



A Closer Look:

Credit-risk Transfer to Private Investors

Freddie Mac Multifamily's strategy of transferring as much of our credit risk as possible to private investors enables us to fulfill our mission – to help keep the multifamily housing market liquid and stable and to promote rental affordability nationwide – while minimizing our and, therefore, U.S. taxpayers' exposure to potential losses. Although shaped before our regulator took the government-sponsored enterprises (GSEs) into conservatorship, our strategy largely aligns with stated housing finance reform objectives.

Innovation that Matters

As a GSE, we are congressionally chartered to support the housing market in good economic times and bad. To help ensure our continual presence and maintain access to multifamily funding, we aim to shield Freddie Mac and, ultimately, the market from credit volatility to the extent we can. The most effective and efficient approach, we have found, is to transfer as much of our credit risk as possible away from taxpayers, to private investors.

We embraced this strategy 10 years ago and, subsequently, transformed our business rapidly. At the start of that process, we held on our balance sheet all of the credit risk related to the loans we bought. Today, we transfer the vast majority of our credit risk to private investors and continually look for or create innovative ways to shift away even more.

Securitization is our primary method of selling off risk, and our flagship structure is our K-Series Multifamily Mortgage Pass-Through Certificate, or K-Deal. Our issuances are commercial mortgage-backed securities (CMBS); multifamily rental housing is considered commercial – rather than residential – real estate because these properties are developed and purchased for investment only. The property developers/owners (borrowers) are businesses. Over time, our securitization program has evolved and expanded. Today, almost all of our new business is eligible for securitization.

To further reduce our risk exposure – and taxpayers' – in May 2016, we introduced a means of transferring risk on certain loans ineligible for securitization. And we continue to innovate.

Our risk-transfer activities reduce our reliance on our retained portfolio and government backstop guarantee. They also enable us to increase access to funding for multifamily properties and, therefore, to more housing for renters nationwide. Here, we will touch on them all but focus mainly on the K-Deal.

Industry-leading Securitization Program

Freddie Mac Multifamily's securitization program reflects our leadership, creativity, industry and business acumen, and commitment to promoting rental housing affordability.

Until 2008, Freddie Mac Multifamily held just about all of our purchases in portfolio. When the Federal Housing Finance Agency (FHFA) took GSEs Freddie Mac and Fannie Mae into conservatorship in September 2008, the implied government guarantee on the companies' portfolios became an effective guarantee – meaning that U.S. taxpayers would shoulder any losses. Freddie Mac

What's the difference between risk transfer and risk sharing?

Risk sharing – Risk is divided among participants, including the entity selling the risk. Each participant is liable for a portion of any and all losses incurred.

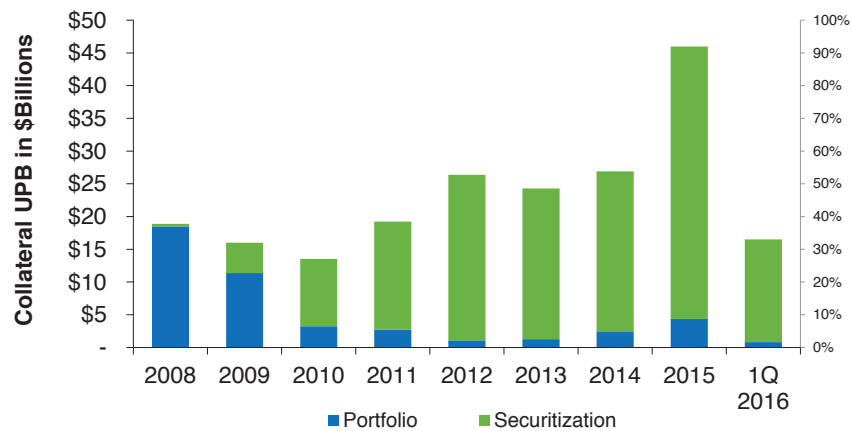
Risk transfer – Risk is shifted from the selling entity to other participants.

Through our approach to buying mortgages, packaging them, and attracting private investment to the resulting issuances, Freddie Mac Multifamily transfers more than 90 percent of our credit risk off of our books. Our guarantee acts as catastrophic insurance and would be called on only in the most extreme cases where losses exceed the unguaranteed amounts of the securities.

had already been working to pivot away from portfolio lending and toward a securitization business model to reduce our risk and increase liquidity. In fact, we launched a securitization product in April 2008 to enable us to aggregate and securitize new multifamily loans originated through our seller/servicer network. The need and the opportunity for this dramatic, positive change became even clearer with the change in our circumstances.

We issued our first modern **K-Deal** in June 2009. And in just a few years, we went from holding nearly all of the mortgages that we purchased in our portfolio (a storage company) to securitizing most of our eligible purchase volume (a moving company). Today, we securitize about 90 percent of our purchase volume annually.

Shifting the Vast Majority of Credit Risk to Investors



Our goal: Reduce taxpayer risk, while attracting private capital to the market and increasing market liquidity so that more apartments may be funded. Based on our extensive knowledge of the multifamily rental housing industry and the capital markets, the best approach appeared to be a business model that married a CMBS-like structure that would allow us to shift a substantial amount of the credit risk to private investors with features commonly found in portfolio lending that provide flexibility to borrowers.

Most of our security issuances are considered true sales; that is, after securitization, the underlying loans come off of our balance sheet. Therefore, we do not and will not need to hold an equivalent amount in capital. This allows us, in effect, to recycle our capital – to reuse the funds from the sale to buy new mortgage loans. This capability is unique in the GSE world to Freddie Mac Multifamily.

Over time, we have expanded – and continue to expand – the K-Deal program to include various types of transactions, including the following:

- 5-year loans
- 7-year loans
- 10-year loans
- 15-year loans
- Loans to a single sponsor (owner)
- Workforce housing loans
- Floating-rate loans
- Legacy-portfolio loans
- Supplemental loans
- Single asset, single borrower
- Fully wrapped loans (no subordination)
- Seniors housing loans
- Student housing loans
- Military housing loans
- Targeted affordable housing loans
- Manufactured housing community loans

Expanding our K-Deal program has enabled us to expand our support for workforce and targeted affordable (government-subsidized) rental housing, which is affordable to renters with low and moderate incomes. Half of today's renters are cost burdened (that is, spend more than 30 percent of their income on rent), and half of those renters spend more than 50 percent of their income on rent; many lower-income renters bear an even heavier burden. Our funding makes an important difference to renters nationwide.

Building on the K-Deal technology, we have introduced several additional CMBS structures to transfer credit risk associated with other product types. You'll find details in the Additional Securitization Structures subsection.

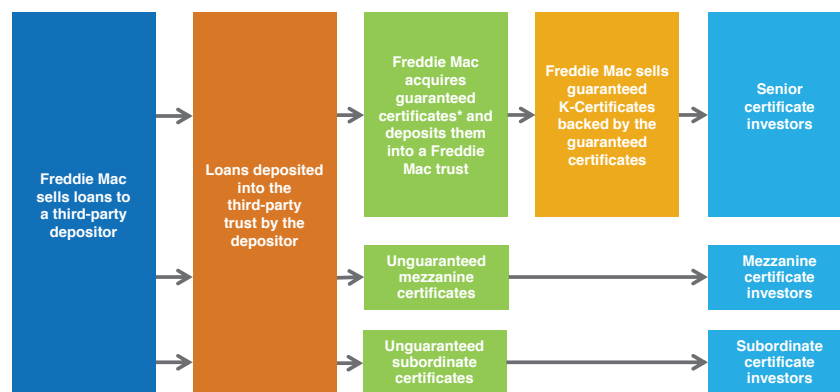
K-Deal Securitization Process

Our securities typically are backed by loans that have been purchased recently from our network of lenders and directly underwritten, priced, and structured by Freddie Mac underwriting, capital markets, and legal staff members. Loan quality, the size of annual purchase volumes, and investor interest affect our ability to issue CMBS on a regular, predictable schedule.

We currently issue a new K-Deal backed by approximately \$1.2 billion in multifamily loans about every two or three weeks. Including our other risk-transfer activities, however, we're in the market every week.

What and who is involved?

K-Deal Securitization Process

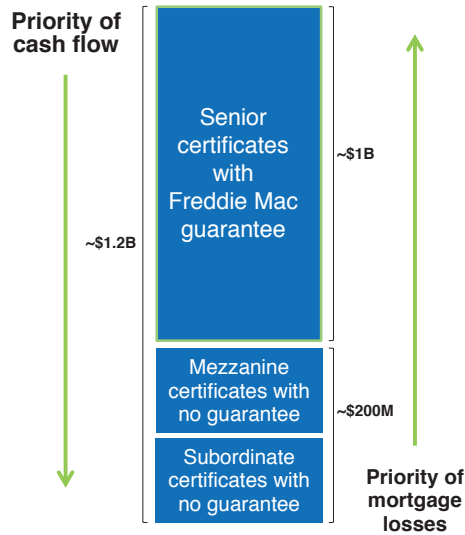


The loans are pooled and sold to a third-party depositor, which deposits the loans into a third-party trust. The pool's diversity in terms of borrowers, property type and location, and loan size and type helps reduce risk.

- Private-label securities backed by the loans are issued by the third-party trust.
- The subordinate certificates and mezzanine certificates, which are not guaranteed by Freddie Mac, are issued by the third-party trust and privately offered to third-party investors.
- Freddie Mac purchases and guarantees all of the senior certificates issued by the third-party trust and securitizes the senior certificates via a Freddie Mac trust. Freddie Mac also purchases and guarantees certain subordinate interest-only certificates related to the senior certificates.
- The resulting Freddie Mac guaranteed structured pass-through certificates (K-Certificates) are then publicly offered by Freddie Mac via placement agents. These transactions are known as K-Deals.
- Investors buy the certificates, which represent slices of the loan pool. In return, investors receive specified portions of the cash flow that the loans generate.

The K-Deal structure contains a shock absorber of sorts in the form of structured subordination and Freddie Mac’s guarantee.

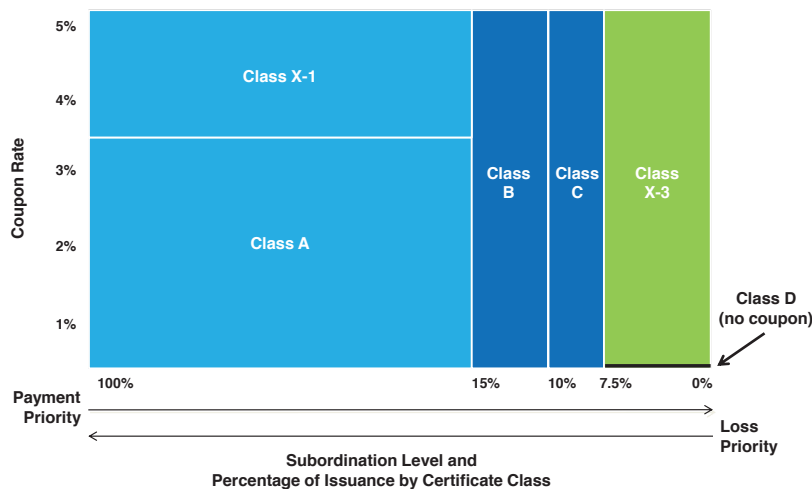
Fixed-rate K-Deal Structure “Shock Absorber”



The senior guaranteed certificates (approximately \$1 billion of the \$1.2 billion in the security) typically carry a AAA rating based solely on the quality of the underlying collateral, and not based on the Freddie Mac guarantee. We sell mezzanine and subordinate certificates (the remaining \$200 million) to private capital investors; these certificates are backed by the same pool of loans as the senior certificates are but without Freddie Mac’s guarantee. It is important to note that the unguaranteed mezzanine and subordinate certificates represent approximately the bottom 15 percent of the total offering, although they account for the vast majority of the risk. Investors in the unguaranteed certificates are the last to receive a payout and the first to take any loss.

Following is a simplified illustration of a K-Deal, breaking it down by the various certificate classes and the risks/rewards they bear.

Fixed-rate K-Deal Coupon and Subordination



In this example, the weighted average coupon we receive on the underlying loan pool is 5 percent and the coupon rate we offer on the issuance – that is, the interest rate paid to investors – varies, depending on certificate class.

- Class A are the senior certificates, which Freddie Mac guarantees. Investors in these certificates receive principal and interest paid on each loan in the pool every month until the certificates are paid off. They are the first to receive payments and would be the last to absorb any credit losses if they weren't guaranteed. Because these investors bear the least risk, they receive the lowest yield.
- Class B and Class C are unguaranteed mezzanine certificates. Investors receive interest every month until the certificates are paid off; they receive principal only after investors in the senior certificates have been entirely paid off. Because these investors bear more risk, they receive a higher yield.
- Class D are unguaranteed subordinate certificates. These also are the first in the structure to absorb losses. Investors in this class do not receive any interest and only receive principal after Classes A, B, and C have been entirely paid off. Because these certificates bear the most risk in the structure, they have the highest yield in the transaction.
- Interest-only strips, known as Class X, reflect the difference between the interest rate on the loan and the coupon rate on each certificate class. For Class X certificates, investors only receive interest payments and never receive principal.

Securitization promotes market discipline and accountability within Freddie Mac Multifamily because of all of the scrutiny each K-Deal receives. This motivates us to continuously improve our securities program so that we can continue to finance rental housing.

Generally, upwards of 30 investors participate in each of our issuances; of those, around 20 invest in the subordinate certificates. Each investor conducts an independent risk assessment of the securities.

- Senior and interest-only certificate investors review the loans and conduct due diligence around Freddie Mac Multifamily's underwriting and credit approach.
- Rating agencies conduct independent reviews of the loans; typically, each fixed-rate K-Deal is rated by two nationally recognized statistical rating organizations.
- Mezzanine certificate investors conduct thorough analyses, which are completed by credit and underwriting professionals.
- Subordinate certificate investors typically re-underwrite all of the loans in a K-Deal.
- The capital markets inherently provide transparency and ensure that information is available.

The K-Deal program has a consistent record of success. From the program's start in 2009 through the end of first quarter 2016, we funded \$138 billion in multifamily mortgages through 112 K-Deals. Freddie Mac Multifamily has been the most prolific issuer of CMBS backed by multifamily mortgages since the 2009 market crash. To date, our issuances have been very well received and we have had zero losses on our guarantees on K-Deal securities.

K-Deal Investor Profile

The investor community clearly has an appetite for this type of investment. Our fixed-rate offerings consistently have been highly rated and very well subscribed.

Our investor base is broad, encompassing domestic and international entities. It includes conventional real estate investors that may view our subordinate certificates like other real estate equity investments, life insurance companies and pension fund managers that seek the high yields of our mezzanine certificates, and major financial institutions that treat our senior certificates as an alternative to other Agency CMBS.

Since June 30, 2014, Freddie Mac Multifamily K-Deals have been included in the Barclays Aggregate U.S. and Global Bond Index – recognition of the growing importance of the Agency CMBS sector. Being in the index has raised our visibility and brought in more investors.

Investors have access to considerable information about the loans within the securitized pools. In fact, Freddie Mac Multifamily offers a web-based tool that allows investors to track the performance of every K-Deal in which they invested.

Additional Securitization Structures

As our list of product offerings has grown, so have our securitization offerings. These structures build on K-Deals but differ somewhat from them, as appropriate, depending on the product's features.

- **SB-Deal** for Small Balance Loans (generally ranging from \$1 million to \$5 million)
 - After K-Deals, our most active structure – \$2.8 billion through 14 SB-Deals over the last year
 - Unlike K-Deals and our other securities, we generally do not issue structured pass-through securities in SB-Deals
- **M-Deal** fully guaranteed tax-exempt and taxable securities backed by unenhanced tax-exempt and taxable multifamily housing mortgages that support targeted affordable (government-subsidized) housing
 - For tax-exempt multifamily housing revenue bonds, possibly with related taxable bonds or loans (TEBS)
 - For Tax-Exempt Loans (TEL), tax-exempt bond credit enhancements with 4% Low-Income Housing Tax Credits (LIHTC)
- **P-Deal** 55-Day Multifamily Real Estate Mortgage Investment Conduit (REMIC) structure for loans not slated for K-Deals to help keep our retained portfolio at mandated levels
- **Q-Deal** for loans originated without our involvement but that meet our quality standards; almost \$1 billion in Q-Deals to date

SB-Deals and M-Deals in particular help bring more capital to workforce and targeted affordable housing, which benefits low- and moderate-income renters.

A recent innovation to remove supplemental mortgages – illiquid assets – from our balance sheet is the **Multifamily Credit Income Fund**. Sponsored by Freddie Mac Multifamily but funded with private capital, the Investment Fund lets us securitize supplemental mortgages related to certain pre-defined senior mortgages backing a previously issued K-Deal and sell the unguaranteed piece to a private investor.

New Approaches to Transferring Risk When Securitization Isn't an Option

Our deep commitment to transferring as much credit risk from our balance sheet as possible motivates us to find or build new avenues when our existing paths can't accommodate.

For example, while M-Deal TEBS is our preferred structure for handling new tax-exempt bond credit enhancements, it can't help reduce the risk on our legacy portfolio of tax-exempt bond enhancements. That's the impetus behind Freddie Mac Multifamily Structured Credit Risk Notes (SCR Notes).

Introduced in May 2016, SCR (pronounced "score") Notes provide a synthetic risk-transfer structure with performance tied to the underlying bonds in a specified pool of mortgages. These unsecured, unguaranteed corporate bonds build on the success of Freddie Mac Multifamily's securities offerings and Single-Family's Structured Agency Credit Risk® debt notes. Private capital market investors bear the first-loss credit risk.

And we continue to explore possible ways to shrink our remaining credit risk. Our aim is to minimize risk over the entire life of a loan – from its purchase through maturity.

Benefits of Our Credit-risk Transfer Program

Freddie Mac Multifamily's credit-risk transfer model enables us to increase financing for rental housing nationwide – most of which is affordable at low- and moderate-income levels – while minimizing U.S. taxpayers' exposure to credit risk.

Benefits of our program:

- Attracts private capital through replicable, sustainable structures

- Transfers significant amounts of risk to private investors, away from taxpayers
- Allows us to offer lenders and borrowers access to a highly competitive funding source for multifamily mortgages
- Expands Freddie Mac Multifamily's access to capital, while helping to manage our risk
- Reduces reliance on Freddie Mac's government guarantee, thereby shrinking the government's footprint in the housing finance market

Another benefit of today's program is its reliability and dependability. For example, investors like knowing when the next K-Deal will be issued, its size, and other key characteristics. Our issuances have predictable collateral characteristics and investors consistently purchase them. This promotes liquidity and competitive pricing and makes Freddie Mac Multifamily a reliable outlet for loans.

Key Success Factors

Our in-house expertise, intense focus on quality from end-to-end, and dedication to promoting rental housing contribute to the success of our business model.

We purchase loans only from a small network of lenders with demonstrated experience in multifamily lending, knowledge of local market conditions, and close relationships with borrowers. In addition, we maintain specialty lender networks to finance Small Balance Loans as well as targeted affordable and seniors housing. We work with our lenders to allocate specific geographic regions in which they can specialize and source loans eligible for sale to Freddie Mac Multifamily.

To decide whether to purchase particular loans, Freddie Mac Multifamily follows a prior-approval model – that is, we underwrite each multifamily mortgage loan in-house before accepting it for purchase. We do not delegate our due diligence or credit analysis.

Our in-house underwriters, in collaboration with our legal and capital markets staff, make credit decisions on each loan based on a number of factors before accepting the loan for purchase. These factors include strength of sponsors, historical property operations, cash equity, the underwriter's knowledge of markets, and other pertinent information.

After purchasing a loan, we are involved with asset management and servicing, through its maturity. We set servicing standards and, through regular interaction with servicers, actively monitor the loan's performance and work to ensure that each loan is serviced properly.

Importantly, we apply the same credit underwriting and servicing standards to loans whether we invest in them directly through our investment portfolio or securitize them. This consistency and loan quality enables us to attract a high demand for our credit-risk transfer offerings, which in turn allows us to provide a reliable flow of liquidity to our lenders and borrowers.

The Proof Is in Our Performance

Freddie Mac Multifamily's business results reflect the strength of our strategy and execution:

- We have delivered \$7.8 billion in profits for U.S. taxpayers over the last four years.
- Our credit losses are nominal and delinquency rates consistently are among the industry's lowest.
 - We have experienced zero losses on our guarantee on K-Deal securities to date.
 - Credit losses on our \$180 billion mortgage portfolio – comprising 14,500 loans, held either for securitization or for investment – were \$2 million, or less than 0.01 percent, at the end of first quarter 2016.
 - The 60+-day delinquency rate on our mortgage portfolio has been consistently low. It peaked at 0.26 percent during the height of the U.S. financial crisis, compared to more than 11 percent for privately funded CMBS. At the end of first quarter 2016, the delinquency rate on our portfolio was 4 basis points, or 0.04 percent.
- Repeat borrowers account for a large majority of our business.

Moreover, the market essentially grades our performance every time we issue a K-Deal or other vehicle. In fact, rating agencies and potential investors often re-underwrite many if not all of the loans in the pool when making decisions about a particular issuance. Our credit-risk transfer offerings are consistently well-received in the marketplace and our underwriting is viewed favorably.

In Conclusion

Freddie Mac's mission is to help keep the multifamily rental market liquid and stable and promote housing affordability, and our credit-risk transfer program helps us carry it out, efficiently. At the same time, our program achieves many of the goals for housing finance reform today – and has achieved them since 2009:

- Attract private capital to the market.
- Shift credit risk away from U.S. taxpayers.
- Support the entire housing market in all economic conditions.
- Promote rental housing to help keep it affordable, especially to lower- and moderate-income households.

We apply our resources, expertise, and innovation every day to help meet the rental housing market's needs now and in the future. That's our responsibility and our commitment to those who work with us, invest in us, and rely on us to help make rental housing available and affordable nationwide.

To learn more about Freddie Mac Multifamily and our credit-risk transfer activities, explore our web site at FreddieMac.com/Multifamily.