# A visual essay: post-recessionary employment growth related to the housing market

Matthew Miller

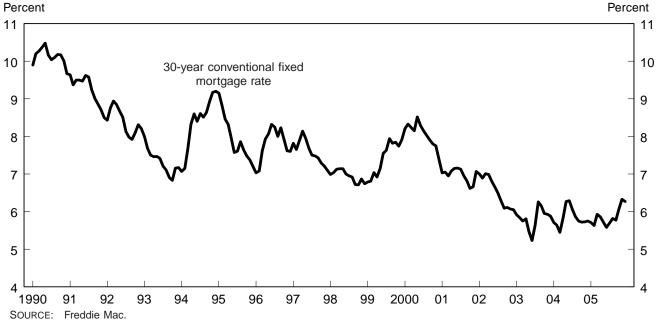
uring and after the 2001 recession, low mortgage rates helped drive unusual strength in the housing market. Consumption traditionally falters during recessions, thus hindering sales of homes, which are the largest purchase most people ever make. Although many industries saw employment fall during and after the recession, certain industries expanded in large part because of increased housing activity. The following analysis looks at various indicators related to the housing market and employment trends in industries that benefited.

Data on employment used in this article are from the Current Employment Statistics (CES) program, which surveys 160,000 nonfarm businesses representing about 400,000 establishments monthly. For more information on the program's concepts and methodology, see *BLS Handbook of Methods* (Bureau of Labor Statistics, on the Internet at **http://www. bls.gov/opub/hom/home.htm**). CES data are available on the Internet at **http://www.bls.gov/ces**/. Data used in this article are seasonally adjusted and analyzed through December 2005 unless otherwise noted.

This essay was prepared by Matthew Miller, a former economist in the Office of Employment and Unemployment Statistics, Bureau of Labor Statistics. For questions about this essay, contact Julie Hatch Maxfield, a supervisory economist in the Office of Employment and Unemployment Statistics. E-mail: Hatch.Julie@bls.gov

The following is a list of the charts presented in this visual essay:

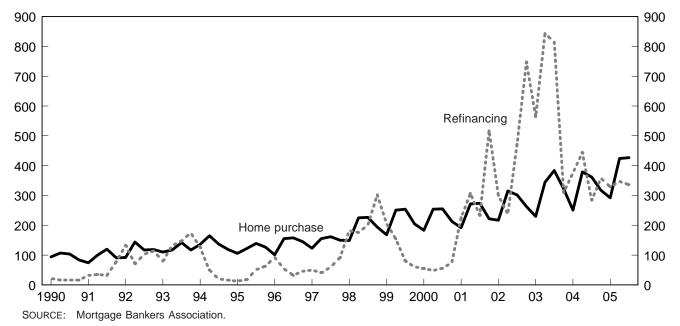
- 1. The 30-year conventional fixed mortgage rate hit an historic low in June 2003, while refinancing rose sharply in the second quarter of 2003
- New home sales and employment in residential construction experienced strong growth after the 2001 recession
- 3. Employment in residential specialty trades increased by nearly 530,000 since January 2001
- 4. Construction-related manufacturing employment and industrial production of construction supplies both increased after 2003
- 5. Lumber and construction supply wholesalers employment accelerated in 2004 and 2005
- 6. Existing home sales accelerated in mid-2003, while real estate employment followed suit about 6 months later
- 7. Low mortgage rates led to increased employment in mortgage and nonmortgage loan brokers and real estate credit
- 8. Average expenditures for residential improvements have increased by more than \$110 billion since 1991
- Construction spending outpaced retail sales after 2002 and sales in building material and garden supply stores in 2003
- 10. Employment growth in furniture and home furnishings stores and building material and garden supply stores outpaced total retail trade following the 2001 recession
- 11. Housing has aided employment and sales growth in a host of industries



1. The 30-year conventional fixed mortgage rate hit an historic low in June 2003, while refinancing rose sharply in the second quarter of 2003

Billions of dollars

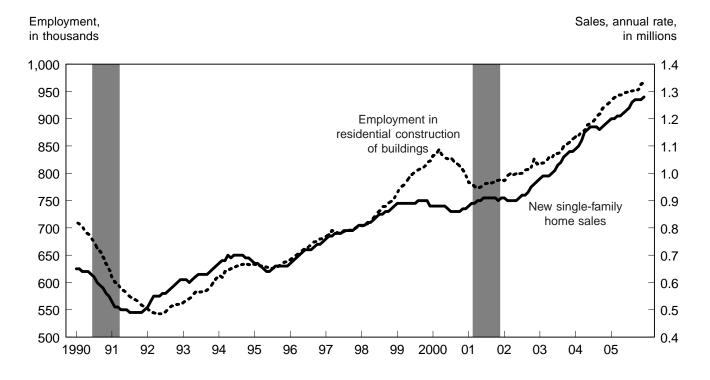
Billions of dollars



- After reaching a cyclical peak of 8.52 percent in May 2000, the 30-year conventional fixed mortgage rate began to decline until it hit an historic low of 5.23 percent in June 2003. The rate remained low through 2005.
- Low mortgage rates spurred consumers to buy homes

and to refinance existing mortgages. The low rates and rising housing prices fed the perception that housing was a good investment, and home sales boomed. According to the U.S. Census Bureau, home-ownership rates reached an all-time high of 69.2 percent in the second quarter of 2004.

### 2. New home sales and employment in residential construction experienced strong growth after the 2001 recession



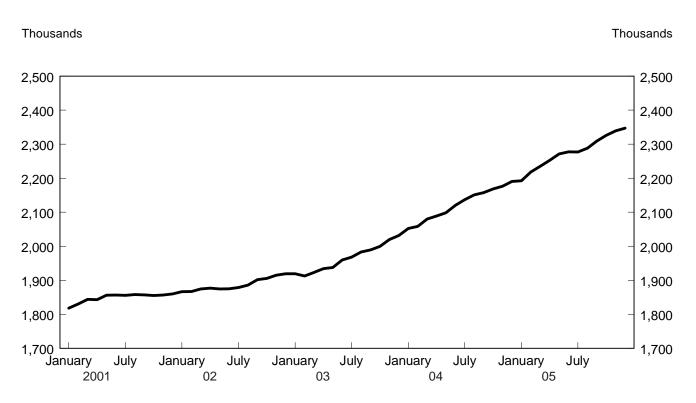
NOTE: Data are seasonally adjusted. New single-family home sales data are 12-month moving average. SOURCE: BLS and Census Bureau.

- Employment in *residential construction of buildings* grew at a strong rate soon after mortgage rates dropped and as new home sales rose. Between March and November 2001, residential builders added only 11,700 jobs but, between November 2001 and December 2005, added almost 180,000 jobs.
- In contrast, the industry cut 131,300 jobs during and following the 1990–91 recession, reaching an employment trough in April 1992, about 7 months following a sales low point. Employment gains in residential builders lagged new home sales growth after

the 1990–91 recession; however, after this lag, both employment and sales experienced strong coincidental growth.

• During the 1990–91 recession, the annual rate of new homes sold declined by around 100,000, as compared with an increase of around 10,000 new homes sold during the 2001 recession. New home sales continued to reach record highs since then. Through 2005 about 1,280,000 new homes had been sold. Since the start of the 2001 recession, the demand for new homes has created a need for residential construction workers.

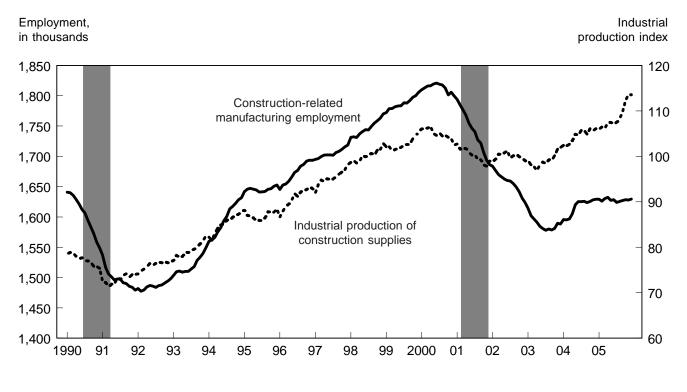
#### 3. Employment in residential specialty trades increased by nearly 530,000 since January 2001



NOTE: January 2001 is the first month for which residential and nonresidential specialty trades data are available. Data are seasonally adjusted.

- Housing demand has also driven employment growth of residential specialty trade contractors. From January 2001 through December 2005, the residential trades added 529,100 jobs, a 29.1 percent increase. This hiring outpaced job growth for residential building contractors, which had 23.5 percent growth over the same period.
- Specialty trade contractors are essentially subcontractors that specialize by performing certain tasks, such as pouring concrete, site preparation, plumbing, painting, or electrical work. The residential trades employ about 2.3 million workers, more than twice as many workers as residential building contractors.

## 4. Construction-related manufacturing employment and industrial production of construction supplies both increased after 2003

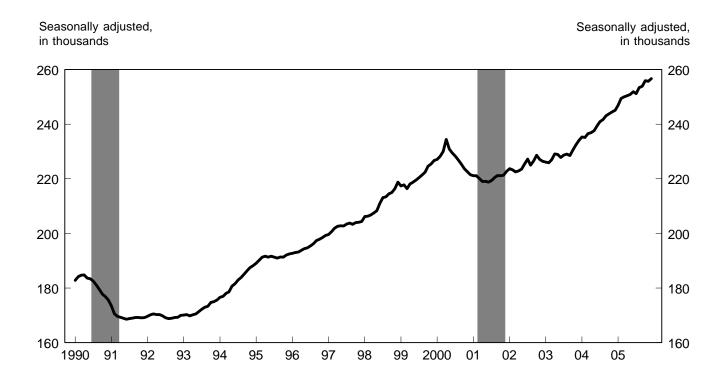


NOTE: Data are seasonally adjusted. SOURCE: BLS and Federal Reserve Board.

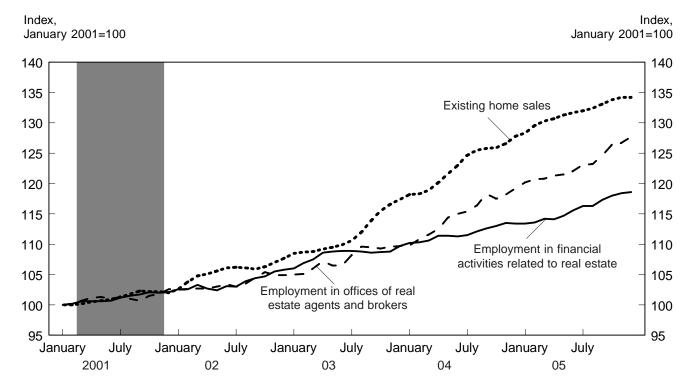
- Demand for building materials and equipment has grown with home sales. Construction-related manufacturing employment has grown also; 48,600 jobs were added between an employment trough in June 2003 and December 2005. This is notable in the manufacturing industrial sector, which as a whole has had no sustained employment growth since before the 2001 recession.
- Similar trends appeared in the index of industrial production of construction supplies, which measures real output in manufacturing. The index of industrial production has grown from 96.9 in April 2003 to 113.5 in December 2005, an increase of 17.2 percent.
- Certain construction-related manufacturing industries

have shown particular strength in recent years and are worth noting. *Wood products* manufacturers have added 28,900 jobs, representing a 5.5-percent gain since hitting an employment trough in August 2003. *Cement and concrete products* added 17,700 jobs, a 7.9-percent increase, since an employment trough in February 2003. In addition to U.S. demand, some of this growth may be attributable to growing foreign demand for U.S. exports of cement and concrete products as reported by the U.S. International Trade Commission. After an employment low in June 2003, *architectural and structural metals* has regained 23,900 jobs, a 6.4-percent increase, while *construction machinery manufacturing* has recovered 16,800 jobs, representing a 29.1-percent gain.

#### 5. Lumber and construction supply wholesalers employment growth accelerated in 2004 and 2005



- Following sharp declines during the year leading up to the 2001 recession, strong job growth came in *lumber and construction supply wholesalers*. Employment reached a low point in June 2001 and then began to expand during the recession. Growth accelerated in 2004 and 2005.
- Since June 2001, the industry added 37,900 jobs, or 17.3 percent, easily outpacing wholesale trade's overall growth. Wholesale employment did not hit a trough until August 2003, and subsequent job gains totaled only 3.5 percent.

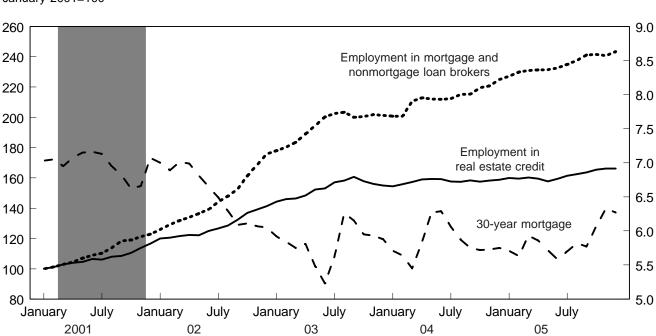


6. Existing home sales accelerated in mid-2003, while real estate employment followed suit about 6 months later

NOTE: Data are seasonally adjusted. Existing home sales data are 12-month moving average. SOURCE: BLS and National Association of Realtors.

- Growth in existing home sales accelerated after the 2001 recession as did new home sales. The number of existing homes that changed hands well exceeded the number of new homes sold, directly benefiting the real estate and related financial industries. According to the National Association of Realtors, two factors may help explain this fact. First, before the stock market decline of 2001, some investors were placing capital gains from stocks into residential real estate. Second, after the stock market decline, some investors liquidated some stock holdings and placed the proceeds into residential real estate.
- Existing home sales accelerated in mid-2003. Real estate employment followed suit about 6 months later; after that, existing home sales and real estate employment grew coincidentally. Employment in *activities related to real estate* and *offices of real estate agents and brokers* notched up during the recession. Employment in offices of real estate grew by 77,700 or 26.8 percent since March 2001, the beginning of the recession. Activities related to real estate include services such as managing real estate for others and appraising real estate but not real estate leasing. Employment in this industry grew by 77,900 jobs or 17.9 percent since March 2001.

## 7. Low mortgage rates led to increased employment in mortgage and nonmortgage loan brokers and real estate credit



Seasonally adjusted employment, January 2001=100

SOURCE: BLS and Federal Home Loan and Mortgage Corporation.

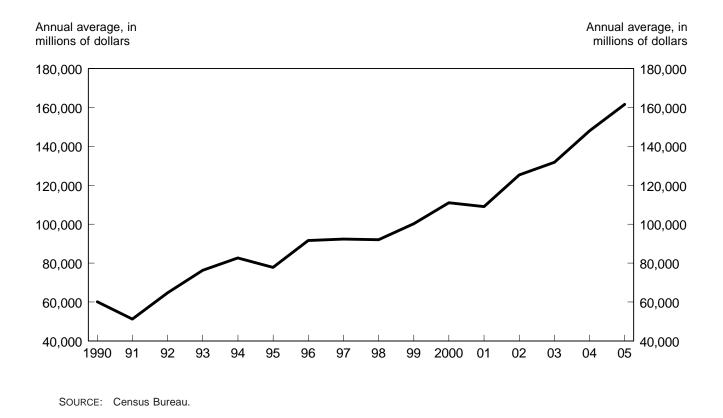
- Mortgage rates have not only been a driving force behind all of the employment trends analyzed thus far, low rates have benefited mortgage brokers and lenders also. The low rates increased demand for new and refinanced mortgages and, thus, for workers in *mort-gage and nonmortgage loan brokers* and *real estate credit.*
- Real estate credit companies lend funds and require borrowers to secure the loan by pledging real estate as collateral. Mortgage and other loan brokers facilitate the

interaction between home buyers and real estate credit establishments. Employment in mortgage and nonmortgage brokers and real estate credit grew through the recession. Even when mortgage rates stopped declining in mid-2003, employment still grew, especially for mortgage and nonmortgage loan brokers.

Mortgage rate

• Home sales remained strong even after the number of those refinancing their mortgages fell back from unusually high levels in 2003. Consequently, employment continued its upward trend, just at a slower rate.





• Mortgage lending also boosted remodeling. Much refinancing was done to tap home equity in order to remodel and renovate existing homes. The National Association of Realtors found that gains in housing wealth are spent at a quicker pace in the short run than gains in stocks and provide a temporary lift to consumer expenditures. Between 2001 and 2002, 40 percent of those borrowing

against their home equity reported using some of the

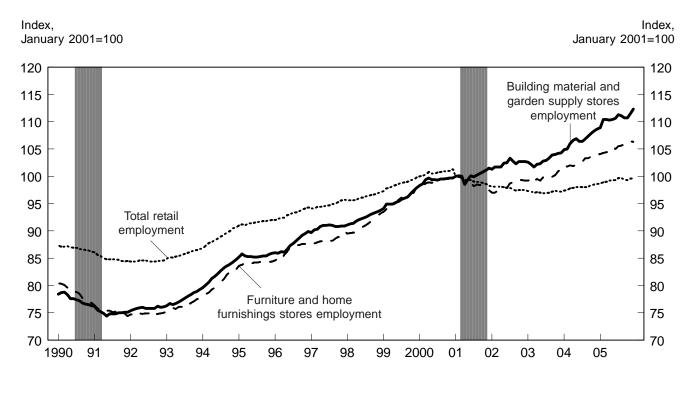
money for home improvements.

• Since 1999, residential improvement expenditures have increased by an average of \$10.2 billion or 9.3 percent per year. This jump provides an additional explanation of the growth in construction, construction-related manufacturing, and wholesale employment. It also helps explain sales and employment strength in some retail industries.

9. Construction spending outpaced retail sales after 2002 and sales in building material and garden supply stores in 2003



- From 1993 though 2000, sales in building material and garden supply stores and spending on private residential construction trended together similar to overall retail sales. After 2002, construction spending grew at a faster pace than retail sales, while the same occurred with building material and garden supply stores as of 2003.
- Much of the spending occurred at home centers. Some large chains have estimated that 20 percent to 30 percent of their business comes from private contractors. Building and garden stores benefited doubly from the building and remodeling boom as they supply contractors as well as individuals.



10. Employment growth in furniture and home furnishings stores and building material and garden supply stores outpaced total retail trade following the 2001 recession

NOTE: Data are seasonally adjusted.

- Overall, retail trade shed jobs through the 2001 recession and until mid-2003. The industry has since recovered about 85 percent of the job losses. However, two retail component industries—building material and garden supply stores and furniture and home furnishings stores—experienced notable employment growth.
- Home centers have become the foundation for employment in building material and garden supply stores, which added 141,200 jobs since January 2001 for a 12.3-percent employment gain. Home centers expanded their payrolls by 153,900 jobs or 31.3 percent over the

same timespan.

• With consumers buying more new and existing homes, furniture sales have risen as well. Furniture and home furnishings stores have added 34,800 jobs since January 2001. Furniture stores have not seen the same growth as building material and garden supply stores however, because other venues also sell furnishings. For example, according to the U.S. Census Bureau, *general merchan-dise stores* accounted for about one-third more kitchenware and home furnishings sales than furniture stores in 1997.

#### 11. Housing has aided employment and sales growth in a host of industries

Industry	March 2001- November 2001		November 2001- December 2005		March 2001- December 2005	
	Level (thousands)	Percent	Level (thousands)	Percent	Level (thousands)	Percent
Total nonfarm	-1.621	-1.2	3,493	2.7	1.872	1.4
Total private	-2.002	-1.8	2.941	2.7	939	.8
Construction	-2,002	-1.0	632	9.3	554	8.1
Construction of buildings	-6	4	143	9.0	137	8.6
Residential	12	1.5	180	22.8	191	24.7
Nonresidential	-17	-2.1	-37	-4.6	-54	-6.7
Heavy and civil engineering	-4	4	22	2.3	18	1.8
Specialty trade	-68	-1.6	467	11.0	400	9.3
Residential specialty trade contractors Nonresidential specialty trade	13	.7	490	26.4	504	27.3
contractors	-81	-3.3	-23	-1.0	-104	-4.2
Manufacturing	-1.107	-6.5	-1.606	-10.1	-2.713	-16.0
Wood products	-19	-3.3	-3	6	-23	-3.9
Cement and concrete products	-5	-1.9	7	2.9	2	.9
Architectural and structural metals	-22	-5.2	-10	-2.5	-33	-7.6
Construction machinery	-9	-11.9	8	12.2	-1	-1.2
Wholesale trade	-112	-1.9	74	1.3	-38	6
Lumber and construction supply	1	.5	35	16.0	37	16.6
Retail trade	-197	-1.3	150	1.0	-47	3
Furniture stores	-10	-1.8	47	8.7	37	6.7
Building material and garden supply	-				-	
stores	13	1.1	129	11.1	141	12.3
Financial Activities	50	.6	378	4.8	428	5.5
Real estate credit	24	10.6	113	46.0	137	61.5
Mortgage and nonmortgage loan brokers .	11	17.8	73	100.8	84	136.6
Real estate	10	.7	137	10.2	147	11.0
Offices of real estate	3	1.1	75	25.4	78	26.8
Activities related to real estate	6	1.3	72	16.3	78	17.9

• Record existing and new-home sales have propelled economic growth after the 2001 recession. Housing has aided employment and sales growth in a host of industries. These beneficiaries include residential construction, construction-related manufacturing, loan brokers and real estate credit agents, real estate, and certain retail and wholesale industries.