U.S. Multifamily Market
Poised for Long-Term Growth

By Dr. Peter Linneman, PhD
Chief Economist, NAI Global
Principal, Linneman Associates

Multifamily Market Fundamentals

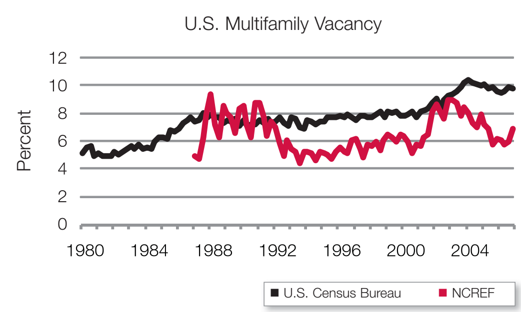
On a national basis, despite mixed signals, both demand and supply driven factors indicate that the outlook for the U.S. multifamily housing market is strong. Although home ownership rates are increasing, regulatory barriers to development are generally on the rise, and several other factors bode well for the multifamily rental sector, including declining vacancy rates, near-term softness in single family home demand, rising mortgage rates and declining home ownership affordability.

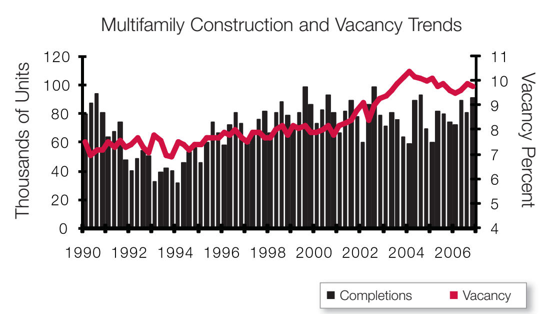
The most critical component of long-term multifamily demand in the U.S. is population growth. The nation's population is expected to increase by about 3 million people per year through 2020. Assuming historical household size and rental propensities hold, this rate of growth will require new construction of roughly 420,000 incremental multifamily units per year across the U.S. However, if rental propensities decline as they have done over the last decade, less than 100,000 multifamily units will be needed to meet expected demand each year. In addition to demographic growth, demand for new multifamily units will also be driven by the need to replace existing units.

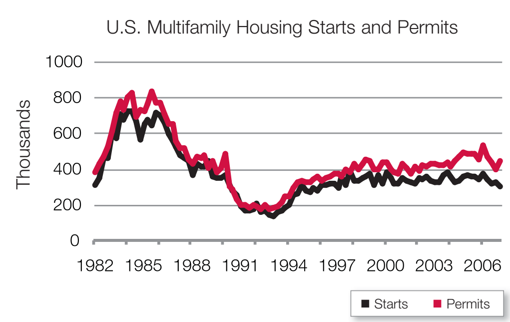
According to the Census Bureau's year-end 2006 Housing Vacancy Survey, the U.S. multifamily vacancy rate inched back up to 9.8%, slightly above the 9.6% vacancy rate of one year earlier. In contrast, the year-end 2006 vacancy rate, as reported by NCREIF, was 6.9%. The discrepancy is due to the fact that the Census survey captures a larger universe of multifamily inventory, including lower quality product, while NCREIF focuses on class A and B product. NCREIF shows a steady decline in multifamily vacancies, reflecting strong market fundamentals for higher quality product.

There were 336,000 multifamily units started (in buildings with two or more units) in 2006. This is on par with the number of starts in 2000, but is down from 345,000 in 2004 and 352,000 in 2005. The average since 2000 has been 342,000 new units started per year. Similarly, there were 324,000 multifamily units completed in 2006, up from 310,000 in 2005 and 296,000 in 2004. From a building cost perspective, multifamily construction volume was $57 billion, down slightly from $58 billion in the previous three quarters.

While demographics point to negative demand, population growth and an aging inventory will likely support development of 2.5 million to 3 million new multifamily units by 2020.

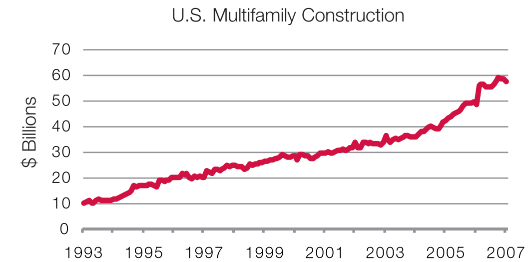






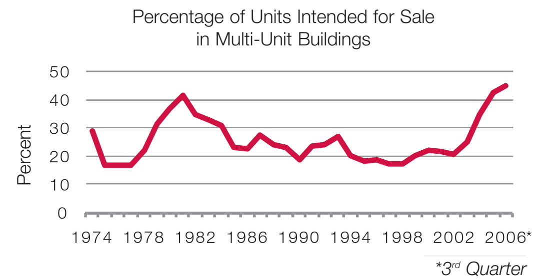
population growth

Interestingly, of the newly constructed inventory, the percent of units in multi-unit buildings that are intended for sale has risen precipitously since 2002 when it was just 20%. As of year-end 2006, it stood at 45%, reflecting the momentum of the condominium market. We expect this to revert back to around 24%, the historical average over the last 30 years, by 2010. Multifamily revenue growth was about 6.25% through the first half of 2006, according to SNL Financial.

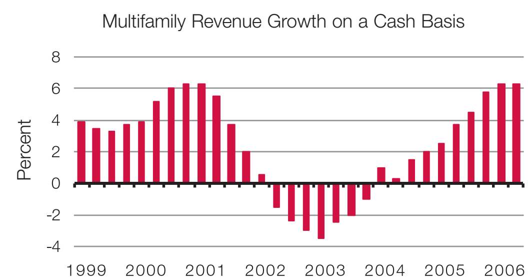


Where will growth occur?

It took more than 50 years for the U.S. population to grow from 100 million to 200 million in 1967, and not quite 40 more years for it to reach 300 million in October 2006. Over the past 20 years, the U.S. population has grown slightly in excess of 1% per annum – a significant distinguishing feature of the U.S. economy relative to other developed economies. About two-thirds of this growth is due to more births than deaths (among those already in the country), while the other third is due to immigration.

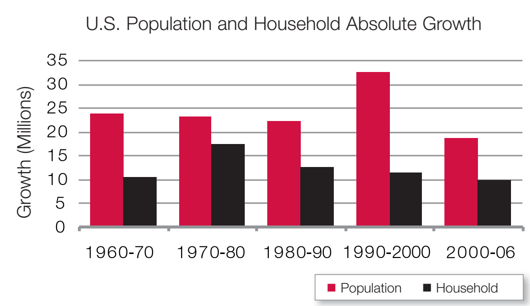


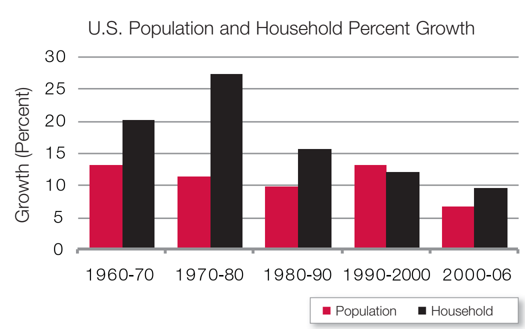
Over the next 20 years, this population growth rate is expected to continue, barring any major change in birth rates or immigration. But not all areas of the country will grow equally. Why do some places achieve substantially higher population growth while others lag far behind? Because high growth occurs where people want to live and play, where firms find it efficient to produce, where the necessary approvals can be attained to accommodate desired growth, and where "wild card" factors align.



Demand and Supply Fundamentals

The U.S. under-produced housing from 2001-2004 relative to these underlying demand fundamentals. This is shown by the dramatic increase in excess demand over this time period, which rose to nearly 2% of the total housing stock. From 1993-2001, supply growth modestly outpaced demand growth. While this surplus existed, both home prices and home production slowed. But while supply dipped in 2001-2003, household formation surged and housing demand soared, creating a shortage. Accordingly, home prices and production boomed to meet the shortage. Housing starts (including manufactured homes) as a ratio of new households fell from the norm of approximately 1.4-1.5, to less than 1.0 during the shortage. Then as home prices surged in the face of this supply shortfall, home builders brought new product on-line, enabling the market to rebound to the norm, with modest excess supply by the end of 2006.





Today, housing inventories (including units under construction and manufactured housing) are about 360,000 units too high. This represents a mere 0.3% of the U.S. housing stock, or nearly three months of required annual housing, assuming about 125,000 households are formed each month. That means in order to adjust for the surplus, we will need to produce just nine months of new housing over the next 12 months. Once this inventory adjustment is achieved (and it is rapidly occurring), housing construction can resume at its normal pace.

How badly will this housing inventory adjustment harm the U.S. economy? This question consumes the media and Wall Street. The answer is that it is an economic non-event. This reduction amounts to $50-80 billion over the next year. This is less then 0.5% of the U.S. economy. If this were the only factor occurring in the economy, it would knock the growth rate from approximately 3.2% to approximately 2.7% in 2007.

Factors Driving Home Ownership

The strength of multifamily housing markets is integrally connected to market fundamentals of the single family home sector. Thus, when examining multifamily markets, it is critical to consider several economic, social and political factors and the relative influence of each.

- **Innate Ownership Preferences**

  When it comes to homes, potential investment returns are not the primary or even the secondary driver of ownership. Rather, the key driver for most is the "dividend" associated with owning one's home – the value of the comfort, enjoyment and satisfaction that one derives from living in it, net of maintenance and capital costs. It is the value of the option to customize one's home, as well as the value of the flexibility to defer maintenance or capital expenditures, not afforded to renters.

  Running simple numbers, we know that the annual expected price appreciation for homes is approximately 4% over the long term, versus an 8.5% expected total return for a diversified stock portfolio (the alternative use for the down payment). Seen in this light, it is obvious that home ownership is financially advantageous if the "dividend" associated with living in one's home exceeds 4.5% annually. Is it reasonable to believe that this expected dividend service exceeds 4.5% annually? The answer for the majority of Americans is yes.

Population Growth: An Historic Perspective
Top 10 MSA Absolute Population Growth 1980-2000

Los Angeles-Long Beach, CA (PMSA)	2,038,470
Atlanta, GA (MSA)	1,898,202
Riverside-San Bernardino, CA (PMSA)	1,706,325
Phoenix-Mesa, AZ (MSA)	1,665,593
Dallas, TX (PMSA)	1,472,984
Houston, TX (PMSA)	1,414,017
Las Vegas, NV-AZ (MSA)	1,047,239
Chicago, IL (PMSA)	1,044,858
New York, NY (PMSA)	1,044,813
San Diego, CA (MSA)	949,458

Source: Census; Linneman/Saiz (April 2006)

Population Growth: An Historic Perspective
Top 10 MSA Percentage Population Growth 1980-2000

Las Vegas, NV-AZ (MSA)	196%
Naples, FL (MSA)	190%
Punta Gorda, FL (MSA)	139%
Austin-San Marcos, TX (MSA)	114%
Fort Myers-Cape Coral, FL (MSA)	113%
Ocala, FL (MSA)	110%
Riverside-San Bernardino, CA (PMSA)	109%
Fort Pierce-Port St. Lucie, FL (MSA)	108%
Orlando, FL (MSA)	104%
Phoenix-Mesa, AZ (MSA)	103%

Source: Census; Linneman/Saiz (April 2006)

Population Growth: An Historic Perspective
Bottom 10 MSA Absolute Population Growth 1980-2000

Pittsburgh, PA (MSA)	-211,721
Buffalo-Niagara Falls, NY (MSA)	-72,323
Youngstown-Warren, OH (MSA)	-49,736
Scranton-Wilkes-Barre-Hazleton, PA (MSA)	-35,478
Wheeling, WV-OH (MSA)	-32,490
Johnstown, PA (MSA)	-32,017
Steubenville-Weirton, OH-WV (MSA)	-31,674
Davenport-Moline-Rock Island, IA-IL (MSA)	-26,173
Cleveland-Lorain-Elyria, OH (PMSA)	-25,649
Duluth-Superior, MN-WI (MSA)	-22,633

Source: Census; Linneman/Saiz (April 2006)

Population Growth: An Historic Perspective
Bottom 10 MSA Percentage Population Growth 1980-2000

Steubenville-Weirton, OH-WV (MSA)	-19%
Wheeling, WV-OH (MSA)	-18%
Decatur, IL (MSA)	-13%
Johnstown, PA (MSA)	-12%
Enid, OK (MSA)	-9%
Duluth-Superior, MN-WI (MSA)	-8%
Pittsburgh, PA (MSA)	-8%
Casper, WY (MSA)	-8%
Youngstown-Warren, OH (MSA)	-8%
Muncie, IN (MSA)	-8%

Source: Census; Linneman/Saiz (April 2006)

affordability, risk, taxes

Affordability

There are two distinct factors driving the affordability of home ownership, the first being high transaction costs. If one plans to remain in a home more than five years, the present value of the costs associated with buying (1-2%) and selling (5-7%) one's home are outweighed by the advantages. As a result, for younger households who are experiencing rapid changes in their housing demand due to growing incomes and changing family status, renting dominates. But for mature households with relatively stable income and family characteristics, the advantages of home ownership dominate the burden of the high transaction costs.

The second and more important factor driving home ownership affordability is the ability to pay a substantial down payment. This remains true even in today's world of 5% money-down mortgages. Most of these households can afford the monthly payment on a mortgage, but simply lack the savings for a down payment. Until people accumulate sufficient funds for the requisite down payment, people allow their landlord to fund the de facto down payment on their dwelling.

The increased propensity for home ownership among the young reflects the fact that Freddie/Fannie and Granny are all subsidizing home ownership, thereby dramatically changing the dynamics of the American rental market.

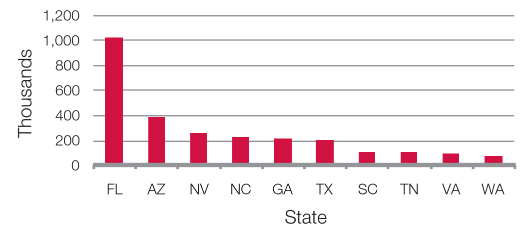
The need to control the rental rate risk

A major risk management advantage of home ownership has been documented by my Wharton colleague, Todd Sinai. He notes that while a homeowner has poor asset diversification, he is insulated from inopportune rent shocks. Thus, whereas a landlord may raise rents when the tenant is tight on funds, a homeowner cannot be squeezed out by a strong rental market. Given the costs of moving and the emotional disruption associated with searching for and moving to a new residence, this rental shock "insurance" aspect of home ownership is attractive, particularly for lower- and moderate-income households.

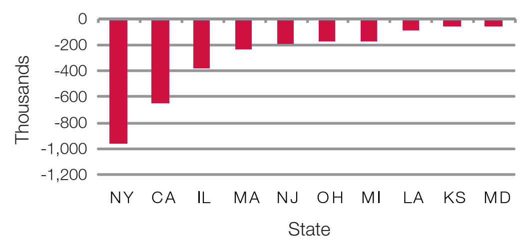
Tax & other advantages

It is clear that federal tax deductions cannot be the primary driver of home ownership preferences. This is because landlords deduct these same payments from their federal taxes, and in competitive rental markets, which include most local rental markets, these landlord tax deductions are reflected in lower market rents. Stated

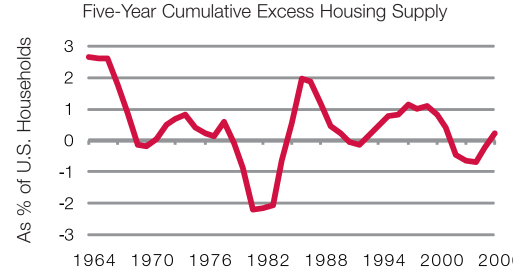
Top Ten Net Domestic Migration Gainers (2000-05)



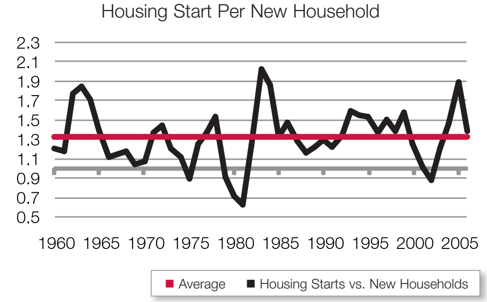
Top Ten Net Domestic Migration Losers (2000-05)



Five-Year Cumulative Excess Housing Supply



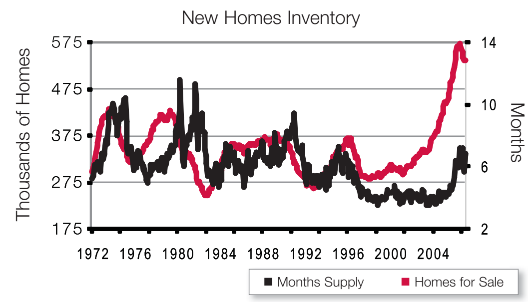
Housing Start Per New Household

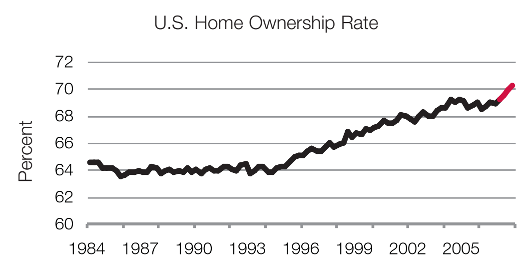


differently, the ability to deduct interest payments and property taxes is relatively neutral, up to the point at which high-income households may have higher tax brackets than landlords. But since many apartments are owned in partnership structure by high-income households, the typical landlord tax rate is the same as that of high-income households.

Home ownership also receives considerable political protection. This is hardly surprising for an asset owned by nearly 80% of all voters. Among these protections are generous treatment in cases of personal bankruptcy, prohibitions against mortgage prepayment penalties and pressure on Fannie and Freddie to create low-money-down mortgages.

Another advantage of home ownership is that residential mortgage interest rates are subsidized by the federal government through Freddie Mac and Fannie Mae. While these subsidies are primarily reflected in the profits of these entities, a portion of the subsidy is passed on in the form of lower mortgage rates. This interest subsidy partially offsets the inefficiency of self-provision of housing relative to professional landlords, particularly at high-leverage levels.

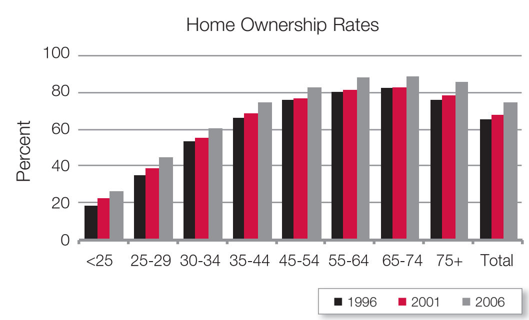




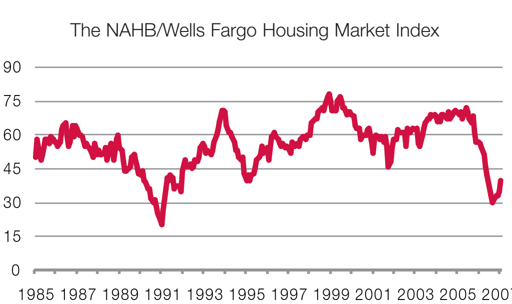
LL Forecast (2007-2010) in red

Development Barriers

High-barrier markets make it difficult to satisfy the demand to own one's home. This is where home prices get so high that it takes a long time to accumulate the down payment (while developers of rental properties have the necessary equity). As a result, where development barriers are high, long-term rentals will occur by default. In an effort to accommodate (or control) growth, almost every community has raised the entry barrier ever higher. This favors rehabbing existing properties over building new ones as development opposition is generally less for existing properties than for new developments.



Research done using the Wharton Decentralization Survey of Growth Controls repeatedly has found that both lower growth rates and higher housing prices result from high local regulatory burdens. My Wharton colleague, Joe Gyourko, has persuasively demonstrated that communities with high regulatory burdens have a large gap between housing prices and construction costs, and also that housing production grinds to a halt in such communities. Thus, the burden of difficult-to-obtain approvals is both direct (you cannot get permits) and indirect (you can get them, but only at enormous risk, delay and cost, which boosts housing prices).



demand outlook

Multifamily Demand Outlook

Projecting long term housing demand is conceptually straightforward. There are three primary factors that drive the need for new multifamily units in the U.S.:

- **Annual household growth**
- **Age specific rental propensities**
- **Annual inventory destruction**

Despite declining rental propensities, the outlook for the multifamily construction market is far from bleak, due to both increasing population and, in large part, the need to replace the nation's aging multifamily inventory. In fact, according to our analysis, if age cohort rental propensities (the percentage of the population likely to rent) continue their long-term decline, we forecast that just under 1.3 million total multifamily units will need to be constructed in the U.S. through 2020, just 92,000 per year. That works out to be an average annual loss of 65,000 rental households for the next 14 years, offset by an annual average need to replace 157,000 units that are destroyed. But if age cohort rental propensities remain constant at 2006 rates, we forecast about 5.9 million total new rental units will be required (418,000 per year for the next 14 years.)

The "right" answer is probably somewhere between these two scenarios, or around 2.5 million to 3 million newly constructed units, about 180,000 to 215,000 annually, through 2020 But if rental propensities continue their historic slide, "Katie, bar the door."

NAI Global®
Commercial Real Estate Services, Worldwide.

4 Independence Way
Suite 400
Princeton NJ 08540
tel +1 609 945 4000
fax +1 609 945 4001
www.naiglobal.com