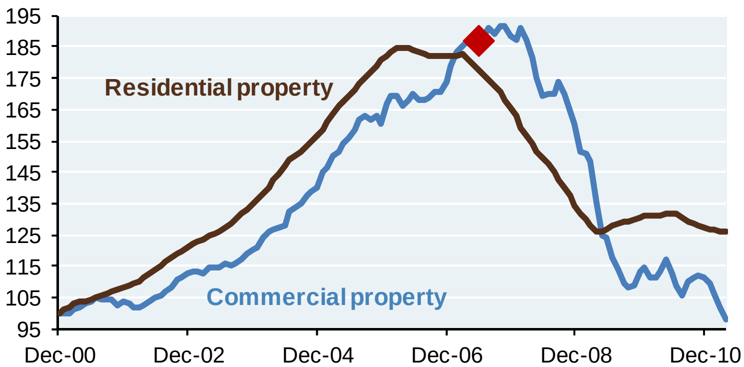
The Rise and Fall (and rise) of US Commercial Real Estate

Overview

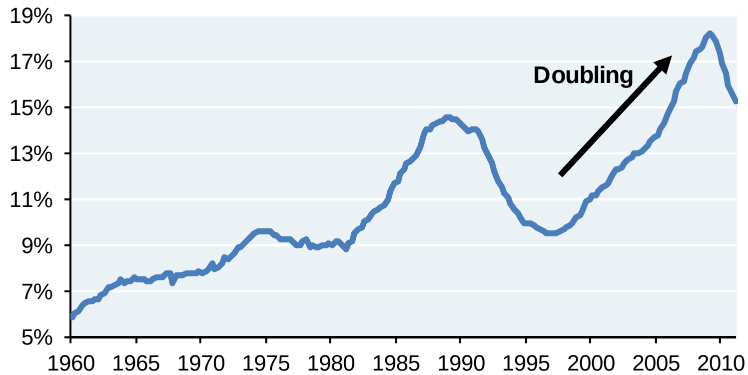
There was a time early in the recession when residential property prices had begun to collapse, but commercial property prices were still holding in. We cut our allocations to commercial property (red dot), although given the illiquidity of the asset class, this was more of a benefit to newly funded portfolios than existing ones. By the end of 2009, commercial property prices, when measured on a national level, fell even more than residential property prices. The primary driver of the collapse: a massive expansion in the use of debt, which contributed to skyrocketing prices. The 2nd chart shows commercial real estate credit extended by private markets (banks, insurance companies) and by public markets (e.g., rated property-backed debt, securitized commercial real estate loans). It almost doubled as a percentage of GDP from 2000 to 2007.

Commercial and residential property prices
Index, Dec 2000 = 100



Source: Moody's Commercial Property Price Index, S&P/Case-Shiller Composite-20 Home Price Index.

Commercial real estate debt outstanding
Percent of GDP



Source: Federal Reserve Board, Bureau of Economic Analysis.

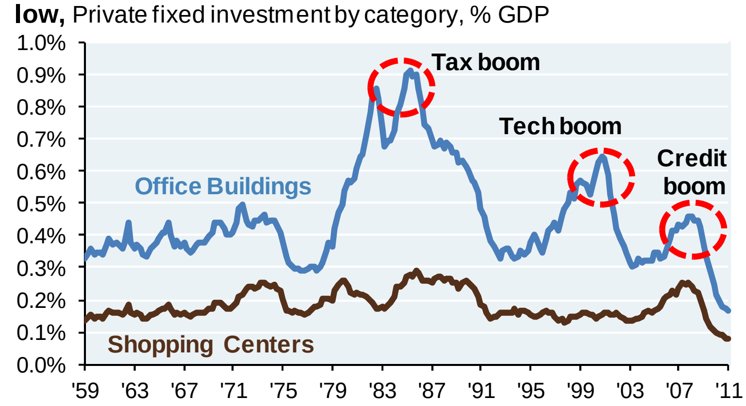
Any silver linings? Unlike residential property, the oversupply of office property was less severe. To illustrate this, consider the chart below (left), on the three expansions in office property since the Volcker disinflation of the early 1980s:

- The first was the worst: **the tax boom**. The 1981 Economic Tax Recovery Act ushered in accelerated depreciation allowances for real estate and the ability to offset active income with passive losses. This fueled a massive expansion in commercial property construction. The 1986 Tax Reform Act then ended this tax arbitrage. Unoccupied buildings never needed in the first place drove vacancies to 30%-40% in some cities, prices collapsed, and banks suffered losses of 15% or more on commercial property loans.

- The next was the **tech boom**, when markets were pricing in 5% perpetual GDP growth and the elevated payroll growth/ office space needs that it implies. The tech sector played a large role (as one sign of optimism, Cisco traded at 150 times earnings), but it wasn't just tech that was expected to expand; everybody was (Merck traded at 35 times earnings). As a sign of how things have changed, both Cisco and Merck now trade closer to 10 times earnings.

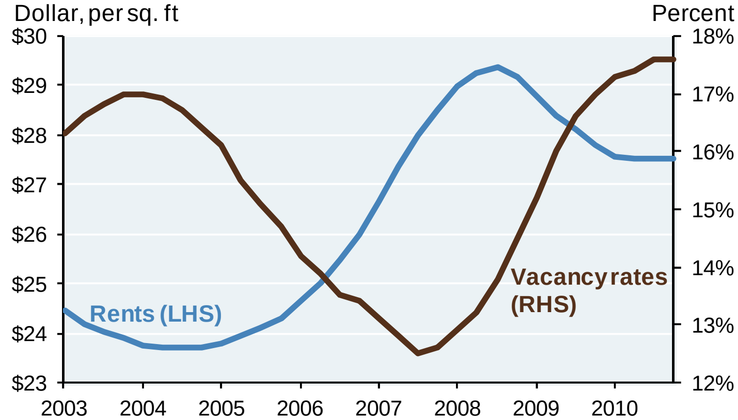
- The third episode was the recent **credit boom**, when the cheapest and most abundant credit in history (see below for more details) pushed office construction higher, although the peak this time was lower than the prior two. While office vacancy rates are still elevated, they are starting to stabilize (see chart), as are national measures of office rents per square foot. The retail expansion did match prior peaks, a reflection of the consumer credit boom and bust.

Third boom-bust brings office construction to all-time low, Private fixed investment by category, % GDP



Source: Bureau of Economic Analysis.

Office rents and vacancies stabilizing
Dollar, per sq. ft Percent



Source: Reis, Inc.

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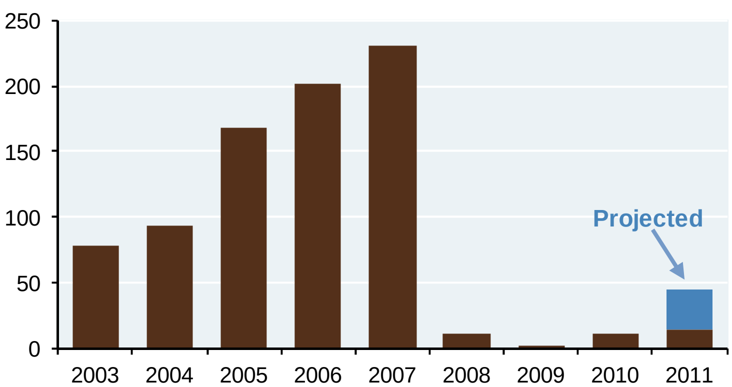
As a result, we have been more active over the last 2 years in commercial property investing than residential, as the latter suffers from worse oversupply. Since the onset of the recession, we have been opportunistically adding exposure to commercial real estate through distressed property funds, mezzanine financing and commercial mortgage backed securities. To be clear, there are plenty of impaired properties after the construction boom shown on the prior page; but there are just as many valuable ones that are simply over-leveraged, or held by banks that need to shrink their exposure to the sector.

The details: how mezzanine financing opportunities may benefit from the collapse in securitized property loans

Securitization of bank-originated commercial real estate loans was behind the explosion of commercial property credit shown on page 1. It's kind of a horror show in hindsight; all the participants in this market (bank lenders, underwriters, fixed income investors, rating agencies and property owners) come out looking pretty bad. Here are a few lowlights of the CMBS markets (commercial mortgage backed securities) from 2002 to 2007:

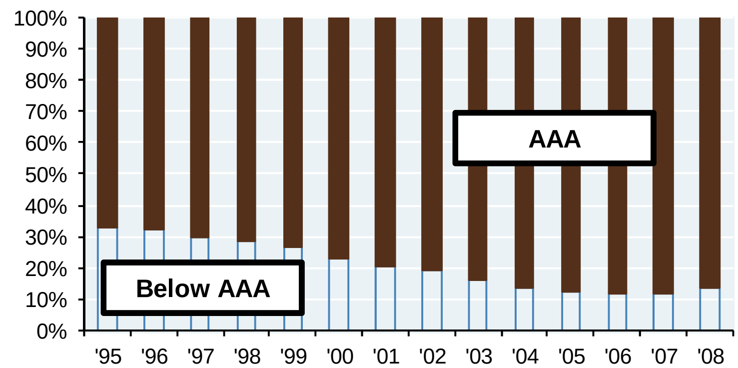
- Before its collapse in 2008, the CMBS market tripled in size to over $800 billion, grew to be 25% of the entire property financing market, financed **40% of all new construction**, and set the marginal cost and conditions for credit
- **Interest-only loans** rose from 10% to 50% of all loans, as the notion of required amortization was gradually discarded
- By 2007, rating agencies allowed debt service coverage to fall below 1.0 and loan-to-values to rise above 100%. This implied that everyone involved was assuming automatic rental and property valuation growth ("**forward underwriting**"). Stuyvesant Town in NYC, underwritten to assume conversion of rental units to market prices, is an example of this.
- **The decline in protection for AAA investors** is one of the clearest indications of the role rating agencies played in the crisis. Rating agencies used the same backward-looking lens they applied to subprime, and after looking at low CRE default data from 1995 to 2000, cut required credit enhancement for AAA-rated CMBS investors in half by 2007. We estimate that by 2007, only 5%-10% declines in property prices could have exposed AAA investors to losses (see chart).

US CMBS issuance - historical and projected
USD billions



Source: J.P. Morgan Securities LLC.

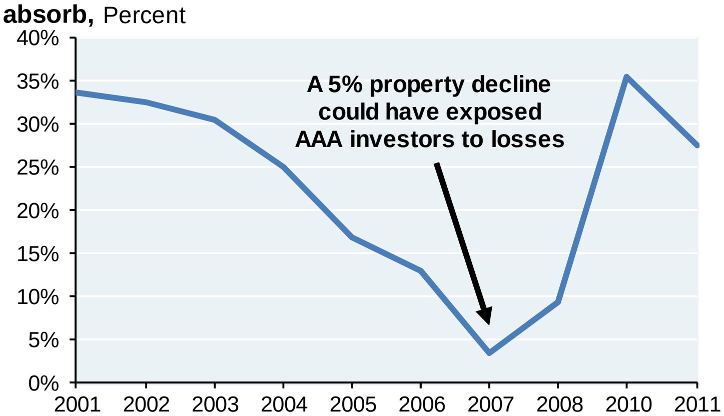
Erosion of protections for AAA CMBS investors, 1995-2007
Size of AAA and non-AAA tranches, Percent



Source: J.P.Morgan Securities LLC, Trepp.

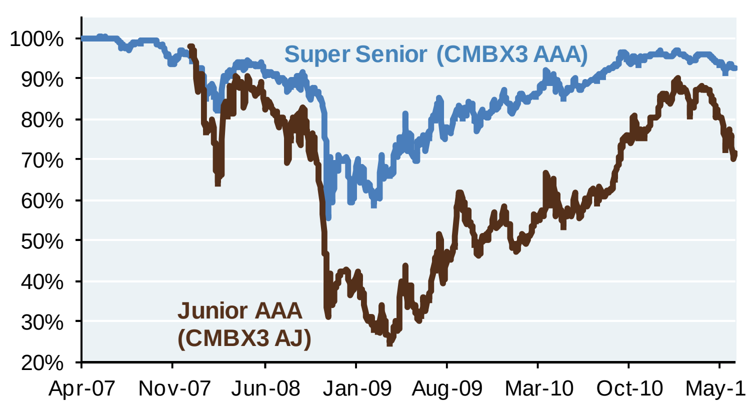
Since 2008, protections for AAA investors reverted to where they were a decade ago, which led to a partial recovery in CMBS issuance in 2010. A CMBS deal in November 2009 required 52% LTV, 92% leasing and 2 times debt service coverage.

Estimated property decline AAA CMBS investors could absorb, Percent



Source: J.P. Morgan Securities LLC, Trepp, Rating agencies, Bloomberg.

2006 and 2007 vintage AAA CMBS prices
Percent



Source: Markit, J.P. Morgan Securities LLC.

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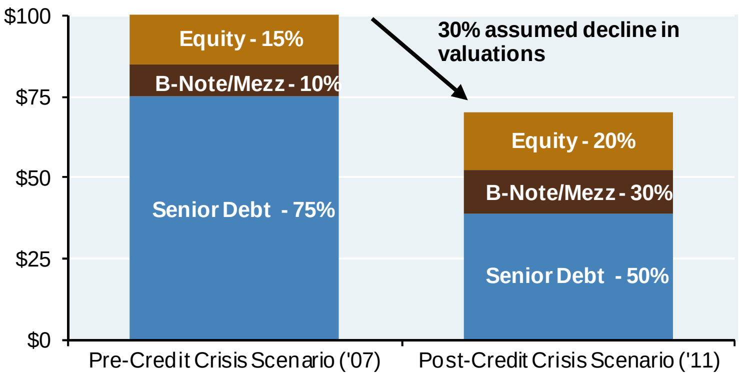
During the credit collapse, prices on AAA-rated CMBS tumbled (chart above, right). We took advantage of what appeared to be an oversold market, and in April 2009, increased allocations to super-senior AAA-rated CMBS securities. These securities have since recovered most of their value. The remaining discount to par value on many legacy super-senior AAA CMBS securities mostly reflects the fact that many property loans are floating rate (originated at a small spread over Libor), and yielding almost nothing (they are effectively commercial real estate backed zero coupon bonds). Newly issued CMBS are now yielding 1.25%-1.50% above government rates, which falls into the bucket of "enhanced income" investing.

With CMBS prices having recovered, our more recent focus has been on a new generation of mezzanine lending. Most banks now apply more conservative lending standards, which we illustrate below (left) in a pro-forma comparison of financing terms from before and after the credit bust. Given higher equity contributions and lower levels of senior debt, there's a need for mezzanine lending to bridge the gap between conservative lenders and property owners. We stayed away from mezzanine lending during the credit boom, since it was effectively equity risk with fixed income returns. **As shown, the characteristics of mezzanine lending today are more favorable**. With greater equity cushions in place, and with properties having been reappraised at lower prices, we see value in the current vintage of mezzanine lending opportunities. The table below shows some of the underwriting characteristics of recent mezzanine positions extended by our managers.

Evolution in capital structures
Illustrative example



Source: J.P. Morgan Private Bank.

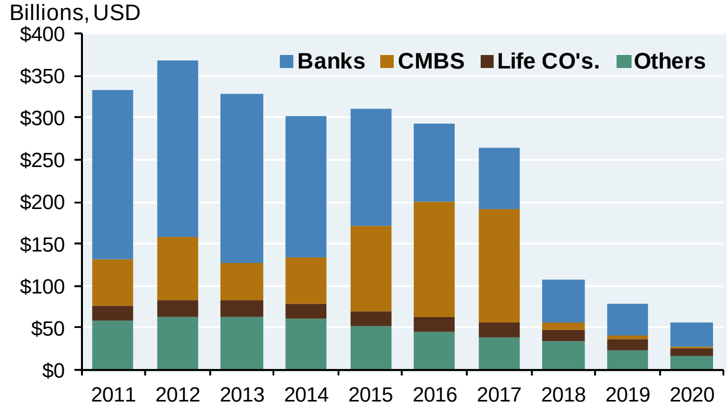
Recent indications of commercial real estate mezzanine financing terms

Type of collateral	Comm. R/E	Debt service coverage	1.2x
Yield to call	12.3%	Call protection	1.7 yrs
Yield to maturity	12.4%	Estimated equity cushion	33%
Cash coupon	9.0%	Deal size in last 6 months	$42mm
Years to maturity	3.0 yrs		

Source: Individual fund managers, J.P. Morgan Private Bank.

As shown in the chart, of $3.4 trillion in CRE loans outstanding, ~$1.0 trillion matures over the next 3 years. While lending standards have improved versus a year ago, most banks are not extending credit at 2007 terms and conditions. We see continued opportunity in mezzanine lending as this $1 trillion needs to be refinanced, particularly since a lot of these loans will be "underwater" by the time they mature[1]. There may come a time when mezzanine spreads get too tight; it took several years after the early 1990's commercial property collapse for that to happen. **If anything, the only thing holding back a flood of restructurings and mezzanine lending opportunities is the practice by banks, insurance companies and CMBS trusts[2] to extend maturing loans whenever possible, even when loan-to-value and interest coverage are not as healthy as levels required on newly originated loans**. These flexible extension practices are sanctioned by the FDIC, which ruled that "performing commercial real estate loans made to creditworthy borrowers, including loans that have been renewed or restructured on reasonable modified terms, **will not be subject to adverse classification solely because the value of the underlying collateral has declined to an amount less than the loan balance**."[3]

Commercial Real Estate debt maturities by lender
Billions, USD



Source: Foresight Analytics, SNL, Intex, Trepp, Morgan Stanley.

[1] US commercial banks hold around $952 billion in commercial real estate loans which will mature in the next five years. According to Trepp, 18% of these loans now exceed the property's value by more than 20%.
[2] CMBS trusts have finite lives and were not designed to modify and extend loans, but are doing so anyway. Trepp reports that 63% of CMBS loans maturing in 2010 were repaid. Around 13% are delinquent, 9% were liquidated and 15% were modified/extended.
[3] FDIC Policy Statement on Prudent Commercial Real Estate Loan Workouts, October 2009.

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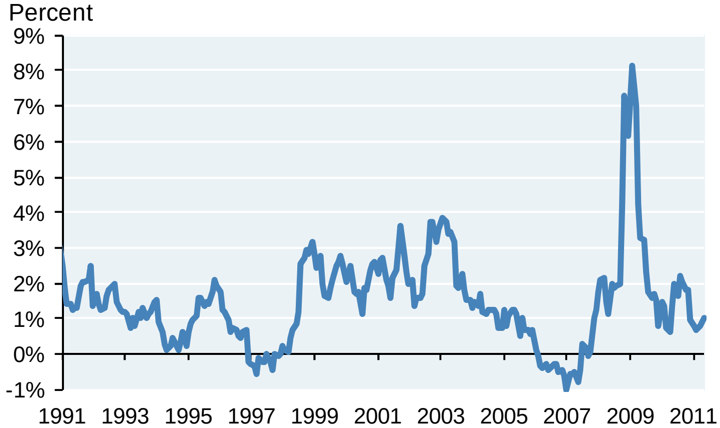
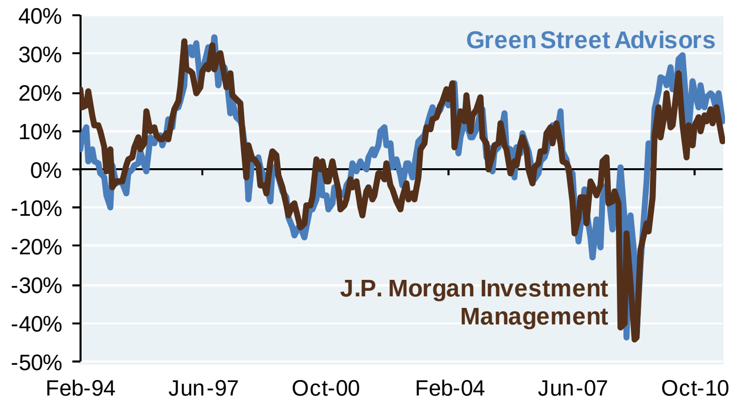
What about real estate equity investing? REITs look expensive, and pricing between trophy and distressed assets is wide
As shown in the chart below, REIT dividends as a spread over 10 year Treasuries are on the low end of fair value, and that's with Treasury yields having the benefit of Fed buying. Less liquid commercial real estate investments through private market transactions may offer better value. As shown in the second chart, for similar property types, REIT investors now pay a 10%-20% premium over private markets. Only in the depths of the financial crisis did REITs offer much better value.

REIT dividend yield spread to US 10-year treasury bond
Percent



Source: FTSE Group, Bloomberg.

REIT premium to private real estate
Percent

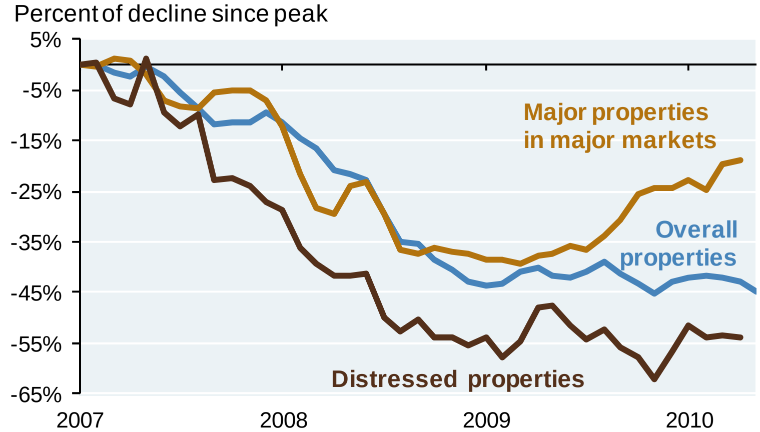


Source: Green Street Advisors, J.P. Morgan Investment Management.

There is a large divergence between "trophy" properties and the rest of the market. As shown below, the recovery in commercial property has been confined to central business district (CBD) trophy properties: well-known, well-leased buildings in established locations (typically in NYC, DC, Los Angeles, San Francisco, Chicago and Boston). These properties are of interest to insurance companies, pension funds and sovereign wealth funds, in spite of onerous FIRPTA taxes[4] paid by non-US property buyers. The rest of the market has yet to show much pricing improvement. As a result, commercial real estate investors have to choose between lower-risk, lower-return trophy assets, or higher returns in higher risk properties (higher risk due to off-market location, lease-up challenges, structural vacancy or functional obsolescence).

The "distressed" category is a very heterogeneous mix of assets; some are recovering, while others are still declining. It is very early in the process, but the experiences our managers have had in distressed property investing since 2009 have been positive. This is mostly a function of the typical bottom-fishing that takes place during and after a large recession. Their investments make clear the high risk nature of distressed investing, including the risk of how relevant "replacement cost" turns out to be:

Trophy vs. distressed US commercial asset prices
Percent of decline since peak



Source: Moody's Commercial Property Price Indices.

- Purchase of Florida condominium loans from the FDIC at 60 cents on the dollar, with an all-in basis less than $200 per foot; the FDIC provided 50% seller financing at a cost of 0%
- Purchase of an 87%-leased London office tower at 60% of replacement cost for a cash flow yield of 12%
- Purchase of senior-secured debt of a casino business near bankruptcy for loan-to-own purposes at 50 cents on the dollar
- Purchase of a junior mezzanine position secured by a resort hotel in San Diego for 50% of par
- Purchase of a pool of 14 hotels with 5,828 rooms across the US. The purchase price of $950 million represents a greater than 50% discount to replacement cost.
- Agreement to acquire 593 shopping centers from a distressed public company for $9.5 bln, representing $102 psf, 40% below replacement cost

[4] The commercial real estate industry, through the Real Estate Roundtable, has been arguing for a repeal in FIRPTA taxes for many years, including a hearing last month at the House Ways and Means Committee. The Roundtable asserts that FIRPTA is the only major provision of the U.S. tax code which subjects foreign investors to taxation on capital gains realized from investment in U.S. assets.

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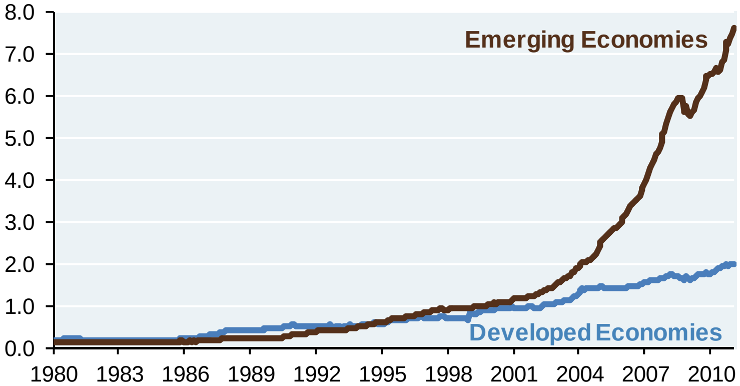
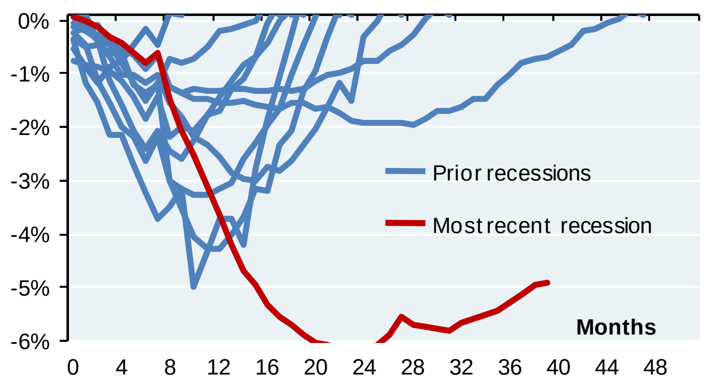
If anything, what has been surprising is the speed of the recovery in trophy assets. This may reflect the explosive rise in reserve accumulation by emerging economy and oil-exporting central banks (see chart below) and their respective sovereign wealth funds. Recent examples include the purchase of 750 Seventh Avenue in Manhattan for $820 psf by the institutional real estate investment arm of the Kuwait Investment Authority. Other examples appear in Appendix II. Whether investors are buying trophy assets or distressed ones, the unmistakable challenge is the substantial decline in US employment in the latest recession, the slow pace at which these jobs are being recovered, and the implications for office space demand.

Global Foreign Exchange Reserves
Trillion, USD



Source: International Monetary Fund, J.P.Morgan Securities LLC.

Job losses in post WWII recessions
Employment drawdown from peak



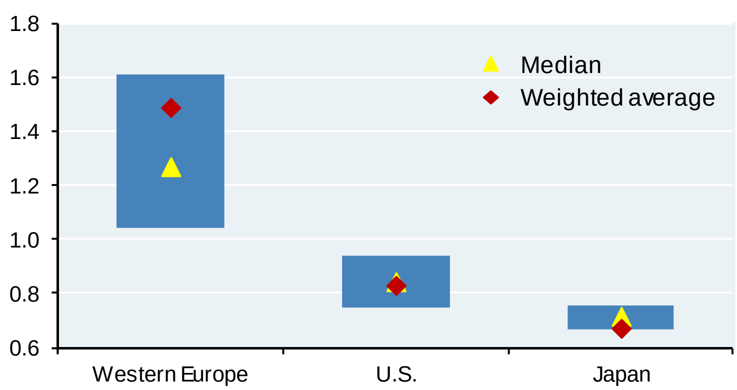
Source: Bureau of Labor Statistics.

Distressed sometimes refers to the sellers instead of the properties

One of the central themes of the financial crisis was the extent to which banks and broker-dealers financed illiquid assets with highly mobile "wholesale funding", provided by money market funds and other banks. In the wake of the crisis, US banks weaned themselves off of wholesale funding to a large degree. As shown below, US banks have in aggregate moved back to a position of financing their loan portfolios with "stickier" money: retail deposits, long term debt and equity.

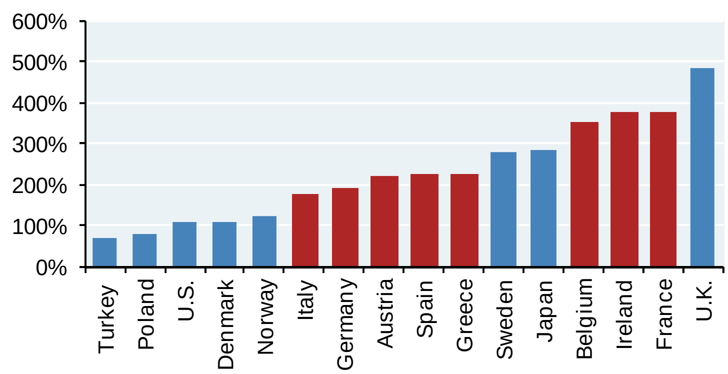
The situation is quite different in Europe, where both core European and peripheral banks finance their loan portfolios with more volatile wholesale funding. As the European sovereign debt crisis staggers on towards some conclusion, **there is likely to be greater pressure on European banks to recapitalize, and to shrink their balance sheets**. European banks in theory could raise more retail deposits[5], but given the large size of European banks relative to their GDP (second chart below), it does not appear that there are large untapped pools of domestic savings. As a result, we expect European bank asset sales to continue. Our managers have begun to accumulate pools of corporate, commercial property and residential property loans sold by European banks at substantial discounts to face value (see examples in Appendix I). Coming up with creative solutions is important for buyers, such as structures which do not require selling banks to take losses for accounting purposes (apparently, it's not just impaired Greek sovereign debt they hold at Par).

G-3 banking sector loan to deposit ratios
Ratio



Source: J.P. Morgan Securities LLC, Bloomberg.

Bigger banks, bigger problems
Bank liabilities as % of GDP



Source: Central Banks.

[5] There appears to be a retail deposit war taking place in Spain, Portugal and Greece. Despite weak economic conditions, deposit rates have risen by around 1% over the last year. This reflects increased credit risk, as well as a desire to reduce reliance on wholesale funding.

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Final thoughts: the flaw in "firewall thinking", and what happens next

From 2003 to 2007, commercial real estate investors succumbed to "firewall" thinking. In other words, even though underwriting standards were slipping, "they were not *nearly* as bad as [insert name of worse market here]". Unfortunately, firewall thinking has a poor track record (see below). **While residential property is where *most* excesses took place, commercial property investing and lending lost its sense of bearing as well, for the third time in the last 30 years**. Through the end of 2010, US banks realized $80 billion in losses on commercial real estate, which the Fed's director of banking supervision and regulation estimates to be around half of the eventual losses on the sector. What stings in hindsight, at least in our own experience, are the prices paid for properties, rather than the quality, location or long-run viability of the properties themselves. Among the decisions I would make differently if I could turn back time: an earlier and larger exit from commercial property tops the list. However, we did add aggressively to commercial real estate after the fall, and in aggregate, have committed more assets after the crisis than beforehand.

As we look forward to where we go from here, most of our managers benefit from two things. First, they did not use leverage at both the fund and property level, which mitigated the severity of the decline in Net Asset Values. Second, many portfolios retain the benefit of extremely low-cost, long-maturity, non-recourse funding that was borrowed during the credit bubble. The terms and conditions of this financing are often irreplaceable, and as rents stabilize, should contribute to the recovery in NAVs, an effect we are already witnessing over the last two quarters. **Two of the charts on page 1 tell the story: there's less new construction to impede a recovery, and prices have been marked down to reflect a new era of cautious underwriting, slower GDP growth and less demand for space. The new realities of the commercial property markets have finally arrived; while they are painful for existing (pre-crisis) holders, they are more promising for new ones**.

Michael Cembalest
Chief Investment Officer

The poor track record of "firewall" thinking

Era	Issuer	Supposedly unique problem	Turns out it was not unique, and also applied to:	Widespread outcome
1980s	Argentina	Hyperinflation	Brazil, Venezuela, Mexico	Balance of payments crisis, default, devaluation
1990s	Thailand	Large current account deficit	Malaysia, Indonesia, Korea, Philippines	Balance of payments crisis, equity market and credit losses
1990s	TheGlobe.com, CMGI	No cash flow, ridiculous valuation	A lot of technology companies	NASDAQ collapse
2000s	Bear Stearns	Wholesale funding, illiquid assets, a lot of leverage and bad management	Other US broker-dealers, UBS, etc	Lehman collapse, Credit crisis, recession, TARP, etc.
2000s	Subprime loans	Poor underwriting standards	Conforming residential loans	GSE conservatorship and other unrecoverable losses on lenders focused on conforming loans
2000s	Residential real estate	Poor underwriting standards, with a pronounced reduction in investor protections in the securitized debt markets	Commercial real estate	Rising delinquencies and foreclosures on commercial property; decline in public and private real estate vehicles
2000s	Greece	Massive erosion of relative productivity after joining the European Monetary Union; accumulation of public sector debt beyond the ability to pay; excess ownership of sovereign debt by banking sector; unsustainable reliance on foreign capital	Ireland, Portugal and Spain	Large fiscal transfers from EU and IMF; becomes lender of last resort; single digit P/Es on European equities; collapse in sovereign debt prices; long-run consequences to be determned
2000s	Illinois	Structural deficit, excessive use of vendor financing to cloose budget gaps, underfunded pensions, underfunded healthcare obligations	Indiana, New Jersey, Conn. (states); Chicago, Boston, NYC, Philadelphia (cities) as per Rauh (see footnotes)	Substantial fiscal adjustments through higher taxes and reduced state payrolls; longer-term impact to be determined

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Appendix I: examples of European bank asset sales

- European bank selling European assets: One of our managers recently formed a joint venture with a European bank to hold a €2 billion portfolio of non-performing commercial mortgage loans backed by properties across Europe. Our manager acquired its portion of the JV at ~40% of face value of the loans, and received financing from the seller as well as a preferred equity position.
- European bank selling US assets: One of our managers acquired a portfolio of real estate loans sold by a European bank looking to reduce exposure to US commercial real estate. The portfolio included 16 loans secured by assets such as the Met Life Building, the Seagram Building and the Essex House hotel. Our manager paid 93% of face value for the loan portfolio, comprised of participations in Senior Mortgages, Junior Mortgages and Mezzanine interests. The portfolio weighted average LTV is 75%.

Appendix II: some war stories from the commercial property front

- Harry Macklowe lost his ownership battle for 510 Madison in September 2010. After accounting for its purchase price, taxes, acquisition costs and a junior lien, Boston Properties paid $900 per square foot for the 350,000-square-foot office tower. A series of leases signed late last year for more than $100 a square foot signifies a turnaround for the building. Besides the leases signed in 2010 with Senator Investment Group, Chieftain Capital Management and Valinor Capital Partners, Boston Properties also retained the Jay Goldman & Company hedge fund that had signed in 2007 at $135 a foot, at the same rent but on a higher floor. Floors 25 through 28 have been leased, with the exception of 6,000 square feet still available on the 27th floor. Assuming an average of $80-90/psf rented, a stabilized yield would be about 6.7%.
- In December 2010, Boston Properties closed on its $930 million purchase of the John Hancock Tower, Boston's tallest building, at $540/psf. The Hancock tower, which is 95 percent leased, has a capitalization rate of around 4 percent. This building is an interesting bell-weather for property markets. Broadway Partners purchased the building at $750 psf in December 2006, and it was purchased out of bankruptcy at $383 psf in March 2009.
- In February 2011, Wells Real Estate Investment Trust II, an untraded REIT, bought a Washington, D.C., office complex Market Square from Boston-based Beacon Capital Partners for $615 million. The price paid for the 680,000-square-foot property, about $905 per square foot, is very close to peak-era prices for the most sought-after commercial property and one of the highest ever paid for a Washington office building.
- In NYC, Google outbid about a dozen other parties to buy 111 Eighth Avenue, which occupies the entire block between 15th and 16th Streets, for $1.8 billion (a yield of 5.25 percent). A smaller building, 434 Broadway, at Howard Street, subsequently sold for $41 million, a 5 percent cap rate, in a deal that took only 10 days to go from contract to closing

Notes

Sources on municipal issuer risks: "*Are state public pensions sustainable? Why the Federal Government Should Worry About State Pension Liabilities*", and "*The crisis in local government pensions in the United States*", Joshua D. Rauh Kellogg School of Management, Northwestern University, Evanston, IL

CMBS	Commercial mortgage backed securities
CRE	Commercial real estate
REIT	Real estate investment trust
FDIC	Federal Deposit Insurance Corporation
FIRPTA	Foreign Investment in Real Property Tax Act