

Agency CMBS Market Primer

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Introduction

The Agency CMBS market includes various mortgage-backed securities (MBS), where the underlying assets are commercial real estate, predominantly multifamily properties. Similar to their well-known larger cousins, the residential Agency MBS products, they have either an explicit US government guarantee or are guaranteed by one of the Government Sponsored Enterprises (GSEs); however, one important difference sets them apart from Agency RMBS – the existence of strong call protection provisions for the underlying loans, which curb voluntary prepayments and provide a cushion to the undesirable negative convexity that is generally present in RMBS. These unique features make Agency CMBS an attractive asset class for fixed-income bond investors.

The Agency CMBS market provides financing to borrowers on multifamily and healthcare properties as well as to small business owners with public policy goals (including affordable housing, community development, and job creation and so on). Issuance has increased significantly since the recession because of a void left by private commercial real estate lenders, most notably by CMBS issuers.

With the increased depth and liquidity in this well-established corner of the Agency universe, we present a survey of various Agency CMBS products, including the following major securitization programs:

- Ginnie Mae Project Loan REMICs;
- Fannie Mae Multifamily DUS MBS, DUS Megs, and DUS REMICs;
- Freddie Mac Multifamily K-Deals; and
- Small Business Administration (SBA) Programs including SBA 7(a) Pools, SBA DCPCs (CDC/504), and SBIC Debentures.

Some of the Agency CMBS products are traded as single-pool MBS (i.e., project loan certificates, DUS MBS); however, we focus mainly on multiple-pool structures (i.e., REMICs, Megs) in which investors get the diversification benefits and improved liquidity of larger issue sizes.

We cover the basic features of each product, discussing issuance trends, collateral characteristics, loan origination processes, call provisions, deal structures, market pricing conventions, and prepayment and default analysis. We also provide a summary matrix highlighting the commonalities and differences for each sector.

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Agency CMBS Summary Matrix

	Ginnie Mae Project Loan REMICs	Fannie Mae DUS Megas, DUS REMICs	Freddie Mac K-Deals	SBA 7(a) Pools	SBA DCPC (Development Company Participation Certificates)	SBIC Debentures
Program	FHA/GNMA Project Loans	DUS MBS (Delegated Underwriting Servicing)	Capital Markets Execution (CME®)	SBA 7(a) Loan Program	SBA 504/CDC Loan Program	Small Business Investment Company (SBIC) Program
Market Size (Outstanding Balance)	\$45 billion	DUS Mega: \$12 billion DUS REMIC: \$10 billion	\$19 billion	\$17 billion	20yr DCPC: \$24 billion 10yr DCPC: \$530 million	\$4.6 billion
Bloomberg Ticker	GNR	Mega: FN REMIC: FNA	FREMF (FHMS for guaranteed classes)	SBA	SBAP	SBIC
Example Deal	GNR 2011-58	Mega: FN FN0002 REMIC: FNA 2011-M3	FREMF 2011-K13	SBA 509069	SBAP 2011-20F SBAP 2011-10D	SBIC 2011-10A
Deal Structure	Multi-tranche, sequential pay classes.	Mega: Single-tranche, pass through REMIC: Multi-tranche, sequential pay classes	Multi-tranche, sequential pay classes with credit enhancement	Single-tranche, pass through	Single-tranche, pass through	Single-tranche, pass through
IO Class	Yes	Mega: No REMIC: Yes	Yes (multiple)	Optional	No	No
Average Deal Size since 2010	\$325 million	Mega: \$77mn (\$7mn - \$315mn) REMIC: \$550mn (\$380-\$866mn)	\$1.1 billion	\$9 million	20yr DCPC: \$283 million \$223mn - \$334mn	\$570 million
Range	\$180mn - \$780mn		\$529mn - \$1.25 billion	\$1mn - \$75mn		\$339mn - \$823mn
Average # of Loans	65	Mega: 25 REMIC: 133	70	33	20yr DCPC: 508 10yr DCPC: 49	195
Loan Terms (most popular)	Fixed-rate, 35-40 year maturity with full amortization	Fixed-rate, 10yr balloon maturity with 30yr amortization (10/9.5s)	Fixed-rate, 10yr balloon maturity with 30yr amortization	Floating-rate, 5 to 25 year maturity loans. Indexed to Prime Rate, resetting monthly or quarterly	Fixed-rate, 20-year maturity with full amortization (for 20yr DCPC)	Fixed-rate, 10 year maturity, non-amortizing loans
Payment Schedule	Monthly	Monthly	Monthly	Monthly	Semi-annual	Semi-annual
Collateral / Property Types	<ul style="list-style-type: none"> Mostly low- and moderate-income multifamily housing and healthcare loans (nursing homes and assisted-living facilities) Proceeds can be used for new construction or substantial rehabilitation projects, as well as refinancing of existing mortgages 	<ul style="list-style-type: none"> Mostly standard conventional multifamily housing Other eligible property types: affordable multifamily housing and low-income housing tax credit, seniors housing, manufactured housing, coops, student housing, military housing, rural rental housing 	<ul style="list-style-type: none"> Mostly standard conventional multifamily housing secured by occupied, stable and completed properties Limited amount of age-restricted multifamily, student housing, cooperative housing and Section 8 housing assistance payments (HAP) contracts 	<ul style="list-style-type: none"> Full-recourse loans to small businesses Proceeds are used for expansion/renovation; new construction, purchase of land or buildings; purchase equipment, fixtures, lease-hold improvements; working capital; refinance debt for compelling reasons; seasonal line of credit, inventory 	<ul style="list-style-type: none"> Real estate for 20yr DCPC and machinery for 10yr DCPC Loan proceeds can only be used for fixed asset projects, such as purchasing and/or improving land, constructing new facilities, renovating existing facilities or purchasing machinery/equipment The program is not applicable for rental real estate investment, working capital & inventory 	<ul style="list-style-type: none"> Non-recourse loans to small businesses Non-recourse equity investments in small businesses Proceeds are used for operating capital purposes and for acquisitions of existing business, as well as other activities including research & development and marketing

Agency CMBS Summary Matrix

	Ginnie Mae Project Loan REMICs	Fannie Mae DUS Megas, DUS REMICs	Freddie Mac K-Deals	SBA 7(a) Pools	SBA DCPC (Development Company Participation Certificates)	SBIC Debentures
Loan Origination Process	<ul style="list-style-type: none"> • Originated and underwritten by a network of HUD-approved private lenders according to FHA statutory requirements • Loans are insured by HUD, and Ginnie Mae provides additional guarantee 	<ul style="list-style-type: none"> • Origination and servicing guidelines are set by Fannie Mae in DUS program (Delegated Underwriting Servicing) • Loans are originated, underwritten and serviced by a network of private DUS lenders • Losses are shared by a DUS lender and Fannie Mae according to a loss sharing arrangement 	<ul style="list-style-type: none"> • Loans are sourced/originated by Freddie Mac's Program Plus® Seller/Service network of private lenders • Loans are underwritten in-house by Freddie Mac through its Capital Markets Execution (CME®) program 	<ul style="list-style-type: none"> • Originated and serviced by private sector lenders • Lenders can sell the SBA guaranteed portion of the loans (75% to 85% of balance) into secondary market, which are pooled and sold to institutional investors as SBA Pools 	<ul style="list-style-type: none"> • CDC/504 lending program involves two loans: (1) a senior lien loan from a private sector lender (typically banks) covering up to 50% of the project cost /collateral, (2) a junior lien loan through the CDC (Certified Development Company, licensed by SBA) covering up to 40% of the project cost • Only the junior liens from CDCs are backed by a 100% SBA-guaranteed debenture, which are pooled and securitized as SBA DCPCs 	<ul style="list-style-type: none"> • Small Business Investment Companies (SBICs) are privately owned venture capital funds licensed and regulated by the SBA • SBICs raise funds from private investors which are matched by SBA at a 2:1 ratio of public to private funding; i.e. for every \$2 debt capital ("Leverage") borrowed from the SBA, the SBICs must raise \$1 of capital from private investors
Guarantee	Full faith and credit guarantee of US government	Fannie Mae guarantee	Freddie Mac guarantee (on the senior classes)	Full faith and credit guarantee of US government	Full faith and credit guarantee of US government	Full faith and credit guarantee of US Government
Nature of Guarantee	<ul style="list-style-type: none"> • Full recovery and timely payment of principal and interest • Prepayment penalties are not guaranteed for IO bondholders 	<ul style="list-style-type: none"> • Full recovery and timely payment of principal and interest • Yield maintenance (YM) payments associated with prepayments are not guaranteed 	<ul style="list-style-type: none"> • Timely payment of interest to senior classes (Classes A1, A2 and X1) • Timely payment of principal to the classes A1 and A2 upon maturity of any loan, and ultimate payment of principal by final distribution date (no extension) • Reimbursement of any realized losses and expenses allocated to senior classes upon resolution of defaulted loans (not on the date loan default occurs) 	<ul style="list-style-type: none"> • Full recovery and timely payment of principal and interest 	<ul style="list-style-type: none"> • Full recovery and timely payment of principal and interest 	<ul style="list-style-type: none"> • Full recovery and timely payment of principal and interest

Agency CMBS Summary Matrix

	Ginnie Mae Project Loan REMICs	Fannie Mae DUS Megs, DUS REMICs	Freddie Mac K-Deals	SBA 7(a) Pools	SBA DCPC (Development Company Participation Certificates)	SBIC Debentures
Call Protection	<ul style="list-style-type: none"> • “2/8”: Lockout for 2yr, followed by 8yr prepayment penalty which declines 1% annually from 8% to 1%. This is the most popular call provision in recent years. Another popular call • “5/5”: Lockout for 5yr; followed by 5yr of prepayment penalties (typically 5%,4%,3%,2%,1% penalty). This was the predominant call protection type for older cohort project loans (i.e. pre-2005) 	<ul style="list-style-type: none"> • “10/9.5” DUS MBS: Yield Maintenance for 9.5yr, open 6 months (most popular) • “7/6.5” DUS MBS: Yield Maintenance for 6.5yr, open 6 months • Call protection features can also include defeasance, prepayment fees and lockout 	<ul style="list-style-type: none"> • Lockout and Defeasance for the term of the loan except for the last 3 months 	<ul style="list-style-type: none"> • Prepayment penalty during the initial three years for loans with maturities 15-years or longer 	<ul style="list-style-type: none"> • 20yr DCPC: 10 year of prepay penalties (penalty equal the coupon in 1st year, reduced by 10% annually until year 11) • 10yr DCPC: 5 year of prepay penalties (penalty equal the coupon in 1st year, reduced by 20% annually until year 6) 	<ul style="list-style-type: none"> • No call protection feature: borrowers can prepay in whole date. However partial prepayments are not allowed
Market Pricing Assumption	<ul style="list-style-type: none"> • 15% CPJ: the conventional PLD curve for default, and 15% flat CPR for voluntary prepayments after lockout 	<ul style="list-style-type: none"> • 0% CPY: zero default throughout life and no prepayment after the yield maintenance period ends 	<ul style="list-style-type: none"> • 0% CPR 	<ul style="list-style-type: none"> • 12% to 14% CPR 	<ul style="list-style-type: none"> • 5% CPR (secondary trading) • 0% CPR (new issue pricing) 	<ul style="list-style-type: none"> • 7% CPR

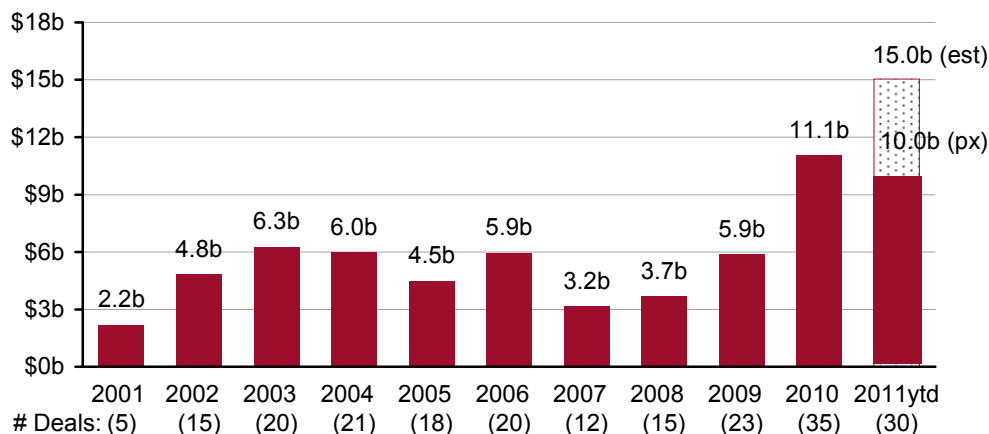
Source: Credit Suisse, HUD, Ginnie Mae, Fannie Mae, Freddie Mac, SBA, the BLOOMBERG PROFESSIONAL™ service

Ginnie Mae Project Loans & GNR REMICs

GNR REMIC market size: \$45 billion outstanding

The outstanding volume of Ginnie Mae Project Loan REMICs (also called GNR REMICs) is \$45 billion; \$63 billion has been issued since 2001.¹ Prior to 2010, annual issuance ranged from \$3 billion to \$6 billion, with an average of 18 deals each year. Issuance has surged since the beginning of the recession: in 2010, 35 deals totaling \$11 billion priced, and 2011 is on track to break the record, with issuance in the first eight months of 30 deals totaling \$10.0 billion. At this pace, 2011 GNR REMIC volume would top \$15 billion (Exhibit 1).

Exhibit 1: GNR REMIC issuance is on track for another record year



Source: Credit Suisse, Ginnie Mae
 * GNR Re-REMIC transactions are excluded.

Collateral Characteristics

A typical GNR REMIC deal includes 40 to 100 project loans, which are mostly 35- to 40-year fully amortizing mortgages. Average deal size has been approximately \$325 million since 2010 versus \$285 million for earlier vintages. The wide range of project loan collateral includes the following:

- low- and moderate-income multifamily housing;
- nursing homes and assisted living facilities for the elderly;
- hospitals and health care centers; and
- condominiums, cooperatives, multifamily rental units and rural developments

Project loans are originated and underwritten by a network of HUD-approved private lenders, according to FHA statutory requirements.² The top originators in fiscal year 2010 included Berkadia Commercial Mortgage, P/R Mortgage & Investment Corp, Prudential Huntoon Paige, Red Mortgage Capital, Greystone Servicing and CWC Capital.³

Each project loan is underwritten according to the guidelines of the specific section of the act, and as an industry convention, it is customary to refer to the program by the section number by which it is authorized (e.g., Section 221d4 for new construction multifamily or Section 232 for healthcare project loans). In turn, FHA provides mortgage insurance for the project loans, which then allows them to be traded as FHA-insured pass-through certificates.

¹ Prior to the launch of Ginnie Mae REMIC (GNR) shelf in 2001, Ginnie Mae project loans were pooled and securitized under the Fannie Mae multifamily REMIC shelf (between 1995 and 2000). A total of \$5.2 billion Ginnie Mae project loans were securitized under the Fannie Mae REMIC deals, which also included Fannie Mae multifamily certificates as collateral.

² The National Housing Act of 1934 legislated the Federal Housing Administration (FHA) with the mandate to preserve the health of the single and multifamily housing markets. The FHA is now a part of the Department of Housing and Urban Development (HUD), which created Ginnie Mae to facilitate the secondary market of FHA-insured loans. Outstanding FHA-insured project loans totaled \$65 billion as of 2011 H1 of which \$55 billion carried an additional Ginnie Mae guarantee; \$45 billion of the \$55 billion was securitized in GNR REMICs.

³ In FY 2010, lenders originated 52 apartment and 232 health care loans, which were processed by HUD's 18 multifamily hubs.

An additional Ginnie Mae guarantee is usually purchased for a small fee (usually 13 bp plus a nominal commitment authority fee) by the mortgage banker to ensure the timely payment of all principal and interest payments. The resulting Ginnie Mae pass-through certificate is also called a “Ginnie Mae pool.” Almost every pool is backed by a single FHA project loan (99.4% by count); therefore, in this primer, we use the term “project loan” interchangeably with “Ginnie Mae pool”, for simplicity. Originators typically retain the servicing rights. The servicing fee is typically 12 bp.

Stable underwriting criteria

The underwriting criteria for project loans have been fairly consistent over the last decade. This compares favorably to the underwriting on private label CMBS multifamily loans, which had become frothier (e.g., pro forma loans) prior to the recession. Nevertheless, HUD tightened the underwriting requirements slightly in September 2010. The minimum DSCR required is generally 1.15x to 1.20x across different Sections (1.11x to 1.18x for pre-September 2010 project loans); maximum LTVs range from 83% to 90% (compared to 85% to 90% for pre-September 2010 loans). Appendix 1 includes a summary of various HUD lending programs and the underwriting criteria for some of the major sections.

70% multifamily vs. 30% healthcare

By property type, multifamily project loans make up approximately 70% of the collateral for GNR REMICs, and the rest are predominantly healthcare loans. Recent vintage deals may also include a small percentage, typically less than 5%, of rural development loans (we grouped them under the multifamily category).⁴ These loans carry the US Department of Agriculture guarantee, pursuant to the Section 538 Guaranteed Rural Rental Housing Program, instead of the HUD/FHA guarantee.

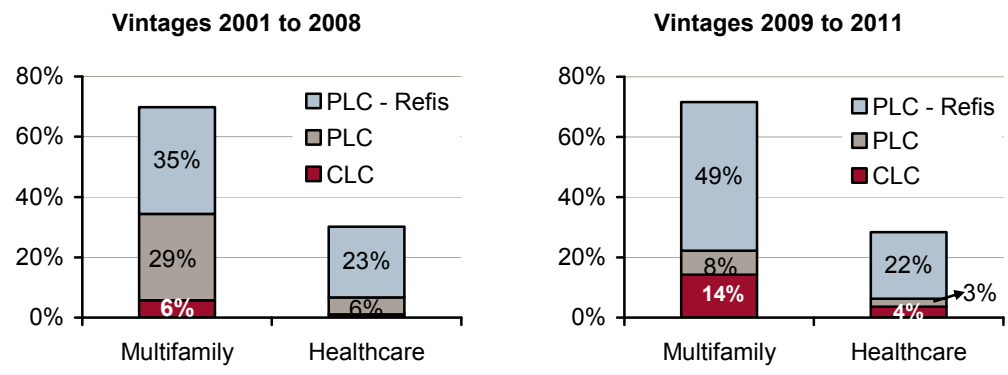
More refis in recent vintage REMICs ...

The project loan proceeds can be used for new construction (or substantial rehabilitation), acquisitions or refinancing existing debt. Refinanced project loans, the “refis”, are typically Section 223a7 or Section 223f loans, and they constitute more than half of GNR REMICs collateral. We note that recent vintage REMICs have higher percentages of refis: 71% for post-2009 deals versus 59% for earlier vintages.

... and more CLCs

The underlying project loans in GNR REMICs can be either construction project loans (CLC) or permanent project loans (PLC).⁵ A CLC will be converted into a PLC when construction is completed upon final FHA endorsement. CLCs represented 7% of original GNR REMIC collateral for pre-2009 vintage deals. However, recent vintages have double-digit CLC concentrations (18% on average). Exhibit 2 provides a detailed summary of various collateral sub-types for recent and older vintages.

Exhibit 2: Dissection of GNR REMIC collateral



Source: Credit Suisse, Ginnie Mae

⁴ One notable exception is the GNR 2008-52 deal in which rural development loans made up 41% of the underlying collateral.

⁵ This applies both for the multifamily and healthcare project loans.

Securitization Process

A single project loan can be traded as a stand-alone certificate (PLC or CLC); however, the majority are pooled and securitized in multiple-loan REMIC form. For example 85% of project loans issued in 2009 and 2010 ended up in GNR REMICs.⁶ These REMICs are efficient investment vehicles, as pooling large numbers of project loans provides geographic, coupon and section (i.e., program type) diversity. In addition, the time-tranched nature of project loan REMIC securities makes it possible to tailor risk and return characteristics, which makes it easier to buy and sell project loans to a broad set of investors with different objectives. This, in turn, improves both the marketability and the liquidity of securitized deals.

Explicit guarantee of the US Government

Project loans have an explicit US government guarantee in the form of FHA insurance, which guarantees eventual payment of principal, less an assignment fee (1%) and one month of interest, and an additional Ginnie Mae guarantee, which ensures the full recovery and timely payment of principal and interest.⁷ By virtue of this dual insurance on the underlying project loans, a GNR REMIC deal inherits the explicit government guarantee for the full recovery and timeliness of all cash flows when any of the project loans default.

Another advantage project loans enjoy is that bank regulators attach a zero-percent risk weighting to mortgages guaranteed by Ginnie Mae, and therefore to GNR REMIC bonds.

Call Protection

Call protection on project loans is usually in the form of a hard lockout period followed by a time period when penalties are imposed on voluntary prepayments. The most commonly used call provision in recent years has been a two-year lockout followed by a declining eight-year penalty, which starts at 8% of the outstanding principal amount in year 3 and declines 1% each year after that. We refer to this as a "2/8." The second most frequent call type is "1/9"s. For 2010 issued GNR REMICs, 80% of project loans were "2/8"s and 11% were "1/9"s.⁸

Call provisions have evolved since the mid-2000s for project loans. The "5/5" structure (five-year lockout/five-year declining prepay penalty) was the predominant call type historically; 70% of loans in 2003 vintage GNR REMICs were "5/5"s.

Deal Structure

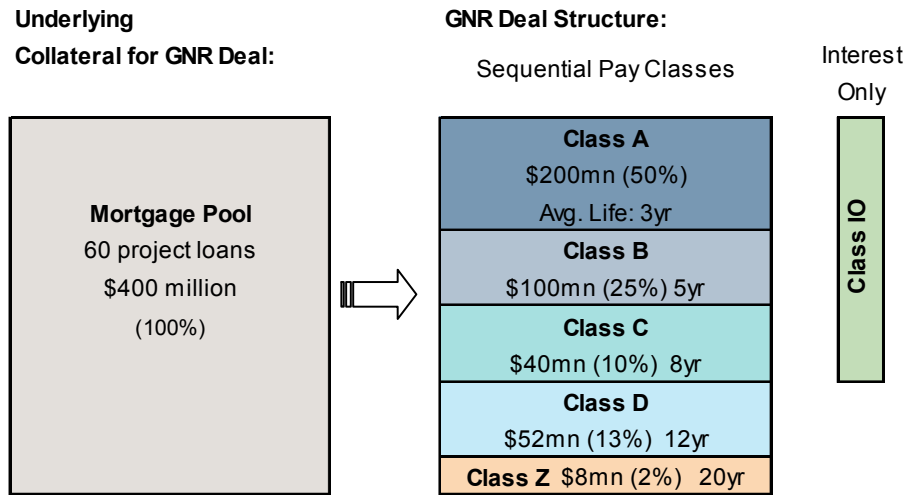
A typical GNR REMIC deal has a time-tranched structure of sequential-pay classes. The typical four-class structure (Classes A, B, C, and D) has average lives of 3-, 5-, 8- and 12-years, respectively. A 20-year Z class accrues interest that goes to pay down those four classes first while adding to the principal balance of the Z class. An IO class gets the excess interest. In addition, the IO class receives all the prepayment penalties collected by the trustee. We illustrate the generic GNR REMIC deal structure in Exhibit 3.

⁶ Approximately half of the project loans not pooled in GNR REMICs are the Section 242 Acute Care Hospital project loans. Under the current guidelines, Section 242 loans may not include any equipment as a part of the security for such loans in order to be considered as eligible collateral for REMIC transactions.

⁷ Ginnie Mae's fee is 13 bp.

⁸ We also note the existence of other call structures in GNR REMICs such as "0/10", "3/7", "5/5", "10/0", but they are infrequent. It is also possible to have different prepayment penalty patterns within a structure, for example a "2/8" with 8% penalty during the initial three-year after lockout, followed by 5%, 4%, 3%, 2%, 1%, but these are also infrequent.

Exhibit 3: Ginnie Mae project loan REMIC deal – time tranching



Source: Credit Suisse

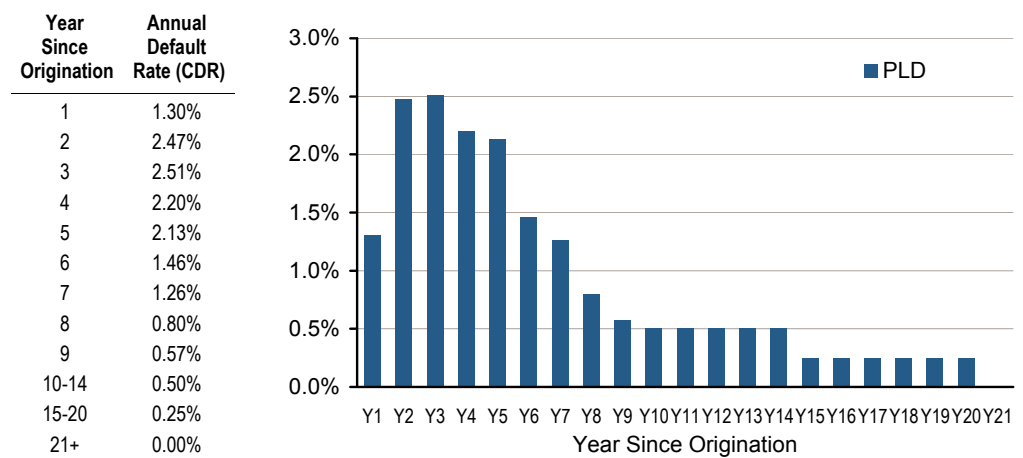
Pricing Convention: 15% CPJ

The market pricing convention for GNR REMICs is 15% CPJ, which is a combination of Project Loan Default curve (PLD) and a flat 15% CPR for voluntary prepayments.

The PLD curve is used to estimate the default behavior of project loans based on seasoning. Default rates are expressed as a per annum percentage of the then-outstanding principal balance of a project loan in relation to its loan age. The hump-shaped curve peaks in year 3 with a 2.51% annual default rate, then trends down in the subsequent years as shown in Exhibit 4. The PLD curve was developed more than a decade ago, by DLJ, based on the historical project loan default experience.

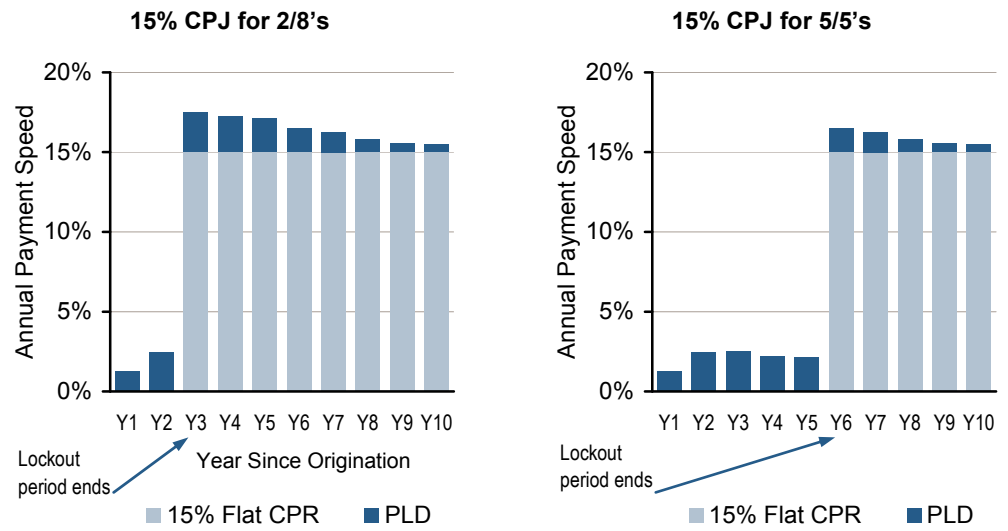
For voluntary prepayments, the market convention is to use 15% CPR **after the lockout period ends**. Exhibit 5 shows the theoretical 15% CPJ payment speeds for “2/8” and “5/5” project loans.

Exhibit 4: Project loan default (PLD) curve



Source: Credit Suisse

Exhibit 5: Annual payment speeds implied by the 15% CPJ assumption



Source: Credit Suisse

Default Analysis

Project loan defaults are generally driven by soft property market fundamentals (i.e., rising vacancies, declining property values), similar to other multifamily loans. Although timely and full principal is guaranteed to GNR REMIC bondholders upon default, this is a form of involuntary prepayment in which IO bondholders do not receive any prepayment penalty and premium-priced bond holders are paid back at par.

Therefore, it is important to understand how project loan defaults are defined/labeled before we present the statistics on actual default experience for GNR REMIC project loans. There are three workout strategies for defaulted project loans: assignment, modification and override.

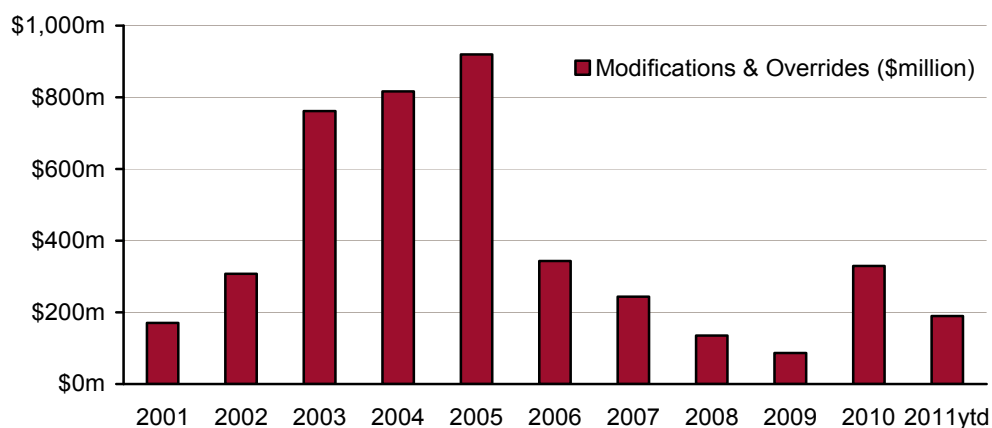
Project Loan Default Types

Assignment is the traditional liquidation procedure in which a servicer assigns a defaulted project loan to HUD for execution of a claim, foreclosure and liquidation. At the assignment date, GNR REMIC investors receive full principal payment.

Modifications and overrides are alternative workout remedies also applicable to delinquent loans. In both cases, an assignment is bypassed; therefore, a claim is avoided against the HUD insurance fund mitigating losses. Historically for modifications, borrowers used to negotiate with the servicer for a lower rate and/or a less restrictive call protection provision. HUD would subsequently approve these modifications even though it was not involved with the negotiations. For overrides, borrowers negotiate directly with HUD to void the call protection provision, the Ginnie Mae pool gets paid off in full without any penalties collected and the underlying loan is re-securitized with a different Ginnie Mae pool number.

These resolution strategies came under the spotlight in mid-2000s amid allegations of “contrived defaults.” In these defaults, a borrower and a servicer conspire to circumvent the prepayment provision, mostly by arguing there has been deterioration in the property’s financial viability, and then refinancing into a new project loan without any penalties collected on the former one. The controversy dissipated in the latter half of the past decade as incidents of modifications and overrides declined (Exhibit 6).

Exhibit 6: Project loan modifications & overrides



Source: Credit Suisse, HUD, Ginnie Mae

Since 2010, modifications, mostly in the form of Partial Payments of Claims (PPC), have been on the rise for distressed project loan borrowers; however, unlike the mid-2000 modifications, HUD now actively participates in these negotiations and requires thorough underwriting as well as an equity contribution from the borrowers.⁹

⁹ A Partial Payments of Claims (PPC) effectively results in payoff of the Ginnie Mae pool without collection of any prepayment penalty: A new “recast first mortgage” note is issued as a new Ginnie Mae pool (typically around 50% of outstanding balance), and the second mortgage is held by HUD with the right to sell it.

From the investor's perspective, both modifications and overrides have the same impact as a traditional default (i.e., assignment) and no prepayment penalties are collected. As mentioned above, this distinction is especially critical for IO investors, who are usually entitled to receive prepayment penalties.

GNR REMIC Defaults

Actual defaults (including modifications and overrides) for GNR REMIC project loans have been well below those estimated by the PLD curve, with the exception of the 2001 to 2003 vintages (which were mainly driven by modifications and overrides done in mid-2000s). Exhibit 7 shows the PLD curve in comparison to the annual default rates for each GNR REMIC vintage since securitization. We also calculate the equivalent default rates for the initial three-year, six-year and life-to-date periods by vintage, then we compare them to the PLD curve.

Exhibit 7: PLD versus actual annual default rates by vintage

Year Since Securitization	PLD	GNR REMIC Vintage									
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	1.3%	0.5%	1.6%	1.2%	0.5%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%
2	2.5%	3.4%	8.1%	3.5%	1.2%	0.5%	0.2%	1.7%	0.2%	0.1%	
3	2.5%	3.2%	5.9%	1.2%	0.7%	0.8%	0.6%	1.7%	0.1%		
4	2.2%	4.2%	2.9%	1.5%	0.4%	1.4%	1.7%	1.9%			
5	2.1%	0.6%	1.4%	0.6%	0.5%	0.2%	1.3%				
6	1.5%	2.2%	0.3%	1.3%	1.2%	1.6%					
7	1.3%	0.3%	0.6%	1.5%	0.6%						
8	0.8%	0.7%	0.3%	1.7%							
9	0.6%	0.0%	1.1%								
10	0.5%	1.0%									

Equivalent Flat Default Rates (CDRs):											
Year 1 to Year 3	2.1%	2.4%	5.2%	2.0%	0.8%	0.5%	0.3%	1.1%	0.1%	N/A	N/A
Year 1 to Year 6	2.0%	2.4%	3.4%	1.5%	0.8%	0.8%	N/A	N/A	N/A	N/A	N/A
Life-time	1.5%	1.6%	2.5%	1.6%	0.7%	0.8%	0.8%	1.3%	0.1%	0.03%	0.1%

Source: Credit Suisse, HUD, Ginnie Mae

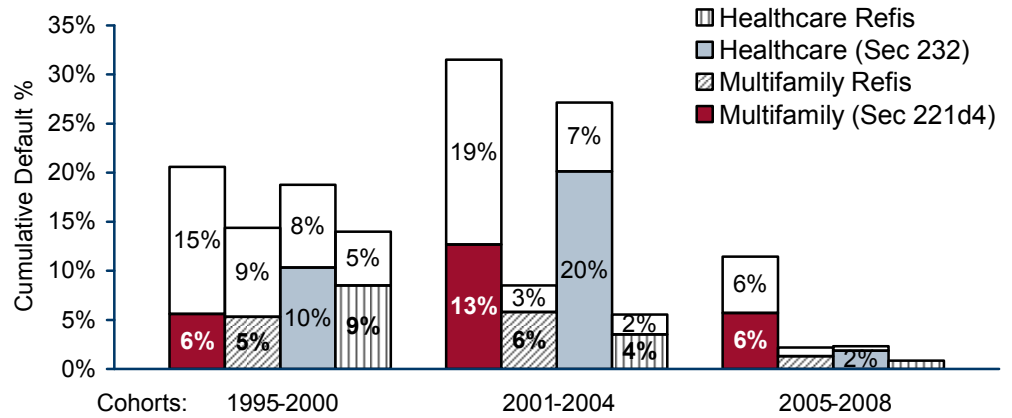
Across all these measures, post-2003 vintage defaults are a fraction of what the PLD curve implies: for the 2004 to 2006 vintages, actual cumulative defaults are running 35% of the PLD-implied cumulative defaults, and for 2008 and later vintages, actual defaults correspond to less than 10% of what the PLD would imply. Even for the 2007 vintage, which is viewed as the worst-performing issue year in recent history, cumulative defaults are only 60% of the PLD so far. This vintage is supposed to have the weakest performance, as the loans were originated when property values were, in general, at peak levels.

Refis have lower default rates

Project loan default rates also differ by the underlying program. In general, refinanced project loans (under Section 223a7 or Section 223f) have lower default rates compared to construction project loans and newly completed project loans. By property type, the results are mixed: multifamily project loans have generally higher total default rates compared to healthcare project loans when the modifications and overrides of mid-2000s are factored in. However, excluding them, regular defaults (assignments) are generally lower for multifamily project loans compared to healthcare loans (Exhibit 8).

Exhibit 8: Regular defaults (assignments) versus modifications/overrides

Modifications/overrides are shown on top for each subtype (in white boxes)



Source: Credit Suisse, HUD, Ginnie Mae

Superior performance relative to private multifamily CMBS

Project loans have performed significantly better than non-agency multifamily CMBS loans since the recession. For 2007 vintage GNR REMICs, 5.4% of the loans have defaulted so far, with another 0.1% 60+-days delinquent as of August 2011. By comparison, for multifamily CMBS loans securitized in 2007, the 60+-day delinquency rate is 27.0% (the foreclosure/REO rate is 18.7%), with another 3.3% already liquidated.

The same conclusion holds for earlier vintages. Total defaults and current 60+-day delinquencies have been around 6% for the 2004/2005 GNR REMICs, compared to approximately 12% for the CMBS multifamily loans in those vintages.

Prepayment Analysis

The annual voluntary prepayment speed, CPR, calculation for project loans at the REMIC level is tricky because each REMIC contains a myriad of call protection types (such as 2/8s, 1/9s, 5/5s and so on). Therefore, CPRs for initial years would be solely based on the few project loans that are not in lockout, and any calculated CPRs would be hard to interpret.

Instead we show the voluntary prepayment rates **after the lockout period** for each origination year (cohort) in Exhibit 9. The earlier cohorts, 2001 and 2002, had generally prepaid at levels consistent with a flat 15% CPR assumption after exiting the lockout period. In contrast, recent cohort (i.e., post-2005) CPRs have been in the single digits.

Exhibit 9: Project loan voluntary prepayments after lockout

Year Since End of Lockout Period	Cohort 2001	Cohort 2002	Cohort 2003	Cohort 2004	Cohort 2005	Cohort 2006	Cohort 2007	Cohort 2008	Cohorts 2001 – 2008
1	41.0%	24.3%	11.9%	7.6%	7.6%	4.7%	2.1%	4.5%	11.3%
2	22.0%	16.1%	9.7%	13.3%	9.9%	3.7%	3.4%	6.7%	9.5%
3	14.9%	12.7%	16.6%	11.2%	3.9%	6.4%	6.7%	11.1%	9.8%
4	16.3%	25.1%	10.0%	17.0%	6.7%	7.8%	7.9%	N/A	11.4%
5	20.4%	21.9%	17.7%	3.7%	9.3%	20.4%	N/A	N/A	13.2%

Source: Credit Suisse, HUD, Ginnie Mae

What Drives Voluntary Prepays for Project Loans

Borrowers often prepay project loans in order to take out equity, either by refinancing at higher proceeds or by selling the underlying property. Another incentive for prepayment arises due to lower project loan rates, enabling borrowers to reduce their debt service payments by refinancing. On the flip side, prepayment penalties are imposed to deter early prepayments.

We employ an S-curve analysis to show the prepayment sensitivities for each of these factors. The S-curve shows how prepayment rates change when the underlying factor (e.g., the change in property prices since origination) varies, assuming all other factors remain constant. Prepayment rates are shown as multiples of the baseline prepayment rate (e.g., 0% change in property values since origination) for different levels of the underlying factor.

Factor #1: Property Price Change (i.e., Equity Take-out)

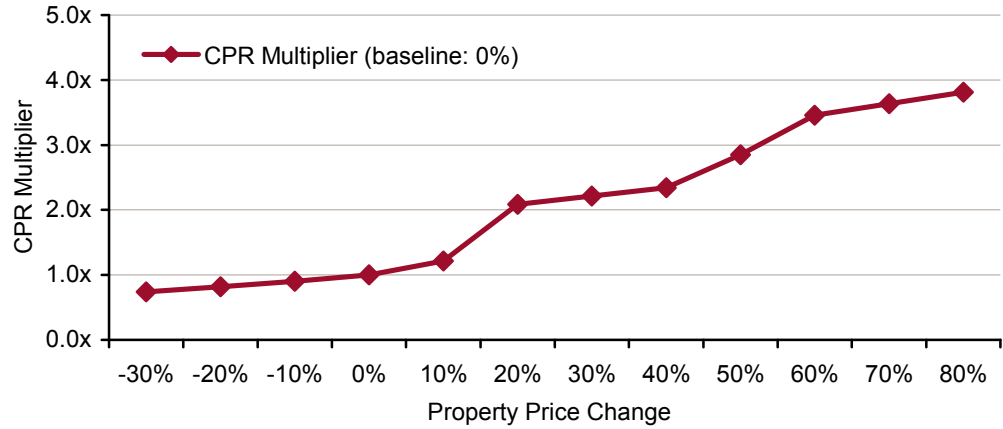
Project loan borrowers build up positive equity as property values increase. In Exhibit 10, we depict how prepayment rates vary based on different levels of equity accumulation since origination. Property price changes are calculated by using the Moody's Multifamily CPPI Index, and CPRs, at each different equity level, are shown as a multiple of the CPR with no additional equity buildup (i.e., 0% change in property value since origination).

The resulting CPR multiples are indeed S-shaped. CPRs are below a 1.0x multiple when property prices decline, and they are significantly above a 1.0x multiple as borrowers accumulate equity. For example, if property prices rise 80% from origination, the CPR is almost four times larger than the base case.

These results also shed light on why we have seen slow prepay speeds so far for recent cohorts, which are dominated by project loans with "2/8" and "1/9" call structures. Borrowers of 2005 to 2008 cohort project loans generally have not built up any meaningful equity during the short lockout period (some have faced significant equity losses) during a period when commercial property prices experienced the worst slump in recent history. Accordingly, prepayments due to equity take-outs/refinancings failed to materialize for these cohorts in initial years after the lockout period ended.

However, we note that multifamily property prices have begun to stabilize and have been increasing since early 2010; therefore, prepayments are likely to accelerate going forward for short lockout loans.

Exhibit 10: Project loan S-curve: property price change



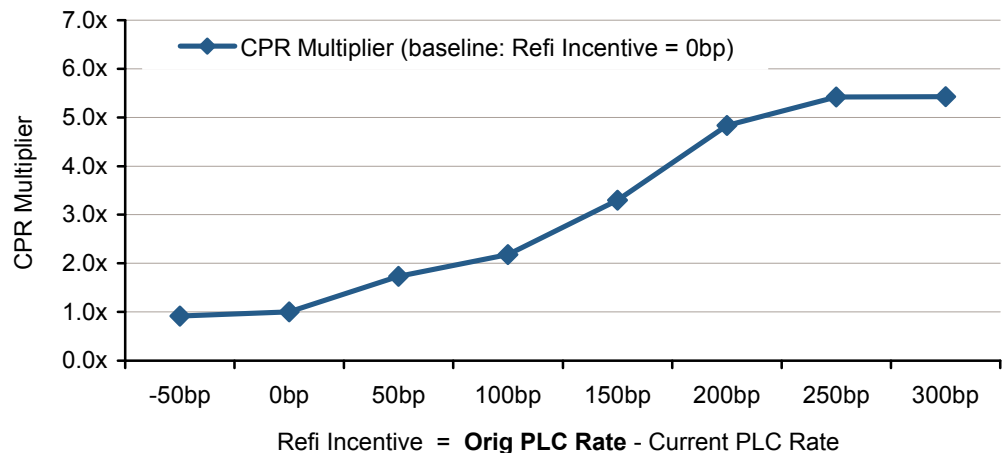
Source: Credit Suisse, HUD, Ginnie Mae

Factor #2: Refi Incentive

Another incentive for borrowers to prepay is the potential savings opportunity by refinancing at a lower rate. Exhibit 11 shows the S-curve for this “refi incentive”, which is the difference between the original loan rate and the current project loan rate (baseline case CPR is set at 0 bp). As expected, borrowers prepay faster when the incentive increases; however, prepay rates drop when current rates are close to, or higher, than the original loan rate.

Going back to “2/8”s and “1/9”s, we note that such loans from 2005-2008 vintages generally carry 5% to 6% coupons¹⁰, which are historically low for project loans (Exhibit 12). However, assuming prevailing project loan rates stay below 5%, prepayments are likely to increase for these loans in the near future.

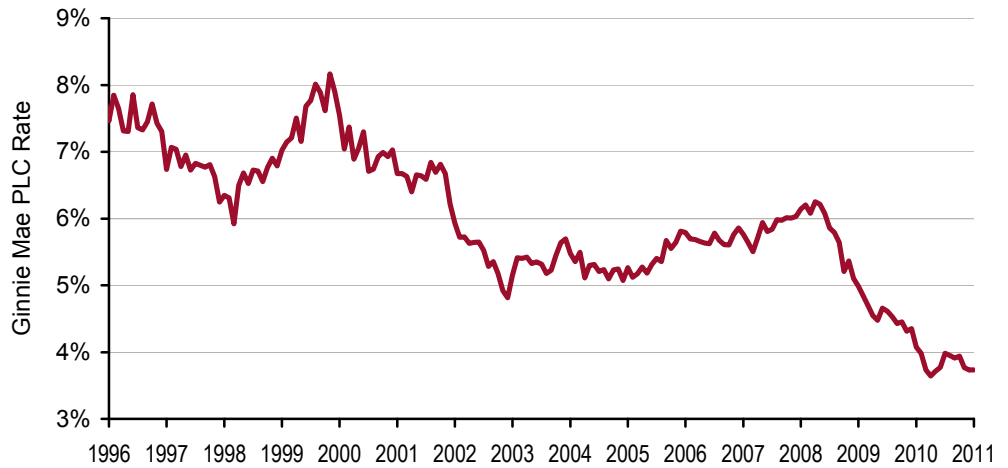
Exhibit 11: Project loan S-curve: Refi incentive



Source: Credit Suisse, HUD, Ginnie Mae

¹⁰ Coupons for multifamily-refi project loans, pool type = PN

Exhibit 12: Ginnie Mae project loan rates (multifamily refis)

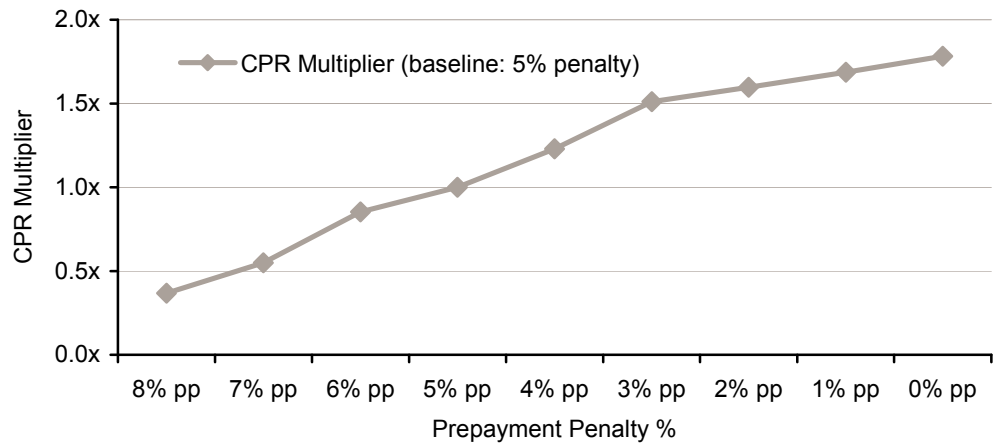


Source: Credit Suisse, HUD, Ginnie Mae

Factor #3: Prepayment Penalties

High prepayment penalties in the initial years after the lockout period are instrumental in deterring borrowers from prepaying. The S-curve for varying levels of prepayment penalties, in which the baseline CPR assumes a 5% penalty, is shown in Exhibit 13. At a 8% penalty, the CPR multiple is 0.37x, implying that the CPR at a 8% penalty is roughly one-third of the CPR at a 5% penalty. As penalties decline gradually each year, the impact of the penalties is less significant on the prepayment behavior in subsequent years. For example, the CPR multiplier jumps from 1.23x (at 4% penalty) to 1.51x (at 3% penalty), but only increases from 1.60x to 1.69x when penalties are 2% and 1%, respectively.

Exhibit 13: Project loan S-curve: prepayment penalties



Source: Credit Suisse, HUD, Ginnie Mae

Prepay speeds for GNR REMICs

Investors often ask for deal (or vintage) CPRs as a way to measure the historical level of voluntary prepayments. As noted above, calculating any CPR since securitization may yield computationally correct, but not necessarily insightful results (this is especially true for less seasoned deals) because of the different call protection features of the underlying project loans. Exhibit 14 shows the myriad of call types for each vintage.

Exhibit 14: Call Protection for GNR REMIC collateral

Percentage of loans (by balance)

# Years in Lockout	GNR REMIC Vintage									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	
No lockout	1%	1%	3%	4%	3%	3%	5%	4%	3%	
1yr	0%	0%	1%	5%	9%	26%	54%	37%	13%	
2yr	0%	1%	1%	5%	38%	48%	29%	39%	58%	
3-4yr	11%	16%	14%	32%	28%	11%	5%	12%	23%	
5yr	55%	55%	64%	46%	20%	8%	6%	2%	1%	
6-9yr	14%	13%	13%	5%	1%	3%	1%	1%	1%	
10+yr	18%	15%	4%	3%	1%	2%	1%	4%	0%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Source: Credit Suisse, HUD, Ginnie Mae

**CPR for a GNR
REMIC is hard to
interpret**

To further illustrate this point, consider a generic deal from the 2006 vintage as an example. During the initial year after pricing, only 3% of the project loans would be prepayable (i.e., project loans without any lockout period). Any calculated **CPR for year 1 after securitization** would be solely based on this small universe. In contrast, the **CPR for year 2 after securitization** would be based on 26% of loans with one-year call protection plus any outstanding loans from the aforementioned 3% bucket with no call protection. In our view, such annual CPR since securitization numbers at the deal (or vintage) level are not easily comparable and hard to interpret for investment analysis.

A more intuitive way to show annual prepayment activity would be to mimic the way annual default activity is measured using a CDR. **This calculation simply sums up all of the voluntary prepayments, each year, and expresses them as a percentage of the outstanding balance at the beginning of the year, regardless of whether the loans are locked out or not.** This is slightly different than the traditional CPR calculation, because CPRs are solely based on loans that are out of the lockout period. Exhibit 15 summarizes these vintage level annual prepayment speeds, since securitization, based on our proposed method.

As expected, for earlier vintages, voluntary prepayment activity was not high during the initial years, since most of the loans were in lockout (mostly “5/5”s), but prepayments increase by year 5¹¹ and year 6 after securitization. The recent vintage REMICs, dominated by “2/8”s and “1/9”s, have lower prepay rates, by our measure, which is consistent with the CPR analysis by cohort in the previous section (Exhibit 9).

Lastly, this methodology can be used for computing total payment speeds, which would include actual defaults (i.e., involuntary prepayments) as well as the voluntary prepayments. The combined results are shown in Exhibit 16.¹²

¹¹ We note that some of the “5/5” project loans could begin to exit the lockout period during the fifth year after securitization, because such loans were acquired by dealers several months prior to pricing the deal.

¹² This information is available for investors on a monthly basis for each GNR REMIC deal on the Credit Suisse Locus website.

Exhibit 15: Voluntary prepay speeds for GNR REMICs

Year Since Securitization	GNR REMIC Vintage								
	2001	2002	2003	2004	2005	2006	2007	2008	2009
1	0.6%	0.3%	0.2%	0.2%	1.0%	0.5%	0.1%	0.8%	0.0%
2	1.2%	1.8%	1.6%	0.6%	0.5%	0.9%	0.3%	1.8%	1.9%
3	7.0%	1.7%	1.6%	1.6%	1.4%	1.9%	3.5%	7.4%	
4	6.4%	7.0%	1.5%	2.8%	2.2%	3.4%	9.2%		
5	17.6%	12.2%	6.8%	4.1%	3.5%	18.2%			
6	27.6%	11.6%	5.9%	7.3%	15.0%				
7	11.6%	10.4%	8.3%	18.5%					
8	16.3%	13.5%	19.8%						
9	15.1%	32.6%							

Source: Credit Suisse, HUD, Ginnie Mae

Exhibit 16: Total payment speeds for GNR REMICs (prepays + defaults)

Year Since Securitization	GNR REMIC Vintage								
	2001	2002	2003	2004	2005	2006	2007	2008	2009
1	0.9%	2.0%	1.5%	0.7%	1.0%	0.6%	0.1%	0.8%	0.0%
2	3.1%	9.7%	4.4%	1.7%	1.1%	1.1%	1.9%	2.0%	2.1%
3	10.2%	6.8%	2.9%	2.3%	2.3%	2.6%	5.4%	8.0%	
4	9.3%	9.9%	3.0%	3.3%	3.6%	5.0%	11.9%		
5	18.2%	13.4%	7.3%	4.6%	3.7%	20.2%			
6	29.6%	11.9%	7.3%	8.4%	17.0%				
7	12.1%	10.8%	10.3%	19.1%					
8	16.7%	13.8%	21.7%						
9	15.1%	33.6%							

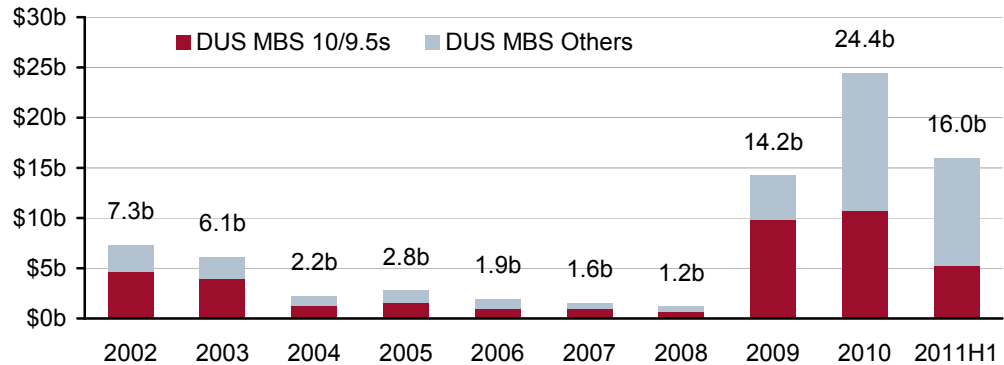
Source: Credit Suisse, HUD, Ginnie Mae

Fannie Mae Multifamily DUS MBS

**DUS MBS pools:
\$75 billion
outstanding**

Fannie Mae DUS MBS are Fannie Mae-guaranteed pass-through MBS backed by one or more multifamily loans. DUS stands for “Delegated Underwriting Servicing” – the origination and servicing guidelines for Fannie Mae’s multifamily lending program. The DUS program was established in 1988.¹³ Current outstanding volume is \$75 billion. Exhibit 17 shows historical DUS MBS issuance, segregated by the most popular DUS MBS type, “10/9.5”s (refers to the call protection and discussed further below), versus the rest. Approximately half of outstanding DUS MBS pools are “10/9.5”s.

Exhibit 17: Strong DUS MBS issuance since 2009

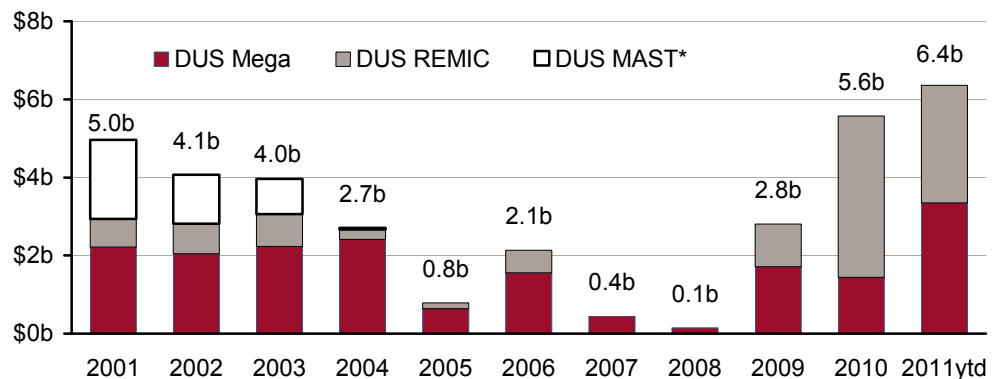


Source: Credit Suisse, Fannie Mae

**DUS Megas,
REMICs, MASTs:
\$24 billion
outstanding**

Fannie Mae Guaranteed Multifamily Structures, or Fannie Mae GeMS[®], is the execution platform for securitizing the DUS MBS pools (particularly “10/9.5”s) as diversified multiple-pool deal structures. The two most commonly used structures are Megas and REMICs (MASTs¹⁴, another structure, have not been issued since 2004). Syndicated DUS Megas are also offered under the GeMS[®] program. We estimate \$24 billion of the \$75 billion of outstanding DUS MBS have been pooled under Megas, REMICs or MASTs. During the first eight months of 2011, \$6.6 billion of DUS Mega and REMIC transactions were priced. At this pace, issuance is on track to reach \$10 billion in 2011 (Exhibit 18).

Exhibit 18: Fannie Mae DUS Megas, REMICs, MAST issuance



Source: Credit Suisse, Fannie Mae, the BLOOMBERG PROFESSIONAL™ service * MAST shelf is inactive since 2004. Data as of Aug 2011.

¹³ From 1988 to 1994, Fannie Mae exclusively bought all DUS loans and held them in its portfolio. DUS MBS issuance began in 1994.

¹⁴ Multifamily Assured Schedule Payment Trust (MAST) deals were issued under the Fannie Mae Multifamily Grantor Trust (FNGT) shelf.

Collateral Characteristics

Underlying collateral for a DUS MBS pool is often a single multifamily loan underwritten by DUS lenders.¹⁵ DUS loans provide financing for existing or newly constructed 5+ unit income-producing, multifamily properties. The wide range of eligible property types includes standard conventional multifamily apartments, affordable multifamily housing, seniors housing, student housing, military housing, rural rent housing, manufactured housing communities and cooperatives.

**10-year balloon,
30-year amort.
(most popular)**

Different types of DUS MBS pools are distinguished by their terms and call protection. The most prevalent loan structure, “10/9.5”, is a 10-year balloon loan with a 30-year amortization schedule; prepayments are typically subject to a yield maintenance (YM) charge for a period of 9.5 years, followed by a six-month open prepayment period. Other popular loan types are “7/6.5” and “5/4.5.” Maturities for DUS MBS loans can be as long as 30 years. The majority of loans have fixed-rate coupons.

Under the DUS program, Fannie Mae-approved lenders underwrite, close and sell Fannie Mae-guaranteed loans, on multifamily properties, without a prior Fannie Mae review.¹⁶ Servicing is also done by DUS lenders. A three-tier credit structure, Tier 2 to Tier 4, is used for underwriting (there is no Tier 1). More favorable rates are granted to borrowers of Tier 4 loans. For Tier 2, the maximum allowed LTV is 80% and the minimum DSCR is 1.25x, compared to 55% maximum LTV and 1.80x minimum DSCR for Tier 4. Exhibit 19 summarizes year-to-date 2011 statistics for the “10/9.5” DUS MBS backed by multifamily properties for each tier. Underwriting standards are more stringent for other property types.

Exhibit 19: DUS MBS underwriting

Underwriting Criteria			10/9.5 DUS MBS (issued in 2011 ytd) Property Type: Multifamily				
Rating	Minimum DSCR	Maximum LTV Ratio	Rating	Wavg. DSCR	Wavg. LTV Ratio	Wavg. Note Rate (%)	% of 10/9.5 Issuance
Tier 2	1.25x	80%	Tier 2	1.30x	73%	5.41%	70%
Tier 3	1.35x	65%	Tier 3	1.44x	64%	5.29%	20%
Tier 4	1.55x	55%	Tier 4	1.99x	47%	5.02%	10%
			All	1.40x	69%	5.35%	100%

Source: Credit Suisse, Fannie Mae

Loss sharing with DUS lenders

Although Fannie Mae delegates the responsibility for underwriting and servicing DUS loans, loss-sharing agreements with DUS lenders help to align the interests of each side. Each lender has its own loss-sharing arrangement with Fannie Mae. In addition, the lenders may be required to bear the entire loss, upon default, if Fannie Mae determines any breach of lender representations or warranties.

Fannie Mae guarantee

Unlike Ginnie Mae Project Loans, there is no explicit US government guarantee for DUS MBS loans. Fannie Mae bears the full responsibility for making payments under its guarantee, which is for the timely payment of principal and interest for DUS MBS, and the full payment of principal in the event of a default. Fannie Mae does not guarantee the yield maintenance payment associated with prepayments. This implies DUS MBS bond holders will only receive yield maintenance charges that are paid by the borrowers.

¹⁵ Only 2% of all DUS pools were collateralized by multiple DUS loans in 2010 (3.4% in 2009).

¹⁶ Among the 25 Fannie Mae-approved DUS lenders, the top originators in the past three years have included Wells Fargo Bank, Deutsche Bank Berkshire Mortgage, Prudential Multifamily Mortgage, Walker & Dunlop and PNC Bank.

Call Protection

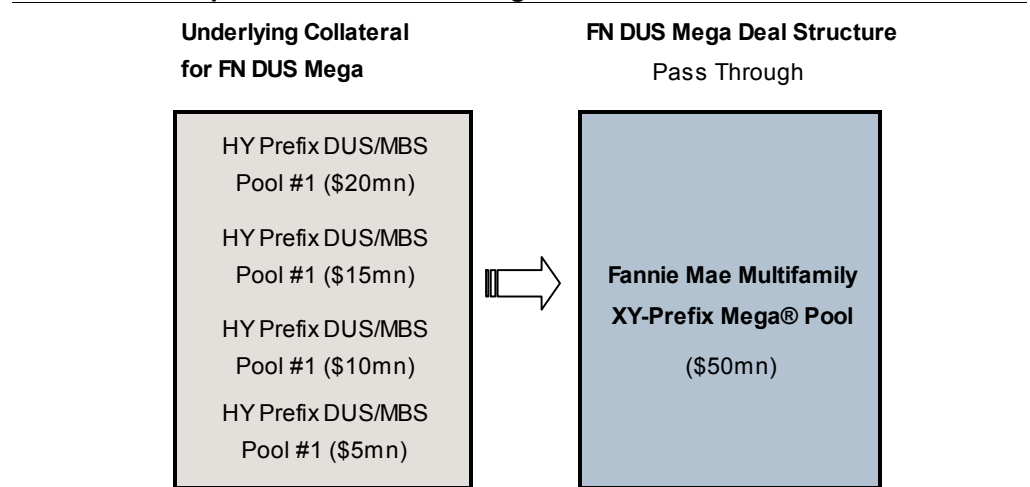
DUS MBS loans may have one of four different types of call protections:

- **Yield Maintenance (YM):** This is the most popular feature in which the borrower is permitted to prepay the loan if a yield maintenance fee (penalty) is paid. By construct, the YM fee increases when interest rates decline, deterring the borrowers from prepaying the loans, therefore mitigating negative convexity of DUS MBS. Investors may receive part of the YM fee, according to the formula specified in the prospectus, to the extent that collected premiums remain after Fannie Mae has deducted its full portion. As noted in the previous section, YM fees are not guaranteed by Fannie Mae.¹⁷
- **Defeasance:** Under this provision, the borrower is permitted to prepay the loan by exchanging Fannie Mae or US Treasury strips/securities, which would create a cash flow stream matching all the future unpaid mortgage payments for the loan.
- **Prepayment Fee:** This option is similar to Ginnie Mae project loan prepayment penalties, in which penalties are a percentage of the outstanding balance, and decline each year, such as “5%, 4%, 3%, 2%, 1%.”
- **Lockout:** Prepayments are prohibited, except for the payments resulting from casualty or condemnation.

Deal Structures: DUS Mega

DUS Megas are the oldest and most common form of the multiple-pool DUS MBS structures, enabling investors to gain the benefits of diversification and improved liquidity. A number of DUS MBSs (with coupons typically varying less than 100 bps) with the same prefix are sent to Fannie Mae to set up a Mega.¹⁸ DUS Megas are issued as pass-through certificates by Fannie Mae with a coupon equal to the balance-weighted average coupon of the underlying DUS MBS in the pool (Exhibit 20).

Exhibit 20: Sample Fannie Mae DUS Mega



Source: Credit Suisse

¹⁷ When the loan exits the yield maintenance period, the borrower is still required to pay 1% of the prepaid balance to Fannie Mae (DUS investors do not receive this fee) unless the loan is maturing in the next three months.

¹⁸ The top two DUS MBS prefixes, HY and MY, represent 58% of pools for conventional multifamily balloon loans maturing or due in seven years or more. HY pools accrue interest on an actual/360 basis; MY pools include level-payment mortgages. Other major DUS MBS prefixes are MX, MD and HX.

The outstanding DUS Mega volume is \$12 billion.¹⁹ The average deal size has been \$78 million over the past three years, but it has varied considerably from \$6 million up to \$500 million. Standard conventional multifamily loans represent 82% of the underlying DUS Mega collateral. By geography, more than half of the collateral is located in five states (Exhibit 21). The largest exposure is in California (27%), followed by Texas (8%) and New York (8%).

Exhibit 21: DUS Mega collateral by property type and by geography

By Property Type	Pct of Bal	By State	Pct of Bal
Multifamily	82%	California	27%
Manufactured Housing	7%	Texas	8%
Senior Housing	4%	New York	8%
Cooperative	3%	Washington	7%
Student Housing	3%	Florida	5%
Other	1%	Other States	46%
Total	100%	Total	100%

Source: Credit Suisse, Fannie Mae

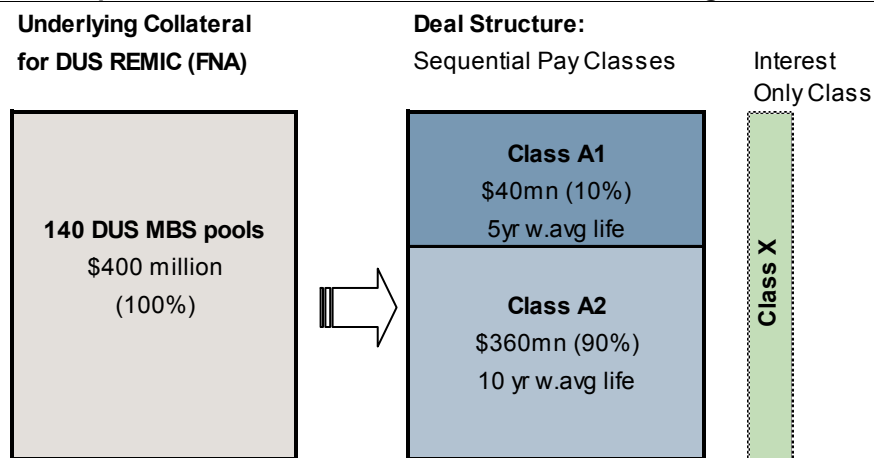
Deal Structures: DUS REMIC

DUS REMICs, also called Fannie Mae Aces, represent an alternative way to gain exposure to multiple DUS MBS pools. In contrast to the homogenous pass-through deal structure of a DUS Mega, a DUS REMIC typically consists of sequential-pay classes (often with par coupon pricing) and an IO class (Exhibit 22). The outstanding DUS REMIC volume is \$10.0 billion. The average deal size is around \$550 million, consisting of 108 DUS MBS pools per deal, on average, at issuance. The top 10 pools make up 37% of deal balance. The underlying pools in REMICs are predominantly standard multifamily (84%), followed by cooperative loans (6.5%) and manufactured housing communities (4.8%).

Unlike the clustered DUS MBS pools in a Mega, the range of coupons within a DUS REMIC can be much wider, such as in FNA 2010-M7, in which coupons ranged from 4.64% to 7.14% (or 250 bp). DUS Megas can also be part of the collateral in DUS REMICs.

Upon voluntary prepayment, the IO class usually receives 70% of the YM penalty, and the current pay bond receives the remaining 30%.

Exhibit 22: Sample Fannie Mae DUS REMIC deal – time tranching



Source: Credit Suisse

¹⁹ As of August 2011.

Deal Structures: MAST REMIC

Another multiple-pool DUS MBS structure issued in the past was Fannie Mae MAST (Multifamily Assured Schedule Payment Trust), securitized under the Fannie Mae Guarantor Trust shelf (FNGT). MAST REMICs were unique in that all classes were fully protected from voluntary prepayment and default risk; in other words, each class was guaranteed to receive its scheduled principal and/or interest. The DUS underwritten loans underlying MAST REMICs were originated with a defeasance-only provision such that the borrower has to substitute matching cash flows through maturity, in the event of a prepayment, by purchasing FN debentures in order to release the property from the loan.

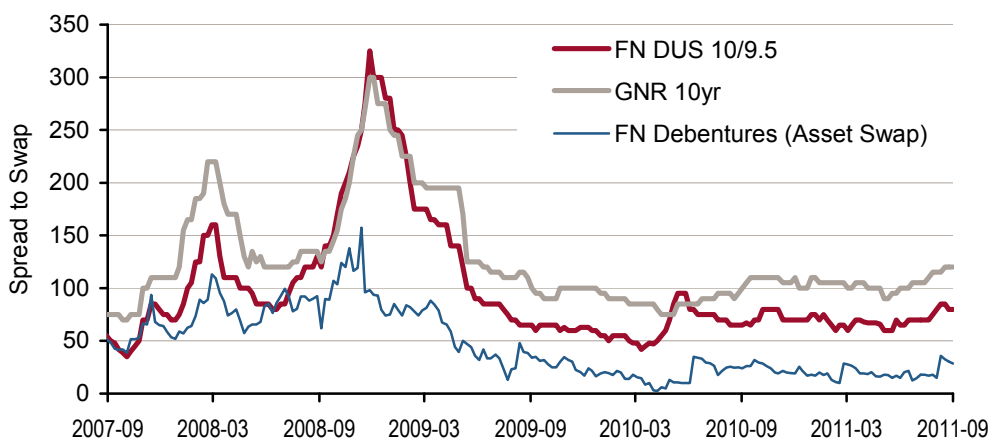
A MAST REMIC typically consisted of three classes: a 5-year class receiving monthly interest and principal amortization; a 10-year class (akin to an agency debenture) receiving interest only during the term and the entire principal at the final distribution date; and an IO class. There were a total of nine MAST REMICs issued between September 2000 and September 2004, totaling \$4.75 billion; the outstanding volume is \$1.9 billion as of September 2011.

Pricing Convention: 0% CPY

DUS “10/9.5”s are typically priced at 0% CPY (zero default throughout life and no prepayment after the yield maintenance period ends) at issuance. For a premium seasoned bond 100% CPY (i.e., zero defaults throughout the life and 100% prepayment after the yield maintenance period ends) is typically used. Spreads are usually quoted over the average-life interpolated swap curve (typically between 9.25 to 9.75 years).

Exhibit 23 shows historical FN DUS 10/9.5 spreads versus Fannie Mae Debentures and Ginnie Mae Project Loan REMICs.²⁰ DUS spreads widened briefly to swaps+300 bp in 2008 Q4 and have tightened to double-digit levels since then and traded around swaps+65 bp in the first half of 2011. Compared to Fannie Mae Debentures, DUS MBS trades wider despite having the very same Fannie Mae guarantee.

Exhibit 23: DUS 10/9.5 spreads vs. FN debentures, GNR 10yr and SBAP 20yr



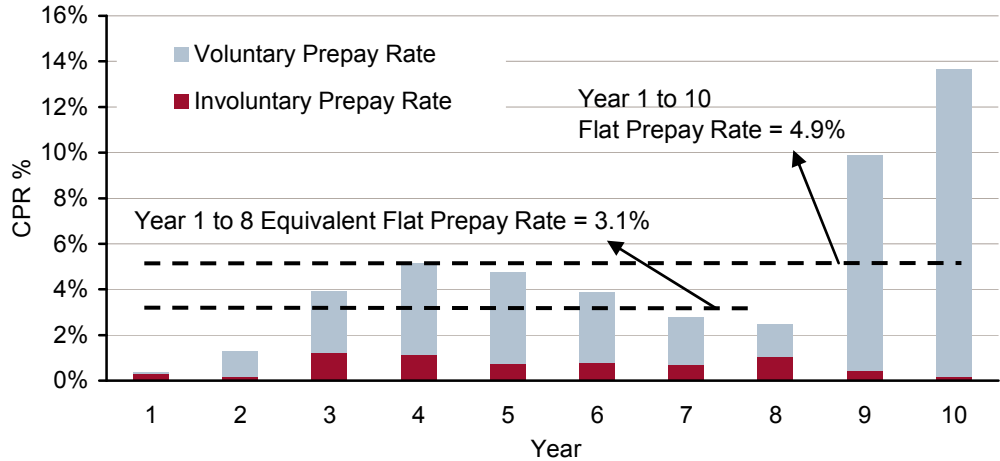
Source: Credit Suisse

²⁰ DUS “10/9.5”s spreads historically mirrored private label AAA CMBS spreads and traded 10bp to 20bp tighter than AAA CMBS for most of the last decade prior to the recession.

Prepayment Analysis

The average prepayment speed for the “10/9.5” DUS MBS pools issued since 2002 has been 4.9% per year. This can be decomposed into 4.2% voluntary prepayments, where a yield maintenance penalty was collected, and the remainder due to involuntary prepayments (such as default, casualty or breach of lender representation or warranty). Exhibit 24 illustrates prepayment speeds for each year; interim voluntary prepayments typically peak between year 3 and year 5, then subside in the following years. Exhibit 25 shows prepayment speeds by issue year.

Exhibit 24: Voluntary vs. Involuntary prepay speeds for “10/9.5” DUS MBS



* Year 10 is based solely on the performance of 2002 pools.
Source: Credit Suisse, Fannie Mae

Exhibit 25: Prepayment speeds for “10/9.5” DUS MBS (voluntary + involuntary)

Year Since Origination	All	Issue Year								
		2002	2003	2004	2005	2006	2007	2008	2009	2010
1	0.4%	0.0%	0.0%	0.0%	0.0%	2.7%	0.5%	0.0%	0.3%	0.0%
2	1.3%	0.7%	3.5%	1.1%	3.7%	0.1%	1.3%	0.9%	0.5%	0.0%
3	3.9%	1.4%	6.1%	4.5%	8.3%	1.8%	2.8%	4.7%	1.6%	
4	5.1%	10.9%	6.0%	11.5%	0.7%	2.3%	1.1%	3.5%		
5	4.8%	11.9%	10.3%	2.5%	1.1%	0.0%	2.7%			
6	3.9%	11.2%	3.9%	0.7%	0.5%	3.0%				
7	2.8%	5.3%	1.3%	2.7%	1.9%					
8	2.5%	3.4%	3.4%	0.6%						
9	9.9%	15.1%	4.6%							
10	13.6%	13.6%								
Flat Voluntary CPR	4.2%	7.1%	4.0%	2.5%	1.8%	0.4%	0.2%	0.0%	0.4%	0.0%
Flat Involuntary CPR	0.7%	0.2%	0.4%	0.5%	0.4%	1.3%	1.4%	1.7%	0.4%	0.0%
Flat Total CPR	4.9%	7.4%	4.4%	3.0%	2.3%	1.7%	1.7%	1.7%	0.8%	0.0%

Source: Credit Suisse, Fannie Mae

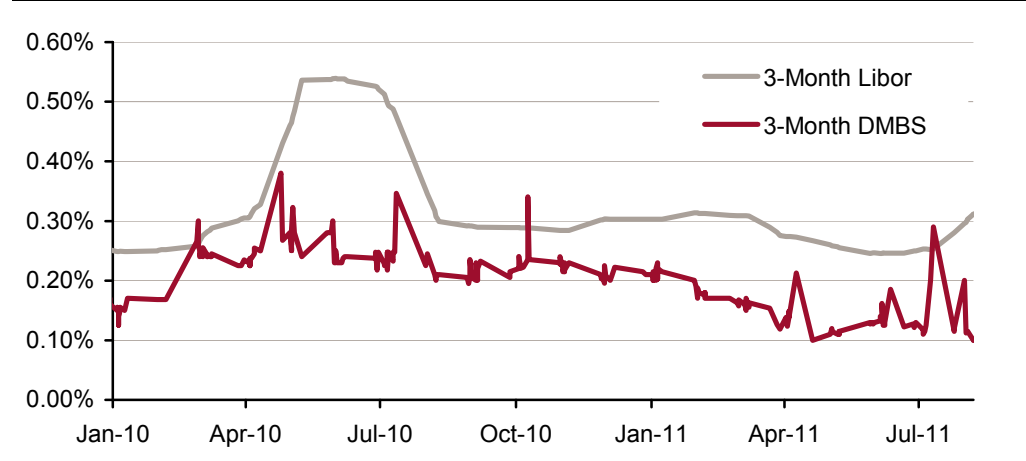
DMBS: Short-term discounts backed by multifamily loans

Discount MBS (DMBS) is another active Fannie Mae Multifamily MBS program. Similar to DUS MBS pools, DMBSs are also backed by multifamily loan pools composed of one or more loans. These securities are issued as a discount bond with a maturity of one to nine months. There are no interest payments during the term; investors are repaid, via a Fannie Mae guarantee, at par upon maturity. They are locked out for the full term, and therefore carry no prepayment risk.

The DMBS program effectively enables borrowers to get a short-term loan that mimics variable-rate financing. Year-to-date 2011, DMBSs generally have traded 12-14 bp tighter than the LIBOR rate (Exhibit 26). Investors can find the historical spreads of 3-month DMBS that Fannie Mae tracks on the website:

<https://www.efanniemae.com/mf/refmaterials/cginfo/dmbstrades.jsp>

Exhibit 26: 3-month DMBS versus 3-month LIBOR



Source: Credit Suisse, Fannie Mae

Freddie Mac Multifamily K-Deals

Market Size: \$19 billion and growing

Freddie Mac K-Deals are the most recent addition to the Agency CMBS offerings, with cumulative issuance of \$19 billion since 2009. Six deals (\$6.4 billion) were priced in 2010 and \$10.0 billion (nine deals) have come to market year-to-date 2011 (Exhibit 27). Bloomberg deal tickers for a K-Deal starts with FREMF²¹ (i.e., FREMF 2011-K14).

K-Deals (also informally known as 'Kfreds' in the marketplace) are differentiated from other Agency CMBS products by blending several features and best practices from private-label CMBS market with the guarantee offered by Freddie Mac for the senior classes. Consistent deal structures, transaction sizes over \$1 billion and a repeat issuance calendar are other factors contributing to the success and liquidity of the K-Deals.

Exhibit 27: Freddie Mac K-Deal Summary

Deal	Px Month	Total Bal (\$mil)	Guaranteed Bal (\$mil)	AAA Subord.*	Class A1 Px Spread	Class A2 Px Spread	Loan Count	Top 10 Loan Pct	WAC	WA LTV	WA DSCR	Period IO Pct	Term IO Oct
K-003	2009-09	1,065	985	20%	S+55bp	S+100bp	62	39.2	5.85	68.8	1.67x	64.6	2.8
K-004	2009-10	1,075	995	17%	S+45	S+70	46	58.2	5.56	69.2	1.35x	39.6	0.0
K-005	2010-01	1,107	1,024	14%	S+35	S+55	70	35.9	5.68	67.7	1.45x	40.6	18.4
K-SCT	2010-02	529	476	10%	NA	NA	1	NA	5.77	68.7	1.28x	0.0	0.0
K-006	2010-03	1,232	1,081	12%	S+30	S+45	68	36.0	5.55	70.0	1.39x	38.8	3.7
K-007	2010-06	1,169	1,012	13%	S+60	S+80	83	33.9	5.63	70.1	1.36x	27.4	1.4
K-008	2010-09	1,159	1,011	13%	NA	S+67	72	43.4	5.54	69.2	1.35x	35.8	3.8
K-009	2010-11	1,248	1,089	13%	S+63	S+75	70	47.0	5.26	70.6	1.39x	30.7	14.4
K-010	2011-01	1,165	1,010	13%	S+70	S+80	76	37.0	4.89	70.6	1.54x	43.7	6.7
K-701	2011-02	1,016	861	15%	S+50	S+65	44	55.0	4.58	69.2	1.47x	54.0	10.0
K-011	2011-03	1,188	1,035	13%	S+60	S+70	78	35.0	4.58	70.0	1.43x	45.0	0.0
K-012	2011-04	1,210	1,038	14%	S+60	S+68	69	41.1	4.53	68.7	1.39x	37.4	0.7
K-013	2011-05	1,250	1,097	14%	S+60	S+65	81	30.7	4.84	68.4	1.48x	40.5	8.9
K-AIV	2011-05	672	538	20%	S+68	S+72	19	83.1	5.49	64.4	1.32x	0.0	0.0
K-702	2011-06	1,109	1,013	16%	S+50	S+65	72	32.0	5.06	70.9	1.40x	49.3	1.3
K-014	2011-07	1,192	1,049	12%	S+65	S+70	90	33.9	5.30	62.7	1.62x	21.7	17.3
K-703	2011-08	1,225	1,047	15%	S+65	S+80	71	34.7	5.09	69.8	1.36x	70.9	7.8

Source: Credit Suisse, Freddie Mac

* Initial K-deals (K-003, K-004 and K-005) also had other guaranteed Class A tranches with subordination levels around 7.5%.

Collateral Characteristics

Collateral characteristics are fairly standardized in K-deals. A typical deal includes around 70 fixed-rate multifamily mortgages with a total deal balance averaging slightly over \$1 billion.²² The top ten loans usually represent around 40% of the entire deal. Loan sizes vary from less than \$2 million to over \$100 million. The most frequent term is a 10-year balloon loan with a 30-year amortization schedule; 5- and 7-year loans can also be included. Period (i.e., partial) interest-only loans and term (full) IO loans are also allowed. Acquisition loans represent roughly one-third of the collateral.

Loans are sourced/originated by Freddie Mac's Program Plus® Seller/Servicer network of private lenders²³; however, Freddie Mac underwrites each loan internally, according to guidelines set by the Capital Markets Execution (CME®) program as outlined in Exhibit 28.²⁴ For 10- and 7-year amortizing loans, the maximum allowed LTV is 80%, while the minimum DSCR is 1.25x (the same parameters are used for Fannie Mae DUS Tier 2 loans). Period and term IO loans have tighter LTV/DSCR requirements.

²¹ The guaranteed classes are also under FHMS shelf in Bloomberg (Freddie Mac Multifamily Structured Pass-Through K-Certificates)

²² The predominant property type is multifamily secured by occupied, stable and completed properties (garden style, mid- and high-rise apartments), followed by student housing and senior housing properties. A limited amount of age-restricted multifamily, cooperative housing and Section 8 housing assistance payments (HAP) contracts are also permitted in the CME® program.

²³ Most of the Freddie Mac Seller/Servicer lenders are also Fannie Mae DUS lenders.

²⁴ Freddie Mac's in-house multifamily business staff consisted of 250+ professionals in four regional offices plus headquarters in 2010.

Loan proceeds can be used for acquisition or to refinance. However, no cash-out is allowed for the latter. This is a positive feature for K-deal collateral; cash-out refinancing was prevalent for pre-recession private-label CMBS loans, which partly led to greater credit problems for those deals.²⁵ One best practice for K-Deals, borrowed from the CMBS market, is the transparency of property-level information before and after securitization. This effectively enables investors to analyze the collateral performance on an ongoing basis.

Exhibit 28: CME® underwriting criteria for acquisition or no cash-out refis

Type	7- and 10-year Loan		5-year Loan	
	Minimum DSCR	Maximum LTV	Minimum DSCR	Maximum LTV
Amortizing	1.25x	80%	1.30x	70%
Partial IO	1.25x	80%	1.35x	60%
Full IO	1.30x	65%	1.35x	60%

- Effective gross income is calculated based on trailing three months actual rent collections or the annualized current rent roll minus a 5% vacancy rate
- Expenses are calculated based on trailing 12 months plus an inflation factor
- Real estate taxes and insurance are based on actual annual expenses
- Property values are based on third-party appraisals and internal value confirmation
- Replacement reserves are required and are generally equal to the higher of an engineer's recommendation or \$250 per unit
- Taxes and insurance escrows are generally required
- Other third-party reports are required (e.g., Phase I ESA, Property Condition, etc.)

Source: Credit Suisse, Freddie Mac

Call Protection

K-Deal loans have strong call protection features, including a combination of lockout (usually the initial 24 months after securitization) followed by a lengthy defeasance period, which only ends three months prior to the maturity date. Therefore, there is no “voluntary” prepayment risk during most of the loan term, as defeasance effectively replicates all future cash flows, resulting in no disruption of scheduled payments.²⁶

Deal Structure

**Sequential-Pay
classes with credit
tranching**

The deal structure resembles private-label CMBS deals in many ways. In most deals, there are two senior classes, guaranteed by Freddie Mac and rated AAA²⁷, at the top of capital structure (Class A1 and A2). The subordinate classes, Class B (rated Single-A) and Class C (unrated first loss tranche), are not guaranteed by Freddie Mac. Class C is a principal-only class and does not receive, or accrue, any interest payments.²⁸

In addition, multiple IO classes, with notional amounts tied to various rated and/or unrated classes, are present in a K-deal. In our illustrative deal example (Exhibit 29), Class X1 receives some of the excess interest stripped from Classes A1 and A2 (seniors). Class X3 gets excess interest from Classes B and C (subordinates), and Class X2 gets excess interest from all the rated and unrated classed. Class X1 is a WAC IO, Class X2 is a Strip IO. Class X3 can be either a WAC IO or a Strip IO, depending on the deal structure.

²⁵ Supplemental financing is available for borrowers under Freddie Mac's supplemental mortgage product, which is purchased by Freddie Mac on a held-for-investment basis.

²⁶ Involuntary prepayments can arise due to recoveries from liquidation of defaulted loans.

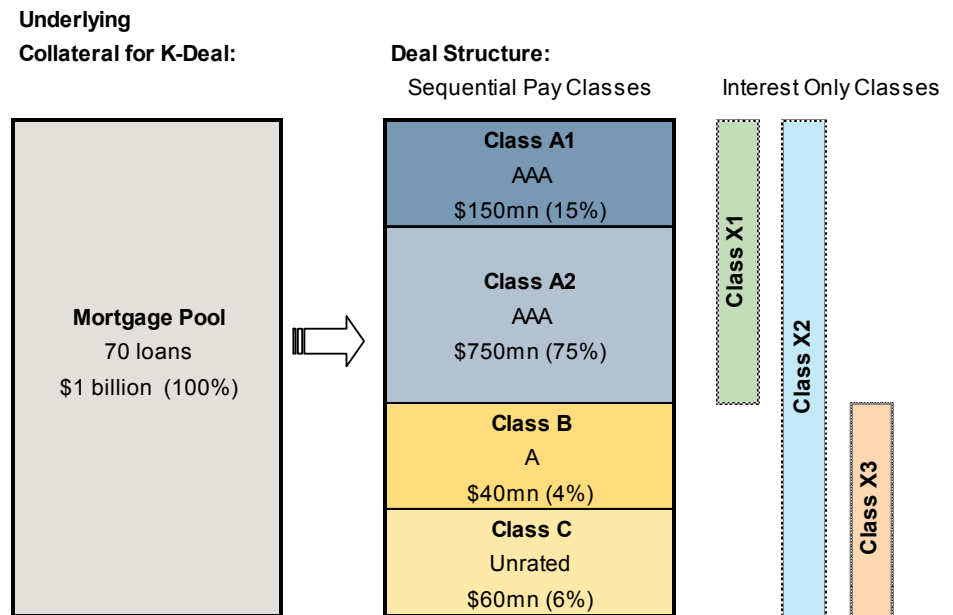
²⁷ Rating agencies initially assign a AAA rating to senior classes without giving any benefit to the Freddie Mac guarantee, but these ratings are then withdrawn on the deals' closing date, and they are not subject to ongoing monitoring, upgrades or downgrades or any further assessment by any rating agency after the date of issuance.

²⁸ This is similar to Ginnie Mae REMIC Class Z class, which also does not receive interest; however, accrued interest is added to principal for GNR Class Z.

Principal payments follow a waterfall being paid first to Class A1, followed, in order of priority, to Class A2, Class B and then finally to Class C. Any losses are allocated in reverse sequential order starting from the unrated Class C, then Class B. If both Class B and C are wiped out due to losses, any further principal is paid pro-rata between Class A1 and A2 (Exhibit 30).

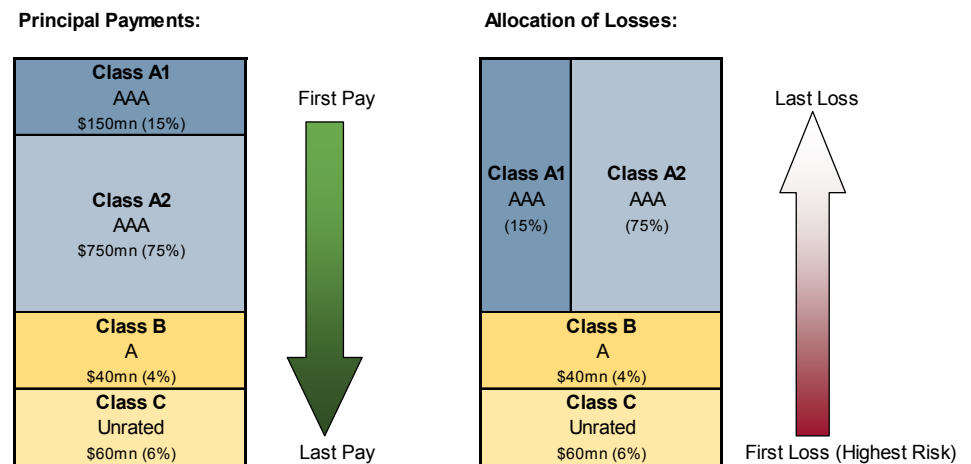
Similar to a CMBS deal, a master servicer handles the collection of principal and interest payments. Defaulted loans are handled by the special servicer. During the default, the master servicer advances only the scheduled interest payment for the defaulted loan – the scheduled principal payment due to amortization does not get paid to senior bondholder until liquidation.

Exhibit 29: Capital structure for a K-Deal



Source: Credit Suisse

Exhibit 30: Allocation of principal payments and losses to bonds in a K-deal



Source: Credit Suisse

Freddie Mac Guarantee

Freddie Mac provides a guarantee for the top of the capital structure, namely for senior Classes A1, A2 and the related IO classes, which is Class X1 in our example. The guarantee typically covers:

- Timely payment of interest to Classes A1, A2 and X1;
- Timely payment of principal to the Classes A1 and A2 upon maturity of any loan;
- Reimbursement of any realized losses and expenses allocated to guaranteed certificates upon 'resolution' of defaulted loans²⁹ (not on the date the loan default occurs); and
- Ultimate payment of principal by the final distribution date for Classes A1 and A2. This effectively ensures that all the principal is paid in full to these classes by the end of year 10 (i.e., the final distribution date) regardless of defaulted loans resolved or not by that time.

The rest of the classes are not guaranteed by Freddie Mac. As in the case with Fannie Mae DUS MBS, Freddie Mac K-certificates are not guaranteed by the US government. Freddie Mac is the sole guarantor.

Pricing Convention: 0%CPR

Market pricing convention for K-Deals is 0% CPR. Typical investors in senior K-certificates include banks and money managers; a wide array of other investors also participate, including the insurance companies, pension funds, hedge funds and foreign investors.

Prepayments and Defaults

K-Deals have limited historical data to conduct a meaningful prepayment and default analysis. None of the loans are currently delinquent across any of the deals issued so far. In regard to voluntary prepayments, we reiterate that loans are in lockout in the initial years and borrowers are only allowed to prepay via defeasance; therefore, no voluntary prepayments should occur except for the last three months prior to maturity in K-Deals.

²⁹ Of note, for defaulted loans, any scheduled principal payments due to amortization are not paid to bondholders until the loan is liquidated by the servicer.

Small Business Administration (SBA) Programs

The U.S. Small Business Administration (SBA) was established in 1953, pursuant to the Small Business Act, to assist and protect the interests of small businesses. Small businesses are an important part of the domestic economy. Characterized as independent and with 500 or fewer employees³⁰, small businesses employ half the private sector. They generate 60%-80% of net new jobs and are responsible for more than 50% of non-farm private gross domestic product (GDP).

SBA does not directly originate loans or provide capital to small businesses. Instead, the agency administers a number of loan guaranty programs that effectively provide low-interest loans to small businesses. The SBA 7(a) and SBA 504 CDC loans represent two of these major lending programs.³¹ Through the Small Business Investment Company (SBIC) Program, SBA enhances small business access to venture capital by providing “leverage” in the form of matching capital to private funds.

One common feature of all these programs is that SBA always shares some of the risk of small business loans with the private sector lenders: for the SBA 7(a) program, only 75% of the loan amount (85% for smaller loans) is guaranteed; for a SBA 504 CDC loan, only the second lien from the CDC is 100% guaranteed (i.e., the first lien from a private lender, which is 50% of total financing, is not guaranteed by SBA). In the SBIC program, private capital needs to be raised in order to be matched with capital from the SBA.

In the next sections, we review the basic tenets of each SBA program, then discuss the associated fixed-income products available to investors, all of which carry the full faith and credit guarantee of US government.

³⁰ The 500 employees criteria is mostly applicable for manufacturing/mining industries. For most non-manufacturing industries, the criteria is \$7 million in average annual receipts.

³¹ In Appendix 2, we compare the basic features of each program.

SBA 7(a) Program & SBA 7(a) Pools

SBA 7(a) Loans

**Adjustable-rate,
5- to 25-year
maturity small
business loans**

Through its 7(a) loan program, the SBA provides government guarantees on loans made by commercial lenders, with the goal of expanding access to capital for small business owners who face challenges getting financing on reasonable terms through traditional lending channels. The majority of 7(a) loans are adjustable rate, indexed to the Prime Rate³², with a spread that cannot exceed Prime+2.75%, and with maturities ranging from 5 to 25 years.³³

Small business owners can use the loan proceeds for various purposes, including expansion/renovation, new construction or purchasing land/buildings, purchasing machinery/equipment/fixtures, working capital and so on. Loans for real estate generally have a 25-year maturity, whereas working capital, machinery/equipment loans have 5- to 10-year maturities. The maximum loan amount is \$5 million.³⁴

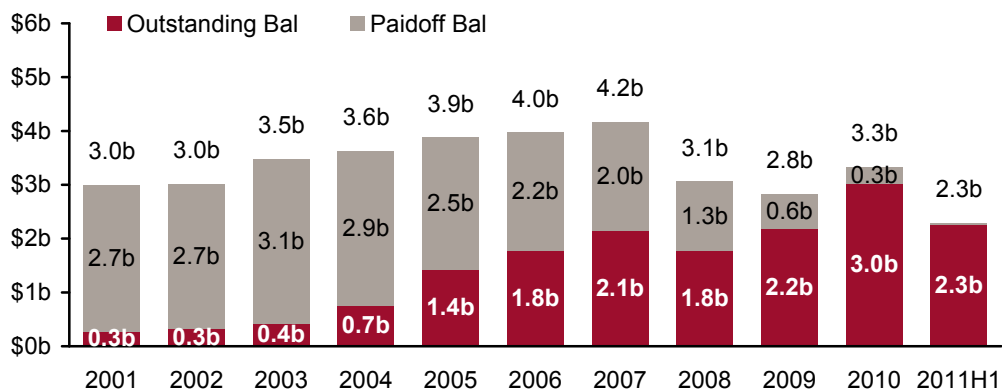
The SBA provides only a partial guarantee to lenders – typically 75% of the loan amount (85% for smaller loans) – ensuring that the lenders share some of the risk of small business loans. Approximately \$13 billion of 7(a) loans have been originated annually over the last decade.

SBA 7(a) Pools

**Secondary market
for SBA 7(a) pools:
\$17 billion
outstanding**

The lenders may opt to sell the guaranteed portion of the 7(a) loans (i.e., 75% of the loan) into the secondary market and hold the unguaranteed portion on their balance sheets including the servicing rights. Close to \$4 billion of guaranteed SBA loans are sold into the secondary market each year, subsequently pooled into SBA guaranteed 7(a) Pool securities and sold to institutional investors. The current outstanding size of SBA 7(a) Pools actively traded in the secondary market is \$17 billion (Exhibit 31).³⁵

Exhibit 31: Secondary market SBA 7(a) pools



Source: Government Loan Solutions, Colson Services

³² Approximately 75% of loans adjust quarterly and the reset on a monthly basis.

³³ For loans with less than a 7-year maturity, the maximum rate is Prime+2.25%.

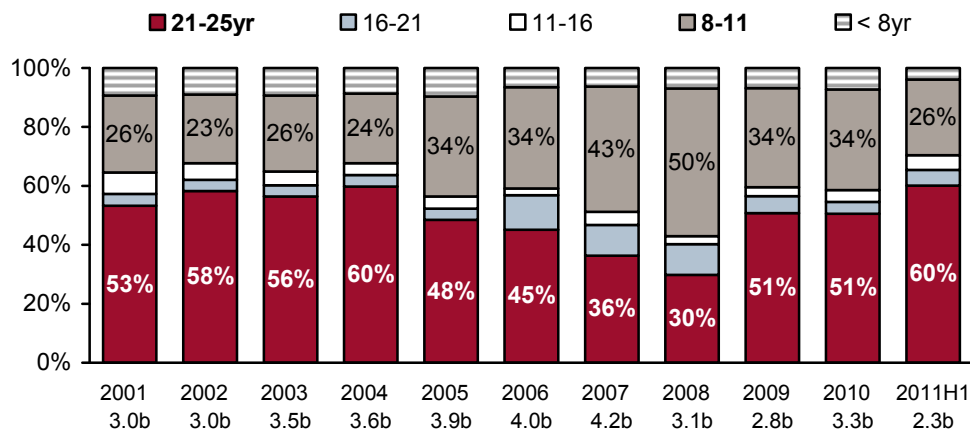
³⁴ 7(a) loans are full recourse and require a personal guarantee from all principals with 20% ownership interest or more.

³⁵ A total of \$63 billion SBA 7(a) loans were pooled since 1985 for secondary market trading. Balance figures are as of first half 2011.

SBA 7(a) pool characteristics

Pursuant to the SBA Secondary Market Improvements Act of 1984, each SBA pool includes at least of four 7(a) loans with a minimum pool size of \$1 million where no loan can be more than 25% of the pool size. The average SBA pool is \$9 million in size and includes 33 loans.³⁶ Akin to a Fannie Mae DUS Mega, an SBA 7(a) pool includes loans with comparable characteristics, such as interest rates that cannot range by more than 2% along with loans having similar maturities. A majority of pools have 25-year weighted-average maturities (WAM) at origination, with the next largest sector being pools with 8- to 11-year-WAM (Exhibit 32). New issue SBA pools are priced at 12% to 14% CPR.

Exhibit 32: Weighted-average maturity of SBA 7(a) pools at origination



Source: Government Loan Solutions, Colson Services

Explicit US government guarantee

SBA pools carry an unconditional 100% US government guarantee for the timely payment of principal and interest to investors. Similar to the Ginnie Mae project loans, bank regulators attach a zero-percent risk weighting to SBA pools.

Call Protection

Prepayment penalties only apply for longer-term SBA 7(a) loans (15 years or longer). During the initial three years, the borrower has to pay a 5% penalty in year 1 if the prepayment amount exceeds 25% of the outstanding balance, a 3% penalty in year 2 and 1% penalty in year 3. In addition, any penalties collected are retained by the SBA and are not passed through to investors.

Pooling Process

SBA 7(a) loans were sold individually prior to the aforementioned 1984 Act. Since then, the pooling process, undertaken by SBA approved pool assemblers³⁷, has enhanced institutional investor participation and created significant liquidity for the 7(a) program. There are two means of pooling SBA 7(a) loans. A pool assembler can strip interest off of loans to a common net margin, creating an IO strip for each loan. This method allows the pool originator to target specific price points for a pool. The other method of pooling loans is creating a WAC pool. The WAC pool does not allow for the creation of IO strips and is simply the weighted-average net interest rate of the underlying 7(a) loans.³⁸

³⁶ To date, the largest SBA 7(a) Pool was \$291 million in size (issued in 2007), followed by another \$117 million Pool (issued in 2006).

³⁷ Coastal Securities, Signature Bank, Morgan Keegan, Suntrust Bank and Vining-Sparks are the top five SBA 7(a) Pool assemblers.

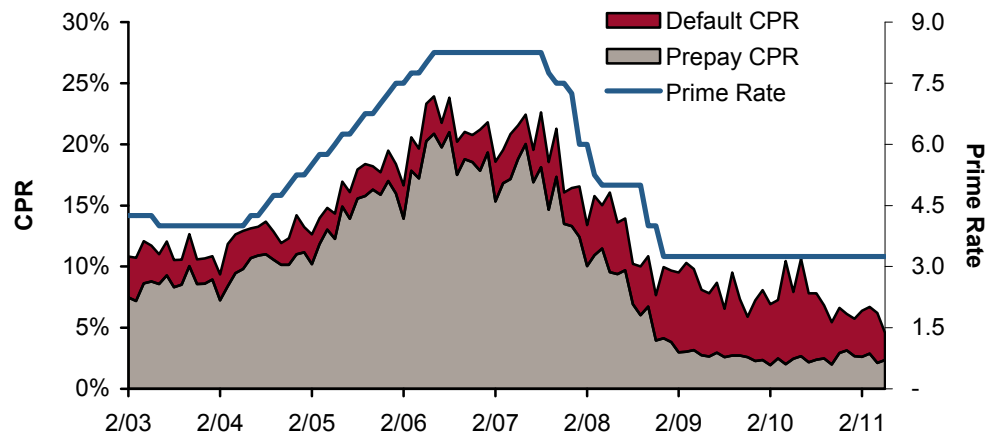
³⁸ WAC pools represent 20% of outstanding SBA pools (by balance).

Prepayment Analysis

SBA 7(a) prepayments result from voluntary prepayments as well as defaults. Being adjustable (i.e., floating) rate loans, 7(a) voluntary prepayments increase when the interest rates rise as borrowers strive to get fixed-rate loans to have more predictable interest costs. When the rates decline, prepayments fall as coupons are reset to lower levels, and the borrowers have minimal incentive to refinance. As shown in Exhibit 33, voluntary CPR increased from 8.5% in 2003 (the prime rate was around 4.0%) to 18.3% in 2006 (the prime rate was at 8.0%), and gradually declined with interest rates falling to 2.4% voluntary CPR in 2010 (the prime rate was at 3.25%).

Defaults are usually a fraction of total prepayments (typically less than 20%); however, they typically make up the majority of the prepayments during recessions as more borrowers default and voluntary prepayments fall (due to lower rates). Default (i.e., involuntary) CPRs hovered below 3.0% between 2003 and 2006, but remained above 5.0% in 2009 and 2010.

Exhibit 33: Prime rate & SBA 7(a) payment speeds



Source: Government Loan Solutions, Colson Services

SBA pools usually offer attractive yields to investors compared to their cost of funds, and having adjustable-rate coupons, pool prices are relatively stable, which enhances the liquidity in the secondary market. Given the historically low interest rate environment, voluntary prepayments are likely to remain subdued, which can create solid returns for premium pool buyers and IO strip investors; however, spikes in default-related early payments would negatively impact their performance.

SBA CDC/504 Program & SBA DCPCs

SBA CDC/504 Program

The SBA CDC/504 loan program is geared toward providing financing to small businesses with the goal of community economic development. Section 503 of the Small Business Investment Act authorized the SBA to guarantee debentures issued by Certified Development Companies (CDC), which are private corporations facilitating local economic development (there are about 270 CDCs nationwide).

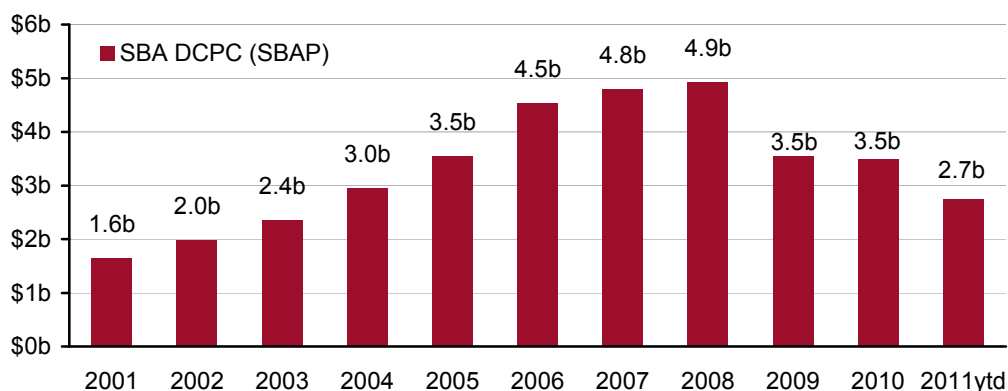
In this program, the small business owners provide at least a 10% down payment for eligible CDC/504 projects and borrow 50% of the projects' costs/collateral from private sector lenders (senior liens). The remaining 40% comes through the CDC program from the proceeds when the SBA debentures are securitized and sold to investors as SBA Development Company Participation Certificates, or SBA DCPCs.³⁹ These debentures are backed by a 100% SBA guarantee.

Market Size: \$24 billion outstanding

There have been \$48 billion of SBA DCPCs issued since 1986, with a current outstanding balance of \$24 billion.⁴⁰ In 2009 and 2010, issuance was \$3.5 billion per year, down nearly 30% from 2008's \$4.9 billion (Exhibit 34).

We attribute the slowdown in issuance to the restrained availability of private credit to small businesses since the recession began and the reduced demand for financing among small business owners due to the economic uncertainty that followed. We expect SBA debenture issuance, through the CDC program, to increase going forward in concert with an improving economy (though the recovery has been slow to date). Additionally, a recently expanded SBA lending program, which targets small loan borrowers in need of refinancing, could result in higher volumes once it gains traction.

Exhibit 34: SBA DCPC issuance



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service
Data as of September 2011

Collateral Characteristics

The SBA DCPC proceeds are used to fund CDC/504 loans for the construction or acquisition of physical plants or machinery/equipment. Unlike their brethren floating-rate SBA 7(a) loans, the CDC/504s are fixed-rate loans.⁴¹ Majority of the loans are backed by real estate and have 20-year maturities, whereas machinery/equipment loans have 10-

³⁹ Bloomberg deal ticker for a SBA DCPC deal is SBAP (i.e., SBAP 2011-20H)

⁴⁰ Balance figures are as of first half 2011.

⁴¹ In Appendix 2, we compare the key features of each program.

year maturities. A typical 20-year DCPC deal is \$283 million in size and is backed by over 500 debentures. The 10-year DCPCs are smaller in size, approximately \$25 million, and are backed by 50 debentures on average.

The CDC/504 program is more attractive than conventional financing because it offers a low down payment (typically 10% down), a long-term, low fixed interest rate and financing of soft costs (accounting fee, title, insurance, closing fee, etc.). Of note, the proceeds cannot be used for working capital.

According to the 504 Program guidelines, a small business is generally defined as one with a tangible net worth under \$7.5 million that has not generated average net income in excess of \$2.5 million, after taxes, for the preceding two years. For most of the small businesses, there can be a maximum of 500 employees.⁴² Also, the loans cannot be made to businesses engaged in speculation or investment in rental real estate.

The Small Business Jobs Act, enacted in September 2010, increased the maximum loan amount to \$5.0 million⁴³. Prior to September 2010, the maximum junior lien loan amount was \$1.5 million (\$2 million upon meeting certain public policy goals, such as business district revitalization or rural development).

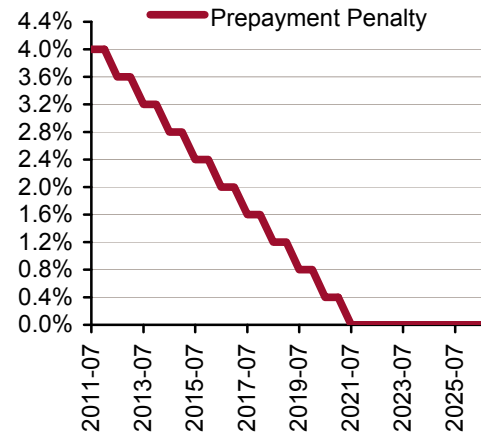
Explicit US government guarantee

The SBA guarantees the timely payment of principal and interest on the CDC debentures securitized in SBA DCPCs. The full faith and credit of the United States backs SBA's guarantee. Therefore, SBA DCPC investors can gain exposure to commercial real estate with an explicit government guarantee – a rare form of excellent credit protection only matched by Ginnie Mae Project Loans and GNR REMICs. SBA DCPCs qualify as zero-percent risk-weighted assets.

Call Protection

A CDC/504 loan may prepay, on any semi-annual payment date, its outstanding principal amount in whole (but not in part) with a prepayment penalty. The 20-year debenture prepayment penalty starts at the debenture rate in the first year and decreases by one-tenth of the debenture rate each year until reaching zero in the eleventh year. Likewise, a 10-year debenture's prepayment penalty is the debenture rate in the first year, and decreases by one-fifth of the debenture rate each year until reaching zero in the sixth year. For example, a 4.0% 20-year debenture with a first payment date of July 1, 2011 will have the prepayment penalty schedule shown in Exhibit 35.

Exhibit 35: Prepayment penalty schedule for a 4.0% 20-year debenture with first payment date of July 1, 2011



Source: Credit Suisse

⁴² SBA's Table of Small Business Size Standards lists the largest size of a business (including its subsidiaries and affiliates) by NAICS code. <http://www.sba.gov/content/table-small-business-size-standards>

⁴³ \$5.5 million for certain projects reducing energy consumption or to generate renewable fuels.

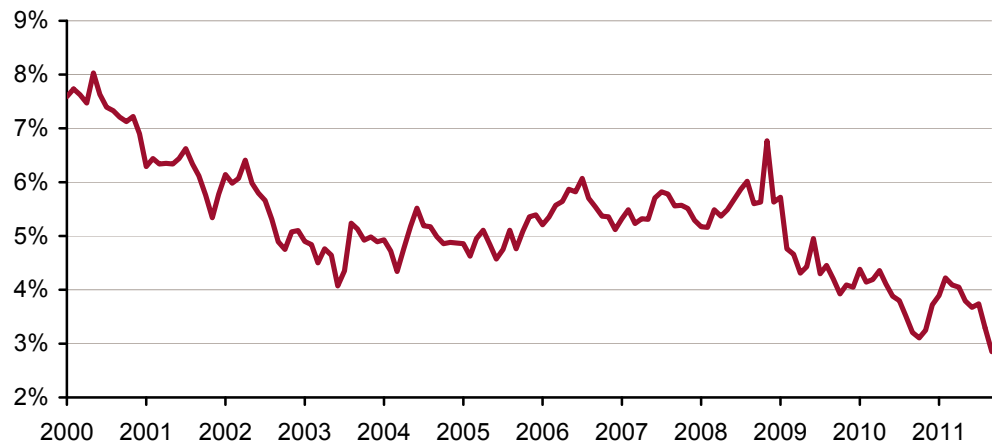
Deal Structure

The securitization of CDC debentures into DCPCs results in a single class certificate with a coupon rate equal to the debenture rate. The cash flows are simple pass-through from the pool of same-rate debentures. There is no time-tranching or credit enhancement. Given debenture maturities of either 10 or 20 years, the resulting DCPCs are 10 or 20 years. Twenty-year debentures constitute 97% of SBA DCPC issuance.

Securitization Process

The debentures and DCPCs are simultaneously issued. As new offerings are priced, the coupons are set for DCPCs and the debentures in the pool (Exhibit 36). While debentures (and hence DCPCs) pay semi-annually, the 504 loan borrowers make monthly principal/interest payments. Once the debenture rate is set, a note rate is calculated to equate the semi-annual payment schedule with a monthly schedule. The CDC/504 loan borrowers pay the effective rate that equals the sum of the note rate and three fees, including the CDC fee (typically 0.625%), the SBA guarantee fee (0.393%) and the Central Servicing Agent fee (0.1%). The fiscal and transfer agent is Colson Services Corp., and the trustee is The Bank of New York Mellon.

Exhibit 36: 20-year SBA DCPC coupons



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

Pricing Convention: 5% CPR

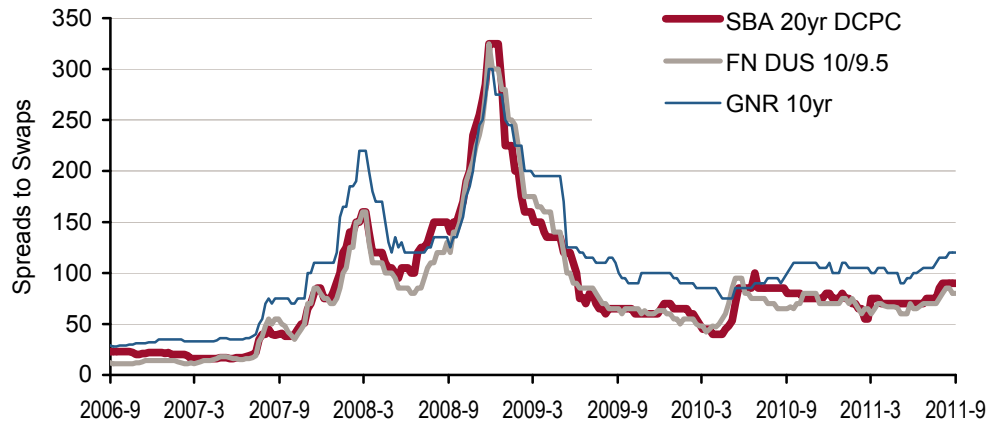
New issue deals are priced at 0% CPR; however, market convention for secondary trading is a 5% CPR for the total prepayment speed.

Against a spectrum of rich spread products, SBA DCPCs continue to offer value. The range of investor participants is broad, including banks, money managers and insurance companies. DCPCs offer the safety of a government security, a regular issuance calendar (20-year DCPC monthly and 10-year DCPC bimonthly) plus a robust 25-year performance history of prepayment and acceleration (i.e., default) data. DCPC underwriters are also secondary market makers for the sector.

The market quotes 20-year DCPC spreads over 10-year swaps and 10-year DCPC spreads over 5-year swaps. The average lives for the 20-year DCPCs and 10-year DCPCs is approximately 8.5 years and 4.75 years, respectively, when priced at a 5% CPR prepayment speed.

SBA DCPC spreads move in tandem with other Agency CMBS products. After gapping out to swaps+325 bp in 2008 Q4, 20-year DCPC spreads have tightened to double digits, and have been trading around swaps+70 bp in the first half of 2011. Looking ahead, we expect spreads to perform in sympathy with the spread product universe, and they would do so with the incremental benefit of a guarantee.

Exhibit 37: SBA DCPC spreads over swap curve



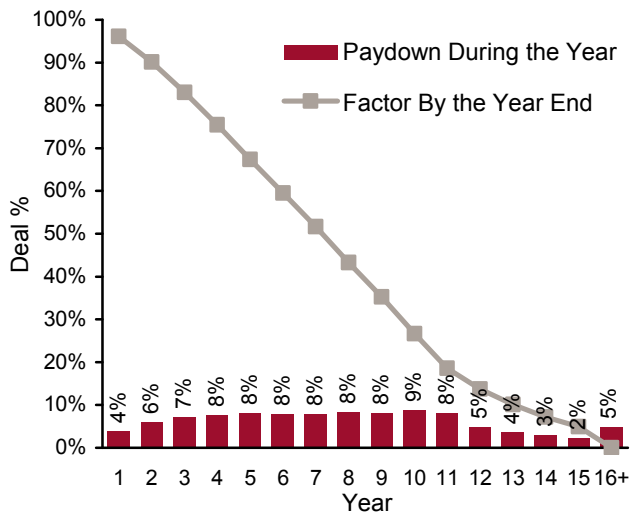
Source: Credit Suisse

Prepayment Analysis

There are two sources of prepayment risk in SBA Debentures: (1) voluntary prepayments and (2) “default induced” accelerations; together, they represent “total prepayments.” Exhibit 38 shows the seasoning of the total prepayment curve for 20-year DCPCs based on historical DCPC payment data since 1986. The seasoning curve generally follows voluntary prepayments given the relatively insignificant acceleration/default activity (with the exception for initial years).

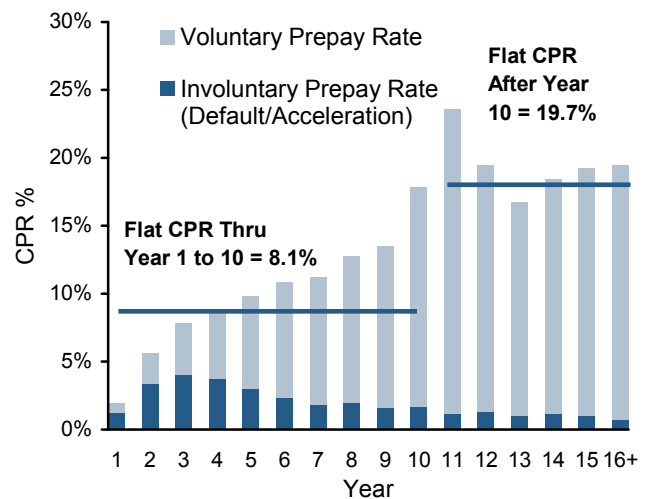
The equivalent annual payment rate consistent with realized prepayments and defaults would be approximately 8.1% for the first ten years and 19.7% for the last ten years in which borrowers prepay without any penalty (Exhibit 39). The equivalent lifetime rate would be 14.7%.

Exhibit 38: SBA DCPC paydowns



Source: Credit Suisse, BNY Mellon

Exhibit 39: SBA DCPC payment speeds



Source: Credit Suisse, BNY Mellon

Exhibit 40: SBA DCPC total payment speeds by vintage (%)

Year Since Origination	All	Issue Year													
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	1.6	0.9	1.3	0.7	1.1	1.2	1.2	1.1	1.4	1.7	2.0	2.3	3.2	3.3	1.1
2	4.8	3.1	2.8	2.6	4.2	4.5	3.8	3.9	4.5	5.2	5.9	6.4	9.8	5.6	
3	7.4	5.1	2.9	5.9	10.4	8.5	6.9	6.3	6.9	7.4	8.1	10.3	9.8		
4	8.8	4.3	5.7	11.4	14.6	9.2	8.2	7.1	9.3	6.5	8.9	11.3			
5	10.3	8.2	10.3	15.5	16.6	11.3	8.9	7.4	6.9	8.4	9.6				
6	11.6	14.1	15.8	15.4	15.9	11.4	10.0	6.4	6.6	8.3					
7	11.7	17.9	12.1	13.7	13.6	13.4	8.7	6.0	8.0						
8	13.3	17.2	13.3	14.2	18.9	11.8	8.3	9.2							
9	13.4	14.9	13.5	16.1	16.8	10.7	8.2								
10	17.3	15.0	18.7	19.7	18.2	15.0									
Flat Voluntary CPR	2.8	11.6	9.9	11.3	11.7	7.8	5.6	4.3	4.2	3.2	2.2	0.9	0.4	0.4	0.2
Flat Involuntary CPR	5.4	1.1	1.1	1.3	1.9	1.8	1.5	1.5	1.9	3.0	4.4	6.1	6.7	3.4	1.0
Flat Total CPR	8.1	12.7	11.1	12.6	13.9	9.6	7.2	5.8	6.2	6.2	6.7	7.1	7.2	4.1	1.2

Source: Credit Suisse, BNY Mellon

The total prepayment speed increases as deals season across all the issue years; however, the mix of voluntary prepayments versus defaults may differ significantly for each issue year. Indeed, post-2005 SBA DCPC deals incurred relatively more defaults compared to older vintages due to the last recession; therefore, the majority of early payments stemmed from accelerations for the recent vintages, as shown in Exhibit 40. The yield pickup, as a result of prepayment penalty collection, can be quite significant for voluntary prepayments; therefore, dissecting the source of prepayments (i.e., voluntary vs. acceleration) is critical.

We also note that defaults in the aftermath of the last recession are much more severe compared with those in prior periods. Looking at the performances of 2000 and 2007 deals, the two vintages at the peak of the last two business cycles, cumulative default rates total only 10% of the original balance for the former cohort's loans, but have already reached over 18% for the 2007 loans, despite the latter having less seasoning.

SBIC Program & SBIC Debentures

SBIC Program

The SBIC program addresses the needs of small businesses with limited or no access to private venture capital. A Small Business Investment Company (SBIC) is a privately owned venture capital (VC) fund that makes equity and/or debt investment in qualifying small businesses. All SBICs are licensed and regulated by the SBA, but the agency is not involved in the management of the SBICs; its role is akin to a “fund of funds” for the VC industry.

The SBIC program has often been credited with the development of the US venture capital industry. Since the first SBIC was licensed in 1959, the number of SBICs has grown to 302 for a grand total of \$15 billion invested in small businesses (\$8.8 billion raised from private capital and \$6.2 billion guaranteed by the SBA).

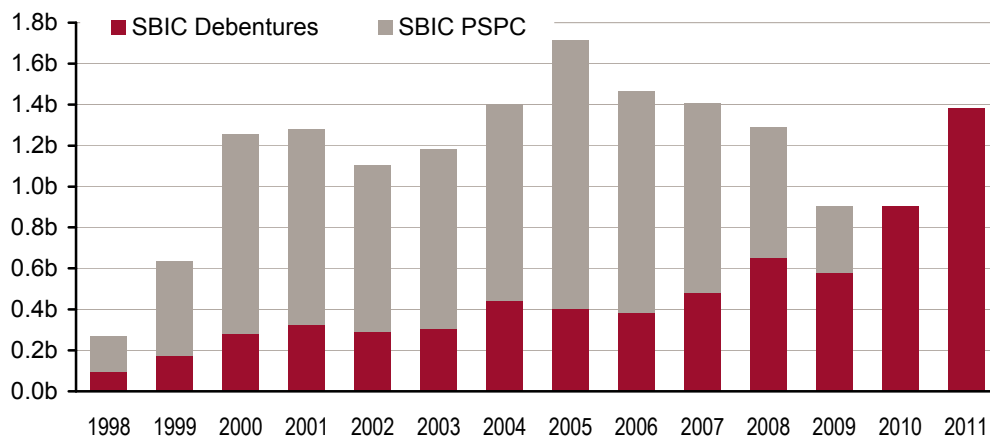
Market Size

Market Size: \$4.6 billion outstanding

There have been \$6.8 billion of SBIC debentures issued since 1992, with a current outstanding balance of \$4.6 billion. The deals carry a ticker of SBIC on Bloomberg (i.e., SBIC 2011-10A). Issuance of SBIC Debentures has been increasing in the past decade, partly because the SBA decided to phase out another SBIC program named SBIC Participating Securities (PSPC). We review the basic features of SBIC PSPCs in Appendix 3.⁴⁴

With the last PSPC being issued in 2009, SBIC debenture issuance has increased 50% annually for the last two years (Exhibit 41). The average deal size jumped to \$570 million compared to \$250 million for the deals issued between 2004 and 2009.

Exhibit 41: SBIC debenture issuance



Source: Credit Suisse, SBA

In order to be licensed by the SBA, SBICs need to fulfill various requirements, which typically include experience in managing VC funds and securing private investor commitments. Once commitments and licensing are secured, SBICs are eligible to receive capital (also called “leverage”) from the SBA.

⁴⁴ Outstanding SBIC PSPC total \$2.1 billion as of August 2011.

**10-year fixed-rate,
non-amortizing
debentures**

Collateral Characteristics

By leveraging private capital, SBICs raise additional funds via the SBIC program by issuing debentures (debt obligations). The leverage is typically at a 2:1 ratio of public to private funding, implying that for every \$2 dollars borrowed from the SBA, the SBICs must raise \$1 of capital from private investors.⁴⁵ The debentures are unsecured, non-recourse loans that have ten-year maturities and pay interest semi-annually with a lump sum payment of principal due at maturity. With the proceeds of debentures, SBICs can make debt and/or equity investments in small businesses.⁴⁶

In order to be eligible for SBIC financing, the SBA requires small businesses to have tangible net worth not exceeding \$18 million and average after-tax income for the prior two years not exceeding \$6 million, or to have 500 employees or less. Small business owners generally use the SBIC financing for operating capital purposes and for acquisitions of business, as well as other activities including research & development and marketing.

SBICs serve a broad range of industries and geographies as shown in Exhibit 42. This is in contrast to the private VC market, which largely focuses on high technology industries, and is concentrated in the West (most notably in Silicon Valley, LA/Orange County and the San Diego area) and in the Northeast (NY Metro and New England).

Exhibit 42: SBIC debentures by sector and by region

Fiscal Year 2006-2010

By Sector	Pct	By Region	Sub-Region	Pct
Manufacturing	21%	West	Pacific	13%
Consumer Related	17%		Mountain	7%
Transportation	17%	Midwest	West North Central	6%
Business Services	12%		East North Central	11%
Communications & Media	9%	South	West South Central	9%
Medical/Health	8%		East South Central	3%
Other*	17%		South Atlantic	17%
		Northeast	Middle Atlantic	26%
			New England	8%

Source: Credit Suisse, SBA

*includes Biotechnology, computers, financial services, industrial/energy, construction and other sectors

No Call Protection

SBIC debentures issued since 2007 have no call protection features, allowing the borrowers to prepay in whole (not in part though) on any semi-annual payment date without penalty. SBIC debentures in prior years had 5-year prepayment penalties, which declined 1% annually from 5% to 1%.

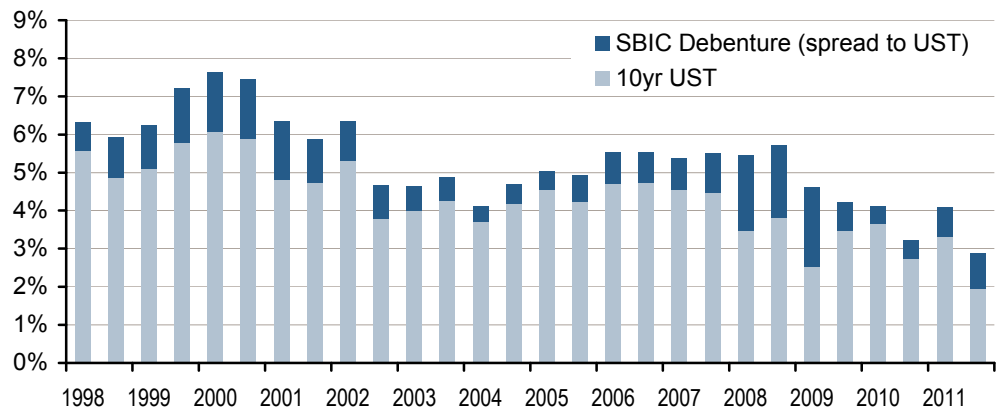
Securitization Process

By pooling 100 to 200 individual debentures, an “SBIC Debenture” deal is issued on a semi-annual basis. The interest rate for the underlying pooled debentures is set based on the pricing of the SBIC debenture, which is typically a nominal spread to the 10-year Treasury rate as shown in Exhibit 43. Similar to a SBA DCPC deal, there is no time-tranching or credit enhancement for a SBIC debenture. The cash flows are simply pass-through from the pool of same-rate debentures.

⁴⁵ To issue debentures, SBICs need a minimum private capital requirement of \$5 million in order to be SBA licensed. SBICs can borrow up to the lesser of three times of the private capital or \$119 million through debentures. The \$119 million ceiling is adjusted annually to reflect increases in the Consumer Price Index.

⁴⁶ Most of the investments are either straight debt (43%) or debt with a equity “kicker” feature (44%).

Exhibit 43: SBIC debenture rates



Source: Credit Suisse, SBA

Explicit US government guarantee

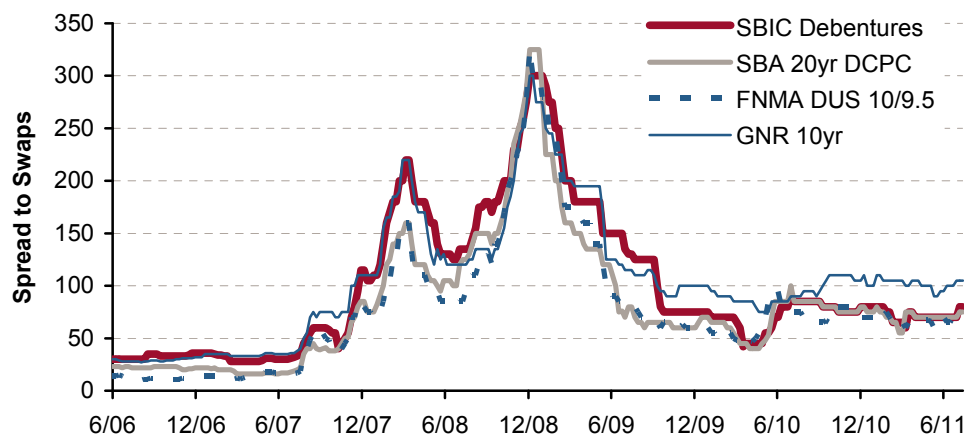
The SBA, backed by the full faith and credit of the US government, guarantees the timely payment of principal and interest on the SBIC debentures, and the timely pass-through of principal and interest to the participation certificate investors. SBIC debentures qualify as zero-percent risk-weighted assets.

Pricing Convention: 7% CPR

Market pricing convention for SBIC Debentures is at a 7% CPR prepayment speed (including both voluntary prepayments and accelerations). New issue pricing spreads are quoted versus 10-year swaps; secondary market spreads are quoted over swaps of the actual average life after applying the prepayment assumptions. The average life is around seven years for a SBIC debenture using the 7% CPR convention.

SBIC debenture spreads closely track SBA 504 DCPCs, and hence are highly correlated with other Agency CMBS spreads. SBIC spreads widened out to swaps+300 bp in 2008 Q4, then tightened to double digits, and have been trading around swaps+60 bp to swaps+80 bp in the first half of 2011.

Exhibit 44: SBIC debenture spreads over swap curve



Source: Credit Suisse

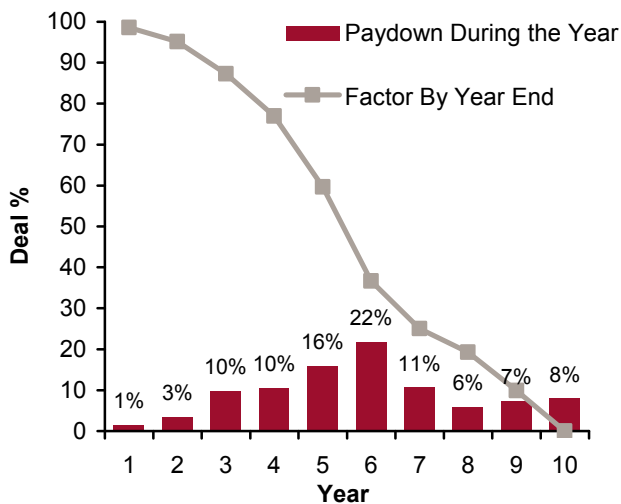
Prepayment Analysis

Similar to SBA 504 debentures, there are two sources of prepayment risk in SBIC debentures: (1) optional (i.e. voluntary) prepayments and (2) “default induced” accelerations. The optional prepayments are generally driven by payoffs after a successful exit strategy (IPO, buyout, etc.), whereas payoffs due to rate refinancing are less prevalent.

Exhibit 45 shows the timing of SBIC Debenture paydowns (including both voluntary prepayments and accelerations) based on historical payment data since 1992, and Exhibit 46 illustrates the seasoning of the prepayment curve expressed as CPRs. We also note that with the elimination of the prepayment penalty feature in/after 2007, voluntary prepayments would have the same impact as the defaults for recent SBIC debentures.

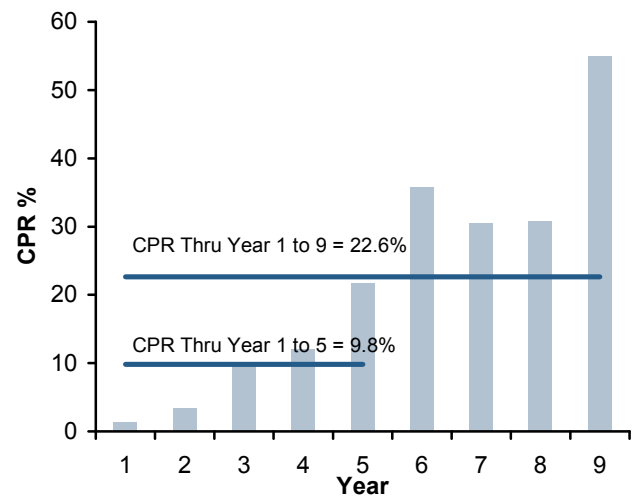
Total principal paydowns peak by year 6 during which, on average, 22% of the original balance is paid off, then taper off. This is equivalent to a flat 9.8% CPR for the first five years, followed by annual CPRs at or above 30% in year 6 and later. The year 1 to year 9 equivalent flat CPR is 22.6%. In Exhibit 47, we show historical prepayment speeds for each SBIC debenture deal issued since 1998.

Exhibit 45: SBIC debenture paydowns



Source: Credit Suisse, SBA

Exhibit 46: SBIC debenture payment speeds



Source: Credit Suisse, SBA

Exhibit 47: Summary of SBIC debentures issued since 1998

Deal	Original Balance (\$mn)	Rate	Current Factor	Vol. Prepay	Default (Accel.)	Annual CPR (Year Since Origination)										Deal Life Time Speed
						1	2	3	4	5	6	7	8	9	10	
SBIC 1998-10A	\$67	6.32	0.00x	0.44x	0.45x	0.0%	16.3%	5.3%	22.6%	4.8%	35.1%	9.8%	0.0%	43.5%	100.0%	15.9%
SBIC 1998-10B	\$27	5.94	0.00x	0.55x	0.45x	0.0%	0.0%	16.6%	6.3%	31.6%	10.3%	22.3%	62.4%	73.7%	100.0%	29.4%
SBIC 1999-10A	\$76	6.24	0.00x	0.36x	0.56x	0.0%	2.0%	8.0%	4.1%	42.8%	7.9%	36.0%	4.5%	41.4%	100.0%	22.9%
SBIC 1999-10B	\$99	7.22	0.00x	0.54x	0.44x	0.0%	6.8%	29.7%	7.7%	17.1%	44.5%	39.3%	43.1%	15.8%	100.0%	29.7%
SBIC 2000-10A	\$155	7.64	0.00x	0.71x	0.29x	1.0%	5.9%	10.6%	29.3%	64.4%	56.0%	31.6%	43.6%	100.0%		42.0%
SBIC 2000-10B	\$127	7.45	0.00x	0.82x	0.18x	2.7%	0.6%	15.0%	22.2%	40.0%	37.4%	83.3%	100.0%			39.1%
SBIC 2001-10A	\$134	6.35	0.00x	0.63x	0.38x	0.6%	4.9%	5.5%	18.3%	56.1%	34.7%	34.0%	37.9%	56.3%	100.0%	33.0%
SBIC 2001-10B	\$193	5.89	0.01x	0.73x	0.25x	0.0%	0.8%	0.0%	25.8%	27.1%	42.8%	18.6%	14.6%	36.7%	98.8%	35.9%
SBIC 2002-10A	\$148	6.34	0.05x	0.73x	0.22x	0.0%	7.3%	7.0%	10.5%	20.9%	44.3%	30.1%	11.0%	76.6%		28.4%
SBIC 2002-10B	\$141	4.67	0.25x	0.63x	0.12x	0.4%	0.0%	14.5%	7.6%	12.0%	33.9%	44.8%	0.0%	5.6%		15.2%
SBIC 2003-10A	\$152	4.63	0.27x	0.32x	0.41x	0.0%	0.5%	22.7%	9.4%	22.8%	17.4%	12.5%	30.7%			15.1%
SBIC 2003-10B	\$153	4.88	0.32x	0.53x	0.15x	0.0%	7.5%	10.9%	9.4%	20.9%	32.8%	7.8%	21.3%			13.9%
SBIC 2004-10A	\$185	4.12	0.34x	0.53x	0.13x	0.0%	1.9%	3.8%	9.6%	7.2%	27.4%	39.9%				14.1%
SBIC 2004-10B	\$256	4.68	0.48x	0.47x	0.05x	0.4%	0.4%	9.6%	4.5%	7.6%	34.6%	15.9%				10.8%
SBIC 2005-10A	\$205	5.04	0.33x	0.58x	0.09x	0.5%	0.0%	7.4%	3.4%	6.9%	60.1%					16.8%
SBIC 2005-10B	\$197	4.94	0.61x	0.36x	0.02x	0.0%	0.0%	0.5%	8.6%	2.2%	52.5%					8.5%
SBIC 2006-10A	\$185	5.52	0.85x	0.13x	0.02x	0.0%	0.0%	1.1%	9.6%	4.8%						3.2%
SBIC 2006-10B	\$198	5.54	0.96x	0.03x	0.01x	0.0%	0.0%	0.0%	2.7%	1.7%						0.8%
SBIC 2007-10A	\$240	5.38	0.70x	0.30x	0.00x	6.7%	5.0%	7.4%	15.0%							8.6%
SBIC 2007-10B	\$238	5.53	0.84x	0.16x	0.00x	9.1%	0.0%	0.7%	14.0%							5.0%
SBIC 2008-10A	\$290	5.47	0.83x	0.16x	0.01x	8.6%	5.0%	4.4%								6.0%
SBIC 2008-10B	\$361	5.89	0.67x	0.28x	0.05x	0.8%	13.0%	40.1%								14.9%
SBIC 2009-10A	\$262	4.62	0.96x	0.04x	0.00x	1.0%	3.1%									2.0%
SBIC 2009-10B	\$319	4.23	0.99x	0.00x	0.01x	1.0%	0.4%									0.8%
SBIC 2010-10A	\$339	4.11	0.98x	0.00x	0.02x	1.7%										1.7%
SBIC 2010-10B	\$563	3.13	1.00x	0.00x	0.00x	0.9%										0.9%
SBIC 2011-10A	\$823	4.08	1.00x	0.00x	0.00x	na										0.0%
SBIC 2011-10B	\$559	2.87	1.00x	0.00x	0.00x	na										0.0%
Avg. Annual CPR						1.4%	3.4%	10.0%	12.0%	21.7%	35.7%	30.4%	30.8%	55.0%	100.0%	

Source: Credit Suisse, SBA

Appendix 1: Major FHA/HUD Project Loan Programs

Section 221(d)(4), Low- and Moderate-Income Multifamily Housing: Through Section 221(d)(4), FHA insures mortgages for new or substantially rehabilitated multifamily rental properties. Section 221(d)(4) supports private industry in building or improving rental and cooperative housing for low- and moderate-income or displaced families by making capital more readily available. It assists for-profit sponsors only. The maximum loan amount ranges from 83% to 90% of the project replacement cost.

Exhibit 48: Underwriting criteria for Section 221(d)(4) project loans

Section, Project Type	New Min DSCR	Old Min DSCR	New Max LTV or LTC	Old Max LTV or LTC
221(d)(4): 90% > rental assistance	1.11x	1.11x	90%	90%
221(d)(4): affordable	1.15x	1.11x	87%	90%
221(d)(4): market rate	1.20x	1.11x	83%	90%

Source: Credit Suisse, HUD

Section 223(f), Acquisition or Refinancing of Existing Mortgages: Through Section 223(f), FHA provides mortgage insurance for existing mortgages that are either conventional or FHA insured. In order to qualify for a 223(f) loan, the property must have been completed or rehabilitated at least three years ago. For acquisitions, the loan amount can be up to 85% of the acquisition cost. For refinancing, the maximum loan amount is 85% of HUD's appraisal value.

The refinanced loan amount may exceed that of the old loan (a cash-out refinance). The principal objective of the Section 223(f) program is to permit the refinancing of mortgage loans to provide for a lower debt service, or the purchase of existing properties, in order to preserve an adequate supply of affordable rental housing. Such projects may have been financed originally with conventional or FHA-insured mortgage loans.

Exhibit 49: Underwriting criteria for Section 223(f) project loans

Section, Project Type	New Min DSCR	Old Min DSCR	New Max LTV or LTC	Old Max LTV or LTC
223(f): refinance of Section 202	1.15x	1.11x	90%	90%
223(f): 90% > rental assistance	1.15x	1.18x	87%	85%
223(f): affordable	1.18x	1.18x	85%	85%
223(f): market rent refinance	1.20x	1.18x	83%	85%
223(f): market rate acquisition	1.20x	1.18x	83%	85%

Source: Credit Suisse, HUD

Section 223(a)(7), Refinancing of FHA-Insured Mortgages: Through Section 223(a)(7), FHA refinances existing mortgages that were created under any section or title of the National Housing Act. Both non-profit and for-profit borrowers may participate; however, the maximum loan term may not exceed the remaining term on the existing mortgage. The motivation for such a refinancing is typically to improve the cash flow of the enterprise. The new loan amount cannot exceed the original balance of the refinanced loan.

Section 232, Mortgage Insurance for Nursing Homes and Assisted-Living Facilities: Through Section 232, FHA insures the construction, substantial rehabilitation, or refinancing of nursing homes, assisted-living facilities, board-and-care homes and intermediate-care facilities. Both non-profit and for-profit borrowers may participate. For new construction and rehabilitation, for-profit borrowers may borrow a maximum of 90% of the improvement value, while non-profit borrowers may borrow up to 95%. For existing projects, the maximum is 85% for profit-driven borrowers and 90% for non-profit borrowers.

Appendix 2: SBA 7(a) vs. SBA CDC/504 Program Summary

Program	7(a) Loans	CDC/504 Loans
Provided Through	Private lenders (banks, credit institutions)	First loan via private lenders Second loan via Certified Development Companies (CDCs) which are licensed by SBA
Maximum Amount	\$5 million (gross)	Depending on type of business: Private Lender Loan: \$6.3 million to \$6.9 million (first lien) CDC Loan: \$5.0 million to \$5.5 million (second lien)
Percent of Guaranty	75% SBA guaranty for loans greater than \$150,000 (up to \$3.75 million maximum guaranty) 85% SBA guaranty for loans of \$150,000 or less	Private Lender Loan: No SBA guaranty CDC Loan: 100% SBA guaranty
Securitized and Sold to Investors	SBA Pools which include only the SBA-guaranteed part of loans (i.e., 75% to 85% of gross loan)	SBA DCPCs which include only the SBA-guaranteed CDC loans.
Interest Rates	Floating-rate Max. Prime + 2.25% (Loans less than 7 yr) Prime +2.75% (7 yrs. or more);	Fixed-rate on CDC loans are established upon pricing of SBA DCPC deals (issued on a monthly basis)
Prepayment Penalties	Prepayment penalty for loans with maturities of 15 years or more if prepaid during first 3 years. (5% year 1, 3% year 2 and 1% year 3)	Declining prepayment penalty for 1/2 of term.
Maturity	Depends on ability to repay. Generally, working capital & machinery & equipment (not to exceed life of equipment) is 5-10 years; real estate is 25 years	CDC Loan: 10- or 20-year term fixed interest rate. Private lender loan financing may have a shorter term. May be fixed or adjustable interest rate
Guaranty Fees	(Fee charged on guarantied portion of loan only) Maturity: 1 year or less 0.25% guaranty fee; over 1 year: \$150,000 gross amount or less = 2%; 150,001—\$700,000 = 3.0%; over \$700,000 = 3.5%; 3.75% on guaranty portion over \$1 million. Ongoing fee of 0.55%	.5% fee on lender share, plus CDC may charge up to 1.5% on their share. CDC charges a mthly servicing fee of .625%-1.5% on unpaid balance Ongoing guaranty fee (FY 2011) is 0.749% of principal outstanding. Ongoing fee % does not change during term
Who Qualifies	Must be a for profit business & meet SBA size standards; show good character, credit, management, and ability to repay. Must be an eligible type of business	Alternative Size Standard: For-profit businesses that do not exceed \$15 million in tangible net worth, and do not have average net income over \$5 million
Use of Proceeds	Expansion/renovation; new construction, purchase land or buildings; purchase equipment, fixtures, lease-hold improvements; working capital; refinance debt for compelling reasons; seasonal line of credit, inventory	Construction or acquisition of physical plants or machinery and equipment. Proceeds cannot be used for working capital
Benefits to Borrowers	Long-term financing; Improved cash flow; Fixed maturity; No balloons; No prepayment penalty (under 15 years)	Low down payment – equity (usually 10%) (The equity contribution may be borrowed) Fees can be financed; SBA CDC Portion: Long-term fixed rate Full amortization No balloons

Source: Credit Suisse, SBA

Appendix 3: SBIC Participating Securities (PSPC)

The Small Business Equity Enhancement Act of 1992 authorized SBA to guarantee participating securities. Depending on whether the issuing SBIC was a corporation or a partnership, the participating securities were issued as preferred stock, or an income bond (with equity features), or as preferred limited partnership interests, in order to make equity investments in small businesses.⁴⁷

The program was gradually phased out, beginning in 2004, due to increased losses during the early 2000s. Between 1995 and 2009, 35 PSPC deals, totaling \$10.3 billion, were issued. Cumulative losses for the program have been \$4.1 billion across all deals; another \$4.1 billion of participating securities have been prepaid, resulting in \$2.1 billion outstanding SBIC PSPC volume, as of August 2011.

SBIC PSPCs, like SBIC Debentures, are single-tranche securities with a fixed-rate coupon and a 10-year maturity. Another common feature is that there is no principal amortization, and the full face amount payment is due at maturity. Interest payments, called “prioritized payments”, are quarterly, and the amount is dependent upon the profit generated by the small business (the investment). If the small business is unable to generate enough cash flow to make payments, the SBA covers the interest payment shortfall.

SBIC PSPC principal payments are referred to as “redemptions.” There are three types of redemption payments: mandatory, optional, and forced. Mandatory redemption is earning dependant – i.e., at the end of each fiscal year, the principal payment is due based on a portion of the small business’s net cumulative earning of the fiscal year. An optional redemption is essentially a voluntary prepayment (in whole, not partial), without prepayment penalty. A forced redemption is similar to acceleration payment found in SBIC debentures – when there is a default, the SBA will step in and pay the full remaining principal balance. Timing for redemptions of SBIC PSPCs is tricky, as they may occur on any payment date throughout the life of the security.

Under the participating securities program, failure by an SBIC to pay prioritized payment does not constitute a condition for forced redemption. Instead, the SBA covers the interest payment shortfall for the SBIC. In return, the SBA is reimbursed for such guarantee payments in addition to profit sharing of the SBIC throughout the life of the participating securities.⁴⁸ This is in contrast to the SBIC Debentures program, where failure by an SBIC to pay interest is a default and leads to acceleration.

Mandatory redemptions and optional redemptions of participating securities follow a special “first-in-first-out” payment rule. Since SBICs issue multiple participating securities at different times, mandatory redemptions and optional redemptions received by the SBIC are applied to redeem the participating securities sequentially by issue date. In other words, mandatory and optional redemptions from later participating securities are applied to pay down the principal of an earlier participating securities. By comparison, there’s no “first-in-first-out” rule applied to the optional prepayments of SBIC debentures, i.e., the optional prepayment can only be applied to redeem the corresponding debenture.

In Exhibit 50, we show historical payment speeds for the PSPC deals issued since 1995.

⁴⁷ Equity features associated with an income bond can be warrants, stock purchase options, among others.

⁴⁸ The profit participation of SBA is typically 9% to 12%.

Exhibit 50: Summary of SBIC PSPC issued Since 1995

Deal	Orig. Bal. (\$mn)	Rate	Current Factor	Optional or Mandatory Redemptions (Vol. Prepay)	Forced Redemptions (Default)	Annual CPR (Year Since Origination)										Deal Life Time Speed
						1	2	3	4	5	6	7	8	9	10	
SBIC 1995-P10C	\$110	7.35	0.00x	0.81x	0.19x	0.0%	0.6%	12.0%	20.7%	41.4%	17.0%	39.5%	13.4%	100.0%	29.3%	
SBIC 1995-P10D	\$25	6.70	0.00x	0.88x	0.12x	0.0%	0.0%	19.7%	22.4%	51.7%	48.0%	0.0%	20.5%	96.0%	100.0%	42.0%
SBIC 1996-P10A	\$59	6.67	0.00x	0.91x	0.09x	0.0%	2.8%	36.2%	9.4%	33.4%	61.5%	26.6%	6.0%	100.0%	25.1%	
SBIC 1996-P10B	\$43	7.44	0.00x	0.93x	0.07x	0.0%	0.0%	7.0%	37.5%	13.1%	5.8%	31.3%	100.0%	20.7%		
SBIC 1996-P10C	\$160	7.35	0.00x	0.67x	0.33x	0.0%	0.3%	17.3%	17.9%	10.1%	27.0%	10.4%	81.5%	38.3%	100.0%	29.5%
SBIC 1996-P10D	\$21	6.90	0.00x	0.51x	0.49x	0.0%	6.8%	0.0%	46.9%	0.0%	29.0%	32.7%	57.7%	100.0%	24.4%	
SBIC 1997-P10A	\$33	7.08	0.00x	0.97x	0.03x	0.0%	22.2%	41.8%	39.8%	0.0%	0.0%	40.7%	79.2%	100.0%	37.8%	
SBIC 1997-P10B	\$77	7.07	0.00x	0.55x	0.45x	0.0%	0.0%	14.1%	33.5%	50.2%	33.6%	53.1%	41.1%	100.0%	28.7%	
SBIC 1997-P10C	\$83	6.76	0.00x	0.75x	0.25x	0.0%	3.6%	17.9%	20.1%	10.3%	5.0%	50.6%	32.1%	62.8%	100.0%	31.8%
SBIC 1997-P10D	\$48	6.55	0.00x	0.78x	0.22x	0.0%	12.8%	51.4%	7.3%	33.5%	34.5%	63.9%	0.0%	0.0%	100.0%	24.8%
SBIC 1998-P10A	\$93	6.12	0.00x	0.77x	0.23x	0.0%	1.2%	42.7%	24.1%	10.7%	10.6%	5.1%	10.0%	32.5%	100.0%	21.3%
SBIC 1998-P10B	\$81	6.25	0.00x	0.63x	0.37x	0.0%	24.3%	25.3%	24.0%	17.1%	27.7%	52.7%	37.4%	20.7%	100.0%	25.0%
SBIC 1999-P10A	\$192	6.10	0.00x	0.63x	0.37x	10.6%	16.5%	11.2%	16.8%	34.9%	24.6%	37.4%	0.8%	34.0%	100.0%	23.5%
SBIC 1999-P10B	\$269	7.54	0.00x	0.47x	0.53x	14.1%	10.0%	14.0%	19.2%	54.7%	43.3%	37.3%	39.0%	57.8%	100.0%	32.3%
SBIC 2000-P10A	\$455	8.02	0.00x	0.39x	0.61x	7.9%	11.6%	15.3%	43.3%	40.1%	55.8%	10.6%	24.2%	31.5%	100.0%	28.4%
SBIC 2000-P10B	\$516	7.45	0.00x	0.38x	0.62x	0.5%	8.8%	17.4%	35.0%	49.3%	51.5%	43.5%	24.9%	10.7%	100.0%	30.7%
SBIC 2001-P10A	\$430	6.64	0.00x	0.44x	0.56x	0.1%	12.0%	15.0%	20.5%	54.2%	37.4%	48.6%	51.5%	38.9%	100.0%	31.3%
SBIC 2001-P10B	\$522	6.34	0.00x	0.45x	0.55x	1.6%	12.1%	14.5%	27.1%	38.1%	28.1%	64.4%	41.4%	66.0%	100.0%	37.8%
SBIC 2002-P10A	\$420	6.03	0.05x	0.49x	0.46x	1.8%	7.9%	15.6%	31.9%	30.3%	18.8%	40.3%	50.8%	35.9%	29.6%	27.6%
SBIC 2002-P10B	\$393	5.20	0.09x	0.45x	0.46x	2.3%	7.3%	13.8%	22.6%	27.7%	39.2%	39.0%	37.9%	11.0%	23.5%	
SBIC 2003-P10A	\$423	4.52	0.05x	0.49x	0.46x	2.9%	7.0%	19.1%	29.9%	28.7%	36.1%	57.2%	47.5%	4.5%	29.5%	
SBIC 2003-P10B	\$450	5.14	0.11x	0.45x	0.44x	2.9%	12.4%	15.6%	26.2%	34.3%	30.0%	31.3%	36.9%	24.5%		
SBIC 2004-P10A	\$469	4.50	0.13x	0.40x	0.47x	2.9%	11.6%	16.2%	19.8%	31.9%	42.8%	37.6%	14.1%	23.8%		
SBIC 2004-P10B	\$491	4.75	0.20x	0.38x	0.42x	3.6%	9.0%	12.6%	32.3%	27.9%	31.1%	21.2%	20.4%			
SBIC 2005-P10A	\$698	4.64	0.17x	0.44x	0.39x	4.0%	13.1%	16.2%	23.3%	35.7%	31.4%	49.2%	24.0%			
SBIC 2005-P10B	\$611	4.94	0.28x	0.46x	0.26x	2.0%	8.2%	18.5%	18.6%	25.3%	38.2%	19.3%				
SBIC 2006-P10A	\$580	5.52	0.25x	0.42x	0.33x	3.8%	13.4%	19.8%	24.6%	41.4%	30.8%	22.5%				
SBIC 2006-P10B	\$502	5.68	0.39x	0.26x	0.35x	1.2%	5.6%	11.9%	28.3%	34.0%	17.2%					
SBIC 2007-P10A	\$496	5.46	0.49x	0.16x	0.34x	4.5%	8.3%	14.3%	20.6%	31.2%	14.5%					
SBIC 2007-P10B	\$431	5.79	0.59x	0.13x	0.28x	3.7%	8.3%	16.9%	19.7%	12.4%						
SBIC 2008-P10A	\$314	5.90	0.65x	0.08x	0.28x	1.3%	17.0%	12.5%	18.5%	11.7%						
SBIC 2008-P10B	\$325	5.94	0.64x	0.04x	0.33x	2.9%	22.7%	15.2%	14.0%							
SBIC 2009-P10A	\$322	4.73	0.74x	0.08x	0.18x	4.6%	15.5%	16.0%	11.4%							
Avg. Annual CPR						1.4%	3.4%	10.0%	12.0%	21.7%	35.7%	30.4%	30.8%	55.0%	100.0%	

Source: Credit Suisse, SBA

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