HoustonBusiness

A Perspective on the Houston Economy

FEDERAL RESERVE BANK OF DALLAS • HOUSTON BRANCH • JANUARY 2008

Neither Boom nor Bust: How Houston's Housing Market Differs from Nation's

Houston did not share in the rapid price appreciation seen by some large metros in the early 2000s or the sharp downturn. But the tightening of credit standards since August has affected Houston disproportionately.

The ongoing housing downturn has served as a significant headwind for the U.S. economy, subtracting nearly a percentage point from the country's gross domestic product growth in each of the past six quarters. However, this downturn has not been uniform across the country. Houston is an example of a metropolitan area that was seemingly immune to the trend until its housing market began slowing significantly in mid-2007.

Houston did not share in the rapid price appreciation seen by some large metros in the early 2000s or the sharp downturn of late 2006 and early 2007. But the tightening of credit standards since August has affected Houston disproportionately. Mortgage and housing markets have seen wide variations in performance as a result of the downturn, and this is Houston's story in the context of the national housing market turmoil.

U.S. Housing Rise and Fall

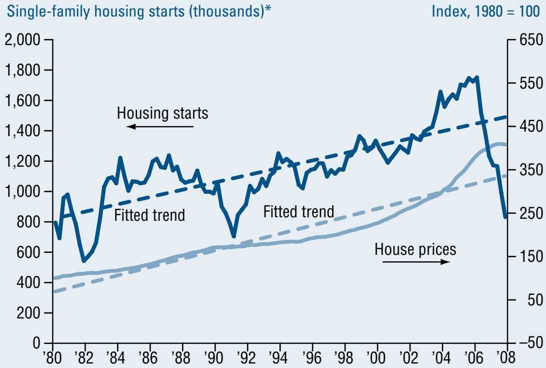
Fundamentally, employment and population growth are primary drivers of long-term housing market demand. As the U.S. economy emerged from a relatively short and shallow 2001 recession, improving job growth boosted housing demand and, ultimately, home prices.

In this period, though, an additional boost came from low mortgage interest rates. After peaking at 8.52 percent in May 2000, the average interest rate for a fixed 30-year mortgage fell to 5.45 percent in March 2004, a 25-year low.[1] It remained less than 6.5 percent through first quarter 2006, opening the door to many potential homeowners. Augmenting this increase in demand, financial institutions developed new mortgage products that further broadened the number of potential buyers.

We observe this higher demand in an accelerating rate of new-home construction and in price appreciation for existing homes (*Figure 1*).

Figure 1

U.S. Construction, Price Appreciation Rise Above Trend Before Falling

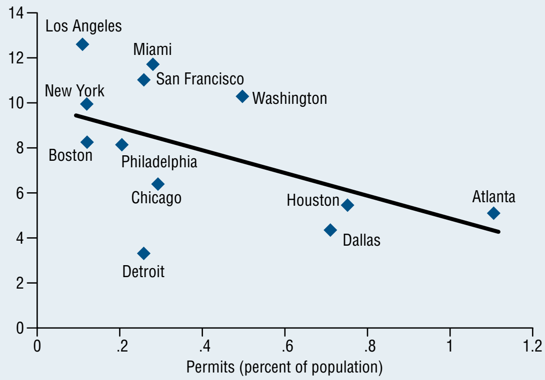


*Seasonally adjusted annual rate.

SOURCES: Census Bureau; Office of Federal Housing Enterprise Oversight.

Figure 2

Single-Family Permits, Price Appreciation in 12 Largest Metros



NOTES: Figures annualized. Permit data are for November 1997–November 2007. Price appreciation data are for third quarter 1997–third quarter 2007.

SOURCES: Census Bureau; Office of Federal Housing Enterprise Oversight; authors' calculations.

Phase I: Demand and Price Increases

In the first phase of the U.S. housing market boom and bust, many large cities (primarily on the East and West coasts) saw a prolonged run-up in prices. Demand for housing, driven by low interest rates and a growing economy, combined with supply restrictions—such as zoning laws, high permitting costs and "not in my backyard" regulations—to contribute to rapid price appreciation. Figure 2 shows how low levels of construction in the face of strong demand contributed to significant price appreciation in most of the 12 largest U.S. metros.[2] These price increases then fed off themselves. Rising prices—whether for gold, corn or houses—often foster a bubble mentality, contributing to speculative demand.

Without a commensurate increase in income, home-price appreciation cannot last forever since higher prices inevitably reduce the pool of potential buyers. This result is illustrated in Table 1, showing the percentage of houses in these 12 metros that are affordable, based on prevailing interest rates for conventional 30-year mortgages, for a family earning the area's median income. In 2001, at least a third of houses were affordable for a median-income family in all but one of these areas, but affordability has declined rapidly in the six years since. In Atlanta, Dallas and Houston, affordability has fallen but remains at sustainable levels.

As shown in Figure 2, these markets have weathered increased demand largely with new construction rather than price appreciation because of the ease of building new homes.[3] While some are dismissive of this developer-friendly attitude that allows such rapid construction, the approach clearly carries significant benefits for the homebuyer, both in selection and in price. We will return to this subject at length in a subsequent section.

Phase II: Tightened Credit Standards

Price appreciation is now turning to price decline in many cities that saw the most rapid increases. And for many homeowners who counted on price appreciation rather than a down payment to build equity in their homes or who are now stretching to afford their homes as mortgage rates adjust, these price declines have contributed to the second phase of the downturn: mortgage defaults and tightened credit.

In August 2007, when mortgage-related financial instruments began to see substantial losses, banks engaged in a flight to quality, lending only to the least risky customers. As a result, subprime, Alt-A, low documentation and other unconventional loans fell out of favor. Sales of new and existing homes in high-priced markets already were stressed by the lack of affordability and the collapse of speculative buying; now they are being hurt by the limited use of new mortgage products.

Originally, subprime lending was intended to fit a narrow niche of primarily young or minority homebuyers, allowing them to qualify for mortgages

Table 1

Housing Opportunity Index

(Percent of homes affordable based on area's median household income)

	Q3 '01	Q3 '07
Atlanta	71.2	63.7
Boston	41.8	26.6
Chicago	56.1	40.3
Dallas	67.0	53.7
Detroit	65.1	83.9
Houston	64.4	47.4
Los Angeles	35.6	3.7
Miami	55.1	10.6
New York City	54.8	7.1
Philadelphia	60.6	38.5
San Francisco	7.8	7.0
Washington, D.C.	75.4	35.0

NOTE: Because the HOI was computed using the 2000 census before 2005 and the 2005 American Community Survey from 2005 onward, the data from these two periods are not strictly comparable. But they suffice for our purpose of comparing very broad trends.

SOURCE: National Association of Home Builders/Wells Fargo Housing Opportunity Index.

Table 2
Percentage of 2006 Mortgage Originations That Were High-Cost

Atlanta	24.4
Boston	17.7
Chicago	27.2
Dallas	29.4
Detroit	37.2
Houston	33.9
Los Angeles	32.3
Miami	45.1
New York City	22.4
Philadelphia	18.4
San Francisco	22.4
Washington, D.C.	22.7

SOURCES: Home Mortgage Disclosure Act data from ffiec.com; authors' calculations.

Table 3
Annualized Growth Rates, Percent

	Population	Jobs
Atlanta	3.19	1.82
Boston*	.39	.31
Chicago	.78	.31
Dallas	2.59	1.69
Detroit	.07	–.83
Houston	2.52	1.86
Los Angeles	.93	.92
Miami	1.60	1.85
New York City	.60	.78
Philadelphia	.41	.74
San Francisco	.53	.40
Washington, D.C.	1.66	2.32

*Boston metropolitan statistical area data exclude New Hampshire.

NOTE: Population data are for 1997–2006. Jobs data are for December 1997–December 2007.

SOURCES: Census Bureau; Bureau of Labor Statistics; authors' calculations.

sooner than otherwise possible. In recent years, however, lenders misused these mortgages in a significant departure from normal lending standards. Indeed, along with job growth and low interest rates, the subprime market became an important factor in driving demand for homeownership.

Just how widespread these subprime and other nonconforming lending practices became is indicated in Table 2, which shows the percentage of 2006 mortgage originations that were "high cost," or at least 3 percentage points higher than prevailing rates or Treasury securities of equivalent duration. By 2006, most of the largest U.S. cities depended on these high-cost mortgages for a significant portion of home sales, ranging from 18 to 45 percent in the 12 largest metros.

The first phase of the current housing crisis was the bursting of the price bubble in a few large U.S. metros. But the second phase—the August 2007 withdrawal of the subprime stimulus—affected a much wider range of cities, including high-construction markets like Houston.

The Houston Example

Phase I: Construction, Not Price Increases

Houston saw tremendous job and population growth over the last decade, ranking it high among the 12 largest U.S. metropolitan areas in both metrics (*Table 3*). Projections from the Texas Office of the State Demographer indicate that this population expansion will continue, with Harris County predicted to grow an annualized 1.5 percent over the next five years.[4]

Given that Houstonians had access to the same new types of mortgages as the rest of the country and that Houston has had greater population growth than other large metros, we might expect price appreciation to be stronger in Houston than elsewhere. However, the opposite has been true.

Houston's large supply of land means that demand growth primarily results in more construction, not higher prices. Construction levels are limited by the availability of two kinds of developable land: the previously undeveloped, generally found on a metro's outskirts, and the redeveloping, usually in a city's interior. In both cases, Houston's policies are relatively permissive, making the metro friendly toward development.

The most fundamental difference between Houston and other cities lies in how they provide (or in Houston's case, do not provide) water, sewer and drainage to developments on the urban fringe. In Houston, developers can create a municipal utility district, or MUD, to provide these services on their properties and can finance these with tax-free bonds. Houston requires developers to build MUDs in such a way that they eventually could be connected to the city's corresponding infrastructure, but they begin as self-sufficient enterprises.

In other cities, developments must be connected to the city's water and sewer lines, confining new projects to nearby or adjacent land since the cost of building lengthy lines is prohibitive. In metro Houston, by contrast, virtually any large parcel of land can become a new suburb, especially given the metro's expansive highway system. Experience bears out this conceptual framework, with significant Houston suburbs like Katy and Spring developing and prospering before many closer-in areas.

But Houston does not just have a larger supply of available land on its outskirts. Unlike all other large U.S. cities, Houston lacks zoning laws restricting industrial, commercial and residential construction to specific neighborhoods. Many inner-city Houston neighborhoods protect property values through deed restrictions diligently enforced by private neighborhood associations, and the large, planned suburban communities operate similarly.[5] But much of the land in metro Houston is not assigned a specific use.

So much land is available in Houston that the cost of each incremental unit rises slowly and keeps the average cost below that of more restrictive metros. Even in the face of

Table 4
Median House Prices
(Third quarter 2007)

Atlanta	$175,300
Boston*	$414,700
Chicago	$286,400
Dallas	$146,800
Detroit	$142,900
Houston	$155,800
Los Angeles	$588,400
Miami	$346,800
New York City	$476,100
Philadelphia	$243,000
San Francisco	$825,400
Washington, D.C.	$438,000
Average of 12 largest metros	$353,300
National median	$220,800

*Boston data exclude New Hampshire.

SOURCE: National Association of Realtors.

significant population growth, this large supply keeps land prices in Houston stable, which over time contributes to lower home prices. (See box titled "Land Supply, Construction and Home Prices" for a simple illustration of the relevant supply–demand framework.)

Indeed, Houston and other metros such as Dallas and Atlanta that have relatively more permissive development policies have lower housing prices than more restrictive places do.

At $155,800, Houston's median house price is the third lowest among the 12 largest U.S. metropolitan areas and is less than half the average for these cities (*Table 4*). Houston's median price is lower than even the national average, which includes inexpensive rural areas.

By comparison, the median house price in metropolitan San Francisco, where zoning laws and building codes are very strict, is $825,400.

This result—more zoning bringing higher prices—is a robust one. Economists Edward Glaeser and Joseph Gyourko find that house prices across the country are positively related to the degree of zoning and regulation.[6] Even in Houston, there is evidence that houses in deed-restricted neighborhoods or in zoned cities within the metro area are more expensive than comparable ones outside these areas.[7] But with plenty of unzoned neighborhoods remaining, Houston house prices, on the whole, are restrained near construction costs.[8]

In summary, Houston's low-and-slow home prices have made real estate a relatively accessible and safe investment for the area's residents even as other cities' markets have become expensive and volatile. The early phases of the current housing downturn—the boom and bust in prices—were barely felt in Houston.[9]

Phase II: The Subprime Problem

Rather, Houston began to feel the housing pinch in the second phase of the downturn: diminished credit availability and the sudden narrowing of the market due to the loss of high-cost mortgages.

The withdrawal of subprime lending likely will deepen the decline of markets like Washington, D.C., Boston and Los Angeles, which already are in a tailspin from falling home prices. In high-construction markets like Houston, Dallas and Atlanta, the reduced pool of potential homebuyers since August 2007 marks the beginning of a serious slowdown.

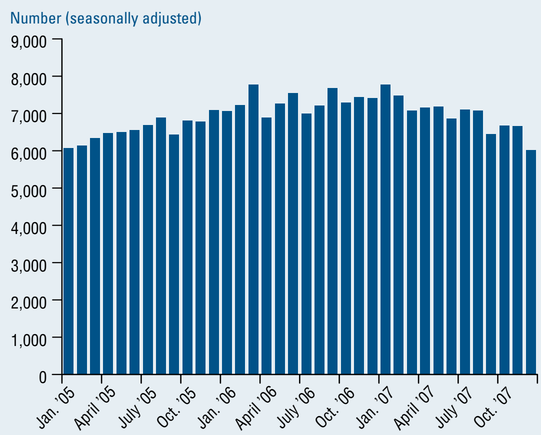
This connection between financial conditions and the local housing market is evident in Houston's existing-home sales, which declined substantially in September (*Figure 3*), immediately after credit standards tightened. This decline persisted throughout the fall, with existing-home sales down 23.5 percent year-over-year in December. Further, the decline began at the low end of the market, exactly where local consumers had relied most heavily on subprime and Alt-A loans.[10] Luckily for Houston, the nationwide price correction that began earlier this year caused many national homebuilders to abandon projects across the country, including in Houston, where the market was still strong. The result is that inventories are likely lower than they would have been if not for this exogenous effect.

As the housing downturn unfolds, Houston is in a relatively strong position. The metro will not escape without significant correction, but forces are at work to limit the damage.

In 2006, Houston relied more heavily on high-cost lending than many other large metro areas did. The resulting correction, however, takes place in the context of prices that are squarely in line with local construction costs and without the painful supply-induced downturn under way in many other markets.

Perhaps the most powerful force working in Houston's favor is that the metro remains a strong beneficiary of the current global commodity boom. As the seat of the U.S. energy

Figure 3
Houston Existing-Home Sales



SOURCES: Houston Association of Realtors; authors' calculations.

industry, Houston is generating large numbers of jobs,[11] and the outlook for job growth remains good. There are downside risks to oil and other commodity prices, particularly as the U.S. economy decelerates and perhaps slows other economies along with it. However, Houston's surest route to a short and mild correction in the local housing market is through continued strong population, job and income growth.

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Notes

1 According to Freddie Mac. Data can be found at www.freddiemac.com/pmms/pmms30.htm.

2 Some data are reported by metropolitan statistical area (MSA) and others by metropolitan division, into which some large MSAs are divided. In cases where MSA data are not available, metropolitan division data are aggregated or combined into a weighted average by population.

3 Along with Atlanta, Dallas and Houston, Detroit is also an affordable housing market. In Detroit, however, this affordability results from overall economic malaise over the last five years, making it fundamentally different from the other three areas, where housing markets have remained affordable in the face of rapid economic growth.

4 This compares with 0.8 percent for Texas, which is expected to outpace national growth during this period. Data are available on the Office of the State Demographer's website at http://txsdc.utsa.edu/tpepp/2006projections.

5 The absence of zoning does not imply that developers have free rein. The city has extensive building codes, setback, parking, landscape and other development restrictions. The primary conflict that has arisen without zoning has been confrontations between high-rise development and affluent inner-city neighborhoods.

6 "The Impact of Zoning on Housing Affordability," by Edward Glaeser and Joseph Gyourko, Harvard Institute of Economic Research Discussion Paper no. 1948, March 2002.

7 "The Effect of Land-Use Restrictions on Market Values of Single-Family Homes in Houston," by Janet Speyrer, *Journal of Finance and Economics*, June 1989, pp. 117–30. While this study is not recent, the fundamentals of the Houston real estate market have not changed since its publication, and a crude examination of current real estate prices bears out its findings.

8 See Glaeser and Gyourko (note 6).

9 Any spillover to Houston in the early phases of the housing downturn was minor and confined to new-home construction, where homebuilders' issues elsewhere led them to abandon projects in Houston, and perhaps also to a slowing in relocations resulting from potential migrants' inability to sell homes in weaker markets.

10 This is in contrast to other markets, where subprime loans were used to stretch incomes to finance move-up purchases of homes at middle and higher price levels, or for speculative purchases to take advantage of rapid price appreciation.

11 According to the Dallas Fed's rebenchmarked data, Houston has seen job gains of 322,000 over the last four years, a 14.2 percent increase (equivalent to an annualized 3.4 percent).

Land Supply, Construction and Home Prices

The use of municipal utility districts and a lack of zoning in Houston foster a highly elastic supply of land. This is depicted in Figure A, which shows how a strong shift in demand for homes, perhaps through population growth or lower interest rates (Phase I), brings a different response in cities that have an elastic (including Houston) versus inelastic (San Francisco, among others) land supply. The left chart shows that with an elastic supply of land, the shift of the demand curve from D to D′ results in greater delivery of homes to the market and a small price increase. In the right chart, depicting cities with a more inelastic supply, we see the shift in the demand curve results in much larger price increases and fewer homes constructed.

Phase II of the correction (*Figure B*) has meant a shift in demand from D′ to D″, and this downturn can be attributed specifically to tightened credit in the high-cost mortgage market, bringing fewer potential homebuyers. Because of Houston's heavy use of these mortgages compared with other cities, the metro has been affected more than cities with a lower concentration of high-cost loans. As with the initial demand shift, the correction will fall heavily on homebuilding rather than home prices in Houston, while it will mean price drops more than a homebuilding downturn in cities with more restrictive land use policies.

In Houston, the process of shifting the demand curve from D″ back to D′ will have to be done the old-fashioned way—through population and employment growth. A continuation of the rapid job growth Houston has seen since 2004 would keep the building downturn shallow and shorten the period of malaise.

Figure A
Phase I: Population Growth and Lower Mortgage Rates

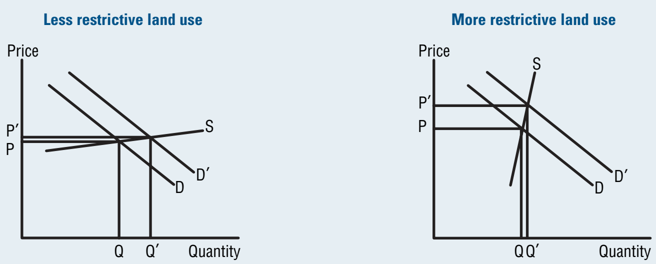
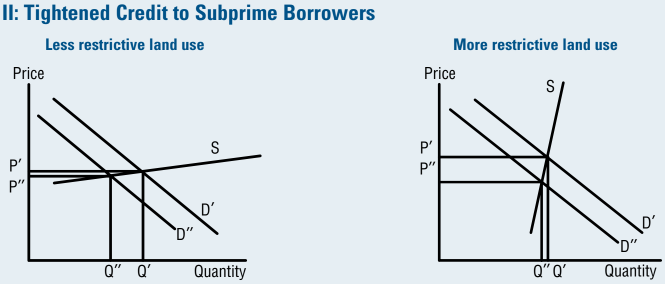


Figure B
Phase II: Tightened Credit to Subprime Borrowers



NOTE: S = Supply, D = Demand.

SOURCE: Authors' construction.

Houston EconomicUpdate January 2008

The Houston economy is probably on track to have added 100,000 new jobs in 2007, once all the revisions are complete. The local economy continues to click along, with the one notable exception of housing. Oil prices above $90 per barrel continue to work their magic for the city, despite slower growth at the national level. Looking ahead, however, if the slowdown were to become more serious for the world's largest economy, it could spell adverse consequences for both oil markets and Houston.

Retail Sales and Autos

Local retail sales during the holidays were disappointing for many stores. Clothing was a major problem, as warm weather kept the stores overstocked through the Thanksgiving weekend. Discounting began even before holiday shopping got serious and then seemed to snowball. Department and furniture stores were off significantly, discount stores about flat.

Local car and truck sales, in contrast, finished the year strong and were up 2.6 percent for 2007 as a whole.

Real Estate

Sales continue to decline for both new and existing homes. New-home sales are likely to finish the year down by 20 percent or more. Existing-home sales were down only 4 percent through November, with most of the decline at the lower end of the market. The correction process is falling primarily on sales rather than home prices, which have remained steady.

Strong job growth is keeping other real estate markets healthy. Apartments are leasing rapidly, but thousands of units under construction keep both rents and occupancy from significant gains. Retail continues strong throughout the city. The office market remains the star, however, with a good year for occupancy and rent assured in 2008, barring unforeseen and serious economic problems. Energy continues to drive demand for office space, and construction is a couple of years behind the curve.

Energy Prices and Refining

Crude oil prices pushed to near $100 per barrel in early January, driven by OPEC's decision to maintain current production; by geopolitical issues in Iran, Nigeria and Pakistan; and by a sharp decline in U.S. inventories. Gasoline prices followed crude prices up, and heating oil rose with additional momentum coming from sparse inventories.

Refinery utilization held at about 90 percent, typical for this time of year. Refiner margins were dampened by the rising price of crude inputs and by highway diesel and gasoline prices that lagged well behind crude.

Natural gas prices were under downward pressure from moderate winter weather and inventories that are about 10 percent above normal for midwinter. They were supported, however, by sharply rising oil prices. Natural gas prices remained range-bound between $7 and $8 per thousand cubic feet.

Petrochemicals

Petrochemical demand has eased significantly. Domestic demand continued to weaken in response to poor housing and auto activity, and export demand eased for most products. Caustic soda exports remained strong and ethylene and polyethylene revived some at year-end, but propylene and polypropylene were largely priced out of the export market. Following a string of price increases for plastics throughout 2007, price pressures on polyvinyl chloride, polyethylene and polypropylene seemed to ease at year-end.

Oil Services and Machinery

Domestic drilling held steady near 1,800 working rigs, but the Texas rig count jumped sharply, once again led by work in the Barnett shale near Fort Worth. Expectations are for drilling to decline in Canada in 2008 and remain steady or pick up in the U.S. and for lucrative international work to continue to grow. Pricing is mixed depending on the line of business, on domestic weakness versus international strength and on declines in some durable goods versus better pricing for nondurable products consumed in the drilling process. Overall, price pressures in oil services have eased significantly since last spring.

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