## HIGHLIGHTS

## **Regional Performance and Comparisons**

In the third quarter of 2002, 7 states and 33 of 185 Metropolitan Statistical Areas (MSAs) experienced negative quarterly house price growth. It is notable that 5 of the states and 21 of the MSAs were located in the **Midwest Census Region**. While housing price "bubbles" generally are metropolitan area phenomena, periods of prolonged appreciation or depreciation (housing cycles) may stretch across larger geographic regions. In this case, housing prices in the **Midwest** are likely impacted by flattening productivity in the manufacturing sectors in 2001.

Housing cycles often occur within regions that are dominated by certain industries or characterized by like topography and climate. For example, the oil crisis in the early 1980s impacted housing prices throughout the **West South Central Division**. The existence of interstate highways, business clustering, and interrelationships between state and local government policies are other examples of factors that influence housing values at state and/or regional levels. Below, we investigate the housing price cycles across and within regions using the currently defined Census Divisions and Census Regions over the past 21 years. While all of the regions continue to be cyclically high, the third quarter data indicates that growth is decelerating (**0.84%** since last quarter for the **U.S**.). Some areas in particular are slowing measurably according to the third quarter appreciation rates, notably the **Midwest Region** and the **West South Central Division**. This article provides a general historical overview targeting the patterns of cycles across Census Divisions in the 4 Census Regions.

Figures 1-4 depict real housing prices for the 4 Census Regions and the divisions they contain<sup>1</sup>. It is interesting to note the patterns of similarity or differences in house price movements when comparing divisions within regions. For example, the **East North Central** (ENC) and **West North Central** (WNC) **Divisions** (Figure 1), which comprise the **Midwest Region**, look similar in overall pattern. It is not surprising that a regional cycle could characterize this area, given the common topography, climate, and business influences. The same is true for the **Middle Atlantic** (MA) and **New England** (NE) **Divisions** that make up the **Northeast Region** (Figure 2). The two indexes follow each other fairly closely, suggesting regional factors are significant.

The divisions that comprise the **South Region** are not as consistent in pattern (Figure 3). The oil market crisis is the primary reason that **West South Central** (WSC), **East South Central** (ESC), and **South Atlantic** (SA) **Divisions** do not line up at all during the 1980s. Peaks and valleys are slightly more concurrent during the 1990s, but volatility is markedly different. It appears as though **ESC** shares common regional influences with the **Midwest**, and may be more appropriately grouped within this region for this purpose. The **South Atlantic Division** shares more in common with the **Northeast**, likely resulting from the coastal nature of the states, as well as their similar business environments (high tech centers in Boston, Washington DC, and Chapel Hill, in addition to a fair amount of tourist industry all along the coast).

In the same vein, the **Pacific** (PAC) and **Mountain** (MT) **Divisions** are entirely different (Figure 4). The **Pacific Division** is coastal and high tech in nature, and thus lines up a little better with the patterns observed in the **Northeast**. House prices in **Mountain** states tend to

<sup>&</sup>lt;sup>1</sup> The indexes are deflated using the CPI less shelter, which is available at <u>www.bls.gov</u>.

be driven primarily by tourist industry and mineral extraction industries. As Figure 4 indicates, the **Pacific** and **Mountain** states actually move oppositely to each other, until the most recent boom. Since about 1996, the indexes for these divisions have been moving in like fashion, although **Mountain** states experienced significantly less overall growth.

Another common trait within regions is the tendency for divisions to take turns occupying the lead during booms or busts over the 21-year period. For example, **East North Central** leads its region as a whole in the late 1980s boom, but **West North Central** leads the region for the most recent boom. **New England** leads the **Northeast** in the early 1980s, but lags **Middle Atlantic** during the late 1980s and early 1990s. This phenomenon again reverses itself in the late 1990s. The most recent data charts very similar appreciation between the 2 divisions indicating that **Middle Atlantic** is catching up. Oscillation also occurs among the divisions within the other 2 regions. This phenomenon could possibly be linked to labor force migration. That is, as areas become expensive, businesses move to neighboring areas and take the labor force with them. Labor force data, however, does not necessarily confirm this hypothesis. It is probably more likely that prices in given areas may overshoot for a period of time, and natural market adjustments take place in periods following.

The less volatile areas, such as the interior states, require minor market adjustments; however, major market corrections occur in the **Northeast Region** and **Pacific Division**. Large and volatile coastal cities (such as San Jose, Boston, and New York) are dictating the high volatility in prices that we are witnessing in these regions. While all of the divisions cycled upwards during the most recent boom, the **Northeast Region** and **Pacific Division** experienced the largest gains (and have historically suffered the largest losses). This is consistent with coastal patterns, as has been documented in a number of studies. The data for the most recent quarter indicates that all areas are growing less rapidly than they have over the previous couple of years. However, very healthy appreciation continues to characterize the **Northeast** and **Pacific** areas. Slowing growth is especially notable in the **Midwest**, as the quarterly rate was slightly below zero. The remaining interior regions continue to outpace inflation, although increases are substantially lower than in the past several years. Increases were also especially low and often negative in many of the MSAs in the **West South Central Division**.

## Figure 1: Real Annual HPI Growth Midwest Region

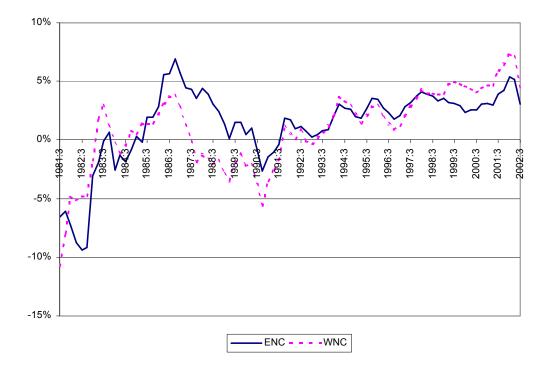
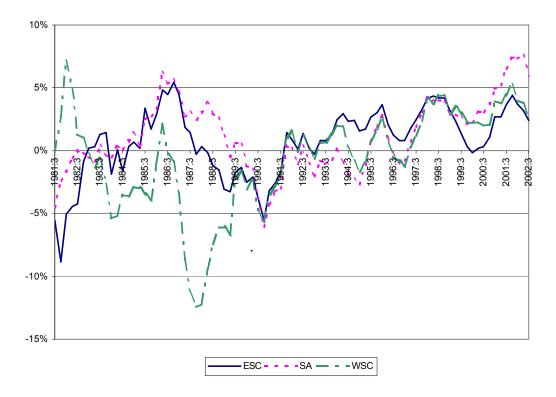


Figure 2: Real Annual HPI Growth South Region



## Figure 3: Real Annual HPI Growth Northeast Region

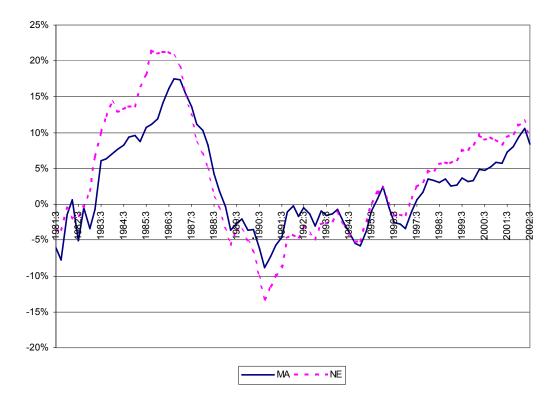


Figure 4: Real Annual HPI Growth West Region

