

# Seizure in the Capital Markets and Its Impact on Washington's Investment-Grade Office Building Deal Volume

BY OAKLEIGH J. THORNE, CRE

THE LENDING CRISES THAT HIT THE U.S. ECONOMY IN THE LATE 1980s and early 1990s had their foundation in poorly underwritten commercial loans and, for the most part, the impact of this failure remained within our domestic borders. However, this time the disruption in the credit market is found in residential loans that have infected both global and domestic credit markets for all asset classes and profiles.

Thomas L. Friedman declared in his most recent book, "The World is Flat," that the globe is a level playing field and is rapidly shrinking. The concept certainly applies to global financial markets as we watch the impact of subprime loan defaults seep into the international markets, thereby reducing access to credit. The constrained flow of global funding has entered U.S. micro markets, and Washington, D.C.'s sharp decline in office building acquisitions from 2005–2007 is a good example of our flat world.

## GLOBAL BANKING 101

Global trading in the world's foreign exchange market has jumped from about \$70 billion per day in the 1980s to more than \$3.2 trillion per day in 2007. The U.S. prime rate was never the global standard for foreign exchange markets as it was always considered "politically sticky." Rates published by the London-Inter-Bank-Offer-Rate (LIBOR) are the intermediary in the exchange of foreign currency. It is now common practice for a country originating funds to deposit them in one or more foreign banks to facilitate money flows. As the currency flows rise and fall between countries during the day, market traders using derivatives and future contracts seek to capture

arbitrage profits contributing to added volatility in global currency markets.

London is the capital for offshore currency deposits for almost all depositor nations that function in a global environment. Typically, these deposits are held in European banks; however, other depositories include the Bahamas, Bahrain, Canada, Hong Kong, Japan, the Netherlands Antilles and Singapore, among others.

Much of the volume in the foreign exchange market is linked to movements between LIBOR deposits and other global banking centers. However, the foreign exchange market has no physical location and no central exchange similar to the stock exchanges of London, Japan and the United States. Operations function electronically among the global banks, corporations and individuals who are constantly trading currencies. Sans a physical "place," the currency exchange market operates 24 hours a day without regard to time zones, as funds move around the globe.



## About the Author

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Gary Dorsch, editor of the *Global Money Trends* newsletter, reported in a recent edition:

“Normally, the three-month LIBOR rate trades at a small premium of around 0.15 percent above where the market thinks the European Central Bank's (ECB) repo rate will be in three months' time. But since the shocking revelations of the subprime mortgage debt crisis came to the surface in mid-July, with potential losses to global banks of anywhere from \$250 billion to up to \$1 trillion, Euro LIBOR rates have shot much higher, to 75 basis points above the ECB's 4.00 percent repo rate.

“In early December, the Euro LIBOR 3-month deposit rate jumped to 4.72 percent, far above the ECB's repo rate of 4.00 percent, the widest gap since May 2001. The size of the potential losses in the banking sector both in Europe and in the U.S. is still very uncertain and very large, and this is keeping inter-bank markets dislocated. **In other words, banks are reluctant to lend money to each other in the LIBOR market, and are hoarding cash instead, to cover probable future losses.** With more than \$1.8 trillion worth of securities backed by subprime mortgages created since 2000, banks and broker dealers are revealing new losses every week. The impact on the overall confidence in the credit markets has been devastating.”

Although the ECB has attempted to ameliorate liquidity fears, the effort has failed to convince the global banks to lend to each other at rates matching perceived risks. Consequently, LIBOR has moved higher, clearly suggesting that the cost of accessing funds will become more expensive.

Thus, higher bank lending rates reflect growing concern about the strength of financial institutions after more than \$120 billion of write-downs by several Wall Street firms and CitiBank last quarter were directly linked to subprime mortgage defaults.

LIBOR serves as the primary benchmark for global short-term rates and is used to settle many of the world's interest rates, futures contracts, hedge funds and derivative contracts including short-term commercial-paper loans used by banks—above \$3.5 trillion globally. Financial futures contracts, with values of about \$150 trillion are indexed to the LIBOR. Unknown to many, a very large

percentage of U.S. business and consumer loans, including domestically originated home mortgages, are pegged to LIBOR rates. Moreover, almost all home mortgage loans in the EU are directly linked to the performance of LIBOR.

The Feds recently lowered the funds rate based on a report that the 224,451 foreclosure filings on U.S. homes in the month of October 2007 represent an increase of 94 percent compared with foreclosures in October 2006. For the full year, RealtyTrac expects two million U.S. homes to have entered the foreclosure process; this includes bank repossessions, default notices and auction sale notices. In addition, two million more adjustable-rate mortgages are scheduled to reset in 2008, with many tied to the LIBOR rate, sending homeowners' monthly mortgage payments higher, possibly to unmanageable levels.

Before the credit crisis, global banks had various options to access funds including the commercial paper market of \$1.2 trillion, which is now effectively closed to all participants. Currently, banks have to rely on inter-bank funding where cash supply is squeezed by a year-end liquidity shortage. U.S. banks whose costs of borrowing are founded in the LIBOR market jumped to +202 basis points above U.S. Treasuries in the third quarter of 2007.

The Federal Reserve realizes that LIBOR is not clearing efficiently, and half of the total world's finance is tied to LIBOR performance (\$150 trillion including derivatives). The risk of recession and a spreading toxic infection from the defaults of subprime loans increases every week.

As Mr. Dorsch noted:

“Worse yet, U.S. corporate profits are in a recession, and the entire U.S. economy may not be far behind. Corporate profits, as measured by the Commerce department, fell \$19.3 billion in the third quarter from the second, as domestic earnings dropped to \$41.2 billion. The drag from sagging U.S. sales and huge write-downs were offset by robust earnings abroad, fueled by the weak U.S. dollar.

“Operating profits for S&P 500 companies fell 2.5 percent in the third quarter, the first drop in more than five years. Much of last quarter's damage came in the financial sector, where operating earnings fell 25 percent, as banks and brokers were hurt by losses from subprime mortgages and related investments. Financial industry profits in Q4 may also decline more than 25 percent from a year ago.”

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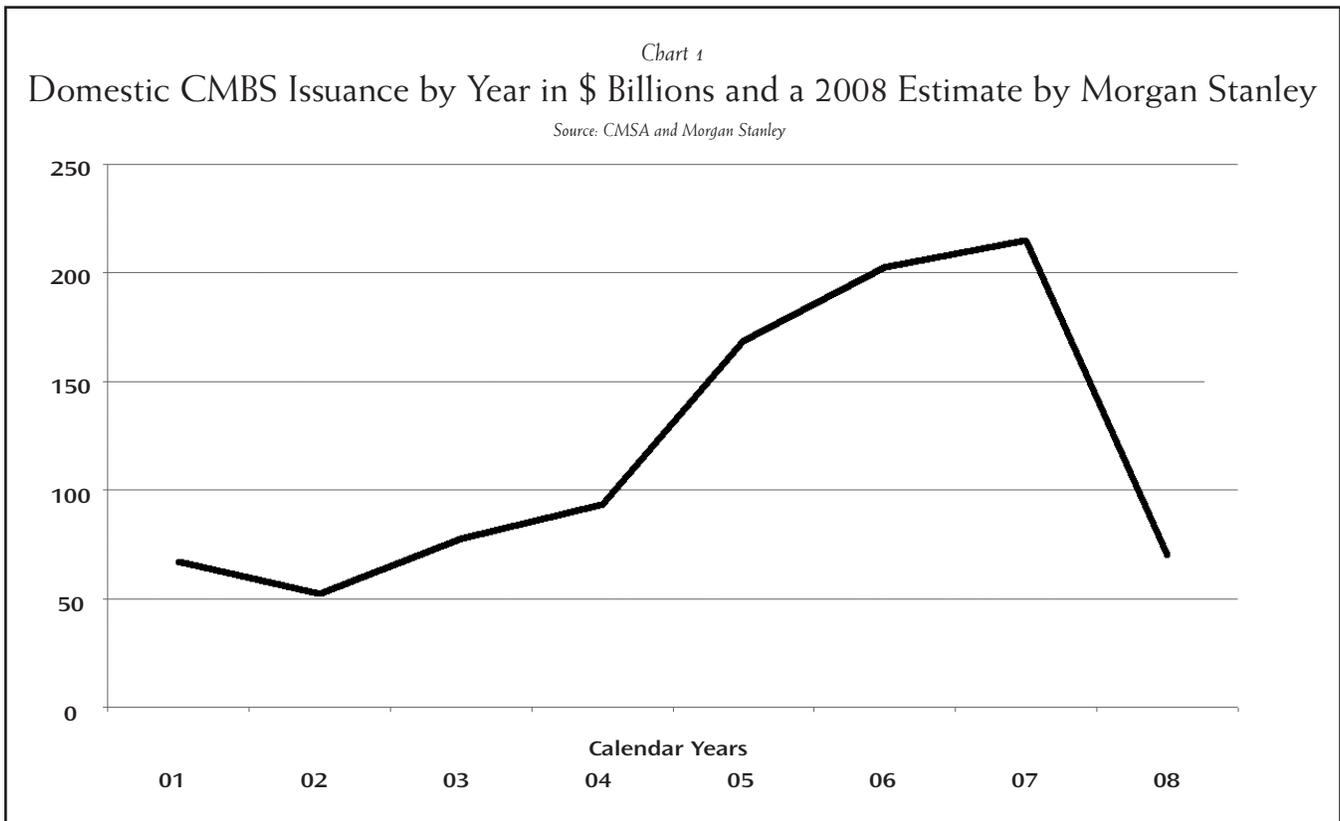
### THE CMBS MARKET

The disruption in the credit markets began in early July 2007; however, mutations in the process to access credit began in late 2006 when residential subprime defaults first hit the newspapers. By the end of the first quarter of 2007, buyers of investment property found their access to easy money far more difficult. Investors and lenders redirected their goals and invested in risk-free Treasury notes and bills, driving prices up and interest rates down for these instruments while abandoning riskier investments. Balance sheet loans (cash generated from operations) from banks and insurance companies are still available but at far more conservative terms.

The securitization activity, including commercial mortgage-backed securities (CMBS) issuances, slowed moderately during 2006 and 2007 from the pace set between 2002 and 2005 (refer to Chart 1). Institutional and foreign investors who do not use leverage are now more active, while buyers needing high-leverage private sector money have been stalled.

The stock and bond markets reacted to the rising rate of delinquencies among subprime residential borrowers, a result of continued deterioration in the housing sector. Investors lost confidence in subprime loans, the securities backed by subprime loans and the businesses making, holding, securitizing and purchasing subprime loans. Hedge funds managed by Bear Stearns, Merrill Lynch, Goldman Sachs and others that had purchased subprime asset-backed securities (ABS) reported huge losses. Globally, an Australian hedge fund and banks in Germany and France that invested in these subprime ABS also reported significant losses. Investors seeking to increase returns leveraged their ABS holdings which, when applied to a market decline, exponentially drove prices even lower.

According to Bloomberg News, a dozen of the largest investment firms headquartered in New York and Los Angeles pooled subprime residential asset-back securities (ASB) totaling \$383 billion and sold the paper to investors in 2006. As of September 2007, 21 percent or about \$80 billion is in default. The impact is worse as Bloomberg did not report the lesser known firms issuing less than \$20 billion in securities. There are about 18 trillion global



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dollars in all forms of outstanding ASBs, and market analysts claim that losses will be in the range of \$400 to \$600 billion. Published articles in newspapers had reported only about \$150 billion as of the end of 2007. The trough remains in the future despite the current Federal Reserve's rate reductions.

Prior to July, it appeared that the primary impact of the housing downturn on the office market would be restricted to buildings whose tenant rolls included mortgage lenders, title companies, builders and other housing-related businesses which were downsizing or closing. The retail sector also seemed at risk as strapped homeowners cut back on discretionary spending, and sliding home construction reduced opportunities for shopping center developers. The upheaval in the credit markets has been called by Fitch Rating Ltd. (a rating agency with offices in New York and London) "a global re-pricing of risk." There is now a negative reaction to lending practices that had become too aggressive using highly engineered and complex debt instruments impacting all asset classes and economic sectors including commercial real estate (CRE) in the global sphere.

Easy access to all forms of credit instruments has driven cap rates down and deal volumes up to record levels every year since 2002. Analysts are still debating whether this behavior is a bubble waiting to burst or a rational re-pricing of assets from the depressed levels of the 1990s. Market participants are confident that the chronic overbuilding that consistently plagued some markets has slowed or stopped.

Institutional-grade assets have been priced using future assumptions based on upward-bending parabolic curves (the use of exponents in cash flow projections as an example); however, when global credit markets turn downward, the response is an equal and negative parabolic curve.

Aggressive lending conditions prevailing in the commercial sector from early mid-2004 to mid-2007 offered opportunities for real estate developers, lenders and property owners to use a menu of complex financial instruments to gain access to low cost capital and shift risk. Expectations by all participants were that increases in both rents and prices would cure the poor underwriting

standards. Pricing for all income-producing assets has risen in the last five years to the equivalent of the heady days of the 1980s. Major cities like New York, Washington, Boston, Chicago and Los Angeles have exceptionally strong office markets. However, by mid-2007, evidence of the significant change in both deal volume and prices became obvious.

The Center for Real Estate at MIT published in September 2007 a set of indices for trading real estate based on Real Capital Analytics transaction database. Its website ([mit.edu/cre/research](http://mit.edu/cre/research)) offers a 75-page PDF on the construction of the indices to measure demand for real estate investments and price changes over time. The authors, Messrs. Geltner and Pollakowski, reported that both demand and price indices turned negative in the third quarter of 2007 for the first time since the third quarter of 2003.

Some market observers (appraisers and real estate analysts) expect that commercial real estate prices in the U.S. could fall as much as 12%–15% during 2008. Active buyers of investment-grade real estate in July 2007 bought the fewest commercial properties since August 2006, and apartment acquisitions were down 50 percent from June data compiled by industry consultants Real Capital Analytics, Inc.

New issuance of U.S.-based CMBS in 2007 (\$215 billion projected by Morgan Stanley), although higher than in 2006 (\$203 billion), has been more difficult to obtain this year, which has slowed deal activity and rendered debt more expensive to obtain. In 1990, financial institutions held about \$1.1 trillion of the commercial and multi-family loans. The public Government Sponsored Enterprises (GSE) and private sectors (real estate developers and investors) shifted their focus to the capital markets (investors on the street) after the credit crunch in the early 1990s. By the first quarter of 2007, the aggregate CMBS paper held by all investor profiles was slightly more than \$3.0 trillion. The chart below depicts the annual growth in issuance activity from 2001 to about Dec. 8, 2007. Morgan Stanley projects domestic CMBS issuance to drop to \$70 billion in 2008 due to "weakening real estate fundamentals."

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According to Morgan Stanley, the global market for CMBS approximated \$300 billion in 2007, and will drop to about \$100 billion in 2008.

### ASSET-BACKED SECURITIES

CMBS are only one component of all asset-backed securities; however, the CRE securities are not responsible for the current seizure in the credit markets. The financing of commercial property (defined as office, retail, industrial, multi-family and lodging properties) is an unintended victim in this collapse.

The website abalert.com compiles statistics on rated issues including residential mortgage-backed issues and collateralized bond (CBO) and debt (CDO) placements anywhere in the world. The database includes only those securities that are:

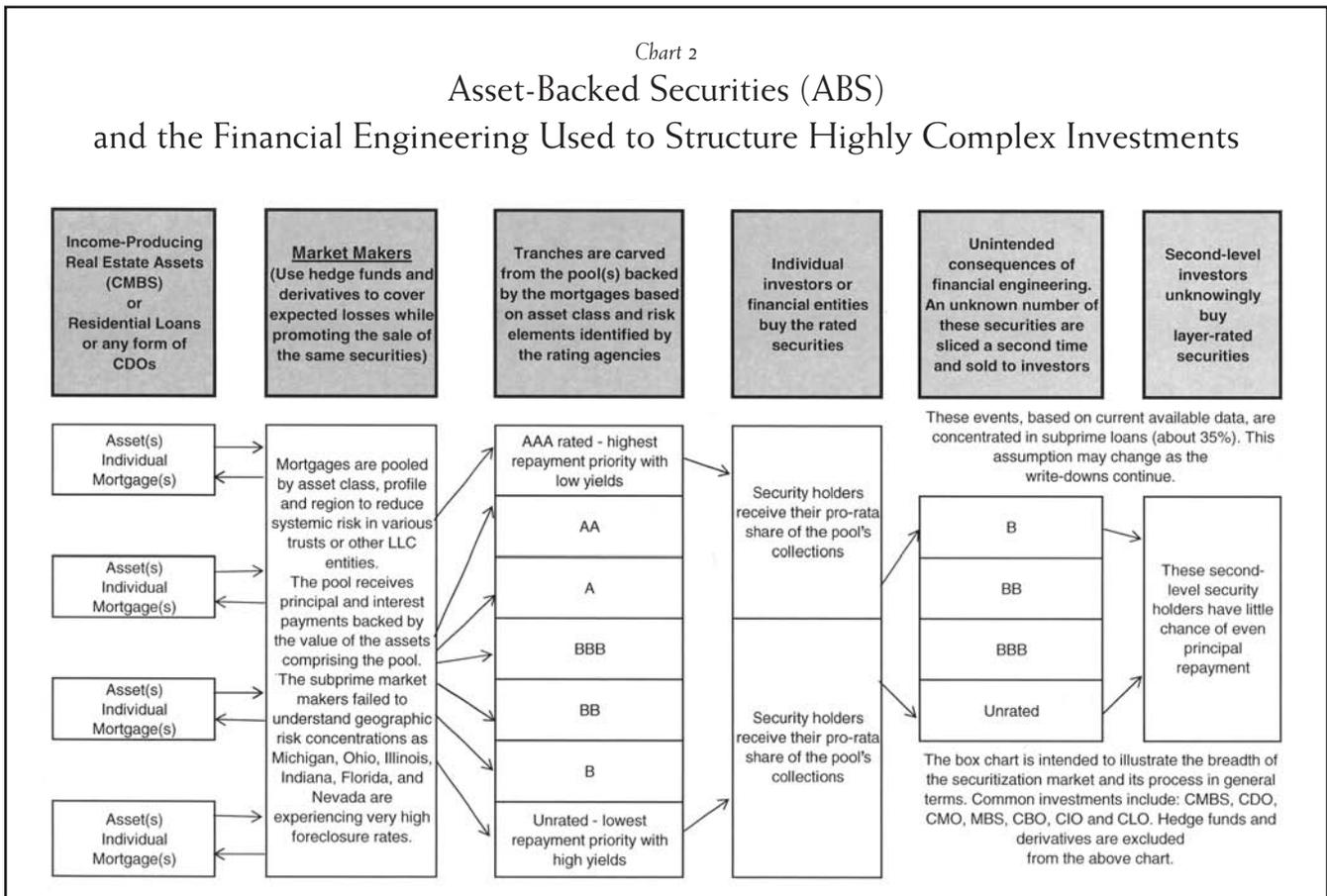
- 1) rated by at least one major rating agency;
- 2) under the control of a Trustee; and

- 3) collateralized by assets of some kind; synthetic CDOs and catastrophic bonds are also included.

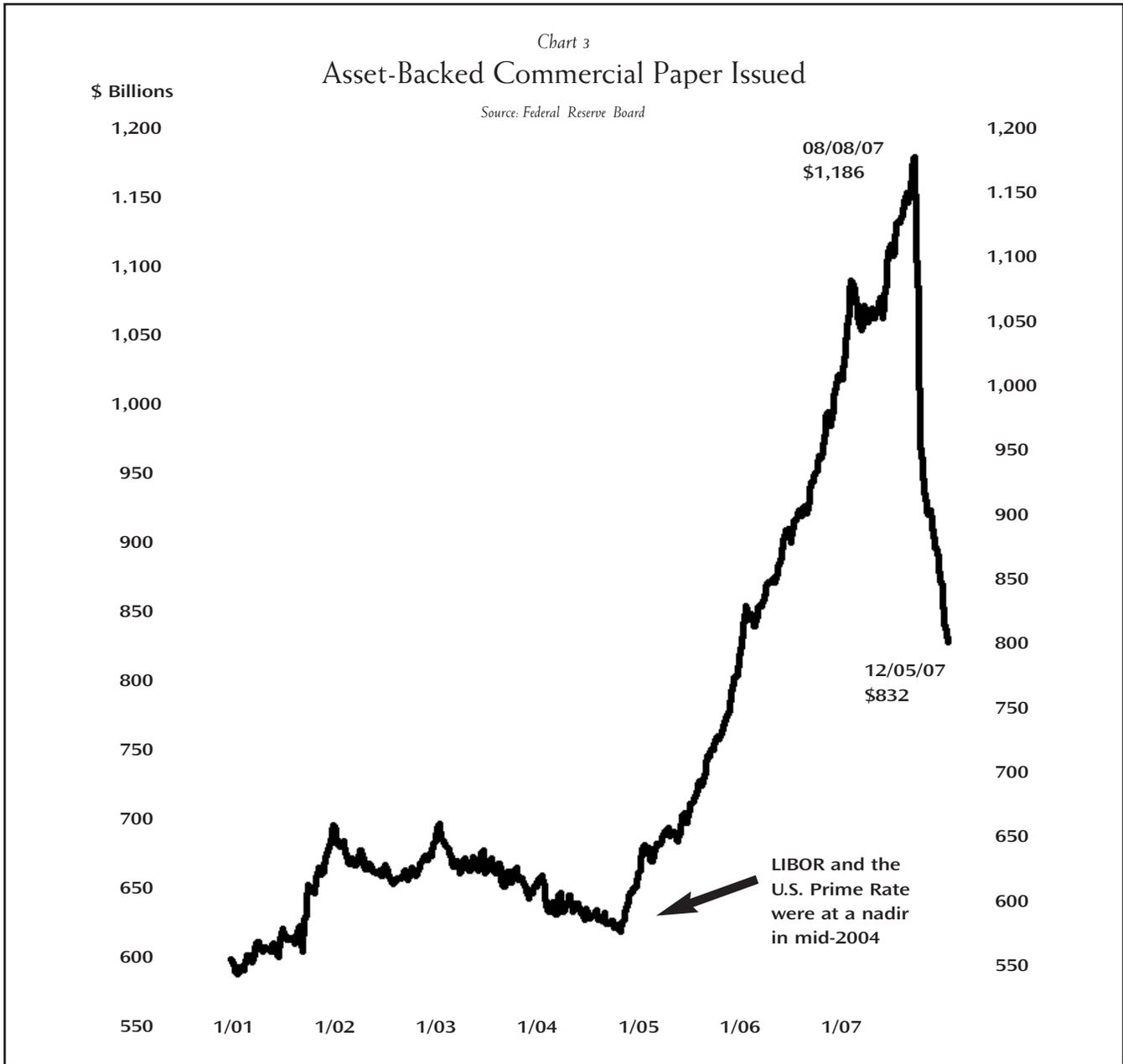
The database excludes CMBS, GSE, and municipality and tax-exempt issues.

The financial engineering mechanism or process behind the issuance of both ABS and CMBS begins with an originator of a loan or credit instrument. Market makers, using their lender or originator network, pool multiple debt obligations (CBO, CDO and other fungible assets). The goal of the originator is to factor and sell the debt instruments to an investment firm, which in turn collects a fee to package the loans. The shift from the original lender to the asset pool enables the originating entity to free up capital to capture new deals.

Based on assets comprising the pool's future income (repayment of principal and interest or other payment forms), portions are carved into tranches. "Tranche" is the French word for "slice." Slices of these highly complex structured investment vehicles (SIV) are sold based on



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several different factors relating to risks, rewards and/or maturities (varying terms). The slices are then rated by one or sometimes two rating agencies such as Fitch, Moodys and S & P. When rated, the tranches are offered for sale to individuals or firms. The process is illustrated in Chart 2.

The impact of the subprime defaults is magnified, as we are now learning, as a number of unknown firms, for a fee, purchased slices of these original-rated pools and re-packaged the assets a second time, rated them a second

time, and later sold them as lower-tiered units to other investor market participants. The impact has been global as most banking members of the EU have offices in New York, and they acquired both the original-rated and second-tier rated ABS.

The line graph illustrated in Chart 3 reports ABS issuance from Jan. 3, 2001 to Dec. 5, 2007. The rise in activity was initiated when both the U.S. prime rate and LIBOR were at a nadir in mid-2004.

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Chart 4  
ABS Issuance From Jan. 3 to Dec. 5, 2007

Source: Federal Reserve Board

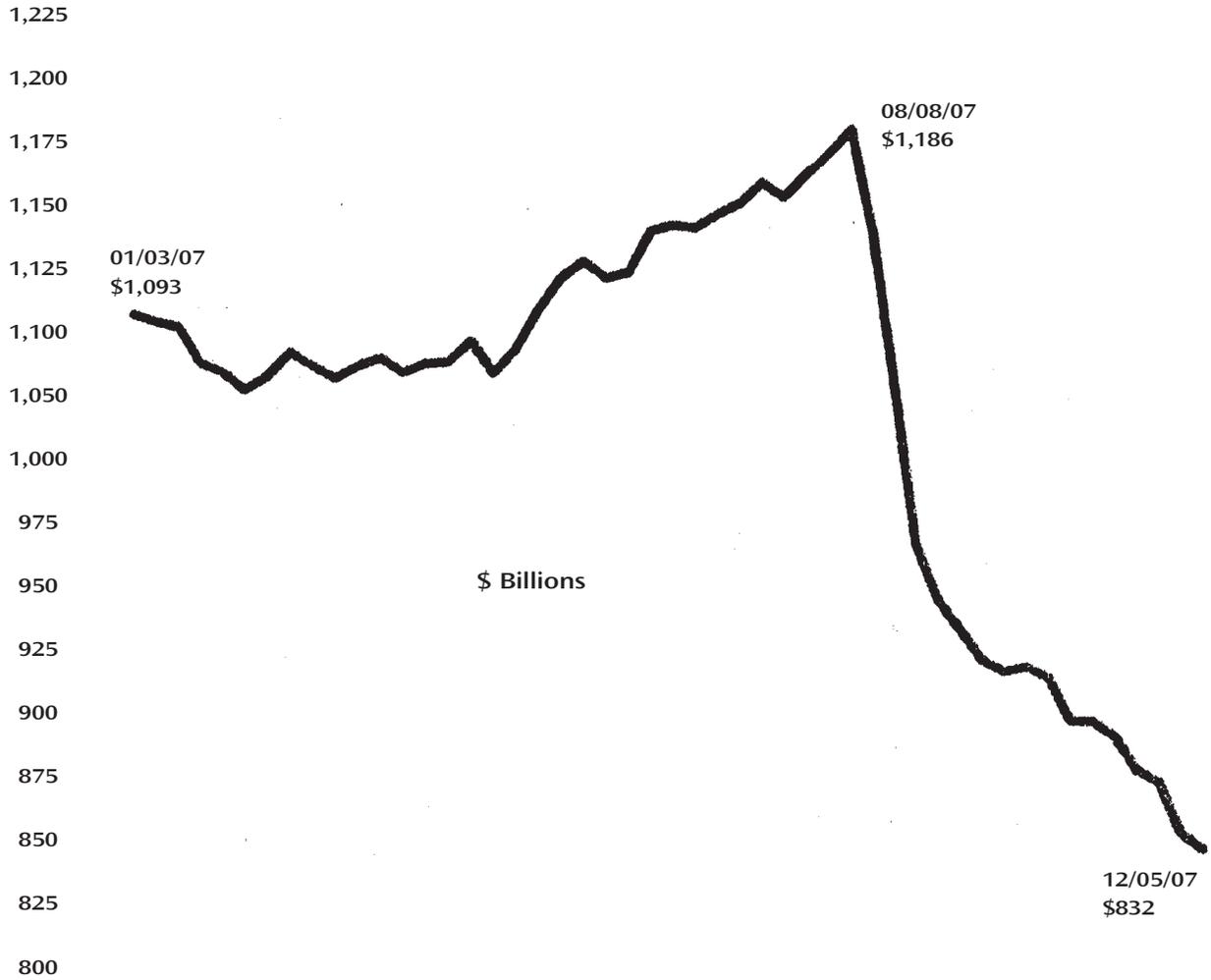


Table 1  
ABS Breakdown as of Nov. 29, 2007

SECURITY	(\$BIL.)	(%)
Other	211.4	36.7
U.S. Subprime Residential	202.1	35.1
Credit Cards	90.3	15.7
Non-U.S. Residential	72.7	12.6
<b>TOTAL</b>	<b>576.6</b>	<b>100.0</b>

Issues originated only in the U.S. for about eleven months of 2007  
Source: abalert.com

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Table 2  
Yield Margin Comparisons

INVESTMENT	3Q07	3Q06	3Q05	3Q04	3Q03
R. E. Yields	8.1	8.9	8.9	10.1	10.6
10-Yo. T-Bills	4.8	5.0	4.3	4.4	4.1
Margin	3.3	3.9	4.6	5.7	6.5

Source: Real Estate Research Corporation

Of the total \$832 billion of ABS issued during the first eleven months, about \$577 billion were domestically pooled and sold. About 35 percent (\$202 billion) of the total securities issued are backed by questionable loans in the residential subprime market. The subprime ratios for 2005 and 2006 are unknown but can only be added to this year's volume. Assuming a total of about \$600 billion in subprime outstanding securities are placed as of the end of 2007 (Table 1), and applying the default ratio reported by the top dozen market makers of about 20 percent, possible loans in default by the first quarter of 2008 could approach \$120 billion.

The monthly issuance volume in 2007 (depicted in Chart 4) illustrates a precipitous fall from early August to early December 2007. The reduced activity is the result of limited to no demand for the securities as well as the originators' inability to raise their own funds for use by end users of credit.

### OFFICE BUILDING INVESTMENT ACTIVITY IN WASHINGTON, D. C.

The District's office market in the past five years has rushed headlong into an unmovable wall. First-generation tenants renting space in Class A product have experienced full-service rent increases of about 3.0%–3.5% per year during this period. Prices for Class A to Class B+ office products have been escalating at about 8%–9% per year since 2002. However, total operating expenses during the same five-year period (due primarily to increases in terrorism insurance, real estate taxes and energy costs) are escalating at an alarming rate of 11%–15% per year. While standard tenant fit-up above shell space stood at about \$45 per foot in 2002, the standard work letter in 2007 (if there is one in place for the building) ranges \$55–\$60 per

foot. Obviously, the changes in these parabolic curves should curtail the aggressive attitudes of investors.

Office investors nationwide have been willing to accept lower real estate yields since the third quarter of 2003. The margin between real estate yields and those available from risk-free Treasuries has declined steadily from 2003 to the present (refer to Table 2).

Yields and the inherent risks in commercial real estate investment demand higher spreads above Treasuries than those illustrated between 2006 and 2007. The declining margin over the reported time period is a result of the availability of easily acquired debt for acquisitions and/or the cost of funds for operations. With more conservative lending standards in place, the yield margin will increase to levels reported in 2003 and 2004, implying that asset prices should turn lower during 2008 and 2009.

Market observers in Washington concluded that the intersection of these parabolic curves would prompt an adjustment in prices moving cap rates higher. However, the seizure in the credit markets trumped the evolutionary curve theory. Investment activity for the District's office buildings came to almost a standstill in 2007.

Recently, investment sales activity in the Washington, D.C., office market fell dramatically. The decline became evident in the third quarter of 2007 when the District recorded \$398 million in office sales, according to Cushman & Wakefield, which was equivalent to a 40 percent fall from the same period a year earlier, and the lowest quarterly volume since 2002.

Washington has always been one of those cities where there is an irrational disconnect among the financial indices of cap rates, prices per foot of rentable area, and

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*Table 3*  
Office Building Investment Activity in Washington, D. C. From 2004 to 2007

CALENDAR PERIOD	DEALS #	DELTA (%)	DEAL VOL. (\$ MILLIONS)	DELTA (%)	MEDIAN \$/FT.	DELTA (%)
2004	25	-	2,474	-	363	-
2005	34	36.0	4,020	62.5	455	125.6
2006	34	0.0	3,863	(3.9)	463	1.6
2007	14	(58.8)	935	(75.8)	440	(5.0)

*Note: Includes only investment-grade office buildings with prices at or exceeding \$30 million.*

*Source: CoStar Group, Inc., District's Taxpayer Service Center Web Site, and Thorne Consultants, Inc.*

expense burdens. Full-service rents for Class A locations and buildings in New York City fall in the range of \$75–\$90 per foot, and prices are commonly found in a range of \$600–\$900 per foot. Office rents in Washington for similar class structures range \$45–\$60 per foot; however, prices are about \$600–\$750 per foot.

This article concentrates on only Class A and Class B+ product with a selling price equal to or greater than \$30 million. A determination was made that office investments priced below \$30 million, although remaining investor-grade, are not investment-grade real estate. At this dollar scale and higher (\$30 million), both the asset class and tenant profiles (credit ranking and lease terms) are more apt to be favorably received by the rating agencies in New York, thereby decreasing the potential for pooling friction. Leasehold, portfolio and 1031 exchange sales were eliminated from the database. The results of the analysis, using two complementary information sources, are depicted in Table 3. Over a 48-month period from 2004 to the end of 2007, \$11.3 billion worth of investment-grade assets were acquired in 107 deals in Washington.

The charts on page 20 illustrate the annual deal volume and median per foot prices in a column format. The second line graph charts the deal volume in millions of dollars for calendar years 2006 and 2007 on a monthly basis.

The drop in activity (using the database criteria) dovetails consistently with the fall in ABS issuances and the ongoing impact of residential subprime defaults. Note also that the

growth in CMBS pooling activities slowed as well. The drop in deal volume from 2005 to 2007 was more than 76 percent. The number of deals fell from a high of 34 acquisitions in 2005 to a meager 14 deals in 2007.

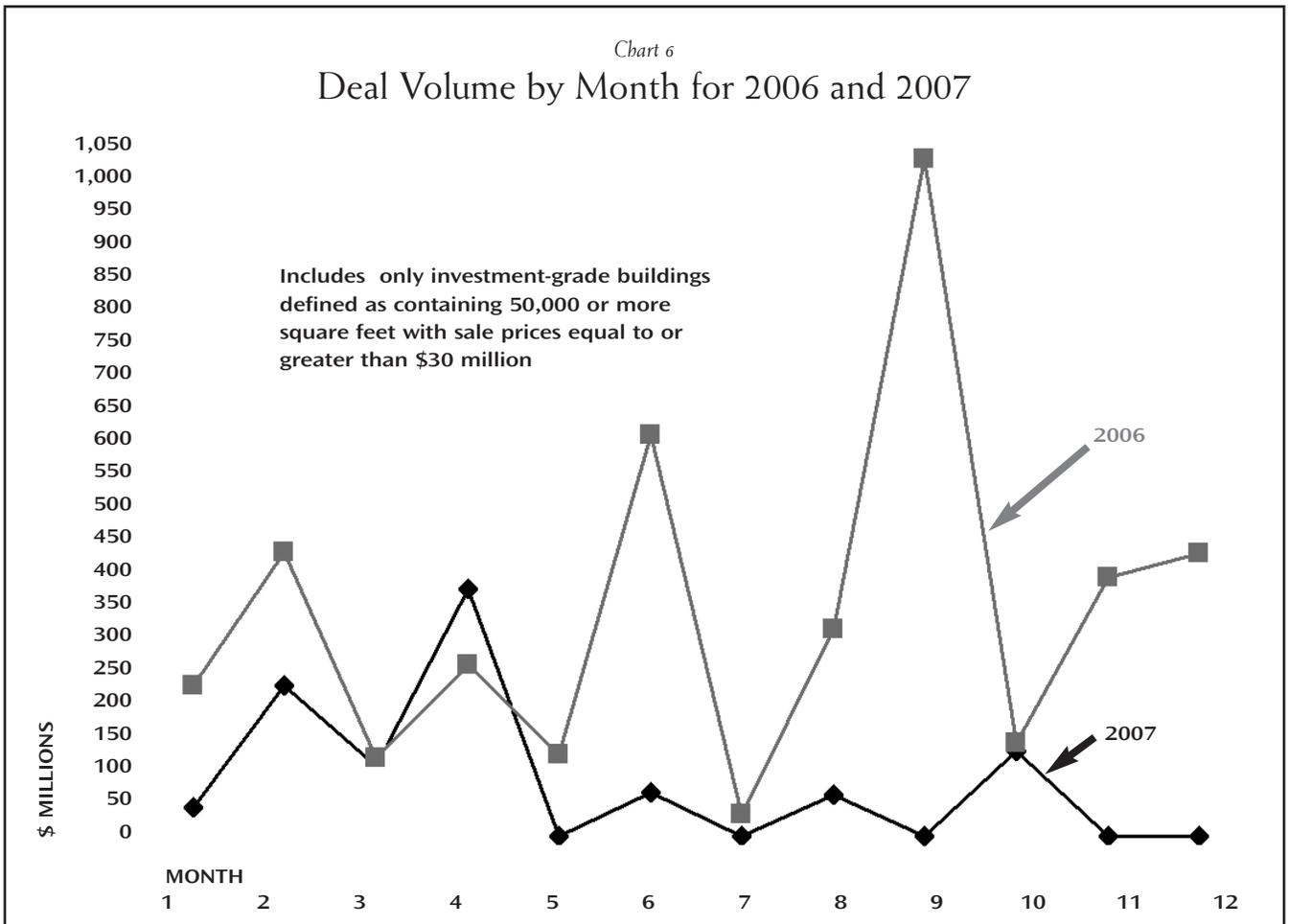
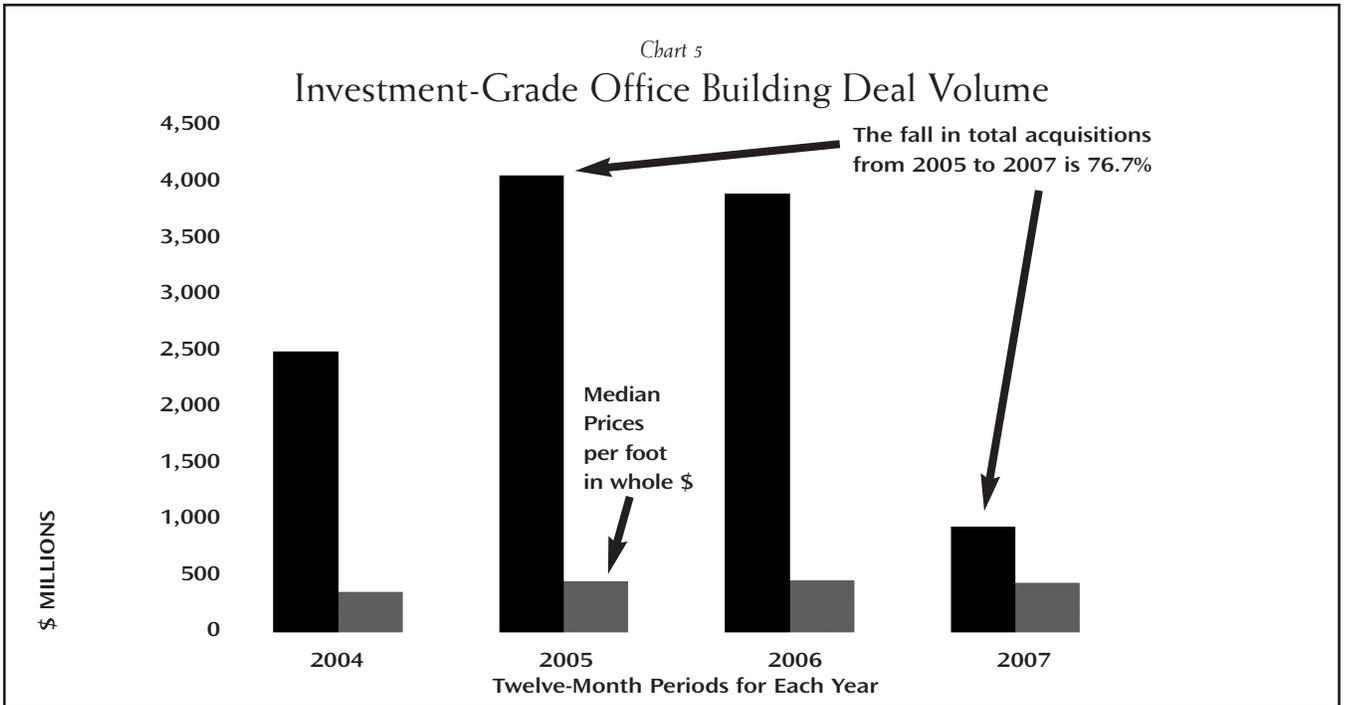
The line chart illustrates the market's poor acquisition performance for each month in 2007. April was the only period in 2007 when deal volume exceeded the amount earned in the same month in 2006. There were five months of 2007 during which not a single sale fit the identified criteria.

The median price per net rentable foot fell in 2007 a modest 5.0 percent from its high in 2006. A review of average prices is equally supportive of a possible decline in prices. For each year, these are as follows:

YEAR	AVG. \$ PER FOOT
2004	379
2005	472
2006	474
2007	436

Drawing up or down conclusions about prices derived from the use of medians and averages may not be reliable. In order to develop accurate conclusions from a series of data using averages, the samples in the database must have product homogeneity in all years of the study. A disproportionate ratio of asset class sales (mix of Class A and B

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product from one year to the next) during one or more of the periods could impact the result.

Multiple acquisitions within a sub-market which is part of a larger economic unit will skew the findings, especially if there are no representative sales of comparable class assets in the remaining micro-geographic units comprising the larger market area.

Regardless, informational "noise" leeches into every database analysis due to either unidentifiable elements within the market or by extrinsic factors. Washington's office buildings, many leased to GSA, have consistently been viewed as a low-risk investment. However, Washington competes with other cities for the same investors. How changes in the relative competitive matrix affect sales activity in these other regions during the four-year study period are unknown; the element can be classified as potential "noise" in the database.

Culling from the larger database, only the office building sales with a floor price of \$30 million (investment-grade assets) may ameliorate some of the issues surrounding the simplistic approach; however, it is not foolproof. It is too early to confirm that Washington's office building prices declined in 2007. Sans access to cap rates for the transactions occurring during 2006 and 2007, it is impossible to offer any conclusions about the market.

Linear or multiple regression approaches offer no solution either, as statistical credence is only obtained when the sample exceeds 200 data points. Even if all office building

sales above \$5 million were included in the analysis, there are inadequate data points to use regression.

### CONCLUSIONS

Despite the lack of any determinative evidence about asset pricing, Washington's office building investment activity has illustrated a dramatic change from its peak in 2005. We suspect that the impact of the collapse in the credit markets is not endemic to Washington. According to the research efforts of the national firms, deal volumes across all asset types throughout the country declined during 2007.

Although buyers of most of the larger deals (above \$50 million) seldom rely on traditional mortgage funds, access to capital is a strategic component to maintain asset churning. The firms need access to capital as none are funding acquisition costs using cumulative balance sheet income from operations to buy additional assets. Even if some leverage is used on these very large deals, equity amounts are substantial.

Demand for office space and the number of leasing deals in Washington since early in the second quarter of 2007 have all but stopped. The need of potential office tenants to access funds to create and expand their enterprises may explain the sharp decline in leasing activity.

Calendar years 2008 and 2009 may be correction periods as the spread between real estate yields and treasuries returns to a respectable margin. However, the depth and length of the subprime market's continuing impact on the capital markets are presently unknown. The economic nadir remains in the future. ■