1794 | 1748 | 1539 | 6535 | 6304 | 6886 |
| % CHG SAME QTR LAST YR...... | -2.97 | -1.75 | -11.06 | -5.21 | 0.50 | 1.10 | 15.27 | 7.71 | 6.80 | 8.41 | 0.72 | 1.60 | -3.54 | 9.24 |
| EATING AND DRINKING PLACES.... | 884 | 837 | 784 | 909 | 940 | 891 | 869 | 965 | 984 | 952 | 870 | 3380 | 3523 | 3769 |
| % CHG SAME QTR LAST YR...... | 5.00 | 1.77 | 1.22 | 2.85 | 6.25 | 6.43 | 10.78 | 6.12 | 4.69 | 6.94 | 0.19 | 6.14 | 4.25 | 6.98 |
| FOOD STORES................... | 1629 | 1524 | 1449 | 1554 | 1670 | 1570 | 1488 | 1730 | 1560 | 1618 | 1443 | 6129 | 6244 | 6395 |
| % CHG SAME QTR LAST YR...... | 6.24 | 3.39 | 1.08 | 0.84 | 2.50 | 3.00 | 2.64 | 11.32 | -6.62 | 3.05 | -2.99 | 3.92 | 1.87 | 2.43 |
| LIQUOR STORES................. | 60 | 81 | 61 | 66 | 64 | 84 | 65 | 65 | 64 | 86 | 61 | 264 | 275 | 281 |
| % CHG SAME QTR LAST YR...... | 0.38 | 4.41 | 0.00 | 6.18 | 5.59 | 4.53 | 6.88 | -1.07 | 0.09 | 2.59 | -6.62 | 3.80 | 4.12 | 2.08 |
| HOTELS AND MOTELS............. | 303 | 254 | 190 | 294 | 329 | 264 | 214 | 295 | 382 | 326 | 261 | 1027 | 1076 | 1216 |
| % CHG SAME QTR LAST YR...... | 2.45 | 6.94 | -0.18 | 4.73 | 8.74 | 3.99 | 12.72 | 0.57 | 15.96 | 23.32 | 21.99 | 6.35 | 4.82 | 13.00 |
| OTHER RETAIL AND SERVICE...... | 2696 | 3339 | 2472 | 2908 | 2813 | 3593 | 2752 | 2962 | 3096 | 3842 | 2835 | 11256 | 11787 | 12653 |
| % CHG SAME QTR LAST YR...... | 2.75 | 4.59 | 2.14 | 3.83 | 4.33 | 7.61 | 11.31 | 1.86 | 10.07 | 6.94 | 3.03 | 5.36 | 4.71 | 7.35 |
| MISC NONDURABLE GOODS......... | 938 | 1087 | 851 | 935 | 967 | 1148 | 907 | 995 | 1006 | 1229 | 896 | 3818 | 3901 | 4137 |
| % CHG SAME QTR LAST YR...... | 4.65 | 3.39 | 0.20 | -0.86 | 3.04 | 5.58 | 6.58 | 6.49 | 4.02 | 7.05 | -1.23 | 5.66 | 2.17 | 6.06 |
| TRANSPORTATION,COMMUNICATION.. | 590 | 587 | 601 | 680 | 642 | 639 | 663 | 608 | 715 | 543 | 828 | 2362 | 2562 | 2528 |
| % CHG SAME QTR LAST YR...... | 20.14 | 16.06 | 3.12 | 13.03 | 8.80 | 8.73 | 10.39 | -10.69 | 11.28 | -15.03 | 24.82 | 25.45 | 8.46 | -1.32 |
| PER CAPITA ($).................. | 2182 | 2234 | 1886 | 2198 | 2213 | 2311 | 2063 | 2266 | 2295 | 2426 | 2095 | 8585 | 8608 | 9050 |
| % CHG SAME QTR LAST YR...... | 0.44 | 1.40 | -3.73 | -0.62 | 1.44 | 3.48 | 9.42 | 3.12 | 3.68 | 4.95 | 1.53 | 3.06 | 0.26 | 5.13 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 20: TENNESSEE TAXABLE SALES
MILLIONS OF SEASONALLY ADJUSTED CURRENT DOLLARS

| | HISTORICAL - DATA | | | | | | | | | | | ANNUAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 199003 | 199004 | 199101 | 199102 | 199103 | 199104 | 199201 | 199202 | 199203 | 199204 | 199301 | 1990 | 1991 | 1992 |
| TOTAL........................... | 10414 | 10416 | 10338 | 10631 | 10722 | 10909 | 11454 | 11128 | 11282 | 11618 | 11774 | 42025 | 42601 | 45482 |
| % CHG PREV QTR SAAR......... | -4.57 | 0.06 | -2.96 | 11.83 | 3.47 | 7.17 | 21.52 | -10.90 | 5.66 | 12.43 | 5.50 | 3.96 | 1.37 | 6.76 |
| % CHG SAME QTR LAST YR...... | 1.47 | 2.31 | -3.01 | 0.90 | 2.96 | 4.74 | 10.80 | 4.68 | 5.22 | 6.49 | 2.80 | 3.96 | 1.37 | 6.76 |
| AUTO DEALERS.................. | 1026 | 1023 | 970 | 1016 | 1036 | 1051 | 1187 | 1075 | 1111 | 1259 | 1268 | 4243 | 4072 | 4633 |
| % CHG PREV QTR SAAR......... | -16.91 | -0.98 | -19.32 | 20.48 | 8.04 | 6.07 | 62.85 | -32.76 | 14.06 | 65.05 | 2.83 | -6.32 | -4.01 | 13.77 |
| % CHG SAME QTR LAST YR...... | -12.43 | -4.67 | -13.37 | -5.43 | 0.98 | 2.73 | 22.45 | 5.84 | 7.28 | 19.82 | 6.81 | -6.32 | -4.01 | 13.77 |
| PURCHASES FROM MANUFACTURERS.. | 754 | 730 | 707 | 728 | 730 | 739 | 771 | 755 | 724 | 745 | 744 | 2983 | 2903 | 2995 |
| % CHG PREV QTR SAAR......... | 8.72 | -12.32 | -12.16 | 12.76 | 0.83 | 5.07 | 18.47 | -7.65 | -15.52 | 11.85 | -0.55 | -0.29 | -2.70 | 3.18 |
| % CHG SAME QTR LAST YR...... | -0.25 | -3.39 | -7.13 | -1.42 | -3.27 | 1.21 | 9.07 | 3.76 | -0.73 | 0.83 | -3.48 | -0.29 | -2.70 | 3.18 |
| MISC DURABLE GOODS............ | 1590 | 1581 | 1534 | 1566 | 1600 | 1598 | 1767 | 1686 | 1709 | 1732 | 1781 | 6552 | 6298 | 6895 |
| % CHG PREV QTR SAAR......... | -14.20 | -2.32 | -11.27 | 8.53 | 9.02 | -0.52 | 49.62 | -17.11 | 5.58 | 5.42 | 11.74 | 1.86 | -3.88 | 9.48 |
| % CHG SAME QTR LAST YR...... | -2.94 | -1.61 | -11.30 | -5.22 | 0.63 | 1.09 | 15.20 | 7.69 | 6.83 | 8.39 | 0.76 | 1.86 | -3.88 | 9.48 |
| EATING AND DRINKING PLACES.... | 840 | 842 | 858 | 875 | 893 | 895 | 949 | 930 | 935 | 956 | 951 | 3380 | 3521 | 3771 |
| % CHG PREV QTR SAAR......... | -4.49 | 1.02 | 7.63 | 8.40 | 8.64 | 0.66 | 26.66 | -8.04 | 2.53 | 9.18 | -2.17 | 6.19 | 4.16 | 7.09 |
| % CHG SAME QTR LAST YR...... | 5.14 | 1.66 | 1.00 | 3.00 | 6.38 | 6.28 | 10.69 | 6.24 | 4.71 | 6.86 | 0.18 | 6.19 | 4.16 | 7.09 |
| FOOD STORES................... | 1547 | 1538 | 1549 | 1528 | 1578 | 1587 | 1590 | 1706 | 1469 | 1637 | 1543 | 6129 | 6242 | 6401 |
| % CHG PREV QTR SAAR......... | 10.14 | -2.18 | 2.83 | -5.38 | 13.88 | 2.20 | 0.67 | 32.66 | -45.06 | 54.20 | -21.10 | 3.95 | 1.85 | 2.54 |
| % CHG SAME QTR LAST YR...... | 5.71 | 3.64 | 1.00 | 1.19 | 2.03 | 3.16 | 2.61 | 11.66 | -6.94 | 3.13 | -2.96 | 3.95 | 1.85 | 2.54 |
| LIQUOR STORES................. | 65 | 66 | 67 | 70 | 69 | 69 | 71 | 69 | 69 | 71 | 67 | 264 | 275 | 281 |
| % CHG PREV QTR SAAR......... | -3.42 | 3.58 | 3.03 | 22.07 | -3.69 | -1.53 | 13.37 | -11.89 | 2.62 | 8.11 | -22.09 | 3.78 | 4.03 | 2.07 |
| % CHG SAME QTR LAST YR...... | 0.66 | 4.49 | -0.09 | 5.91 | 5.84 | 4.51 | 7.03 | -1.34 | 0.23 | 2.60 | -6.58 | 3.78 | 4.03 | 2.07 |
| HOTELS AND MOTELS............. | 251 | 264 | 254 | 271 | 273 | 273 | 287 | 273 | 316 | 337 | 350 | 1027 | 1071 | 1213 |
| % CHG PREV QTR SAAR......... | -9.17 | 21.47 | -14.36 | 29.55 | 3.62 | -0.04 | 20.92 | -17.13 | 78.93 | 28.50 | 16.34 | 6.73 | 4.28 | 13.21 |
| % CHG SAME QTR LAST YR...... | 2.49 | 6.44 | -0.23 | 5.18 | 8.70 | 3.54 | 12.86 | 0.94 | 15.71 | 23.20 | 22.02 | 6.73 | 4.28 | 13.21 |
| OTHER RETAIL AND SERVICE...... | 2792 | 2825 | 2852 | 2953 | 2910 | 3043 | 3165 | 3017 | 3200 | 3253 | 3259 | 11258 | 11758 | 12635 |
| % CHG PREV QTR SAAR......... | -6.00 | 4.88 | 3.79 | 15.00 | -5.80 | 19.65 | 17.08 | -17.48 | 26.51 | 6.85 | 0.72 | 5.44 | 4.44 | 7.46 |
| % CHG SAME QTR LAST YR...... | 2.59 | 4.86 | 1.66 | 4.15 | 4.21 | 7.70 | 10.99 | 2.15 | 9.97 | 6.90 | 2.96 | 5.44 | 4.44 | 7.46 |
| MISC NONDURABLE GOODS......... | 955 | 947 | 953 | 957 | 984 | 1001 | 1014 | 1020 | 1023 | 1072 | 1000 | 3821 | 3895 | 4129 |
| % CHG PREV QTR SAAR......... | -3.77 | -3.02 | 2.40 | 1.66 | 11.77 | 7.18 | 5.11 | 2.46 | 1.35 | 20.58 | -24.29 | 5.80 | 1.94 | 6.01 |
| % CHG SAME QTR LAST YR...... | 4.66 | 3.57 | -0.22 | -0.72 | 3.07 | 5.68 | 6.37 | 6.58 | 4.00 | 7.11 | -1.32 | 5.80 | 1.94 | 6.01 |
| TRANSPORTATION,COMMUNICATION.. | 594 | 599 | 596 | 667 | 649 | 653 | 653 | 596 | 725 | 555 | 812 | 2367 | 2565 | 2529 |
| % CHG PREV QTR SAAR......... | 3.23 | 3.43 | -2.30 | 57.54 | -10.47 | 2.62 | -0.22 | -30.41 | 118.14 | -65.51 | 357.85 | 25.46 | 8.37 | -1.39 |
| % CHG SAME QTR LAST YR...... | 20.67 | 16.89 | 1.90 | 13.22 | 9.26 | 9.05 | 9.62 | -10.63 | 11.66 | -14.98 | 24.43 | 25.46 | 8.37 | -1.39 |
| PER CAPITA ($).................. | 2128 | 2121 | 2098 | 2150 | 2161 | 2191 | 2292 | 2219 | 2242 | 2300 | 2325 | 8594 | 8600 | 9054 |
| % CHG PREV QTR SAAR......... | -5.58 | -1.27 | -4.25 | 10.35 | 2.02 | 5.67 | 19.83 | -12.17 | 4.25 | 10.77 | 4.29 | 3.19 | 0.07 | 5.28 |
| % CHG SAME QTR LAST YR...... | 0.70 | 1.35 | -4.09 | -0.38 | 1.57 | 3.31 | 9.27 | 3.20 | 3.76 | 4.99 | 1.41 | 3.19 | 0.07 | 5.28 |

TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| US GDP (BIL87$)...................... | 3908.2 | 4148.5 | 4280.6 | 4404.0 | 4542.2 | 4719.8 | 4837.2 | 4897.2 | 4862.3 | 4987.4 |
| PERCENTAGE CHANGE................. | 3.92 | 6.15 | 3.18 | 2.88 | 3.14 | 3.91 | 2.49 | 1.24 | -0.71 | 2.57 |
| TN GSP (MIL82$)...................... | 54101.0 | 58775.0 | 61555.0 | 64808.0 | 68846.0 | 72003.0 | 73612.0 | 75016.6 | 75379.0 | 77960.7 |
| PERCENTAGE CHANGE................. | 4.28 | 8.64 | 4.73 | 5.28 | 6.23 | 4.59 | 2.23 | 1.91 | 0.48 | 3.43 |
| US GDP (BIL$)........................ | 3405.1 | 3777.2 | 4038.7 | 4268.6 | 4539.9 | 4900.4 | 5250.8 | 5546.1 | 5722.9 | 6038.5 |
| PERCENTAGE CHANGE................. | 8.11 | 10.93 | 6.92 | 5.69 | 6.36 | 7.94 | 7.15 | 5.62 | 3.19 | 5.51 |
| TN GSP (MIL$)........................ | 56065.0 | 63173.0 | 67967.0 | 73213.0 | 80507.0 | 86949.0 | 92267.0 | 97667.3 | 101328.1 | 107322.5 |
| PERCENTAGE CHANGE................. | 8.07 | 12.68 | 7.59 | 7.72 | 9.96 | 8.00 | 6.12 | 5.85 | 3.75 | 5.92 |
| IMPLICIT DEFLATOR,GDP............... | 87.1 | 91.0 | 94.3 | 96.9 | 99.9 | 103.8 | 108.6 | 113.3 | 117.7 | 121.1 |
| PERCENTAGE CHANGE................. | 4.03 | 4.51 | 3.62 | 2.73 | 3.12 | 3.88 | 4.55 | 4.33 | 3.93 | 2.87 |
| IMPLICIT DEFLATOR,GSP............... | 103.6 | 107.5 | 110.4 | 113.0 | 116.9 | 120.8 | 125.3 | 130.2 | 134.4 | 137.7 |
| PERCENTAGE CHANGE................. | 3.63 | 3.72 | 2.73 | 2.31 | 3.51 | 3.27 | 3.80 | 3.87 | 3.25 | 2.41 |
| US PERS CONS DEFL (1987=100)........ | 86.1 | 89.6 | 93.1 | 96.0 | 100.0 | 104.2 | 109.3 | 114.9 | 119.9 | 123.9 |
| PERCENTAGE CHANGE................. | 4.81 | 4.00 | 3.88 | 3.14 | 4.17 | 4.22 | 4.85 | 5.17 | 4.31 | 3.34 |
| TN PERSONAL INCOME (MIL$)........... | 45955 | 51022 | 54593 | 59101 | 63509 | 68276 | 72779 | 77493 | 81719 | 88584 |
| PERCENTAGE CHANGE................. | 6.52 | 11.03 | 7.00 | 8.26 | 7.46 | 7.51 | 6.60 | 6.48 | 5.45 | 8.40 |
| US PERSONAL INCOME (BIL$)........... | 2862.5 | 3154.6 | 3379.8 | 3590.5 | 3802.0 | 4075.9 | 4380.3 | 4673.8 | 4850.9 | 5144.9 |
| PERCENTAGE CHANGE................. | 6.38 | 10.20 | 7.14 | 6.23 | 5.89 | 7.20 | 7.47 | 6.70 | 3.79 | 6.06 |
| TN PERSONAL INCOME (MIL87$)......... | 53343 | 56944 | 58655 | 61564 | 63509 | 65508 | 66601 | 67429 | 68170 | 71510 |
| PERCENTAGE CHANGE................. | 1.64 | 6.75 | 3.00 | 4.96 | 3.16 | 3.15 | 1.67 | 1.24 | 1.10 | 4.90 |
| US PERSONAL INCOME (BIL87$)......... | 3322.7 | 3520.8 | 3631.2 | 3740.1 | 3802.0 | 3910.7 | 4008.5 | 4066.8 | 4046.6 | 4153.3 |
| PERCENTAGE CHANGE................. | 1.50 | 5.96 | 3.14 | 3.00 | 1.66 | 2.86 | 2.50 | 1.45 | -0.50 | 2.64 |
| TN NONAGRIC JOBS (THOUS)............ | 1719.0 | 1812.0 | 1867.8 | 1929.8 | 2011.6 | 2092.0 | 2167.2 | 2193.2 | 2183.6 | 2232.1 |
| PERCENTAGE CHANGE................. | 0.91 | 5.41 | 3.08 | 3.32 | 4.24 | 4.00 | 3.59 | 1.20 | -0.44 | 2.22 |
| US NONAGRIC JOBS (MIL).............. | 90.1 | 94.4 | 97.4 | 99.3 | 102.0 | 105.2 | 107.9 | 109.4 | 108.3 | 108.5 |
| PERCENTAGE CHANGE................. | 0.66 | 4.72 | 3.16 | 2.01 | 2.63 | 3.19 | 2.56 | 1.42 | -1.06 | 0.24 |
| TN UNEMPLOYMENT RATE (%)............ | 11.5 | 8.6 | 8.0 | 8.0 | 6.6 | 5.8 | 5.1 | 5.2 | 6.6 | 6.4 |
| US UNEMPLOYMENT RATE (%)............ | 9.6 | 7.5 | 7.2 | 7.0 | 6.2 | 5.5 | 5.3 | 5.5 | 6.7 | 7.4 |
| BANK PRIME INTEREST RATE (%)........ | 10.8 | 12.0 | 9.9 | 8.3 | 8.2 | 9.3 | 10.9 | 10.0 | 8.5 | 6.3 |
| TN MFG JOBS (THOUS)................. | 468.6 | 497.1 | 492.4 | 490.5 | 497.4 | 511.9 | 524.5 | 520.3 | 502.7 | 513.0 |
| PERCENTAGE CHANGE................. | 0.31 | 6.08 | -0.94 | -0.39 | 1.42 | 2.90 | 2.47 | -0.81 | -3.39 | 2.05 |

(CONTINUED ON NEXT PAGE)

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS (CONT.)

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TN TAXABLE SALES (MIL$)............. | 25357 | 29273 | 32124 | 34662 | 36728 | 38903 | 40438 | 41991 | 42650 | 45473 |
| PERCENTAGE CHANGE.................. | 2.00 | 15.44 | 9.74 | 7.90 | 5.96 | 5.92 | 3.95 | 3.84 | 1.57 | 6.62 |
| TN TAXABLE SALES (MIL87$)........... | 29434 | 32671 | 34514 | 36106 | 36728 | 37326 | 37006 | 36537 | 35579 | 36709 |
| PERCENTAGE CHANGE.................. | -2.67 | 11.00 | 5.64 | 4.61 | 1.72 | 1.63 | -0.86 | -1.27 | -2.62 | 3.18 |
| TN MFG OUTPUT/EMPLOYEE (THOUS82$)... | 30.8 | 32.2 | 33.7 | 35.2 | 37.5 | 39.5 | 39.9 | 40.8 | 42.3 | 44.7 |
| PERCENTAGE CHANGE.................. | 8.40 | 4.50 | 4.59 | 4.67 | 6.55 | 5.14 | 1.00 | 2.38 | 3.65 | 5.63 |
| TN AVERAGE ANNUAL WAGE,NONAG ($).... | 15987 | 16694 | 17392 | 18110 | 19001 | 19701 | 20133 | 21038 | 21962 | 23283 |
| PERCENTAGE CHANGE.................. | 5.61 | 4.42 | 4.18 | 4.12 | 4.92 | 3.68 | 2.19 | 4.50 | 4.39 | 6.01 |
| TN AVERAGE ANNUAL WAGE,NONAG (87$).. | 18558 | 18632 | 18686 | 18864 | 19001 | 18902 | 18424 | 18306 | 18321 | 18796 |
| PERCENTAGE CHANGE.................. | 0.77 | 0.40 | 0.29 | 0.95 | 0.73 | -0.52 | -2.53 | -0.64 | 0.08 | 2.59 |
| TN TOTAL POPULATION (THOUS)......... | 4661 | 4687 | 4716 | 4740 | 4784 | 4823 | 4854 | 4889 | 4953 | 5023 |
| PERCENTAGE CHANGE.................. | 0.33 | 0.56 | 0.61 | 0.52 | 0.92 | 0.81 | 0.65 | 0.71 | 1.32 | 1.42 |

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TABLE 2: SELECTED PER CAPITA U.S. AND TENNESSEE ECONOMIC INDICATORS

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TN GSP (82 $)........................ | 11608 | 12540 | 13053 | 13672 | 14392 | 14931 | 15165 | 15345 | 15218 | 15519 |
| PERCENTAGE CHANGE................. | 3.94 | 8.03 | 4.09 | 4.74 | 5.26 | 3.75 | 1.57 | 1.19 | -0.83 | 1.98 |
| TN GSP ($)........................... | 12029 | 13478 | 14413 | 15445 | 16829 | 18030 | 19008 | 19979 | 20457 | 21364 |
| PERCENTAGE CHANGE................. | 7.72 | 12.05 | 6.93 | 7.16 | 8.96 | 7.13 | 5.43 | 5.10 | 2.39 | 4.44 |
| US GDP (87 $)........................ | 16659 | 17526 | 17925 | 18274 | 18684 | 19233 | 19529 | 19565 | 19219 | 19497 |
| PERCENTAGE CHANGE................. | 2.99 | 5.21 | 2.28 | 1.95 | 2.25 | 2.94 | 1.54 | 0.19 | -1.77 | 1.45 |
| US GDP ($)........................... | 14514 | 15958 | 16913 | 17712 | 18675 | 19969 | 21198 | 22158 | 22620 | 23606 |
| PERCENTAGE CHANGE................. | 7.14 | 9.95 | 5.98 | 4.73 | 5.44 | 6.93 | 6.16 | 4.53 | 2.09 | 4.36 |
| TN PERSONAL INCOME (87 $)........... | 11445 | 12149 | 12438 | 12987 | 13276 | 13584 | 13721 | 13793 | 13763 | 14235 |
| PERCENTAGE CHANGE................. | 1.31 | 6.15 | 2.38 | 4.42 | 2.22 | 2.32 | 1.01 | 0.53 | -0.22 | 3.43 |
| TN PERSONAL INCOME ($).............. | 9860 | 10886 | 11577 | 12468 | 13276 | 14158 | 14994 | 15852 | 16498 | 17634 |
| PERCENTAGE CHANGE................. | 6.18 | 10.40 | 6.35 | 7.70 | 6.48 | 6.64 | 5.90 | 5.72 | 4.08 | 6.89 |
| US PERSONAL INCOME (87 $)........... | 14163 | 14874 | 15206 | 15519 | 15640 | 15936 | 16183 | 16248 | 15995 | 16237 |
| PERCENTAGE CHANGE................. | 0.59 | 5.02 | 2.23 | 2.06 | 0.78 | 1.89 | 1.55 | 0.40 | -1.56 | 1.51 |
| US PERSONAL INCOME ($).............. | 12202 | 13327 | 14153 | 14898 | 15640 | 16609 | 17684 | 18673 | 19174 | 20113 |
| PERCENTAGE CHANGE................. | 5.42 | 9.23 | 6.20 | 5.27 | 4.98 | 6.20 | 6.47 | 5.59 | 2.68 | 4.90 |
| TN TAXABLE SALES (87 $)............. | 6315 | 6970 | 7319 | 7617 | 7678 | 7740 | 7624 | 7474 | 7183 | 7307 |
| PERCENTAGE CHANGE................. | -2.99 | 10.37 | 5.00 | 4.07 | 0.80 | 0.81 | -1.50 | -1.96 | -3.90 | 1.73 |
| TN TAXABLE SALES ($)................ | 5441 | 6246 | 6812 | 7312 | 7678 | 8067 | 8331 | 8590 | 8611 | 9052 |
| PERCENTAGE CHANGE................. | 1.67 | 14.80 | 9.07 | 7.34 | 5.00 | 5.07 | 3.27 | 3.11 | 0.24 | 5.13 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 3: TENNESSEE PERSONAL INCOME BY COMPONENTS
MILLIONS OF 1987 DOLLARS



| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TOTAL PERSONAL INCOME............... | 53343 | 56944 | 58655 | 61564 | 63509 | 65508 | 66601 | 67429 | 68170 | 71510 |
| PERCENTAGE CHANGE............... | 1.64 | 6.75 | 3.00 | 4.96 | 3.16 | 3.15 | 1.67 | 1.24 | 1.10 | 4.90 |
| WAGES AND SALARIES................ | 32465 | 34352 | 35506 | 36984 | 38817 | 40133 | 40519 | 40767 | 40616 | 42546 |
| PERCENTAGE CHANGE............... | 1.59 | 5.81 | 3.36 | 4.16 | 4.96 | 3.39 | 0.96 | 0.61 | -0.37 | 4.75 |
| OTHER LABOR INCOME................ | 3352 | 3414 | 3412 | 3559 | 3696 | 3908 | 4092 | 4270 | 4522 | 4874 |
| PERCENTAGE CHANGE............... | 2.70 | 1.83 | -0.05 | 4.30 | 3.87 | 5.72 | 4.71 | 4.36 | 5.90 | 7.78 |
| PROPRIETORS INCOME................ | 3974 | 5094 | 5323 | 5685 | 5874 | 5957 | 6050 | 5966 | 6120 | 6640 |
| PERCENTAGE CHANGE............... | 0.39 | 28.19 | 4.49 | 6.80 | 3.32 | 1.42 | 1.56 | -1.39 | 2.58 | 8.50 |
| RENT INTEREST DIVIDENDS........... | 7535 | 8276 | 8532 | 8879 | 8682 | 9101 | 9740 | 9697 | 9313 | 9079 |
| PERCENTAGE CHANGE............... | -0.34 | 9.83 | 3.10 | 4.06 | -2.21 | 4.83 | 7.02 | -0.45 | -3.96 | -2.51 |
| TRANSFER PAYMENTS................. | 8861 | 8799 | 9118 | 9879 | 10010 | 10303 | 10225 | 10796 | 11711 | 12634 |
| PERCENTAGE CHANGE............... | 1.96 | -0.70 | 3.63 | 8.34 | 1.33 | 2.93 | -0.76 | 5.58 | 8.47 | 7.88 |
| LESS:PERS CONT FOR SOC INS........ | 2336 | 2473 | 2681 | 2802 | 2821 | 3134 | 3228 | 3246 | 3340 | 3466 |
| PERCENTAGE CHANGE............... | -4.67 | 5.86 | 8.42 | 4.51 | 0.67 | 11.11 | 3.00 | 0.56 | 2.87 | 3.77 |
| RESIDENCE ADJUSTMENT.............. | -508 | -516 | -554 | -618 | -749 | -760 | -796 | -821 | -771 | -796 |
| PERCENTAGE CHANGE............... | 1.69 | 1.76 | 7.24 | 11.67 | 21.06 | 1.49 | 4.80 | 3.03 | -6.04 | 3.29 |
| PER CAPITA PERSONAL INCOME ($)...... | 11445 | 12149 | 12438 | 12987 | 13276 | 13584 | 13721 | 13793 | 13763 | 14235 |
| PERCENTAGE CHANGE............... | 1.31 | 6.15 | 2.38 | 4.42 | 2.22 | 2.32 | 1.01 | 0.53 | -0.22 | 3.43 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE

TABLE 4: TENNESSEE PERSONAL INCOME BY COMPONENTS

MILLIONS OF CURRENT DOLLARS

H I S T O R I C A L - D A T A

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL PERSONAL INCOME ............. | 45955 | 51022 | 54593 | 59101 | 63509 | 68276 | 72779 | 77493 | 81719 | 88584 |
| PERCENTAGE CHANGE............. | 6.52 | 11.03 | 7.00 | 8.26 | 7.46 | 7.51 | 6.60 | 6.48 | 5.45 | 8.40 |
| WAGES AND SALARIES............... | 27969 | 30780 | 33047 | 35504 | 38817 | 41829 | 44277 | 46852 | 48689 | 52704 |
| PERCENTAGE CHANGE............. | 6.47 | 10.05 | 7.37 | 7.44 | 9.33 | 7.76 | 5.85 | 5.82 | 3.92 | 8.25 |
| OTHER LABOR INCOME............... | 2888 | 3059 | 3176 | 3416 | 3696 | 4073 | 4471 | 4907 | 5421 | 6038 |
| PERCENTAGE CHANGE............. | 7.63 | 5.91 | 3.83 | 7.58 | 8.20 | 10.19 | 9.78 | 9.75 | 10.46 | 11.38 |
| PROPRIETORS INCOME............... | 3424 | 4564 | 4954 | 5458 | 5874 | 6209 | 6611 | 6857 | 7336 | 8225 |
| PERCENTAGE CHANGE............. | 5.21 | 33.32 | 8.54 | 10.16 | 7.62 | 5.71 | 6.48 | 3.71 | 6.99 | 12.12 |
| RENT INTEREST DIVIDENDS.......... | 6491 | 7415 | 7941 | 8524 | 8682 | 9486 | 10644 | 11144 | 11164 | 11247 |
| PERCENTAGE CHANGE............. | 4.44 | 14.23 | 7.10 | 7.33 | 1.86 | 9.26 | 12.20 | 4.70 | 0.18 | 0.74 |
| TRANSFER PAYMENTS................ | 7634 | 7884 | 8487 | 9484 | 10010 | 10738 | 11174 | 12407 | 14038 | 15650 |
| PERCENTAGE CHANGE............. | 6.86 | 3.27 | 7.65 | 11.75 | 5.55 | 7.28 | 4.05 | 11.04 | 13.14 | 11.48 |
| LESS:PERS CONT FOR SOC INS....... | 2013 | 2216 | 2496 | 2690 | 2821 | 3267 | 3528 | 3731 | 4004 | 4293 |
| PERCENTAGE CHANGE............. | -0.09 | 10.10 | 12.62 | 7.79 | 4.86 | 15.80 | 7.99 | 5.76 | 7.30 | 7.23 |
| RESIDENCE ADJUSTMENT............. | -437 | -463 | -516 | -594 | -749 | -792 | -870 | -943 | -924 | -987 |
| PERCENTAGE CHANGE............. | 6.58 | 5.83 | 11.40 | 15.18 | 26.11 | 5.78 | 9.88 | 8.36 | -1.99 | 6.74 |
| PER CAPITA PERSONAL INCOME ($)..... | 9860 | 10886 | 11577 | 12468 | 13276 | 14158 | 14994 | 15852 | 16498 | 17634 |
| PERCENTAGE CHANGE............. | 6.18 | 10.40 | 6.35 | 7.70 | 6.48 | 6.64 | 5.90 | 5.72 | 4.08 | 6.89 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 5: TENNESSEE WAGE AND SALARY EMPLOYMENT BY SECTOR
THOUSANDS OF JOBS

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TOTAL NONAGRICULTURAL.............. | 1719.0 | 1812.0 | 1867.8 | 1929.8 | 2011.6 | 2092.0 | 2167.2 | 2193.2 | 2183.6 | 2232.1 |
| PERCENTAGE CHANGE............ | 0.91 | 5.41 | 3.08 | 3.32 | 4.24 | 4.00 | 3.59 | 1.20 | -0.44 | 2.22 |
| MINING............................ | 7.9 | 8.0 | 7.7 | 7.2 | 6.8 | 6.6 | 6.3 | 6.2 | 5.5 | 5.0 |
| PERCENTAGE CHANGE............ | -14.13 | 1.48 | -3.43 | -7.64 | -5.13 | -2.33 | -4.40 | -2.89 | -10.30 | -9.82 |
| CONSTRUCTION...................... | 69.6 | 78.3 | 85.6 | 90.0 | 95.2 | 96.7 | 97.2 | 92.3 | 86.5 | 85.3 |
| PERCENTAGE CHANGE............ | -3.63 | 12.54 | 9.37 | 5.10 | 5.80 | 1.57 | 0.56 | -5.02 | -6.33 | -1.35 |
| MANUFACTURING..................... | 468.6 | 497.1 | 492.4 | 490.5 | 497.4 | 511.9 | 524.5 | 520.3 | 502.7 | 513.0 |
| PERCENTAGE CHANGE............ | 0.31 | 6.08 | -0.94 | -0.39 | 1.42 | 2.90 | 2.47 | -0.81 | -3.39 | 2.05 |
| DURABLE GOODS.................. | 214.5 | 237.8 | 239.6 | 239.3 | 244.4 | 254.1 | 261.7 | 258.4 | 248.6 | 256.2 |
| PERCENTAGE CHANGE............ | 3.17 | 10.84 | 0.79 | -0.14 | 2.13 | 3.96 | 2.99 | -1.25 | -3.80 | 3.08 |
| NONDURABLE GOODS................ | 254.1 | 259.3 | 252.8 | 251.2 | 253.0 | 257.8 | 262.8 | 261.9 | 254.1 | 256.7 |
| PERCENTAGE CHANGE............ | -1.99 | 2.07 | -2.52 | -0.62 | 0.73 | 1.87 | 1.96 | -0.36 | -2.98 | 1.04 |
| TRADE............................. | 389.9 | 413.3 | 435.3 | 452.1 | 477.2 | 495.6 | 508.4 | 517.2 | 511.6 | 518.6 |
| PERCENTAGE CHANGE............ | 2.47 | 5.99 | 5.33 | 3.85 | 5.57 | 3.86 | 2.58 | 1.73 | -1.09 | 1.37 |
| SERVICES.......................... | 323.4 | 344.3 | 360.2 | 384.7 | 408.9 | 440.3 | 467.2 | 486.3 | 505.2 | 534.5 |
| PERCENTAGE CHANGE............ | 3.28 | 6.48 | 4.60 | 6.81 | 6.30 | 7.68 | 6.11 | 4.09 | 3.88 | 5.81 |
| FIN,INS,REAL EST.................. | 81.9 | 85.9 | 89.4 | 95.4 | 101.4 | 103.2 | 103.4 | 103.1 | 101.6 | 100.7 |
| PERCENTAGE CHANGE............ | 2.54 | 4.81 | 4.12 | 6.68 | 6.32 | 1.78 | 0.19 | -0.35 | -1.44 | -0.84 |
| TRANS,COMM,PUB UTIL............... | 83.7 | 89.1 | 93.0 | 97.6 | 103.4 | 109.2 | 115.8 | 116.4 | 117.4 | 119.6 |
| PERCENTAGE CHANGE............ | -0.39 | 6.47 | 4.44 | 4.92 | 5.98 | 5.61 | 6.00 | 0.55 | 0.81 | 1.92 |
| GOVERNMENT........................ | 294.1 | 296.1 | 304.2 | 312.4 | 321.2 | 328.4 | 344.3 | 351.4 | 353.2 | 355.3 |
| PERCENTAGE CHANGE............ | -1.15 | 0.69 | 2.72 | 2.71 | 2.81 | 2.24 | 4.83 | 2.08 | 0.49 | 0.61 |
| FEDERAL,CIVILIAN............... | 61.8 | 60.1 | 61.3 | 61.6 | 63.4 | 64.5 | 61.8 | 63.6 | 61.7 | 58.3 |
| PERCENTAGE CHANGE............ | -6.39 | -2.82 | 2.04 | 0.46 | 2.94 | 1.80 | -4.29 | 3.00 | -3.03 | -5.43 |
| STATE AND LOCAL................ | 232.3 | 236.1 | 242.9 | 250.8 | 257.8 | 263.9 | 282.5 | 287.8 | 291.5 | 297.0 |
| PERCENTAGE CHANGE............ | 0.35 | 1.63 | 2.89 | 3.28 | 2.78 | 2.35 | 7.06 | 1.88 | 1.27 | 1.89 |
| FARM.............................. | 21.8 | 19.6 | 12.1 | 16.1 | 13.0 | 12.6 | 15.6 | 16.4 | 13.5 | 15.2 |
| PERCENTAGE CHANGE............ | 8.28 | -10.10 | -38.35 | 33.14 | -18.74 | -3.53 | 24.24 | 5.14 | -17.87 | 12.38 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 6: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF [illegible]RS

| | H I S T O R I C A L - D A T A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TOTAL DURABLE GOODS................. | 214.5 | 237.8 | 239.6 | 239.3 | 244.4 | 254.1 | 261.7 | 258.4 | 248.6 | 256.2 |
| PERCENTAGE CHANGE............... | 3.17 | 10.84 | 0.79 | -0.14 | 2.13 | 3.96 | 2.99 | -1.25 | -3.80 | 3.08 |
| LUMBER AND WOOD................... | 17.2 | 18.9 | 18.3 | 18.6 | 21.3 | 21.6 | 21.0 | 20.2 | 18.3 | 18.5 |
| PERCENTAGE CHANGE............... | 7.97 | 9.85 | -2.87 | 1.41 | 14.45 | 1.72 | -2.77 | -3.88 | -9.40 | 1.14 |
| FURNITURE AND FIXTURES............ | 21.5 | 24.2 | 24.3 | 24.5 | 24.7 | 26.0 | 27.2 | 27.1 | 26.1 | 27.3 |
| PERCENTAGE CHANGE............... | 4.49 | 12.34 | 0.48 | 0.65 | 1.09 | 4.92 | 4.65 | -0.21 | -3.57 | 4.43 |
| STONE,CLAY AND GLASS.............. | 12.9 | 14.3 | 14.3 | 15.1 | 15.3 | 14.8 | 14.8 | 14.3 | 13.5 | 14.0 |
| PERCENTAGE CHANGE............... | 4.05 | 11.15 | 0.06 | 5.31 | 1.33 | -2.95 | -0.23 | -2.93 | -6.05 | 4.15 |
| PRIMARY METALS.................... | 15.5 | 16.2 | 16.8 | 16.2 | 15.7 | 15.7 | 15.8 | 15.6 | 15.1 | 15.2 |
| PERCENTAGE CHANGE............... | -5.24 | 4.46 | 3.80 | -3.86 | -2.89 | -0.11 | 0.53 | -1.32 | -2.68 | 0.22 |
| FABRICATED METALS................. | 35.5 | 39.3 | 39.3 | 39.1 | 39.9 | 42.2 | 42.9 | 43.2 | 41.7 | 41.7 |
| PERCENTAGE CHANGE............... | 5.39 | 10.43 | 0.11 | -0.47 | 2.05 | 5.62 | 1.72 | 0.64 | -3.44 | -0.02 |
| NONELECTRICAL MACHINERY........... | 31.7 | 36.7 | 37.8 | 37.3 | 36.4 | 37.1 | 40.1 | 38.1 | 35.4 | 36.8 |
| PERCENTAGE CHANGE............... | -0.08 | 15.70 | 2.84 | -1.30 | -2.44 | 2.13 | 8.10 | -5.04 | -7.26 | 4.13 |
| ELECTRICAL MACHINERY.............. | 37.5 | 39.9 | 37.6 | 35.2 | 35.7 | 38.4 | 40.0 | 37.3 | 35.5 | 35.8 |
| PERCENTAGE CHANGE............... | 0.40 | 6.30 | -5.72 | -6.47 | 1.56 | 7.41 | 4.15 | -6.59 | -4.91 | 0.89 |
| TRANSPORTATION EQUIPMENT.......... | 24.4 | 29.1 | 31.5 | 33.0 | 34.7 | 36.0 | 36.9 | 39.4 | 41.3 | 45.4 |
| PERCENTAGE CHANGE............... | 6.95 | 19.34 | 8.49 | 4.55 | 5.36 | 3.53 | 2.64 | 6.66 | 4.87 | 9.91 |
| INSTRUMENTS....................... | 8.2 | 8.9 | 9.1 | 9.6 | 9.3 | 9.9 | 10.7 | 11.0 | 10.8 | 10.2 |
| PERCENTAGE CHANGE............... | 8.81 | 8.50 | 2.43 | 4.92 | -2.86 | 6.08 | 8.00 | 2.81 | -1.97 | -5.34 |
| MISCELLANEOUS..................... | 10.0 | 10.3 | 10.5 | 10.9 | 11.4 | 12.5 | 12.4 | 12.2 | 10.9 | 11.4 |
| PERCENTAGE CHANGE............... | 6.08 | 3.08 | 1.77 | 3.49 | 4.52 | 9.74 | -1.00 | -1.15 | -10.57 | 3.89 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 7: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
THOUSANDS OF JOBS



| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TOTAL NONDURABLE GOODS.............. | 254.1 | 259.3 | 252.8 | 251.2 | 253.0 | 257.8 | 262.8 | 261.9 | 254.1 | 256.7 |
| PERCENTAGE CHANGE............... | -1.99 | 2.07 | -2.52 | -0.62 | 0.73 | 1.87 | 1.96 | -0.36 | -2.98 | 1.04 |
| FOOD............................ | 36.9 | 37.2 | 37.6 | 38.4 | 38.7 | 39.2 | 38.8 | 38.8 | 37.3 | 35.8 |
| PERCENTAGE CHANGE............... | -3.02 | 0.63 | 1.23 | 2.10 | 0.65 | 1.49 | -1.15 | -0.09 | -3.87 | -3.78 |
| TOBACCO......................... | 1.5 | 1.7 | 1.6 | 1.6 | 1.4 | 1.0 | 1.2 | 1.4 | 1.3 | 1.2 |
| PERCENTAGE CHANGE............... | -8.96 | 9.84 | -5.47 | 1.05 | -11.46 | -26.47 | 12.80 | 18.44 | -6.59 | -7.69 |
| TEXTILES........................ | 25.2 | 25.6 | 23.1 | 23.1 | 24.0 | 23.1 | 22.2 | 20.8 | 20.2 | 20.6 |
| PERCENTAGE CHANGE............... | -0.95 | 1.45 | -9.58 | -0.04 | 3.79 | -3.61 | -3.93 | -6.41 | -2.85 | 2.02 |
| APPAREL......................... | 64.8 | 68.6 | 65.4 | 63.8 | 64.7 | 65.1 | 65.7 | 64.2 | 60.6 | 61.2 |
| PERCENTAGE CHANGE............... | 1.66 | 5.81 | -4.64 | -2.45 | 1.41 | 0.58 | 1.06 | -2.29 | -5.59 | 0.92 |
| PAPER........................... | 16.9 | 17.6 | 17.9 | 18.3 | 18.9 | 19.7 | 20.8 | 21.4 | 21.6 | 22.1 |
| PERCENTAGE CHANGE............... | 0.25 | 4.45 | 1.32 | 2.75 | 2.86 | 4.33 | 5.42 | 2.89 | 1.13 | 2.32 |
| PRINTING AND PUBLISHING........... | 29.1 | 30.4 | 31.6 | 32.9 | 33.9 | 35.4 | 36.8 | 37.6 | 37.0 | 36.6 |
| PERCENTAGE CHANGE............... | 4.83 | 4.38 | 4.03 | 4.06 | 3.19 | 4.42 | 3.95 | 2.06 | -1.62 | -1.01 |
| CHEMICALS....................... | 43.0 | 41.5 | 40.0 | 37.9 | 37.4 | 38.5 | 39.3 | 39.7 | 39.2 | 39.8 |
| PERCENTAGE CHANGE............... | -11.42 | -3.53 | -3.52 | -5.31 | -1.25 | 2.85 | 2.01 | 1.13 | -1.30 | 1.62 |
| PETROLEUM REFINING.............. | 0.8 | 0.7 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 0.9 | 0.7 |
| PERCENTAGE CHANGE............... | 2.25 | -3.30 | 12.50 | 7.07 | 3.77 | 4.55 | 0.00 | 0.00 | -8.70 | -22.86 |
| RUBBER AND PLASTICS............... | 21.0 | 22.8 | 24.0 | 24.2 | 23.9 | 25.5 | 27.6 | 28.1 | 27.7 | 30.2 |
| PERCENTAGE CHANGE............... | 7.82 | 8.49 | 5.19 | 0.83 | -1.17 | 6.76 | 8.03 | 2.06 | -1.54 | 9.06 |
| LEATHER......................... | 14.9 | 13.3 | 10.8 | 10.1 | 9.3 | 9.3 | 9.6 | 9.0 | 8.4 | 8.5 |
| PERCENTAGE CHANGE............... | -12.20 | -10.31 | -18.99 | -6.32 | -8.48 | -0.09 | 3.24 | -5.93 | -6.86 | 1.29 |

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TABLE 8: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
1987 DOL

I S T O R I C A L - D A T A

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL NONAGRICULTURAL............... | 18558 | 18632 | 18686 | 18864 | 19001 | 18902 | 18424 | 18306 | 18321 | 18796 |
| PERCENTAGE CHANGE............. | 0.77 | 0.40 | 0.29 | 0.95 | 0.73 | -0.52 | -2.53 | -0.64 | 0.08 | 2.59 |
| MINING............................ | 23619 | 23458 | 23558 | 23274 | 23993 | 24982 | 24961 | 24335 | 22796 | 23772 |
| PERCENTAGE CHANGE............. | -1.86 | -0.68 | 0.43 | -1.21 | 3.09 | 4.12 | -0.08 | -2.51 | -6.33 | 4.28 |
| CONSTRUCTION...................... | 19913 | 19781 | 19677 | 20287 | 20352 | 20516 | 20244 | 19921 | 19859 | 20730 |
| PERCENTAGE CHANGE............. | -3.60 | -0.66 | -0.53 | 3.10 | 0.32 | 0.80 | -1.32 | -1.60 | -0.31 | 4.38 |
| MANUFACTURING..................... | 20384 | 20291 | 20500 | 20881 | 20833 | 20808 | 20465 | 20333 | 20750 | 21477 |
| PERCENTAGE CHANGE............. | 2.23 | -0.45 | 1.03 | 1.86 | -0.23 | -0.12 | -1.65 | -0.65 | 2.05 | 3.51 |
| DURABLE GOODS................... | 19983 | 21354 | 21618 | 22163 | 21945 | 21773 | 21268 | 21071 | 21547 | 22243 |
| PERCENTAGE CHANGE............. | 0.96 | 6.86 | 1.24 | 2.52 | -0.98 | -0.78 | -2.32 | -0.93 | 2.26 | 3.23 |
| NONDURABLE GOODS................ | 20723 | 19318 | 19440 | 19660 | 19760 | 19857 | 19666 | 19605 | 19970 | 20713 |
| PERCENTAGE CHANGE............. | 3.32 | -6.78 | 0.63 | 1.13 | 0.51 | 0.49 | -0.96 | -0.31 | 1.86 | 3.72 |
| TRADE............................. | 14453 | 14565 | 14424 | 14548 | 14553 | 14458 | 14060 | 13750 | 13866 | 14410 |
| PERCENTAGE CHANGE............. | -0.90 | 0.77 | -0.97 | 0.85 | 0.04 | -0.66 | -2.75 | -2.20 | 0.84 | 3.93 |
| SERVICES.......................... | 17110 | 17628 | 17585 | 17690 | 18148 | 17945 | 17857 | 17952 | 17729 | 18176 |
| PERCENTAGE CHANGE............. | 1.66 | 3.03 | -0.24 | 0.60 | 2.59 | -1.12 | -0.49 | 0.53 | -1.24 | 2.52 |
| FIN,INS,REAL EST.................. | 20873 | 20974 | 21734 | 22553 | 22739 | 22318 | 21690 | 21408 | 21778 | 23270 |
| PERCENTAGE CHANGE............. | 3.14 | 0.48 | 3.62 | 3.77 | 0.82 | -1.85 | -2.82 | -1.30 | 1.73 | 6.85 |
| TRANS,COMM,PUB UTIL............... | 26844 | 26358 | 26136 | 25921 | 26036 | 25622 | 24687 | 24863 | 24747 | 25006 |
| PERCENTAGE CHANGE............. | 1.44 | -1.81 | -0.84 | -0.82 | 0.44 | -1.59 | -3.65 | 0.71 | -0.47 | 1.05 |
| GOVERNMENT........................ | 19223 | 19252 | 19577 | 19548 | 19906 | 20018 | 18805 | 18887 | 18588 | 18364 |
| PERCENTAGE CHANGE............. | 0.58 | 0.15 | 1.69 | -0.15 | 1.83 | 0.56 | -6.06 | 0.43 | -1.58 | -1.20 |
| FEDERAL,CIVILIAN................ | 29329 | 29389 | 29230 | 28255 | 28765 | 29211 | 27446 | 28098 | 28025 | 28481 |
| PERCENTAGE CHANGE............. | 3.25 | 0.21 | -0.54 | -3.33 | 1.80 | 1.55 | -6.04 | 2.37 | -0.26 | 1.63 |
| STATE AND LOCAL................. | 16534 | 16673 | 17142 | 17411 | 17729 | 17771 | 16917 | 16851 | 16591 | 16377 |
| PERCENTAGE CHANGE............. | 0.44 | 0.84 | 2.81 | 1.57 | 1.83 | 0.24 | -4.80 | -0.39 | -1.55 | -1.29 |
| AGRICULTURE....................... | 5709 | 5963 | 9267 | 6164 | 7148 | 7243 | 6190 | 6484 | 7477 | 6186 |
| PERCENTAGE CHANGE............. | -17.11 | 4.45 | 55.40 | -33.48 | 15.96 | 1.33 | -14.54 | 4.76 | 15.31 | -17.27 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 9: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
CURRENT DOLLARS

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TOTAL NONAGRICULTURAL............... | 15987 | 16694 | 17392 | 18110 | 19001 | 19701 | 20133 | 21038 | 21962 | 23283 |
| PERCENTAGE CHANGE........... | 5.61 | 4.42 | 4.18 | 4.12 | 4.92 | 3.68 | 2.19 | 4.50 | 4.39 | 6.01 |
| MINING............................ | 20348 | 21019 | 21927 | 22343 | 23993 | 26038 | 27276 | 27967 | 27326 | 29447 |
| PERCENTAGE CHANGE........... | 2.86 | 3.30 | 4.32 | 1.90 | 7.38 | 8.52 | 4.76 | 2.53 | -2.29 | 7.76 |
| CONSTRUCTION...................... | 17155 | 17724 | 18314 | 19476 | 20352 | 21382 | 22122 | 22894 | 23806 | 25679 |
| PERCENTAGE CHANGE............. | 1.03 | 3.32 | 3.33 | 6.34 | 4.50 | 5.06 | 3.46 | 3.49 | 3.99 | 7.86 |
| MANUFACTURING..................... | 17561 | 18181 | 19080 | 20046 | 20833 | 21687 | 22364 | 23368 | 24874 | 26605 |
| ERCENTAGE CHANGE............. | 7.14 | 3.53 | 4.94 | 5.06 | 3.93 | 4.10 | 3.12 | 4.49 | 6.45 | 6.96 |
| DURABLE GOODS.................. | 17215 | 19133 | 20121 | 21276 | 21945 | 22693 | 23241 | 24215 | 25829 | 27554 |
| PERCENTAGE CHANGE............. | 5.81 | 11.14 | 5.16 | 5.74 | 3.14 | 3.41 | 2.41 | 4.19 | 6.66 | 6.68 |
| NONDURABLE GOODS................ | 17853 | 17309 | 18094 | 18874 | 19760 | 20696 | 21490 | 22531 | 23939 | 25658 |
| PERCENTAGE CHANGE............. | 8.28 | -3.05 | 4.54 | 4.31 | 4.69 | 4.74 | 3.84 | 4.84 | 6.25 | 7.18 |
| TRADE............................. | 12452 | 13050 | 13426 | 13966 | 14553 | 15068 | 15364 | 15802 | 16622 | 17851 |
| PERCENTAGE CHANGE............. | 3.86 | 4.81 | 2.88 | 4.02 | 4.21 | 3.54 | 1.96 | 2.86 | 5.18 | 7.40 |
| SERVICES.......................... | 14740 | 15795 | 16367 | 16983 | 18148 | 18703 | 19513 | 20631 | 21253 | 22516 |
| PERCENTAGE CHANGE............. | 6.55 | 7.16 | 3.62 | 3.76 | 6.86 | 3.06 | 4.33 | 5.73 | 3.01 | 5.94 |
| FIN,INS,REAL EST.................. | 17982 | 18793 | 20229 | 21651 | 22739 | 23261 | 23701 | 24603 | 26107 | 28826 |
| PERCENTAGE CHANGE............. | 8.10 | 4.51 | 7.64 | 7.03 | 5.03 | 2.30 | 1.89 | 3.80 | 6.11 | 10.42 |
| TRANS,COMM,PUB UTIL............... | 23126 | 23617 | 24326 | 24884 | 26036 | 26704 | 26977 | 28574 | 29666 | 30976 |
| PERCENTAGE CHANGE............. | 6.31 | 2.12 | 3.01 | 2.29 | 4.63 | 2.57 | 1.02 | 5.92 | 3.82 | 4.42 |
| GOVERNMENT........................ | 16560 | 17250 | 18222 | 18766 | 19906 | 20864 | 20550 | 21705 | 22282 | 22748 |
| PERCENTAGE CHANGE............. | 5.41 | 4.16 | 5.63 | 2.99 | 6.08 | 4.81 | -1.51 | 5.62 | 2.66 | 2.09 |
| FEDERAL,CIVILIAN................ | 25267 | 26333 | 27206 | 27125 | 28765 | 30446 | 29992 | 32292 | 33595 | 35281 |
| PERCENTAGE CHANGE............. | 8.21 | 4.22 | 3.31 | -0.30 | 6.05 | 5.84 | -1.49 | 7.67 | 4.04 | 5.02 |
| STATE AND LOCAL................. | 14244 | 14939 | 15955 | 16714 | 17729 | 18521 | 18486 | 19366 | 19888 | 20287 |
| PERCENTAGE CHANGE............. | 5.27 | 4.88 | 6.80 | 4.76 | 6.07 | 4.47 | -0.19 | 4.76 | 2.70 | 2.01 |
| AGRICULTURE......................... | 4918 | 5343 | 8625 | 5918 | 7148 | 7549 | 6764 | 7452 | 8963 | 7663 |
| PERCENTAGE CHANGE........... | -13.12 | 8.63 | 61.42 | -31.39 | 20.79 | 5.61 | -10.40 | 10.18 | 20.27 | -14.51 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 10: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE

| | ISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| CIVILIAN LABOR FORCE (THOUS)........ | 2180 | 2220 | 2253 | 2290 | 2334 | 2338 | 2368 | 2397 | 2416 | 2440 |
| PERCENTAGE CHANGE............... | 2.40 | 1.83 | 1.49 | 1.64 | 1.92 | 0.17 | 1.28 | 1.22 | 0.79 | 0.99 |
| EMPLOYED PERSONS (THOUS).......... | 1930 | 2030 | 2073 | 2106 | 2180 | 2203 | 2247 | 2272 | 2256 | 2285 |
| PERCENTAGE CHANGE............... | 2.82 | 5.18 | 2.12 | 1.59 | 3.51 | 1.06 | 2.00 | 1.11 | -0.70 | 1.29 |
| UNEMPLOYED PERSONS (THOUS)........ | 250 | 190 | 180 | 184 | 154 | 135 | 121 | 125 | 160 | 155 |
| PERCENTAGE CHANGE............... | -0.79 | -24.00 | -5.26 | 2.23 | -16.31 | -12.35 | -10.35 | 3.31 | 28.00 | -3.13 |
| PARTICIPATION RATE (PERCENT)........ | 60.9 | 61.3 | 61.5 | 61.8 | 62.1 | 61.5 | 61.8 | 62.0 | 61.5 | 61.0 |
| PERCENTAGE CHANGE............... | 1.52 | 0.79 | 0.26 | 0.55 | 0.35 | -0.86 | 0.45 | 0.32 | -0.87 | -0.78 |
| UNEMPLOYMENT RATE (PERCENT)......... | 11.5 | 8.6 | 8.0 | 8.0 | 6.6 | 5.8 | 5.1 | 5.2 | 6.6 | 6.4 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 11: TENNESSEE TAXABLE SALES
MILLIONS OF 1987 DOLLARS

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TOTAL................................ | 29434 | 32671 | 34514 | 36106 | 36728 | 37326 | 37006 | 36537 | 35579 | 36709 |
| PERCENTAGE CHANGE............... | -2.67 | 11.00 | 5.64 | 4.61 | 1.72 | 1.63 | -0.86 | -1.27 | -2.62 | 3.18 |
| AUTO DEALERS...................... | 2845 | 3323 | 3740 | 4231 | 4379 | 4393 | 4150 | 3688 | 3398 | 3726 |
| PERCENTAGE CHANGE............... | 14.21 | 16.80 | 12.54 | 13.13 | 3.49 | 0.33 | -5.54 | -11.12 | -7.87 | 9.66 |
| PURCHASES FROM MANUFACTURERS...... | 2239 | 2471 | 2680 | 2429 | 2452 | 2671 | 2735 | 2593 | 2424 | 2415 |
| PERCENTAGE CHANGE............... | 5.85 | 10.37 | 8.44 | -9.38 | 0.95 | 8.93 | 2.41 | -5.17 | -6.55 | -0.36 |
| MISC DURABLE GOODS................ | 4616 | 5407 | 5806 | 6199 | 6239 | 6135 | 5887 | 5687 | 5259 | 5559 |
| PERCENTAGE CHANGE............... | 5.66 | 17.14 | 7.38 | 6.77 | 0.64 | -1.66 | -4.05 | -3.40 | -7.53 | 5.71 |
| EATING AND DRINKING PLACES........ | 2114 | 2343 | 2468 | 2675 | 2782 | 2849 | 2914 | 2941 | 2939 | 3043 |
| PERCENTAGE CHANGE............... | -6.00 | 10.81 | 5.34 | 8.39 | 4.00 | 2.42 | 2.27 | 0.92 | -0.05 | 3.53 |
| FOOD STORES....................... | 5355 | 5486 | 5556 | 5483 | 5584 | 5515 | 5397 | 5333 | 5209 | 5163 |
| PERCENTAGE CHANGE............... | -8.47 | 2.45 | 1.28 | -1.32 | 1.85 | -1.24 | -2.15 | -1.19 | -2.33 | -0.88 |
| LIQUOR STORES..................... | 268 | 260 | 266 | 295 | 256 | 244 | 233 | 230 | 229 | 227 |
| PERCENTAGE CHANGE............... | -9.21 | -2.69 | 2.04 | 11.22 | -13.34 | -4.85 | -4.42 | -1.30 | -0.18 | -1.22 |
| HOTELS AND MOTELS................. | 596 | 663 | 700 | 803 | 814 | 855 | 884 | 894 | 898 | 982 |
| PERCENTAGE CHANGE............... | -20.79 | 11.35 | 5.57 | 14.70 | 1.33 | 5.10 | 3.31 | 1.12 | 0.49 | 9.35 |
| OTHER RETAIL AND SERVICE.......... | 7392 | 8306 | 8729 | 9278 | 9551 | 9778 | 9777 | 9795 | 9832 | 10214 |
| PERCENTAGE CHANGE............... | -5.86 | 12.37 | 5.09 | 6.29 | 2.95 | 2.37 | -0.01 | 0.18 | 0.39 | 3.88 |
| MISC NONDURABLE GOODS............. | 2768 | 3144 | 3192 | 3283 | 3191 | 3272 | 3307 | 3322 | 3254 | 3340 |
| PERCENTAGE CHANGE............... | -4.04 | 13.57 | 1.55 | 2.83 | -2.79 | 2.53 | 1.06 | 0.47 | -2.05 | 2.64 |
| TRANSPORTATION,COMMUNICATION...... | 1241 | 1266 | 1376 | 1429 | 1480 | 1613 | 1723 | 2055 | 2137 | 2041 |
| PERCENTAGE CHANGE............... | -10.34 | 2.02 | 8.68 | 3.87 | 3.51 | 9.02 | 6.81 | 19.29 | 3.98 | -4.51 |
| PER CAPITA TOTAL TAXABLE SALES ($).. | 6315 | 6970 | 7319 | 7617 | 7678 | 7740 | 7624 | 7474 | 7183 | 7307 |
| PERCENTAGE CHANGE............... | -2.99 | 10.37 | 5.00 | 4.07 | 0.80 | 0.81 | -1.50 | -1.96 | -3.90 | 1.73 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 12: TENNESSEE TAXABLE SALES
MILLIONS OF CURRENT DOLLARS

HISTORICAL-DATA

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL............................... | 25357 | 29273 | 32124 | 34662 | 36728 | 38903 | 40438 | 41991 | 42650 | 45473 |
| PERCENTAGE CHANGE............... | 2.00 | 15.44 | 9.74 | 7.90 | 5.96 | 5.92 | 3.95 | 3.84 | 1.57 | 6.62 |
| AUTO DEALERS...................... | 2451 | 2978 | 3481 | 4062 | 4379 | 4579 | 4535 | 4239 | 4073 | 4616 |
| PERCENTAGE CHANGE............... | 19.70 | 21.47 | 16.91 | 16.69 | 7.80 | 4.57 | -0.96 | -6.53 | -3.90 | 13.32 |
| PURCHASES FROM MANUFACTURERS...... | 1929 | 2214 | 2494 | 2331 | 2452 | 2783 | 2989 | 2981 | 2905 | 2991 |
| PERCENTAGE CHANGE............... | 10.94 | 14.79 | 12.64 | -6.53 | 5.15 | 13.53 | 7.37 | -0.27 | -2.53 | 2.96 |
| MISC DURABLE GOODS................ | 3977 | 4845 | 5404 | 5951 | 6239 | 6394 | 6433 | 6535 | 6304 | 6886 |
| PERCENTAGE CHANGE............... | 10.74 | 21.83 | 11.54 | 10.12 | 4.83 | 2.49 | 0.60 | 1.60 | -3.54 | 9.24 |
| EATING AND DRINKING PLACES........ | 1822 | 2099 | 2297 | 2568 | 2782 | 2970 | 3184 | 3380 | 3523 | 3769 |
| PERCENTAGE CHANGE............... | -1.48 | 15.25 | 9.42 | 11.79 | 8.33 | 6.75 | 7.23 | 6.14 | 4.25 | 6.98 |
| FOOD STORES....................... | 4613 | 4915 | 5171 | 5264 | 5584 | 5748 | 5898 | 6129 | 6244 | 6395 |
| PERCENTAGE CHANGE............... | -4.07 | 6.56 | 5.21 | 1.78 | 6.09 | 2.94 | 2.60 | 3.92 | 1.87 | 2.43 |
| LIQUOR STORES..................... | 230 | 233 | 247 | 284 | 256 | 254 | 254 | 264 | 275 | 281 |
| PERCENTAGE CHANGE............... | -4.85 | 1.21 | 6.00 | 14.71 | -9.73 | -0.83 | 0.21 | 3.80 | 4.12 | 2.08 |
| HOTELS AND MOTELS................. | 513 | 594 | 652 | 771 | 814 | 892 | 966 | 1027 | 1076 | 1216 |
| PERCENTAGE CHANGE............... | -16.98 | 15.81 | 9.66 | 18.30 | 5.55 | 9.54 | 8.31 | 6.35 | 4.82 | 13.00 |
| OTHER RETAIL AND SERVICE.......... | 6368 | 7442 | 8124 | 8907 | 9551 | 10191 | 10684 | 11256 | 11787 | 12653 |
| PERCENTAGE CHANGE............... | -1.34 | 16.87 | 9.17 | 9.63 | 7.24 | 6.70 | 4.83 | 5.36 | 4.71 | 7.35 |
| MISC NONDURABLE GOODS............. | 2385 | 2817 | 2971 | 3152 | 3191 | 3410 | 3613 | 3818 | 3901 | 4137 |
| PERCENTAGE CHANGE............... | 0.57 | 18.12 | 5.48 | 6.07 | 1.26 | 6.86 | 5.95 | 5.66 | 2.17 | 6.06 |
| TRANSPORTATION,COMMUNICATION...... | 1069 | 1135 | 1281 | 1372 | 1480 | 1681 | 1883 | 2362 | 2562 | 2528 |
| PERCENTAGE CHANGE............... | -6.03 | 6.11 | 12.90 | 7.14 | 7.83 | 13.63 | 11.99 | 25.45 | 8.46 | -1.32 |
| PER CAPITA TOTAL TAXABLE SALES ($).. | 5441 | 6246 | 6812 | 7312 | 7678 | 8067 | 8331 | 8590 | 8611 | 9052 |
| PERCENTAGE CHANGE............... | 1.67 | 14.80 | 9.07 | 7.34 | 5.00 | 5.07 | 3.27 | 3.11 | 0.24 | 5.13 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 13: TENNESSEE GROSS STATE PRODUCT BY SECTOR
MILLIONS OF 1982 DOLLARS

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| GROSS STATE PRODUCT | 54101.0 | 58775.0 | 61555.0 | 64808.0 | 68846.0 | 72003.0 | 73612.0 | 75016.6 | 75379.0 | 77960.7 |
| PERCENTAGE CHANGE | 4.28 | 8.64 | 4.73 | 5.28 | 6.23 | 4.59 | 2.23 | 1.91 | 0.48 | 3.43 |
| MINING | 355.0 | 366.0 | 364.0 | 377.0 | 398.0 | 438.0 | 417.0 | 427.4 | 402.7 | 383.7 |
| PERCENTAGE CHANGE | 1.43 | 3.10 | -0.55 | 3.57 | 5.57 | 10.05 | -4.79 | 2.49 | -5.78 | -4.71 |
| CONSTRUCTION | 2090.0 | 2350.0 | 2534.0 | 2785.0 | 2931.0 | 2890.0 | 2900.0 | 2751.3 | 2569.1 | 2560.8 |
| PERCENTAGE CHANGE | -1.14 | 12.44 | 7.83 | 9.91 | 5.24 | -1.40 | 0.35 | -5.13 | -6.62 | -0.33 |
| MANUFACTURING | 14433.0 | 16000.0 | 16577.0 | 17284.0 | 18677.0 | 20207.0 | 20913.0 | 21238.6 | 21269.1 | 22927.0 |
| PERCENTAGE CHANGE | 8.73 | 10.86 | 3.61 | 4.26 | 8.06 | 8.19 | 3.49 | 1.56 | 0.14 | 7.79 |
| DURABLE GOODS | 6536.0 | 8478.0 | 9006.0 | 9450.0 | 10333.0 | 11624.0 | 12184.0 | 12437.8 | 12421.9 | 13645.8 |
| PERCENTAGE CHANGE | 11.73 | 29.71 | 6.23 | 4.93 | 9.34 | 12.49 | 4.82 | 2.08 | -0.13 | 9.85 |
| NONDURABLE GOODS | 7897.0 | 7523.0 | 7571.0 | 7835.0 | 8344.0 | 8583.0 | 8729.0 | 8800.8 | 8847.1 | 9281.2 |
| PERCENTAGE CHANGE | 6.39 | -4.74 | 0.64 | 3.49 | 6.50 | 2.86 | 1.70 | 0.82 | 0.53 | 4.91 |
| TRADE | 10069.0 | 11296.0 | 12045.0 | 13155.0 | 13178.0 | 13640.0 | 14024.0 | 14298.5 | 14454.5 | 14481.0 |
| PERCENTAGE CHANGE | 4.87 | 12.19 | 6.63 | 9.22 | 0.17 | 3.51 | 2.82 | 1.96 | 1.09 | 0.18 |
| SERVICES | 7445.0 | 8043.0 | 8462.0 | 8950.0 | 9343.0 | 9818.0 | 10352.0 | 10773.9 | 11022.7 | 11739.0 |
| PERCENTAGE CHANGE | 3.27 | 8.03 | 5.21 | 5.77 | 4.39 | 5.08 | 5.44 | 4.08 | 2.31 | 6.50 |
| FINANCE,INSURANCE AND REAL ESTATE | 7422.0 | 7855.0 | 8320.0 | 8534.0 | 9021.0 | 9349.0 | 9347.0 | 9393.3 | 9378.1 | 9420.4 |
| PERCENTAGE CHANGE | 3.41 | 5.83 | 5.92 | 2.57 | 5.71 | 3.64 | -0.02 | 0.50 | -0.16 | 0.45 |
| TRANS.,COMM.,AND PUBLIC UTIL | 4163.0 | 4505.0 | 4642.0 | 5073.0 | 5917.0 | 6238.0 | 6456.0 | 6575.7 | 6735.2 | 6941.6 |
| PERCENTAGE CHANGE | 11.97 | 8.22 | 3.04 | 9.28 | 16.64 | 5.43 | 3.49 | 1.85 | 2.43 | 3.06 |
| GOVERNMENT | 6775.0 | 6789.0 | 7016.0 | 7113.0 | 7665.0 | 7778.0 | 7662.0 | 7879.1 | 7848.7 | 7791.4 |
| PERCENTAGE CHANGE | 0.33 | 0.21 | 3.34 | 1.38 | 7.76 | 1.47 | -1.49 | 2.83 | -0.39 | -0.73 |
| FEDERAL CIVILIAN | 2438.0 | 2402.0 | 2544.0 | 2623.0 | 2825.0 | 2837.0 | 2679.0 | 2779.6 | 2733.4 | 2637.7 |
| PERCENTAGE CHANGE | 1.71 | -1.48 | 5.91 | 3.11 | 7.70 | 0.42 | -5.57 | 3.76 | -1.66 | -3.50 |
| FEDERAL MILITARY | 401.0 | 401.0 | 394.0 | 400.0 | 410.0 | 408.0 | 403.0 | 421.5 | 427.1 | 417.9 |
| PERCENTAGE CHANGE | -0.25 | 0.00 | -1.75 | 1.52 | 2.50 | -0.49 | -1.23 | 4.59 | 1.33 | -2.15 |
| STATE AND LOCAL | 3936.0 | 3985.0 | 4078.0 | 4089.0 | 4430.0 | 4533.0 | 4580.0 | 4677.9 | 4688.2 | 4735.8 |
| PERCENTAGE CHANGE | -0.46 | 1.24 | 2.33 | 0.27 | 8.34 | 2.33 | 1.04 | 2.14 | 0.22 | 1.01 |
| AGRICULTURE | 1349.0 | 1572.0 | 1596.0 | 1536.0 | 1718.0 | 1646.0 | 1540.0 | 1678.8 | 1698.9 | 1715.9 |
| PERCENTAGE CHANGE | -19.89 | 16.53 | 1.53 | -3.76 | 11.85 | -4.19 | -6.44 | 9.01 | 1.20 | 1.01 |
| FARM | 1140.0 | 1353.0 | 1395.0 | 1319.0 | 1439.0 | 1377.0 | 1269.0 | 1401.6 | 1415.6 | 1426.8 |
| PERCENTAGE CHANGE | -24.75 | 18.68 | 3.10 | -5.45 | 9.10 | -4.31 | -7.84 | 10.45 | 1.00 | 0.79 |
| AG SERVICES,FORESTRY,FISHERIES | 209.0 | 219.0 | 201.0 | 218.0 | 279.0 | 269.0 | 271.0 | 277.2 | 283.2 | 289.1 |
| PERCENTAGE CHANGE | 24.40 | 4.78 | -8.22 | 8.46 | 27.98 | -3.58 | 0.74 | 2.29 | 2.17 | 2.09 |
| [illegible]PITA GROSS STATE PRODUCT ($) | 11607.8 | 12540.0 | 13053.1 | [illegible] | 14391.6 | 14930.6 | 15165.2 | 15345.4 | 15218.1 | 15519.4 |
| PERCENTAGE CHANGE | 3.94 | 8.03 | 4.09 | [illegible] | 5.26 | 3.75 | 1.57 | 1.19 | -0.83 | 1.98 |

## TABLE 14: TENNESSEE DURABLE GOODS MANUFACTURING GROSS PRODUCT
MILLIONS OF 19[illegible]LARS

[illegible]ISTORICAL-DATA

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL DURABLE GOODS................. | 6536.0 | 8478.0 | 9006.0 | 9450.0 | 10333.0 | 11624.0 | 12184.0 | 12437.8 | 12421.9 | 13645.8 |
| PERCENTAGE CHANGE............... | 11.73 | 29.71 | 6.23 | 4.93 | 9.34 | 12.49 | 4.82 | 2.08 | -0.13 | 9.85 |
| LUMBER AND WOOD PRODUCTS.......... | 355.0 | 401.0 | 363.0 | 399.0 | 531.0 | 566.0 | 537.0 | 507.9 | 459.8 | 469.3 |
| PERCENTAGE CHANGE............... | 18.33 | 12.96 | -9.48 | 9.92 | 33.08 | 6.59 | -5.12 | -5.42 | -9.47 | 2.07 |
| FURNITURE AND FIXTURES............ | 440.0 | 503.0 | 542.0 | 522.0 | 546.0 | 519.0 | 546.0 | 566.0 | 577.5 | 613.0 |
| PERCENTAGE CHANGE............... | 13.99 | 14.32 | 7.75 | -3.69 | 4.60 | -4.95 | 5.20 | 3.67 | 2.03 | 6.15 |
| STONE,CLAY AND GLASS.............. | 440.0 | 524.0 | 542.0 | 584.0 | 583.0 | 598.0 | 606.0 | 593.5 | 562.2 | 598.9 |
| PERCENTAGE CHANGE............... | 15.79 | 19.09 | 3.44 | 7.75 | -0.17 | 2.57 | 1.34 | -2.07 | -5.27 | 6.53 |
| PRIMARY METALS.................... | 372.0 | 429.0 | 449.0 | 491.0 | 514.0 | 561.0 | 543.0 | 532.3 | 531.9 | 554.5 |
| PERCENTAGE CHANGE............... | -11.64 | 15.32 | 4.66 | 9.35 | 4.68 | 9.14 | -3.21 | -1.97 | -0.09 | 4.26 |
| FABRICATED METAL PRODUCTS......... | 861.0 | 1357.0 | 1429.0 | 1429.0 | 1552.0 | 1787.0 | 1833.0 | 1884.9 | 1848.0 | 1971.2 |
| PERCENTAGE CHANGE............... | 9.26 | 57.61 | 5.31 | 0.00 | 8.61 | 15.14 | 2.57 | 2.83 | -1.96 | 6.66 |
| NONELECTRICAL MACHINERY........... | 1608.0 | 2170.0 | 2563.0 | 2789.0 | 3040.0 | 3603.0 | 3950.0 | 4133.2 | 4153.9 | 4850.6 |
| PERCENTAGE CHANGE............... | 15.43 | 34.95 | 18.11 | 8.82 | 9.00 | 18.52 | 9.63 | 4.64 | 0.50 | 16.77 |
| ELECTRICAL MACHINERY.............. | 1102.0 | 1249.0 | 1205.0 | 1186.0 | 1358.0 | 1508.0 | 1641.0 | 1576.3 | 1574.1 | 1630.9 |
| PERCENTAGE CHANGE............... | 6.47 | 13.34 | -3.52 | -1.58 | 14.50 | 11.05 | 8.82 | -3.94 | -0.14 | 3.61 |
| TRANSPORTATION EQUIPMENT.......... | 912.0 | 1255.0 | 1332.0 | 1410.0 | 1515.0 | 1705.0 | 1765.0 | 1881.0 | 1991.2 | 2193.0 |
| PERCENTAGE CHANGE............... | 32.17 | 37.61 | 6.14 | 5.86 | 7.45 | 12.54 | 3.52 | 6.57 | 5.86 | 10.14 |
| INSTRUMENTS....................... | 218.0 | 249.0 | 251.0 | 271.0 | 277.0 | 301.0 | 307.0 | 327.7 | 321.2 | 316.2 |
| PERCENTAGE CHANGE............... | 5.31 | 14.22 | 0.80 | 7.97 | 2.21 | 8.66 | 1.99 | 6.74 | -1.98 | -1.56 |
| MISCELLANEOUS DURABLE GOODS....... | 228.0 | 342.0 | 331.0 | 369.0 | 416.0 | 474.0 | 458.0 | 435.0 | 402.1 | 448.2 |
| PERCENTAGE CHANGE............... | -9.16 | 50.00 | -3.22 | 11.48 | 12.74 | 13.94 | -3.38 | -5.02 | -7.56 | 11.46 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 15: TENNESSEE NONDURABLE GOODS MANUFACTURING GROSS PRODUCT
MILLIONS OF 1982 DOLLARS

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TOTAL NONDURABLE GOODS.............. | 7897.0 | 7523.0 | 7571.0 | 7835.0 | 8344.0 | 8583.0 | 8729.0 | 8800.8 | 8847.1 | 9281.2 |
| PERCENTAGE CHANGE............... | 6.39 | -4.74 | 0.64 | 3.49 | 6.50 | 2.86 | 1.70 | 0.82 | 0.53 | 4.91 |
| FOOD............................ | 1415.0 | 1450.0 | 1555.0 | 1592.0 | 1625.0 | 1661.0 | 1716.0 | 1729.7 | 1696.2 | 1699.4 |
| PERCENTAGE CHANGE............... | 1.87 | 2.47 | 7.24 | 2.38 | 2.07 | 2.22 | 3.31 | 0.80 | -1.94 | 0.19 |
| TOBACCO......................... | 116.0 | 126.0 | 105.0 | 114.0 | 77.0 | 57.0 | 47.0 | 51.5 | 42.8 | 35.7 |
| PERCENTAGE CHANGE............... | -27.04 | 8.62 | -16.67 | 8.57 | -32.46 | -25.97 | -17.54 | 9.57 | -16.85 | -16.69 |
| TEXTILES........................ | 493.0 | 494.0 | 450.0 | 492.0 | 509.0 | 478.0 | 473.0 | 450.1 | 451.3 | 481.5 |
| PERCENTAGE CHANGE............... | 12.81 | 0.20 | -8.91 | 9.33 | 3.46 | -6.09 | -1.05 | -4.84 | 0.26 | 6.69 |
| APPAREL......................... | 960.0 | 974.0 | 946.0 | 1008.0 | 1064.0 | 1102.0 | 1111.0 | 1080.8 | 1025.5 | 1058.2 |
| PERCENTAGE CHANGE............... | 9.84 | 1.46 | -2.87 | 6.55 | 5.56 | 3.57 | 0.82 | -2.72 | -5.11 | 3.19 |
| PAPER........................... | 830.0 | 855.0 | 896.0 | 942.0 | 1053.0 | 1136.0 | 1130.0 | 1164.1 | 1162.9 | 1212.6 |
| PERCENTAGE CHANGE............... | 8.07 | 3.01 | 4.80 | 5.13 | 11.78 | 7.88 | -0.53 | 3.02 | -0.11 | 4.28 |
| PRINTING AND PUBLISHING........... | 624.0 | 638.0 | 662.0 | 696.0 | 728.0 | 773.0 | 780.0 | 781.3 | 775.7 | 794.3 |
| PERCENTAGE CHANGE............... | 8.52 | 2.24 | 3.76 | 5.14 | 4.60 | 6.18 | 0.91 | 0.17 | -0.73 | 2.40 |
| CHEMICALS....................... | 2297.0 | 1689.0 | 1645.0 | 1738.0 | 1926.0 | 1935.0 | 1926.0 | 1950.7 | 2051.3 | 2229.6 |
| PERCENTAGE CHANGE............... | 7.54 | -26.47 | -2.61 | 5.65 | 10.82 | 0.47 | -0.47 | 1.28 | 5.16 | 8.69 |
| PETROLEUM REFINING................ | 13.0 | 16.0 | 16.0 | 24.0 | 21.0 | 22.0 | 24.0 | 24.9 | 23.5 | 18.7 |
| PERCENTAGE CHANGE............... | 44.44 | 23.08 | 0.00 | 50.00 | -12.50 | 4.76 | 9.09 | 3.84 | -5.87 | -20.18 |
| RUBBER AND PLASTICS............... | 829.0 | 980.0 | 1066.0 | 1038.0 | 1129.0 | 1215.0 | 1316.0 | 1370.3 | 1430.0 | 1563.7 |
| PERCENTAGE CHANGE............... | 17.42 | 18.21 | 8.78 | -2.63 | 8.77 | 7.62 | 8.31 | 4.13 | 4.36 | 9.35 |
| LEATHER......................... | 319.0 | 300.0 | 231.0 | 191.0 | 213.0 | 205.0 | 206.0 | 197.3 | 188.0 | 187.6 |
| PERCENTAGE CHANGE............... | -13.55 | -5.96 | -23.00 | -17.32 | 11.52 | -3.76 | 0.49 | -4.21 | -4.71 | -0.21 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 16: TENNESSEE GROSS STATE PRODUCT BY SECTOR
MILLIONS OF CURRENT DOLLARS

HISTORICAL-DATA

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|
| GROSS STATE PRODUCT.................. | 56065 | 63173 | 67967 | 73213 | 80507 | 86949 | 92267 | 97667 | 101328 | 107323 |
| PERCENTAGE CHANGE............ | 8.07 | 12.68 | 7.59 | 7.72 | 9.96 | 8.00 | 6.12 | 5.85 | 3.75 | 5.92 |
| MINING............................ | 338 | 337 | 326 | 315 | 337 | 375 | 354 | 367 | 349 | 335 |
| PERCENTAGE CHANGE............ | -3.43 | -0.30 | -3.26 | -3.37 | 6.98 | 11.28 | -5.60 | 3.76 | -4.96 | -4.11 |
| CONSTRUCTION...................... | 2139 | 2528 | 2844 | 3251 | 3619 | 3855 | 4013 | 3889 | 3680 | 3727 |
| PERCENTAGE CHANGE............ | 1.18 | 18.19 | 12.50 | 14.31 | 11.32 | 6.52 | 4.10 | -3.10 | -5.38 | 1.29 |
| MANUFACTURING..................... | 14578 | 16422 | 16864 | 17957 | 19461 | 21046 | 22161 | 22889 | 23172 | 24926 |
| PERCENTAGE CHANGE............ | 9.82 | 12.65 | 2.69 | 6.48 | 8.38 | 8.14 | 5.30 | 3.29 | 1.23 | 7.57 |
| DURABLE GOODS................... | 6525 | 8417 | 8643 | 9252 | 9977 | 10681 | 11243 | 11545 | 11553 | 12500 |
| PERCENTAGE CHANGE............ | 11.54 | 29.00 | 2.69 | 7.05 | 7.84 | 7.06 | 5.26 | 2.69 | 0.07 | 8.20 |
| NONDURABLE GOODS................ | 8053 | 8005 | 8221 | 8705 | 9484 | 10365 | 10918 | 11344 | 11618 | 12426 |
| PERCENTAGE CHANGE............ | 8.49 | -0.60 | 2.70 | 5.89 | 8.95 | 9.29 | 5.34 | 3.90 | 2.42 | 6.95 |
| TRADE............................. | 10316 | 11781 | 12762 | 13580 | 14510 | 15391 | 16174 | 17459 | 18271 | 18779 |
| PERCENTAGE CHANGE............ | 7.45 | 14.20 | 8.33 | 6.41 | 6.85 | 6.07 | 5.09 | 7.94 | 4.65 | 2.79 |
| SERVICES.......................... | 7982 | 9154 | 10180 | 11371 | 12529 | 13998 | 15494 | 16848 | 18181 | 20292 |
| PERCENTAGE CHANGE............ | 10.72 | 14.68 | 11.21 | 11.70 | 10.18 | 11.72 | 10.69 | 8.74 | 7.91 | 11.61 |
| FINANCE,INSURANCE AND REAL ESTATE. | 8058 | 8817 | 10046 | 11042 | 12221 | 13152 | 13981 | 14710 | 15360 | 16087 |
| PERCENTAGE CHANGE............ | 12.28 | 9.42 | 13.94 | 9.91 | 10.68 | 7.62 | 6.30 | 5.21 | 4.42 | 4.73 |
| TRANS.,COMM.,AND PUBLIC UTIL...... | 4177 | 4709 | 5047 | 5558 | 6371 | 6904 | 7326 | 7609 | 8041 | 8404 |
| PERCENTAGE CHANGE............ | 12.35 | 12.74 | 7.18 | 10.12 | 14.63 | 8.37 | 6.11 | 3.87 | 5.67 | 4.51 |
| GOVERNMENT........................ | 7170 | 7679 | 8370 | 8754 | 9821 | 10458 | 11026 | 11875 | 12328 | 12836 |
| PERCENTAGE CHANGE............ | 6.18 | 7.10 | 9.00 | 4.59 | 12.19 | 6.49 | 5.43 | 7.70 | 3.82 | 4.12 |
| FEDERAL CIVILIAN................ | 2547 | 2701 | 3016 | 3111 | 3454 | 3597 | 3716 | 4045 | 4148 | 4279 |
| PERCENTAGE CHANGE............ | 6.26 | 6.05 | 11.66 | 3.15 | 11.03 | 4.14 | 3.31 | 8.86 | 2.55 | 3.14 |
| FEDERAL MILITARY................ | 420 | 440 | 452 | 468 | 498 | 515 | 537 | 584 | 613 | 625 |
| PERCENTAGE CHANGE............ | 4.48 | 4.76 | 2.73 | 3.54 | 6.41 | 3.41 | 4.27 | 8.67 | 4.99 | 1.99 |
| STATE AND LOCAL................. | 4203 | 4538 | 4902 | 5175 | 5869 | 6347 | 6772 | 7246 | 7567 | 7932 |
| PERCENTAGE CHANGE............ | 6.30 | 7.97 | 8.02 | 5.57 | 13.41 | 8.14 | 6.70 | 7.00 | 4.43 | 4.83 |
| AGRICULTURE....................... | 1307 | 1746 | 1528 | 1387 | 1640 | 1768 | 1738 | 2021 | 1946 | 1936 |
| PERCENTAGE CHANGE............ | -22.39 | 33.59 | -12.49 | -9.23 | 18.24 | 7.80 | -1.70 | 16.26 | -3.68 | -0.52 |
| FARM............................ | 1102 | 1534 | 1324 | 1188 | 1353 | 1476 | 1426 | 1626 | 1546 | 1529 |
| PERCENTAGE CHANGE............ | -27.26 | 39.20 | -13.69 | -10.27 | 13.89 | 9.09 | -3.39 | 14.02 | -4.92 | -1.12 |
| AG SERVICES,FORESTRY,FISHERIES.. | 204 | 213 | 203 | 199 | 286 | 292 | 312 | 395 | 400 | 407 |
| PERCENTAGE CHANGE............ | 21.43 | 4.41 | -4.69 | -1.97 | 43.72 | 2.10 | 6.85 | 26.50 | 1.45 | 1.77 |
| PER CAPITA GROSS STATE PRODUCT ($).. | 12029 | 13478 | 14413 | 15445 | 16829 | 18030 | 19008 | 19979 | 20457 | 21364 |
| PERCENTAGE CHANGE............ | 7.72 | 12.05 | 6.93 | 7.16 | 8.96 | 7.13 | 5.43 | 5.10 | 2.39 | 4.44 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 17: TENNESSEE DURABLE GOODS MANUFACTURING GROSS PRODUCT
MILLIONS OF CURRENT DOLLARS



| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| TOTAL DURABLE GOODS................. | 6525 | 8417 | 8643 | 9252 | 9977 | 10681 | 11243 | 11545 | 11553 | 12500 |
| PERCENTAGE CHANGE............... | 11.54 | 29.00 | 2.69 | 7.05 | 7.84 | 7.06 | 5.26 | 2.69 | 0.07 | 8.20 |
| LUMBER AND WOOD PRODUCTS.......... | 388 | 437 | 407 | 462 | 626 | 666 | 673 | 643 | 587 | 618 |
| PERCENTAGE CHANGE............... | 29.33 | 12.63 | -6.86 | 13.51 | 35.50 | 6.39 | 1.05 | -4.50 | -8.65 | 5.32 |
| FURNITURE AND FIXTURES............ | 451 | 537 | 612 | 619 | 656 | 646 | 712 | 742 | 758 | 803 |
| PERCENTAGE CHANGE............... | 16.84 | 19.07 | 13.97 | 1.14 | 5.98 | -1.52 | 10.22 | 4.27 | 2.09 | 6.01 |
| STONE,CLAY AND GLASS.............. | 451 | 564 | 606 | 687 | 681 | 672 | 677 | 663 | 626 | 664 |
| PERCENTAGE CHANGE............... | 18.68 | 25.06 | 7.45 | 13.37 | -0.87 | -1.32 | 0.74 | -2.05 | -5.63 | 6.07 |
| PRIMARY METALS.................... | 391 | 466 | 479 | 600 | 533 | 643 | 654 | 674 | 699 | 744 |
| PERCENTAGE CHANGE............... | -7.13 | 19.18 | 2.79 | 25.26 | -11.17 | 20.64 | 1.71 | 3.06 | 3.65 | 6.53 |
| FABRICATED METAL PRODUCTS......... | 841 | 1363 | 1470 | 1511 | 1592 | 1763 | 1894 | 2029 | 2050 | 2224 |
| PERCENTAGE CHANGE............... | 6.73 | 62.07 | 7.85 | 2.79 | 5.36 | 10.74 | 7.43 | 7.15 | 1.01 | 8.49 |
| NONELECTRICAL MACHINERY........... | 1428 | 1755 | 1706 | 1781 | 1957 | 2114 | 2198 | 2251 | 2261 | 2565 |
| PERCENTAGE CHANGE............... | 2.51 | 22.90 | -2.79 | 4.40 | 9.88 | 8.02 | 3.97 | 2.42 | 0.43 | 13.44 |
| ELECTRICAL MACHINERY.............. | 1156 | 1357 | 1332 | 1323 | 1468 | 1550 | 1751 | 1716 | 1676 | 1729 |
| PERCENTAGE CHANGE............... | 11.69 | 17.39 | -1.84 | -0.68 | 10.96 | 5.59 | 12.97 | -2.02 | -2.28 | 3.12 |
| TRANSPORTATION EQUIPMENT.......... | 947 | 1327 | 1432 | 1605 | 1752 | 1820 | 1851 | 1992 | 2121 | 2343 |
| PERCENTAGE CHANGE............... | 37.25 | 40.13 | 7.91 | 12.08 | 9.16 | 3.88 | 1.70 | 7.62 | 6.49 | 10.47 |
| INSTRUMENTS....................... | 226 | 266 | 267 | 286 | 289 | 326 | 352 | 376 | 368 | 362 |
| PERCENTAGE CHANGE............... | 9.18 | 17.70 | 0.38 | 7.12 | 1.05 | 12.80 | 7.98 | 6.76 | -2.05 | -1.75 |
| MISCELLANEOUS DURABLE GOODS....... | 247 | 343 | 331 | 377 | 423 | 481 | 483 | 459 | 407 | 448 |
| PERCENTAGE CHANGE............... | -1.59 | 38.87 | -3.50 | 13.90 | 12.20 | 13.71 | 0.42 | -4.98 | -11.25 | 10.05 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

TABLE 18: TENNESSEE NONDURABLE GOODS MANUFACTURING GROSS PRODUCT
MILLIONS OF CURRENT DOLLARS

H I S T O R I C A L - D A T A

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL NONDURABLE GOODS.............. | 8053 | 8005 | 8221 | 8705 | 9484 | 10365 | 10918 | 11344 | 11618 | 12426 |
| PERCENTAGE CHANGE............... | 8.49 | -0.60 | 2.70 | 5.89 | 8.95 | 9.29 | 5.34 | 3.90 | 2.42 | 6.95 |
| FOOD.............................. | 1461 | 1557 | 1675 | 1722 | 1830 | 1980 | 1989 | 2041 | 2073 | 2124 |
| PERCENTAGE CHANGE............... | 5.18 | 6.57 | 7.58 | 2.81 | 6.27 | 8.20 | 0.45 | 2.60 | 1.61 | 2.46 |
| TOBACCO........................... | 174 | 207 | 205 | 234 | 210 | 219 | 248 | 361 | 389 | 413 |
| PERCENTAGE CHANGE............... | 9.43 | 18.97 | -0.97 | 14.15 | -10.26 | 4.29 | 13.24 | 45.73 | 7.53 | 6.16 |
| TEXTILES.......................... | 515 | 537 | 494 | 552 | 587 | 577 | 588 | 567 | 576 | 621 |
| PERCENTAGE CHANGE............... | 17.85 | 4.27 | -8.01 | 11.74 | 6.34 | -1.70 | 1.91 | -3.52 | 1.46 | 7.90 |
| APPAREL........................... | 970 | 988 | 971 | 1052 | 1089 | 1158 | 1221 | 1212 | 1171 | 1240 |
| PERCENTAGE CHANGE............... | 10.98 | 1.86 | -1.72 | 8.34 | 3.52 | 6.34 | 5.44 | -0.77 | -3.35 | 5.90 |
| PAPER............................. | 795 | 925 | 983 | 1059 | 1256 | 1502 | 1604 | 1719 | 1715 | 1813 |
| PERCENTAGE CHANGE............... | 3.52 | 16.35 | 6.27 | 7.73 | 18.60 | 19.59 | 6.79 | 7.15 | -0.21 | 5.70 |
| PRINTING AND PUBLISHING........... | 667 | 744 | 817 | 917 | 995 | 1089 | 1180 | 1256 | 1321 | 1419 |
| PERCENTAGE CHANGE............... | 16.00 | 11.54 | 9.81 | 12.24 | 8.51 | 9.45 | 8.36 | 6.46 | 5.18 | 7.39 |
| CHEMICALS......................... | 2292 | 1762 | 1777 | 1906 | 2167 | 2392 | 2498 | 2539 | 2682 | 2970 |
| PERCENTAGE CHANGE............... | 7.30 | -23.12 | 0.85 | 7.26 | 13.69 | 10.38 | 4.43 | 1.63 | 5.63 | 10.74 |
| PETROLEUM REFINING................ | 12 | 14 | 13 | 21 | 14 | 17 | 18 | 21 | 20 | 16 |
| PERCENTAGE CHANGE............... | 33.33 | 16.67 | -7.14 | 61.54 | -33.33 | 21.43 | 5.88 | 15.56 | -1.46 | -24.20 |
| RUBBER AND PLASTICS............... | 843 | 967 | 1041 | 1045 | 1103 | 1202 | 1326 | 1381 | 1425 | 1557 |
| PERCENTAGE CHANGE............... | 19.41 | 14.71 | 7.65 | 0.38 | 5.55 | 8.98 | 10.32 | 4.15 | 3.19 | 9.23 |
| LEATHER........................... | 325 | 303 | 245 | 199 | 231 | 229 | 246 | 248 | 246 | 254 |
| PERCENTAGE CHANGE............... | -11.92 | -6.77 | -19.14 | -18.78 | 16.08 | -0.87 | 7.42 | 0.73 | -0.77 | 3.38 |

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1993 UPDATE
TABLE 19: TENNESSEE ENERGY CONSUMPTION - SELECTED CATEGORIES

| | HISTORICAL-DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| ELECTRICITY (MIL. KWH).............. | 58316 | 61079 | 61658 | 64580 | 65878 | 68955 | 69734 | 71641 | 73116 | 72929 |
| PERCENTAGE CHANGE............... | 4.11 | 4.74 | 0.95 | 4.74 | 2.01 | 4.67 | 1.13 | 2.73 | 2.06 | -0.26 |
| RESIDENTIAL........................ | 24277 | 25189 | 24959 | 26452 | 27202 | 28324 | 27638 | 28069 | 29090 | 28486 |
| PERCENTAGE CHANGE............... | 2.03 | 3.76 | -0.91 | 5.98 | 2.84 | 4.12 | -2.42 | 1.56 | 3.64 | -2.07 |
| COMMERCIAL & INDUSTRIAL (<=50 KWH) | 4668 | 4987 | 5010 | 5427 | 6068 | 5649 | 5735 | 5976 | 6211 | 5053 |
| PERCENTAGE CHANGE............... | 5.52 | 6.83 | 0.46 | 8.33 | 11.81 | -6.91 | 1.52 | 4.20 | 3.94 | -18.64 |
| COMMERCIAL & INDUSTRIAL (> 50 KWH) | 21453 | 22837 | 23472 | 24352 | 25137 | 26803 | 27780 | 28646 | 29155 | 31186 |
| PERCENTAGE CHANGE............... | 2.85 | 6.45 | 2.78 | 3.75 | 3.22 | 6.63 | 3.65 | 3.12 | 1.78 | 6.97 |
| DIRECTLY SERVED COMM AND IND...... | 7918 | 8066 | 8217 | 8349 | 7471 | 8179 | 8581 | 8950 | 8660 | 8204 |
| PERCENTAGE CHANGE............... | 14.09 | 1.87 | 1.87 | 1.61 | -10.52 | 9.48 | 4.92 | 4.30 | -3.23 | -5.28 |
| GASOLINE (MIL. GAL.)................ | 2293 | 2458 | 2496 | 2594 | 2693 | 2510 | 2600 | 2460 | 2370 | 2508 |
| PERCENTAGE CHANGE............... | -0.97 | 7.20 | 1.53 | 3.93 | 3.83 | -6.82 | 3.59 | -5.35 | -3.69 | 5.82 |
| MOTOR VEHICLE REGISTRATIONS......... | 3537 | 3569 | 3754 | 3932 | 4027 | 4226 | 4316 | 4444 | 4542 | 4645 |
| PERCENTAGE CHANGE............... | 4.61 | 0.90 | 5.19 | 4.75 | 2.40 | 4.94 | 2.13 | 2.98 | 2.20 | 2.28 |

CENTER FOR BUSINESS AND ECONOMIC RESEARCH,UT-KNOXVILLE.

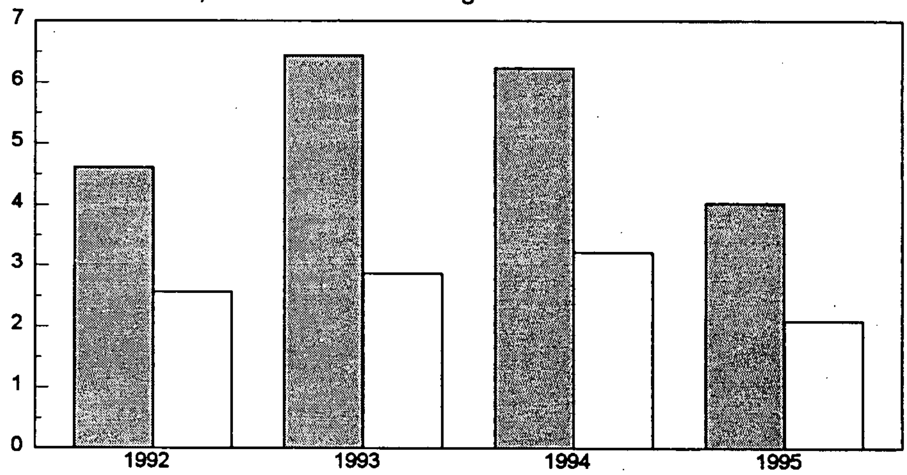
# Economic Forecast Summary

Community Partnerships Tennessee Valley Authority **1994**

### VALLEY OUTPERFORMS NATION OVER THE RECOVERY PERIOD

The Valley has been outperforming the nation over the recovery period, with faster gross product growth than the nation. Gross product for the region is expected to again experience much faster growth than the U.S. in 1994, as it did the previous year. In 1995, growth is expected to slow down, following the national pattern.

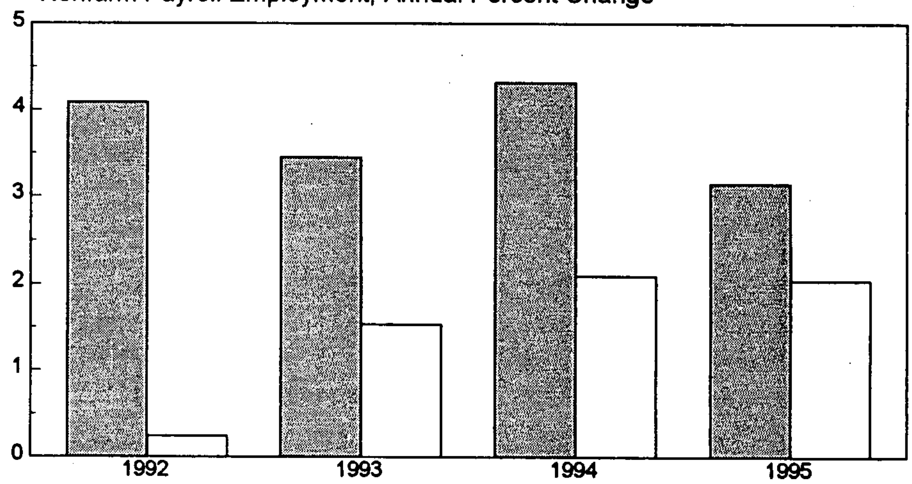
Gross Product, Annual Percent Change




### JOB GROWTH IS EXPECTED TO PICK UP

Unlike the U.S., the Valley has been experiencing healthy increases in employment. The nation finally started adding jobs in 1993 and is expected to add them at a faster rate in 1994. The region is also expected to pick up its pace of job growth in 1994 before slowing in 1995.

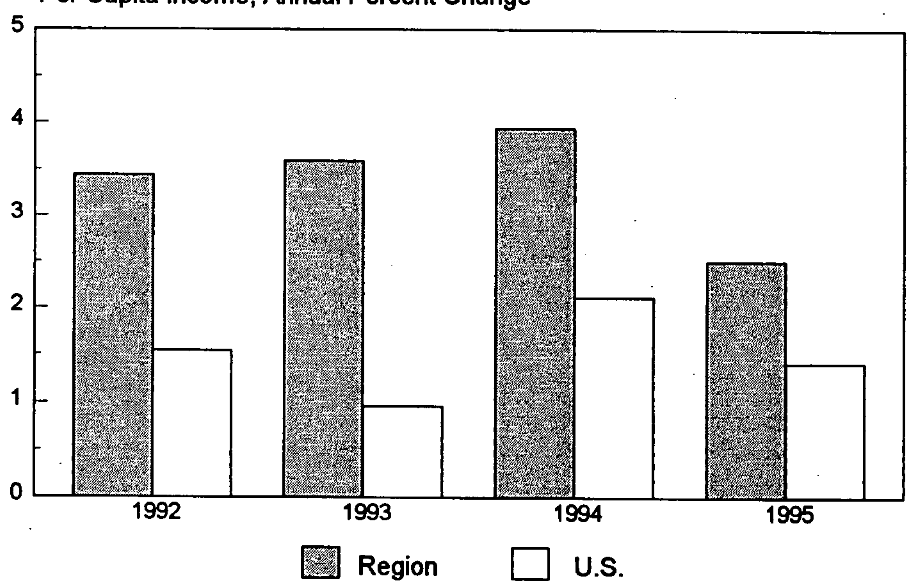
Nonfarm Payroll Employment, Annual Percent Change




### PER CAPITA INCOME SHOWS HEALTHY GROWTH IN VALLEY

Valley per capita income growth exceeded that of the nation in 1992 and 1993. The nation is expected to show a faster rate of per capita income growth in 1994 than in the previous two years, but the region is still expected to outperform the nation. Both the region and the nation are expected to exhibit a slower rate of growth in 1995.

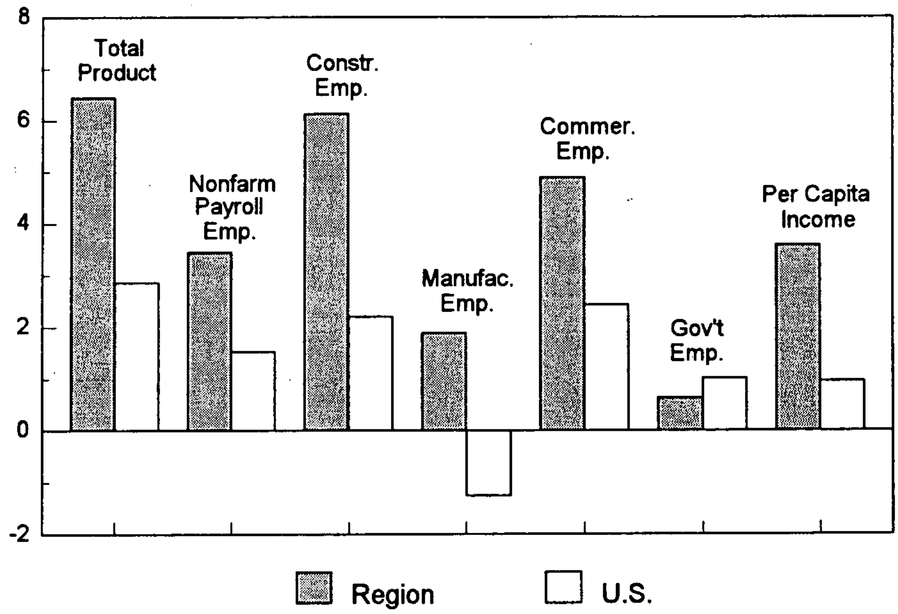
Per Capita Income, Annual Percent Change



## STRONG MANUFACTURING GROWTH LED VALLEY TO OUTPERFORM U.S. IN 1993

As mortgage and other interest rates came down in 1993, national demand for housing, durables (autos and appliances, for example), and business equipment picked up considerably in the latter part of the year. This greatly benefited the Valley's manufacturing sector. Auto-related manufacturing had already enjoyed a more favorable position in the region than the U.S. with expansions by Nissan and Saturn. Carpets, furniture, appliances, and other construction-related manufacturing (which make up a significant portion of the Valley's manufacturing) picked up steam, not only from the increase in national construction activity, but from a sizable increase in the Valley's construction activity as well. The Valley economy ended the year on a very upbeat note.

Percent Change in 1993



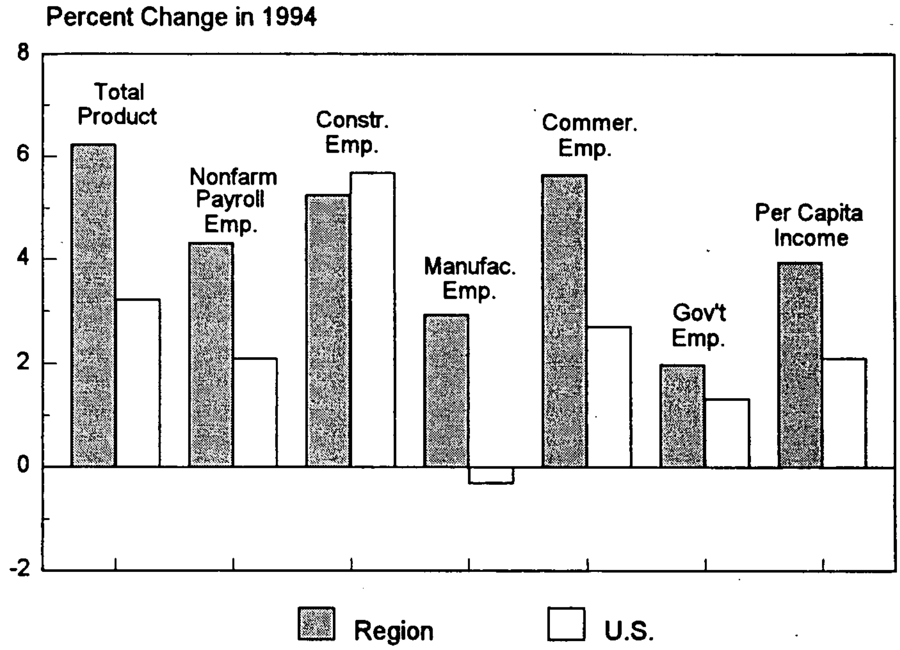

## 1993 HIGHLIGHTS

| | Region | Percent Change | U.S. | Percent Change |
|---|---|---|---|---|
| Total Product (billions 1987$)............ | $129.4 | 6.4% | $5,129.3* | 2.9% |
| Employment (000s): | | | | |
| Nonfarm Payroll............ | 3,403.0 | 3.5% | 110,174 | 1.5% |
| Construction................ | 138.9 | 6.1% | 4,570 | 2.2% |
| Manufacturing............ | 890.4 | 1.9% | 17,813 | -1.3% |
| Durables.................. | 430.9 | 3.0% | 10,054 | -1.8% |
| Nondurables............. | 459.5 | 0.9% | 7,759 | -0.6% |
| Private Commercial.... | 1,834.1 | 4.9% | 68,352 | 2.4% |
| Civilian Government... | 533.1 | 0.6% | 18,841 | 1.0% |
| Personal Income Per Capita (1987$)........................ | $14,096 | 3.6% | $16,395 | 1.0% |

*Gross Domestic Product

## STRONG GROWTH AT THE END OF 1993 BODES A BRIGHT OUTLOOK FOR 1994

Almost all national forecasts are calling for the U.S. economy to carry over the momentum from the end of 1993 into 1994, with the result of 1994 being a year of strong growth, the best of this recovery. Interest rates are expected to remain relatively low (albeit rising somewhat) and national demand is expected to continue to improve. With the continued national improvement, the Valley's growth is expected to be very healthy and more broad-based than in 1993. The Valley's auto manufacturing is not expected to provide as big a boost to the economy as it did in 1993 since no big expansions are planned by Saturn or Nissan. However, continued improvement in the region's construction-related manufacturing is expected, following the growth in the national construction industry. Other Valley manufacturing industries are also expected to see better growth. Thes factors will lead to stronger growth in the Valley's private commercial and government sectors as well, with stronger overall employment increases.




## 1994 HIGHLIGHTS

| | Region | Percent Change | U.S. | Percent Change |
|---|---|---|---|---|
| Total Product (billions 1987$)............ | $137.4 | 6.2% | $5,294.6 | 3.2% |
| Employment (000s): | | | | |
| Nonfarm Payroll........... | 3,550.1 | 4.3% | 112,477 | 2.1% |
| Construction................ | 146.2 | 5.2% | 4,829 | 5.7% |
| Manufacturing............ | 916.5 | 2.9% | 17,757 | -0.3% |
| Durables.................. | 451.1 | 4.7% | 10,043 | -0.1% |
| Nondurables............ | 465.4 | 1.3% | 7,714 | -0.6% |
| Private Commercial.... | 1,937.4 | 5.6% | 70,204 | 2.7% |
| Civilian Government... | 543.6 | 2.0% | 19,090 | 1.3% |
| Personal Income Per Capita (1987$)........................ | $14,651 | 3.9% | $16,741 | 2.1% |

*Gross Domestic Product

## COMMERCIAL INDUSTRY EMPLOYMENT FORECAST
(in thousands)

| | | Region | Percent Change | U.S. | Percent Change |
|---|---|---|---|---|---|
| Transportation, Communications, & Utilities | 1993 | 161.8 | 3.5% | 5,710 | 0.0% |
| | 1994 | 168.3 | 4.0% | 5,718 | 0.1% |
| Trade | 1993 | 779.8 | 4.6% | 25,848 | 1.8% |
| | 1994 | 817.8 | 4.9% | 26,430 | 2.3% |
| Finance, Insurance, & Real Estate | 1993 | 129.5 | 1.4% | 6,607 | 0.5% |
| | 1994 | 133.2 | 2.9% | 6,716 | 1.7% |
| Services | 1993 | 763.0 | 6.1% | 30,187 | 3.9% |
| | 1994 | 818.2 | 7.2% | 31,340 | 3.8% |

## MANUFACTURING INDUSTRY EMPLOYMENT FORECAST
(in thousands)

| | | Region | Percent Change | U.S. | Percent Change |
|---|---|---|---|---|---|
| Selected Durables | | | | | |
| Lumber & Furniture | 1993 | 94.6 | 2.2% | 1,166 | 1.4% |
| | 1994 | 98.8 | 4.4% | 1,202 | 3.1% |
| Primary & Fabricated Metals | 1993 | 76.6 | 2.5% | 1,986 | -1.5% |
| | 1994 | 79.2 | 3.4% | 2,007 | 1.1% |
| Machinery | 1993 | 135.8 | 3.6% | 3,419 | -0.8% |
| | 1994 | 144.5 | 6.5% | 3,437 | 0.5% |
| Transportation Equipment | 1993 | 69.9 | 4.3% | 1,727 | -5.2% |
| | 1994 | 72.7 | 4.0% | 1,658 | -4.0% |
| Selected Nondurables | | | | | |
| Food | 1993 | 64.0 | 1.5% | 1,651 | -0.2% |
| | 1994 | 64.8 | 1.2% | 1,647 | -0.3% |
| Textiles & Apparel | 1993 | 193.5 | 0.6% | 1,644 | -1.9% |
| | 1994 | 194.2 | 0.4% | 1,593 | -3.1% |
| Paper, Printing & Publishing | 1993 | 76.2 | 1.5% | 2,185 | -0.3% |
| | 1994 | 78.0 | 2.4% | 2,185 | 0.0% |
| Chemicals | 1993 | 63.0 | 1.2% | 1,074 | -0.8% |
| | 1994 | 63.3 | 0.6% | 1,068 | -0.6% |
| Rubber & Plastics | 1993 | 50.8 | 0.6% | 886 | 1.6% |
| | 1994 | 53.4 | 5.2% | 911 | 2.8% |

This Economic Forecast Summary is an insert in the Economic Update published annually by Community Partnerships, Resource Group, Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902.