A CASE FOR INVESTING IN U.S. APARTMENTS

PREPARED FOR:

NATIONAL MULTI-HOUSING COUNCIL

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Executive Summary

Over the last twenty-five years, institutional investors in the United States have significantly increased their ownership of apartment properties. The apartment sector now accounts for the second-largest share of institutional investors’ real estate holdings, lagging only the office sector. During this period, the apartment sector established itself as having the best track record for risk-adjusted returns and recognized diversification benefits for real estate portfolios. Apartment properties also present investors with a wide range of choices in terms of product, location and advantageous debt financing, allowing them to pursue a wide variety of successful investment strategies.

Despite its broad recognition as one of the largest and healthiest real estate sectors in the nation, apartments remain overlooked by foreign capital. Though foreign investment in U.S. real estate has surged in recent years, its allocation to apartments lags well behind other property types. It is our sense that because apartment properties in the U.S. are part of a market whose structure and operation is quite different from those in other countries, foreign capital does not have the same level of experience with regard to investment in this product. Professionally-managed apartment properties in the United States are a highly liquid asset class that is very attractive to institutional capital due to its stable cash flows, abundant debt financing, and unique diversification benefits.

*The purpose of this paper is to illustrate the benefits of investing in U.S. apartments today by highlighting the key factors that influence their superior risk-adjusted performance and positive contribution to diversified real estate portfolio returns.*
Key Factors:

1. Apartments have a long track record of having the highest risk-adjusted investment returns compared to other property types. The sector has proven to be most resilient during economic downturns, delivering superior returns during recessionary periods.

2. Apartments have the most efficient cash distribution, due to low capital expenditures and technical improvements.

3. Apartments have a lower cost of capital and wider availability of debt capital; apartment investments can support more debt with the same level of risk.

4. Apartments operate in a favorable, transparent, and market-driven regulatory and taxation environment. In addition, apartments have shorter leases than other property types, allowing them to adjust more quickly to changing market environments.

5. Apartment properties vary widely in terms of age, size, quality, and location, creating a broad spectrum of opportunities and possible investment strategies, thereby providing greater liquidity than other sectors.

6. Short-term problems from the current economic downturn aside, apartment market fundamentals are expected to remain positive on a cumulative basis over the next five-to-seven year period. Demand is expected to expand and new supply is expected to subside, creating conditions for moderate rent and revenue growth in most locations.

7. Apartments are still under-weighted in institutional real estate portfolios.
1. Apartments have a long track record of having the highest risk-adjusted investment returns compared to other property types. The sector has proven to be most resilient during economic downturns, delivering superior returns during recessionary periods.

Of all the major property types, apartments have provided the highest long-term returns as well as the smallest amount of variation in those annual returns. The sector’s thirty-year performance is shown in Exhibit 1. Apartments have generated the highest return over the past 30 years and the second-highest return over the past 20 and 25 years. More importantly, examining the return achieved for the risk incurred, we see that apartments have generated the highest risk-adjusted rate of return over the last 10, 15, 20, 25, and 30 year periods.

**Exhibit 1. Total Returns by Property Type**

<table>
<thead>
<tr>
<th></th>
<th>Period ending 2008Q4, Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td><strong>Apartments</strong></td>
<td></td>
</tr>
<tr>
<td>Average compounded return, %</td>
<td>12.50</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>1.27</td>
</tr>
<tr>
<td><strong>Industrial</strong></td>
<td></td>
</tr>
<tr>
<td>Average compounded return, %</td>
<td>13.54</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>1.51</td>
</tr>
<tr>
<td><strong>Office</strong></td>
<td></td>
</tr>
<tr>
<td>Average compounded return, %</td>
<td>14.64</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>1.45</td>
</tr>
<tr>
<td><strong>Retail</strong></td>
<td></td>
</tr>
<tr>
<td>Average compounded return, %</td>
<td><strong>15.58</strong></td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td><strong>1.66</strong></td>
</tr>
<tr>
<td><strong>Hotels</strong></td>
<td></td>
</tr>
<tr>
<td>Average compounded return, %</td>
<td>14.38</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>1.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
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<tr>
<td>Average compounded return, %</td>
<td>14.10</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>1.61</td>
</tr>
</tbody>
</table>

**Sharpe Ratio** = Period Average (Compounded Return - 10-Year Treasury Bond) / Period Standard Deviation (Compounded Return - 10-Year Treasury Bond)

Grey color highlights the highest return; green color highlights the highest ratio of average annualized return to standard deviation.

*Sources: NCREIF, TWR*
To quantify the amount of return a property type generates from one additional unit of risk, we have calculated the Sharpe Ratio. The Sharpe Ratio measures the reward achieved relative to the risk undertaken, with higher Sharpe values preferable. With the exception of the last five years, apartments outperformed all other sectors, with stronger returns per unit of risk undertaken. The last five years were an aberration coming from the fact that U.S. real estate returns were generated primarily by cap-rate compression rather than by the income drivers that typically favor the apartment sector.

The sector's performance has also proven to be more resilient during economic downturns and periods of economic weakness. Apartment investments made during the 1990-91 recession and shortly thereafter outperformed other sectors on a risk-adjusted basis over 5-, 7-, 10-, and 15-year horizons. The same result was observed for the 5-year periods that began with the 2001 and 1980-81 recessions. The following graphic shows how, on an annual basis, the apartment sector tends to outperform other property types during times of economic weakness.

Apartments have also displayed high returns during times in which other property sectors have underperformed, thus bringing diversification benefits when added to real estate portfolios. This is evidenced by comparing risk-adjusted returns and variation in returns by property type, relative to the consolidated real estate performance composite.
Exhibit 2. Apartments Outperform in Challenging Economic Times

Sources: NCREIF, CBRE Torto Wheaton Research.

Apartments, therefore, represent a desirable investment option for buyers with a lower risk tolerance. Apartment investors have the ability to generate excess returns through property management and strategic utilization of property rehabilitation capital, and are adequately compensated for the risks they take.

The lower investment risk associated with apartments can be explained by several factors. In general, apartments have more consistent demand than other property types, as well as shorter leasing cycles, with a one-year average lease. Apartment buildings also have a shorter development cycle than other asset sectors, averaging 12 to 14 months. The rental market for apartments is consequently much more responsive to price changes and this sensitivity helps keep price levels close to equilibrium. In contrast, the office sector saw the greatest volatility historically, attributable in part to its longer building cycle (18 to 30 months), longer lease structure (5 to 10 years), and susceptibility to overbuilding in the face of falling demand due to the length of the building cycle.
2. Apartments have the most efficient cash distribution, due to low capital expenditures and tenant improvements.

If much of the historical difference in total returns can be attributed to a higher cash flow yield, credit must be given to apartment managers’ ability to translate net income into cash available for distribution. While average cap rates have not varied widely by property type in recent periods, there are significant differences in costs taken out “below the line” across property types. These costs include capital expenditures as well as tenant improvements and leasing commissions.

The ratio of income that translates into cash flow versus the income that is part of “net operating income” is known as the income efficiency ratio. As shown in the following chart, apartments translate 83% of NOI into cash flow; other property types range between 64% and 74%. As a percent of value, the portion of apartment returns generated from income is as much as 160 basis points above that of other property types.

Exhibit 3. Dividend Payout Ratios

![Dividend Payout Ratios Chart]

Source: NCREIF, CBRE Torto Wheaton Research.
3. Apartments have a lower cost of capital and wider availability of debt capital; apartment investments can support more debt with the same level of risk.

The apartment sector has had stable access to debt, due to the lending activities of Fannie Mae and Freddie Mac. These Government-Sponsored Enterprises’ (GSEs) share of multi-housing residential mortgages grew substantially over the past decade and their capital has become a reliable source of liquidity for the industry as a whole. The Federal Government’s conservatorship of these enterprises through the Federal Housing Finance Agency (FHFA) has solidified its commitment to maintaining liquidity in the multifamily sector. This consistency of debt availability results in a generally favorable cost of capital over time.

Evidence of investor sentiment toward the different property sectors can be seen in the way lenders have been pricing debt. Historically and currently, apartments have benefitted from more favorable cost of debt pricing—as measured by the spread over U.S. Treasury bonds—than the other sectors. Even in today’s turbulent credit environment, apartments are enjoying relatively tight spreads for higher quality assets, and especially for lower-leverage deals. Such variation in spreads also reflects the expectation that return volatility of apartments will remain low going forward. While adding debt to any investment will change its risk profile, the relative stability of debt financing in the apartment sector presents a unique opportunity. Investors may deploy higher levels of leverage and face less re-financing risks at loan maturation.

4. Apartments operate in a favorable, transparent, and market-driven regulatory and taxation environment. In addition, apartments have shorter leases than other property types, allowing them to adjust more quickly to changing market environments.

The U.S. apartment market has a number of structural and regulatory advantages that make it attractive from an investment standpoint. For example, the share of housing in the U.S. (5-10%) that is subsidized/low-income is lower than in many European markets where rents are often heavily regulated by local and federal governments, and where inventory of regulated units can account for 15-25% of the overall inventory.
Furthermore, unlike housing markets in other parts of the world, the U.S. housing market is highly transparent. In addition to decennial, bi-annual, annual, and quarterly government surveys of rents and vacancies at the national and municipal level, a number of private surveys of investment-grade apartments are conducted on a quarterly, monthly, and even daily basis.

Additionally, apartment rents adjust to market changes both rapidly and efficiently as leases reset every 6 to 12 months. Other property types, such as office and industrial, may take years for the same adjustment process to occur. This advantage makes it relatively easy to value and finance apartments compared to other property types.

The relative advantages of the U.S. apartment market compared to other countries are reflected in the unique position this property class occupies on the domestic investment landscape. In the United States, multifamily properties represent the second-highest institutional asset ownership interest of all U.S.-based real estate. By contrast, there has been no material institutional investment in residential real estate in other major countries such as Australia, Belgium, United Kingdom, Ireland, Italy, Norway, Portugal, and South Africa.

5. *Apartment properties vary widely in terms of age, size, quality, and location, creating a broad spectrum of opportunities and possible investment strategies and providing greater liquidity than other sectors.*

There are over 23,000 investment-grade apartment properties in the U.S. Well over half of the stock of units in such properties is concentrated in the 25 largest markets. These professionally-managed apartments vary by age, size (from 50 units to over 1,000 units), type (“garden-style” vs. “high-rise”), quality (class A, B, or C), or location within markets (downtown vs. suburban).

Such a relatively broad playing field provides investors with potential for geographical and product diversification and allows owners to devise and implement various investment strategies to suit their needs. In addition to traditional market-rate apartment properties, there are also specialized segments of multi-housing for seniors, students, and low-income households—all of which are gaining attention among investors searching for new “niche” sectors.
Exhibit 4. The Breakdown of U.S. Apartment Unit Structure

<table>
<thead>
<tr>
<th>Units in structure</th>
<th>Rentable U.S. Inventory</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units, 000s</td>
<td>Average</td>
<td>Structures, 000s</td>
</tr>
<tr>
<td>5-9</td>
<td>5,431</td>
<td>7</td>
<td>776</td>
</tr>
<tr>
<td>10-19</td>
<td>5,122</td>
<td>14</td>
<td>366</td>
</tr>
<tr>
<td>20-49</td>
<td>3,823</td>
<td>32</td>
<td>119</td>
</tr>
<tr>
<td>50+</td>
<td>3,758</td>
<td>160</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>18,135</td>
<td>14</td>
<td>1,285</td>
</tr>
</tbody>
</table>

Institutional investors mostly focus on this segment.

Source: Bureau of Census

6. Short-term problems from the current economic downturn aside, apartment market fundamentals are expected to remain positive on a cumulative basis over the next five-to-seven year period. Demand is expected to expand and new supply is expected to subside, creating conditions for moderate rent and revenue growth in most locations.

Demographic trends are favorable across the 60 or so major metropolitan areas in the U.S. where institutional investors focus the majority of their capital. The period from 2002 to 2008 saw population growth averaging 1.7 million new people per year. While this growth was unusually low, Moody’s Economy.com is forecasting that population growth will accelerate over the next six years to an average pace of 2 million people per year.

Although immigration to the U.S. slowed considerably in 2003 as the shock of 9/11 resulted in tighter restrictions on legal entry, it has since rebounded strongly and is on pace to set an all-time record this decade. In addition, overall household growth this decade (through 2008) continued at a faster pace than in the 1990s.

As a result, demand for rental housing in the U.S. is expanding at the strongest pace since the mid-1980s and apartments are benefiting greatly from this trend as their market share continues to edge
higher. Over a four-year period ending in 2008, about 3 million households were added to national rental demand as a result of new household formation, declining homeownership rate, and a subsequent increase in the propensity to rent for two significant cohorts—the “echo boomers” and foreign immigrants. With this gain, rental demand has not only fully recovered the losses it sustained over the last decade, but has surpassed its previous peak.

Overall rental demand will continue growing rapidly over the next five years, supported by favorable trends among rental cohorts. Growth in population aged 20 to 29—the group with the highest propensity to rent, or “prime renters”—is resuming after two decades of decline. Meanwhile, growth in renter population aged 50-and-over is strong now, despite the cohort’s historically high homeownership rate. The group is now contributing more to rental demand than even the so-called "prime renters”.

Moreover, a trend toward "lifestyle renting" among the middle-aged households has also emerged as one of the forces enhancing renter demand recently. Additionally, steady foreign immigration and an increasing diversity of the U.S. population are two long-term trends that are expected to continue to materially benefit broad rental demand.

Economic cost/benefit trends now favor renting to owning. In most markets today, the costs of renting are still lower than the costs of owning (especially when accounting for issues of energy costs, insurance, property taxes, and house repairs) and will likely remain so even if home prices see additional declines. Rental demand will also see an additional near-term boost from a decreasing pace of home ownership.

The following chart highlights the trend towards declining homeownership rates since 2004. The combination of tightening lending practices and rising foreclosures due to sub-prime and adjustable-rate mortgage resets is throwing up barriers to homeownership and pushing households into apartments.
Exhibit 5. Homeownership Rate in the United States, 1970-2008

Source: Bureau of the Census.

As shown in Exhibit 6, completions of market-rate apartments (properties with 5 units or more) have been declining in this decade, from 230,000 units in 2000 to about half that figure last year. Moreover, about 200,000 existing apartment units were converted to condominiums at the peak of the last housing boom.


Source: Bureau of the Census, CBRE Torto Wheaton Research.
The short-term weakness in the economy alone would push down the pace of construction of market-rate apartments. In addition, the current crunch in the capital markets has had a beneficial impact. While debt is available today for the purchase of apartment assets, development capital is nonexistent. The significant pullback of development capital is squeezing the projects underway to record lows, with only those developments that had secured some financing prior to the credit crunch moving forward. Counting live projects, TWR is forecasting that across the U.S., just under 100,000 multi-housing units in the 5+ unit asset universe will be delivered in 2010. This pace of construction will deliver fewer units than during 1993, the trough of the last major development recession.

It should be noted, however, that in some markets, completions of new condominiums are elevated and still rising, despite falling sales and prices. Since condominiums are the closest product substitute for rental apartments, investors should carefully evaluate supply-side risks across markets and submarkets. These risks are concentrated in about a dozen markets, where a large share of new condominium development was catering to investors and speculators.

On the positive side, this environment could also create unique opportunities in the near term. As distressed, new and recently converted condominium projects slash the prices of individual units in order to attract buyers, whole properties may eventually become attractive options for apartment investors. Foreign investors looking at U.S. property for a diversification benefit to their portfolio are in a particularly strong position to take advantage of this distress. The availability of financing in this market today allows investors to apply leverage to their assets, using the same currency as their equity investment. Few domestic sources of debt, on the other hand, are available for other real estate asset classes, and application of leverage tied to foreign currency for these classes would expose one to exchange rate risks.
7. **Apartments are still under-weighted in institutional real estate portfolios.**

Over the last 20 years, apartments have become a widely accepted investment for institutional capital. Exhibit 7 shows that apartments as a share of institutionally-owned private real estate grew from less than 3% in the early 1980s to 24% today, making it the second-highest concentration among property sectors in privately-held portfolios, behind office assets.

**Exhibit 7. Apartment Share of Privately-Owned Institutional Real Estate**

![Graph showing the increase in apartment share of privately-owned institutional real estate from 1983 to 2008]

*Sources: NCREIF, CBRE Torto Wheaton Research.*

This dramatic move in the allocations to the apartment sector from the 1980s onward is explained by a number of factors. In the early 1980s, as the Reagan administration began to disassemble elements of the New Deal and Great Society programs, the construction of public housing in particular was curtailed, pushing demand out to the private sector.
Tax credit-based affordable housing development began during the Reagan years, which brought more professional management into the sector. Institutional investor interest grew when this trend was combined with the introduction of lending to the sector by Fannie Mae and Freddie Mac in the early 1990s. Also in the early 1990s, a number of developers transitioned their portfolios into a publicly-traded Real Estate Investment Trust (REIT) structure which, given quarterly reporting requirements, increased transparency for the sector well above levels that existed in the past.

Along with all of these structural issues that changed the apartment sector from the 1980s onward, the U.S. economy was in the midst of a transformation to an information-driven economy. The introduction of inexpensive and easy-to-use computer systems greatly aided the management of hundreds of diverse apartment units.

As shown in Exhibit 8, the growing acceptance of apartments has raised their institutional share to exceed those of the established retail and industrial property types.

Exhibit 8. Property Sector Allocations of Institutional Investors

![Exhibit 8. Property Sector Allocations of Institutional Investors](chart)

*Sources: NCREIF, CBRE Torto Wheaton Research.*

More recently, the increasing acceptance of apartments as institutional investments and the aggressiveness with which investors have been pursuing these investments has contributed to the
higher return performance through greater appreciation. While most acquisitions of U.S. apartments are still sponsored by private individuals, the diversity of buyers has provided, and will continue to provide, liquidity for this asset class, as shown in Exhibit 9. Still, despite being a popular investment among domestic institutions, very few of the transactions have been completed by foreign investors.


<table>
<thead>
<tr>
<th>Source</th>
<th>Share of Total Acquisitions, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td>Private</td>
<td>63.7</td>
</tr>
<tr>
<td>Institutions</td>
<td>14.6</td>
</tr>
<tr>
<td>Funds</td>
<td>7.5</td>
</tr>
<tr>
<td>REITs</td>
<td>12.2</td>
</tr>
<tr>
<td>Foreign</td>
<td>1.5</td>
</tr>
<tr>
<td>Syndicators</td>
<td>0.5</td>
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<tr>
<td>Total %</td>
<td>100.0</td>
</tr>
<tr>
<td>Total $ Amount (Bil.)</td>
<td>29.4</td>
</tr>
</tbody>
</table>

Sources: Real Capital Analytics, CBRE Torto Wheaton Research.

We believe that apartments still remain under-weighted in investment real estate portfolios relative to their proportional share of U.S. aggregate institutional real estate market value. We purport that apartments should comprise something closer to 30% to 35% of a diversified institutional real estate portfolio, which more appropriately reflects rental apartments’ position relative to its total U.S. institutional market value. This creates a significant opportunity for foreign investors to expand their U.S. apartment ownership.
Conclusion

Apartment assets in the U.S. continue to present investors with a wide range of choices in terms of product, location, and debt financing, which provides the ability to pursue a wide range of investment strategies. Favorable demographics and continuing foreign immigration will fuel rental demand for many years to come. Furthermore, housing policy will likely modify its historically strong bias toward homeownership in favor of a more balanced approach that will also support rental housing going forward.

Apartment investments represent an attractive opportunity for both U.S. and foreign institutional investors to achieve higher risk-adjusted returns and steady yields when other real estate assets underperform. Apartment investments are also especially well-suited to provide superior relative returns during periods of economic weakness and recession.

Finally, on a portfolio basis, we believe apartments are still under-weighted, and investors can, therefore, continue to increase diversification benefits by raising their allocation to this asset class.
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