Introduction to Freddie Mac
Freddie Mac’s Credit Guarantee Business

- Freddie Mac was chartered by the federal government in 1970 to provide liquidity, stability, and affordability to the housing market. Freddie Mac buys loans from originators, securitizes them, and sells bonds into the capital markets.

**Mortgages**
- $200K Balance
- 5% fixed interest rate
- 30 year term

**Servicer**
- Gets a 0.25% servicing fee (Participation Certificate or PC)

**Freddie Mac**
- Guarantees payments to investors
- Earns 0.25% Guarantee Fee (Gfee) fixed interest rate

**Investors**
- Get a 4.5% bond (Participation Certificate or PC)
FHFA Mandate and Freddie Mac’s Go-Forward Strategy
Conservatorship

- Freddie Mac continues to operate under the conservatorship that commenced on September 6, 2008, under the direction of Federal Housing Finance Agency (FHFA).

- FHFA’s statutory mandate is to oversee the conservatorships of Freddie Mac and Fannie Mae (the “Enterprises”) in their current state and ensure that the Enterprises’ infrastructure meets the needs of their current credit guarantee business and other operations.

- FHFA as our Conservator:
  - Assumed all powers of the Board, management and shareholders
  - Has directed and will continue to direct certain of our business activities and strategies
  - Delegated certain authority to our Board of Directors to oversee, and to management to conduct, day-to-day operations
On May 13, 2014, FHFA released its 2014 Strategic Plan, which provides an updated vision of FHFA’s implementation of its obligations as Conservator of the Enterprises.

The plan sets forth three reformulated strategic goals:

- **Maintain**, in a safe and sound manner, foreclosure presentation activities and credit availability for new and refinanced mortgages to foster liquid, efficient, competitive and resilient national housing finance markets.

- **Reduce** taxpayer risk through increasing the role of private capital in the mortgage market.

- **Build** a new single-family securitization infrastructure for use by the Enterprises and adaptable for use by other participants in the secondary mortgage market in the future.
In 2011, Freddie Mac began developing a strategic plan to reduce the credit risk incurred on single-family loans.

CRT addresses the following needs in the housing finance system:

- Reduce risk to taxpayer
- Develop new investor base
- Reduce concentration of mortgage risk
- Minimizes volatility through economic cycles
- Maintain borrower access to credit

Credit Risk Transfer ("CRT") has developed into a core business strategy which is securely transferring very large amounts of credit risk to private capital via securities and insurance markets.

Freddie Mac has now transferred over $20 Billion of credit risk on single-family loans to private investors on over $500 Billion of loans.
Freddie Mac’s Credit Risk Transfer Structures

ACIS

Structured Agency Credit Risk (STACR®), debt notes are unsecured and unguaranteed bonds issued by Freddie Mac whose principal repayments are determined by the delinquency and principal payment experience on a reference pool of single-family mortgages guaranteed by Freddie Mac (STACR reference pools).

STACR

Seller Indemnification

Seller Indemnification (SI), risk share agreement in which Seller/Servicers cover a portion of loss on the loans they originate and sell or service.

Whole Loan Securitization

Whole Loan Securities (WLS\textsuperscript{SM}), whole loans aggregated by Freddie Mac and subsequently deposited into a trust that issues guaranteed senior and non-guaranteed subordinated securities to the market.

Agency Credit Insurance Structure (ACIS\textsuperscript{®}), insurance policies issued by or ceded to global reinsurance companies to cover a portion of the remaining risk (retained vertical slice) on the STACR or standalone reference pools.
CRT Building Over Several Years

- Creating a CRT market in GSE scale requires the development of multiple CRT offering products.

Progress to Date & Future Goals

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<tr>
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<tbody>
<tr>
<td><strong>Inception</strong></td>
<td><strong>Establishing the Market</strong></td>
<td><strong>Achieving Scale &amp; Depth</strong></td>
<td><strong>Complete development of broad and mature market of GSE-scale</strong></td>
</tr>
<tr>
<td>- Freddie Mac establishes team to develop CRT concepts</td>
<td>- Historical loan credit data released to develop investor demand</td>
<td>- New CRT tools added – <strong>Seller Indemnification, Whole Loan Securitization.</strong></td>
<td></td>
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<td>- FHFA later establishes guidelines governing GSE risk sharing</td>
<td>- First STACR transaction (debt) kick-starts the market</td>
<td>- More risk transferred via &quot;actual loss severity&quot; and longer maturities</td>
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<td>- First ACIS transaction (reinsurance)</td>
<td>- Over 80-LTV loan first included</td>
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<td>- Structure: 10 years, fixed severity only</td>
<td>- Obtained critical mass re: investor participation - over ~195 globally</td>
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Expanding out CRT to GSE Scale will take several more years
Freddie Mac’s Credit Guaranty Business
Key Mortgage Credit Variables

Focus on four fundamental drivers to analyze credit risk and performance

- Home Prices
- Interest Rates
- Loan to Value
- Credit Score (FICO)
Average credit score has significantly improved since the crisis

Credit Score (FICO) Changes

Source: Freddie Mac Single Family Loan-Level Dataset, 30yr fixed rate loans with original LTV's between 60-80, FICO <680
Stability of Credit Profile

Key drivers of reference pool performance have remained stable across STACR/ACIS transactions.

DN Series Credit Profile
60 - 80 LTV Loans

HQ Series Credit Profile
> 80 LTV Loans
Based on the unpaid principal balance of the single-family credit guarantee portfolio, which includes unsecuritized single-family mortgage loans held by the company on its consolidated balance sheets and those underlying Freddie Mac mortgage-related securities, or covered by the company’s other mortgage-related guarantees.

Freddie Mac as Credit Risk Manager

- Banks
- Credit Unions
- Mortgage Brokers
- Others

Risk Distribution:
- Underwriting Standards
- Quality Control
- Servicing Policy
- Servicing Monitoring
- Counterparty Management
- REO Disposition
- Securitization

Central Banks
Federal Reserve
Banks/Credit Union

Pension Funds
Money Managers

(Re)insurance Companies
Sovereign WFs
Hedge Funds
REITs
Credit Risk Management Enhancements

- Established a robust post-crisis infrastructure to manage credit risk
- Consistent, high-quality underwriting standards and standardized servicing guidelines
- Internal and external fraud prevention and quality control review processes

Underwriting
- Documentation Standards and Credit Eligibility Requirements
- Delegated Underwriting Guidelines
- Seller Representations and Warranties

Loan Quality Control
- Post-Close Credit Review
- Quality Assurance
- Compliance Review
- Performing Loan Quality Control Review
- Non-Performing Loan Quality Control Review
- Underwriting Defects Repurchase Process

Seller / Servicer Management
- Seller In-House Quality Control
- Seller Servicer Approval Standards
- Loan Servicer Performance Monitoring and Scorecard
Credit Risk Transfer
CRT Program

ACIS & STACR are the leading products in the GSE Risk Transfer Market

CRT Focus

- Since 2013, Freddie Mac has focused on transferring the credit risk on fixed rate 30 year products, which represents the majority of new loans and nearly all of new credit risk.
  - Expanding credit risk transfer to include additional mortgage products, such as 20 and 15 year fixed rate.
  - Majority of CRT is through the STACR debt note and ACIS (re)insurance offering; tranche structure offers multiple risk preferences.

<table>
<thead>
<tr>
<th>STACR</th>
<th>ACIS</th>
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<tbody>
<tr>
<td>Structured as bond; interest paid to investors based on tranches.</td>
<td>Targets multi-line diversified reinsurers with strong balance sheet / credit ratings, and low correlation to mortgage credit risk.</td>
</tr>
<tr>
<td>The notes are issued at par and include a 12.5 year final maturity.</td>
<td>Can be linked to STACR reference pool or execute on an independent reference pool through ACIS Standalone.</td>
</tr>
<tr>
<td>Static reference pools: No new loans can be added to the reference pool.</td>
<td>Partial collateralization.</td>
</tr>
</tbody>
</table>
STACR and ACIS programmatically transfer risk on the same reference pool and leverage the same mezzanine pool structure.

**Key Structural Considerations**

- Structured similar to an aggregate excess of loss contract
- Freddie Mac transfers risk on mezzanine tranches, and B1 tranche; retains a vertical slice of every tranche to demonstrate aligned incentives
- Actual loss calculation mimics cash flows from underlying collateral
- 12.5-year transaction limit, amortizes with prepay and loss
- Early cancellation option after Year 5

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**CRT Structure**

<table>
<thead>
<tr>
<th>STACR/ACIS shared Reference Pool</th>
<th>30 Year Fixed Rate Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepayments</td>
<td></td>
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<tr>
<td>Losses</td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td></td>
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<tr>
<td>M2</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td></td>
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</table>

**Freddie Mac Retains Catastrophic Risk**

- Risk Retained by FRE

*Structure is for illustration purposes only, portions of transactions insured through ACIS or retained can vary with each deal. Image is not drawn to scale.*
Since inception, Freddie Mac has transferred over $7 Billion of mortgage credit risk through the ACIS program.

ACIS is the leading (re)insurance product in the GSE credit risk transfer marketplace.

Reinsurers have become a core investor our CRT program through ACIS.

Freddie Mac is actively expanding reinsurer participation through ACIS enhancements.

**Key Stats of ACIS Program:**

- 27 ACIS Transactions
- $7.2 Billion of Limit Placed
- 30 Unique Participants
Historical and Recast Loss History
ACIS 2017-5 Reweighted by LTV & FICO

**Historical losses would be lower than ACIS detachment point even during crisis period**

**ACIS 2017-5 Structure**

- **M1**
- **M2**
- **B1**
- **B2**

**Historical and Reweighted Losses**

- **Cumulative Loss (% of UPB)**

**For Freddie Mac data above:**

- Net Losses are calculated as follows: Collateral Deficiency + Delinquent Interest + Expenses – MI Recoveries – Non MI Recoveries
- Freddie Mac data does not include bulk settlements
- Assumes 35bps servicing fee to calculate delinquent interest
- Collateral Deficiency: Defaulted UPB – Net Sales Proceeds

**Source:**

Freddie Mac Single Family Loan-Level Dataset

**Notes:**

- Performance reflects activity through September 2016 using the March 2017 data release on 30-year loans with LTV > 80% and <=97%
- Cumulative Losses do not include modification losses
- Data is weighted in proportion to ACIS 2017-5 FICO and LTV
- Historical loss experience truncated to claims paid within 12.5 years to reflect treaty term of 12.5 years

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Data Transparency

**Freddie Mac’s Single-Family Loan-Level Dataset**

- Publicly disclosed loan-level origination and monthly loan performance data on a portion of Freddie Mac’s single-family mortgages.
- Full data set includes ~22.5 million fixed-rate mortgages originated between January 1, 1999 and September 30, 2015.
- Includes actual loss data and credit performance information up to and including property disposition.
  - This level of quality and historical data is generally not seen in the private label RMBS market.
- Freddie Mac has created a smaller dataset for those who do not require the full dataset or do not have the capability to download the full dataset.
- Investors can rely upon the dataset to model transaction projections and performance.

**STACR Datasets and Third-Party Tools**

- Freddie Mac also releases loan level data for all STACR deals on a monthly basis. New disclosure fields include updated credit score and estimated loan to value.
- Several broker dealers and third-party providers have models available for investors to analyze credit risk transfer transaction, e.g. Bloomberg and Corelogic.

*Broad availability of tools and data transparency to help investors assess mortgage credit risk and credit risk transfer transactions*
Two paths for reinsurer participation in ACIS

**Streamlined**

- Enables reinsurer to participate at limited levels, establish familiarity with ACIS transactions and mortgage credit.
- Approval based on review of publicly available information.
- Does not guarantee full approval.
- Includes market-based partial collateralization; collateral levels driven by ratings and tranche participation.

**Full Approval**

- Enables greater levels of participation and potential for lower collateral.
- Meet with reinsurer senior management.
- Assess reinsurer risk management framework and management of mortgage credit risk.
- Analyze public and non-public information to evaluate credit quality, financial strength, capital adequacy; benchmark against peers.
### Key Due Diligence Factors

<table>
<thead>
<tr>
<th>Financial &amp; Operating Performance</th>
<th>Capital Adequacy</th>
<th>Risk Management</th>
<th>Support Structure</th>
</tr>
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<tbody>
<tr>
<td>Stable historical performance; financial statements of the entity writing the ACIS policy.</td>
<td>Rating agency excess capital assessment (e.g. S&amp;P Excess Capital and A.M. Best stressed BCAR score).</td>
<td>Strength of risk management framework.</td>
<td>Parental support agreements or internal reinsurance contracts with participating entity (if applicable).</td>
</tr>
<tr>
<td>Investment portfolio composition.</td>
<td>Internal economic capital model results.</td>
<td>PMLs and other risk exposure relative to limits (e.g., Realistic Disaster Scenarios).</td>
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<tr>
<td>Existing exposure to mortgage-related securities (e.g., non-Agency MBS).</td>
<td>Third-party reserve studies/actuarial reports.</td>
<td>Business line and geographic diversification.</td>
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</table>
# ACIS Deal Calendar

<table>
<thead>
<tr>
<th>STACR Deal Name</th>
<th>STACR Expected Issuance</th>
<th>ACIS Deal Name</th>
<th>ACIS Deal Size</th>
<th>ACIS Expected Execution Date</th>
<th>Key Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>STACR 2017 HQA-2</td>
<td>June</td>
<td>ACIS 2017-5</td>
<td>$263.3M</td>
<td>July 2017 (Materials available June)</td>
<td>&gt;80% LTV loans, Aug - Nov 2016 production</td>
</tr>
<tr>
<td>STACR 2017 DNA-3</td>
<td>September</td>
<td>ACIS 2017-6</td>
<td>TBD</td>
<td>October 2017 (Materials available September)</td>
<td>60%-80% LTV loans, Nov 2016 – Jan 2017 production</td>
</tr>
<tr>
<td>STACR 2017 HQA-3</td>
<td>October</td>
<td>ACIS 2017-7</td>
<td>TBD</td>
<td>November 2017 (Materials available October)</td>
<td>&gt;80% LTV loans, Dec 2016 – Mar 2017 production</td>
</tr>
<tr>
<td>n/a</td>
<td>n/a</td>
<td>ACIS 2017-8</td>
<td>TBD</td>
<td>December 2017 (Materials available November)</td>
<td>15/20-year Standalone</td>
</tr>
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