U.S. CMBS: Hurricane Katrina Shows Limitations of Current Flood Insurance Practices

AUTHOR:

Daniel B. Rubock
Senior Credit Officer
(212) 553-4683
Dan.Rubock@moodys.com

CONTACTS:

Tad Philipp
Managing Director
(212) 553-1992
Tad.Philipp@moodys.com

Jim Duca
Managing Director
(212)553-1415
James.Duca@moodys.com

Brett Hemmerling
Investor Liaison
(212) 553-4796
Brett.Hemmerling@moodys.com

WEBSITE:
www.moodys.com

CONTENTS:

OPINION SUMMARY

With nearly $500 billion of bonds outstanding, U.S. CMBS is now so large and so diverse that it will periodically be impacted by most U.S. natural disasters. Last year, the serial hurricanes of Charley, Frances, Ivan and Jeanne shone attention on windstorm coverage. This year, Hurricane Katrina has focused attention on flood insurance. In this report, Moody's discusses the practices of the CMBS industry regarding flood insurance, and concludes that some changes for new transactions may be warranted in loan document insurance language and in the due diligence practices of loan originators regarding flood risk.

AVAILABILITY AND COVERAGE OF FLOOD INSURANCE

A large portion of the damage attributed to Hurricane Katrina was caused by flooding. The flooding came both from the storm surge that typically accompanies hurricanes, and more unusually, from the breaching of levees protecting New Orleans from the waters of Lake Pontchartrain. The focus of much debate, and some planned legal actions by plaintiffs' lawyers, is how much of the damage can be characterized as damage covered by windstorm insurance rather than by either nonexistent or fairly limited, flood insurance.

Windstorm damage is generally fully and fairly covered by property insurance, and the willingness of insurance companies to pay claims and continue such windstorm coverage going forward is not seriously questioned.[1] Substantial legal precedent appears to support the position of the insurance carriers in defending their usually broadly-worded flood damage exclusions and definitions.[2]

In contrast to windstorm coverage, flood insurance is much harder to obtain from private insurance carriers, and when obtained, it is saddled with material quantitative and qualitative limitations. The first $500,000 layer of flood insurance for commercial property owners usually is obtainable only under the National Flood Insurance Program (NFIP).[3]

This $500,000 layer is the *maximum* available. In addition, the NFIP does not offer business interruption insurance, and the coverage is for the "actual cash value" of the asset, not the replacement cost. Policyholders seeking additional or different coverage must therefore seek insurance in excess of the NFIP maximum from either their primary all-risk insurance carrier, or if not obtainable, from "excess and surplus lines" insurance carriers.

If the primary carrier offers excess flood insurance, it will typically not be on the same terms and conditions of the other covered perils. It may be subject to substantially lower "sublimits", or just a small percentage of the replacement cost coverage offered for, say, fire damage (perhaps 10% or 15% of other covered perils). It will be on an "aggregate" basis rather than a "per occurrence" basis, which means that if one event exceeds the limit that policy year, a second occurrence will not be covered, and business interruption insurance amounts will fill up the same aggregate bucket that repair costs will. Finally, the costs are relatively high, especially if the primary all-risk carrier declines to write the flood coverage and the specialty or excess and surplus lines market must be tapped.[4] It is also fairly difficult to obtain excess flood insurance of more than about $10 or $15 million from any one carrier, so multiple policies from different carriers, if available, would have to be "layered" - one on top of the other.

Borrowers with many properties can often obtain large excess flood insurance limits on their "blanket" policies, which essentially diversify the risk for the insurer, and spread out the cost over the many properties covered. Smaller borrowers with one or two large properties cannot obtain those economies of scale for flood insurance premiums.

1 Windstorm insurance is excluded from many "all-risk" insurance policies in high windstorm-prone areas, but is then added back to almost all by endorsement where the collateral is in the high windstorm-prone area. Once the endorsement is obtained, most commonly it is for the full replacement cost, not subject to separate, lower "sublimits", and is covered on a "per occurrence" basis. The main area of variability is how large the deductible will be, usually ranging between 2% to 5% of total coverage.

2 Flood exclusion clauses were broadly rewritten in recent decades to avoid application of so-called "concurrent" or "sequential" loss theories of recovery, which essentially held insurers liable for damages when the underlying cause was a covered peril that caused a *sequence* of events culminating in the flood damage, or was a covered peril that occurred *concurrently* with the flood damage. However, a 2004 Florida case, *Mierzwa v. Florida Windstorm Underwriting Association*, decided by an intermediate appeals court and now under appeal to the Florida Supreme Court, held that if there is a *total loss* of a property only partially caused by windstorm, the insurer must pay notwithstanding the flood exclusion. This concept would apply only in states that have so-called "valued policy laws." Louisiana is one such state. Importantly, the Florida legislature, in response to *Mierzwa*, passed legislation in early 2005 that bars claims under *Mierzwa* for post-2004 hurricanes.

3 The NFIP was created by Congress in 1968 in response to the increasing amount of disaster relief funds being allocated to flood disaster victims. It is administered by the Federal Emergency Management Agency.

4 A number of servicers quoted force-placed excess flood insurance rates ranging (and note that the range can be extreme) from eight to 15 cents per $100 of insurable value. If we assume an average of all-risk premiums for all commercial properties (and again the range can be extreme) of perhaps 25 cents per $100, then excess flood insurance runs about 1/3 to 1/2 of the entire all-risk premium rate.

CMBS PRACTICE

When are flood insurance policies obtained in CMBS, and what do they look like? Much depends on the requirements of the lender, the prudence and risk tolerance of the borrower, and on the attributes of the insured property.

A common mortgage requirement for flood insurance, for both conduit loans and for large loans, reads as follows:

"Borrower shall obtain flood insurance in an amount equal to the full insurable value of the property, or the maximum amount available under the National Flood Insurance Program (NFIP), *whichever is less*, if the improvements are located in an area designated as being an area of special flood hazard under the NFIP."

This language means that for any loan but the smallest conduit loan, the lender requires the borrower to obtain flood insurance *for just $500,000*, if the property is located in a "special flood hazard " zone, that is, an area deemed to have a 1% or greater chance of flooding each year.[5]

The ubiquity of the "lesser of replacement cost or $500,000" standard affects underwriting checklists at origination. Importantly, even if the borrower at loan origination obtained excess flood insurance, if the loan document language requires only the lesser $500,000 amount, the lender will be unable in later years to require that the borrower continue with an amount in excess of the NFIP maximum.[6]

At first blush, the $500,000 maximum requirement appears rather low. However, there arguably are a couple of mitigants to this seeming under-insurance. They are:

- In order for flood insurance under the NFIP to be available, a community must elect to participate in the program. About 19,200 communities across the US do so, almost all of those that have areas subject to material flood risk. To participate, that community must adopt building and land use codes aimed at reducing the risk of flood damage. For instance, commercial buildings located in a special flood-hazard area may be required to be designed so that the parking area for the building is located in the elevation most likely to flood, with the occcupiable portions located above the “base flood elevation”; alternatively the building may be required to be on the higher portion of the parcel, less subject to flood hazard.
- In addition, actuarially "expected" flood waters are calculated to various heights, perhaps five or 10 feet; that portion of the building above those levels for the most part will be relatively undamaged. For instance, if the height of the building is 30 feet, but flood waters within reasonable probabilities are assumed to reach only 10 feet, flood damage insurance may not be needed for the large portion of the building above the flood waters.

Notwithstanding these mitigants, having a one-size-fits-all requirement cannot address the unique "stories" that may attach to each loan and to each building, the individual circumstances that make commercial real estate non-fungible. Some properties are better constructed than others; some are newer than others; some are taller and less squat than others; and some are closer to, or are further away from, or are higher or lower than, the potentially overflowing water source.

For those reasons, some loan originators have more flexible insurance standards that dictate a *case-by-case* analysis of the particular flooding potential of the collateral, realizing that $500,000 in flood damage coverage is not appropriate in all cases.[7] A handful of portfolio loan originators even demand full replacement cost flood coverage for all commercial loans.[8]

5 This 1%-per-year flood zone is commonly known as the "100-year flood zone", and is also designated as Flood Zone "A". Flood Zone "B" a/k/a Zone "X (shaded)", is the so-called "500-year flood zone" where there is at least a 0.2% but less than 1% chance each year of a flood. Simple math yields interesting results: there is at least a 9.6% chance that a flood zone A area property will be flooded during the term of a typical 10-year commercial mortgage loan. Yet there is a 36.6% chance that a flood will not occur during a 100-year period. There is at least a 2.0% chance - and perhaps as high as 5.8% if the average midpoint probability of 0.6% per year is used - that a flood will occur in ten years in the 500-year flood zone, where flood insurance is rarely if ever required by lenders.

6 Usually, loan documents have a "dragnet" clause that requires the borrower to obtain "such other insurance against other insurable hazards as the lender may reasonably request." This clause would probably not be a winner for lenders seeking to increase the amount of flood insurance the borrower must get, because flood insurance presumably has been specifically bargained-for in a prior provision, so it is does not qualify as "such other insurance".

7 Many loans, despite the minimal requirements of the mortgage, have more than $500,000 in flood insurance. This is more typical of larger loans on larger properties, which frequently are owned by borrowers who have a portfolio of real estate and can take advantage of insurance economies of scale. Other times, the borrower out of pure prudence seeks insurance greater than the mortgage mandates.

8 The Capital Consortium form loan documents ask for the *greater* of full replacement cost, or the maximum available under the NFIP.

However, to put flood damage potential into perspective, consider statistics requested by Moody's from two of the largest servicers in the CMBS industry: ***approximately 7% of their entire serviced CMBS portfolios are located in flood zones A or V***,[9] the flood zones that are "special flood hazard" zones that traditionally trigger the need for flood insurance. Assuming a fairly diverse pool of loans, 7% of a pool's properties on average will have a 1% per year (or somewhat more) chance of flood damage, which damage will typically be a fraction of total replacement cost. Even if the probabilities of flood damage are greatly stressed, there will be little credit effect on investment grade ratings even if in some scenarios, properties sustain damage greater than the limited flood insurance available.

These calculations naturally change if the pool is not a large, numerous, geographically diverse collection of assets. If the rated pool is a chunky collection of large loans in flood zones A or V, or that are geographically concentrated in flood prone areas, or if the rated loan is a single asset in a flood prone area, arbitrarily limiting flood insurance, especially to the NFIP maximum of $500,000, may have a material negative credit effect. The chance that a flood will cause great damage in such circumstances cannot be ignored.

More insurance is always better, viewed in isolation. Would full replacement cost for flood damage always be protective of the lender's interest rather than half or a tenth of that amount? Of course. But the calculus of intelligent risk management is weighing benefit against cost.

Unfortunately, flood insurance is a hard insurance to manage and predict, with modeling less reliable than for other perils. Flood modeling also suffers from somewhat unreliable information: flood zone maps many times are out-of-date, and the calculation of flood frequency and severity is more of an art than a science. This feeds the difficulty of placing a property on the proper position of loss probability and severity, and affects pricing powerfully.

A balance needs to be struck, and we believe it should be one of no hard and fast rules: neither mechanically allow properties to be insured only for the NFIP maximum (which in commercial real estate financing terms really is a minimum), nor ask for the sky by always requiring full replacement cost (which in commercial insurance terms may be unaffordable and practicably unobtainable).

GREATER LENDER AWARENESS CALLED FOR

Lenders need to exercise greater underwriting discretion, carefully consider the particular flood risks of each asset being financed, and obtain excess flood insurance coverage tailored to a good faith estimate of risk for the specific property[10]. For large loans, it sometimes may be appropriate to examine the need for flood insurance even if the asset is not located in an A or V flood zone.[11]

Loan document language should give the lender flexibility to ask for more than the NFIP maximum, perhaps with language such as "or such greater amounts of flood insurance as the lender in its reasonable discretion may require." Alternatively, the flood insurance provision may specify in advance the percentage of replacement cost value of excess flood insurance above the NFIP maximum, that will be required. In that way, underwriting checklists will signal a case-by-case examination of flood risk, and the lender will be able to ask for greater amounts than the NFIP maximum as flood risk may demand.

9 Flood zone "V" is the 1% or greater risk flood zone of properties located in coastal zones that have additional risks of "velocity wave action."

10 Moody's recognizes that it is difficult if not impossible to tease a "probable maximum loss" figure from an engineer, because, among other reasons, flood zone information is frequently out of date or imprecise, and there is no recognized ASTM-like methodology for determining such PML figures. However, some reasoned determination needs to be made, perhaps just by the loan underwriter acting in good faith.

11 According to the Federal Emergency Management Agency (FEMA), 25% to 30% of all flood insurance claims come from properties located outside of the 100-year flood zone. For example, much of New Orleans was not classified to be in a 100-year flood zone, because of the protection the levees were assumed to provide.

Doc ID# SF62945