

## Trends in Housing-Related Employment

During the housing boom years, the housing market was the engine for employment and economic growth. The jump in construction employment and other employment in housing-related industries helped to offset job losses in other industries in the early 2000s.

The lagged effects of the increases in the fed funds rate beginning in June 2004 started to have a negative impact on housing activity in late 2005 and on the labor market in 2006. The overall job gains slowed in 2006, due in large part to declining construction employment and slowing gains in other housing-related jobs. The on-going moderation of the housing market has sparked concerns that the slowdown could jeopardize the expansion in the labor markets and the overall economy.<sup>1</sup>

The purpose of this note is to examine how the housing market slowdown has affected construction employment, other housing-related employment, and overall employment. We separate housing-related employment into construction-related and sales-related employment to examine if the housing slowdown has affected the two groups differently. We find that the extent of job losses has been uneven across all housing-related industries, with the majority of job losses concentrated in construction-related industries rather than sales-related industries.

We also explore employment in local markets where construction activity has played a more important role in the overall labor market to see if the slowdown in the housing market has had more pronounced impacts on these markets than those where housing activity has played a limited role. We find that, in metropolitan areas with a relatively higher share of construction employment to total employment, employment growth slowed considerably during the past year relative to 2004 and 2005. By contrast, in metropolitan areas with a relatively lower share of construction employment to total employment, employment growth did not slow significantly during the same period.

We expect housing starts and home sales to continue to moderate well into the first half of the year, reaching their troughs around the end of the third quarter or the beginning of the fourth. As a result, housing-related employment should continue to ease in line with weaker housing activities. We believe that the decline in housing-related employment should moderate overall job growth this year rather than endangering overall job growth. If housing activity recovers gradually late this year as we expect, housing-

related employment should, at a minimum, be neutral or contribute to overall job gains in 2008.

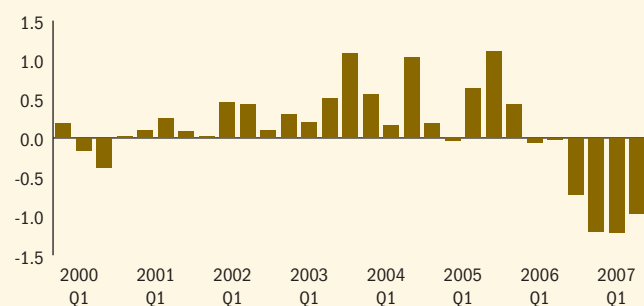
### Residential Investment and Economic Growth

Residential investment<sup>2</sup> has accounted for about 5 percent of gross domestic product (GDP) over the past decade.<sup>3</sup> Swings in residential investment can have a significant impact on the pace of economic growth. The ongoing housing slowdown has reduced economic growth through the decline in residential construction. For all of 2006, the decline in residential investment subtracted from economic growth on an annual basis for the first time since 1995. In the first quarter of 2007, real residential investment declined at a 17.2 percent annual rate, subtracting nearly 1 percentage point from overall economic growth (see chart 1).

CHART 1

### Real Residential Investment Contribution to Economic Growth

(Percentage point)



Source: Bureau of Economic Analysis

2 Residential investment consists of purchases of private residential structures and residential equipment that is owned by landlords and rented to tenants. Investment in residential structures consists of new construction of permanent-site single-family and multi-family units, improvements (additions, alterations, and major structural replacements) to housing units, expenditures on manufactured homes, brokers' commissions on the sale of residential property, and net purchases of used structures from government agencies. Residential structures also include some types of equipment that are built into residential structures, such as heating and air-conditioning equipment.

3 If we add rent payment and the imputed rents from owner-occupied properties, spending on utilities, home operation, appliances and furnishing, the total contribution of the broad housing sector approaches 20 percent of GDP.

1 See for example, "The Biggest Slump in US Housing in the Last 40 Years . . . or 53 Years?" Nouriel Roubini, August 23, 2006

As inventories of new homes continued to build last year, builders slowed the pace of new construction significantly. Housing starts declined nearly 13 percent in 2006, and builders have shed residential construction jobs since the middle of last year. By contrast, non-residential construction payrolls continued to increase last year.

Besides the direct impact of housing construction on the labor markets, swings in the housing market have had spillover effects on employment in other industries. As the demand for housing moderated, spending and employment growth in housing-related industries also declined. The National Association of Home Builders (NAHB) estimates that building an average single-family housing unit creates 3.47 jobs in construction and housing-related industries, compared with 1.29 jobs for a production of 1 multi-family unit. In addition, the NAHB estimates that, in the first year following the purchase of a new home, the typical owner spends \$8,642 on furnishings and improvements. For the purchase of existing homes, similar expenses incurred average about \$6,540. After controlling for average annual household purchase, the spending attributable to the home purchase amounts to \$4,767 for new homes and \$3,148 for existing homes.<sup>4</sup>

### General Employment Trends

The labor market ended 2006 on a strong note. For all of 2006, nonfarm payroll gains totaled nearly 2.3 million — moderating from a gain of over 2.5 million jobs in 2005. Payroll gains averaged 189,000 a month last year, compared with 212,000 in 2005. The unemployment rate fell to 4.5 percent at the end of 2006 from 4.9 percent a year earlier. Strong job gains across a number of service industries more than offset job losses in manufacturing and housing-related industries. Employment growth is poised to moderate this year as the labor market continues to reflect job losses in housing-related and manufacturing industries. We expect nonfarm payrolls to increase an average of about 120,000 per month in 2007. Through April 2007, monthly payroll employment gains have averaged 129,000.

### Housing-Related Employment Measures

The Bureau of Labor Statistics (BLS) does not publish a single measure of housing-related industry payroll employment in either its Establishment Survey or Household Survey.<sup>5</sup> We estimate that about 7 million payroll jobs in the U.S. are associated with the residential housing sector. These jobs constitute about 5 percent of total nonfarm payrolls or about 6 percent of private nonfarm payrolls. Various definitions of what constitutes housing-related employment yield different estimates. Despite these slightly different estimates, a common underlying trend of industry employment should be evident.

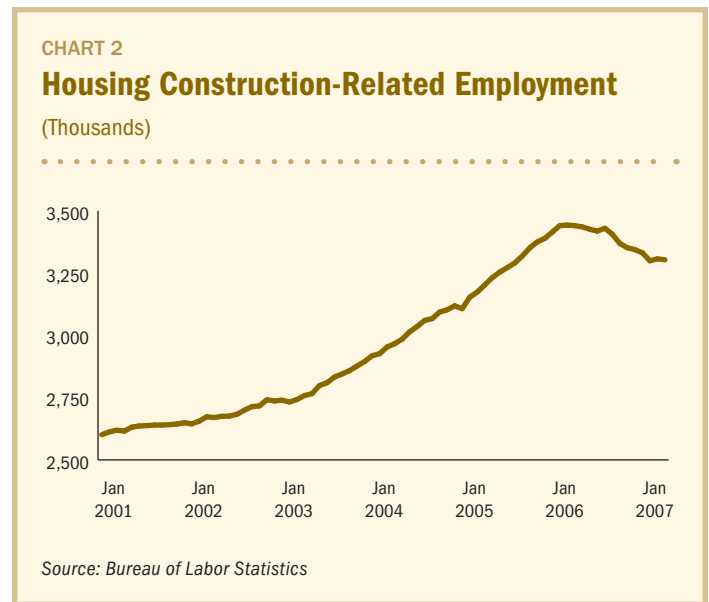
4 Paul Emrath, "Home Building's Direct Impact on the U.S. Economy," August 8, 2005, the National Association of Home Builders, Washington, DC.

5 The Bureau of Labor Statistics (BLS) measures employment in two ways. The Establishment Survey collects payroll records from 400,000 companies. The estimates are benchmarked annually to the unemployment insurance tax records. This process anchors the payroll employment numbers to the comprehensive count of all nonfarm payroll employment. The Household Survey is based on a sample survey of 60,000 households. It is benchmarked once a decade to the decennial census. The household survey is useful for measuring self-employment, the unemployment rate and breakdowns by demographic. The survey is extremely volatile due to a smaller sample size and thus the results are less reliable to analyze employment trends. The payroll survey is generally a superior tool for measuring employment levels and trends but it excludes agricultural workers, the self-employed, unpaid family workers, private household workers and those on unpaid leave.

We can group detailed payroll employment into two broad categories. The first group involves construction jobs — which consists of residential construction jobs and special trade contractors in residential construction. The second group involves jobs related to home sales. The latter includes jobs in industries related to building material wholesale and retail trade, architectural, landscape architecture, building inspection, surveying and mapping services, facilitating the sale of residential structures, real estate appraising and brokering, mortgage lending and mortgage loan brokering and title insurance, exterminating and pest control services, decorating residential structures, and interior design and landscaping services.<sup>6</sup>

### Construction-Related Employment

The severity of housing-related job losses has been uneven across all industries. The bulk of job losses has been concentrated in construction-related industries. Charts 2 and 3 show the recent trend in housing construction-related employment and changes in its payrolls. (Unfortunately, payroll employment in special trade contractors has a short history; the data are available only after January 2001.) Payroll gains in residential construction-related employment averaged about 20,000 jobs during the period 2004–2005. As home building activity slowed sharply in 2006, construction-related employment also weakened. With the exception of August 2006, builders have shed these jobs since April 2006. Net job loss in housing construction-related employment in all of 2006 was 45,000.



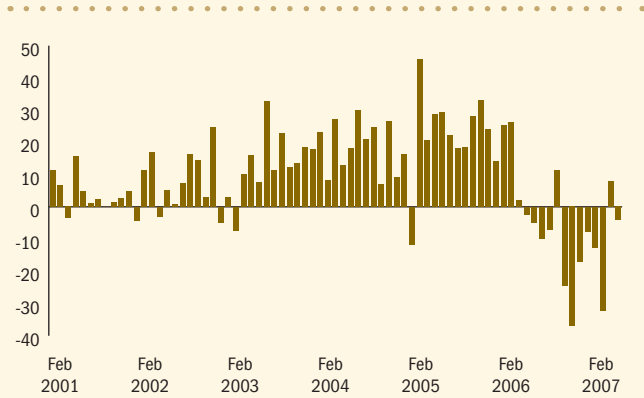
6 Our definition of housing sales-related employment is composed of lumber and construction supply wholesale (4233); building material & garden supply retail (444); landscape architectural services (54132); exterminating and pest control services (56171); building inspection (54135); surveying and mapping services (54137); landscaping services (56173); architectural services (54131); furniture wholesalers (4232), furniture retailers (442); direct title insurance carriers (524127); real estate agents and brokers (5312); real estate appraisers (53132); non-depository real estate credit intermediation (522292) and mortgage and non-mortgage loan broking (52231).

We omit several categories in the manufacturing industries (e.g., sawmills and wood preservation, veneer, plywood, etc.) because some of the construction materials are for both residential and non-residential construction. And, as a result, we somewhat underestimate housing-related employment. We believe, however, that we still are able to capture the trend accurately. At some level of detail, employment data lag by about one month.

CHART 3

### Changes in Housing Construction-Related Employment

(Thousands)

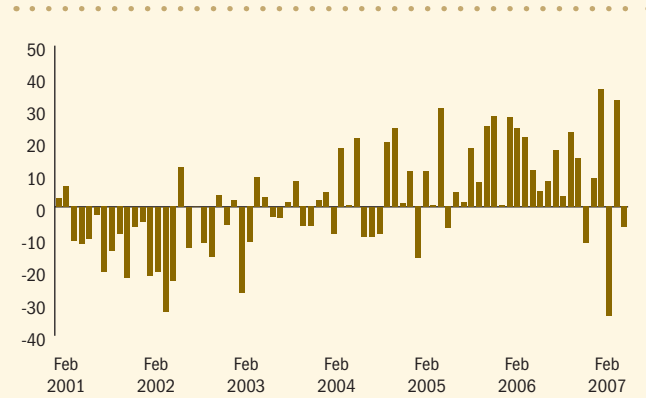


Source: Bureau of Labor Statistics

CHART 5

### Changes in Nonresidential Construction-Related Employment

(Thousands)



Source: Bureau of Labor Statistics

By contrast, nonresidential construction-related employment increased every month in 2006 except in November to a gain of 154,000 for the year. It has started to lose jobs in 2007, however (see charts 4 and 5).

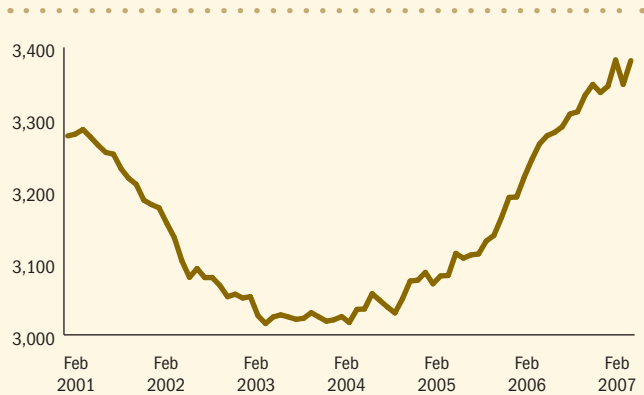
### Housing Sales-Related Employment

Some of the industries that facilitate the sales of residential structures also suffered job losses last year but to a lesser extent than housing construction-related employment. Charts 6 and 7 show the trend in housing sales-related employment and changes in its payrolls. Payroll gains in home sales-related employment averaged about 14,000 jobs during the period 2004–2005. For all of 2006, unlike the construction industry, these industries that facilitate home sales still experienced a net job gain averaging 6,900 a month, as strong gains early in the year outweighed losses near the end of the year.

CHART 4

### Nonresidential Construction-Related Employment

(Thousands)



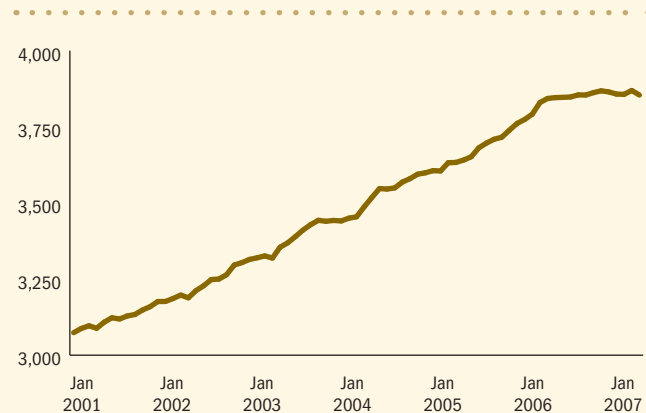
Source: Bureau of Labor Statistics

Job losses in construction-related employment have been relatively small compared to the decline in home building activity. One potential explanation is that the construction industry employed large numbers of illegal immigrants who were never entered on reported payrolls. They may have been the first to be laid off as home building activity has declined. The fact that remittances to Latin American countries have fallen this year supported that view.<sup>7</sup>

CHART 6

### Housing Sales-Related Employment

(Thousands)



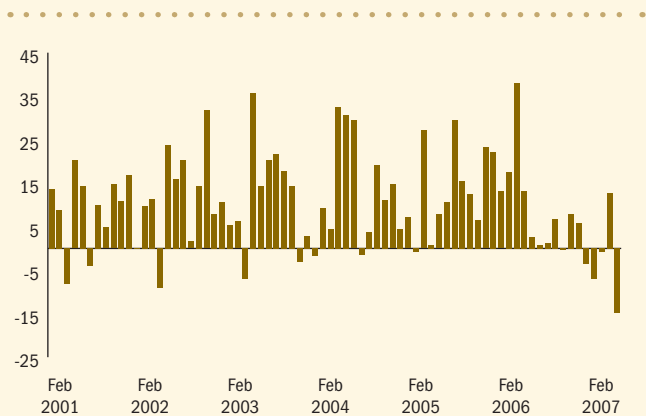
Source: Bureau of Labor Statistics

<sup>7</sup> Joel Millman, "Latin America Feels Pain Of U.S. Housing Slump," The Wall Street Journal, April 23, 2007.

CHART 7

### Changes in Housing Sales-Related Employment

(Thousands)

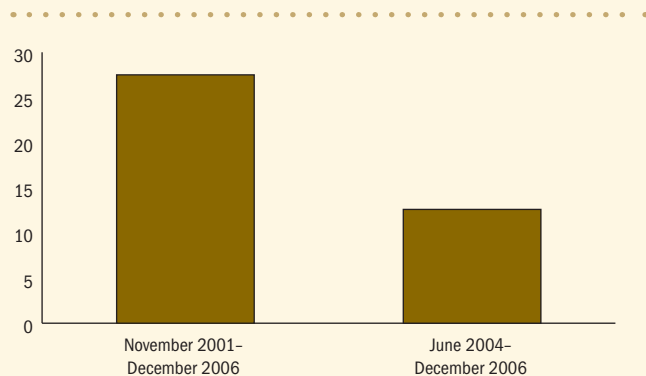


Source: Bureau of Labor Statistics

CHART 8

### Housing-Related Job Gains: Share of Total Private Industry Job Gains

(Percent)



Source: Bureau of Labor Statistics; Mortgage Bankers Association

Some housing sales-related industries did not experience job losses for most of last year. For example, payrolls in mortgage industries (employees in real estate credit and mortgage and non-mortgage brokers) rose to all-time high in October 2006. The industry started to lose jobs relative to a year earlier in November 2006, and job losses have intensified in 2007. For example, in March (the most recent data available as some detailed job categories data released are lagged by 1 month), employment in the mortgage industry was down by 19,000 jobs from a year ago.

Although some employees have not lost their jobs during the on-going housing slowdown, they may work fewer hours, receiving less income or commissions. In addition, many people who work in these industries are self-employed and therefore are excluded from the payroll employment data. For example, The National Association of Realtors reported that there were about 1.3 million realtors at the end of 2006. For the same time period, the BLS estimated that there were about 386,000 real estate agents and brokers. Thus our estimate, which excludes self-employed workers, understates the actual employment in housing-related industries and could underestimate the extent of the decline in housing-related employment.

#### Overall Housing-Related Performance

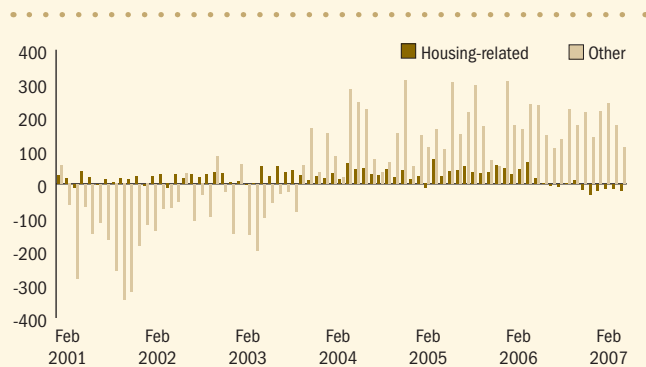
Employment in housing-related industries accounted for about 27 percent of the increase in private sector payrolls since the economic recovery began in November 2001 through December of 2006. Since the Federal Reserve began raising the fed funds rate in June 2004, housing-related employment has accounted for only about 12 percent of private sector payroll gain (see chart 8).

The slowdown in housing activity has weighed on overall employment growth. With the economy continuing to expand, non-housing related employment gains, such as healthcare professions, should continue to be strong, easily offsetting weakness in housing and manufacturing industries. Despite a net job loss of more than 70,000 in housing-related employment in the second half of 2006, the overall economy managed to create jobs at a solid pace as a result of strong job gains in non-housing related employment (see chart 9).

CHART 9

### Changes in Employment: Total Housing-Related vs. Other

(Thousands)



Source: Bureau of Labor Statistics; Mortgage Bankers Association

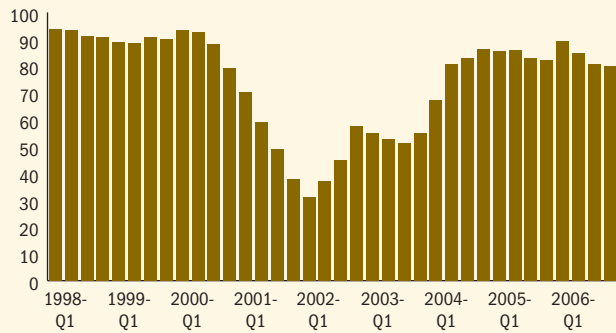
## Regional Employment

The vast majority of U.S. metropolitan areas continued to see job growth at the end of last year. Chart 10 shows that the share of metropolitan areas experiencing job growth steadily decline in 2006 but remain at a high share during the final quarter. Job losses are still uncommon except among the auto-producing areas of the Midwest. Manufacturing and housing downturns are the two primary factors that influence regional economic performance. Regionally, the Northeast and the Midwest have the smaller share of job gains due to construction employment.

CHART 10

### Share of MSAs with Job Growth\*

(Percent)



\*increases in nonfarm payroll employment from a year ago

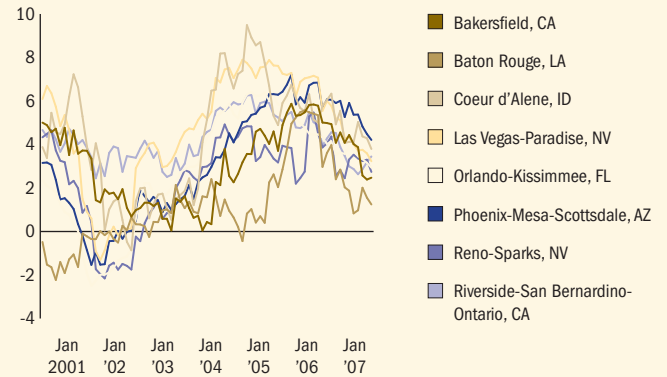
Source: Bureau of Labor Statistics

Among metropolitan areas with the highest average share of construction employment to total employment, employment growth generally slowed significantly during the past year relative to 2004 and 2005 (see Chart 11). By contrast, among metropolitan areas with the lowest average share of construction employment to total employment, employment growth did not slow considerably during the past year relative to 2004 and 2005 (see Chart 12).

CHART 11

### Nonfarm Employment: High Share Construction

(Year-over-year percent change)

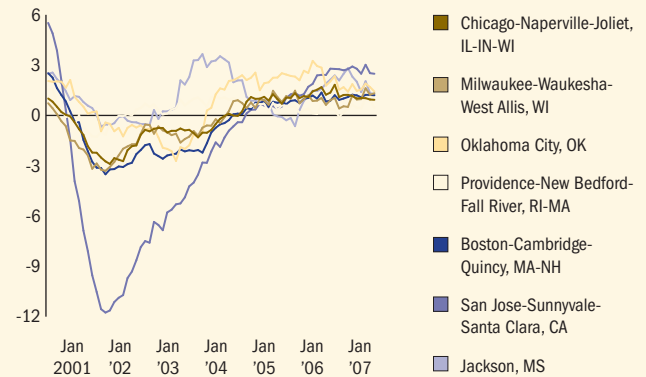


Source: Bureau of Labor Statistics

CHART 12

### Nonfarm Employment: Low Share Construction

(Year-over-year percent change)



Source: Bureau of Labor Statistics

## Conclusions

The housing market contributed significantly to the economy over the past few years. Housing-related industries — both residential construction-related and residential sales-related — created 34,500 jobs a month, on average, during the housing boom in 2004 and 2005. Measures of housing activity have declined from their peaks around the summer of 2005 and the decline was more pronounced in mid 2006. Cooling construction activity has resulted in declining construction-related employment and weak growth in home sales-related employment last year.

We examine housing-related employment, separating it into two large categories: construction-related and sales-related employment. We find that the housing slump has impacted them unevenly. The majority of job losses has been concentrated in construction-related industries rather than sales-related industries.

We also examine regional employment and find that in the metropolitan areas with relatively higher share of construction employment to total employment, employment growth slowed considerably during the past year relatively to 2004 and 2005. On the other hand, employment growth slowed only modestly in the metropolitan areas with relatively lower share of construction employment to total employment.

As we expect housing starts and home sales to continue to moderate through most of this year, housing-related employment should continue to decline in line with weaker housing activities and moderately hold down overall job growth this year. We expect housing activity to recover gradually by the end of the year as thus housing-related employment should contribute to overall job gains in 2008.

## About Research DataNotes

### Author:

Orawin T. Velz, Director, Economic Forecasting,  
Mortgage Bankers Association

Any questions or for more information, please contact  
Orawin at [ovelz@mortgagebankers.org](mailto:ovelz@mortgagebankers.org).

Research DataNotes are a series produced by members  
of MBA's research and economics group designed to  
explain and explore technical aspects of the real estate  
finance industry.

© 2007 Mortgage Bankers Association, Washington, DC. All rights reserved.

All rights reserved. No part of this publication may be downloaded, stored in a retrieval system, reproduced or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the copyright owner.

**Disclaimer:** Although the MBA takes great care in producing DataNotes and all related data and other information products, MBA does not guarantee that the information provided is accurate, current or suitable for any particular purpose. MBA Research DataNotes is provided on an "as is" basis, with no warranties of any kind whatsoever, either express or implied, including, but not limited to, any warranties of title or accuracy or any implied warranties of merchantability or fitness for a particular purpose. Use of the information provided in MBA Research DataNotes is at the user's sole risk. In no event will MBA be liable for any damages whatsoever arising out of or related to the information provided, including, but not limited to direct, indirect, incidental, special, consequential or punitive damages, whether under a contract, tort or any other theory of liability, even if MBA is aware of the possibility of such damages.