sci

Special report

US Mortgage Risk Transfer 2020

Sponsored by

Aon Empower Results®

Arch | MI

Fannie Mae®

HUNTON ANDREWS KURTH

HUNTON ANDREWS KURTH

Hunton Andrews Kurth LLP has wide-ranging experience in the representation of dealers, initial purchasers and issuers in novel synthetic and asset-backed credit risk transfer transactions.

In connection with these representations, we provide clients with advice regarding evolving and improving their credit risk transfer strategies to best utilize the capital markets while satisfying applicable regulatory requirements and their internal business needs. Hunton Andrews Kurth has been active in the growing credit risk transfer space and has helped shape the market with representation on first impression deals.

CONTENTS

Author
Simon Boughey

Editor
Mark Pelham
mp@structuredcreditinvestor.com

Design and Production
Andy Peat
andy@andypeatdesign.co.uk

Managing Director
John Owen Waller
jow@structuredcreditinvestor.com

Subscriptions Account Manager
Jon Mitchell
+44 (0)20 7061 6397
jm@structuredcreditinvestor.com

Business Development Manager
David Zaher
+44 (0)20 7061 6334
dz@structuredcreditinvestor.com

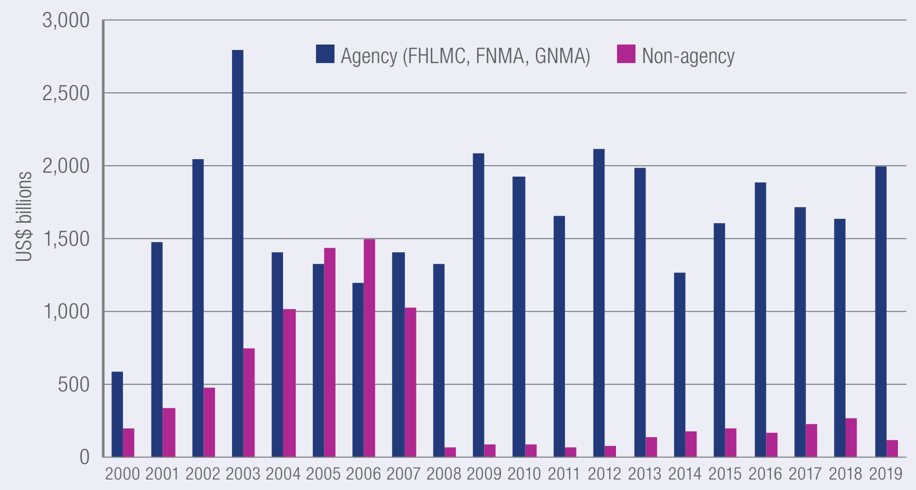
Published February 2020

ISSN: 2043-7900

SCI is published by Cold Fountains Media.

CHAPTER ONE: ORIGINS

US mortgage-related securities issuance



Source: SIFMA

US government-sponsored enterprises (GSEs) have been intrinsically linked to the secondary mortgage and mortgage-backed securities (MBS) market from outset. They have been at the forefront of its development throughout the past eight decades and continue to lead the way with new developments as well as providing the foundations and benchmark for all mortgage risk transfer (MRT) market participants.

Chief among those participants are the two principal federal housing finance agencies. The Federal National Mortgage Association – known as Fannie Mae – and the Federal Home Loan Mortgage Corporation – Freddie Mac.

Fannie Mae was established by the US Congress in 1938 as part of President Franklin Delano Roosevelt's New Deal. The organisation's purpose was to fund local banks through the creation of a liquid secondary mortgage market. In doing so, the agency not only saved the Depression-hit housing market and related construction industry, but also helped to usher in a new generation of American home ownership, paving the way for banks to loan money to low- and middle-income buyers who otherwise might not have been considered creditworthy.

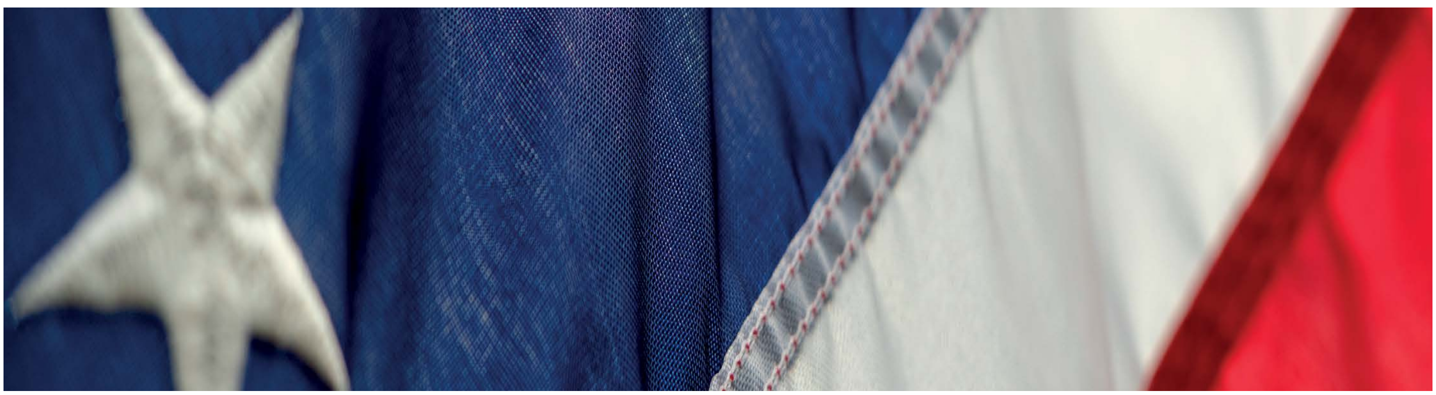
In 1968, Fannie Mae converted to a privately held corporation and two years later was allowed to invest in private mortgages in addition to the federally insured loans already within its remit. The same year, 1970, saw the launch of Freddie Mac.

Freddie's statutory mission to provide liquidity, stability and affordability to the US housing market manifested itself in a similar model to Fannie's in that it too buys mortgages on the secondary market, pools them, and sells them as MBS to investors on the open market. The addition of a new principal player gave greater depth to the secondary mortgage market and enabled even more funding to mortgage lenders in support of homeownership and rental housing.

Around this time, securitisation was being developed to assist in the GSEs' aims and broaden the scope of MRT. It was the Government National Mortgage Association (known as Ginnie Mae and formerly part of Fannie Mae pre-privatisation) that guaranteed the first mortgage pass-through security of an approved lender in 1968. However, by 1971 Freddie Mac had issued its first securitisation and Fannie Mae joined it in 1981, still some way ahead of the private market.

Securitisation remains key to both GSEs' MRT strategies, but like all other major structured finance market participants they were badly hit by the global financial crisis. Resultant losses saw the two GSEs placed into conservatorship of the Federal Housing Finance Agency (FHFA) in September 2008.

Since then, MBS markets have recovered an even keel, activity has picked up in recent years and existing holdings and new issuance have begun generating relative value once more. The GSE case is no different in those respects but at the same time they are also once again providing revenue for the US tax payer as well as supporting the mortgage market. Today, Fannie Mae and Freddie Mac have each developed their own innovative issuance programmes of credit risk transfer (CRT) products.■



Fannie Mae

Credit Risk Transfer

As the largest credit risk manager in the mortgage industry, Fannie Mae employs prudent standards and advanced technologies to acquire quality loans, prevent defaults, and reduce losses. We continuously evolve our CRT programs to broaden the types of loans covered and promote growth in the credit risk transfer market. Through our suite of credit risk transfer vehicles, we offer opportunities for investors and reinsurers to share in the credit performance of our book of business.

The goals and benefits

Protect U.S. taxpayers through the development of broad and liquid markets for credit risk.

Minimize impact on borrowers, renters, and lenders by offering an attractive investment option for investors.

Improve market efficiency through consistent and programmatic issuance of various credit risk sharing products.

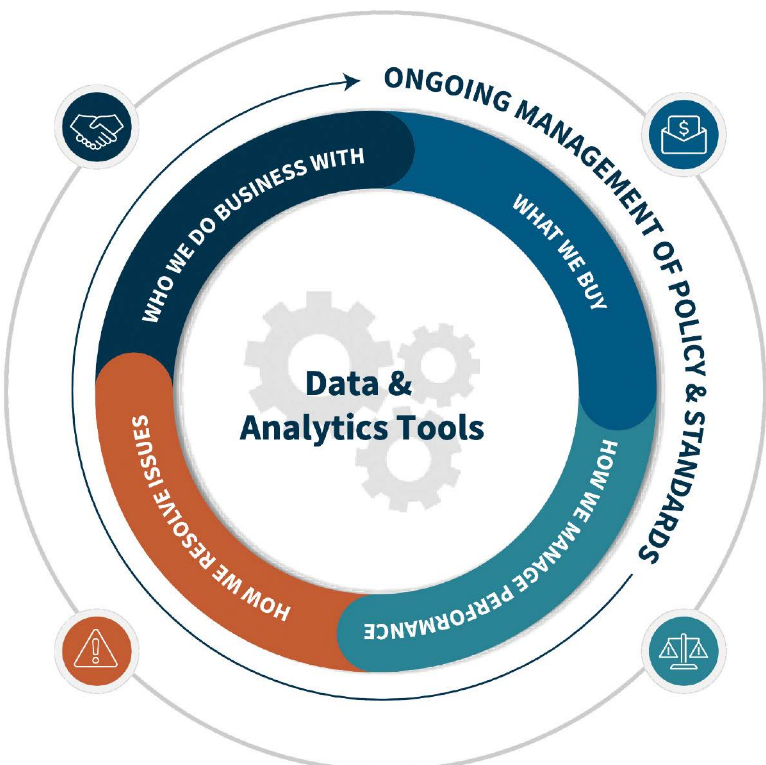
Create liquidity to help build a stronger housing finance system.

Reduce capital that was previously used to cover exposure on transferred risk.

Investor resources

Fannie Mae provides a variety of resources on our web pages to help promote better understanding of the credit performance of Fannie Mae mortgage loans and our approach to credit risk:

- Overview of approach and policies.
- Transaction details.
- Loan performance data and analytics.
- Commentary and news.
- Investor and reinsurer presentations.
- Due diligence details.



Contact us today to learn more about Fannie Mae's CRT programs:
credit_securities@fanniemae.com 1-800-232-6643, Option 3

Data Dynamics®

Data Dynamics is Fannie Mae's free data analytics web tool. The platform allows investors and reinsurers to interact with and analyze the historical loan performance data, deal issuance data, and ongoing disclosure data that we make available to support our credit risk transfer programs, Connecticut Avenue Securities® (CAS) and Credit Insurance Risk Transfer™ (CIRT™).

Notable features include ability to:

- Compare credit profiles of new CAS or CIRT deals to outstanding deals.
- Cut and filter data to compare risk profiles and performance.
- Drill down on specific elements, including various loan and property characteristics.
- Access monthly loan-level data in the ESMA-template format to comply with the new EU Securitization Regulation.
- Allow mortgage real estate investment trust (REIT) participants to monitor recognition of REIT income for tax purposes ("Good REIT Income").

Sign up for a free Data Dynamics account today:
fanniemae.com/DataDynamics

CAS Resources for EU Institutional Investors

Fannie Mae provides institutional investors located in the European Union with resources to support their compliance with the EU Securities Regulation 2017/2402, effective January 1, 2019.

This information describes how EU Institutional Investors or those managing funds subject to EU regulations can map the information disclosed for Fannie Mae's CAS deals issued since January 1, 2019, to certain investor due diligence requirements.

Resources cover:

- Article 5 – Due Diligence Requirements.
- Article 6 – Risk Retention Requirements.
- Article 7 – Transparency Requirements.
- Article 8 – Ban of Re-Securitizations.
- Article 9 – Criteria for Credit-Granting.

Learn more about Fannie Mae's CRT program and resources: fanniemae.com/SFCRT

Fannie Mae®

CHAPTER TWO: NEW PROGRAMMES

The first of the new CRT programmes to be launched was Freddie Mac's Structured Agency Credit Risk (STACR) programme in July 2013. Fannie Mae's Connecticut Avenue Securities (CAS) programme saw its first issue in October of the same year.

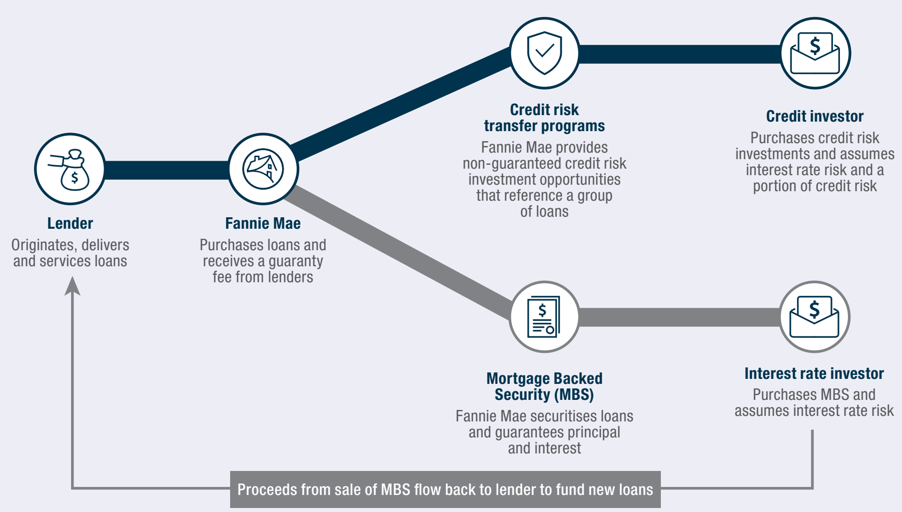
The principle underpinning these programmes was winningly simple: the GSEs would create a brand new class of unguaranteed securities to mitigate their, and potentially the US tax payer's, exposure to the credit risk that they retain as part of the issuance of traditional MBS. At the same time, the CRT programmes give investors the opportunity to access exposure to the US housing market in a transparent and programmatic format, but one that still offers a higher yield than standard MBS.

Even though the principles are identical and they share some structural similarities, both CRT programmes had to be developed independently. In fact, market sources close to the process say it was the FHFA that exercised its authority to ensure that the two programmes shared some features.

"All ideas went through the FHFA and they made sure the programmes were closely aligned. An example of that is the loss definition. The two agencies couldn't co-operate with each other – that would have been illegal – but the FHFA insisted on the alignment," says one.

The first problem both GSEs faced was how to introduce a new class of securities that would transfer credit risk, but not disrupt or challenge the existing traditional MBS market. Chief concern was the highly efficient To Be Announced (TBA) market, which depends explicitly on GSE guarantee.

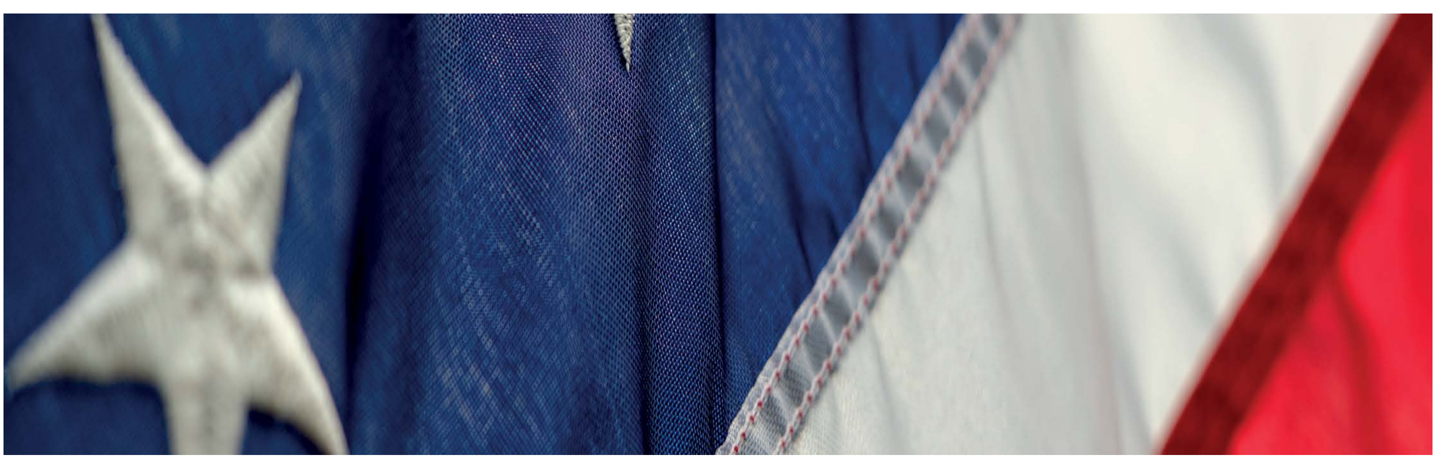
What is credit risk transfer?



Source: Fannie Mae

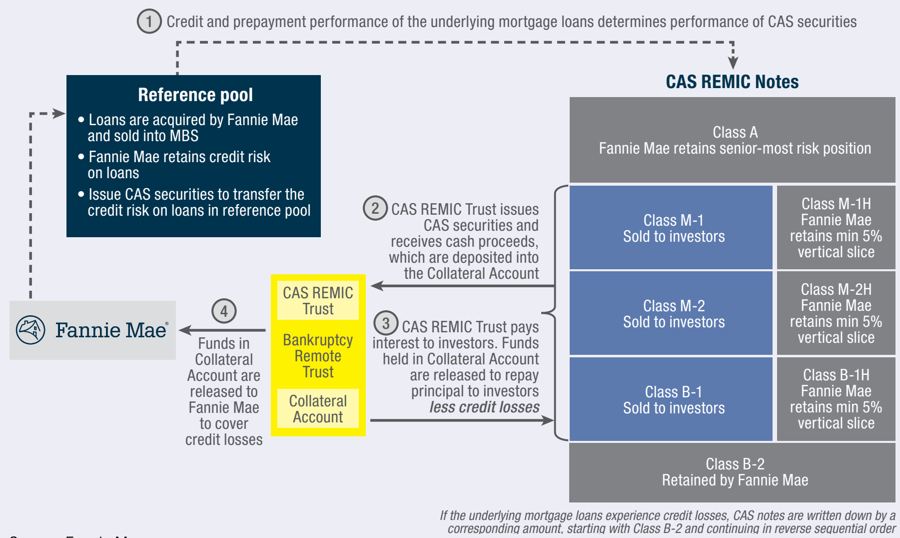
"ALL IDEAS WENT THROUGH THE FHFA AND THEY MADE SURE THE PROGRAMMES WERE CLOSELY ALIGNED"

To circumvent this, the decision was made by both GSEs to utilise synthetic structures. Both CAS and STACR are similar in that their pay-out is tied to the performance of a wider group of loans which is packaged into traditional MBS deals. If the loans in the reference pool



Laurel Davis, Fannie Mae

How CAS works



Source: Fannie Mae

default, the investors to the CAS and STACR notes experience a loss and in this way Fannie and Freddie are compensated for their guaranteed payments in the MBS deals.

Thus, mortgage credit risk transfer is achieved. Meanwhile, prepayment risk and interest rate risk is retained in the MBS market.

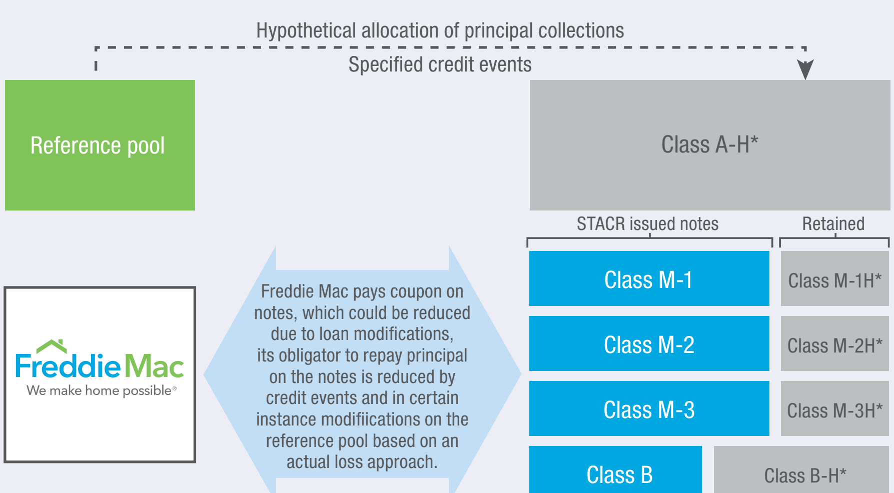
"In simple terms, we started from the proposition that we're essentially an insurance company. We guaranty that MBS investors will receive their full principal and interest payments. That leaves us holding the credit risk on the loans backing the MBS. We want to transfer some of that risk to the market, so we take that underlying credit risk and sell it as separate securities," explains Laurel Davis, vp, CRT, at Fannie Mae.

Freddie Mac and Fannie Mae only transfer risk on mortgages which have a LTV ratio of 60% or higher – that is to say the riskiest loans in the portfolio. These loans generally represent around 70% of total acquisitions and all are then emptied into the reference pool. The GSEs generally retain around the first 25bp of loss, and then the investor absorbs losses up to 4%. Beyond that limit, Fannie and Freddie also absorb the loss. Each GSE also maintains a minimum 5% vertical slice of the classes that are issued, aligning them with EU Risk Retention requirements.

As in other synthetic securitisations, CRT deals allocate the risk of default to certain tranches, and the coupons paid vary accordingly. The GSEs typically hold the safest tranche and the riskiest tranches, while investors can buy the middle tranches according to their capacity for risk and appetite for yield.

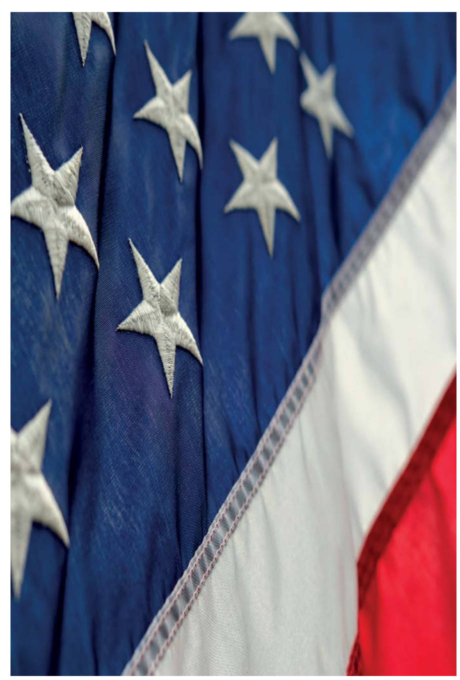
So the agencies proceed from the proposition that it is very unlikely they will lose more than US$1bn from US$25bn of loans. For example, if they sell US$1bn to investors to protect against catastrophe, they collect 50bp in fees on the full US$25bn of loans and yet are paying a coupon of, say, Libor plus 200bp on US$1bn of notes.■

Freddie Mac STACR structure



* Reference tranche only.
Freddie Mac may sell a portion of their retained vertical slice, but will always maintain ownership of at least 6% of the M tranches and 50% of the E tranches.

Source: Freddie Mac



CHAPTER THREE: CAS AND STACR IN PRACTICE

The GSEs had to create a new market from scratch, one they hoped would become broad and liquid, that they could tap on a regular basis and would remain robust through a variety of credit cycles. To this end, they have provided clear and accessible information about the quality and types of loans in every portfolio. All investors and disinterested observers say so.

"Transparency was the key to building liquidity. We provided historical loan data from day one. Our historical data set now includes around 40 million loans with performance over 20 years. It's all free on the website, along with Fannie Mae's free tool Data Dynamics, which helps investors analyse the data. This has been really critical in launching the market and getting people comfortable with the loans," says Laurel Davis, vp, CRT, at Fannie Mae.

The GSEs had to convince investors that their underwriting standards had improved out of all recognition since the pre-crisis days. To provide this assurance they have provided more and more data and offered more and more transparency.

"WE'VE CREATED A WHOLE NEW ASSET CLASS. WHEN WE WERE DOING OUR FIRST DEAL WE HOPED TO MAYBE SELL US$100M OF BONDS AND WE SOLD US$500M"

For example, Fannie Mae has given investors robust materials that share their end-to-end credit risk management practices, including an overview of tools that Fannie Mae uses to assess risk of the loans they acquire, such as DU, its automated underwriting system, embedded in lender shops. Approximately 1200 lenders actively deliver loans to Fannie Mae through DU on an annual basis. Approximately 700 additional lenders are approved for DU access.

Fannie and Freddie are understandably proud of their achievement in a market which, when they started, had every reason to be extremely wary of exposure to the US housing market. "We've created a whole new asset class. When we were doing our first deal we hoped to maybe sell US$100m of bonds and we sold US$500m. Now we've sold more than US$50bn. The market has shown that there is an ongoing appetite for US residential exposure," says Mike Reynolds, vp, CRT, single family portfolio management at Freddie Mac.

Equally, Fannie Mae reports total CAS and CIRT *(see Chapter four)* issuance to end of 2019 at US$54bn. That represents a portion of credit risk transferred on over US$1.5trn in unpaid principal balance of mortgage loans at the time of CAS issuance.

Mike Reynolds, Freddie Mac

FUNDAMENTAL CHARACTERISTICS OF CAS DEALS

- Large, geographically diversified loan pools provide broad exposure to US housing market
- Fannie Mae serves as the credit risk manager acting as an intermediary between the lender and investor to set standards, manage quality, mitigate losses, and maximize value
- Ongoing, programmatic issuance
- Consistent structures promote liquidity and facilitate comparison of deals across time
- Broad Wall Street coverage, daily markets and publishing research and analytics
- Pricing and trading volume available on TRACE and Bloomberg
- Active deal management includes receiving ratings on previously unrated CAS bonds
- Transparent investor resources including our investor analytical tool, Data Dynamics®
- All on the run CAS deals issued in or after November 2018 qualify as REMICS

FUNDAMENTAL CHARACTERISTICS OF STACR DEALS

- Large, diversified reference pools
- Multiple tranches to accommodate various risk appetites
- STACR notes have been issued under the following series:
  - DNA (actual loss) and DN (fixed severity) – Collateral with OLTVs 61-80
  - HQA (actual loss) and HQ (fixed severity) – Collateral with OLTVs 81-97
- Losses based on credit events in the reference pool are allocated to the STACR notes in reverse order of seniority and reduce the balance of such notes
- Principal is allocated monthly to the notes sequentially, similar to a senior/subordinate private label residential mortgage backed securities structure
- Freddie Mac holds the senior risk, which is unfunded and not issued, a portion of the first-loss piece and a 5% interest in each tranche
- Fixed severity transactions have a 10-year final maturity
- Actual loss transactions issued through June 2018 have a 12.5-year final maturity, after which transactions have transitioned to term

RECENT ISSUANCE AND ISSUANCE TRENDS

The recently issued (14 January 2020) US$1bn CAS note offers a text book example of a CRT capital markets deal. The US$1.03bn offering, designated CAS Series 2020-R01, references a pool of 105,000 single family loans with an unpaid principal balance of US$29bn. The pool includes one group of loans where the LTV is between 60.01% and 80%, most of which were acquired between June and August 2019. The loans are generally 30-year fixed rate mortgages.

The US$303m M-1 tranche, rated triple B minus by Fitch, pays one-month USD Libor plus 80bp, the US$523.5m M-2 tranche, rated single B, pays one-month Libor plus 205bp and the unrated US$206.65m B tranche pays one-month Libor plus 325bp.

The lead manager was Morgan Stanley and Wells Fargo was co-lead and joint book-runner. The co-managers were Bank of America, Citi, Goldman Sachs and Nomura.

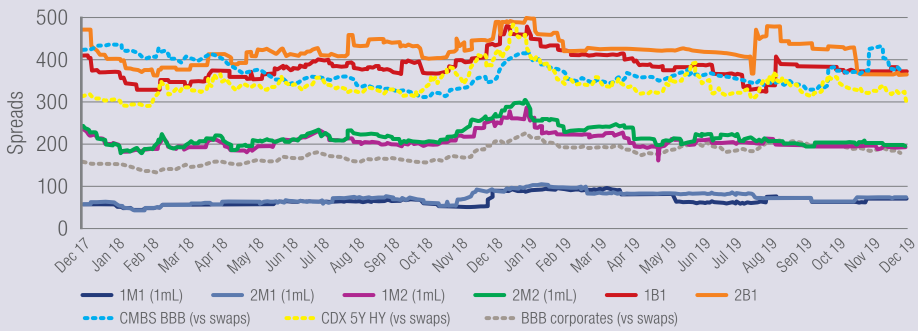
This was the 39th CAS deal Fannie Mae has brought to market since the inception of the CAS programme, worth a total of US$45bn and through these deals the GSE has transferred close to US$1.5trn of mortgage risk from over 2000 different lenders to private investors.

"As we enter the seventh year of the CAS programme, we are pleased to see the growth, liquidity and market supported by a deep and diverse investor base," Laurel Davis, vp, CRT, at Fannie Mae, said at issuance.

Spreads have tightened considerably over the years. For example, spreads on second loss loans – the M-2 tranche – were around 600bp in early 2016. The triple B tranche was priced at around Libor plus 200bp in mid-2015 and is now sub-100bp.

There have also been numerous upgrades. Some 49 M-1 CAS bonds were upgraded in 2019 and 68 M-2 bonds were upgraded. In total, over 300 CAS bonds had been upgraded since the start of the programme.

Connecticut avenue securities spreads



Source: JP Morgan Markets Tool

CAS rating upgrades since programme inception

- CAS bonds received 291 upgrades* since programme inception
- Built in structural de-levering, positive HPA and strong collateral performance have led to continuous upgrades

Upgrade | No change | Downgrade

M1 rating transition matrix

Post-upgrade rating \ Pre-upgrade rating	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB
AAA		2	4	3	1	1						
AA+			3	1		2			1			
AA				1	3	2	1	3	2			
AA-					5	1	2	3	2			
A+						3	9	5	2	2		1
A							3	5	4			
A-								6	12	7		
BBB+								3	12	10		
BBB										24		
BBB-										4		

M2 rating transition matrix

Post-upgrade rating \ Pre-upgrade rating	A-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	NR
AA-		2												
A+			2	2	1									
A				4	1									
A-					2	5								
BBB+						6	1							
BBB							10	2	1					2
BBB-								11	8	1				
BB+									9	5				4
BB										10	9			4
BB-											15	3		1
B+											3	15	1	2
B												7	1	2
B-														1

* Bonds that receive multiple upgrades are shown in the tables multiple times.

Source: Fannie Mae

Both GSEs typically issue around US$8bn or US$9bn a year at their own pre-determined and well-publicised intervals, though volumes vary according to the scale of mortgage origination. The Federal Reserve lowered rates in 2019 so both expect 2020 to be a bumper year. Some US$50bn of STACR and CAS debt is now outstanding.

"The market has done increasingly well. Adoption, liquidity have all improved year after year since the first STACR and CAS deals were issued in 2013, and there still isn't much directly comparable investment alternatives in the mortgage credit space that provide a similar risk/reward proposition, given the same rating levels, and with as much transparency of credit risk and performance data," concludes Mark Fontanilla, of capital markets consultancy Mark Fontanilla & Co.

Mark Fontanilla, Mark Fontanilla & Co

Investors

From the outset, CAS and STACR deals attracted a variety of investors across both the real and fast money sectors, but over the years more real money accounts have got involved.

INVESTOR CASE STUDY

Karlis Ulmanis, DuPont Capital

"THE POOL SIZES ARE ALSO VERY LARGE, ORIGINATED OVER A RELATIVELY SHORT PERIOD SO THERE'S A LOT OF HOMOGENEITY"

Karlis Ulmanis, a portfolio manager at DuPont Capital, says he likes buying STACR and CAS notes as it gives him the opportunity to diversify into lower-rated, higher yielding debt. Moreover, he first started to invest in CRT deals in 2015 as the existing sub-prime and Alt-A market started to dry up, so, as one door closed another door opened.

According to the terms of his investment mandate, he can only buy investment grade debt, so at issue he only buys the triple B-rated tranches. But, he notes, the spate of upgrades has allowed his portfolio to include what was initially lower-rated paper as well.

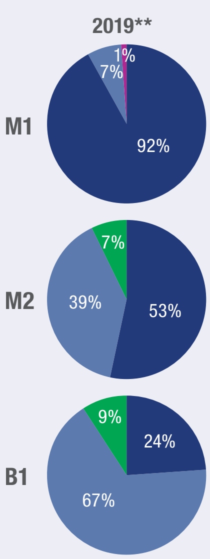
Ulmanis notes that the market, which now consists of around 90 deals in total, is extremely liquid. Secondary trading in CAS bonds alone was in the region of US$35bn over the course of 2019, versus an outstanding float of US$30bn. Nine or ten major dealers make active markets in CAS and STACR notes, posting prices several times a day.

"The pool sizes are also very large, between US$20bn and US$50bn, originated over a relatively short period so there's a lot of homogeneity. This means there is limited tail risk. And the Freddie and Fannie websites offer an abundant amount of information on collateral and structure," he adds.

In fact, the behaviour of Fannie and Freddie throughout the creation and cultivation of this new market wins plaudits from a variety of participants. Both GSEs realised that coaxing investors into a new market which offered unsecured mortgage exposure so relatively soon after the great financial crisis wouldn't necessarily be easy, but both moved with considerable adroitness, communicating their intentions to the market at every step, offering great transparency about collateral, and always moving at a well-telegraphed and disciplined pace.

"Fannie and Freddie have provided lots of education alongside their deals. They released deal structures that looked a lot like subordinated bonds, which people knew. They have disclosed reams of data about the history and characteristics of the loans in the bonds," says Andrew Davidson, president and founder of Andrew Davidson & Co, a New York-based consultancy.

Programme to date investor distribution



Investor type	2013	2014	2015	2016	2017	2018	YTD 2019
Asset manager*	64%	61%	81%	83%	82%	80%	92%
Hedge fund/private equity	19%	18%	4%	5%	7%	6%	7%
Insurance Company	12%	10%	12%	11%	10%	14%	1%
REIT	0%	0%	0%	1%	0%	0%	0%
Depository Institution/Bank	5%	11%	2%	0%	0%	0%	0%

Investor type	2013	2014	2015	2016	2017	2018	YTD 2019
Asset manager*	35%	50%	37%	43%	41%	35%	53%
Hedge fund/private equity	63%	42%	55%	48%	46%	54%	39%
Insurance Company	<1%	0%	<1%	1%	3%	<1%	0%
REIT	<1%	2%	7%	8%	10%	11%	7%
Depository Institution/Bank	1%	6%	<1%	0%	0%	0%	0%

Investor type	2013	2014	2015	2016	2017	2018	YTD 2019
Asset manager*	-	-	-	-	45%	45%	24%
Hedge fund/private equity	-	-	-	-	50%	53%	67%
Insurance Company	-	-	-	-	1%	0%	0%
REIT	-	-	-	-	4%	2%	9%
Depository Institution/Bank	-	-	-	-	0%	0%	0%

*Asset Manager includes pension funds, mutual funds, sovereign wealth funds, foundations/endowments and state/local governments.
** Through CAS 2019-R07

Source: Fannie Mae and dealers, primary issuance only

Since then, the investor base has broadened and deepened dramatically.

"We have a broad range of investors, including asset managers, hedge funds, REITs, insurance companies, pension funds, sovereign wealth funds and mutual funds. These range from household names to very small firms," says Laurel Davis, vp, CRT, at Fannie Mae.

Fannie Mae says that over 200 investors have been represented across the universe of its CAS issuance, and typically some 30-60 participate in each transaction. Not only does it sell bonds which reference loans with an LTV of between 60% and 80%, it also sells bonds which reference loans with an LTV of 80% or more. For example, it sold a US$1bn deal referencing loans of between 80% and 97% LTV in June 2019 and the unrated B-1 tranche paid Libor plus 525bp. ■

Credit and Public Sector Reinsurance – What to look for in 2020

Aon's **Joe Monaghan** urges reinsurers to grow credit reinsurance and public sector partnerships

What's the latest news for reinsurance in the US mortgage and wider credit space?
That marketplace continues to grow. It's been a phenomenal success for Fannie Mae and Freddie Mac but also for the re/insurance sector. We had the sixth-year anniversary of the inaugural mortgage reinsurance risk transfer pilot, which incepted in November 2013, and as of year-end 2019 we saw about $25bn of limit transferred. These deals are expected to generate about $5bn of income to reinsurers over their lifetime.

2020 is expected to be the most active year for reinsurance on US mortgage credit risk as demand for reinsurance limit could exceed $10bn with the potential for generating $2bn of lifetime premium. The increased demand is driven by the Government's desire to move Fannie Mae and Freddie Mac out of conservatorship.

Aon is expanding now from single-family risk to multi-family risks and has done a series of transactions, expecting this class of business to continue to grow. We recently completed the markets' first broadly syndicated unfunded risk transfer transaction for a leading European bank issuer. Risk protection was purchased on a portfolio of large cap corporate loans. The transaction provides loss protection but more importantly optimizes regulatory capital so that the bank can increase its lending activity in this business line. We believe reinsurers will prove to be an efficient and reliable source of risk capital for the banking sector, and that you will see similar transactions in the coming year.

In the public sector, we did a pilot for the Export-Import Bank of the United States that was very successful, and we are looking to build. Various international aid and development agencies are seeking innovative public-private partnerships as well. There is a tremendous opportunity for growth, but the re/insurance community needs to approach this sector focused on its unique constraints and considerations. It must be a partnership that brings the best of both sides to enhance the ability of governments to achieve their missions on behalf of their citizens.

What do you see as the future for public-private partnerships, such as with the Federal Emergency Management Agency (FEMA)?
Aon hosted a government de-risking conference in Washington, and we had presentations from several different government agencies that are utilizing reinsurance capacity. FEMA were quite bullish about the role of reinsurance and the private market to help them create more stability in their long-term financing of risk.

It just so happened that the first year they bought protection, there was an event like Harvey and they got a recovery. They recognize that in most years they're probably not going to receive a recovery – that's the nature of reinsurance. But long-term, they value private capital to reduce the volatility of any given year. They want to grow the partnership and reinsurers want to grow the partnership.

The wildfires are another very significant set of events where the insurance considerations are complex, ranging from the impact on homeowners and businesses to utilities that are affected – especially if the fire source starts from trees or limbs contacting transmission or distribution lines. Obviously major utilities in California have recently bought a lot of insurance that's backed by reinsurance, but there's more that can be done to help all the constituents involved.

How has recent M&A activity changed the industry?
I've been in the reinsurance business for more than 20 years, and there's been a lot of change over that time. It's much more property-dominated now than it was when I started, and there are fewer but larger reinsurers. The level of sophistication in terms of quantifying risk has also developed greatly.

Reinsurance CEOs say they want to be more relevant. They mean that in a couple of different ways. They want to be able to bring significant capacity and they want to be more relevant in terms of the thoughtfulness and creativity they can bring to bear for the client.

If a client wants to do something that's not quite box-standard, reinsurers want to have as robust an analytical framework and as strong a talent base as possible to think differently. Buyers want to deal with a core set of reinsurers that can match them in terms of their global awareness and their footprint, and that's another component of what's driving this consolidation.

Having said that, in the US we have a lot of buyers that not only aren't global, they may not even be national – they could be regional players. What they want are large, financially stable reinsurers that understand their risk and are committed to providing stability of capacity and price over time.

What's still relevant today, and relevant 20 years ago, is a trading partnership. The nature

Joe Monaghan

of that partnership has changed over time, but reinsurers must never lose, as they become larger, the ability for individuals to meet with clients and to treat them uniquely. That's something we very much focus on.

If you're just larger and have more capacity, you're not going to be as successful as a competitor who can be creative and think individually about a client's needs.

We have some very large, sophisticated, financially sound reinsurance companies – it's a stronger industry now than it ever has been. But it is still a syndicated marketplace, and you've got to be competitive. You must understand the client's issues and needs.

Need more information?
Aon has been involved in mortgage credit risk transfer since its inception. If you would like to know more about this business line or any of the transactions discussed, please contact Joe Monaghan at *joseph.monaghan@aon.com*

AON

Empower Results®

Aon plc (NYSE:AON) is a leading professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

CHAPTER FOUR: INSURANCE

The capital markets application of CRT is only part of the story, the GSE's also utilise the reinsurance market. In tandem with CAS, Fannie developed its Credit Insurance Risk Transfer (CIRT) programme; while Freddie set up its Agency Credit Insurance Structure (ACIS) alongside STACR.

Moreover, while CAS and STACR are similar, there are a few important differences between CIRT and ACIS. As Jeffrey Krohn, an md at Guy Carpenter, explains, Freddie typically takes a single pool of loans and splits that 75/25 between the capital markets and the reinsurance market. Both participate in the same pool of risk, though terms of coverage may vary a little. Fannie does it differently: it creates one pool of risk for CAS, and another pool for CIRT.

"The biggest difference between ACIS and CIRT is that Freddie chose to follow the same reference pool and rules as STACR, and the layering of the ACIS pool is the same. This isn't the case with Fannie. CIRT is not aligned with CAS. They do a random sampling of the portfolio every quarter and bifurcate it between CAS and CIRT," says a source in the insurance market.

ACIS has multiple layers, so insurers can invest in layers with greater degrees of subordination. "If you insure M-1 or M-2 you can enjoy 100bp-150bp of subordination for M2 or 300bp – 350bp for M1, so you have some flexibility in the ACIS attachment," explains Andreas Koutris, md, credit and guaranty at Aon.

"We designed STACR and ACIS to be very similar. While the reinsurance programme has its own contract, the underlying rules and mechanics are very similar and we did that intentionally," explains Mike Reynolds, vp, CRT, single family portfolio management at Freddie Mac.

Jeffrey Krohn, Guy Carpenter

By the end of 2019, Freddie had executed 49 ACIS transactions covering over US$13bn in policy coverage across 38 reinsurers. Since 2015, it has averaged US$2.5bn to US$3bn in reinsurance contracts per year.

Both GSEs introduced reinsurance at broadly the same time, however, and both are designed to work hand in hand with the capital markets operation. In the same way the bottom 4% of risk is chiefly reassigned to capital markets investors, the same sliver of risk is reassigned to reinsurance firms.

There are two main insurance brokers in this market – Aon and Guy Carpenter – and they portion the risk to a collection of traditional property and casualty insurance firms. Of these two, Aon has been the lead broker placing the vast majority of these deals. No other names have entered the market as it requires a heavy investment in terms of talent and analytic software.

A typical deal structure was provided by the Fannie Mae CIRT deal on US$10.5bn of 30-year single family loans, announced on 6 November 2019. The transaction, designated CIRT 2019-4, covered an unpaid balance on 21-year to 30-year fixed rate loans, all of which had a LTV ratio of greater than 80% and less than 97%. Fannie retains the first 40bp of loss, and if that US$42m retention layer is exhausted, some 15 insurers and

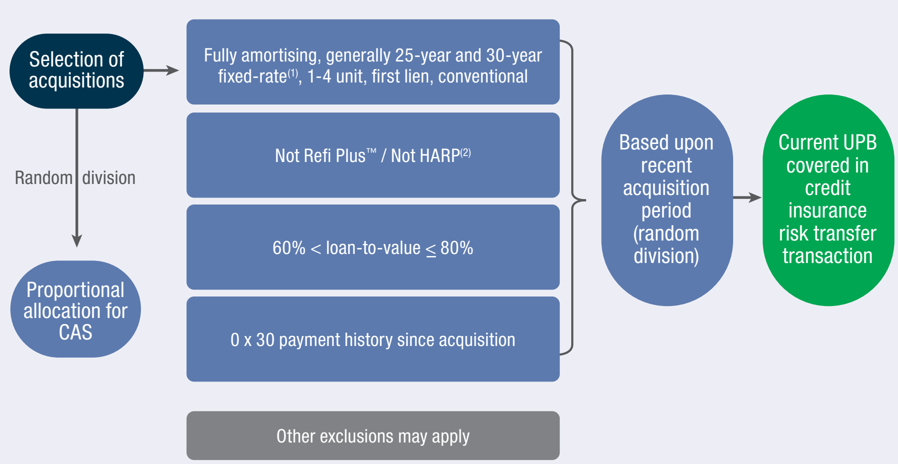
Rob Schaefer, Fannie Mae

reinsurers will step in to cover the next 375bp up to a maximum coverage of around US$392m.

Coverage is based on actual losses for a term of 12.5 years, and that coverage may be cancelled at any time after the fifth anniversary of the effective date through the payment of a cancellation fee. The loan pool for the 2019-4 deal consisted of fixed-rate loans acquired from December 2018 to June 2019. With this transaction, Fannie Mae through CAS and CIRT transferred a portion of credit risk on nearly US$2Trn of unpaid principal balance at the time of the transactions.

There were three principal criteria that governed the development of CIRT and sets it apart from the mortgage insurance the GSEs

CIRT reference pool selection process



(1) All loans will have terms greater than 240 months and less than or equal to 360 months. Other minimal exclusion criteria apply.
(2) Fannie Mae acquires HARP loans under its Refi Plus™ initiative, which provides expanded refinance opportunities for eligible Fannie Mae borrowers.

Source: Fannie Mae

VIEW FROM THE INSURANCE BROKERS

Aon has been there from the reinsurance space from the outset of the programme. Since then it has been the primary reinsurance broker for Freddie and Fannie, helping build the mortgage reinsurance market alongside the two GSEs.

"Freddie Mac and Fannie Mae, with the help of Aon, developed a very innovative insurance solution. While now it has become a mainstream product for our industry, back in 2013 we had to overcome the preconceived notions of reinsurers regarding mortgage default risk as well as the fact that the GSEs were not historically large buyers of insurance for credit protection, but were very familiar with the capital markets," says Andreas Koutris, md, credit and guaranty at Aon.

The development of the programme took about two years before it was ready for the market. Aon places risk with a panel of US, Bermudan and European names, such as Everest, Partner Re, Renaissance and Arch. It has recruited some London-based names but is seeking to enlist more of the large, well-known European names.

"At the beginning, very few insurers knew how to underwrite and price mortgage risk. When the GSEs indicated that they intended to share risk at scale with the reinsurance market, Aon along with Freddie Mac and Fannie Mae worked hard and established a broad panel of reinsurers to meet the demand," says Benjamin Walker, senior md

Benjamin Walker, Aon

and head of analytics for Aon Reinsurance Solutions' credit & guaranty practice group.

Not only did it work hard to recruit a wide panel, it also needed to make sure the names were diversified not only in terms of business line but also geographic footprint. In total, there are some 46 individual balance sheets with which it works, but it seeking to grow that number to reduce individual exposure.

Walker also says that the insurers themselves have been disciplined in their approach, keeping a close eye on how much exposure they have written and how much capital is exposed to mortgage risk.

Jeffrey Krohn, an md at Guy Carpenter – the other big name in the reinsurance brokerage space – confesses that assumption of mortgage risk has not always been the easiest proposition to sell to reinsurers.

"Reinsurers were sceptical and reluctant to assume risk that contributed to the financial crisis. Some reinsurers even thought we were creating the same esoteric financial instruments that were portrayed in the film The Big Short. It was and remains challenging. And once a new reinsurer starts writing mortgage credit, underwriters may be bombarded from board members or management that can slow down the adoption process," he says.

However, once reinsurers can look beyond the headline risk, they often find that the diversification of risk mortgage exposure offers can suit their business model extremely well.

"Traditional P&C insurers really like the diversity mortgage insurance provides as it is not materially correlated to P&C risk. Not only does it dampen earnings volatility and allow reinsurers to hold less capital, it makes the reinsurance model more durable through the cycle," adds Krohn.

Moreover, over time, the reinsurers have learned how thorough and comprehensive the changes to the underwriting and valuation process at Fannie and Freddie have been. "The loan manufacturing process has materially changed and the result is clearly evident in loan performance. In the pre-crisis years, there was no independence in the appraisal process. If you wanted a new loan, you could simply go through appraisal after appraisal until you got the right number," he recounts.

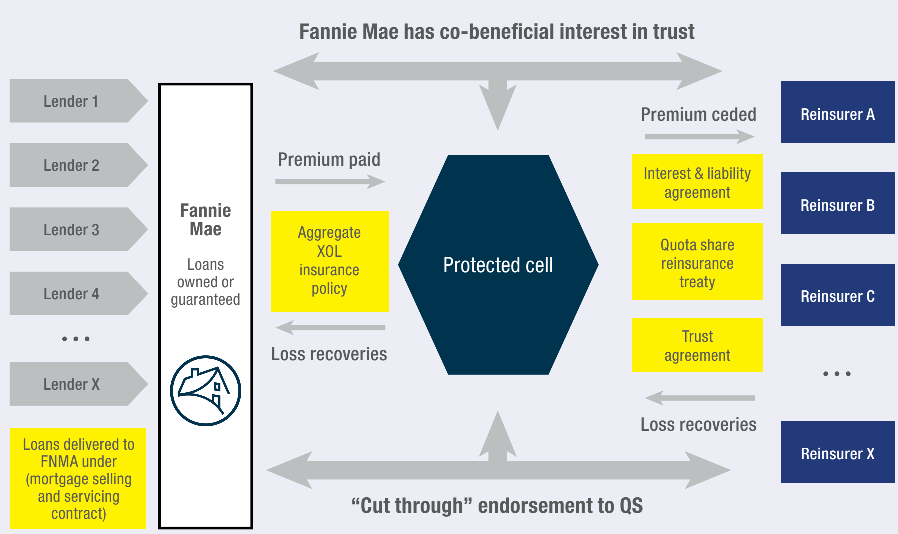
had had in the past, says Rob Schaefer, vp, credit enhancement and strategy, at Fannie Mae. "First, we learned many lessons from the performance of the mortgage insurance that we had in place on our loans during the 2008 credit crisis."

Although the industry ultimately paid tens of billions of dollars in MI benefits, billions of dollars of claims were either not paid or paid months late as a result of the insurer's determination of underwriting or servicing defects. At the same time, the claims process was seen as overly complicated, requiring dozens of origination and servicing documents to be reviewed by the insurer.

"As a result, with CIRT we targeted a wider group of diversified, financially strong and global insurance firms with tens of billions of capital, generally rated single-A or better," Schaefer says.

Second, underwriting standards needed to be raised and quality control needed material improvements. But Fannie also wanted to ensure that an insurer did not unreasonably deem a

Reinsurance deal structure



Source: Fannie Mae

VIEW FROM A REINSURER

Arch is responsible for about 20% of all the underwriting done in the US mortgage reinsurance market, making it the biggest player. It was also one of the first in the market. It likes the mortgage market for a number of different reasons.

Firstly, of course, it offers risk diversification. When it entered the market Arch had the capacity and felt the opportunities presented by this new risk were encouraging. "In 2012, the housing market was in a trough. Home values were below intrinsic values, underwriting standards and the regulatory environment had greatly improved, so we were bullish on the market, despite its history," says Seamus Fearon, evp, CRT and services, global mortgage group, at Arch Capital.

The returns offered were also sharply higher than in the traditional property and casualty space as well. "The P&C market has a 90%-100% combined ratio, meaning there is 0%-10% profit margin, but in the mortgage credit risk market there can be a 60%-70% marginal profit," says Fearon.

Even a 10% premium allocation to mortgages could decrease the combined ratio (which is simply total costs divided by total revenue) at some firms by 6% points or more, and the stock market pays a great deal of attention to combined ratios at reinsurance firms.

Finally, there is a great deal of capacity in the mortgage risk sector and it is set to grow further. There are two big growth areas for the reinsurance market – mortgage risk and cyber risk. But the mortgage market has much more data and certainty of coverage than in cyber world.

Seamus Fearon, Arch Capital

Arch recently formed a partnership with Munich Re, the biggest reinsurer in the world but hitherto one which has had no exposure to the mortgage market. Arch is able to offer its expertise and analytics to Munich Re, while the latter brings a formidable balance sheet to the table.

However, there are still a lot of large European names that have not yet entered the US housing risk market. One of the notable absentees is Swiss Re. As Fearon says, lack of proximity to the market and the recent experience of the financial crisis are often deterrents.

Arch' bullishness back in 2013 has paid off. Although Fannie and Freddie are retaining less exposure than before, there have been minimal losses in the market in its six years of existence. "The loss experience has been pristine and we continue to see favourable returns in this line of business" says Fearon.

> "THOUGH THE REINSURANCE SEGMENT CURRENTLY ACCOUNTS FOR AROUND 25%-30% OF THE ENTIRE CRT MARKET, IT CAN EXPAND IF CONDITIONS IN THE CAPITAL MARKETS ARENA BECOME DIFFICULT"

Andreas Koutris, Aon

loan to have an underwriting defect simply to avoid paying a claim. So, now with CIRT, Fannie Mae is the ultimate arbiter of loan quality, and if a loan has a material defect it is either repurchased by the lender or the lender indemnifies Fannie Mae for the loss.

Third, Fannie Mae simplified and streamlined the claims process. Under CIRT claims are now driven by data and not by thousands of documents. But, with CIRT, as in the CAS programme, Fannie Mae still provides transparency about loan quality. "On our website, Fannie Mae provides ongoing public disclosure of the performance of all the loans covered in CIRT and CAS transactions, as well as millions of similar loans that we acquired all the way back to the year 2000," says Schaefer. "Fannie Mae also engages third party due diligence providers to conduct additional reviews of a portion of the loans that we acquire, and a summary of those reviews are posted on our website," he adds

Though the reinsurance segment currently accounts for around 25%-30% of the entire CRT market, it can expand if conditions in the capital markets arena become difficult. In 2015, for example, spreads widened in both the CAS and STACR sectors, yet the agencies were able to increase the share of risk they deposited into the reinsurance market.

"The theory was proven right in 2015. Freddie Mac, for example, was able to increase the 25% of risk it had shared with reinsurance markets to 40%. This was a signal to the capital markets and a demonstration of prudent risk management by the reinsurance market'" recalls Koutris. ■

CHAPTER FIVE: THE ILN MARKET

Mortgage insurance has been around for a long time, since the late 1950s, but the decision to securitise the receivables into mortgage insurance-linked notes (ILNs) is a relatively recent phenomenon. Arch MI, one of the six mortgage insurers in this market, issued the inaugural deal, Bellemeade 2015-1, in mid-2015.

Prior to the appearance of ILNs, there were three principal methods by which the lender might achieve the required level of credit enhancement: recourse agreements, participation agreements and mortgage insurance. The first two involve the lender retaining a portion of the risk, but mortgage insurance effectively takes the risk off the books and for this reason, mortgage insurance became the default mechanism by which lenders secured the necessary credit enhancement.

Mortgage insurance was first developed by the Mortgage Guaranty Insurance Company (MGIC) in Milwaukee over 60 years ago, but, by the 1970s, as margins were attractive and losses negligible, more names had entered the market so that there were by the end of that decade there were about 20 different names offering both lender paid and borrower paid mortgage insurance. Mainly through consolidation and merger, this number had shrunk to seven by the mid-2000s.

This situation unravelled, as so much else did, during the financial crisis. Although the mortgage insurers had encountered serious downturns in the housing market before, in which they had lost millions, the 2007-2008 crisis was nationwide; there was no hiding from it.

James Bennison, Arch Capital

Moreover, as they insured loans with an LTV of 80% or more, they were right in the firing line when things got ugly.

Three mortgage insurers went into liquidation, and the ones that survived did so only after paying out vast sums in claims and contesting, or rescinding, equally vast sums. "The industry was devastated. It had paid billions in claims and also determined it was not obligated to pay billions more. A primary focus has been to re-establish credibility," says James Bennison, evp, alternative markets, at Arch Capital.

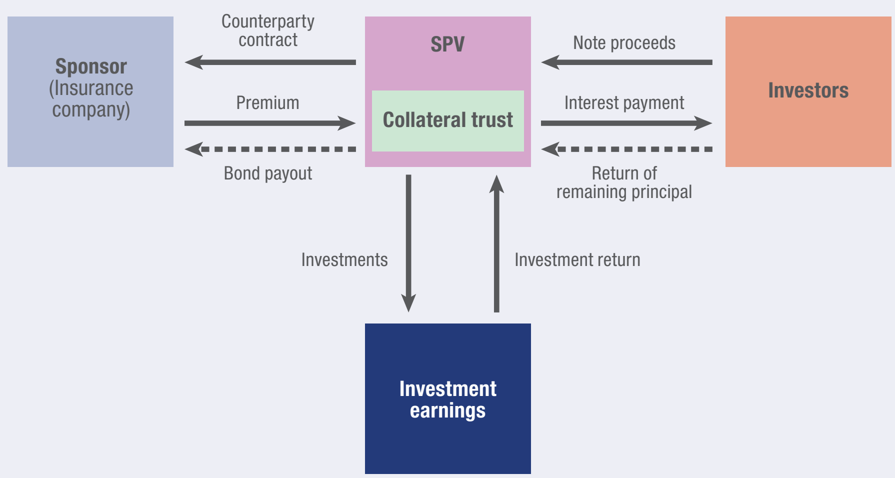
Arch entered the mortgage insurance market after the crisis by buying the assets of one of the defunct insurers, but it was clear to it, as it was to the insurers still standing, that mortgage insurance would have to be done very differently in the future. There were clear problems with flat rate pricing, and the majority of loans would have to be re-underwritten before they could be insured, but the insurers decided to take a leaf out of the GSEs' book and transfer risk. They looked at CAS and STACR and realised that these programmes offered an appropriate mechanism to manage the long tail risk inherent in mortgage exposure.

"We needed to actively manage the risk, and one of the best ways to do this was to transfer a portion of that risk to other private market participants – ideally sophisticated participants that could enhance our understanding of what is going on in the housing market. This was a fundamental change to the mortgage insurance operating model," says Bennison.

ILNs operate in the same way as credit-linked notes. The mortgage insurer creates a special purpose vehicle, and the receivables – in this case the insurance premiums – provide the interest paid on the notes.

"THE INDUSTRY WAS DEVASTATED. IT HAD PAID BILLIONS IN CLAIMS AND ALSO DETERMINED IT WAS NOT OBLIGATED TO PAY BILLIONS MORE"

Structure of collateralised ILS/cat bond transaction



Source: Swiss Re Capital Markets

> "THERE IS A LOT OF UPSIDE FOR THIS PRODUCT AS ADOPTION AND DEAL FLOW PICKED UP SIGNIFICANTLY IN 2019"

In a pool of mortgages, the insurer will generally cover the bottom 25% of the pack. This is the risk in force. Of the total risk in force, around 2.5% will be retained by the mortgage insurer. This is the so-called expected loss. Another vast slice of the risk in force – around 91/92% will also be retained by the insurer. This is the catastrophic loss.

But the middle 6% or so, designated the unexpected loss, will be bundled up and sold off through the ILNs. It is generally split up into five or six different tranches, with differing loss probabilities and accordingly commensurate yields.

For example, in July 2019, National Mortgage Insurance Corporation (NMIC), created the SPV Oaktown Re III and through it issued US$327m of 10-year MILNs, covering an existing portfolio of mortgage insurance policies written between June 2018 and June 2019.

The offering consisted of a US$100m tranche of M-1A notes paying one-month Libor plus 140bp, a US$100m tranche of M1-B notes paying one-month Libor plus 195bp, a US$93.4m M-2 tranche paying plus 255bp and a US$16.7m B-1A tranche paying plus 350bp and a US$16.7m B-1B tranche paying plus 435bp.

In all, six mortgage insurers offer ILNs. These are Arch, through its SPVs called Bellemeade, NMIC through its SPV Oaktown, Radian Guaranty through its SPV Eagle, Genworth Mortgage Insurance Company through its SPV Triangle, Essent Guaranty through its SPV Radnor and MGIC through its SPV Home.

Since the inaugural Bellemeade deal in in July 2015, there have been some 22 different ILN offerings, worth almost US$9bn. Arch has been the most prolific issuer with 10 deals in total worth US$4.7bn.

Yields in this sector have narrowed appreciably over time and particularly recently. For example, in October, Arch issued a US$577m ILN which paid one month Libor plus 385bp on the B-1 tranche and plus 285bp on the B-2 tranche – sharply inside levels seen at the same risk level on the Oaktown deal three months earlier.

This was also Arch's fourth deal of 2019, the most MILN transactions conducted by an insurer in a calendar year. The pace of issuance in general has increased in the last 12 months. "There is a lot of upside for this product as adoption and deal flow picked up significantly in 2019," notes Mark Fontanilla of capital markets consultancy Mark Fontanilla & Co.

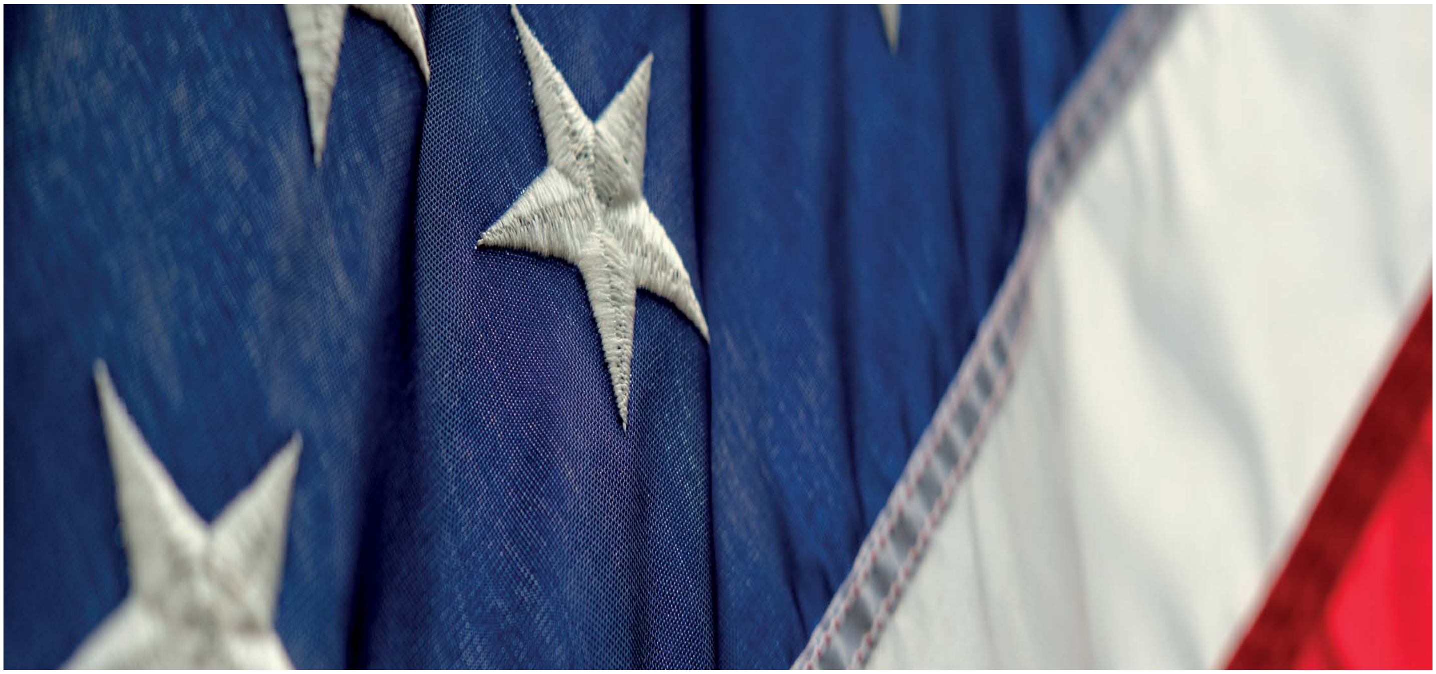
More recent transactions from Genworth in November and Essent in January have been tighter still. The US$302m Genworth deal through Triangle Re 2019 marked its debut in the market and made it the sixth insurer to enter the market.

Issuance of these notes offers a range of different attributes beyond the obvious risk transfer. It also changes the earnings profile of the firm and, as Jim Bennison of Arch puts it, "trades away volatility". It helps raise the eligibility of the firm according the criteria stipulated by GSEs' Private Mortgage Insurer Eligibility Requirements (PMIERS) and the capital raised through the offering helps supports its credit rating.

But, points out Bennison, as important as any of these factors but often overlooked, is the introduction it affords the insurer to a host of investors from whom, through price discovery, it can learn much about the housing market in general. Communication is two-way, forming a virtuous feedback loop.

Through its Bellemeade programme, Arch has had contact with around 60 different investors, including hedge funds, asset managers and insurance firms.

"We've met a much broader set of market participants than we would have done without this programme. The rest of the industry has followed us down this path in the last couple of years, and we have a much more stable industry than would have been the case otherwise," says Bennison.■



Partner with Arch Credit Risk Services

Arch Credit Risk Services provides clients the benefit of the full mortgage underwriting and analytical expertise of Arch Capital Group's Global Mortgage Group, which includes Arch Mortgage Insurance Company (Arch MI), the largest provider of mortgage insurance in the U.S.

At Arch, our focus is on providing risk management, risk financing and capital optimizing products to the housing sector worldwide. Arch MI, and the MI companies we have acquired, represent more than 50 years of MI industry participation.

Our dedicated team of credit risk modelers, data scientists and actuaries provides clients with the full suite of analytical services required to underwrite Fannie Mae and Freddie Mac Credit Risk Transfer (CRT) transactions.

ALIGNMENT OF INTERESTS
Market leading U.S. Mortgage Insurer and participant in CRT programs.

SPEED OF PARTICIPATION
Accelerated access to this market by partnering with Arch.

PROPRIETARY CREDIT RISK MODELLING
Designed to effectively assess the uniqueness of CRT portfolios.

MACROECONOMIC SURVEILLANCE
Macroeconomic insights provided by on-staff economists.

ADVANCED DATA VISUALIZATION TOOLS
Developed to help clients organize, view and analyze mortgage data.

How Can We Support You?

David Gansberg
Chief Executive Officer
Arch Global Mortgage
336 217 2111
dgansberg@archmi.com

Seamus Fearon
Executive Vice President
Arch Credit Risk Services
441 278 9259
sfearon@archcapgroup.com

James Haney
Vice President
Arch Credit Risk Services
441 278 4031
jhaney@archunderwriters.com

Arch | MI

CHAPTER SIX: PRIVATE DEAL POSSIBILITIES

Since the advent of mortgage credit risk transfer in the capital markets in the post-financial crisis era, issuance has been dominated by the GSEs. Banks, which often have huge portfolios of home loans, have eschewed the market as it seemed unlikely that they would receive helpful capital treatment. However, in October 2019, JPMorgan Chase bucked the trend when it issued the so-called Chase Mortgage Reference Notes 2019-CL1.

Principal payments on the notes, according to the Fitch Ratings Report issued at the time, are based on actual payments received and the performance of a reference pool consisting of 979 prime residential mortgages with a total balance of US$757m. There are seven tranches, each paying a spread over one-month Libor.

The deal has aroused significant interest in the structured credit community. The mortgage risk market is big enough, but if banks start to issue in bulk to receptive investors, it could get a lot bigger. "Banks have an appetite to transfer risk, and there is already an established and deep market for mortgage risk, underpinned by strong fundamentals. This is set up well to be a very meaningful market in the future," says Chris Helwig, an md at Amherst Pierpont in New York.

There are significant similarities between this structure and the one utilised by Freddie Mac and Fannie Mae in the STACR and CAS deals. Like the GSE deals, the Chase transaction uses a reference pool of loans to determine performance of the notes. Investors buy the notes and the proceeds cover future losses on the reference pool of loans.

But there are important differences as well. Both the principal and interest payments are obligations upon the issuer so the investor is acquiring counterparty exposure to JPMorgan Chase. In this sense, the deal is a hybrid of both of mortgage credit transfer and unsecured corporate debt. In contrast, the GSE REMIC deals put the proceeds into a bankruptcy remote trust which invests in liquid and well-rated assets like commercial paper, so an investors' counterparty risk to the GSEs is limited.

Chris Helwig, Amherst Pierpont

For this reason, only the most creditworthy banks like Bank of America and Wells Fargo are likely to be able to copy the structure as they will have to offer a minimal risk premium to investors. Less highly rated banks would find that the hefty premium they would be obliged to offer would outweigh the benefits of risk transfer.

The deal also covers the first 8% of losses in the reference pool of loans, about double the losses covered in STACR and CAS deals. This means that the actual deal size is likely to be around US$65m, placed to perhaps one or two investors, surmise market experts. JPMorgan Chase declined to comment on the terms of the deal, and in fact the particulars have been kept carefully hidden from public gaze.

But this also means that issuers need a large notional principal of unpaid balances on home loans to create anything like meaningful size in deals such as these. This also restricts the potential pool of issuers.

Most importantly, JPMorgan reserves the right to collapse the deal if it does receive favourable regulatory and accounting treatment from the banking regulator – the Office of the Comptroller of the Currency (OCC). Risk transfer like this will only be attractive to other banks if they are allowed to lower the capital they are obliged to set against the loans. In fact, JPMorgan Chase chanced its arm with this type of transaction in 2016, but got the thumbs down from the OCC and had to retire the deal.

"Will this synthetic form get favourable capital treatment? This is the key. Banks have not been active in this market because the idea of CRT is not only to reduce risk but also capital required. If it doesn't reduce capital or improve return on equity it won't get done," says Mark Fontanilla, of capital markets consultancy Mark Fontanilla & Co.

There has been a considerable regulatory sea change in the last three of four years. The previous Comptroller of the Currency, Thomas Curry, an Obama appointee, was replaced by Trump appointee Joseph Otting in 2017. Otting is, according to one market watcher, "much more markets-friendly." Consequently a friendlier regulatory response is on the cards.

Moreover, exacting accounting requirements for securitisation instituted in the wake of the crisis could be due for relaxation. A whole slew of pre-2007/2008 deals had to be moved back on to the balance sheet in the wake of the crisis, and then the FDIC Securitization Safe Harbor Rules obliged banks to provide the same level of reporting and disclosure for synthetic mortgage risk transfer as they did for all public securitisations.

"If this is rolled back, banks can do either synthetic or cash deals and get the same regulatory treatment. This is the real game changer," says Helwig.

Finally, new head of the FHFA Mark Calabria has said on many different occasions that he wishes to reduce the footprint of the GSEs and level the playing field between them and commercial lenders. In September, the Treasury Department termed the difference of capital treatment between securitisations and risk transfer by the GSEs as a "potentially unwarranted gap".

So, the winds would seem to be blowing in the right direction. But does this mean that JPMorgan Chase will get the answer it's looking for? A lot of market commentators seem fairly convinced it will. "My read is that JP Morgan wouldn't go through with this without fairly strong confidence that they will get favourable regulatory treatment," says one.

Others aren't so sure. "My view is that if approval had been in the offing it would have been much better publicised and more banks would have looked into it. There are a lot of costs involved in doing this sort of deal, so if there was any kind of likelihood of regulatory approval then we would have heard. Also, it's only a US$60m deal so it's not a big deal if there isn't approval," says another market participant. ■

> "BANKS HAVE AN APPETITE TO TRANSFER RISK, AND THERE IS ALREADY AN ESTABLISHED AND DEEP MARKET FOR MORTGAGE RISK"

US Mortgage Risk Transfer Special Report – Corporate Statement

Hunton Andrews Kurth LLP has wide-ranging experience in the representation of dealers, initial purchasers and issuers in novel synthetic and asset-backed credit risk transfer transactions. In connection with these representations, we provide clients with advice regarding evolving and improving their credit risk transfer strategies to best utilize the capital markets while satisfying applicable regulatory requirements and their internal business needs. Hunton Andrews Kurth has been active in the growing credit risk transfer space and has helped shape the market with representation on first impression deals.

We represent the dealers in all of the synthetic credit risk transfer offerings by Freddie Mac under its Structured Agency Credit Risk (STACR™) program. Our representation in the STACR program includes the evolution of the program from a fixed severity loss payment structure to one that allocates losses and payments based on the actual performance of the reference mortgage loans, as well as the transition from direct debt to trust and REMIC issuances. We also provide advice regarding minimization of US withholding tax risk.

We also represent the underwriters and initial purchasers in all of the Freddie Mac Seasoned Credit Risk Transfer Trust (SCRT) transactions, which are re-performing residential mortgage loan securitizations. The SCRT transactions represent a hybrid between private-label securitizations and Freddie Mac's traditional guaranteed products, and provide an additional credit risk transfer tool to shift credit risk from Freddie Mac to the investors in the related subordinate securities.

Hunton Andrews Kurth also represents the structuring agent and lead manager on Freddie Mac's Multifamily Structured Credit Risk (SCR) Debt Notes transactions, which are modeled off of the STACR transactions and are linked to the credit and principal payments risk of a reference pool of multifamily mortgage loans backing state and local tax-exempt bonds for which Freddie Mac provides credit enhancement.

Hunton Andrews Kurth is tax structuring counsel for Fannie Mae's risk transfer transactions under the Connecticut Avenue Securities (CAS) program for both single family and multifamily transactions. In addition, Hunton Andrews Kurth has worked on the overall structuring of both the Freddie Mac and Fannie Mae credit risk transfer programs since their inceptions.

Our credit risk transfer experience also includes representing initial purchasers in structuring deals for private mortgage insurers that transfer the risk of loss under mortgage insurance policies, which provides reinsurance credits under the GSE Private Mortgage Insurer Eligibility Requirements (the "PMIERs") capital requirements. We also act as deal counsel for synthetic securitizations of mortgage pools, revolving and closed end home equity loans, and auto loans, in each case providing structuring, tax and regulatory advice to the protected parties.

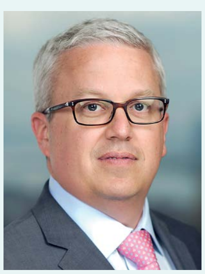
HUNTON
ANDREWS KURTH

Core Team

Robert Hahn
Partner
Charlotte
rhahn@HuntonAK.com
+704 378 4764 direct

Tom Hiner
Partner
New York
thiner@HuntonAK.com
+212 309 1302 direct

Cecelia Horner
Partner
Richmond
chorner@HuntonAK.com
+804 788 7394 direct



Brent Lewis
Partner
New York
blewis@HuntonAK.com
+212 309 1006 direct

Janet McCrae
Partner
New York
jmccrae@HuntonAK.com
+212 309 1234 direct

CHAPTER SEVEN: REMICS, EPMI AND IMAGIN

REMICS

The two wings of CRT practised by the GSEs – via the capital markets and via the reinsurance market – have changed very little in structure since they were first unveiled. Indeed, to develop and maintain familiar and understood MRT strategies has been a principal aim of the GSEs.

"As fixed income investors tend to be conservatives, we think of innovation in terms of the service we provide. We're starting to roll out APIs for investors through Fannie Mae's Data Dynamics platform, for example, and we want to create better information, tools and data for investors rather than constantly change the structure of the programme. We strive for consistency," says Laurel Davis vp, CRT, at Fannie Mae.

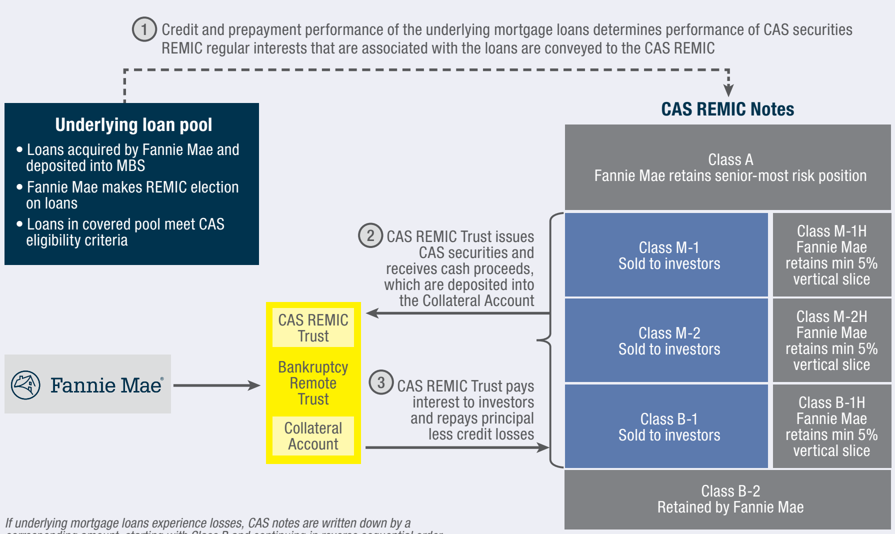
Her counterpart at Freddie Mac, Mike Reynolds, agrees that introducing bright new vehicles to what is a tried and trusted formula is not what CRT is all about. "CRT is a relatively young market compared to other asset classes and is still evolving. We are working on plans to transition away from LIBOR. We will also study the new FHFA capital rule and determine if any adjustments to our CRT strategy need to be made," says Reynolds.

That is not to say, however, that the GSEs don't introduce changes and improvements. In 2018, for example, Fannie Mae began issuing CAS securities in real estate mortgage investment conduit (REMIC) format rather than as simple debt securities. The award winning initiative was the successful culmination of years of extensive effort with the aim of expanding the CAS investor base and further enhancing the long-term liquidity of the programme. It also mitigates an investors' counterparty risk to Fannie Mae, given that each CAS REMIC deal is issued from a bankruptcy remote trust.

Janet Sadler McCrae, Hunton Andrews Kurth

REMICs were authorised by the Tax Reform Act of 1986 and operate as special purpose vehicles that pool mortgages and issue various slivers of interest in these mortgages to investors. They are very similar to collateralised mortgage obligations (CMOs).

CAS REMIC structure



Source: Fannie Mae

To qualify bond issuance as a REMIC security, the issuer must make a tax election to do so, files a Form 1066 with the Internal Revenue Service (IRS) and must continue to satisfy various ongoing requirements. If a GSE wants loans to be qualified assets for a REMIC, it must make an election on those loans immediately as they are acquired; the election cannot be made retroactively.

What it has done is create bonds that enable the programmes to bring more real estate investment trusts (REITs) into the fold. A REIT is a company which owns income producing real estate and to qualify as a REIT in the US certain rigorous criteria must be fulfilled. They must invest 75% of its assets in real estate, and this makes REMICs issued under CAS and STACR viable investments for REITs.

"One goal of the transition to the REMIC structure was to broaden the investor base as REMICs are better for REITs and offshore investors," says Janet Sadler McCrae, a partner in the structured finance team at law firm Hunton Andrews Kurth in New York.

But it was not easy to get all the paperwork in order. "The REMIC was a massive effort in terms of documentation. There were a lot of legal ramifications. We wanted to use the REMIC structure from the start, but it took some time to get there," says Davis.

Freddie began issuing STACR securities in REMIC form one year after Fannie.

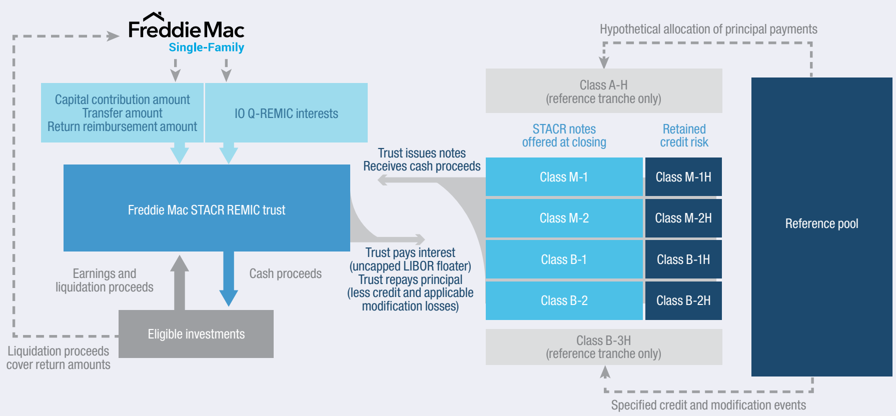
But with the introduction of increased numbers of international and REIT investors to CAS and STACR REMICs, yields find themselves under renewed downward pressure. So while traditional CAS and STACR buyers are not deterred by the REMIC format, they are in competition with more investors than before.

"We're indifferent to the REMIC structure, and it has opened up the investor base. But as it has allowed more competition it has exerted negative pressure on yields. It's more difficult as an investor to beat the benchmark," says Karlis Ulmanis a portfolio manager at Du Pont Capital.

In some ways, the market has become a victim of its own success. Observers say that REITs, for whom the REMIC format was expressly designed, are now finding yields on offer a trifle too rich.

This is all good news for the agencies of course. Yields are narrower, and if they are now too narrow for a lot of REITs, then they know the REITs are ready and waiting should yields back up again.

STACR REMIC structure



(1) The class M-2A and class M-2B notes and corresponding reference tranches relate to the class M-2 notes. The class M-2A and class M-2B notes are exchangeable for the class M-2 notes, and vice versa, as further described in the term sheet and preliminary PPM. In addition, certain classes of MAC notes can be further exchanged for other classes of MAC notes, and vice versa, as further described in the term sheet and preliminary PPM.
(2) The class B-1A and class B-1B notes and corresponding reference tranches relate to the class B-1 notes. The class B-1A and class B-1B notes are exchangeable for the class B-1 notes, and vice versa, as further described in the term sheet and preliminary PPM. In addition, certain classes of MAC notes can be further exchanged for other classes of MAC notes, and vice versa, as further described in the term sheet and preliminary PPM.
(3) The class B-2A and class B-2B notes and corresponding reference tranches relate to the class B-2 notes. The class B-2A and class B-2B notes are exchangeable for the class B-2 notes, and vice versa, as further described in the term sheet and preliminary PPM. In addition, certain classes of MAC notes can be further exchanged for other classes of MAC notes, and vice versa, as further described in the term sheet and preliminary PPM.

Source: Freddie Mac

EPMI and IMAGIN

The enterprise-paid mortgage insurance (EPMI) initiative, introduced by Fannie Mae in July 2018, is still in its pilot phase. The essence of EPMI is that Fannie Mae, rather than the lender, will take over many of the operational aspects of acquiring mortgage insurance.

Before EPMI, about 85%-90% of loans with an LTV of 80% or more which are delivered to Fannie Mae are covered by borrower-paid insurance with 10%-15% covered by lender-paid insurance, but in both cases it is up to the lender to make sure the insurance is intact before sending the loan upstream to Fannie Mae. This can be a headache.

> “UNDER OUR CHARTER, ANY LOAN THAT WE ACQUIRE WITH AN LTV OF 80% OR GREATER MUST HAVE CREDIT ENHANCEMENT, AND THAT GENERALLY IS MET THROUGH MORTGAGE INSURANCE”

“Under our charter, any loan that we acquire with an LTV of 80% or greater must have credit enhancement, and that generally is met through mortgage insurance. Some lenders don’t want the responsibility of acquiring the insurance, reporting to the insurer, and filing claims; they would rather let Fannie Mae do it. In some cases it might be more efficient for us to do those functions, leveraging much of the insurance structure that we developed under CIRT,” says Rob Schaefer, vp, credit enhancement strategy and management at Fannie Mae.

Loans covered by EPMI are covered by a forward insurance arrangement, secured by Fannie Mae from an approved insurer. According to the GSE, the process for settling claims under EPMI is similar to the process for settling CIRT claims.

But, stresses Schaefer, this programme is still in its very early stages and is designed solely for the benefit of the customer. It so far encompasses just 25 lenders, and FHFA approval would be needed if Fannie should seek expansion.

Freddie Mac’s Integrated Mortgage Insurance (IMAGIN) pilot scheme was also unveiled in the summer of 2018. The precepts appear are strikingly similar to EPMI: Freddie Mac, rather than the lender will secure mortgage insurance for loans carrying an LTV of 80% or higher and, for the lender, the whole process is streamlined and simplified.

They can also be sure that pricing is transparent and the same for all lenders across the board according to one set of standards and criteria. For lenders juggling several sets of insurance quotes, this might be attractive.

Freddie MSC is offering IMAGIN in co-operation with Arch Mortgage Risk Transfer, an affiliate of Arch Capital Group – the largest supplier of mortgage insurance in the market. Under the terms of the scheme, Arch initially supplied the insurance on high LTV loans, and then each loan is reinsured by a panel of reinsurers approved by Freddie. It also has the contractual right to seek reimbursement for unpaid claims directly from panel members.

The object of both these pilot schemes is to bring greater capital into the mortgage market. Lenders that might be reluctant to make high down-payment loans as they could not, or did not want, to secure the necessary insurance may now be encouraged to go ahead. ■

CHAPTER EIGHT: THE FUTURE OF CRT

Everyone responsible for CRT, in its various forms, is happy with what has been achieved and the current state of the market. Even relatively disinterested parties concur that the GSEs have done a remarkable job in both rehabilitating the reputations of the organisations and establishing mechanisms that lessen the burden upon the US taxpayer.

However, it is worth saying that not everyone is quite so positive. For example, Malay Bansal, experienced industry professional, makes a series of points about the CRT programmes at both Fannie and Freddie in his well-read blog. There is a mismatch between the risk transferred and risk on loans that remain with GSEs, he says.

First, the agencies retain the very bottom portion of risk in any capital markets or reinsurance deal, and the first loss might be the right risk to sell. This, however, could well to be too costly for the GSEs in terms of yield.

Second, the original STACR and CAS deals transferred risk on 30-year mortgages only for the first 10 years, though subsequently increased to 20 years on new deals, after which it reverts to the GSEs. This leaves a tail risk.

Perhaps most fundamentally, CAS and STACR were conceived and have been sold during an era of preternaturally low interest rates. While there is no immediate prospect of this phase ending, it almost certainly will do so at some stage. No one has seen how these notes, or indeed any other post-crisis MBS, will perform in a high rate environment and when some mortgages start to default.

More immediately, the future of the GSEs is in the balance. The end of conservatorship is at hand. Mark Calabria, appointed to the directorship of the FHFA in April 2019, has made no secret of the fact that he wants to return the GSEs to private hands and says that, all being well, Freddie and Fannie could be in a position to sell shares as soon as 2021 or 2022.

In September 2019 the Treasury and the FHFA allowed the GSEs to increase retained capital to a combined US$45bn but their leverage levels are still high. In a speech to the National Association of Homebuilders in Las Vegas on 23 January 2020, Calabria said, "It [their leverage] still stands at around three hundred to one. By contrast, the largest financial institutions in the nation have an average leverage ratio of roughly ten to one."

So, clearly, with or without the doubtless formidable achievement of the CRT programme, the agencies still hold far too much risk for Calabria's liking. He has also talked of "levelling the playing field" in the housing market. The only way forward is to end conservatorship and approximately US$250bn remaining combined line of credit to the US Treasury the GSEs currently enjoy.

Lest we should be in any doubt about the matter, this is a message Calabria has repeated in numerous speeches, addresses and interviews since his appointment. He's not just speaking for himself either: it is a theme endorsed by the national administration.

In September 2019, both the Treasury Department and the Department of Housing and Urban Development (HUD) released plans for the future of the housing finance system. The Treasury's plan had 49 recommendations, most of which had to do with ending conservatorship.

However, in the same document the Treasury also noted: "The GSEs' CRT programmes enhance taxpayer protection and foster price discovery and market discipline, and in light of these features, FHFA should continue to support efforts to expand these programs."

Further it recommended: "FHFA should, in prescribing regulatory capital requirements, provide for appropriate capital relief to the extent that a guarantor, or a GSE pending legislation, transfers mortgage credit risk through a diverse mix of approved forms of CRT."

> "IF THE GOAL IS TO PRIVATISE GSES, IT STILL MAKES SENSE TO DO CRT BECAUSE IT IS CHEAPER THAN EQUITY"

Andrew Davidson, Andrew Davidson & Co

Whether Congress possesses the resolution and commitment to act is a different question, but what would happen to the CRT programmes should conservatorship end? Most people believe that there would be an even bigger role for these products in that event as they are one of the most effective and cheapest methods by which the GSEs can secure new capital.

Neither Fannie nor Freddie will talk about current political rumblings, the end of conservatorship and what it means for CRT, but consultants and market-watchers are bullish. "CRT is one of the most efficient forms of capital to bear credit risk. If the goal is to privatise GSEs, it still makes sense to do CRT because it is cheaper than equity," says Andrew Davidson, president and founder of Andrew Davidson & Co, a New York-based consultancy.

This is as true for the reinsurance market as it is for the newer forms of CRT. "When the GSEs exit conservatorship, they will to have to raise equity capital – the most expensive form of capital. To minimise the capital raise, the GSEs will tap their professional CRT investor and reinsurer base above and beyond their normal flow of risk transfer. It makes a lot of sense for the GSEs and it's a great opportunity for investors and reinsurers," says Jeffrey Krohn, an md at Guy Carpenter.

Indeed, sources in the reinsurance market say that private conversations with the FHFA and other organisations in the centre of this debate indicate that if anything there will be an expanded role for the reinsurance market should the GSEs re-enter private hands.

So, at the very least, it seems there will be a lively role for mortgage risk transfer well into the third decade of the twenty-first century. ■

26th March 2020, New York

Venue: Clifford Chance: 31 West 52 Street, New York, NY 10019

Delegate feedback from SCI's recent Capital Relief Trades events in London & New York

"This event provided valuable insight on credit risk transfer and importantly from different market participants' perspectives."

"The right number of attendants to have useful discussions."

"When I say that the event met my expectations, you should also know that my expectations were very high based on last year's event – and they were still met!"

"An interesting summary of developments in the sector."

"One of the very few CRT conferences out there, with an impressive roster."

"Good quality knowledgeable panels."

"A good conference that was well attended."

"Great representation from most market participants – a networking opportunity."

"Well organised event providing excellent networking opportunities. Fantastic attendance from a range of market participants including investors, arrangers, issuers and law firms."

FOR FULL EVENT DETAILS & REGISTRATION GO TO

http://risk-transfer-and-synthetics-seminar-new-york-2020.structuredcreditinvestor.com