

The South Florida Condominium Market

The anatomy of a bubble.

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THE SOUTH FLORIDA condominium market has attracted much attention from real estate investors across the world in the past three years. Prices have risen more than 112 percent since 2000, new construction and conversions have soared, and the media has highlighted the easy money to be made by the “day trader” in condos. To many experienced investment professionals, this market appears to be a speculative real estate investment bubble, but most analysts (including Fed chairman Alan Greenspan) take the view that you cannot identify an investment bubble until after it bursts. We disagree. The purpose of this paper is to identify the indicators that show a real

investment bubble has formed in the South Florida condominium market. We will also forecast the fallout from the bursting of the bubble that will inevitably take place.

The huge boom in condo construction that is taking place in South Florida has all the classic signs of an asset price bubble. While definitions of bubbles differ, it is our view that a bubble can be defined as market conditions in which new supply becomes disconnected from fundamental demand and a significant portion of purchases are made for speculative purposes, not occupancy by the purchaser. Other characteristics of a real estate bubble include rapid price increases, massive media coverage, participation in the market by naive investors (e.g., the shoeshine boy, taxi drivers, flight attendants, doctors, and dentists), rapid resales of units, flipping of units not yet built or occupied, easy credit conditions, a belief that prices only rise, and a massive entry of new professionals into the real estate industry (more brokers, developers, financiers, etc.). This paper provides an anatomy of the South Florida condo bubble and will discuss the consequences and timing of a potential bursting of the bubble.

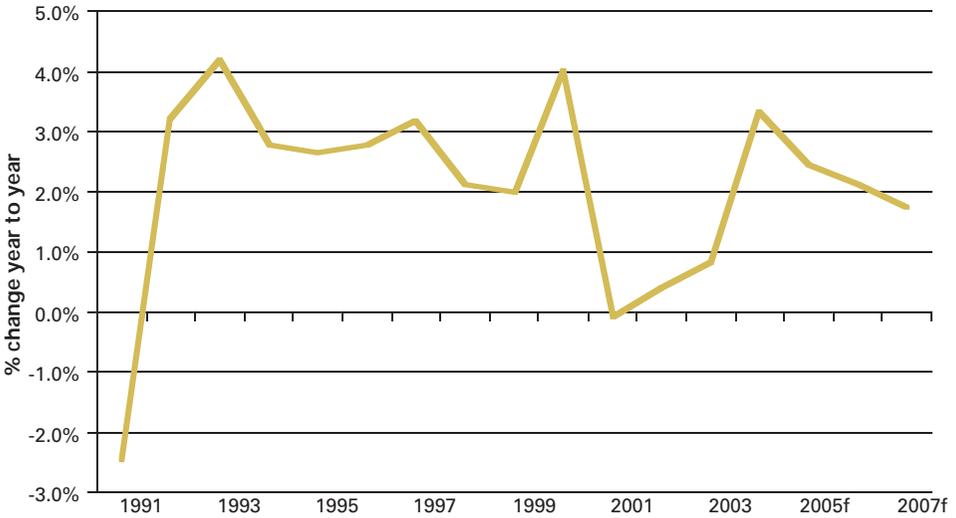
DYNAMICS OF DEMAND

Demand for condominium housing comes from a number of sources. New

entrants to the market come from the existing population who are now renters or possibly from existing single-family homeowners who want to move to the condominium lifestyle. New migrants to the area add to the fundamental demand for units. Part-time residents from the North (snowbirds) are especially prominent as consumers of the full-service condo lifestyle. Part-time residents from abroad are also an important part of this market, representing both demographic demand but also safe haven demand from Latin American political and economic instability. Move-up demand from existing condo owners trying to leverage up their existing equity also provides a significant portion of demand. Finally, during parts of the real estate cycle there can be massive amounts of demand from speculators taking advantage of the peculiar institutional weaknesses of the condo development and financing process.

South Florida's economic growth routinely outpaces the nation as a whole. As indicated in Figure 1, total employment in the area is expected to grow by 2.4 percent in 2005, down from 3.3 percent in 2004. Although the manufacturing, information services, and transportation and utilities sectors lost jobs, strength in the construction and service industries more than compensated for those losses. In a worrying sign of the broader economic impact of the current housing

Figure 1: South Florida employment growth



bubble, a large portion of recent job growth has been concentrated in real estate-related employment sectors.

In general, the economy is strongest in Broward County, followed by Palm Beach and Miami-Dade Counties, respectively. In the past year, Broward added 18,500 jobs, Palm Beach added 15,800, and Miami-Dade 14,000. We believe employ-

ment growth in the area will continue to outpace national levels during the next three years, with 50,000 new jobs added in the three-county area per year.

The condo bubble in South Florida has been a major driver in the local economy as real estate-related employment directly accounted for 25 percent of job growth during the past four years. As shown in

Figure 2: Private real estate employment (000): South Florida ⁽¹⁾

	2001	2002	2003	2004
Total Real Estate Jobs	185	189	195	208
Total Non-Farm Jobs	2,737	2,744	2,757	2,828
Real Estate as Percent of Total	7%	7%	7%	7%
Real Estate Jobs Added		4	6	13
Total Non-Farm Jobs Added		7	13	71
Real Estate Jobs Added as Percent of Total Jobs Added		60%	49%	18%

(1) Preliminary figures
Source: BLS

Figure 3: South Florida demographics

(thousands)	1970s*	1980s*	1990s*	2000	2001	2002	2003	2004e
Total Population	2,262.5	3,255.1	4,078.6	5,028.7	5,116.7	5,205.8	5,277.5	5,361.7
Annualized Absolute Growth	99.3	82.3	95.0	96.7	88.0	89.1	71.6	84.3
Annualized % Change	3.7%	2.3%	2.1%	2.0%	1.7%	1.7%	1.4%	1.6%
Annualized Natural Increase	4.2	12.8	17.5	20.7	19.9	20.2	22.1	20.9
Annualized Births	33.6	51.5	60.2	67.7	68.7	68.4	69.7	71.3
Annualized Deaths	29.4	38.7	42.8	47.0	48.7	48.2	47.6	50.4
Net Migration	95.1	69.6	77.6	76.1	68.0	68.9	49.6	63.3
Households	774	1,266	1,586	1,913	1,947	1,981	2,008	2,040
Annualized Absolute Growth	49.2	32.0	32.7	36.8	33.5	33.9	27.3	32.1
% Change	5.0%	2.3%	1.9%	2.0%	1.7%	1.7%	1.4%	1.6%
Note: Pre-2000 population and household data are levels at start of decade, other figures are annualized changes from 1970-79.								

Sources: US Census Bureau, Florida Dept. of Health, University of Florida Bureau of Economic and Business Research, RCG

Figure 2, more than 200,000 people out of a current total of 2.1 million workers are employed in real estate-related industries. In fact, the real estate boom has resulted in hiring in many diverse employment sectors, and directly and indirectly accounted for well more than 25 percent of total job growth since 2001.

The present burst of condo activity in South Florida started in 2001, spurred by real demand for housing from current residents, migrants to the region, and second-home purchases from other parts of the United States and abroad (especially safe haven money from Latin America).

In analyzing the region's demographics, it is clear that there is strong demand for housing in South Florida. Figure 3 shows population growth in South Florida for the past four decades as well as for the last four

years. While the annual percentage growth in population has slowed over the decades, the average annual absolute growth remains strong in the range of 80,000 to 90,000 persons. Net migration from the rest of the United States and from international sources is also shown in this table. In addition, the table shows household formations of 30,000 to 40,000 per year. By Census definition, each household occupies one housing unit, giving us a direct measure of primary demand for housing.

Approximately 30 percent of Florida's population lives in the Miami-Fort Lauderdale-Palm Beach Area. In 2004, the combined resident population of Miami-Dade, Broward, and West Palm Beach Counties grew 1.1 percent to nearly 5.4 million people, up from 4.3 million ten years prior, as shown in Figure 4. We

Figure 4: Population and household growth: South Florida

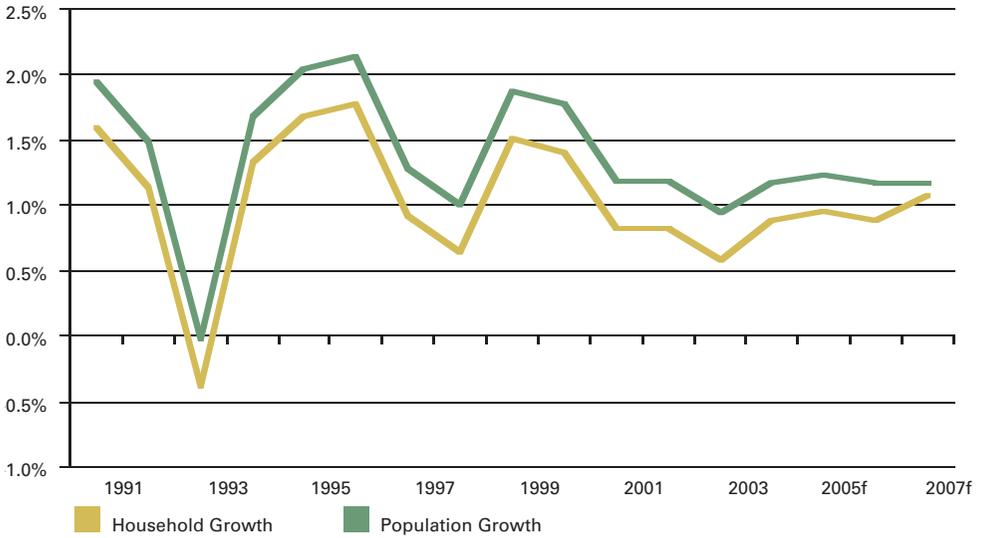
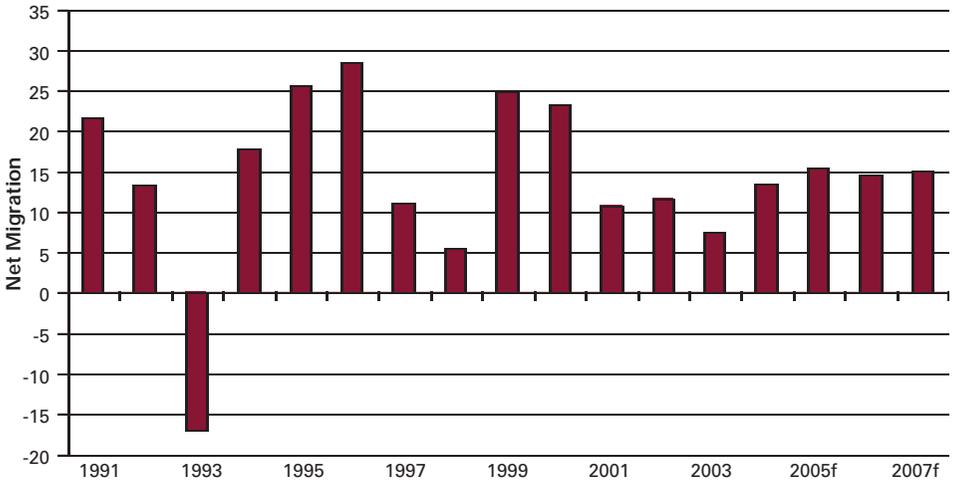


Figure 5: South Florida net migration

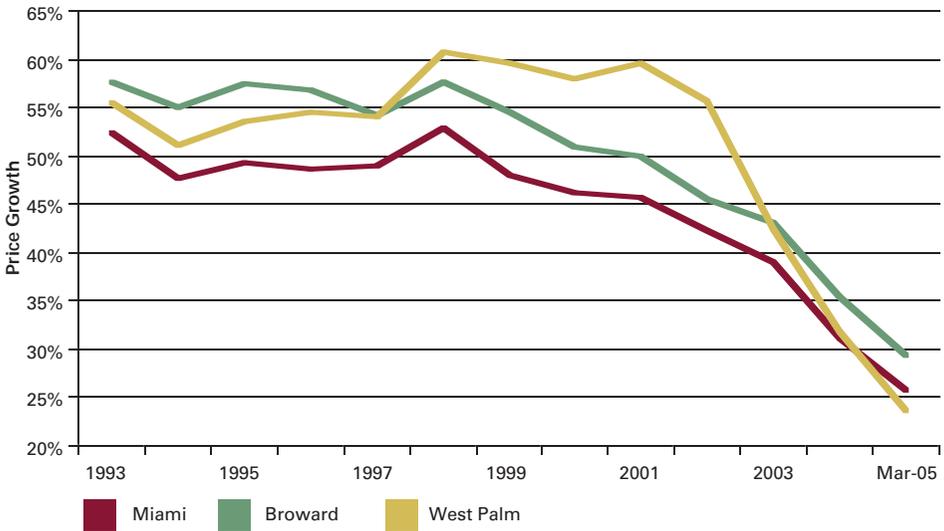


Source: Census Bureau

expect the area’s population will grow by almost 270,000 people, and approximately 91,000 new households will be formed, between 2005 and 2008.

Although in-migration has slowed from the high levels of the 1990s, Figure 5 shows that the three South Florida counties will attract an average of 15,000 new

Figure 6: South Florida single-family home affordability



residents annually through the forecast horizon. We expect the area's strong economy and high quality of life to draw new residents, leading net migration to accelerate through the horizon forecast.

South Florida is an area of significant economic disparity, consisting of both wealthy celebrities and thousands of immigrants living below the poverty line. Incomes steadily rise from south to north, with an average household income of \$84,400 in Miami-Dade all the way up to \$110,200 in Palm Beach County.

Many homeowners in South Florida were once the area's vacationing visitors. Likewise, many speculative investors have ties to the region through family, vacationing, or business. As such, the visitor profiles of each of the three counties help inform our understanding of the

sources of demand in the different areas. Miami-Dade County is the most visited of the three South Florida counties, with Latin American visitors accounting for the largest percentage of total visits, followed by domestic visitors from the Northeast. In contrast, Broward County experiences far more domestic and European visitors, with the majority of domestic visitors originating from New York, New Jersey, and Connecticut. In Palm Beach County, visitors are almost entirely domestic, and business rather than vacation is a much more common reason for being in town.

As the area's population has increased, housing affordability has steadily declined. Rapid house price growth has dramatically reduced affordability. As shown in Figure 6, only 26 percent of Miami households

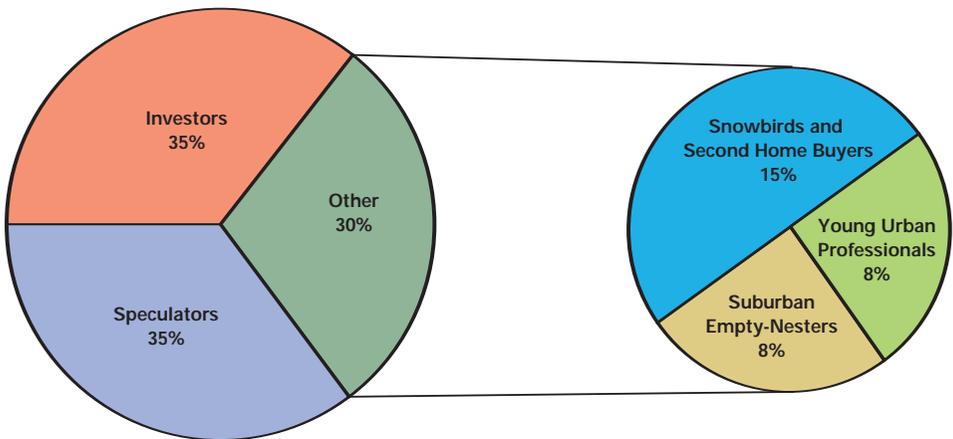
could afford the median-priced single-family home in the first quarter of 2005, down from 53 percent in 1998. Affordability has fallen just as much in Broward County and even more in Palm Beach County. This is due exclusively to the rapid run-up in prices since 2002. Miami had the fourth-lowest home ownership rate in 2004 of all major U.S. metropolitan areas and, when interest rates rise, the area will be in an ever-more precarious position.

Through interviews with developers, appraisers, consultants, and brokers in the South Florida market, we have generated an analysis of buyer profiles and sources of condominium demand. Approximately 70 percent of buyers of new condominiums and condominium conversions are either investors or speculators; the remaining buyers are individuals purchasing units as

primary or secondary residences. Of the 70 percent of buyers who are not owner-users, approximately one-half are pure speculators intending to flip their units. The other half are more stable investors who are probably capable of holding the unit for an extended period of time, as shown in Figure 7.

Of those purchasing the units for personal use, approximately half are either snowbirds or second-home buyers intending to use the unit either year-round or as a vacation residence. Approximately 25 percent of owner-users are empty-nesters trading from single-family homes in suburban South Florida to low-maintenance condos. The remaining 25 percent of owner-users are young professionals and two-income childless couples who are attracted to the amenities and convenience of urban condominiums.

Figure 7: Buyer profiles



As in much of the rest of the country, the current condominium development in the area is being targeted towards a few specific groups of buyers. Along the beaches, most of the projects are targeted towards snowbirds: wealthy retirees and second-home buyers from the Northeast and Midwest. In the outlying downtown areas, including downtown Fort Lauderdale, downtown West Palm Beach, downtown Dadeland in Kendall, and others, the presumed buyers are local empty-nesters and childless two-income couples who want to move from large suburban homes to low-maintenance condos in vibrant, walkable communities. However, it remains to be seen whether demand among this group for this type of development is sustainable. Although interest seems to be high at this point, high-density residential is a new product in the traditionally low-density, automobile-oriented suburban communities of Southern Florida.

The blighted areas of Central Miami, including downtown, the Arts District, and Edgewater, are gaining new interest from both developers and buyers. From in-flight magazines and hotel television stations to billboards and national-circulation magazines, advertising for these new projects is significant and is mostly targeted to a young, hip buyer. As almost none of these projects have yet to be completed and developers are generally reluc-

tant to reveal demographic information on their buyers, it is hard to get data on demand from this demographic. It is possible that the sleek architecture of the buildings and the format of the marketing is designed more to appeal to speculative investors than to the purported target audience. If the perception among investors is that this type of sleek, ultra-modern product is in high demand by young and upwardly mobile buyers, market participants say it would make sense for developers to exploit this market.

SPECULATIVE INVESTMENT

The Downtown Development Authority of Miami commissioned a survey of residential developers in the Brickell area, but found that the majority of respondents reported close to 100 percent of units to be lived in, while in reality it is clear to those in the market that many of the units are being held by investors. In many developers' sales offices the buyer has little or no choice of finishes in the unit, leading some market observers to speculate that the bulk of buyers will never live in the building and have little interest in the interior details. Most developers are simply happy to accept a down-payment and secure a contract.

It is clear that speculative buyers have been an important factor in the current

condominium boom. Foreign investors, some of whom intend to flip the units as prices appreciate, have fueled Miami condominium sales. However, many investors from Latin America are investing in Miami condominiums for second homes and as a long-term safe haven for investment capital. Brokers and developers report that 50 percent or more of buyers in some projects hail from Latin America. Although some developers now claim not to sell to investors and go so far as to have visitors to their sales centers fill out forms asserting that they are not speculators, many more developers are actively courting the market. Development companies hire real estate agencies to specifically market properties through brokers in Colombia, Venezuela, Brazil, Mexico, and, to a lesser extent, Chile.

Latin American investors are particularly interested in South Florida real estate

because it is a familiar market and is perceived to be a safe haven for capital. Miami is known as one of the premier Latin American financial, trade, and cultural centers. With 29 percent of visitors to Miami coming from Latin America, most wealthy Latin Americans have been to the city at some point and many have relatives there. Real estate prices are also lower in the area than in other internationally recognized markets such as New York or London. In recent years, weakness in Latin American economies has coincided with capital flows to South Florida condominium markets.

According to a recent report by Credit Suisse First Boston (CSFB), the Miami-Ft. Lauderdale-West Palm Beach area is one of the most active markets for housing speculation across the board. Using numbers that included single-family residences, and relied to some degree on self-reporting by

Figure 8: Percentage of home sales to investors

	1998	1999	2000	2001	2002	2003	2004	1Q05
Florida								
Daytona	16%	12%	15%	14%	21%	27%	32%	19%
Fort Myers	32%	31%	35%	35%	31%	32%	37%	38%
Jacksonville	9%	7%	7%	7%	12%	16%	19%	23%
Miami/Broward Palm Bch.	11%	9%	9%	11%	15%	19%	22%	26%
Naples	40%	37%	38%	43%	41%	38%	47%	52%
Orlando	11%	9%	9%	10%	14%	18%	22%	7%
Sarasota	22%	20%	18%	28%	25%	29%	32%	29%
Tampa	12%	9%	9%	10%	15%	18%	24%	27%
United States	8%	7%	6%	8%	10%	12%	14%	17%

Sources: LoanPerformance, CSFB

investors in loan documents, the report found that 26 percent of first-quarter 2005 sales were to investors, well above the national average, as shown in Figure 8. We believe this number is at the lower bounds of the range; we also believe that speculation is much more focused in the condominium product segment.

INDICATIONS OF A BUBBLE

New condominium sales accelerated rapidly from 2002 through early 2005. Between 1995 and 2001, new condominium sales in the three-county area averaged approximately 6,500 units per year. The pace of Miami condominium sales accelerated through the first quarter of 2005. In the year to March 2005, 20,295 new condominium units were sold in South Florida, an increase of 81.4 percent above the 11,186 units sold in the same period a year earlier. This acceleration follows a 31.0 percent increase in new sales between 2002 and 2003. High new sale and resale activity is one clear sign of speculative activity.

Growth in new condominium sales has outstripped existing condominium sales and both new and existing single-family sales in recent years. Existing condominium sales volumes have risen steadily in response to the low interest rate environ-

ment and decreasing single-family home affordability. In 2004, 74,164 existing condominiums traded hands in South Florida, a 3.1 percent increase above 2003. Existing condominium resales have increased every year since 1995 with sales of existing condominiums in South Florida growing by an average of 7.3 percent per year during that time.

Sales volume data is calculated from newly recorded deeds once transactions have closed. The majority of new high-rise luxury condominiums do not break ground until a certain number of units have been pre-sold. Many developments in South Florida have been entirely pre-sold long before completion of the project. Pre-sales, however, are contracts to buy rather than final sales, so do not show up in the data described above. The buyer puts down a 20 percent deposit (often in two installments) and sometimes signs a non-assignable contract, preventing flipping before the building is completed. Other developers allow resales before the completion of the building, but only through their sales office and with restrictions to limit competition for the units they are trying to sell. The buyer closes on the deal and pre-sold units are recorded as sales when construction has been completed.

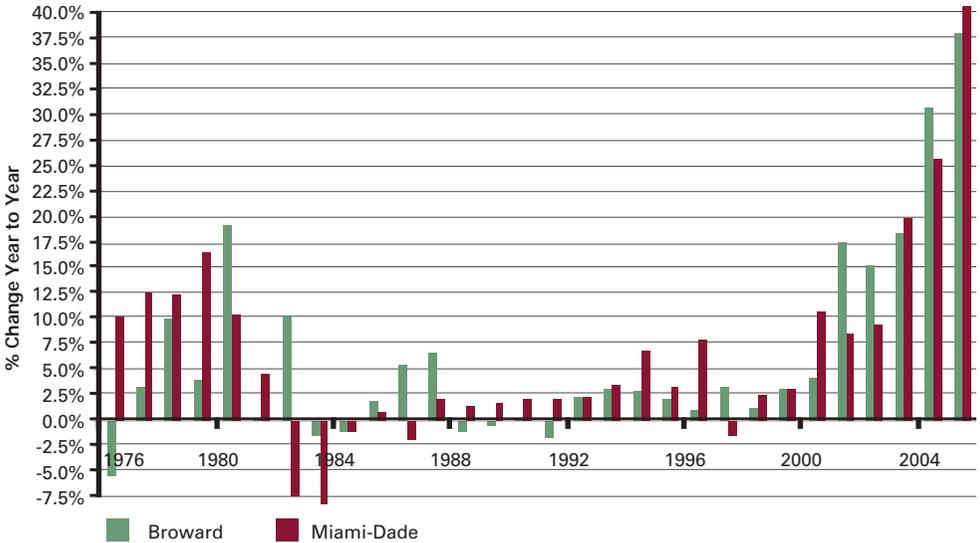
Much of the activity in South Florida is concentrated in pre-sales, and deliveries will not peak until 2005-2007. As these buildings come online and pre-sales buy-

Figure 9: Existing residential price appreciation

	1976-1998 CAGR	2003	2004	1Q05 vs. 1Q04
Single Family				
Broward County	5.1%	15.1%	22.8%	31.8%
Miami-Dade County	6.5%	18.6%	23.9%	28.4%
United States	6.3%	7.3%	8.1%	12.8%
Condominium				
Broward County	4.7%	18.3%	30.6%	37.9%
Miami-Dade County	5.0%	19.8%	25.6%	40.6%
United States	4.1%	17.0%	17.0%	15.9%

Source: FARES, Reinhold-Wolff, NAR

Figure 10: South Florida existing condo prices



ers are asked to close, new condominium sales volumes may rise further. We estimate that 50 percent to 70 percent of pre-sold units are flipped before construction is even started.

Since 1976, single-family homes have followed comparable long-term price

appreciation trends both nationally and in South Florida. As shown in Figure 9, condominium prices appreciated at a rate of less than 5 percent between 1976 and 2003 compared to 6.5 percent for single-family homes in Miami-Dade. Unlike the rest of the country, where condominium

price growth historically outpaced single-family home prices, South Florida condominium prices have generally accelerated less rapidly than single-family homes.

A recent explosion in condominium prices is the main reason for the belief that a speculative bubble has developed. As shown in Figure 10, existing condo prices rose 112 percent since 2000, and the acceleration was especially rapid in 2003, with prices up 18 percent to 20 percent year-over-year; 2004 with prices up 25 percent to 31 percent; and early 2005, with prices up 37 percent to 41 percent. The pace of price appreciation in the area is a cause for concern, as the only period of comparable price appreciation for condominiums in the area was followed by a sharp decline in prices and years of stagnation. In addition, pre-sales prices have been pushed to high levels in some projects marketed heavily to speculative investors. Anecdotes of prices doubling in luxury high-rises over the course of a year or less are common.

The initial increase in the supply of housing in this cycle was clearly in response to unmet fundamental demand. However, as prices began to rise for several years in a row, a new set of speculative demanders entered the market. They bought multiple units with no intention of occupancy or rental but with pure speculative desire to bet on price increases of units. The speculative fever was abetted by the structure of the market. Only a 10 per-

cent deposit on value of the unit is made at the time of purchase (which is held in an escrow account), with another 10 percent due on start of construction. The remaining payment is not due until completion of the unit, which may be two to four years in the future. Thus the investor has a highly leveraged way to acquire a “futures contract” on the housing market. Until recently, these futures contracts were traded easily, a process known as flipping. A number of more responsible developers have tried to discourage speculation by various restrictions on resale.

There are three sources of supply in the condominium market. The biggest component of supply is the existing stock of units now occupied or owned and used seasonally or rented to others. In normal markets, the turnover of this stock supplies 80 percent of supply to the market on a turnover basis. The second source of supply is new construction, which, in normal times, is about 3 percent of the stock and represents 20 percent of supply on a turnover basis. Finally, the net conversion of existing rental apartments or possibly hotels, office buildings, or warehouses to condominiums in non-boom times represents a small portion of new supply.

During the absorption phase (phase I) of the housing market cycle, new demand is met by the existing excess supply from the last cycle. There is virtually no new construction or conversion supply. In the

growth phase of the cycle (phase II) demand surges and exceeds existing and new supply, creating a shortage of housing units at the margin, and prices surge. In phase III of the cycle, new construction and conversion response gears up dramatically, and existing owners put units on the market trying to cash in on the surge in prices. Prices may continue to surge as speculators pour into the market, and completed supply falls short of fundamental and speculative demand. In the overshooting phase (phase IV) of the cycle, overbuilding is apparent as completions now exceed fundamental demand and speculators are the predominant end-buyers. Prices begin to flatten and may even begin to decline. The inventory of existing units rises sharply as owners try to sell at yesterday's prices. In the decline phase (phase V) of the cycle, the glut of oversupply becomes apparent to even the naive speculators, and foreclosures and bulk auction sales follow. Existing owners may withdraw units from the market. Sales prices plunge and new construction and conversion stops.

We believe the South Florida condominium market is currently in the late part of phase III and is about to enter the overshooting phase of the housing market cycle. Supply is surging on two fronts: new construction and conversions. New construction accounted for 31.9 percent of turnover during the first quarter of 2005, up from 18.1 percent in 2004 and

a 10.1 percent in 2003. We expect this share will increase as the current construction pipeline materializes, as deliveries and pre-sale contracts become deeded sales. New construction has surged past normal levels and, when annualized, the first quarter's new sales total more than 5 percent of existing South Florida condominium stock.

PREVIOUS RESIDENTIAL CYCLES

Construction activity in South Florida has always been cyclical. After World War I, Florida experienced a land boom when wealthy Northeasterners turned to Florida as an alternative to vacationing in Europe, and Miami became an important trade hub with Cuba, the Caribbean, and Latin America. Developers created master-planned communities and most of the activity was along a 100-mile stretch from Palm Beach to Miami Beach.

Speculative investment led land prices to increase by a factor of six between 1923 and 1925. Rapid capital flows from the Northeast, the Midwest, and Europe, including \$500 million in capital from the Northeast alone, contributed to price appreciation. A lag period of several months between the payment of an initial 5 percent deposit and closing allowed enough time for values to appreciate sig-

nificantly before deals closed. High prices and a major hurricane in 1926 led to a real estate crash before the beginning of the Great Depression.

Rapid development has likewise been the norm. Arvida, a St. Joe Company, developed Weston, a master-planned community of almost 60,000 residents, beginning in the 1980s. The project sold out in sixteen years, half the time originally projected. At its peak, the company was closing on about 1,400 new homes and almost 600 resales per year.

However, multifamily building booms in the early 1980s and early 1990s led to oversupply in the market. Looking at permits issued for multifamily units, a statistic that includes both units for sale and rental apartment units, current levels of construction are high by historical standards but do not approach the levels reached in the 1980s. Construction peaked in 1987 when a total of 59,900 permits were issued, a level of total construction 32 percent above 2004. Multifamily permits peaked at 33,700 in 1987, 61 percent more than issued in 2004.

This burst of construction coincided with declining condo prices, which came after Miami-Dade County prices more than doubled between the first quarter of 1976 and the fourth quarter of 1981. This was the only period of comparable price appreciation for condominiums in the county and was followed by a sharp

decline in prices and years of stagnation. Prices in Miami-Dade County doubled in the five years to 1981 before falling a total of 14.0 percent in 1982 and 1983. Prices declined an additional 3 percent through 1986 and did not match 1981 levels for the next twelve years. During the same period, price appreciation was much more moderate in Broward County. The Broward condominium index rose by 42.6 percent in the five years to 1981 before falling by 1.2 percent in 1983 and 1984.

However, we must discount this comparison to some extent because of the extraordinary circumstances leading to a nationwide apartment building boom in the early-to-mid-1980s. The high levels of activity during that period were largely an effect of the Reagan tax reform of 1981 that created tax incentives for real estate investment and led to a movement of capital into real estate, especially through syndications or limited partnerships and especially into multifamily (apartments) and hotels/motels. Investment and construction surged through the mid-1980s until Congress reversed much of the Reagan tax changes in 1986 and values declined. During this period, over-development, even as prices of individual condominium units were declining, led to a surplus of unsold condos in the Brickell Avenue corridor of Miami.

Although the condominium market in the 1980s is perhaps the best analogy to

today's market in South Florida, recent episodes of home price appreciation in Los Angeles and Houston are also informative. The median home price in Los Angeles during the early 1990s aerospace recession declined by a cumulative 23.4 percent in five years. In Houston during the mid-1980s oil price collapse, the median home price declined 23.7 percent in three years. Both of these cycles were caused by recessions and major job losses in the respective local economies, a scenario that we are not predicting for South Florida. However, rising interest rates, excess supply, and a shift of investor asset allocations away from South Florida real estate could provide a similar shock to the housing market as was caused by the recessions in Houston and Los Angeles. Furthermore, while interest rates were declining during both of those episodes, we expect interest rates to rise through the forecast horizon, adding additional strain to the market.

LAND SUPPLY

The density of both population and existing residential development in South Florida will put pressure on the area to build high-density housing to accommodate both the current population and future growth in the area. South Florida is one of the densest metropolitan areas in terms of both population and housing

units per square mile. The geography of the area, sandwiched between the Atlantic Ocean to the East and South and the Everglades to the West, puts further constraints on the area's lateral growth. Miami-Ft Lauderdale-West Palm Beach ranks fourteenth among the most densely populated Consolidated Metropolitan Areas in the United States. However, much of the land area in the three counties is located within the Everglades and is sparsely populated and largely undevelopable.

Fully 41 percent of Miami-Dade County's land area is within the boundaries of the Everglades National Park; an additional 16 percent of the land area is within the South Florida Water Management District's Water Conservation Impoundment Area. Similarly, Broward County has a total area of 1,211 square miles, 34 percent or 410 square miles of which are located to the east of the county's Conservation Area. In Palm Beach County, Loxahatchee Wildlife Refuge, Lake Okeechobee, and the county's Urban Service Boundary put pressure on sprawl.

By removing undevelopable land from the density equation, Miami-Fort Lauderdale-West Palm Beach becomes the third-densest Consolidated Metropolitan Area in the United States in terms of population per square mile. Excluding the Everglades, the area has 2,040 residents per square mile, fewer than only the Los Angeles and New York areas, with 2,620

and 2,840 residents per square mile, respectively.

Zooming in to the place level, 38 of the 50 densest places in Florida are located in Miami-Dade, Broward, or Palm Beach Counties. Nine of the top ten places by housing per square mile of land are located in South Florida. These are places where developable land is scarce and new housing must rise vertically. In the city of Sunny Isles Beach, the place with the highest housing density in the state, there were 12,875 housing units per square mile of developable land at the time of the 2000 Census. Since that time, more than 700 additional high-rise condominium units have been added in the area and close to 1,400 more are currently under construction. Miami Beach, North Bay Village, Bal Harbor, Surfside, Aventura, and Bay Harbor Islands, the other beach towns in Dade County, have an average density of more than 8,300 housing units per square mile. By contrast, the city of San Francisco had 7,421 housing units per square mile, New York City had a density of 10,553, and Manhattan registered 34,757 units per square mile at the time of the 2000 Census.

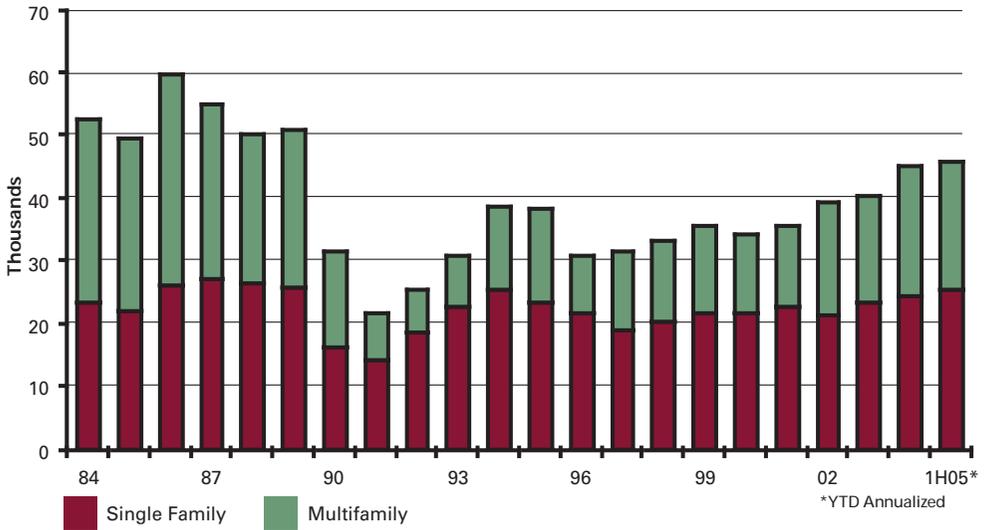
Even more pertinent to high-rise condominium development is the area's developable shoreline. Demand has historically been and will continue to be strongest for beachfront property, and the waterfront high-rise condominium is a well-established product type in the region. In total,

Palm Beach County has 45 miles of linear shoreline, Broward County 23 miles, and Miami-Dade County 84 miles of shoreline, but only 22 miles of prime beaches.

The combined total number of multifamily permits issued in the Miami, Fort Lauderdale, and West Palm Beach MSAs reached 10,300 in the first half of 2005, up 25.1 percent from the same period a year ago. As shown in Figure 11, multifamily permits totaled 20,875 in 2004 and 16,800 in 2003, up from an average of 11,500 units per year in the 1990s, a period of strong household growth. Significantly, the majority of multifamily units currently under way are for sale-condominiums. Therefore, while total multifamily construction is not as high as it was in much of the 1980s, the total number of condominiums is relatively higher. We believe that, based on current demographic and construction trends, the condominium supply overhang will reach 23,000 units during the next three years as construction deliveries far outpace real demand.

Condo conversions significantly added to supply in Miami-Dade County as investors purchased 10,391 apartment units for conversion during 2004 and 4,870 units during the first half of 2005. In total, at least 34 major communities were purchased for condo conversion during the 18 months ended June 2005, and many smaller condo conversion deals likely added further to condominium supply.

Figure 11: South Florida residential permits issued



Source: Census

Broward and Palm Beach Counties were less active condo conversion markets during 2004, but as convertible inventory ran low in Miami-Dade, conversions accelerated in the two northern counties during the first half of 2005. In Broward County, major property sales for the purpose of condo conversion totaled 4,314 units in the first half of 2005, surpassing in six months the 4,238 converted in 2004. In Palm Beach County, condo conversion transactions totaled 2,075 units in the first half of 2005, up from 1,805 in 2004.

Miami-Dade County was by far the most active condo conversion market in the United States during 2004, and although other markets outpaced Miami-

Dade during the first half of 2005, combined conversion activity in the three South Florida counties was more than double the activity recorded in any other single market during that period. With a grand total of 27,693 units sold to investors for the purpose of conversion during the 18 months ended June 2005, it is clear that conversion activity is fueling the condo bubble.

WHEN THE BUBBLE
WILL BURST

The housing bubble in South Florida started with strong fundamental demand

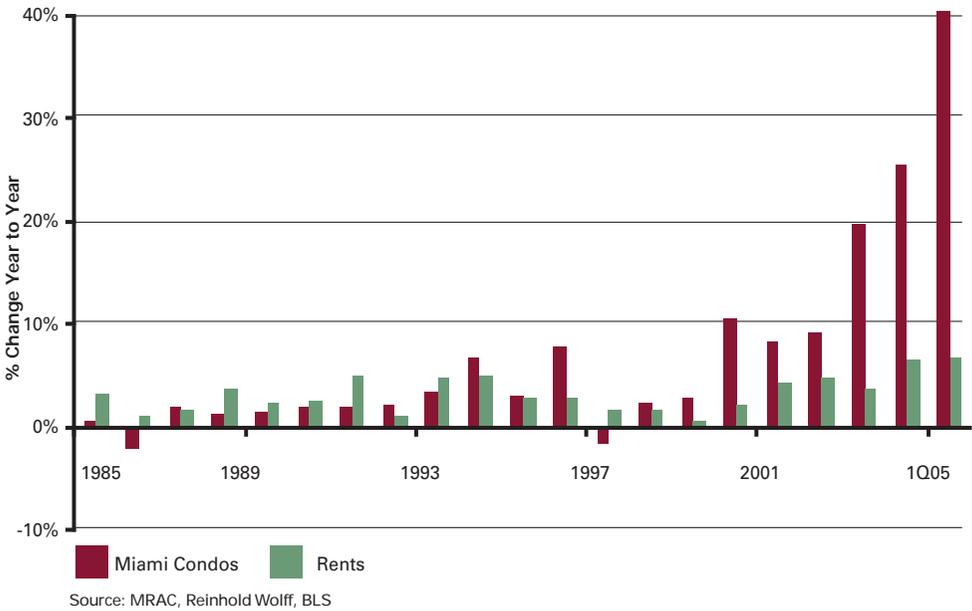
in the single-family-for-sale market triggered by low interest rates and easy credit. As price appreciation accelerated, increased numbers of purchases were made by investors buying purely on the expectation that another buyer would buy the unit at a higher price. As the media magnified the easy money available in the condo and single-family-for-sale market, investment turned to pure speculation. Flippers, the day traders of the real estate market, exploited the housing finance system that tries to make homeownership available to every American. Low or no down-payment loans, interest only or negative amortization mortgages, and option ARMs all reduce the monthly payment requirements for the buyer. Because of construction lags, the condo market is really a housing futures contract with a 10 percent down-payment. This magnifies the speculators' leverage, especially useful in a rising market.

The key to the continued expansion of the bubble is the expectation that future purchasers will pay ever-higher prices for property. The bubble will burst when this expectation changes and investors try to sell and property prices flatten out or fall. Sales volumes fall, time on the market expands dramatically, and property prices fall. Loans are foreclosed, unsold units are auctioned, and prices fall further. The bursting of the bubble could be triggered by higher interest rates, tighter credit, or

the internal dynamics of the housing market affordability. As housing prices rise, affordability often drops dramatically, reducing the potential pool of buyers. Simultaneously, an increasing number of existing owners try to cash in on high prices by selling their units. Thus, even without a rise in interest rates or a tightening of mortgage credit, the internal dynamics of the housing market reduce demand and increase supply in response to a sharp rise in housing prices. Housing bubbles are thus self-deflating, even though they often last longer than experts analyzing fundamentals predict.

The internal dynamics of the housing market respond to rapid-rise price increases in ways that are initially self-reinforcing and therefore help create the bubble. Eventually, however, the dynamics of the market reach an inflection point and turn, becoming self-correcting even without an external shock such as changes in interest rates or credit standards. The initial response to a rapid price run-up may encourage more demand from existing owners as they leverage up their newfound equity and are able to buy a larger and more expensive house. Potential new entrants to the market will be adversely affected by the price-up but may rush to buy anyway to take advantage of an expectation of future price increases. Speculators and investors also may rush to buy in anticipation of future price gains.

Figure 12: Existing condo prices vs. rents



At some point, this self-reinforcing price increase, or bubble expansion, becomes self-correcting. This phase starts with a reduction in demand from potential new buyers as they are squeezed by a lack of affordability because of the price run-up. They can no longer qualify for a mortgage to purchase the unit and the relative cost of renting versus owning becomes more attractive. (For a graphical representation of the current disconnect between prices and rents, see Figure 12.) By both choice and necessity, more and more people remain renters. In this phase of the market an increasing number of existing homeowners decide to cash in on the boom and sell their houses at

these new higher price levels. At the same time, developers of new units finally catch up with the initial burst in demand and complete more units than needed to meet fundamental demand, increasingly building to meet (speculative) demand. As the inventory of unsold existing and new units increases, price growth at first moderates and then turns negative. Condo values may fall below outstanding mortgage amounts, and defaults and foreclosures begin. Lenders then start to auction properties and prices fall further as speculators try to unload. Thus, the very dynamics that started the bubble turn into dynamics that cause the bubble to burst.

CONCLUSION

Looking forward, South Florida's increasingly diverse economy will benefit from its strong trade ties to Latin America, its importance as a tourist center, and its growing service sector. The relative affordability of the area and its high quality of life will attract businesses. Strong demographic trends do not show signs of slowing and will create steady demand for new housing. The combination of the area's tropical climate, existing tourist infrastructure, and convenient location at the intersection of the United States, the Caribbean, and Latin America will contribute to future strength in the tourism industry. Similarly, South Florida is expected to draw increasing numbers of second-home buyers and retirees as baby boomers age.

These positive economic and demographic trends and the limited supply of developable land will create a positive environment for condominium construction in the long term. Additionally, as established high-density residential nodes reach capacity, the revitalization of central neighborhoods and residential infill will be necessary to accommodate growth in demand. Suburban and urban downtowns and underutilized industrial areas will be prime areas for residential development.

However, the volume and intensity of current activity points to a bubble. It is

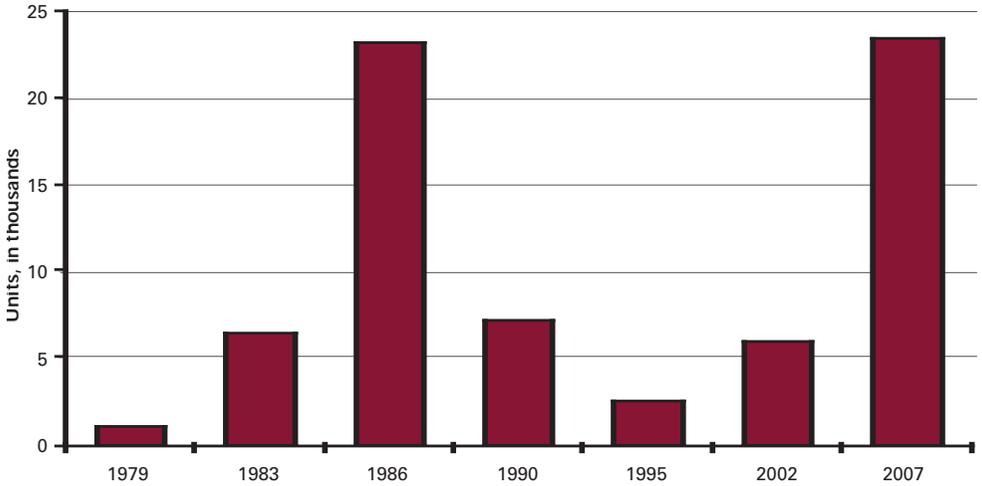
unlikely that sufficient demand exists to absorb the projected new stock of as many as 50,000 units during the next three years. Depending on the number of current projects that reach completion, a large number of investors could put their units on the market at a time when rising interest rates are dampening consumer demand. We project a supply overhang (shown in Figure 13) of approximately 23,000 unoccupied newly constructed units by 2007 as units initially purchased by speculators come online.

The rapid acceleration of prices is also a cause for concern. We believe that price appreciation in recent years has led to a premium in condominium values nationally, and the situation is even more severe in South Florida. Although asset bubbles are notoriously hard to predict, we suspect condominium prices may fall dramatically in the next three years.

We identify a number of risk factors in the South Florida condominium market. First among these is the sustainability of the current levels of demand. Although developers report selling out new projects in hours or days, many—if not most—of the buyers at these projects are investors and speculators who intend to flip the units without ever occupying them.

In the long term, we are bullish on South Florida's economy and real estate markets and expect the area to grow steadily in the future. In the short term, howev-

Figure 13: South Florida supply overhang over time
Newly constructed condominium units vacant for sale



Source: Census Bureau

er, internal dynamics of the housing market, rising interest rates, and shifting investor sentiment as the talk of bubbles increases will likely slow the inflow of capital to Miami real estate, cutting short current sources of demand for condominium units. Additionally, the unprecedented amount of new supply coming online in a very short period of time poses a risk for lenders in the market. Encouraged by easy credit and investor interest in real estate, developers have planned or started a historically high number of units. As these projects are completed, it is unlikely that every pre-construction speculator will be able to flip or close on units they purchased as speculative investments. As a result, lenders will see an increase in default and foreclosure activity.