

Fitch Ratings, Inc.

2015 Form NRSRO Annual Certification

Exhibit 1. Credit Ratings Performance Statistics.

Fitch makes information pursuant to the requirements of 17 CFR 17g-2(d) publicly available at the following web address:

<http://www.fitchratings.com/web/en/dynamic/about-us/regulatory-disclosures-and-commentary.jsp>

The files containing the information can be found at the above web address by clicking on the links titled “Fitch Ratings History Sample” and “Complete Rating History Disclosure.”

Please find attached the following ratings performance reports. These documents can also be accessed at the following web address via the link on the left entitled “Rating Transition & Default Studies”.

<http://www.fitchratings.com/jsp/marketfocus/MarketFocus.faces?marketFocusArea=CreditMarketResearch&selectedTab=Research&selectedLeftNav=all>

- 1) Fitch Ratings Global Corporate Finance 2014 Transition and Default Study, which was published in March 2015. The methodology used to determine the performance statistics contained within this report can be found on page 5. This report contains separate information regarding performance of ratings in the Corporates (Industrials), Financial Institutions and Insurance categories (see pages 9-14).
- 2) Fitch Ratings Global Structured Finance 2014 Transition and Default Study, published in March 2015. The methodology used to determine the performance statistics contained within this report can be found beginning on page 10.
- 3) Fitch Ratings Global Sovereign 2014 Transition and Default Study, which was published in March 2015. The methodology used to determine the performance statistics contained within this report can be found beginning on page 4.
- 4) Fitch Ratings International Public Finance 2014 Transition and Default Study, which was published in March 2015. The methodology used to determine the performance statistics contained within this report can be found beginning on page 4.
- 5) Fitch Ratings U.S. Public Finance 2014 Transition and Default Study, was published in March 2015. The methodology used to determine the performance statistics contained within this report can be found beginning on page 3.

For completeness, please see our ratings definitions at:

http://www.fitchratings.com/creditdesk/public/ratings_defintions/index.cfm under the heading at the top left titled “Rating Definitions.”

Global Corporate Finance 2014 Transition and Default Study

Measured Stability: Fitch's global corporate finance ratings (including financial institutions and industrials) exhibited moderate rating activity. Downgrades trailed upgrades for the first time since 2010, albeit at a slender margin of 0.9 to 1. The share of issuers downgraded – 7% – fell from 8.9% a year earlier, while upgrades – 7.6% – were in line with the 7.8% recorded in 2013. The year-over-year stability rate of 76.3% was progressively higher than 2013's 74.4% and 2012's 72.7%.

Mixed Regional Activity: A challenged European economic environment alongside geopolitical risks (Ukraine) pressured credit conditions, while the U.S. economy found its footing after a protracted recovery. The share of European corporate downgrades, 9.4%, topped upgrades of 5.9%. The reverse was true for North American rating activity with a downgrade rate of 5.6% lagging the upgrade rate of 9.6%.

FI/Industrials Divided: Sovereign and M&A activity contributed to actions both up and down the rating scale across both financial and industrial issuers in 2014. Financial institutions rating activity improved with downgrades trailing upgrades by a margin of 0.7 to 1, from parity in 2013. Industrials approached balanced

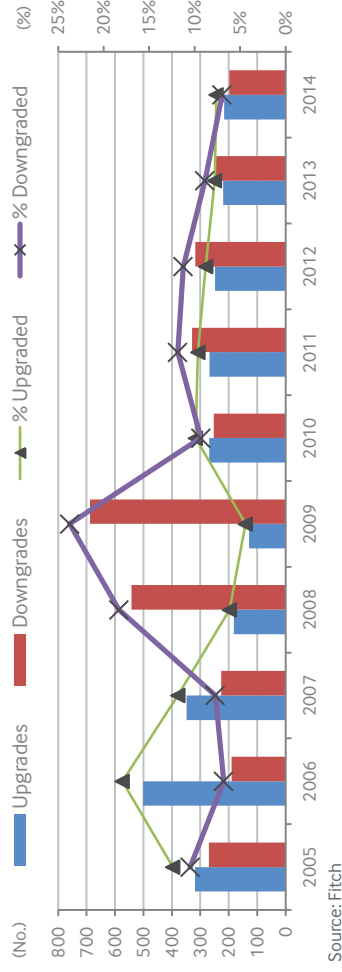
activity in 2014 with downgrades edging passed upgrades by a ratio of 1.1 to 1, narrowing from 1.3 to 1 the prior year.

Emerging Markets vs. Developed Market: The larger emerging market BRICs economies (Brazil, Russia, India and China) continued to experience sluggish economic growth, while confronting political and economic conditions including lower commodity pricing.

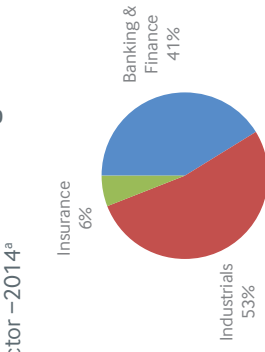
Emerging market issuer downgrades surpassed upgrades by a ratio of 1.6 to 1, for the first time since 2009. Meanwhile, advanced economy counterparts realized more benign conditions as the share of downgrades fell below upgrades by a margin of 0.7 to 1 in 2014, thus reversing the negative rating drift which began with the global financial crisis in 2008.

Default Rate Low in 2014: Fitch recorded a long term corporate issuer-based default rate of 0.49% in 2014, on par with 2013's 0.5% and well below the historical average 0.71% over the period 1990 – 2014. All 2014 defaults were rated speculative-grade at the beginning of the year, resulting in an annual default rate across speculative-grade issuers of 1.58%.

Corporate Finance Historical Rating Activity

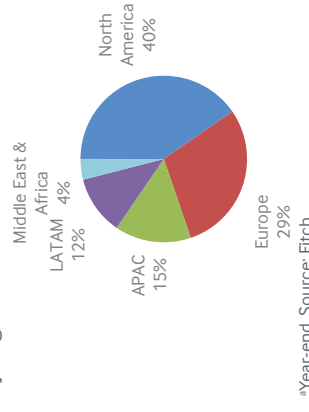


Corporate Finance Ratings Distribution by Sector – 2014^a



^aYear-end. Source: Fitch

Corporate Finance Ratings Distribution by Region – 2014^a



^aYear-end. Source: Fitch

Corporate Finance Activity by Broad Sector

Sector	2013			2014		
	Upgraded	Downgraded	Default Rate	Upgraded	Downgraded	Default Rate
Financial Institutions ^a	7.88	7.57	0.23	8.25	5.60	0.08
Industrials	7.74	9.97	0.72	7.08	8.11	0.84
All Global Corporate	7.80	8.87	0.50	7.61	6.98	0.49

^aIncludes banks, finance and insurance companies. Source: Fitch

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Global Corporate Finance

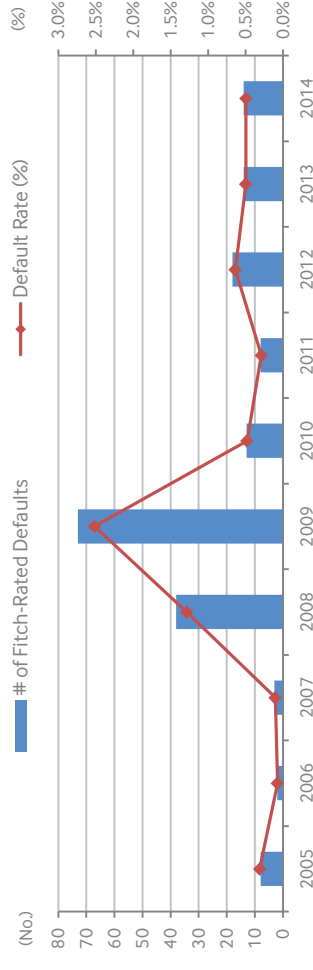
2014 Transition Matrix: The one year transition matrix displays an overall contraction in the downgrade rate year over year at the broad rating categories, excluding the 'B' and below ratings. 'B' downgrades rose to 15% from 3% in 2013 and 'CCC to C' downgrades increased to 23% from 8% in 2013. Additionally, the increase in downgrades at the 'B' category relates to financial and nonfinancial downgrades resulting in part from 2014 Argentina, Venezuela and Ukraine sovereign downgrades.

Regional Defaults: Corporate finance defaults were split across Europe, LATAM and North America, with one default recorded in APAC. European issuers accounted for the most defaults in 2014 including a September missed payment default of Ukrainian agricultural producer Mriya Agro Holding Public Limited. U.S. and Brazilian issuers registered four defaults apiece including duplicative group entities (eg Energy Futures Holdings Corp. and subsidiaries). The European corporate finance 2014 default rate was 0.6%, compared with North America (0.3%) and LATAM (1.2%).

Emerging/Developed Market Trends: Emerging market issuer defaults edged ahead of developed market issuer defaults in 2014. Emerging market defaults, all industrials, totaled eight in 2014, mirroring year-earlier figures. The 2014 emerging market annual default rate of 0.9% was on par with the 1% a year earlier. Developed market issuer defaults in 2014 – six – matched 2013 data; the 2014 rate was 0.31%.

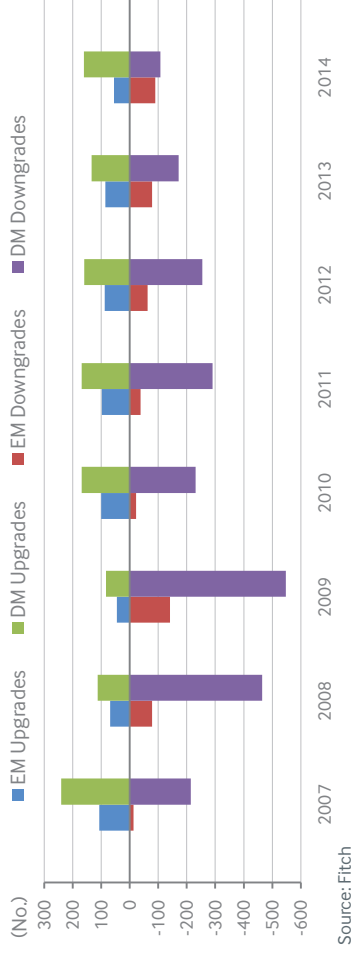
Average Annual Default Rates: The average annual default rate across Fitch-rated corporate finance issuers was 0.71% through 2014. The incidence of default increases considerably with each incremental movement down the rating scale, but particularly when the movement coincides with a shift from investment grade to speculative grade. Fitch's average annual global corporate finance investment-grade issuer default rate was 0.11% over the 1990 - 2014 period, while for speculative-grade issuers, the rate was 2.74%.

Corporate Finance Historical Defaults and Rates



Source: Fitch

Corporate Finance Developed and Emerging Market Historical Rating Activity



Source: Fitch

Corporate Finance One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC to C	D	WD
AAA	92.86	-	-	-	-	-	-	-	7.14
AA	-	95.83	0.83	-	-	-	-	-	3.33
A	-	0.72	92.76	2.89	-	-	-	-	3.62
BBB	-	-	3.02	86.86	0.98	-	-	-	9.15
BB	-	-	-	5.93	78.32	1.02	-	-	14.72
B	-	-	-	0.27	3.54	67.57	13.08	1.91	13.62
CCC to C	-	-	-	-	-	9.68	54.84	22.58	12.90

Source: Fitch

Corporate Finance Average Annual Transition Matrix: 1990-2014

%	AAA	AA	A	BBB	BB	B	CCC to C	D	WD
AAA	87.18	5.30	0.22	-	-	-	-	0.11	7.18
AA	0.12	85.44	8.61	0.35	0.02	0.02	-	0.03	5.42
A	0.01	1.84	87.55	5.02	0.41	0.06	0.03	0.07	5.00
BBB	-	0.13	3.09	86.56	3.13	0.47	0.13	0.17	6.31
BB	0.02	0.03	0.08	7.32	75.52	5.63	1.22	0.94	9.24
B	-	-	0.18	0.35	7.53	75.50	4.56	1.93	9.95
CCC to C	-	-	-	0.29	1.74	17.01	46.08	23.69	11.19

Source: Fitch

Global Financial Institutions

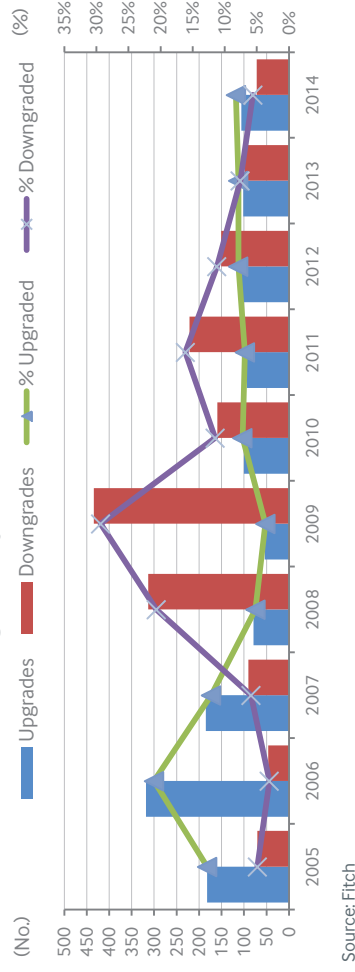
Financial Institutions Activity Improves: For 2014, the share of global financial institutions affected by downgrades, 5.6%, contracted from 7.6% recorded in 2013, while the share upgraded, 8.2%, edged up from 7.9% year over year. The vast majority of ratings, 80%, remained the same in 2014, compared with 76.2% in 2013.

Sovereign Impact: The sovereign downgrades of Argentina (to RD), Ukraine, Venezuela and Russia's country ceiling downgrades, reflected financial and political concerns, prompting negative moves for domestic and foreign-owned banks – as well as nonfinancials. Conversely, Spain's sovereign upgrade lifted several Spanish banks (and international subsidiaries) in 2014. Sovereign support will remain a significant factor in global bank rating activity in 2015, as Fitch executes its previously detailed approach to remove sovereign support from many banks in North America and Europe.

Bank actions driven by factors other than support became more balanced through 2014. Excluding rating actions related to sovereign support, bank upgrades exceeded downgrades in North America, APAC and LATAM. While credit driven downgrades for banks in EMEA exceeded upgrades in 2014, the gap narrowed relative to 2013.

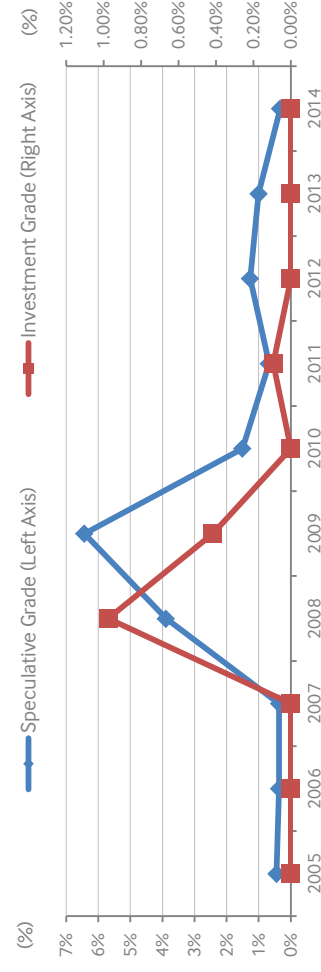
A Single Financial Institution Default: Financial institutions registered one default in 2014, compared with three defaults in 2013. The only financial services default – Alliance Bank JSC, a Kazakhstan bank – experienced an unsecured default on its senior debt obligations in March 2014. Fitch registered a financial institution default rate of 0.08% in 2014, below the 0.23% in 2013. Over the long term period, 1990 – 2014, Fitch recorded an average annual financial institution default rate of 0.44%.

Financial Institutions Rating Activity



Source: Fitch

Financial Institution Issuer Default Rates



Source: Fitch

Financial Institutions' One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC to C	D	WD
AAA	92.31	-	-	-	-	-	-	-	7.69
AA	-	98.82	-	-	-	-	-	-	1.18
A	-	0.72	94.26	1.44	-	-	-	-	3.59
BBB	-	-	4.10	88.12	0.43	-	-	-	7.34
BB	-	-	-	7.83	84.34	1.20	-	-	6.63
B	-	-	-	-	2.96	70.37	14.07	-	12.59
CCC to C	-	-	-	-	-	20.00	60.00	20.00	-

*Includes banks, finance and insurance companies. Source: Fitch

Financial Institutions' Average Annual Transition Matrix: 1990-2014

%	AAA	AA	A	BBB	BB	B	CCC to C	D	WD
AAA	87.06	4.85	0.15	-	-	-	-	0.15	7.79
AA	0.16	85.81	7.89	0.24	0.02	0.02	-	0.04	5.82
A	0.01	2.49	86.80	4.24	0.45	0.06	0.01	0.10	5.84
BBB	-	0.27	4.08	84.31	2.81	0.56	0.16	0.17	7.64
BB	-	0.09	0.14	8.51	72.58	5.59	1.85	1.16	10.08
B	-	-	0.12	0.31	8.21	76.71	4.63	0.93	9.08
CCC to C	-	-	-	-	2.94	21.69	43.38	16.91	15.07

*Includes banks, finance and insurance companies. Source: Fitch

Global Industrials

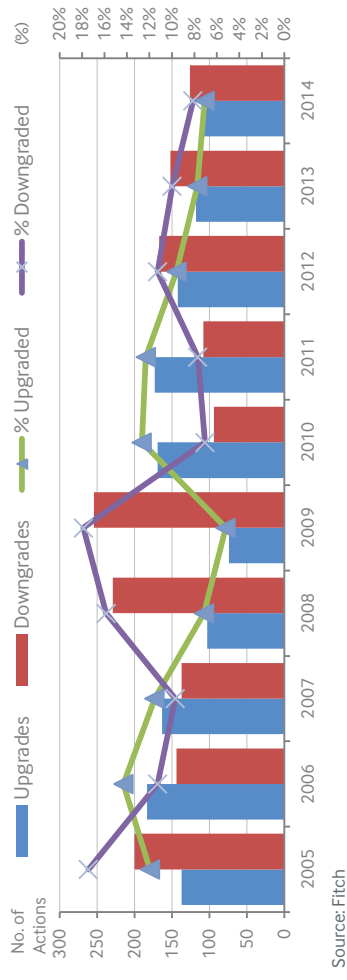
Balanced Industrial Activity: Global industrials recorded more downgrades than upgrades in 2014, for the third consecutive year. However, the volume of industrial rating activity slowed year-over-year. Industrials downgraded (8.1%) modestly outpaced those issuers upgraded (7.1%) in 2014, an improvement from 10% and 7.7%, respectively, in 2013. Downgrades were concentrated in the 'B' and below rating categories. Industrial stability rates aligned year over year at around 73%. Below the 80% stability rate for financial institutions in 2014.

Sovereign/M&A Activity: Sovereign and country ceiling actions affected around 20% of industrial downgrades. M&A activity, also contributed to both downgrades (a similar

proportion of 15%) but fewer upgrades such as Hillshire Brands upon the Tyson acquisition, and in the M&A-active European telecom market, Vodafone on the acquisition of Grupo Corporativo Ono, S.A. (ONO) and Kabel Deutschland.

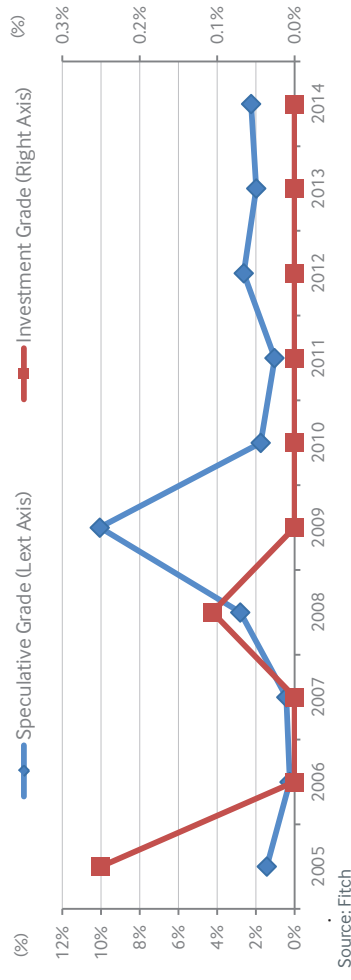
Industrial Defaults: The majority of defaults recorded in 2014 were industrial issuers, 13 in all, up from 11 a year earlier. North American defaults included U.S.-based Energy Future Holdings Corporation (and subsidiaries) following its Chapter 11 bankruptcy filing. The annual industrial issuer default rate reached 0.84% in 2014 up modestly from 0.72% in 2013, but still below the historical average over the 1990 – 2014 period, 0.98%.

Industrial Historical Rating Activity



Source: Fitch

Industrial Issuer Default Rates



Source: Fitch

Industrial One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC to C	D	WD
AAA	100.00	-	-	-	-	-	-	-	-
AA	-	88.57	2.86	-	-	-	-	-	8.57
A	-	0.73	90.48	5.13	-	-	-	-	3.66
BBB	-	-	2.26	85.97	1.36	-	-	-	10.41
BB	-	-	-	4.95	75.23	0.93	-	-	18.89
B	-	-	-	0.43	3.88	65.95	12.50	3.02	14.22
CCC to C	-	-	-	-	-	7.69	53.85	23.08	15.38

Source: Fitch

Industrial Average Annual Transition Matrix: 1990-2014

%	AAA	AA	A	BBB	BB	B	CCC to C	D	WD
AAA	87.56	6.67	0.44	-	-	-	-	-	5.33
AA	-	84.38	10.71	0.64	-	-	-	-	4.27
A	-	0.91	88.62	6.14	0.35	0.08	0.06	0.03	3.80
BBB	-	0.03	2.38	88.18	3.37	0.40	0.11	0.17	5.35
BB	0.03	-	0.05	6.66	77.15	5.66	0.87	0.82	8.77
B	-	-	0.22	0.37	7.12	74.77	4.52	2.53	10.47
CCC to C	-	-	-	0.48	0.96	13.94	47.84	28.13	8.65

Source: Fitch

Methodology

All Fitch publicly rated corporate finance (industries, utilities, insurance, banks and finance companies) long-term international default ratings (IDR) from 1990 to the present are included in Fitch's transition and default statistics, which includes more than 48,500 data points from the past 25 years. This includes Fitch-rated parent companies and their subsidiaries where the subsidiaries have outstanding debt or securities rated by Fitch. Statistical data captured in this study is based on the international long-term IDR, or historically, the long-term issuer rating (a proxy of default risk). For those issuers not assigned an issuer-level rating historically, an algorithm was used to derive an IDR proxy from the outstanding rated debt at year end.

Additionally, this report contains recent and historical transition data for covered bonds, capturing all public long term program ratings – a total of 130 – rated at year-end 2014.

Fitch's continuing data enhancement efforts may result in slightly different statistics than in previously published studies. Therefore, this most recent study supersedes all prior versions. It is important to observe that the rating transitions outlined in this study represent a distinct historical period and might not represent future rating migration patterns. Transition rates are influenced by a number of factors, including credit enhancement levels, macroeconomic variables, state of the financial markets, size of subsectors and ratings portfolio and credit conditions generally.

Fitch employs a static pool approach in calculating default and transition data. The

static pools or, alternatively, cohorts are created by grouping issuer ratings according to the year in which the ratings were active and outstanding at the beginning of the year. For example, issuers with ratings outstanding at the beginning of 1995 constitute the 1995 cohort, with the same true for additional cohorts. Issuers newly rated by Fitch in any given year are included in the following year's cohort. For example, the performance of ratings initiated in mid-1995 would be followed as part of the 1996 and future cohorts. Ratings withdrawn in midyear are excluded from subsequent cohorts since they are no longer active.

Issuer ratings may reside in multiple static pools, as long as their ratings are outstanding at the beginning and end of the year or multiple-year horizons under observation. For example, the annual performance of an issuer rating initiated in 1994, and therefore outstanding at the beginning of 1995 and withdrawn in 1999 would be included in the 1995, 1996, 1997 and 1998 static pools. The rating's performance over multiple-year horizons would also be included in the two-year, three-year and four-year transition rates for each of the cohorts noted and included in the five-year transition rates as a transition to withdrawn.

In all, Fitch's transition and default data contains 25 static pools or cohorts from 1990–2014, allowing for 25 unique one-year transition rates, 24 two-year transition rates, 23 three-year transition rates and so forth.

An examination of the 2014 one-year rating transition data at the major rating categories identifies the movement of ratings both up

and down the rating scale – from A to BBB), for example as opposed to the modifier level, which counts each notch change or from A to A–, for example (see the Fitch Industrial Transition Rates at the modifier in the Appendix commencing on page 9). The vertical left-hand column identifies ratings outstanding at the beginning of 2014, while the horizontal axis provides information on the migration pattern of those ratings by year end. The table reads from the top left-hand corner, beginning with 'AAA' and following the diagonal to the right in order to examine the stability of each consecutive rating category.

Default Rates

Fitch's definition of default is available on Fitch's website, see [Fitch's ratings definitions](#).

Fitch's default rates are calculated on an issuer basis, as opposed to dollar amounts. First, defaults are examined by year for each static pool and individual rating category. For example, if 25 issuers defaulted in 2002, and that static pool consisted of 2,000 issuer ratings, the resulting annual default rate for all ratings in 2002 would be 1.3%. If 10 of these defaults consisted of defaults among issuers rated 'BB' at the beginning of the year and the 'BB' cohort at the beginning of the year totaled 500, the 'BB' 2002 default rate would be 2% (10/500).

From these annual default rates, Fitch derives average annual default rates by weighting each cohort's default rates by the number of ratings outstanding in the given cohort relative to the number of total ratings outstanding for all cohorts. Following the example above, the 2002 'BB' annual default rate of 2% might be followed by a 2003 'BB' annual default rate

of 1%. A straight average of these two rates would ignore potential differences in the size of the two cohorts. Rather, weighting the results based on the relative number of 'BB' ratings outstanding in 2002 and 2003 gives greater emphasis to the results of the 'BB' cohort with the most observations.

The same technique is used to calculate average default rates over multiple-year horizons. For example, the two-year default rate for the 2002 'BB' rating pool would be averaged with the two-year default rate for the 2003 'BB' rating pool by weighting the default rates by the relative size of each pool.

Withdrawn Ratings

With regard to withdrawn ratings, all public ratings are included in the static pool data until the ratings are withdrawn and are then excluded from future static pools.

For the purpose of calculating default rates, however, Fitch tracks withdrawn ratings on a continual basis and includes defaults on withdrawn ratings for the cohorts in which the ratings were active and outstanding. For example, a 'BB' issuer's rating is outstanding in 1995 and is withdrawn in 1997. If the issuer defaults in 1999, the default would be included in the 1995 five-year default rate and 1996 four-year default rate.

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Related Research

Report Data - Excel File



The Fitch Global Structure Finance 2014 Transition and Default Study data is available in an Excel format. Click [here](#) to download.

Related reports

[Global Sovereign 2014 Transition and Default Study](#) (March 2015)

[Global Structured Finance 2014 Transition and Default Study](#) (March 2015)

[U.S. Public Finance 2014 Transition and Default Study](#) (March 2015)

[International Public Finance 2014 Transition and Default Study](#) (March 2015)

[Fitch Ratings Global Cross-Asset First-Half 2014 Default Update](#) (September 2014)

[Risk Radar](#) (September 2014)

[The Credit Outlook](#) (January 2015)

Appendix: Global Corporate Finance Default Rates

Average Cumulative Default Rates: 1990-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year	10-Year
AAA	0.11	0.22	0.34	0.47	0.59	0.97
AA+	-	-	-	-	-	-
AA	-	-	0.11	0.27	0.44	0.49
AA-	0.06	0.06	0.06	0.06	0.07	0.19
A+	-	0.09	0.19	0.25	0.35	0.70
A	0.05	0.24	0.42	0.65	0.88	2.04
A-	0.16	0.29	0.43	0.53	0.69	2.28
BBB+	0.12	0.22	0.42	0.73	1.06	2.03
BBB	0.09	0.47	0.94	1.50	2.03	4.07
BBB-	0.35	0.98	1.72	2.36	3.14	7.21
BB+	0.77	2.51	4.04	5.58	6.83	9.92
BB	0.66	2.25	3.95	5.59	6.94	12.26
BB-	1.45	2.85	4.03	4.94	5.72	8.67
B+	1.04	3.57	6.01	7.64	8.59	9.43
B	2.15	4.90	7.50	10.66	13.61	14.81
B-	2.79	5.07	6.61	7.15	7.95	7.84
CCC to C	23.52	30.36	34.73	36.64	38.97	39.88
Investment Grade	0.11	0.31	0.55	0.79	1.05	2.15
Speculative Grade	2.74	5.09	7.10	8.75	10.17	12.85
All Corporate Finance	0.71	1.38	1.97	2.48	2.94	3.98

Source: Fitch

10-Year Average of Three-Year Cumulative Default Rates (CDRs)

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
2003 - 2012	0.86	-	0.32	0.12	0.18	0.60	0.20	0.07	0.69	1.35	2.36	1.92	2.82	5.59	6.67	6.56

Source: Fitch

Most Recent Three-Year Cumulative Default Rates (CDRs)

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
2012	-	-	-	-	-	-	-	-	-	0.87	-	0.66	1.82	4.62	0.63	12.22
2011	-	-	-	-	-	-	-	0.33	0.53	0.59	0.68	0.81	0.88	3.45	2.63	5.49

Source: Fitch

Appendix: Global Corporate Finance Defaults: 2014

Fitch-rated Global Corporate Defaults^a: 2014

Issuer	Rating at Beginning of the Year	Sector	Country
Alliance Bank JSC	C	Banks	Kazakhstan
Aralco S.A. - Industria e Comercio	B	Food, Beverage & Tobacco	Brazil
Baghlan Group FZCO	B-	Building Materials & Construction	Azerbaijan
Energy Future Competitive Holdings	C	Power Markets & Generation	United States
Energy Future Holdings Corp.	CC	Power Markets & Generation	United States
Energy Future Intermediate Holdings, Inc.	CC	Power Markets & Generation	United States
Ideal Standard International SA	CC	Building Materials & Construction	Luxembourg
Industrias Metalurgicas Pescarmona S.A. (IMPESA)	B+	Capital Goods	Brazil
Mriya Agro Holding Public Limited	B-	Food, Beverage & Tobacco	Ukraine
PT Bakrie Telecom Tbk	C	Telecommunications	Indonesia
Sifco S.A.	B-	Auto & Related	Brazil
Solocal Group	B-	Media & Entertainment	France
Texas Competitive Electric Holdings Company LLC	C	Power Markets & Generation	United States
Trinidad Cement Limited ^b	-	Building Materials & Construction	Trinidad and Tobago
Venti S.A. ^b	-	Capital Goods	Luxembourg
WPE International Cooperatief U.A.	B+	Capital Goods	Brazil

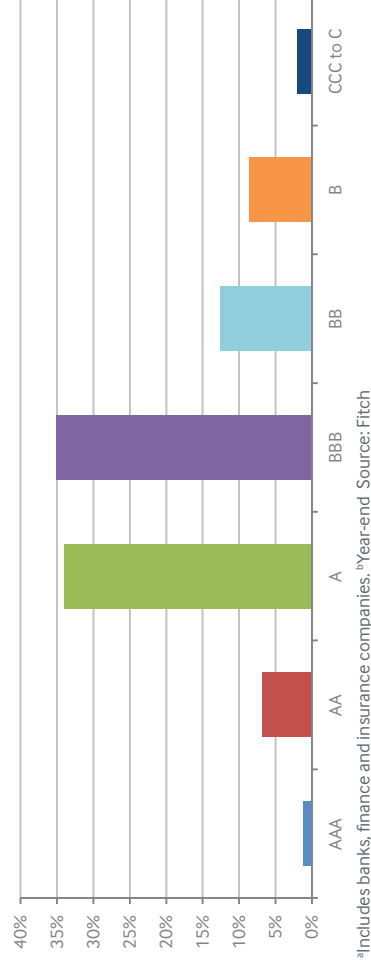
^aRated by Fitch at the beginning of the year of default. ^bInitially rated in 2014. Source: Fitch

Industrial Rating Mix: 2014^a



^aYear-end. Source: Fitch

Financial Institution^a Rating Mix: 2014^b



^aIncludes banks, finance and insurance companies. ^bYear-end. Source: Fitch

Appendix: Global Industrials Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	60.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.00
AA	-	-	93.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.67
AA-	-	-	-	93.33	6.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	4.08	91.84	2.04	2.04	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	1.03	90.72	2.06	-	-	-	-	-	-	-	-	-	-	-	6.19
A-	-	-	-	-	-	2.36	83.46	11.02	-	-	-	-	-	-	-	-	-	-	3.15
BBB+	-	-	-	-	-	-	6.60	81.13	2.83	1.89	-	-	-	-	-	-	-	-	7.55
BBB	-	-	-	-	-	-	0.42	77.92	5.00	-	-	-	-	-	-	-	-	-	11.25
BBB-	-	-	-	-	-	-	7.58	75.83	3.79	0.47	-	-	-	-	-	-	-	-	12.32
BB+	-	-	-	-	-	-	-	13.04	60.87	6.09	0.87	-	-	-	-	-	-	-	19.13
BB	-	-	-	-	-	-	-	0.91	6.36	66.36	4.55	-	-	-	-	-	-	-	21.82
BB-	-	-	-	-	-	-	-	-	-	13.27	68.37	3.06	-	-	-	-	-	-	15.31
B+	-	-	-	-	-	-	-	-	-	1.02	8.16	4.08	1.02	2.04	2.04	2.04	2.04	2.04	16.33
B	-	-	-	-	-	-	1.16	-	-	-	11.63	59.30	8.14	3.49	1.16	1.16	1.16	1.16	15.12
B-	-	-	-	-	-	-	-	-	-	-	-	4.17	29.17	8.33	8.33	8.33	8.33	8.33	8.33
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.85	3.85	53.85	23.08	15.38

Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	33.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66.67
AA+	-	33.33	33.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.33
AA	-	-	61.54	-	7.69	-	-	-	-	-	-	-	-	-	-	-	-	-	30.77
AA-	-	-	12.50	50.00	25.00	-	-	-	-	-	-	-	-	-	-	-	-	-	12.50
A+	-	-	-	19.30	59.65	7.02	5.26	-	-	-	-	-	-	-	-	-	-	-	8.77
A	-	-	-	-	3.79	54.55	24.24	3.03	-	-	-	-	-	-	-	-	-	-	13.64
A-	-	-	-	-	-	6.09	51.30	26.09	5.22	0.87	-	0.76	-	-	-	-	-	-	10.43
BBB+	-	-	-	-	-	1.16	9.88	62.21	7.56	5.81	-	-	-	-	-	-	-	-	13.37
BBB	-	-	-	-	-	0.93	16.36	50.93	7.94	7.94	2.34	1.87	0.47	-	-	-	-	-	19.16
BBB-	-	-	-	-	-	-	2.23	19.64	41.52	7.59	7.59	1.79	1.79	-	-	-	0.89	-	24.55
BB+	-	-	-	-	-	-	-	8.91	17.82	26.73	10.89	3.96	3.96	3.96	-	0.99	-	-	26.73
BB	-	-	-	-	-	-	-	5.15	18.56	28.87	5.15	5.15	5.15	4.12	-	-	2.06	1.03	35.05
BB-	-	-	-	-	-	-	1.45	-	17.39	33.33	5.80	1.45	2.90	1.45	2.90	1.45	1.45	2.90	28.99
B+	-	-	-	-	-	-	-	1.09	10.87	20.65	2.17	10.87	10.87	2.17	1.09	3.26	3.26	6.52	52.17
B	-	-	-	-	-	-	0.93	-	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	39.25
B-	-	-	-	-	-	-	-	-	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	53.49
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.54	11.54	26.92	34.62	19.23

Source: Fitch

Appendix: Global Industrials Transition Matrices and Default Rates

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	20.00	20.00	20.00	-	20.00	-	-	-	-	-	-	-	-	-	-	-	-	-	20.00
AA+	-	25.00	25.00	-	25.00	25.00	-	-	-	-	-	-	-	-	-	-	-	-	25.00
AA	-	-	25.00	-	16.67	25.00	-	-	-	-	-	-	-	-	-	-	-	-	33.33
AA-	-	3.57	7.14	7.14	21.43	28.57	10.71	-	-	-	-	-	-	-	-	-	-	-	21.43
A+	-	-	-	2.35	7.06	25.88	18.82	10.59	1.18	1.18	-	4.71	-	-	1.18	-	-	-	27.06
A	-	-	-	-	1.69	11.02	9.32	14.41	8.47	8.85	0.85	0.85	0.85	-	-	-	-	-	50.85
A-	-	-	-	0.79	1.59	4.76	15.87	22.22	8.73	4.76	-	-	-	0.79	-	-	-	-	40.48
BBB+	-	-	-	-	0.71	6.38	7.80	21.99	9.93	9.93	4.96	2.13	-	-	-	-	0.71	-	35.46
BBB	-	-	-	-	-	2.42	6.67	15.76	15.15	9.70	3.03	0.61	0.61	1.21	0.61	-	-	1.82	42.42
BBB-	-	-	-	-	-	-	4.42	8.85	9.73	5.31	2.65	1.77	-	-	0.88	-	0.88	7.08	58.41
BB+	-	-	-	-	-	1.67	1.67	5.00	10.00	3.33	3.33	3.33	1.67	3.33	1.67	1.67	3.33	3.33	56.67
BB	-	-	-	-	-	-	1.25	3.75	8.75	8.75	5.00	3.75	6.25	2.50	1.25	-	3.75	3.75	51.25
BB-	-	-	-	-	-	1.61	-	-	8.06	4.84	4.84	3.23	6.45	-	4.84	-	-	-	66.13
B+	-	-	-	-	-	-	-	-	2.00	6.00	4.00	4.00	2.00	2.00	-	-	2.00	8.00	74.00
B	-	-	-	-	-	-	-	-	-	-	2.56	2.56	7.69	2.56	-	2.56	-	17.95	64.10
B-	-	-	-	-	-	-	-	4.00	4.00	-	-	4.00	-	-	8.00	-	-	8.00	72.00
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	2.94	8.82	2.94	-	-	44.12	41.18

Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	-
AA+	-	-	-
AA	-	-	-
AA-	-	-	-
A+	-	-	-
A	-	-	0.85
A-	-	-	-
BBB+	-	-	-
BBB	-	-	1.82
BBB-	-	-	8.77
BB+	-	-	5.00
BB	-	1.03	3.70
BB-	-	2.90	-
B+	2.04	6.52	8.00
B	1.16	0.93	17.95
B-	8.33	20.93	8.00
CCC to C	23.08	34.62	44.12

Source: Fitch

Appendix: Fitch Global Financial Institution[®] Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	-	98.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.59
A+	-	-	-	-	93.41	1.10	-	-	-	-	-	-	-	-	-	-	-	-	3.30
A	-	-	-	-	-	96.40	-	-	-	-	-	-	-	-	-	-	-	-	2.88
A-	-	-	-	-	1.03	7.22	86.60	1.03	2.06	-	-	-	-	-	-	-	-	-	2.06
BBB+	-	-	-	-	-	-	7.02	72.81	12.28	-	-	-	-	-	-	-	-	-	7.89
BBB	-	-	-	-	-	-	1.91	10.83	71.97	7.64	-	-	-	-	-	-	-	-	7.64
BBB-	-	-	-	-	-	-	0.70	9.15	83.10	1.41	-	-	-	-	-	-	-	-	5.63
BB+	-	-	-	-	-	-	-	-	14.86	75.68	4.05	-	-	-	-	-	-	-	5.41
BB	-	-	-	-	-	-	-	-	-	9.09	72.73	9.09	-	-	-	-	-	-	9.09
BB-	-	-	-	-	-	-	-	-	-	-	2.38	83.33	4.76	-	-	-	-	-	7.14
B+	-	-	-	-	-	-	-	-	-	-	-	-	11.43	8.57	-	-	-	-	2.86
B	-	-	-	-	-	-	-	-	-	-	-	-	-	10.20	67.35	4.08	-	-	12.24
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.08	14.58	39.58	-	-	16.67
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.00	60.00	-	-

*excludes Insurance. Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	75.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.00
AA+	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	-	11.11	77.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.11
AA-	-	-	-	60.87	11.59	1.45	2.90	1.45	-	-	-	-	-	-	-	-	-	-	21.74
A+	-	-	-	7.14	58.93	16.96	2.68	1.79	-	-	-	-	-	-	-	-	-	-	12.50
A	-	-	-	-	3.50	67.13	6.29	2.80	3.50	0.70	-	-	-	-	-	-	-	-	16.08
A-	-	-	-	-	3.67	11.01	48.62	15.60	5.50	4.59	-	-	-	-	0.92	-	-	-	10.09
BBB+	-	-	-	-	-	0.95	8.57	40.00	14.29	3.81	-	-	-	-	-	-	-	-	28.57
BBB	-	-	-	-	-	-	3.27	15.03	38.56	11.76	1.31	2.61	1.96	-	-	0.65	-	-	24.84
BBB-	-	-	-	-	-	-	1.79	2.68	20.54	53.57	2.68	-	-	-	-	-	-	2.68	16.07
BB+	-	-	-	-	-	-	-	-	32.31	44.62	1.54	6.15	1.54	1.54	-	-	-	-	13.85
BB	-	-	-	-	-	-	-	-	1.89	18.87	16.98	33.96	5.66	3.77	-	-	1.89	-	16.98
BB-	-	-	-	-	-	-	-	-	-	7.32	7.32	34.15	5.66	2.44	-	-	-	-	39.02
B+	-	-	-	-	-	-	-	-	-	-	5.41	2.70	27.03	10.81	2.70	5.41	-	-	18.92
B	-	-	-	-	-	-	-	-	-	-	-	-	3.92	27.45	2.70	19.61	-	-	33.33
B-	-	-	-	-	-	-	-	-	-	-	-	-	2.13	23.40	31.91	6.38	-	-	31.91
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.33	16.67	25.00	-	25.00

*excludes Insurance. Source: Fitch

Appendix: Global Financial Institutions' Transition Matrices and Default Rates

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	15.00	-	-	-	-	-	-	2.50	-	-	-	-	-	-	-	-	-	2.50	80.00
AA+	-	2.78	2.78	2.78	-	36.11	5.56	-	-	-	-	-	-	-	-	-	-	-	50.00
AA	-	-	2.38	30.95	2.38	16.67	-	4.76	2.38	-	2.38	-	-	-	-	-	-	-	38.10
AA-	-	-	-	18.71	8.63	17.27	2.88	2.88	1.44	0.72	1.44	-	-	-	-	-	-	-	46.04
A+	-	-	-	4.35	19.13	9.57	3.48	3.48	2.61	-	1.74	-	-	0.87	-	-	-	1.74	53.04
A	-	-	-	2.60	6.49	8.44	6.49	4.55	1.30	1.30	1.95	0.65	2.60	0.65	-	-	-	3.25	59.74
A-	-	-	-	0.74	10.29	8.82	9.56	7.35	3.68	5.88	0.74	2.21	1.47	-	2.21	-	-	0.74	46.32
BBB+	-	-	-	0.95	2.86	7.62	7.62	5.71	8.57	14.29	0.95	0.95	2.86	-	0.95	-	1.90	0.95	43.81
BBB	-	-	-	-	0.64	1.92	5.77	7.69	11.54	8.97	-	1.28	-	0.64	1.28	-	-	6.41	53.85
BBB-	-	-	-	-	-	-	3.23	11.83	11.83	10.75	3.23	2.15	-	1.08	-	-	-	2.15	53.76
BB+	-	-	-	-	-	-	-	5.26	5.26	13.16	-	2.63	-	5.26	-	-	-	10.53	63.16
BB	-	-	-	-	-	-	-	-	3.85	-	-	11.54	-	3.85	-	-	-	3.85	61.54
BB-	-	-	-	-	-	-	3.23	9.68	6.45	9.68	3.23	9.68	-	-	-	-	-	3.23	54.84
B+	-	-	-	-	-	-	-	6.25	6.25	31.25	2.08	-	-	2.08	2.08	-	-	6.25	39.58
B	-	-	-	-	-	-	-	-	5.00	-	-	-	-	-	15.00	5.00	-	10.00	65.00
B-	-	-	-	-	-	-	-	-	-	-	7.41	3.70	11.11	18.52	3.70	3.70	11.11	-	44.44
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	6.25	6.25	6.25	6.25	6.25	12.50	56.25

*excludes Insurance. Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	2.50
AA+	-	-	-
AA	-	-	-
AA-	-	-	-
A+	-	-	1.72
A	-	-	3.25
A-	-	-	0.74
BBB+	-	-	0.95
BBB	-	-	7.05
BBB-	-	2.68	2.15
BB+	-	-	10.53
BB	-	-	3.85
BB-	-	-	3.23
B+	-	-	6.25
B	-	-	10.00
B-	-	4.26	-
CCC to C	20.00	25.00	12.50

*excludes Insurance. Source: Fitch

Appendix: Global Insurance Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
AA+	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	3.70	85.19	3.70	-	-	-	-	-	-	-	-	-	-	-	-	7.41
A	-	-	-	-	5.88	85.29	6.67	83.33	6.67	-	-	-	-	-	-	-	-	-	8.82
A-	-	-	-	-	-	-	24.14	68.97	8.33	75.00	-	-	-	-	-	-	-	-	3.33
BBB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90
BBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.67
BBB-	-	-	-	-	-	-	-	-	-	33.33	55.56	-	-	-	-	-	-	-	11.11
BB+	-	-	-	-	-	-	-	-	-	-	50.00	50.00	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	50.00	50.00	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66.67
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
AA+	-	75.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.00
AA	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	-	91.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.33
A+	-	-	-	-	70.37	3.70	-	-	-	-	-	-	-	-	-	-	-	-	14.81
A	-	-	-	-	8.11	64.86	2.70	5.41	-	-	-	-	-	-	-	-	-	-	18.92
A-	-	-	-	-	-	8.82	41.18	8.82	5.88	-	-	-	-	-	-	-	-	-	35.29
BBB+	-	-	-	-	-	-	22.86	31.43	-	2.86	-	-	-	-	-	-	-	-	42.86
BBB	-	-	-	-	-	-	10.00	16.67	20.00	-	-	-	-	-	-	-	-	-	50.00
BBB-	-	-	-	-	-	-	-	-	-	33.33	44.44	-	-	-	-	-	-	-	22.22
BB+	-	-	-	-	-	-	-	-	-	-	40.00	40.00	-	-	-	-	-	-	20.00
BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Appendix: Global Insurance Transition Matrices and Default Rates

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	-	8.33	-	16.67	-	-	25.00	-	-	-	-	-	-	-	-	-	-	-	50.00
AA+	-	20.00	20.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60.00
AA	-	-	-	37.50	12.50	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00
AA-	-	-	-	9.09	31.82	9.09	-	-	-	-	-	-	-	-	-	-	-	-	50.00
A+	-	-	-	3.03	12.12	15.15	3.03	3.03	3.03	-	-	-	-	-	-	-	-	-	60.61
A	-	-	-	3.23	3.23	22.58	19.35	3.23	3.23	-	-	-	-	-	-	-	-	-	48.39
A-	-	-	-	7.14	17.86	7.14	3.57	17.86	3.57	-	-	-	-	-	-	-	-	-	42.86
BBB+	-	-	-	-	-	10.00	10.00	10.00	-	-	-	-	-	-	-	-	-	-	70.00
BBB	-	-	-	-	-	10.00	25.00	5.00	5.00	-	-	-	-	-	-	-	-	5.00	55.00
BBB-	-	-	-	-	-	5.88	17.65	5.88	5.88	5.88	-	-	-	-	-	-	-	-	41.18
BB+	-	-	-	-	-	-	-	20.00	-	-	-	-	-	-	-	-	-	-	80.00
BB	-	-	-	-	16.67	-	-	-	-	-	-	-	-	-	-	-	-	-	66.67
BB-	-	-	-	-	-	-	-	33.33	-	-	-	-	-	-	-	-	-	-	33.33
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00

Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	-
AA+	-	-	-
AA	-	-	25.00
AA-	-	-	-
A+	-	-	3.03
A	-	-	-
A-	-	-	-
BBB+	-	-	-
BBB	-	-	5.00
BBB-	-	-	-
BB+	-	-	-
BB	-	-	-
BB-	-	-	33.33
B+	-	-	-
B	-	-	-
B-	-	-	-
CCC to C	-	-	100.00

Source: Fitch

Appendix: Global Corporate Finance Transition Matrices

Corporate Finance Average Annual Transition Matrix: 1990-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	87.18	3.09	1.88	0.33	0.11	-	0.11	-	-	-	-	-	-	-	-	-	-	0.11	7.18
AA+	0.53	78.32	10.64	3.68	0.39	0.53	0.13	-	-	-	-	-	-	-	-	-	-	-	5.78
AA	0.05	2.46	75.30	10.38	3.99	0.52	0.16	0.21	0.05	0.16	-	-	0.05	-	-	-	-	-	6.66
AA-	0.06	0.09	2.97	79.25	9.40	2.47	0.65	0.18	0.21	-	-	-	-	-	-	-	0.03	0.06	4.64
A+	-	0.07	0.33	4.37	77.64	9.03	1.67	0.57	0.42	0.15	-	0.04	-	-	-	-	-	-	5.71
A	0.02	-	0.23	0.68	4.76	78.98	7.74	1.42	0.76	0.21	0.19	0.09	0.03	0.02	0.07	-	0.02	0.05	4.74
A-	-	-	0.10	0.20	0.88	5.88	75.64	9.13	1.65	0.69	0.12	0.04	0.69	-	0.08	0.02	0.08	0.16	4.66
BBB+	-	-	0.04	0.10	0.30	0.76	6.52	74.06	8.61	1.53	0.74	0.18	0.34	0.04	0.10	-	0.08	0.12	6.46
BBB	-	-	0.07	0.09	0.07	0.28	0.87	7.15	76.46	6.26	0.99	0.84	0.23	0.17	0.17	0.03	0.19	0.09	6.03
BBB-	-	0.02	0.02	0.05	0.12	0.09	0.21	0.97	10.23	73.66	4.26	1.62	0.83	0.32	0.44	0.19	0.12	0.35	6.50
BB+	-	0.09	-	-	0.05	0.05	0.05	0.41	1.58	13.43	65.07	5.59	1.53	0.81	0.90	0.32	0.68	0.77	8.70
BB	-	-	-	-	-	0.05	-	0.30	0.81	2.78	11.11	62.70	5.96	2.78	0.96	1.26	1.51	0.66	9.14
BB-	0.05	-	-	-	-	-	0.05	0.16	0.49	0.65	3.99	11.98	58.99	5.45	4.05	1.13	1.57	1.46	9.98
B+	-	-	-	-	-	-	-	0.13	0.13	0.33	0.26	2.67	14.16	59.36	7.89	2.61	1.96	1.04	9.46
B	-	-	-	-	-	0.18	0.12	-	0.06	0.06	0.18	0.68	2.33	13.01	60.34	7.43	3.68	2.15	9.76
B-	-	-	-	-	-	0.25	-	-	0.17	0.17	0.08	0.25	0.76	2.88	13.56	59.07	9.15	2.80	10.85
CCC to C	-	-	-	-	-	-	0.15	-	0.15	0.15	0.15	0.15	1.45	1.02	2.91	13.08	46.08	23.69	11.19

Source: Fitch

Financial Institutions' Average Annual Transition Matrix: 1990-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	87.06	3.38	1.32	0.15	0.15	-	-	-	-	-	-	-	-	-	-	-	-	0.15	7.79
AA+	0.77	75.86	11.88	4.21	0.38	0.19	-	-	-	-	-	-	-	-	-	-	-	-	6.70
AA	0.08	2.86	72.87	11.76	3.84	0.45	0.15	0.08	-	0.08	-	-	0.08	-	-	-	-	-	7.76
AA-	0.08	0.04	3.05	80.66	8.41	2.15	0.49	0.15	0.19	-	-	-	-	-	-	0.04	-	0.08	4.67
A+	-	0.10	0.43	5.19	76.80	8.25	1.28	0.62	0.36	0.07	-	0.03	-	-	-	-	-	-	6.87
A	0.03	-	0.31	0.95	6.49	77.27	7.57	1.04	0.74	0.21	0.06	0.06	-	-	-	-	0.03	0.09	5.15
A-	-	-	0.14	0.25	1.12	6.88	74.00	8.03	1.69	0.65	0.07	-	1.22	-	0.14	0.04	-	0.22	5.55
BBB+	-	-	0.05	0.23	0.42	0.97	8.33	69.80	8.42	1.76	1.25	0.23	0.09	0.05	0.09	-	0.05	0.05	8.23
BBB	-	-	0.12	0.20	0.12	0.20	1.14	7.98	74.40	5.94	1.18	0.81	0.08	0.16	0.08	0.04	0.33	0.12	7.08
BBB-	-	0.06	0.06	0.06	0.18	0.18	0.30	1.25	10.73	72.03	2.92	1.73	0.83	0.48	0.60	0.42	0.06	0.42	7.69
BB+	-	0.24	-	-	-	0.12	-	0.47	2.01	15.37	63.36	4.85	1.06	0.59	1.30	0.24	0.47	1.42	8.51
BB	-	-	-	-	-	0.15	-	0.46	0.76	2.74	12.04	62.04	4.73	1.83	0.91	1.22	3.66	0.61	8.84
BB-	-	-	-	-	-	-	0.15	0.30	0.15	0.61	5.90	10.14	54.61	4.99	5.14	1.51	1.82	1.36	13.31
B+	-	-	-	-	-	-	-	-	0.39	0.39	0.20	0.98	19.49	58.07	7.48	2.95	1.97	1.38	7.09
B	-	-	-	-	-	-	0.36	-	0.18	0.36	0.36	0.89	2.14	14.29	58.93	8.21	3.93	0.89	9.82
B-	-	-	-	-	-	-	-	-	0.36	0.36	0.18	0.18	1.27	2.54	14.88	62.07	7.80	0.54	10.16
CCC to C	-	-	-	-	-	-	-	-	0.36	0.18	0.18	0.18	2.94	1.10	2.21	18.38	43.38	16.91	15.07

*Includes banks, finance and insurance companies. Source: Fitch

Appendix: Global Transition Matrices

Industrial Average Annual Transition Matrix: 1990-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	87.56	2.22	3.56	0.89	-	-	0.44	-	-	-	-	-	-	-	-	-	-	-	5.33
AA+	-	83.68	7.95	2.51	0.42	1.26	0.42	-	-	-	-	-	-	-	-	-	-	-	3.77
AA	-	1.55	80.86	7.24	4.31	0.69	0.17	0.52	0.17	0.34	-	-	-	-	-	-	-	-	4.14
AA-	-	0.27	2.67	74.27	12.93	3.60	1.20	0.27	0.27	-	-	-	-	-	-	-	-	-	4.53
A+	-	-	0.13	2.72	79.34	10.60	2.45	0.46	0.53	0.33	-	0.07	-	-	-	-	-	-	3.38
A	-	-	0.12	0.32	2.51	81.20	7.96	1.91	0.80	0.20	0.36	0.12	0.08	0.04	0.16	-	-	-	4.22
A-	-	-	0.04	0.13	0.60	4.69	77.60	10.45	1.59	0.73	0.17	0.09	0.04	-	-	-	-	-	3.61
BBB+	-	-	0.04	-	0.21	0.61	5.13	77.34	8.76	1.35	0.36	0.14	0.53	0.04	0.11	-	0.17	0.09	3.61
BBB	-	-	0.03	-	0.03	0.34	0.67	6.53	78.00	6.50	0.85	0.85	0.34	0.18	0.24	0.03	0.09	0.06	5.25
BBB-	-	-	-	0.04	0.08	0.04	0.15	0.79	9.91	74.70	5.11	1.55	0.83	0.23	0.34	0.04	0.15	0.30	5.75
BB+	-	-	-	-	0.07	-	0.07	0.36	1.31	12.24	66.13	6.05	1.82	0.95	0.66	0.36	0.80	0.36	8.81
BB	-	-	-	-	-	-	-	0.23	0.83	2.79	10.64	63.02	6.57	3.25	0.98	1.28	0.45	0.68	9.28
BB-	0.08	-	-	-	-	-	-	0.08	0.67	0.67	2.94	13.00	61.41	5.70	3.44	0.92	1.43	1.51	8.14
B+	-	-	-	-	-	-	-	0.20	0.20	0.29	0.29	3.51	11.51	60.00	8.10	2.44	1.95	0.88	10.63
B	-	-	-	-	-	0.28	-	-	0.09	-	0.09	0.56	2.43	12.35	61.09	7.02	3.55	2.81	9.73
B-	-	-	-	-	-	0.48	-	-	0.32	-	-	0.32	0.32	3.18	12.40	56.44	10.33	4.77	11.45
CCC to C	-	-	-	-	-	-	-	0.24	-	0.24	0.24	0.24	0.48	0.96	3.37	9.62	47.84	28.13	8.65

Source: Fitch

Appendix: Global Covered Bonds Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	93.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.41
AA+	11.11	44.44	44.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	25.00	25.00	50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	25.00	50.00	50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	25.00
A	-	-	11.11	-	88.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	25.00	75.00	-	-	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	50.00	-	-	-	-	-	-	-	-	-	-	-	-	50.00
BB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	80.00	-	-	-	-	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.00

Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	67.05	3.41	6.82	1.14	2.27	3.41	-	2.27	-	-	-	-	-	-	-	-	-	-	13.64
AA+	-	16.67	16.67	-	-	-	-	33.33	-	-	-	-	-	-	-	-	-	-	33.33
AA	-	-	-	14.29	-	-	-	14.29	-	-	-	-	-	-	-	-	-	-	71.43
AA-	-	-	20.00	20.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60.00
A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	80.00	-	20.00	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	33.33	-	-	-	-	-	-	-	-	-	-	-	-	66.67
BBB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	-	-	20.00	20.00	-	-	-	-	-	-	-	-	-	60.00
BBB-	-	-	-	-	-	-	-	14.29	14.29	-	-	-	-	57.14	-	-	-	-	14.29
BB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Appendix: Global Covered Bonds Transition Matrices and Default Rates

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	34.21	2.63	13.16	-	-	5.26	-	-	-	-	-	-	-	-	-	-	-	-	44.74
AA+	-	40.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60.00
AA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	-
AA+	-	-	-
AA	-	-	-
AA-	-	-	-
A+	-	-	-
A	-	-	-
A-	-	-	-
BBB+	-	-	-
BBB	-	-	-
BBB-	-	-	-
BB+	-	-	-
BB	-	-	-
BB-	-	-	-
B+	-	-	-
B	-	-	-
B-	-	-	-
CCC to C	-	-	-

Source: Fitch

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Global Structured Finance 2014 Transition and Default Study

SF Upgrades Outpace Downgrades:

For the first time since the financial crisis, global structured finance (SF) upgrades exceeded downgrades by a 1.7:1 margin in 2014, as 12% of ratings improved, compared with 7% being downgraded. Regionally, Asia-Pacific (APAC), Europe, Middle East & Africa (EMEA) and North America (NA) all exhibited high levels of rating stability, with 99%, 78% and 82% of ratings, respectively, either remaining unchanged or being paid in full (PIF) last year.

No Investment Grade Impairments:

Impairments (defaults and near-defaults) across SF were muted in 2014, with impairments registered solely at the below investment grade level, particularly in the 'CCC' category. The U.S. RMBS sector made up nearly 72% of the total volume, primarily as a result of adverse selection in pre-2006 U.S. prime and Alt-A transactions.

Asset-Backed Securities:

Rating performance was robust across the ABS sector in 2014, as approximately 97% of ratings either improved, remained stable or were paid in full. The auto and student loan sectors represented the majority of the upgrade activity, benefitting from lower U.S. personal bankruptcy filings and tighter underwriting standards. Tobacco settlement ABS represented the highest proportion of downgrades (44%) and came primarily from transactions involving non-settling states.

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Commercial Mortgage-Backed Securities:

For the first time in seven years, upgrades topped downgrades across CMBS in 2014. Positive rating actions, which accounted for 8%, were concentrated among multiborrower transactions and driven by defeasance, paydowns and improving fundamentals on the underlying properties. Downgrades, at 4%, occurred mostly in legacy multiborrower transactions in the U.S., Germany and the United Kingdom.

Residential Mortgage-Backed Securities:

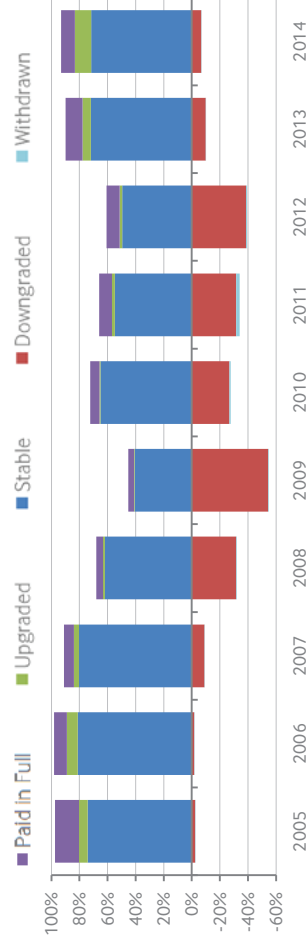
The improvement in RMBS rating performance continued in 2014, with 13% of ratings upgraded and 8% downgraded. Upgrades were driven by a number of factors, including strong home price increases, continued improvement in collateral performance and updates to Fitch's U.S. RMBS Loan Loss Model. Downgrades occurred primarily in transactions where faster prepayments of better borrowers resulted in adverse selection in the remaining pools.

Structured Credit:

Upgrades outstripped downgrades in structured credit (SC) by a ratio of 2.5 times in 2014, with upgrades representing 13%, compared with 5% being downgraded. Small and medium enterprise (SME) transactions accounted for the bulk of the improvement, primarily a reflection of the sovereign-related cap on SF ratings in Spain and Italy being increased.

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Global Structured Finance Rating Changes



Source: Fitch

Global Structured Finance Rating Activity

	2013				2014				
	%	Upgrade	Stable/ PIF	Down-grade	Impaired	Upgrade	Stable/ PIF	Down-grade	Impaired
By Region									
Global SF	5.9	84.0	9.9	2.2	11.7	81.4	6.8	1.6	
APAC SF	2.1	97.3	0.5	0.3	1.4	98.6	0.0	0.0	
EMEA SF	4.7	80.2	14.5	1.9	15.0	77.6	7.1	1.3	
NA SF	6.2	84.4	9.3	2.3	11.4	81.5	7.0	1.7	
By Sector									
ABS	6.2	87.4	6.2	0.7	8.1	88.6	3.1	0.1	
CMBS	1.3	85.3	13.2	4.9	7.8	87.6	4.3	1.5	
RMBS	6.3	83.8	9.9	1.6	13.5	78.1	8.4	2.0	
SC	15.0	77.3	7.2	2.6	13.1	81.2	5.3	1.1	

Note: Downgrade figures include impairments. Source: Fitch

Global Structured Finance

An improving U.S. economy and strong home prices contributed to the number of upgrades nearly doubling year-over-year while downgrades declined by 37%. RMBS continued to account for the overwhelming majority of rating actions last year, representing 72% of the upgrades and 78% of the downgrades.

Rating stability at the 'AAAsf' rating level was high. Nearly 99% of AAAsf ratings either remained the same or were PIF. Of the few 'AAAsf' ratings that were downgraded, all remained at either the 'AAAsf' or 'Asf' level.

The rate at which tranches paid in full remained high, with 10% of global SF ratings being

redeemed. The proportion of PIF tranches was relatively unchanged across ABS and SC, which maintained rates of 16% and 18%, respectively. While PIF rates remained robust across CMBS and RMBS, they were generally lower than the prior year's levels. The marginal decline was due to slower prepayments. The proportion of SF ratings withdrawn remained small at 0.1%.

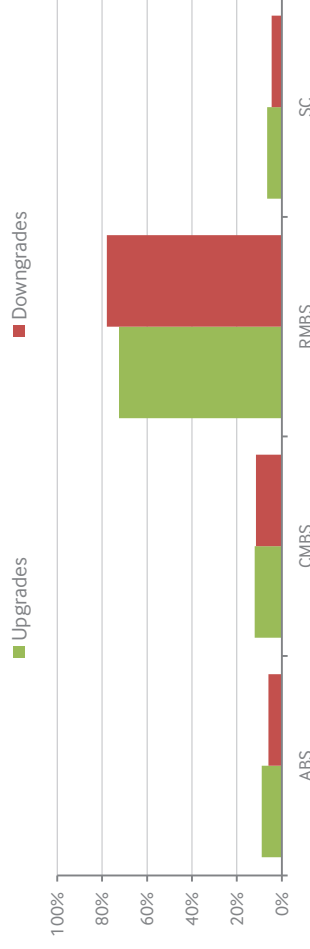
The impairment rate for global SF declined to 1.6%, the lowest level seen since 2006, compared with 2.2% in 2013. Impairments were solely at the speculative grade level. A 4.5% impairment rate was registered for speculative grade ratings.

Global Structured Finance Rating Activity: 2014

% Global SF	ABS			CMBS			RMBS			SC		
	UG	DG	PIF	UG	DG	PIF	UG	DG	PIF	UG	DG	PIF
AAA	na	1.1	na	na	0.5	na	na	0.5	na	na	2.0	na
AA	8.1	11.7	19.4	4.4	4.4	13.0	2.7	5.7	15.4	5.4	15.4	2.0
A	11.3	6.6	18.0	1.7	9.4	3.1	10.7	8.8	7.7	7.7	8.8	4.3
BBB	13.3	5.8	17.1	1.3	11.8	4.3	13.1	7.5	11.7	11.7	7.5	3.5
BB	12.3	7.1	3.1	14.5	14.2	7.0	13.4	6.9	5.9	5.9	6.9	3.6
B	20.7	8.6	2.0	2.0	13.7	7.9	23.4	9.2	16.2	16.2	9.2	8.1
CCC	17.5	10.4	-	7.7	8.3	12.4	19.2	10.0	19.7	19.7	10.0	11.5

Source: Fitch

Global Structured Finance Rating Activity By Sector: 2014



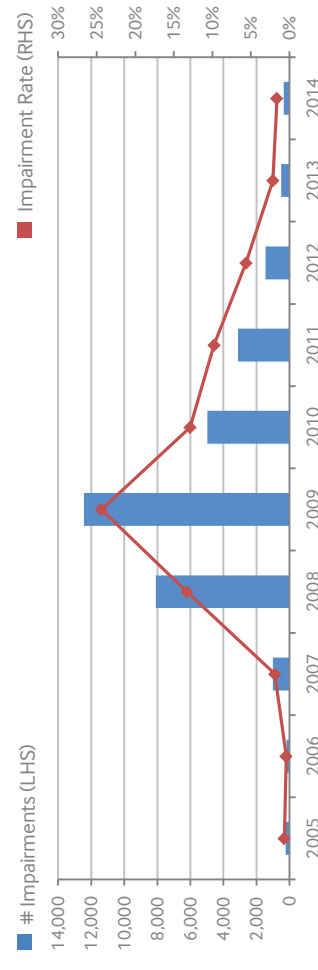
Note: Percentages represent the proportion of total upgrades or total downgrades. Source: Fitch

Global Structured Finance One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC	CC and Below	WD	PIF
AAA	82.19	0.97	0.18	-	-	-	-	-	0.07	16.59
AA	8.12	69.00	9.04	2.62	-	-	-	-	-	11.22
A	3.11	8.17	73.66	5.92	0.70	-	-	-	0.10	8.33
BBB	0.66	1.21	11.45	71.24	5.10	0.62	0.07	-	0.14	9.51
BB	0.19	0.48	4.97	6.66	73.66	6.27	0.82	0.05	0.34	6.56
B	0.16	0.20	1.15	3.80	15.36	65.32	7.48	1.15	0.24	5.15
CCC	-	-	0.07	0.50	8.28	8.68	68.48	10.43	0.17	3.40

Source: Fitch

Global Structured Finance Impairments: 2005-2014



Source: Fitch

Asset-Backed Securities

ABS rating performance continued to improve in 2014 as downgrades declined for the fourth consecutive year. Downgrades accounted for only 3% of rating actions and upgrades accounted for 8%, levels not seen since 2008.

Consumer ABS rating performance was particularly robust, with the auto loan and student loan sectors representing the largest share of positive rating actions at 36% and 29%, respectively.

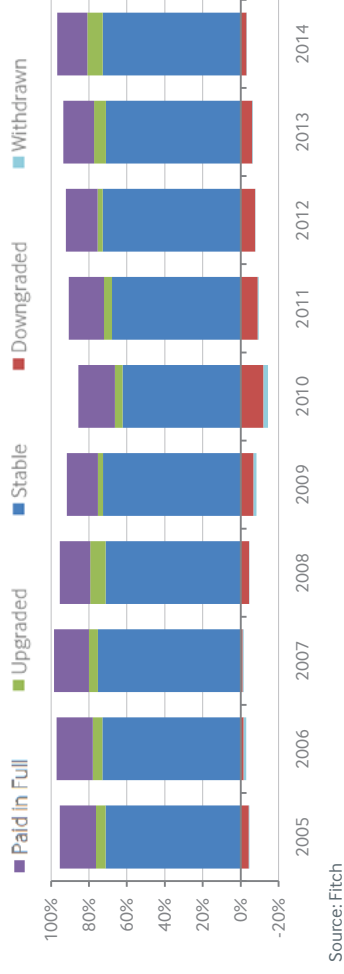
The positive rating activity was driven by improving U.S. labor market conditions, declining personal bankruptcy filings and tighter underwriting standards.

The majority of downgrades were concentrated in the tobacco (44%) and small business (24%) sectors. As part of its annual tobacco portfolio review, Fitch downgraded several bonds from

non-settling states. Although the Master Settlement Agreement payment was stable year-over-year, many of the downgrades were attributed to ongoing underperformance relative to expectations. The handful of small business downgrades resulted from growing obligor concentration and declining credit support.

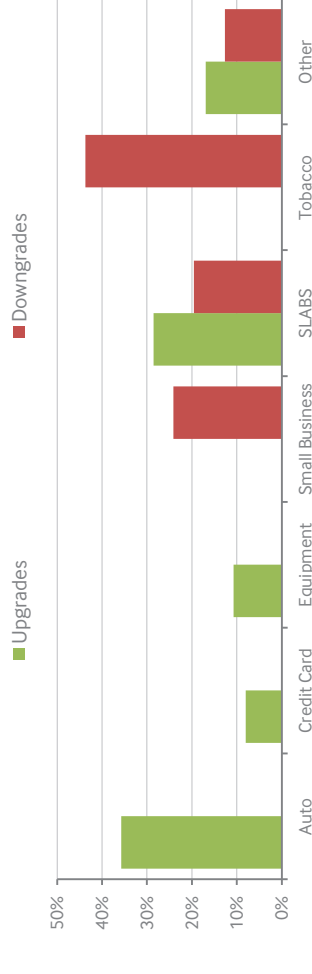
The ABS sector had the fewest number of impairments across the major SF sectors, with only two impairments for the year, registering a 0.07% rate. Fitch downgraded Triton Aviation Finance to 'CCsf' as the trust's cash flow deteriorated due to the aircraft pool's illiquidity and age. BBVA Leasing 1, FTA, was the other impairment, which had historically poor performance with limited excess spread and depleted reserves, making it less likely principal deficiencies will be recovered.

Global ABS Rating Changes



Source: Fitch

Global ABS Rating Activity By Asset Category: 2014



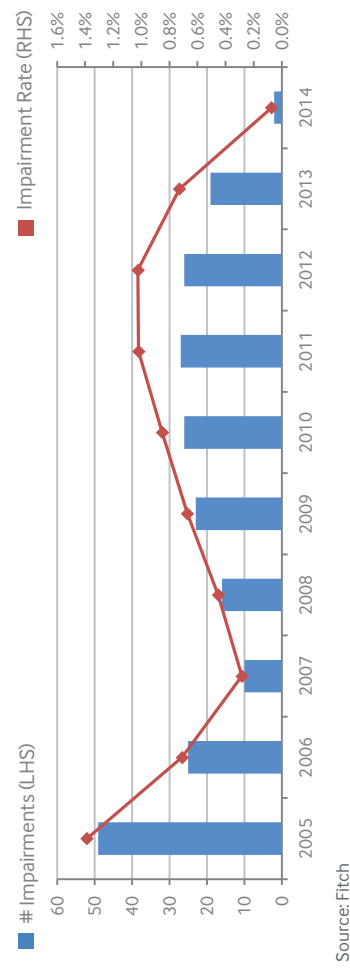
Note: Percentages represent the proportion of total upgrades or total downgrades. Source: Fitch

Global ABS One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC	CC and Below	WD	PIF
AAA	80.71	0.21	0.34	-	-	-	-	-	0.21	18.53
AA	19.44	58.73	3.57	0.79	-	-	-	-	-	17.46
A	2.43	15.57	71.05	0.97	0.73	-	-	-	-	9.25
BBB	0.25	1.01	15.83	65.08	0.75	0.50	-	-	-	16.58
BB	-	-	2.29	0.76	70.99	13.74	0.76	-	0.76	10.69
B	-	-	-	0.98	0.98	92.16	0.98	0.98	-	3.92
CCC	-	-	-	-	-	-	69.23	7.69	-	23.08

Source: Fitch

Global ABS Impairments: 2005-2014



Source: Fitch

Commercial Mortgage-Backed Securities

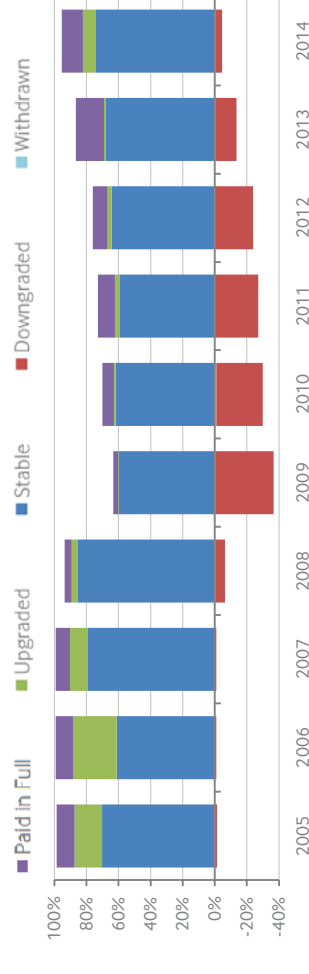
The CMBS sector experienced considerable improvement in rating performance last year as upgrades reached 8%, up from 1% the prior year, and downgrades declined to 4%, from 13%. Defeasance and an increase in paydowns on older vintages were the main reasons behind the upgrades. In addition, improving fundamentals on underlying properties resulted in some better than expected resolutions on specially serviced loans.

Downgrades declined sharply from the previous year's levels as ratings on transactions issued before the financial crisis have begun to stabilize, after significant downgrade activity over the past few years. Legacy multiborrower deals from the U.S. and Germany continued to account for the majority of downgrades.

European CMBS transactions have suffered from negative selection of remaining properties, as many loans have repaid. Many outstanding loans are backed by lower quality collateral with weaker refinancing prospects.

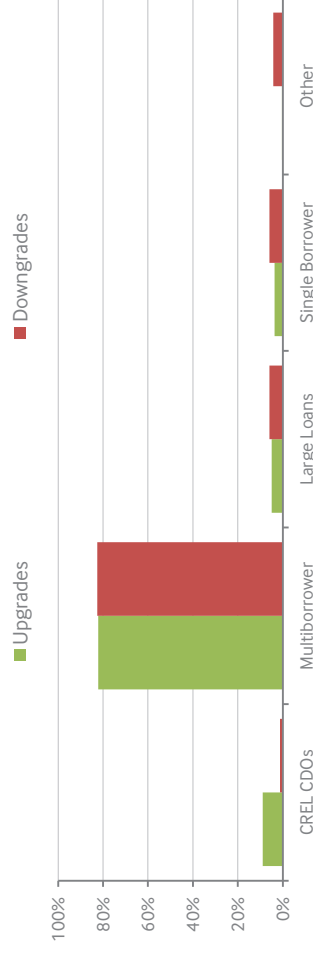
Impairments across CMBS declined sharply. The impairment rate dropped to 1.5%, from 4.9% in the prior year. The overwhelming majority of impairments were from U.S. transactions incurring realized losses from disposed specially serviced assets. The handful that came from European transactions was spread across Germany, Italy, Switzerland and the U.K. Those impairments were primarily driven by higher than expected losses on underlying loans, as well as interest shortfalls.

Global CMBS Rating Changes



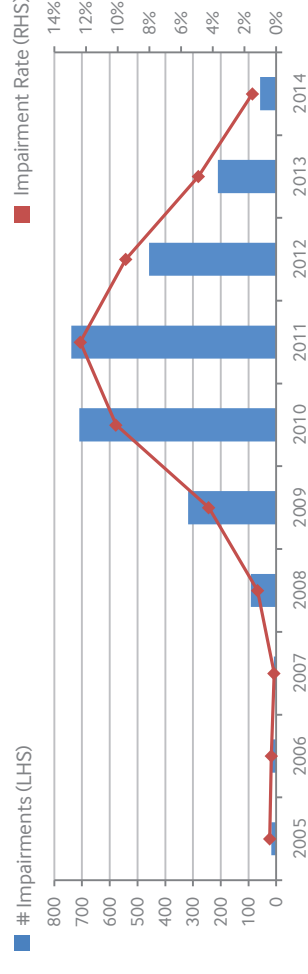
Source: Fitch

Global CMBS Rating Activity By Asset Category: 2014



Note: Percentages represent the proportion of total upgrades or total downgrades. Source: Fitch

Global CMBS Impairments: 2005-2014



Source: Fitch

Global CMBS One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC	CC and Below	WD	PIF
AAA	83.98	0.27	0.20	-	-	-	-	-	-	15.55
AA	13.04	64.55	1.34	1.34	-	-	-	-	-	19.73
A	4.14	5.23	73.64	2.40	0.65	-	-	-	-	13.94
BBB	2.07	0.21	9.52	71.22	3.52	0.62	0.21	-	0.21	12.42
BB	1.11	0.56	1.95	10.58	66.02	4.74	1.95	0.28	1.11	11.70
B	-	-	1.46	1.75	10.53	67.84	7.31	0.58	1.17	9.36
CCC	-	-	-	0.68	2.03	5.63	73.87	12.39	0.68	4.73

Source: Fitch

Residential Mortgage-Backed Securities

RMBS rating performance improved significantly in 2014, as upgrades topped downgrades for the first time since the financial crisis. Upgrades, at 13%, were driven by strong U.S. and U.K. home prices, improvement in underlying collateral performance and, an update to Fitch's U.S. RMBS Loan Loss Model criteria. While there were no material changes made to the model's core methodology, there were a number of key enhancements, including incorporating Fitch's updated Sustainable Home Price model to better reflect recent probability of default and loss severity trends.

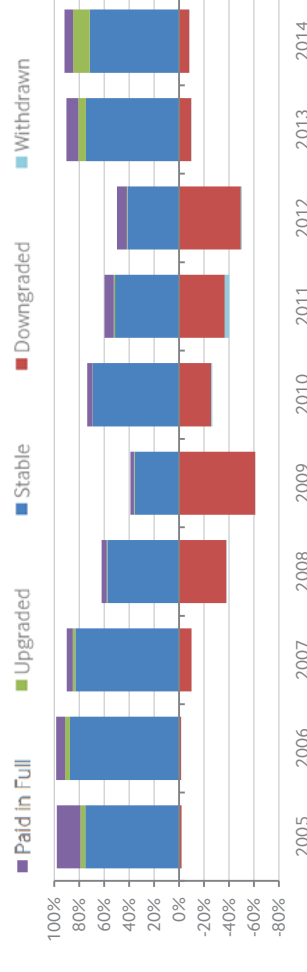
U.S. RMBS ratings represented approximately 81% of the global RMBS universe and therefore drove many of the underlying rating trends. Upgrades were concentrated in the subprime sector where positive selection in the remaining borrowers had resulted in the most significant performance improvement. In addition, the

structures were generally sequential payment, allowing for shorter remaining lives of the bonds. Meanwhile, EMEA RMBS transactions also saw improvement, driven primarily by a stronger U.K. housing market and increased credit enhancement levels.

In contrast, downgrades, at 8%, were generally a reflection of less credit-worthy loans remaining in the pools as faster prepayments were made by better borrowers.

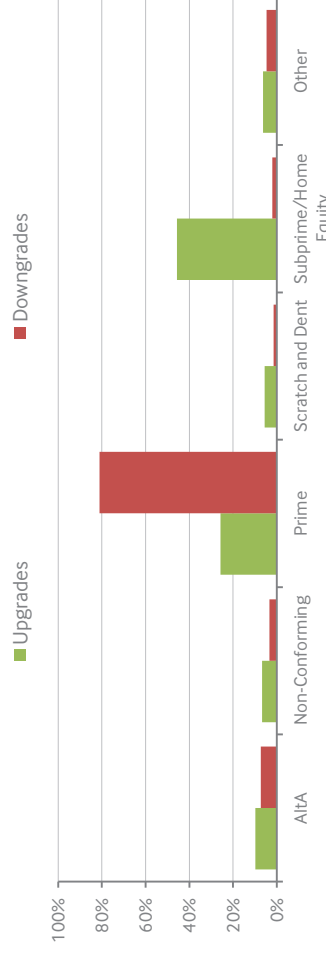
While impairments in RMBS were up marginally last year, they still remained historically low. In 2014, the RMBS sector registered a 2.0% impairment rate, compared with 1.6% in the prior year. The impairments were disproportionately in the pre-2006 U.S. prime and Alt-A transactions where faster voluntary prepayments of better borrowers resulted in weak remaining pools.

Global RMBS Rating Changes



Source: Fitch

Global RMBS Rating Activity By Asset Category: 2014



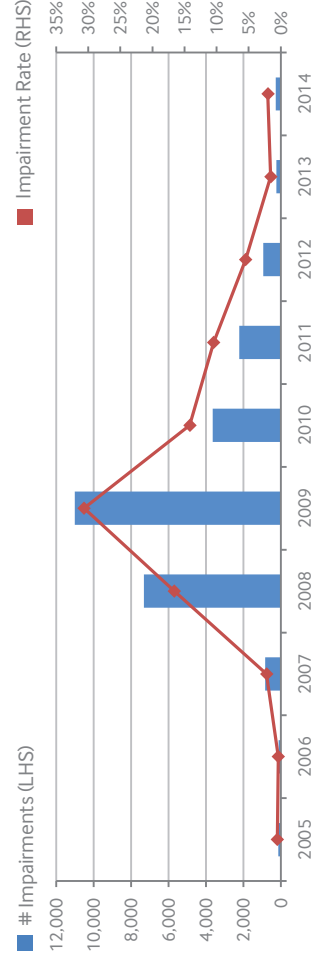
Note: Percentages represent the proportion of total upgrades or total downgrades. Source: Fitch

Global RMBS One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC	CC and Below	WD	PIF
AAA	81.93	1.88	0.08	-	-	-	-	-	-	16.12
AA	5.65	71.42	12.00	3.39	-	-	-	-	-	7.54
A	3.30	7.38	74.76	8.06	0.73	-	-	-	0.05	5.71
BBB	0.45	1.64	11.02	73.28	6.72	0.73	0.06	-	0.11	5.99
BB	-	0.57	6.51	6.36	75.60	6.29	0.64	-	0.14	3.89
B	0.11	0.26	0.95	4.32	17.71	64.10	7.80	1.37	0.05	3.32
CCC	-	-	0.08	0.49	9.59	9.02	68.30	10.04	0.08	2.41

Source: Fitch

Global RMBS Impairments: 2005-2014



Source: Fitch

Structured Credit

Credit deterioration across the SC sector abated as downgrades retreated to their lowest level in a decade. Upgrades outnumbered downgrades by more than a 2:1 margin as 13% of ratings improved and 5% were lowered.

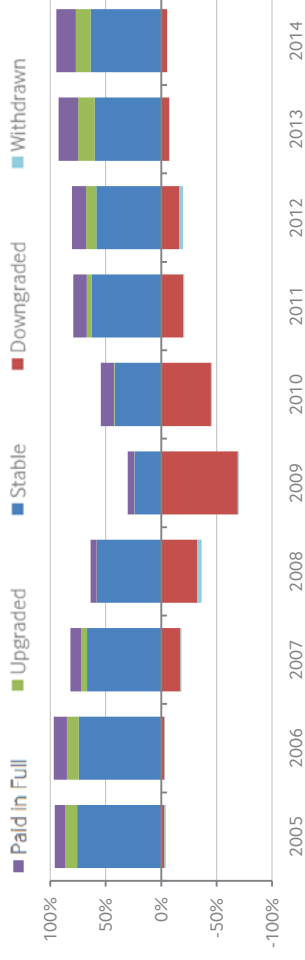
Upgrades were concentrated among transactions with underlying assets from Spain and Italy, which benefitted from upwards revision of the sovereign-related cap on SF ratings. Improvement was also seen in U.S. and German transactions that deleveraged or reached the end of their reinvestment period.

Nonetheless, Spanish and German ratings also experienced negative rating actions. On a few Spanish SME CDOs, junior tranches were downgraded as a result of delinquencies rolling over to default and reserve funds becoming

depleted as recoveries lagged. The German SME mezzanine debt CDO downgrades were driven by additional losses and high concentration in the portfolio, while the few U.S. CDO downgrades that occurred were due to idiosyncratic risks.

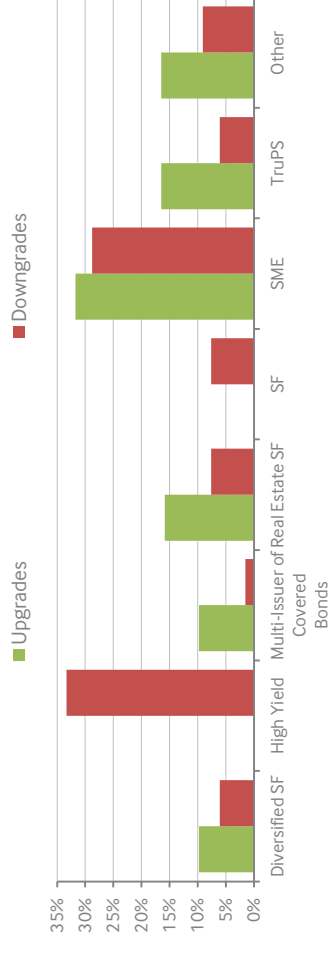
Impairments also declined sharply, with a 1.1% impairment rate, compared with 2.6% the prior year. Half of the impairments came from the Spanish and German transactions referenced above while the remainder was attributed to SF CDO transactions. The U.K. and U.S. impairments were mainly a reflection of the increased risk of an event of default as a result of the step-up coupon, concentration in the remaining portfolio and deteriorating credit enhancement levels.

Global Structured Credit Rating Changes



Source: Fitch

Global Structured Credit Rating Activity By Asset Category: 2014



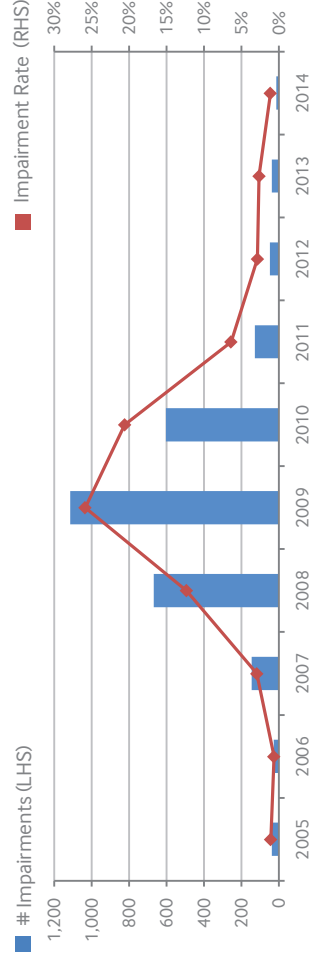
Note: Percentages represent the proportion of total upgrades or total downgrades. Source: Fitch

Global Structured Credit One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC	CC and Below	WD	PIF
AAA	82.98	0.53	-	-	-	-	-	-	0.53	15.96
AA	5.44	69.39	2.04	-	-	-	-	-	-	23.13
A	0.48	7.21	68.75	3.85	0.48	-	-	-	0.96	18.27
BBB	-	0.43	11.26	66.23	3.46	-	-	-	0.43	18.18
BB	-	-	0.59	5.33	75.74	3.55	-	-	-	14.79
B	1.08	-	3.24	3.78	8.11	58.38	8.11	-	0.54	16.76
CCC	-	-	-	-	5.74	13.93	52.46	11.48	-	16.39

Source: Fitch

Global Structured Credit Impairments: 2005-2014



Source: Fitch

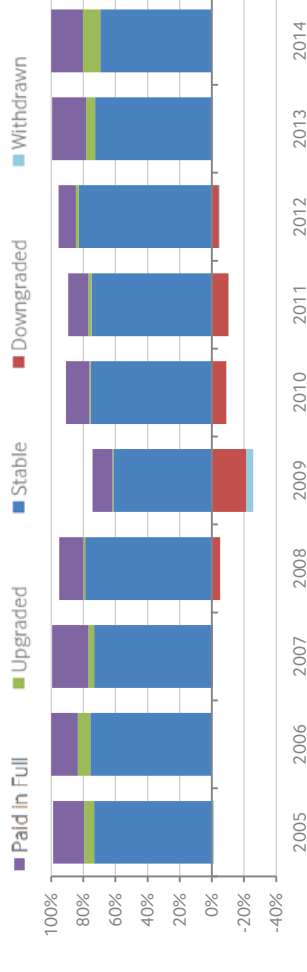
Asia-Pacific Structured Finance

For the first time since 2006, no downgrades were recorded during the year. Furthermore, no ratings became impaired during 2014.

In 2014, there were nine upgrades of APAC SF ratings. The overall number of upgrades remained small, but should be viewed within the context of the 61% proportion of tranches rated 'AAAsf'. Other investment-grade ratings also displayed stability as regional economies performed well with low interest rates and low unemployment rates.

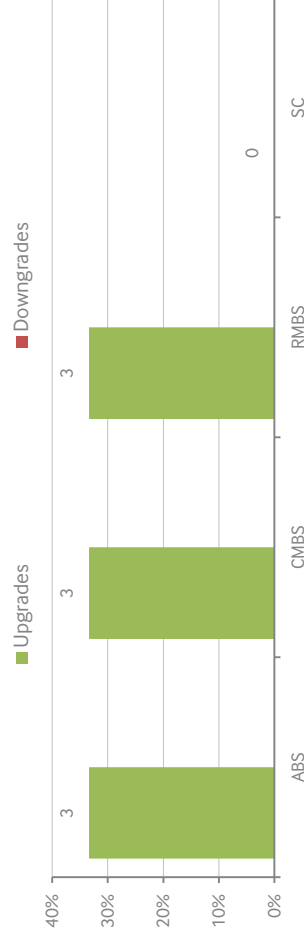
The nine upgrades were split equally between ABS, CMBS and RMBS. All of the ABS tranches were Australian and all of the CMBS tranches were Japanese, while two of the RMBS tranches were from Japan and one was from Australia. Most upgrades were due to a build-up of credit enhancement and asset performance within Fitch's expectations. One of the ABS tranches was upgraded because interest losses due to prepayments were substantially lower than the agency had originally stressed, while credit enhancement and over collateralization had increased due to sequential redemption of notes.

APAC Structured Finance Rating Changes



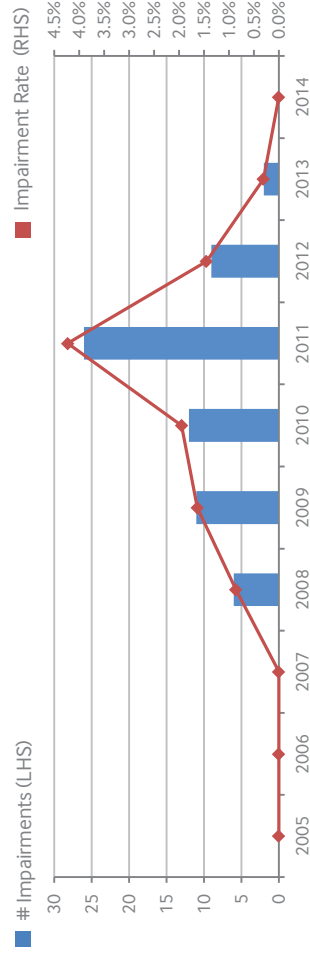
Source: Fitch

APAC Structured Finance Rating Activity By Sector: 2014



Note: Percentages represent the proportion of total upgrades or total downgrades. There were no downgrades in 2014.
Source: Fitch

APAC Structured Finance Impairments: 2005-2014



Source: Fitch

APAC Structured Finance One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC	CC and Below	WD	PIF
AAA	80.80	-	-	-	-	-	-	-	-	19.20
AA	-	84.31	-	-	-	-	-	-	-	15.69
A	-	1.75	78.95	-	-	-	-	-	-	19.30
BBB	-	-	1.18	69.41	-	-	-	-	-	29.41
BB	-	-	-	2.04	69.39	-	-	-	-	28.57
B	-	-	-	-	-	50.00	-	-	-	50.00
CCC	-	-	-	-	-	-	-	-	-	100.00

Source: Fitch

EMEA Structured Finance

In 2014 the ratio of upgrades to downgrades was reversed from previous years with over twice as many upgrades as downgrades.

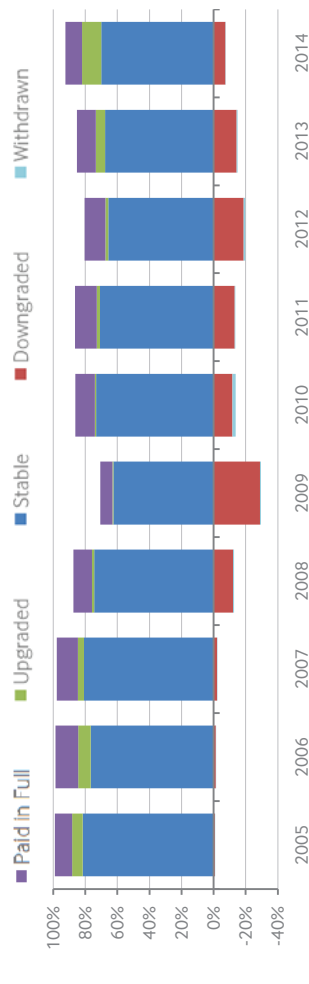
In contrast to previous years, over 39% of the upgraded tranches were from transactions from peripheral eurozone countries including Spain, Portugal and Greece, which had sovereign related ratings caps revised upwards.

Over 45% of the year's upgrades were to UK transactions, with both prime and non-conforming RMBS seeing significant numbers of upgrades as a result of the stronger housing market and increased credit enhancement.

CMBS was again disproportionately represented amongst EMEA SF downgrades, at 60% of the total number. Low quality properties continued to generate losses despite a recovery in lending to the commercial real estate sector and a broad increase in investor demand for the sector.

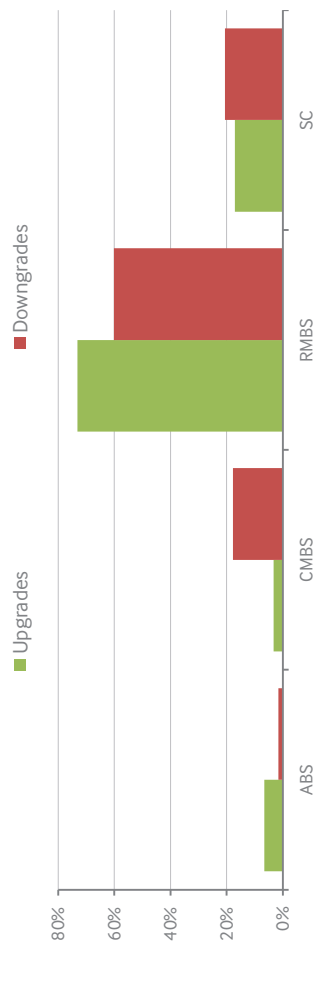
Tranches from peripheral eurozone countries represented almost 45% of the downgrades in the year with low recoveries remaining a theme for certain residential mortgage transactions from across the region. Unusually, Dutch RMBS was amongst the sectors with the most impaired tranches with a set of uncollateralized notes from a single issuer becoming impaired. No consumer ABS tranches were downgraded in 2014.

EMEA Structured Finance Rating Changes



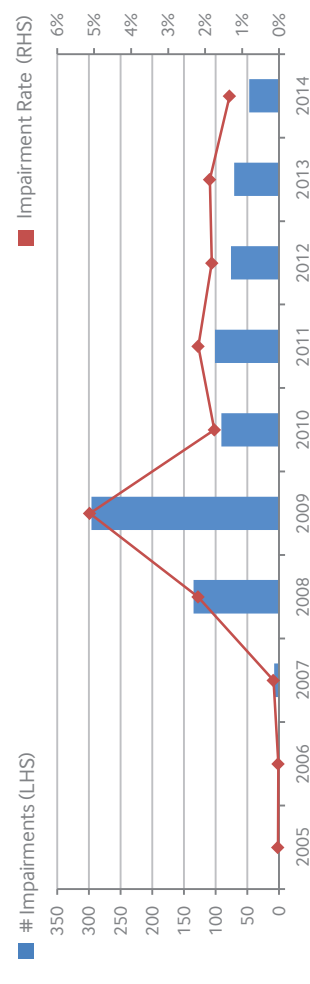
Source: Fitch

EMEA Structured Finance Rating Activity By Sector: 2014



Note: Percentages represent the proportion of total upgrades or total downgrades. Source: Fitch

EMEA Structured Finance Impairments: 2005-2014



Source: Fitch

EMEA Structured Finance One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC	CC and Below	WD	PIF
AAA	86.49	0.54	-	-	-	-	-	-	0.32	12.65
AA	6.37	79.21	3.95	-	-	-	-	-	-	10.47
A	0.36	13.11	70.56	4.85	0.18	-	-	-	0.18	10.77
BBB	0.18	0.53	12.83	70.41	6.77	0.71	0.18	-	0.53	7.84
BB	-	-	0.60	9.82	75.30	6.25	1.49	-	0.60	5.95
B	0.68	-	0.34	0.68	11.15	61.15	13.85	2.36	0.34	9.46
CCC	-	-	-	0.56	1.12	7.82	60.89	22.35	-	7.26

Source: Fitch

North America Structured Finance

The NA SF rating trends closely mirror those for the global SF universe because the NA region accounts for 80% of the total SF universe. In 2014, 11% of NA SF securities were upgraded while 7% were downgraded. Much of that rating activity was driven by the RMBS sector, because it comprised 63% of the overall NA sample. NA RMBS accounted for 72% of the NA SF upgrades and 82% of the downgrades in 2014.

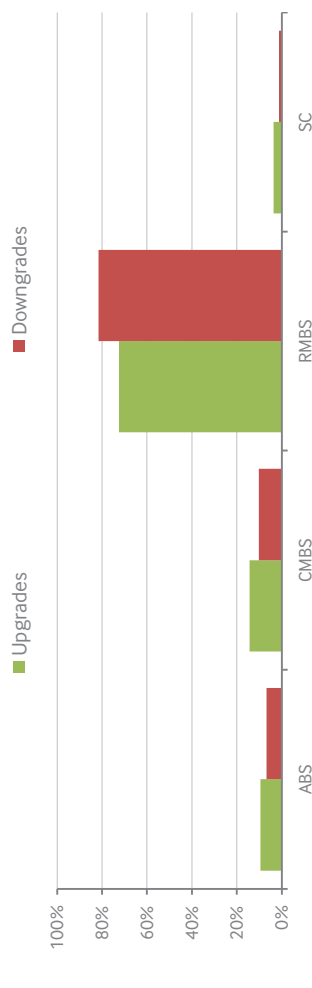
Impairments across the NA SF region continued to decline sharply in 2014, with a 1.7% impairment rate, compared with 2.3% in 2013. There were no impairments at the investment grade level while the non-investment grade level registered a 4.4% impairment rate, down from 5.6% the previous year.

North America Structured Finance Rating Changes



Source: Fitch

North America Structured Finance Rating Activity By Sector: 2014



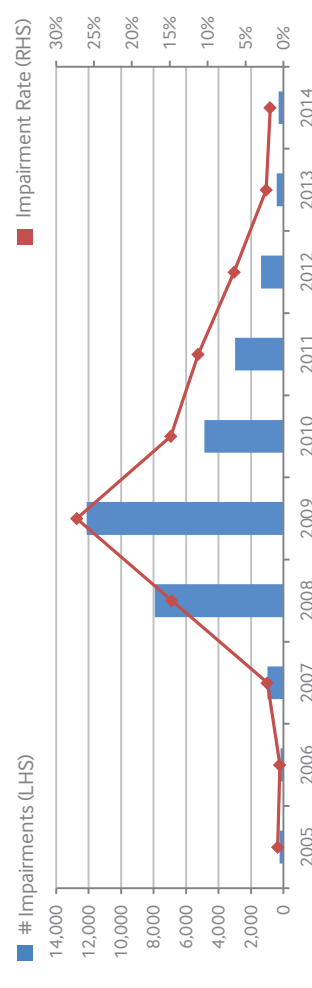
Note: Percentages represent the proportion of total upgrades or total downgrades. Source: Fitch

North America Structured Finance One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC	CC and Below	WD	PIF
AAA	81.36	1.15	0.23	-	-	-	-	-	0.02	17.24
AA	9.15	64.10	11.50	3.81	-	-	-	-	-	11.44
A	3.85	7.20	74.22	6.35	0.85	-	-	-	0.08	7.45
BBB	0.81	1.44	11.51	71.40	4.90	0.63	0.04	-	0.04	9.22
BB	0.24	0.59	6.00	6.12	73.42	6.48	0.71	0.06	0.30	6.06
B	0.09	0.23	1.27	4.25	16.05	65.91	6.69	0.99	0.23	4.29
CCC	-	-	0.07	0.49	8.75	8.75	69.01	9.66	0.18	3.09

Source: Fitch

North America Structured Finance Impairments: 2005-2014



Source: Fitch

Methodology

All SF ratings referenced in this study should be assumed to have the 'sf' suffix, unless otherwise noted.

All Fitch global structured finance (ABS, CMBS, RMBS and SC) long-term, international scale debt ratings from 1990–2014 are included in this study. Private ratings and insured issues, in which the rating is dependent upon a third-party credit enhancement provider, are excluded from the study. In addition, interest-only bonds are also excluded from the analysis. Fitch's continuing data enhancement efforts may result in slightly different statistics than in previously published studies. Therefore, this most recent study supersedes all prior versions.

Of note, Fitch employed a change in methodology in the 2012 study regarding the transition data and matrices. In prior studies, public, private and 144a ratings were included, and similarly rated tranches from the same deal at issuance were treated as one observation. Private ratings are now being excluded and similarly rated tranches from the same deal at issuance are no longer being collapsed into one observation. The decision to count these similarly rated tranches as separate discrete observations allows more meaningful comparisons with the inclusion of rating migrations to withdrawn and PIF.

It is important to observe that the rating transitions outlined in this study represent a distinct historical period and might not represent future rating migration patterns. Transition rates are influenced by a number of factors, including credit enhancement levels, macroeconomic variables, state of the financial

markets, size of subsectors and ratings portfolio and credit conditions generally.

To calculate transition rates, cohorts were created for each year from 1990–2014. A cohort is defined as a fixed pool representing the number of outstanding ratings at the beginning of a respective year. For example, the 2014 cohort may include ratings from 1996, 1997, 1998 and so on if these ratings were outstanding at the beginning of 2014. However, if a new rating was issued in the middle of 2014, that rating movement would be included in a future study in the 2015 cohort. Longer multiyear (i.e., 10-year) transition and impairment rates are comprised of fewer cohorts relative to the average annual rates. Cohort should not be confused with vintage, which represents the year in which a transaction closed.

The cohorts remain fixed over time, with the rating performance of all tranches in each cohort tracked accordingly. A tranche is defined as a class of securities or certificates within the same rating category. If a rating was withdrawn, then it was not included in the analysis for the cohort year in which it was withdrawn, as transition rates examine beginning-of-the-year ratings versus end-of-the-year ratings. Therefore, respective multiple intra-year rating movements during the year were only counted once. Furthermore, for the purposes of calculating average one- and two-year transition rates, the transition rates for each year were weighted by the number of tranches outstanding for each rating category at the beginning of the year or cohort. This was done to give a fair evaluation of rating performance, since the number of SF tranches rated by Fitch grew substantially over the period.

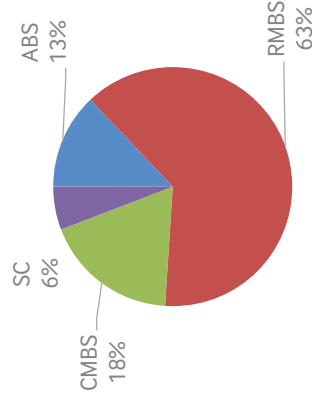
Throughout most of the study, an examination of 2014 one-year rating migration data at the major rating categories pinpoints the movement of ratings both up and down the rating scale from 'A' to 'BBB', for example, as opposed to the modifier level, which counts each notch change or that from 'A' to 'A–' (see the Global Structured Finance Transition Tables at the Modifier Level in the Appendix on pages 15–26). The vertical left-hand column identifies ratings outstanding at the beginning of 2014, while the horizontal axis offers information on the migration pattern for those ratings by year's end. The table reads from the top left-hand corner, beginning with 'AAA' and following the diagonal to the right in order to examine the stability of each consecutive rating category.

In the corporate finance arena, defaults are fairly easy to identify, either through a missed payment, distressed exchange or bankruptcy filing; furthermore, they are typically strongly linked to unrecoverable losses. By comparison, defining defaults within structured finance is a more challenging task, since payment shortfalls can be both temporary or allowed under the terms of bond indentures. Some structured bonds have features that allow notes to defer interest or pay in kind (PIK). Some structured securities can experience temporary interest shortfalls, which are inconsequential to deal performance and are cured relatively quickly.

Lastly, structured bonds may also suffer writedowns to the original face value but continue to be active for extended periods of time. For the purposes of this study, Fitch tracks impairments, or defaults and near defaults, which include bonds rated 'CC' or below. This

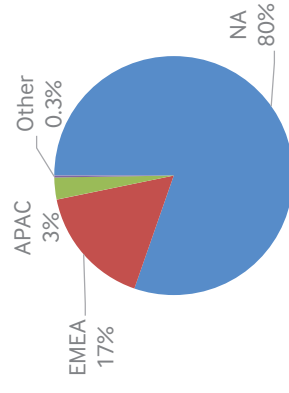
includes not only bonds in payment default but also bonds where a default of some kind appears probable. The possibility exists that some defaults identified in this study will be subsequently cured.

Global Structured Finance Rating Distribution By Sector: 2014



Source: Fitch

Global Structured Finance Rating Distribution By Region: 2014



Source: Fitch

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Related Research

Report Data - Excel File



The Fitch Global Structure Finance 2014 Transition and Default Study data is available in an Excel format. Click [here](#) to download.

Related reports

Global Corporate Finance 2014 Transition and Default Study (March 2015)

Global Sovereign 2014 Transition and Default Study (March 2015)

U.S. Public Finance 2014 Transition and Default Study (March 2015)

International Public Finance 2014 Transition and Default Study (March 2015)

Fitch Ratings Global Cross-Asset First-Half 2014 Default Update (September 2014)

Risk Radar (September 2014)

The Credit Outlook (January 2015)

Appendix: Global Structured Finance Impairment Rates

Average Cumulative Impairment Rates: 1990-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year	10-Year
AAA	0.95	3.18	5.29	6.82	8.02	0.50
AA+	1.61	6.79	11.20	13.57	15.48	2.03
AA	1.39	4.87	8.13	11.06	13.45	5.31
AA-	2.54	9.25	15.08	20.14	23.97	9.29
A+	2.68	9.24	14.75	19.32	22.82	6.64
A	2.78	8.06	13.19	18.26	22.33	11.57
A-	6.10	17.68	27.94	36.27	43.17	24.25
BBB+	5.87	16.55	26.81	35.35	41.98	26.02
BBB	5.17	13.04	19.75	25.37	29.56	15.97
BBB-	8.73	20.44	30.80	38.63	44.52	27.15
BB+	11.65	24.91	34.35	40.56	45.05	18.25
BB	13.28	23.46	31.73	38.36	42.41	18.95
BB-	12.23	21.92	30.58	37.23	42.42	35.22
B+	15.63	25.33	35.45	44.51	51.72	39.42
B	19.44	32.01	42.36	48.84	51.83	26.26
B-	23.99	44.17	55.11	61.81	63.66	57.69
CCC	45.14	63.03	74.91	82.03	87.30	73.89
Investment Grade	1.97	5.83	9.33	12.13	14.31	4.17
Speculative Grade	23.07	35.91	45.17	51.14	53.87	27.50
All Structured Finance	5.23	10.26	14.30	17.26	19.18	6.29

Source: Fitch.

Three-Year Impairment Statistics*

Three-Year Cumulative Impairment Rates Over a 10-Year Period

%	AAA	AA	A	BBB	BB	B
2003-2012	8.27	13.24	20.41	28.21	40.18	54.00

Source: Fitch.

Most Recent Three-Year Cumulative Impairment Rates

%	AAA	AA	A	BBB	BB	B
2012	0.01	-	0.67	2.33	8.39	21.24
2011	0.20	1.29	3.19	11.77	22.55	52.81

*Includes asset-backed, commercial mortgage-backed, residential mortgage-backed and structured credit securities. Source: Fitch.

Appendix: Average Cumulative Impairment Rates: 1990-2014

Global Structured Finance Impairment Rates*

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	0.01	1.88
AA+	-	-	5.48
AA	-	-	16.69
AA-	-	-	17.54
A+	-	-	22.24
A	-	0.69	31.41
A-	-	1.12	41.96
BBB+	-	1.65	41.33
BBB	-	2.24	35.77
BBB-	-	3.52	44.24
BB+	-	7.08	36.12
BB	0.05	8.57	49.44
BB-	-	5.63	43.53
B+	-	5.71	57.48
B	1.19	18.86	69.73
B-	0.96	46.85	70.26
CCC	10.43	48.87	76.21

*Includes asset-backed, commercial mortgage-backed, residential mortgage-backed and structured credit securities. Source: Fitch.

North America Structured Finance Average Cumulative Impairment Rates: 1990-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	1.02	3.40	5.62	7.21	8.44
AA	1.77	6.46	10.62	13.98	16.58
A	3.72	11.10	17.92	24.11	29.00
BBB	6.65	16.70	25.46	32.51	37.76
BB	14.05	25.20	33.96	40.70	44.84
B	20.49	34.17	44.76	51.41	54.27
CCC	46.35	64.40	76.54	83.66	88.84
Investment Grade	2.14	6.31	10.04	12.98	15.22
Speculative Grade	24.27	37.49	46.93	52.90	55.45
NA SF	5.62	10.98	15.24	18.32	20.27

Source: Fitch.

Asia Pacific Structured Finance Average Cumulative Impairment Rates: 1998-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	-	-	-	-	-
AA	-	-	-	0.48	1.24
A	-	0.52	1.15	1.92	2.15
BBB	0.33	2.21	5.47	8.70	11.42
BB	1.81	4.90	9.92	13.95	17.29
B	7.81	17.98	22.78	28.15	31.25
CCC	47.56	70.00	77.03	81.03	78.57
Investment Grade	0.05	0.37	0.90	1.50	1.99
Speculative Grade	8.16	15.56	21.12	24.77	24.83
APAC SF	0.91	2.00	3.02	3.85	4.09

Source: Fitch.

EMEA Structured Finance Average Cumulative Impairment Rates: 1996-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	0.08	0.32	0.63	1.06	1.53
AA	0.37	1.11	2.02	3.17	4.36
A	0.58	1.56	2.70	3.95	5.14
BBB	1.06	3.06	5.26	7.53	9.62
BB	3.63	9.16	14.59	18.25	21.62
B	7.95	15.46	22.27	28.57	34.17
CCC	26.19	41.45	49.90	56.01	59.96
Investment Grade	0.42	1.23	2.17	3.24	4.28
Speculative Grade	9.38	17.27	23.34	27.46	30.05
EMEA SF	1.61	3.24	4.64	5.81	6.67

Source: Fitch.

Appendix: Average Cumulative Impairment Rates: 1990-2014
ABS Average Cumulative Impairment Rates: 1990-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	0.01	0.04	0.10	0.27	0.55
AA	0.04	0.32	1.07	1.96	2.67
A	0.20	0.69	1.35	2.16	2.91
BBB	0.36	1.44	2.64	3.64	4.20
BB	3.39	8.98	13.20	15.37	16.85
B	14.20	25.32	33.73	40.27	44.89
CCC	40.09	56.97	67.68	73.05	76.63
Investment Grade	0.12	0.47	0.94	1.48	1.95
Speculative Grade	10.70	19.19	25.27	29.01	31.60
All ABS	0.84	1.72	2.53	3.23	3.78

Source: Fitch.

CMBS Average Cumulative Impairment Rates: 1991-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	0.01	0.06	0.15	0.35	0.66
AA	0.14	0.49	1.14	2.70	4.76
A	0.37	1.45	3.54	6.53	9.13
BBB	1.01	3.86	8.89	14.15	17.74
BB	3.22	9.64	18.48	26.19	31.04
B	12.50	28.11	40.04	48.42	51.63
CCC	36.46	55.34	65.21	68.93	72.87
Investment Grade	0.32	1.23	2.91	5.04	6.93
Speculative Grade	12.26	23.91	33.44	39.95	42.74
All CMBS	3.44	7.11	10.74	13.78	15.46

Source: Fitch.

RMBS Average Cumulative Impairment Rates: 1990-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	1.14	3.75	6.12	7.74	8.95
AA	1.96	7.07	11.49	14.91	17.56
A	4.35	13.23	21.13	28.47	34.47
BBB	8.57	21.16	31.31	39.33	45.57
BB	17.68	30.26	39.22	45.94	49.79
B	22.59	35.56	46.06	52.10	54.55
CCC	47.09	65.35	78.34	85.82	90.46
Investment Grade	2.34	6.86	10.69	13.60	15.81
Speculative Grade	27.48	41.26	51.13	57.07	59.20
All RMBS	5.83	11.34	15.56	18.52	20.42

Source: Fitch.

Structured Credit Average Cumulative Impairment Rates: 1994-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	0.68	2.85	6.14	9.83	12.90
AA	2.03	7.78	13.67	18.59	21.94
A	5.33	13.83	22.46	28.89	33.64
BBB	5.69	14.52	23.29	29.84	35.09
BB	10.42	21.11	28.88	34.75	40.05
B	20.64	32.77	40.74	48.01	54.90
CCC	42.85	57.04	63.94	70.86	80.00
Investment Grade	3.15	8.96	15.16	20.31	24.26
Speculative Grade	20.95	32.78	40.17	46.31	52.03
All Structured Credit	7.35	14.46	20.74	25.80	29.67

Source: Fitch.

Appendix: Global Structured Finance Transition Matrices

Average Annual Transition Matrix: 1990-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	79.61	0.09	1.15	0.10	0.03	0.99	0.02	0.02	0.96	0.04	0.01	0.64	0.01	-	0.56	-	1.10	0.95	0.40	13.31
AA+	10.82	63.33	1.70	0.49	0.40	3.00	0.16	0.07	2.60	0.27	0.04	2.19	0.08	0.03	1.29	0.02	1.56	1.61	0.60	9.76
AA	6.42	2.38	69.40	0.59	0.34	3.68	0.21	0.12	3.07	0.22	0.10	1.78	0.04	0.05	1.15	0.03	1.02	1.39	0.64	7.38
AA-	3.97	2.74	3.60	61.39	1.43	2.78	0.93	0.27	2.62	0.75	0.10	2.04	0.13	0.05	1.84	0.13	2.50	2.53	0.89	9.31
A+	2.32	1.56	4.09	2.75	62.36	1.89	0.93	0.75	3.39	0.41	0.16	2.04	0.08	0.05	1.67	0.13	2.00	2.68	0.43	10.28
A	2.02	0.82	3.07	0.82	2.01	68.00	0.65	0.54	4.35	0.53	0.13	2.87	0.08	0.06	2.10	0.15	1.81	2.78	0.44	6.78
A-	1.27	0.59	1.01	0.85	1.74	3.16	62.52	2.44	2.96	1.84	0.79	2.72	0.29	0.14	2.06	0.71	2.71	6.10	0.37	5.72
BBB+	0.75	0.31	0.81	0.41	1.36	2.28	2.14	62.12	2.44	1.79	1.40	2.92	0.39	0.25	3.19	0.74	2.50	5.87	0.31	8.04
BBB	0.45	0.25	0.81	0.35	0.69	2.34	0.63	2.16	64.96	0.95	0.51	4.67	0.29	0.18	4.15	0.34	3.73	5.17	0.64	6.71
BBB-	0.34	0.07	0.23	0.17	0.33	0.85	0.53	1.17	2.61	60.80	1.44	4.09	2.07	0.66	3.31	1.69	2.73	8.74	0.50	7.67
BB+	0.25	0.03	0.45	0.10	0.45	0.99	0.51	1.63	2.68	3.20	55.60	2.51	1.28	1.41	4.36	2.04	3.10	11.65	0.74	7.00
BB	0.11	0.04	0.26	0.10	0.19	1.34	0.31	0.57	2.50	0.94	1.56	57.93	0.44	0.52	7.41	0.96	6.17	13.27	0.51	4.87
BB-	0.10	-	0.12	0.02	0.10	0.17	0.24	0.17	0.71	1.22	1.93	3.03	60.24	1.76	4.89	3.67	4.11	12.22	0.39	4.91
B+	0.24	-	0.03	0.03	0.24	0.14	0.07	0.14	0.41	0.54	1.66	3.46	2.81	56.39	4.13	4.13	4.64	15.62	0.54	4.78
B	0.05	0.01	0.03	-	0.03	0.27	0.05	0.11	1.22	0.25	0.57	3.32	0.40	1.05	56.78	1.16	10.94	19.41	0.49	3.86
B-	0.08	-	0.02	0.02	-	0.04	0.02	-	0.08	-	0.17	0.70	0.11	0.95	1.70	56.25	13.52	23.99	0.34	1.99
CCC	0.01	-	-	-	-	0.05	-	-	0.15	-	0.01	1.46	0.01	0.02	1.91	0.15	48.77	45.14	0.40	1.93

Source: Fitch

One-Year Transition Matrix: 2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	82.19	-	0.97	-	-	0.18	-	-	-	-	-	-	-	-	-	-	-	-	0.07	16.59
AA+	4.13	80.58	2.07	0.41	0.41	0.41	-	-	-	-	-	-	-	-	-	-	-	-	-	11.98
AA	9.42	0.97	63.70	-	0.11	11.19	-	-	3.37	-	-	-	-	-	-	-	-	-	-	11.24
AA-	3.72	28.72	6.76	47.64	0.68	1.69	-	-	0.34	-	-	-	-	-	-	-	-	-	-	10.47
A+	0.48	1.91	13.40	5.74	62.68	-	0.48	-	0.48	-	-	-	-	-	-	-	-	-	0.96	13.88
A	3.54	0.23	7.28	0.08	2.18	70.97	0.08	0.31	6.34	0.12	0.04	0.74	-	-	-	-	-	-	-	8.09
A-	0.48	-	1.44	0.96	1.44	10.05	77.99	-	0.96	-	-	0.48	-	-	-	-	-	-	0.48	5.74
BBB+	0.34	-	0.68	-	-	11.90	4.42	65.31	0.34	2.72	0.68	-	-	-	-	-	-	-	0.34	13.27
BBB	0.62	-	1.47	-	0.40	11.06	0.40	2.36	68.47	0.27	0.18	5.58	0.04	-	0.58	-	0.09	-	0.09	8.39
BBB-	1.16	-	-	-	-	4.62	-	0.29	4.62	69.65	0.58	3.76	-	-	1.16	0.29	-	-	0.29	13.58
BB+	0.88	-	-	-	-	0.88	-	0.88	4.39	4.39	71.93	3.51	-	-	0.88	-	0.88	-	0.88	10.53
BB	0.16	-	0.53	-	-	5.38	-	-	6.17	0.42	0.26	73.05	0.21	0.21	6.12	0.05	0.79	0.05	0.32	6.28
BB-	-	-	-	-	-	-	-	-	3.17	-	-	4.76	69.84	6.35	6.35	-	1.59	-	-	7.94
B+	-	-	-	-	-	-	-	-	-	-	1.64	19.67	11.48	36.07	13.11	3.28	3.28	-	-	11.48
B	0.17	-	0.21	-	0.04	1.10	-	-	4.07	-	0.04	15.08	0.17	0.17	64.17	1.14	7.41	1.19	0.25	4.79
B-	-	-	-	-	-	1.92	-	-	-	-	-	5.77	0.96	0.96	4.81	63.46	11.54	0.96	-	9.62
CCC	-	-	-	-	-	0.07	-	-	0.50	-	-	8.28	-	0.03	8.58	0.07	68.48	10.43	0.17	3.40

Source: Fitch

Appendix: Global Structured Finance Transition Matrices

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	33.08	1.54	6.92	0.24	0.15	9.01	0.11	-	6.09	0.01	-	1.72	-	-	0.46	-	0.09	0.01	0.30	40.27
AA+	8.71	15.77	6.22	0.83	0.83	13.69	-	0.83	2.49	-	0.41	4.15	-	-	1.24	-	0.83	-	-	43.98
AA	6.00	2.64	14.59	0.38	0.62	10.36	0.14	0.67	15.74	0.34	0.14	11.76	0.05	-	5.66	-	0.77	-	0.77	29.37
AA-	5.73	2.60	7.29	23.96	1.56	11.98	0.52	1.04	1.56	1.04	0.52	2.08	-	-	1.04	-	1.04	-	-	38.02
A+	1.40	1.86	5.58	6.51	20.47	6.51	3.72	2.33	5.12	1.40	-	0.93	-	-	0.47	-	-	-	0.93	42.79
A	2.85	0.33	6.88	0.12	2.07	24.21	0.45	0.57	12.73	0.53	0.20	14.04	0.08	0.04	8.14	0.04	2.48	0.69	1.18	22.38
A-	1.69	-	2.25	-	2.81	10.67	28.09	3.37	5.06	2.81	1.12	5.62	-	-	0.56	-	1.12	1.12	1.12	32.58
BBB+	0.83	0.28	0.55	-	-	8.26	1.10	30.85	3.86	3.03	0.83	1.38	0.28	-	1.38	-	0.28	1.65	0.83	44.63
BBB	0.57	0.09	1.67	0.13	0.57	9.59	0.22	1.76	15.22	0.88	0.75	17.29	0.09	0.09	18.21	0.04	7.61	2.24	0.88	22.09
BBB-	1.90	-	0.54	-	0.27	6.23	-	0.27	5.15	21.95	1.08	10.03	3.25	2.44	5.42	0.81	5.42	3.52	1.08	30.62
BB+	2.65	-	-	-	-	2.65	0.88	-	5.31	3.54	22.12	7.96	3.54	0.88	7.96	1.77	2.65	7.08	1.77	29.20
BB	0.18	-	0.89	-	-	5.71	-	0.13	4.73	0.49	0.58	21.06	0.36	0.31	21.29	0.13	16.29	8.57	2.50	16.78
BB-	-	-	-	-	-	-	-	-	7.04	2.82	1.41	7.04	15.49	1.41	19.72	7.04	4.23	5.63	2.82	23.94
B+	-	-	-	-	-	-	-	-	1.43	-	-	5.71	-	14.29	10.00	30.00	10.00	5.71	5.71	17.14
B	0.16	-	0.21	-	0.05	2.31	-	-	3.36	0.11	0.16	8.40	0.21	0.11	20.80	1.31	30.09	18.86	1.37	12.50
B-	-	-	-	-	-	0.90	-	-	-	-	0.45	2.25	-	-	2.70	11.71	23.42	46.85	0.90	10.81
CCC	0.22	-	0.19	-	-	0.67	-	-	0.95	-	-	5.49	0.06	0.06	4.31	0.13	31.24	48.87	1.05	6.76

Source: Fitch

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	2.76	0.23	2.88	0.01	0.05	4.88	0.05	0.01	5.87	-	0.01	4.81	-	-	3.01	-	1.24	1.88	3.54	68.78
AA+	2.91	-	2.23	0.17	0.34	4.62	-	-	3.08	-	-	4.79	-	-	7.71	-	7.02	5.48	3.42	58.22
AA	1.51	0.23	2.04	0.19	0.15	1.59	-	-	1.02	0.04	0.04	3.25	-	-	6.04	-	10.31	16.69	3.78	53.13
AA-	1.61	0.40	0.81	0.20	0.20	2.22	-	-	0.81	0.60	-	1.81	-	-	1.21	-	5.44	17.54	2.02	65.12
A+	-	0.13	0.52	0.52	-	0.91	-	-	0.52	0.13	-	0.91	-	-	0.91	-	4.55	22.24	3.12	65.54
A	0.84	0.69	0.87	0.25	0.54	1.85	-	0.04	1.05	0.04	-	0.94	-	-	2.03	-	4.39	31.41	2.76	52.25
A-	1.00	-	0.67	-	0.22	1.00	0.45	0.11	1.79	-	-	1.23	-	-	1.23	0.22	3.01	41.96	1.67	45.42
BBB+	0.86	-	0.43	0.21	-	1.39	0.21	0.32	1.18	0.21	0.11	0.54	0.11	-	0.64	-	2.78	41.33	1.28	48.39
BBB	0.13	0.03	0.20	-	0.03	1.11	0.26	0.88	1.31	0.33	0.20	0.62	0.03	-	0.55	0.03	1.83	35.77	4.63	52.06
BBB-	0.86	-	0.29	-	-	0.96	-	-	0.96	0.38	-	1.25	-	-	0.67	-	1.06	44.24	1.82	47.50
BB+	1.46	-	0.63	0.21	-	1.25	-	0.21	1.46	0.42	-	2.92	-	-	1.46	0.21	1.46	36.12	5.22	46.97
BB	0.69	-	0.43	0.09	-	0.52	-	0.09	0.69	0.09	0.17	1.73	-	-	1.13	0.09	2.52	49.44	2.60	39.72
BB-	1.58	-	0.63	-	0.32	0.63	-	-	2.52	-	0.32	3.15	-	-	1.89	-	3.79	43.53	1.89	39.75
B+	1.18	-	-	-	-	0.79	-	-	1.57	-	-	2.76	-	1.18	3.15	0.79	3.54	57.48	1.18	26.38
B	0.13	-	-	-	-	0.77	-	-	0.26	-	0.13	0.64	0.13	0.13	0.89	-	1.40	69.73	3.45	22.35
B-	-	-	-	-	-	1.12	-	-	0.74	-	-	2.60	-	-	1.12	1.12	1.86	70.26	3.35	17.84
CCC	-	-	-	-	-	-	-	-	0.40	-	-	-	-	-	-	-	0.40	76.21	4.44	18.55

Source: Fitch

Appendix: Global ABS Transition Matrices

Average Annual Transition Matrix: 1990-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	80.24	0.16	0.49	0.23	0.04	0.21	0.06	0.04	0.31	0.09	0.01	0.12	-	-	-	-	0.02	0.01	0.83	17.16
AA+	18.79	56.16	2.42	0.81	-	0.20	0.40	0.20	1.82	0.81	0.20	1.62	-	0.20	-	-	0.40	0.20	0.20	15.56
AA	7.13	1.15	69.99	2.39	0.93	1.15	0.56	-	1.05	0.40	0.19	0.31	0.19	0.03	0.09	-	0.03	-	1.05	13.36
AA-	1.89	1.44	1.78	63.60	1.55	2.22	0.67	0.11	0.22	0.78	0.22	0.11	-	-	-	-	0.11	0.11	0.67	24.53
A+	0.36	0.84	3.09	1.17	72.95	0.57	0.18	0.24	5.40	0.06	0.06	0.09	-	0.03	0.12	-	0.12	0.09	0.66	13.98
A	1.33	0.37	3.30	0.60	1.45	74.06	0.47	0.40	1.32	0.35	0.10	0.60	0.17	0.05	0.48	0.03	0.18	0.28	0.73	13.71
A-	1.14	-	1.14	0.46	1.14	3.66	63.16	4.35	3.89	1.83	0.92	2.06	0.92	0.23	0.46	0.46	0.69	-	1.14	12.36
BBB+	0.27	-	0.48	0.05	0.74	2.29	0.80	72.25	2.50	1.91	0.37	0.74	0.58	0.11	0.58	-	0.53	0.27	0.58	14.94
BBB	0.14	0.02	0.26	0.06	0.24	2.02	0.21	4.03	73.63	0.95	0.55	1.24	0.21	0.12	0.69	0.12	0.35	0.34	1.67	13.14
BBB-	0.28	-	0.14	-	0.14	2.51	-	0.42	3.07	58.52	4.05	6.15	2.79	0.98	4.19	0.42	1.96	0.84	0.70	12.85
BB+	-	-	0.84	-	0.28	1.40	-	2.80	5.60	0.84	49.30	7.84	3.08	3.64	3.64	0.56	1.68	1.68	1.12	15.69
BB	-	-	-	-	0.07	2.11	0.07	-	2.73	0.89	1.36	64.60	1.30	2.25	4.50	0.89	3.21	3.55	0.82	11.66
BB-	-	-	-	-	-	-	-	0.29	-	-	2.65	1.47	56.64	6.78	9.14	0.59	1.47	4.42	0.29	16.22
B+	-	-	-	-	-	-	-	-	-	-	33.09	38.85	2.16	12.23	5.76	-	5.76	-	-	3.60
B	0.15	-	-	-	-	-	-	0.15	1.63	-	0.44	1.63	0.30	0.44	57.63	6.52	7.26	14.22	2.67	6.96
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.64	-	57.38	9.84	22.95	2.46	5.74
CCC	-	-	-	-	-	-	-	-	-	-	-	0.71	-	0.24	0.71	-	50.47	40.57	1.89	5.42

Source: Fitch

One-Year Transition Matrix: 2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	80.71	-	0.21	-	-	0.34	-	-	-	-	-	-	-	-	-	-	-	-	0.21	18.53
AA+	7.41	59.26	3.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.63
AA	25.99	1.69	51.98	-	-	4.52	-	-	1.13	-	-	-	-	-	-	-	-	-	-	14.69
AA-	2.08	14.58	2.08	58.33	-	2.08	-	-	-	-	-	-	-	-	-	-	-	-	-	20.83
A+	1.04	-	25.00	5.21	56.25	-	-	-	1.04	-	-	-	-	-	-	-	-	-	-	11.46
A	3.10	1.03	10.69	-	2.41	72.41	-	-	0.69	-	0.34	0.34	-	-	-	-	-	-	-	8.97
A-	-	-	4.00	-	-	24.00	60.00	-	4.00	-	-	4.00	-	-	-	-	-	-	-	4.00
BBB+	-	-	-	-	-	1.44	5.76	72.66	-	-	-	-	-	-	-	-	-	-	-	20.14
BBB	0.48	-	1.91	-	3.83	17.70	-	0.48	62.20	-	-	0.96	-	0.48	-	-	-	-	-	11.96
BBB-	-	-	-	-	-	16.00	-	-	54.00	-	-	2.00	-	2.00	-	-	-	-	-	26.00
BB+	-	-	-	-	-	3.33	-	-	63.33	-	-	10.00	-	3.33	-	-	3.33	-	-	16.67
BB	-	-	-	-	-	2.38	-	-	1.19	-	-	67.86	1.19	15.48	-	-	-	-	1.19	10.71
BB-	-	-	-	-	-	-	-	-	-	-	76.47	23.53	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	33.33	66.67	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	1.37	-	-	1.37	-	57.53	28.77	1.37	1.37	-	-	5.48
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-
CCC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69.23	7.69	-	-	-	23.08

Source: Fitch

Appendix: Global ABS Transition Matrices

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	47.25	0.52	0.97	0.07	0.07	1.19	0.52	-	-	-	-	-	-	-	-	-	-	-	0.07	49.33
AA+	-	55.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.44
AA	12.58	-	15.23	-	3.97	3.97	1.99	3.31	1.99	-	1.99	-	-	6.62	-	-	-	-	-	54.30
AA-	-	2.27	2.27	45.45	-	4.55	2.27	-	2.27	-	-	-	-	-	-	-	2.27	-	-	40.91
A+	-	1.64	13.11	11.48	18.03	-	1.64	1.64	1.64	-	-	-	-	-	-	-	-	-	1.64	50.82
A	9.20	1.15	3.45	-	1.72	29.89	-	-	5.75	-	0.57	0.57	-	-	-	-	-	-	0.57	47.13
A-	-	-	-	-	13.04	13.04	21.74	-	4.35	-	8.70	4.35	-	-	-	-	8.70	-	-	26.09
BBB+	-	-	-	-	-	0.48	0.48	33.65	3.85	2.40	0.48	0.48	0.48	1.44	-	-	0.48	1.92	0.96	53.37
BBB	1.77	0.88	0.44	1.33	4.87	18.14	-	15.04	15.04	0.44	5.75	5.75	0.44	2.65	-	-	-	0.44	0.44	45.13
BBB-	-	-	-	-	-	31.25	-	4.17	-	4.17	6.25	6.25	14.58	10.42	-	-	2.08	8.33	-	22.92
BB+	-	-	-	-	-	-	-	17.24	-	17.24	3.45	3.45	13.79	3.45	24.14	6.90	-	10.34	-	24.14
BB	-	-	-	-	-	23.64	-	6.36	6.36	-	1.82	14.55	0.91	18.18	0.91	-	-	15.45	-	18.18
BB-	-	-	-	-	-	-	-	7.69	7.69	-	-	-	7.69	46.15	30.77	-	-	-	-	7.69
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	13.04	73.91	-	-	-	-	4.35
B	-	-	-	-	-	6.00	-	4.00	4.00	-	6.00	6.00	-	14.00	26.00	4.00	20.00	20.00	2.00	18.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	-	-	-	50.00	-
CCC	-	-	-	-	-	-	-	-	-	-	4.55	4.55	-	4.55	-	18.18	40.91	-	4.55	22.73

Source: Fitch.

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	8.92	0.19	0.37	-	-	0.50	0.43	-	0.12	-	-	0.06	-	0.19	-	-	-	0.62	2.48	86.13
AA+	13.70	-	1.37	1.37	-	12.33	-	-	8.22	-	-	1.37	-	-	-	-	-	1.37	-	60.27
AA	1.78	0.89	2.22	1.78	-	0.89	-	0.44	-	-	0.44	-	-	-	-	-	-	-	4.89	87.11
AA-	-	-	3.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.96	1.96	92.16
A+	-	-	-	-	-	1.43	-	-	-	-	-	0.95	-	-	-	-	-	1.43	5.24	90.95
A	-	-	0.46	-	1.39	0.93	-	-	1.62	-	-	0.70	-	-	-	-	-	2.55	3.48	88.86
A-	-	-	-	-	-	-	-	-	2.33	-	-	2.33	2.33	-	-	-	-	3.85	7.69	88.46
BBB+	-	-	-	-	-	-	-	-	2.33	-	-	2.33	2.33	-	-	-	4.65	-	2.33	86.05
BBB	-	-	-	-	-	0.18	-	3.85	1.40	0.53	0.70	0.53	-	0.35	-	-	0.53	1.05	12.61	78.28
BBB-	-	-	-	-	-	-	-	3.45	3.45	-	-	-	-	-	-	-	-	24.14	13.79	58.62
BB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.50	87.50
BB	-	-	-	-	-	-	-	-	-	-	1.04	1.04	-	1.04	-	-	2.08	16.67	4.17	75.00
BB-	-	-	-	-	-	-	-	-	-	-	1.04	-	-	3.33	-	-	-	16.67	3.33	76.67
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63.64	9.09	27.27
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54.76	14.29	30.95
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85.71	-	14.29
CCC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88.89	5.56	5.56

Source: Fitch.

Appendix: Global CMBS Transition Matrices

Average Annual Transition Matrix: 1991-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	83.22	0.08	0.80	0.08	0.04	0.64	0.02	0.01	0.26	0.18	-	0.21	-	-	0.02	0.02	0.01	0.01	0.71	13.69
AA+	25.83	55.72	1.77	0.29	0.35	1.59	0.06	0.12	0.77	0.59	-	1.42	-	-	0.18	0.12	-	0.12	1.00	10.08
AA	10.02	4.74	68.77	0.41	0.27	3.20	0.14	0.10	1.45	0.50	0.07	1.28	0.02	-	0.51	0.07	0.21	0.12	0.67	7.46
AA-	9.13	3.65	6.72	61.28	0.71	2.95	0.47	0.12	1.89	1.06	0.06	2.53	0.12	-	1.00	0.35	0.35	0.24	0.59	6.78
A+	8.83	3.26	7.33	6.14	55.17	2.69	0.50	0.25	1.38	0.56	0.19	2.19	-	0.06	1.57	0.50	0.63	0.44	0.38	7.95
A	2.99	1.04	3.39	1.47	4.31	68.91	0.55	0.30	3.17	1.04	0.12	2.27	0.05	1.24	0.75	0.48	0.30	0.48	0.58	7.27
A-	3.39	1.76	1.76	1.60	2.76	6.27	67.73	1.08	1.76	1.44	0.04	2.60	0.12	0.08	1.08	1.88	0.60	0.48	0.32	3.99
BBB+	2.42	0.90	1.47	1.02	1.84	3.36	5.16	62.49	1.97	1.39	0.57	2.42	0.20	0.12	2.21	2.33	1.68	0.74	0.37	7.33
BBB	1.09	0.28	0.70	0.33	0.66	2.77	1.39	3.92	68.75	1.92	0.31	3.89	0.20	0.08	2.00	1.47	1.59	0.88	0.50	7.25
BBB-	0.75	0.13	0.31	0.24	0.55	0.99	0.77	1.78	4.65	67.95	0.97	3.57	1.28	0.04	2.00	2.84	2.40	1.34	0.64	6.78
BB+	0.66	0.09	0.66	0.05	0.43	1.28	0.90	1.71	2.89	5.26	66.41	2.42	1.09	0.52	1.71	4.59	1.94	2.32	0.66	4.41
BB	0.31	-	0.29	0.02	-	0.51	0.12	0.37	1.97	1.85	3.51	67.10	0.70	0.53	5.64	3.63	5.77	2.81	0.47	4.39
BB-	0.11	-	0.05	0.05	-	0.11	0.21	0.11	0.80	1.44	2.41	4.33	70.05	1.44	3.26	5.24	2.94	5.29	0.32	1.82
B+	0.27	-	-	0.07	0.20	-	-	0.07	0.13	0.33	1.67	2.61	3.28	71.13	2.28	6.43	4.02	5.29	0.40	1.81
B	0.19	-	0.03	-	-	0.25	-	0.06	0.44	0.03	0.36	2.11	0.39	2.27	66.54	4.76	11.75	7.40	0.50	2.94
B-	0.06	-	-	-	-	0.06	-	-	0.06	-	0.18	0.63	0.03	0.36	1.60	59.13	15.38	21.30	0.18	1.03
CCC	0.03	-	-	-	-	0.28	-	-	0.19	-	0.06	0.53	0.06	0.06	1.64	0.78	57.31	36.46	0.37	2.23

Source: Fitch.

One-Year Transition Matrix: 2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	83.98	-	0.27	-	-	0.20	-	-	-	-	-	-	-	-	-	-	-	-	-	15.55
AA+	21.74	39.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.13
AA	15.20	0.49	61.76	-	0.98	0.98	-	-	1.47	-	-	-	-	-	-	-	-	-	-	19.12
AA-	4.17	1.39	4.17	73.61	-	-	-	-	-	1.39	-	-	-	-	-	-	-	-	-	15.28
A+	-	-	5.00	-	60.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.00
A	5.57	-	6.19	-	0.62	67.49	-	-	3.10	0.31	-	0.93	-	-	-	-	-	-	-	15.79
A-	0.86	-	1.72	0.86	-	3.45	87.93	-	-	-	-	-	-	-	-	-	-	-	-	5.17
BBB+	1.96	-	1.96	-	-	11.76	-	66.67	-	9.80	-	-	-	-	-	-	-	-	-	7.84
BBB	2.11	-	-	-	-	13.92	-	-	62.87	1.27	-	5.06	-	-	0.42	-	0.42	-	0.42	13.50
BBB-	2.05	-	-	-	-	3.59	-	-	6.15	72.31	-	2.56	-	-	0.51	0.51	-	-	-	12.31
BB+	3.45	-	-	-	-	-	-	-	10.34	6.90	58.62	-	-	-	-	-	-	-	-	17.24
BB	0.96	-	0.64	-	-	2.24	-	-	9.27	1.28	0.32	65.18	0.32	-	5.43	-	2.24	0.32	0.96	10.86
BB-	-	-	-	-	-	-	-	-	-	-	-	-	82.35	-	-	-	-	-	-	17.65
B+	-	-	-	-	-	-	-	-	-	-	-	27.27	-	36.36	-	-	9.09	-	-	27.27
B	-	-	-	-	-	1.06	-	-	2.13	-	-	9.57	-	69.15	0.35	6.74	0.71	1.42	1.42	8.87
B-	-	-	-	-	-	4.08	-	-	12.24	-	2.04	8.16	-	55.10	10.20	-	-	-	-	8.16
CCC	-	-	-	-	-	-	-	0.68	-	-	-	2.03	-	5.41	0.23	73.87	12.39	0.68	0.68	4.73

Source: Fitch.

Appendix: Global CMBS Transition Matrices

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	43.93	0.28	1.00	0.06	0.06	2.55	-	-	0.50	0.06	-	0.55	-	-	0.06	-	0.06	-	0.28	50.64
AA+	15.79	10.53	2.63	-	-	-	-	-	2.63	-	-	2.63	-	-	-	-	-	-	-	65.79
AA	10.32	0.36	30.25	-	0.71	7.12	-	0.71	3.20	1.42	-	2.85	0.36	-	2.14	-	0.36	-	0.36	39.86
AA-	4.55	-	6.82	11.36	-	2.27	2.27	-	2.27	4.55	-	-	-	-	-	-	-	-	-	65.91
A+	6.38	-	2.13	-	23.40	2.13	-	6.38	4.26	2.13	-	-	-	-	2.13	-	-	-	-	51.06
A	3.50	-	4.08	-	0.29	30.03	-	0.29	9.91	2.33	-	2.92	-	3.79	-	-	3.79	2.62	0.87	35.57
A-	4.05	-	2.70	-	-	6.76	29.73	-	4.05	6.76	-	1.35	-	1.35	-	-	1.35	2.70	-	40.54
BBB+	5.36	-	1.79	-	-	12.50	-	26.79	3.57	3.57	-	3.57	-	-	-	-	-	1.79	-	41.07
BBB	1.69	-	0.68	-	-	9.80	-	23.99	2.70	2.70	0.34	10.14	-	4.73	-	-	4.39	4.05	1.35	36.15
BBB-	3.70	-	0.53	-	-	3.70	-	7.94	21.69	8.47	0.53	8.47	0.53	7.41	1.59	7.94	4.76	4.76	1.59	30.16
BB+	7.69	-	-	-	-	2.56	-	7.69	15.38	12.82	-	12.82	-	2.56	-	-	5.13	5.13	2.56	38.46
BB	-	-	0.25	-	-	1.49	-	-	5.96	0.99	0.25	25.31	-	12.16	0.25	14.14	13.15	0.99	0.99	24.81
BB-	-	-	-	-	-	-	-	-	-	-	-	9.09	13.64	18.18	-	9.09	13.64	-	-	36.36
B+	-	-	-	-	-	-	-	-	4.76	-	19.05	14.29	-	4.76	-	9.52	9.52	4.76	4.76	33.33
B	-	-	-	-	-	1.07	-	-	2.50	-	-	5.71	-	23.93	1.43	20.71	25.71	1.79	1.79	17.14
B-	-	-	-	-	-	1.05	-	-	-	-	-	2.63	-	2.63	8.95	25.79	53.68	-	-	5.26
CCC	0.43	-	0.43	-	-	0.71	-	-	0.43	-	-	1.14	-	1.86	0.14	21.14	65.57	1.43	1.43	6.71

Source: Fitch.

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	3.01	-	0.16	-	-	0.08	-	-	-	-	-	-	-	0.24	-	-	-	0.16	0.65	95.69
AA+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
AA	2.71	0.30	4.22	-	-	0.90	-	-	0.30	0.30	-	-	-	-	-	-	-	0.90	0.60	89.76
AA-	6.84	-	0.85	-	-	1.71	-	-	0.85	2.56	-	1.71	-	-	-	-	-	-	-	85.47
A+	-	-	-	-	-	-	-	-	0.83	-	-	0.83	-	-	-	-	-	-	0.83	97.52
A	4.06	-	1.16	-	0.58	4.64	-	-	1.74	-	-	1.16	-	0.29	-	-	0.58	1.74	0.87	83.19
A-	4.21	-	2.34	-	0.47	2.34	0.93	-	3.27	-	-	0.47	-	1.40	0.93	-	-	3.74	-	79.91
BBB+	3.41	-	0.98	-	-	2.44	0.49	0.49	1.95	0.98	-	1.46	-	1.46	-	-	2.44	4.39	0.49	79.02
BBB	1.08	-	0.54	-	-	2.70	0.27	0.27	3.50	0.54	-	1.35	-	1.08	0.27	-	1.08	5.93	0.81	80.59
BBB-	2.61	-	0.33	-	-	1.63	-	-	2.29	0.98	-	2.29	-	2.29	-	-	1.63	11.11	0.98	73.86
BB+	3.72	-	1.60	-	-	3.19	-	-	3.19	0.53	-	5.32	-	3.72	0.53	-	3.19	23.94	-	51.06
BB	3.48	-	1.30	-	-	2.17	-	-	2.17	0.43	0.43	5.65	-	3.48	0.43	-	5.22	28.26	1.30	45.65
BB-	3.07	-	0.61	-	0.61	1.23	-	-	4.91	-	0.61	4.91	-	2.45	-	-	6.75	47.24	0.61	26.99
B+	1.41	-	-	-	-	1.41	-	-	2.82	-	3.52	3.52	-	3.52	1.41	-	5.63	61.27	0.70	16.90
B	-	-	-	-	-	1.78	-	-	1.18	-	0.59	1.78	0.59	2.96	-	-	3.55	60.95	1.18	24.85
B-	-	-	-	-	-	0.68	-	-	-	-	-	3.40	-	1.36	2.04	-	3.40	72.79	1.36	14.97
CCC	-	-	-	-	-	-	-	-	1.64	-	-	-	-	-	1.64	-	73.77	-	-	22.95

Source: Fitch.

Appendix: Global RMBS Transition Matrices

Average Annual Transition Matrix: 1990-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	79.41	0.06	1.19	0.06	0.01	1.05	0.01	-	1.05	-	-	0.71	-	-	0.65	-	1.32	1.14	0.30	13.06
AA+	6.96	66.77	1.25	0.30	0.41	3.61	0.10	-	3.05	0.05	0.03	2.37	0.03	0.03	1.73	-	1.98	2.00	0.38	8.95
AA	5.95	2.00	70.24	0.36	0.26	4.16	0.14	0.10	3.51	0.10	0.02	1.98	0.02	0.03	1.29	-	1.19	1.68	0.46	6.52
AA-	2.96	2.43	2.96	62.43	1.60	2.67	1.07	0.25	3.36	0.48	-	2.35	0.15	0.06	2.41	0.02	3.82	3.76	0.69	6.53
A+	1.81	1.39	3.57	2.70	59.38	2.24	1.35	1.22	2.91	0.51	0.13	2.98	0.06	0.04	2.66	0.04	3.65	4.66	0.17	8.55
A	2.11	1.00	3.06	0.75	1.62	67.03	0.72	0.61	5.30	0.42	0.08	3.34	0.02	0.02	2.64	0.04	2.39	3.53	0.25	5.07
A-	0.50	0.58	0.83	0.83	1.18	1.85	59.16	3.20	3.72	2.22	1.14	2.68	0.19	0.12	2.62	0.12	4.17	8.82	0.15	6.15
BBB+	0.32	0.22	0.72	0.33	1.24	1.86	1.28	59.58	2.85	2.02	2.02	3.39	0.38	0.26	4.18	0.32	3.14	9.61	0.10	6.17
BBB	0.44	0.31	1.05	0.45	0.87	2.24	0.55	1.37	62.50	0.74	0.48	5.68	0.27	0.15	5.46	0.07	4.90	6.99	0.24	5.23
BBB-	0.07	0.05	0.11	0.18	0.25	0.65	0.44	0.81	1.04	55.43	1.53	4.39	2.77	1.00	4.07	0.74	2.57	16.06	0.14	7.70
BB+	0.04	-	0.30	0.19	0.48	0.93	0.41	1.55	2.22	2.04	48.56	2.11	1.26	1.89	6.14	0.33	3.44	19.69	0.70	7.74
BB	0.09	-	0.29	0.12	0.27	1.59	0.41	0.73	2.49	0.78	1.08	55.43	0.26	0.39	7.88	0.26	6.47	16.91	0.44	4.08
BB-	0.09	-	0.36	-	0.27	0.27	0.54	0.27	0.99	1.72	1.08	2.62	44.39	0.72	6.42	2.44	5.06	27.12	0.27	5.33
B+	0.33	-	0.11	-	0.11	0.44	0.22	0.33	0.87	1.09	2.40	5.66	2.40	38.89	2.40	0.33	3.49	32.35	0.33	8.28
B	0.01	0.01	0.04	-	0.04	0.26	0.06	0.13	1.36	0.32	0.67	3.54	0.42	0.85	55.68	0.27	10.75	21.92	0.31	3.35
B-	0.17	-	0.17	0.17	-	-	0.17	-	0.34	-	-	1.18	0.51	3.87	3.37	46.13	10.10	29.63	0.17	4.04
CCC	-	-	-	-	-	0.02	-	-	0.13	-	0.01	1.72	-	-	1.77	0.03	47.71	47.08	0.26	1.28

Source: Fitch.

One-Year Transition Matrix: 2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	81.93	-	1.88	-	-	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	16.12
AA+	1.79	92.86	1.19	0.60	0.60	0.60	-	-	-	-	-	-	-	-	-	-	-	-	-	2.38
AA	6.22	1.01	65.24	-	-	14.39	-	-	4.20	-	-	-	-	-	-	-	-	-	-	8.94
AA-	5.07	40.58	10.14	40.58	-	2.90	-	-	-	-	-	-	-	-	-	-	-	-	-	0.72
A+	-	-	4.35	10.14	76.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.70
A	3.52	0.11	7.04	0.11	2.12	71.94	0.11	0.45	7.99	0.11	-	0.78	-	-	-	-	-	-	-	5.70
A-	-	-	-	1.92	1.92	19.23	71.15	-	1.92	-	-	-	-	-	-	-	-	-	1.92	1.92
BBB+	-	-	-	-	-	31.03	4.60	51.72	1.15	3.45	2.30	-	-	-	-	-	-	-	-	5.75
BBB	0.50	-	1.80	-	-	9.86	0.25	2.60	71.17	0.12	0.06	6.63	0.06	-	0.68	-	0.06	-	0.06	6.14
BBB-	-	-	-	-	-	1.43	-	1.43	4.29	74.29	2.86	8.57	-	-	2.86	-	-	-	1.43	2.86
BB+	-	-	-	-	-	-	-	-	3.13	9.38	81.25	3.13	-	-	-	-	-	-	-	3.13
BB	-	-	0.59	-	-	6.75	-	-	5.87	0.29	0.22	75.11	0.15	0.22	6.09	0.07	0.59	-	0.15	3.89
BB-	-	-	-	-	-	-	-	-	-	10.00	-	15.00	55.00	-	10.00	-	5.00	-	-	5.00
B+	-	-	-	-	-	-	-	-	-	-	35.71	25.00	25.00	-	-	-	3.57	-	-	7.14
B	0.11	-	0.27	-	-	0.97	-	-	4.41	-	0.05	17.01	0.16	0.05	64.59	0.05	7.86	1.35	0.05	3.07
B-	-	-	-	-	-	-	-	-	-	-	-	9.09	9.09	-	36.36	9.09	9.09	-	-	36.36
CCC	-	-	-	-	-	0.08	-	-	0.49	-	-	9.59	-	-	9.02	-	68.30	10.04	0.08	2.41

Source: Fitch.

Appendix: Global RMBS Transition Matrices

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	26.85	1.95	10.03	0.33	0.16	12.75	0.06	-	9.17	-	-	2.47	-	-	0.69	-	0.12	0.02	0.30	35.11
AA+	8.06	13.98	7.53	1.08	0.54	17.74	-	1.08	2.69	-	-	4.84	-	-	1.61	-	1.08	-	-	39.78
AA	4.74	3.27	11.08	0.40	0.47	12.22	-	0.07	20.23	0.13	-	15.62	-	-	6.81	-	1.00	-	0.80	23.16
AA-	9.89	4.40	10.99	20.88	3.30	19.78	-	-	1.10	-	-	4.40	-	-	2.20	-	1.10	-	-	21.98
A+	-	1.11	3.33	7.78	21.11	14.44	7.78	1.11	7.78	2.22	-	2.22	-	-	-	-	-	-	-	31.11
A	2.15	0.11	7.94	0.17	2.44	22.90	0.45	0.62	14.68	0.23	0.23	18.82	0.11	0.06	10.60	0.06	2.72	0.45	1.25	14.00
A-	-	-	1.67	-	1.67	15.00	33.33	1.67	5.00	-	-	13.33	-	-	-	-	-	-	1.67	26.67
BBB+	-	-	-	-	-	25.88	3.53	28.24	4.71	3.53	3.53	2.35	-	-	2.35	-	-	-	-	25.88
BBB	0.19	-	1.66	-	-	7.52	0.32	2.55	12.99	0.45	0.38	21.85	-	0.06	25.03	-	10.19	2.42	0.57	13.82
BBB-	-	-	1.08	-	-	1.08	-	1.08	2.15	31.18	3.23	17.20	4.30	4.30	5.38	-	4.30	-	-	24.73
BB+	-	-	-	-	-	3.70	-	-	3.70	11.11	40.74	7.41	-	-	3.70	-	3.70	11.11	-	14.81
BB	0.27	-	0.87	-	-	4.75	-	0.20	3.34	0.47	0.20	19.93	0.33	0.27	26.49	-	20.20	7.96	2.74	11.97
BB-	-	-	-	-	-	-	-	-	8.70	8.70	-	13.04	21.74	4.35	17.39	-	-	4.35	4.35	17.39
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.00	-	37.50	25.00	-	12.50
B	0.23	-	0.30	-	-	2.34	-	-	2.72	0.15	0.08	8.69	0.23	0.15	20.48	0.08	37.94	19.58	0.68	6.35
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.33	-	8.33	-	-	58.33
CCC	0.09	-	0.14	-	-	0.69	-	-	1.06	-	-	6.70	0.09	-	4.27	-	35.69	45.87	0.32	5.09

Source: Fitch.

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	2.11	0.24	3.51	0.01	0.05	5.95	-	-	7.46	-	-	6.13	-	-	3.81	-	1.58	1.12	3.95	64.07
AA+	2.27	-	3.56	-	0.32	5.83	-	-	1.94	-	-	8.74	-	-	14.56	-	13.27	7.77	4.53	37.22
AA	1.41	0.12	1.71	0.06	0.24	2.06	-	-	1.35	-	-	4.89	-	-	9.07	-	15.96	19.49	4.53	39.10
AA-	-	0.83	0.42	-	0.42	3.75	-	-	1.25	-	-	2.92	-	-	2.08	-	11.25	31.25	3.33	42.50
A+	-	0.29	1.15	1.15	-	1.15	-	-	0.86	0.29	-	1.15	-	-	2.01	-	9.46	44.99	2.29	35.24
A	0.55	0.98	1.04	0.43	0.43	1.77	0.22	0.06	0.79	0.06	-	1.16	-	-	2.81	-	7.14	45.12	3.24	34.43
A-	-	-	0.22	-	0.22	0.89	0.22	0.22	1.56	-	-	1.56	-	-	0.89	-	4.46	66.07	1.79	21.88
BBB+	0.17	-	0.34	0.34	-	1.03	0.17	0.34	1.03	-	0.17	0.17	-	-	0.34	-	3.26	61.41	1.37	29.85
BBB	-	0.06	0.24	-	0.06	1.32	0.42	0.24	1.02	0.30	0.06	0.48	0.06	-	0.42	-	2.33	52.69	2.81	37.50
BBB-	0.17	-	0.34	-	-	0.68	-	-	0.34	0.17	-	0.85	-	-	-	-	0.85	65.76	0.85	30.00
BB+	-	-	-	0.48	-	-	-	0.48	-	0.48	-	1.93	-	-	-	-	0.48	51.69	10.63	33.82
BB	-	-	0.29	0.15	-	0.15	-	0.15	0.15	-	0.15	0.73	-	-	0.58	-	2.19	63.36	3.07	29.05
BB-	-	-	2.00	-	-	-	-	-	-	-	-	4.00	-	-	-	-	2.00	70.00	4.00	18.00
B+	1.89	-	-	-	-	-	-	-	-	-	-	3.77	-	3.77	-	-	1.89	66.04	-	22.64
B	0.19	-	-	-	-	0.58	-	-	-	-	-	0.39	-	0.19	-	-	0.97	75.44	3.09	19.15
B-	-	-	-	-	-	2.94	-	-	2.94	-	-	2.94	-	-	-	-	-	82.35	1.47	7.35
CCC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77.91	4.65	17.44

Source: Fitch.

Appendix: Global Structured Credit Transition Matrices

Average Annual Transition Matrix: 1994-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	74.66	0.76	2.66	0.72	0.63	2.12	0.34	0.38	1.87	0.52	0.18	1.17	0.16	0.07	0.97	0.05	0.78	0.68	1.23	10.06
AA+	9.58	54.94	4.40	1.96	0.59	2.35	0.68	0.39	2.83	0.98	0.10	2.44	0.59	0.10	0.49	-	1.76	1.96	1.66	12.22
AA	4.52	3.05	63.10	1.27	0.67	2.45	0.60	0.38	3.44	0.67	0.79	1.99	0.17	0.31	1.71	0.24	1.59	1.87	1.68	9.49
AA-	1.58	3.96	2.94	53.73	1.81	3.62	1.36	0.79	2.49	1.58	0.57	1.36	0.23	0.11	2.26	0.45	1.92	2.83	2.71	13.69
A+	1.08	2.26	5.06	2.91	53.61	3.23	2.05	0.75	2.37	0.86	0.65	3.44	0.65	0.22	1.83	0.54	1.83	4.63	1.18	10.87
A	0.98	0.24	2.34	0.79	64.97	4.82	0.48	0.60	3.53	0.79	0.50	3.60	0.45	0.33	1.76	0.29	1.84	4.53	1.22	8.47
A-	0.57	0.11	0.45	0.62	2.10	2.49	64.82	1.64	2.21	1.30	0.79	3.17	0.68	0.28	2.21	0.85	1.93	7.59	0.91	5.27
BBB+	0.28	-	0.47	0.09	1.98	2.26	2.63	58.33	1.03	1.13	1.41	5.08	0.47	0.75	4.23	0.85	4.05	5.46	0.94	8.56
BBB	0.20	0.10	0.20	0.12	0.24	2.82	0.79	2.51	64.30	1.09	0.89	3.83	0.61	0.55	3.20	0.85	3.53	5.35	1.99	6.83
BBB-	0.14	-	0.50	-	0.07	0.35	0.35	0.99	2.13	60.52	1.28	3.54	1.42	1.13	4.04	2.41	4.82	7.09	1.42	7.80
BB+	-	-	0.26	-	0.52	0.26	-	1.17	2.34	2.73	53.58	1.69	1.04	1.17	5.72	1.69	5.72	13.65	0.91	7.54
BB	-	-	0.11	0.11	0.04	0.53	0.04	0.07	3.36	0.67	1.84	57.20	0.92	0.53	8.45	1.66	6.15	9.30	0.96	8.07
BB-	0.13	-	-	-	0.13	0.26	-	0.26	0.26	0.51	1.67	1.16	60.75	1.80	4.76	2.96	6.69	11.07	0.77	6.82
B+	-	-	-	-	0.75	-	-	-	0.50	0.25	0.50	2.24	2.00	49.63	2.99	4.99	6.98	19.20	1.75	8.23
B	0.10	-	-	-	0.05	0.43	-	0.05	1.05	-	-	3.72	0.24	1.10	50.52	2.05	12.58	17.06	1.57	9.49
B-	0.15	-	-	-	-	-	-	-	-	-	0.29	0.73	0.15	1.16	1.02	50.95	8.15	32.31	0.87	4.22
CCC	0.09	-	-	-	-	-	-	-	0.23	-	-	0.84	-	0.09	3.68	0.28	44.50	42.82	1.30	6.15

Source: Fitch.

One-Year Transition Matrix: 2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	82.98	-	0.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53	15.96
AA+	-	58.33	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.33
AA	9.41	-	69.41	-	-	1.18	-	-	-	-	-	-	-	-	-	-	-	-	-	20.00
AA-	-	55.26	5.26	10.53	5.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.68
A+	-	16.67	-	-	50.00	-	4.17	-	-	-	-	-	-	-	-	-	-	-	8.33	20.83
A	0.60	0.60	5.95	-	5.36	64.88	-	-	4.76	-	-	0.60	-	-	-	-	-	-	-	17.26
A-	-	-	5.88	-	12.50	6.25	56.25	-	-	-	-	-	-	-	-	-	-	-	-	25.00
BBB+	-	-	5.88	-	-	-	5.88	70.59	-	-	-	-	-	-	-	-	-	-	5.88	11.76
BBB	-	-	-	-	0.55	10.38	2.73	5.46	59.02	0.55	1.64	2.19	-	-	-	-	-	-	-	17.49
BBB-	-	-	-	-	-	-	-	3.23	67.74	-	3.23	-	-	-	-	-	-	-	-	25.81
BB+	-	-	-	-	-	-	-	4.35	4.35	86.96	-	-	-	-	-	-	-	-	-	4.35
BB	-	-	-	-	-	0.73	-	5.11	-	0.73	73.72	-	-	0.73	2.19	-	-	-	-	16.79
BB-	-	-	-	-	-	-	-	-	-	-	66.67	-	-	22.22	-	-	-	-	-	11.11
B+	-	-	-	-	-	-	-	10.00	10.00	-	40.00	-	-	20.00	-	-	-	-	-	20.00
B	1.35	-	-	-	0.68	3.38	-	4.73	-	-	0.68	8.11	0.68	52.70	6.08	2.70	6.08	-	0.68	18.24
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	66.67	22.22	-	-	-	7.41
CCC	-	-	-	-	-	-	-	-	-	-	0.82	5.74	-	12.30	0.82	52.46	11.48	-	-	16.39

Source: Fitch.

Appendix: Global Structured Credit Transition Matrices

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	38.53	6.06	1.73	-	1.30	1.30	-	-	-	-	-	-	-	-	-	-	-	-	1.73	49.35
AA+	-	37.50	-	-	12.50	-	-	-	-	-	12.50	-	-	-	-	-	-	-	-	37.50
AA	3.90	3.25	19.48	1.30	2.60	4.55	1.95	3.90	8.44	0.65	1.95	-	-	-	-	-	-	1.95	46.10	
AA-	-	-	-	15.38	-	15.38	-	15.38	-	-	7.69	-	-	-	-	-	-	-	-	46.15
A+	-	11.76	-	-	17.65	-	5.88	-	5.88	-	-	-	-	-	-	-	-	-	5.88	52.94
A	2.26	2.26	5.08	-	2.26	20.34	1.69	1.13	5.65	0.56	-	1.13	-	-	-	-	-	1.69	55.93	
A-	-	-	4.76	-	4.76	9.52	14.29	23.81	9.52	-	-	-	-	-	-	-	-	4.76	28.57	
BBB+	-	7.14	7.14	-	-	-	-	21.43	-	7.14	-	-	-	-	-	-	-	7.14	42.86	
BBB	0.55	-	4.97	-	1.10	16.57	-	20.44	2.21	2.21	2.21	3.87	0.55	0.55	0.55	-	-	3.31	41.99	
BBB-	-	-	-	-	2.56	-	-	5.13	23.08	2.56	5.13	5.13	-	-	2.56	-	-	2.56	56.41	
BB+	-	-	-	-	-	5.56	5.56	-	11.11	5.56	16.67	11.11	-	-	-	-	-	5.56	38.89	
BB	-	-	2.58	-	-	10.73	-	10.73	15.38	-	7.69	15.38	1.29	0.43	5.15	0.43	2.58	4.72	33.05	
BB-	-	-	-	-	-	-	-	-	-	-	-	15.38	-	-	-	7.69	7.69	-	30.77	
B+	-	-	-	-	0.40	2.79	-	-	7.57	-	0.80	10.36	0.40	-	5.56	22.22	11.11	16.67	16.67	
B	-	-	-	-	-	-	-	-	-	-	-	-	0.40	20.32	2.79	4.38	7.17	4.38	38.65	
B-	-	-	-	-	-	-	-	-	-	-	5.56	-	-	5.56	22.22	11.11	11.11	5.56	38.89	
CCC	0.80	-	-	-	-	0.40	-	-	1.59	-	-	7.17	-	0.40	11.55	1.20	21.91	29.08	19.92	

Source: Fitch.

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	1.40	0.47	1.87	-	0.09	3.64	0.09	0.19	1.40	-	0.09	0.93	-	-	0.37	-	0.28	15.31	3.27	70.59
AA+	-	-	0.98	-	0.98	-	-	-	5.88	-	-	-	-	-	-	-	-	6.86	5.88	79.41
AA	0.76	0.25	1.53	-	-	0.51	-	-	0.76	-	-	0.76	-	1.53	27.48	-	0.51	27.48	2.54	63.36
AA-	-	-	-	1.14	-	-	-	-	-	-	-	-	-	1.14	-	-	-	12.50	1.14	84.09
A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25	4.49	80.90
A	-	0.88	0.29	-	-	0.59	-	-	0.88	-	0.29	2.65	-	-	2.65	-	0.59	32.06	1.47	60.29
A-	-	-	-	-	-	1.94	0.48	-	0.96	-	1.92	1.44	-	1.92	1.92	-	3.37	34.13	2.40	55.29
BBB+	-	-	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	-	-	18.45	1.94	76.70
BBB	-	-	-	-	-	0.22	-	0.22	0.44	-	0.22	0.67	-	0.89	0.89	-	2.22	41.56	4.44	49.33
BBB-	-	-	-	-	-	0.85	-	-	1.47	-	-	0.85	-	-	-	-	0.85	27.35	5.98	64.10
BB+	-	-	-	-	-	-	-	-	1.41	-	-	0.70	-	-	-	-	-	30.88	1.47	66.18
BB	-	-	-	-	-	-	-	-	1.41	-	-	-	-	-	-	-	-	38.73	1.41	57.75
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.35	1.35	-	-	28.38	2.70	67.57
B+	-	-	-	-	-	-	-	-	-	-	2.08	-	-	2.08	-	-	-	35.42	2.08	58.33
B	-	-	-	-	-	-	-	-	-	-	-	-	-	1.82	1.82	-	-	54.55	5.45	38.18
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.13	2.13	-	-	42.55	12.77	42.55
CCC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61.70	8.51	29.79

Source: Fitch.

Appendix: Global Structured Finance-Like Transition Matrices

One Year Transition Matrix: 2014*

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	89.74	-	0.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.40
AA+	10.53	63.16	15.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.53
AA	3.45	-	66.38	-	9.48	-	-	-	3.45	-	-	-	-	-	-	-	-	-	-	17.24
AA-	-	-	4.76	95.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	5.26	-	75.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.30
A	-	-	3.44	-	3.66	71.40	7.10	-	1.51	-	0.43	-	-	-	-	-	-	-	-	12.47
A-	-	-	-	-	-	24.00	60.00	12.00	-	-	-	-	-	-	-	-	-	-	4.00	-
BBB+	-	-	-	-	-	-	68.00	4.00	-	-	-	-	-	-	-	-	-	-	-	8.00
BBB	-	-	-	-	-	1.49	0.37	10.45	76.49	-	3.73	-	-	-	-	-	-	-	-	7.46
BBB-	-	-	-	-	-	-	-	76.92	-	-	-	-	-	-	-	-	-	-	-	23.08
BB+	-	-	-	-	-	-	-	33.33	-	-	50.00	-	-	-	-	-	-	-	-	16.67
BB	-	-	-	-	-	1.37	-	2.74	-	-	72.60	-	-	5.48	-	-	-	-	-	17.81
BB-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	1.06	-	1.06	-	7.45	-	7.45	-	71.28	3.19	7.45	1.06	-	-	7.45
B-	-	-	-	-	-	-	-	2.86	-	-	-	-	-	-	34.29	-	-	-	-	62.86
CCC	-	-	-	-	-	-	-	-	-	-	-	1.41	-	1.41	-	42.25	53.52	-	-	1.41

*Includes corporate, future flow, government, managed funds, non-profit student loan securitizations. These SF-like sectors do not have the 'sf' modifier assigned. Insured and IOs are also included. Source: Fitch.

Three Year Transition Matrix: 2012 Cohort*

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	31.50	0.11	2.59	-	-	4.61	0.11	-	12.49	-	-	1.01	-	-	0.11	1.01	-	-	0.67	45.78
AA+	6.67	73.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.00
AA	-	-	24.44	1.11	-	11.11	-	-	23.33	-	8.33	-	-	2.22	-	-	-	-	0.56	28.89
AA-	-	-	-	5.17	-	3.45	-	8.62	-	-	-	-	-	-	3.45	-	-	-	1.72	77.59
A+	-	-	2.27	-	38.64	-	-	2.27	-	-	-	1.14	-	-	-	-	-	-	-	55.68
A	0.81	-	5.12	-	2.70	60.38	-	-	7.28	-	4.31	-	-	2.96	-	-	-	-	0.27	15.90
A-	-	-	-	-	6.90	20.69	48.28	-	-	3.45	-	-	-	-	-	-	-	-	-	20.69
BBB+	-	-	-	-	-	14.29	7.14	35.71	-	-	-	-	-	-	-	-	-	-	-	42.86
BBB	-	-	-	-	-	4.08	-	10.20	25.51	-	10.20	-	-	20.41	-	-	6.12	1.02	-	22.45
BBB-	-	-	-	-	-	-	-	7.69	23.08	-	-	-	-	30.77	-	-	-	-	-	38.46
BB+	-	-	-	-	-	-	-	50.00	-	-	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	1.54	-	1.54	-	-	20.00	-	-	16.92	1.54	6.15	3.08	-	50.00	47.69
BB-	-	-	-	-	-	-	-	-	-	-	33.33	-	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	1.61	-	-	3.23	-	-	27.42	4.84	12.90	16.13	3.23	-	30.65
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCC	-	-	-	-	-	-	-	-	-	-	-	2.63	-	-	15.79	71.93	-	-	-	9.65

*Includes corporate, future flow, government, managed funds, non-profit student loan securitizations. These SF-like sectors do not have the 'sf' modifier assigned. Insured and IOs are also included. Source: Fitch.

Appendix: Fitch Global Structured Finance-Like Transition Matrices

10-Year Transition Matrix: 2005 Cohort*

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC and Below	WD	PIF
AAA	1.22	0.07	0.77	0.05	0.02	1.48	0.02	-	2.96	-	-	1.15	-	-	0.68	0.12	0.35	0.54	33.94	56.63
AA+	-	-	-	-	-	16.67	-	-	-	-	-	-	-	-	-	-	-	16.67	-	66.67
AA	-	-	1.27	1.27	-	-	-	-	-	-	-	-	-	-	2.53	-	-	-	-	94.94
AA-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.92	1.92	96.15
A+	-	-	-	-	-	-	-	-	5.26	-	-	-	-	-	26.32	-	-	5.26	-	63.16
A	0.85	-	0.85	-	-	2.99	-	0.43	-	-	0.43	-	-	-	1.71	2.14	-	1.28	5.98	83.33
A-	-	-	-	-	7.69	-	-	-	-	-	-	-	-	-	-	-	-	-	3.85	88.46
BBB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
BBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.00	5.00	85.00
BBB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.94	5.88	91.18
BB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.38	84.62
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42.86	57.14
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.67	58.33	25.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-
CCC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.00	70.00	20.00

*Includes corporate, future flow, government, managed funds, non-profit student loan securitizations. These SF-like sectors do not have the 'sf' modifier assigned. Insured and IOs are also included. Source: Fitch.

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Global Sovereign 2014 Transition and Default Study

Regional Risks Persist: The year was characterized by uneven growth in the major advanced economies and persistent weakness among leading emerging markets. Improved growth in the US and the UK stood in marked contrast to faltering expansion in the eurozone and Japan. Geopolitical tensions, structural shortcomings and lower commodity prices weighed on the outlook for EMs.

Sovereign Upgrades Overtake Downgrades: For the first time since 2011, sovereign downgrades trailed upgrades, by a margin of 0.8 to 1, compared with 1.3 to 1 in 2013 and 1.9 to 1 in 2012. The share of sovereigns downgraded – 9.4% and upgraded – 11.3% contracted modestly from 2013's 15.5% and 11.7%, respectively.

Ratings Outlook Broadly Stable: Positive and Negative Outlooks became more evenly balanced. Negative Outlooks were concentrated in EM, reflecting the risks posed by falling oil prices and the prospect of higher U.S. interest rates. Conversely, the balance of Outlooks in the eurozone pointed to a mild improvement in credit quality, as crisis-hit sovereigns started to recover and rebalance.

Ratings Returning to Historical Levels: Eurozone upgrades included Ireland and Spain, both positive indications for Europe. Saudi

Arabia was the only sovereign to break new ground, its IDR rising from AA- to AA; all other sovereign IDR uplifts entailed countries that had previously been rated at current levels or above.

Developed/Emerging Rating Trends: Mixed signals emanated from developed markets (DMs), with both France and Bermuda downgraded. Emerging market (EM) downgrades divided almost evenly between EMEA and LATAM, with each region reflecting economic and political concerns and both testing the lower extremities of the rating scale with Ukraine (CCC) and Venezuela (CCC) respectively.

Recent Rating Convergence: Sovereign rating convergence between DMs and EMs, evident since the outbreak of the global financial crisis, ceased in 2014 as sovereign creditworthiness in DMs stabilized, whereas EMs encountered a more challenging global economic environment.

A Single Default in 2014: Argentina recorded the sole sovereign foreign currency default when it was unable to cure a missed payment. The 2014 long-term foreign currency default rate was 0.94%. Over the long-term (1995–2014), the average annual default rate across Fitch-rated sovereign issuers is 0.69%.

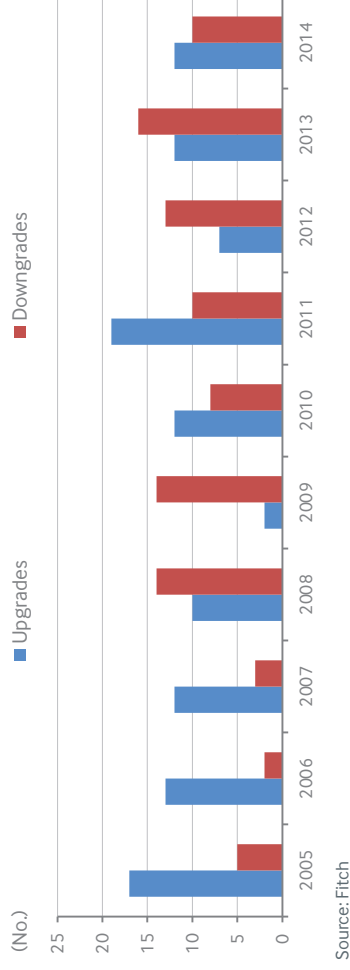
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Sovereign Historical Rating Activity



Sovereign Ratings Distribution by Major Rating Category^a



Sovereign Average Cumulative Default Rates: 1995-2014

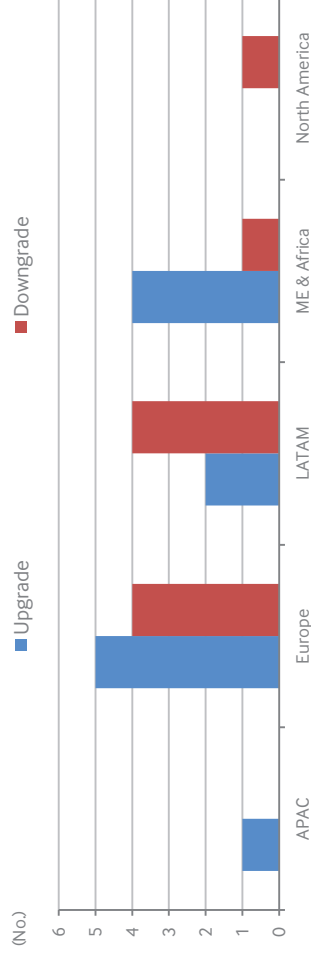
%	1 Year	2 Year	3 Year	4 Year	5 Year
Investment Grade	-	0.21	0.46	0.74	0.94
Speculative Grade	1.88	3.31	4.17	4.97	5.44
All Sovereigns	0.69	1.35	1.81	2.28	2.56

Source: Fitch

Emerging Markets Relapse: EMs bore the brunt of negative actions in 2014. Fitch put Russia's ratings on Negative Outlook in March and downgraded Ukraine to 'CCC' as political and economic turmoil mounted in February. South Africa was put on Negative Outlook in June, while protracted economic and fiscal weakness drove Croatia's rating down one notch to 'BB' in August and Serbia's to 'B+' in January. Elsewhere, in Latin America, Argentina defaulted, while Venezuela sustained multiple downgrades to 'CCC' amid rising political uncertainty and falling oil prices. Guatemala and Aruba were also downgraded. Upgrades included Latvia, Lithuania, Rwanda, Saudi Arabia and Vietnam.

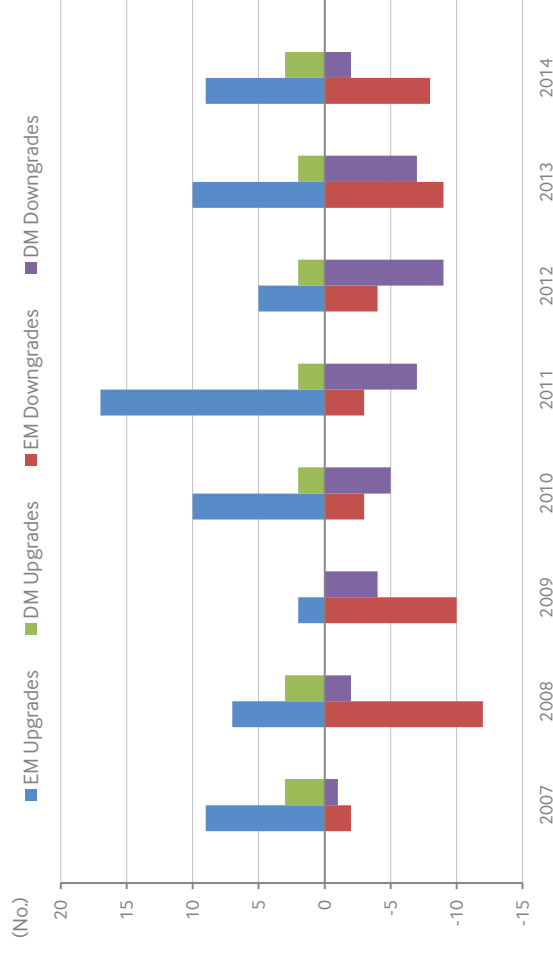
Developed Markets' Comeback: Upgrades and positive rating actions in 2014 were concentrated in DMs. Fitch removed the U.S. from Rating Watch Negative in March following a one-year suspension of the ceiling on federal debt. Positive rating actions were dominated by the eurozone periphery. Greece, Spain and Ireland – three of the worst affected eurozone peripherals – were upgraded on the back of improved economic and fiscal performance. Additionally, Cyprus's Outlook was revised to Stable from Negative and Portugal's to Positive. Nonetheless, these countries' ratings remained below their pre-crisis levels. Additionally France sustained a one notch downgrade in December and Belgium's Outlook was revised to Negative in November.

Sovereign Rating Activity by Region: 2014



Source: Fitch

Sovereign Developed and Emerging Market Historical Rating Activity



Source: Fitch

Sovereign One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC to C	D	WD
AAA	100.00	-	-	-	-	-	-	-	-
AA	-	90.91	9.09	-	-	-	-	-	-
A	-	-	100.00	-	-	-	-	-	-
BBB	-	-	10.34	89.66	-	-	-	-	-
BB	-	-	-	-	94.74	5.26	-	-	-
B	-	-	-	-	5.00	85.00	10.00	-	-
CCC to C	-	-	-	-	-	50.00	-	50.00	-

Source: Fitch

Fitch-Rated Sovereign IDR Defaults: 1995-2014

Russian Federation (1998): Fitch dates sovereign default to August 1998. Although this was when the Russian Federation defaulted on its local-currency (LC) debt, it began to incur arrears on foreign-currency (FC) debt owed to the Paris Club official bilateral creditors very quickly afterwards. Defaults on FC debt instruments held by private creditors occurred in 1999, although payments on Russian Federation Eurobonds were maintained and honored.

Indonesia (1998): Paris and London Club rescheduling operations in June 1998; further rescheduling in 2000 and 2002. Indonesia maintained payments on the single Fitch-rated sovereign bond outstanding at the time.

Argentina (2001): Defaulted on more than USD80 billion of sovereign foreign-currency bonds in December 2001, most of which were held by nonresidents. Debt default partially cured in 2005, but some holdout investors remained, constraining the rating to 'RD' until July 2010.

Moldova (2002): USD75 million Eurobond restructured in 2002, followed by a Paris Club deal.

Uruguay (2003): DDE in March 2003 affecting more than USD5 billion of sovereign FC debt, mostly held by nonresidents.

Dominican Republic (2005): Distressed debt exchange (DDE) in 2005 affected more than USD1.1 billion of eligible foreign-currency-denominated bond debt.

Ecuador (2008): Missed coupon payment on its 2012 global bonds followed by an announcement that the government would selectively default on all global bonds. The rating was lowered to 'RD' in December 2008.

Jamaica (2010): A DDE in February 2010 affected the country's domestic debt, which included FC-denominated instruments to which Fitch's FC rating applied.

Greece (2012): A DDE in March 2012 affecting approximately EUR199bn of Greek and foreign-law government bonds resulted in each EUR100 face value amount of Greek government bonds being exchanged for new bonds with a face value of EUR31.5, EUR15 of one- to two-year EFSF ('AAA') notes, and short-term EFSF notes to cover accrued, unpaid interest. Bondholders also received a notional EUR31.5 of Greek GDP-linked securities. The implied net present value loss relative to the original terms and conditions of the bonds implied by the exchange was estimated to be approximately 74%.

Jamaica (2013): A DDE in February 2013 included JMD860 billion in both FC and LC domestic debt, resulting in both FC and LC IDR downgrades to RD. The DDE announced by the government included the extension of maturities and a reduction in coupons for the affected debt instruments. The debt exchange was one of the pre-conditions for Jamaica to sign a new IMF agreement totaling nearly USD750 million.

Cyprus (2013): A DDE in June 2013 comprised an exchange of domestic government bonds, which resulted in a downgrade of the LC IDR to RD. The exchange constituted domestic bonds with a total nominal value of EUR1 billion, due to expire within the EU-IMF program period (2013 to the first quarter of 2016). These bonds were replaced by new bonds with the same coupon rates but with the maturity dates of the new securities extended beyond the original program period. As foreign Cypriot bonds were unaffected, the FC IDR was unchanged.

Argentina (2014): A missed payment default on discount bonds issued under foreign law after the expiration of the 30-day grace period. The default relates to a dispute between Argentina and certain holdout creditors that did not participate in the 2005 and 2010 exchange offers culminated in the denial of Argentina's cert petition to the U.S. Supreme Court. The U.S. Lower Court ruling was upheld, prohibiting Argentina from making payments to exchanged bond holders unless payments were also made to the plaintiffs in the case.

IDR – Issuer Default Rating, RD – Restricted Default.

Methodology

All Fitch publicly rated, sovereign long-term foreign-currency International Default Ratings (IDR) from 1995 to the present are included in Fitch's transition and default statistics, which includes more than 1,587 data points from the past 20 years. Fitch's continuing data enhancement efforts may result in slightly different statistics than in previously published studies. Therefore, this most recent study supersedes all prior versions.

It is important to observe that the rating transitions outlined in this study represent a distinct historical period and might not represent future rating migration patterns. Transition rates are influenced by a number of factors, including credit enhancement levels, macroeconomic variables, state of the financial markets, size of subsectors and ratings portfolio and credit conditions generally.

Fitch employs a static pool approach in calculating default and transition data. The static pools or, alternatively, cohorts are created by grouping issuer ratings according to the year in which the ratings were active and outstanding at the beginning of the year. For example, issuers with ratings outstanding at the beginning of 1995 constitute the 1995 cohort, with the same true for additional cohorts. Issuers newly rated by Fitch in any given year are included in the following year's cohort. For example, the performance of ratings initiated in mid-1995 would be followed as part of the 1996 and future cohorts. Ratings withdrawn in mid-year are excluded from subsequent cohorts since they are no longer active.

Issuer ratings may reside in multiple static pools, as long as their ratings are outstanding at the beginning and end of the year or multiple-year horizons under observation. For example, the annual performance of an issuer rating initiated in 1994, and therefore outstanding at the beginning of 1995, and withdrawn in 1999 would be included in the 1995, 1996, 1997 and 1998 static pools. The rating's performance over multiple-year horizons would also be included in the two-year, three-year and four-year transition rates for each of the cohorts noted and included in the five-year transition rates as a transition to withdrawn.

In all, Fitch's transition and default data contains 20 static pools or cohorts from 1995–2014, allowing for 20 unique one-year transition rates, 19 two-year transition rates, 18 three-year transition rates and so forth.

An examination of the 2014 one-year rating transition data at the major rating categories identifies the movement of ratings both up and down the rating scale (from A to BBB), for example as opposed to the modifier level, which counts each notch change or from A to A–, for example (see the Fitch Sovereign 2014 Transition Rates at the modifier in the Appendix commencing on page 7). The vertical left-hand column identifies ratings outstanding at the beginning of 2014, while the horizontal axis provides information on the migration pattern of those ratings by year end. The table reads from the top left-hand corner, beginning with 'AAA' and following the diagonal to the right in order to examine the stability of each consecutive rating category.

Default Rates

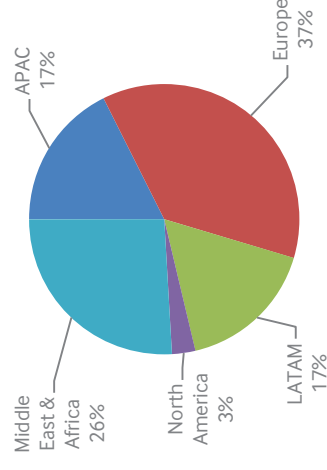
Fitch's definition of default is available on Fitch's website, see [Fitch's ratings definitions](#).

Fitch's default rates are calculated on an issuer basis, as opposed to dollar amounts. First, defaults are examined by year for each static pool and individual rating category. For example, if 25 issuers defaulted in 2002, and that static pool consisted of 2,000 issuer ratings, the resulting annual default rate for all ratings in 2002 would be 1.3%. If 10 of these defaults consisted of defaults among issuers rated 'BB' at the beginning of the year and the 'BB' cohort at the beginning of the year totaled 500, the 'BB' 2002 default rate would be 2% (10/500).

From these annual default rates, Fitch derives average annual default rates by weighting each cohort's default rates by the number of ratings outstanding in the given cohort relative to the number of total ratings outstanding for all cohorts. Following the example above, the 2002 'BB' annual default rate of 2% might be followed by a 2003 'BB' annual default rate of 1%. A straight average of these two rates would ignore potential differences in the size of the two cohorts. Rather, weighting the results based on the relative number of 'BB' ratings outstanding in 2002 and 2003 gives greater emphasis to the results of the 'BB' cohort with the most observations.

The same technique is used to calculate average default rates over multiple-year horizons. For example, the two-year default rate for the 2002 'BB' rating pool would be averaged with the two-year default rate for the 2003 'BB' rating pool by weighting the default rates by the relative size of each pool.

Sovereign Ratings Distribution by Region: 2014^a



^aYear-end. Source: Fitch

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Related Research

Report Data - Excel File



The Fitch Global Structure Finance 2014 Transition and Default Study data is available in an Excel format. Click [here](#) to download.

Related reports

[Global Corporate Finance 2014 Transition and Default Study](#) (March 2015)

[Global Structured Finance 2014 Transition and Default Study](#) (March 2015)

[U.S. Public Finance 2014 Transition and Default Study](#) (March 2015)

[International Public Finance 2014 Transition and Default Study](#) (March 2015)

[Fitch Ratings Global Cross-Asset First-Half 2014 Default Update](#) (September 2014)

[Risk Radar](#) (September 2014)

[The Credit Outlook](#) (January 2015)

Appendix: Sovereign Default Rates

Average Cumulative Default Rates: 1995-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year	10-Year
AAA	-	-	-	-	-	-
AA+	-	-	-	-	-	-
AA	-	-	-	-	-	-
AA-	-	-	-	-	-	-
A+	-	-	-	-	-	6.25
A	-	-	-	1.52	3.33	7.41
A-	-	-	-	-	-	-
BBB+	-	-	1.96	2.04	2.17	-
BBB	-	-	-	-	-	-
BBB-	-	1.89	3.16	4.82	5.63	11.90
BB+	1.72	2.73	2.94	3.19	3.53	10.20
BB	1.45	2.90	4.41	5.97	6.35	9.52
BB-	-	-	-	-	-	-
B+	-	-	1.20	2.70	3.13	-
B	1.01	3.33	4.88	6.94	6.45	10.71
B-	1.61	6.90	8.93	9.26	9.62	12.50
CCC to C	26.09	28.57	26.32	22.22	27.78	36.36
Investment Grade	-	0.21	0.46	0.74	0.94	1.78
Speculative Grade	1.88	3.31	4.17	4.97	5.44	8.72
All Sovereigns	0.69	1.35	1.81	2.28	2.56	4.05

Source: Fitch

10-Year Average of Three-Year Cumulative Default Rates (CDRs)

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
2003 - 2012	-	-	-	-	-	-	-	2.78	-	1.52	-	-	-	1.54	5.48	6.67

Source: Fitch

Most Recent Three-Year Cumulative Default Rates (CDRs)

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.00	50.00
2011	-	-	-	-	-	-	-	-	-	8.33	-	-	-	-	-	-

Source: Fitch

Appendix: Sovereign Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	66.67	33.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	25.00	50.00	25.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	100.00	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	100.00	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	100.00	100.00	-	-	-	-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	30.00	70.00	-	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	11.11	77.78	11.11	-	-	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-
BB+	-	-	-	-	-	-	-	66.67	33.33	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	92.31	7.69	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	14.29	57.14	14.29	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	33.33	66.67	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	25.00	25.00	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	50.00	-	-

Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	86.67	6.67	6.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	33.33	33.33	-	33.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	-	75.00	-	25.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	33.33	-	-	66.67	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	11.11	66.67	11.11	-	11.11	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	66.67	33.33	-	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	-	50.00	-	50.00	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	9.09	36.36	36.36	9.09	-	-	-	-	-	-	9.09	-	-	-
BBB-	-	-	-	-	-	8.33	58.33	8.33	8.33	8.33	-	-	8.33	-	-	-	-	-	-
BB+	-	-	-	-	-	-	12.50	37.50	37.50	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	77.78	11.11	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	33.33	22.22	33.33	11.11	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	40.00	30.00	30.00	10.00	10.00	10.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	50.00	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00

Source: Fitch

Appendix: Sovereign Transition Matrices

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	75.00	6.25	6.25	-	-	-	6.25	6.25	-	-	-	-	-	-	-	-	-	-	-
AA+	50.00	-	50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	16.67	16.67	-	33.33	-	33.33	16.67	-	-	16.67	-	-	-	-	-	-	-	-
AA-	-	25.00	25.00	-	-	-	25.00	25.00	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	-	50.00	-	-	-	-	-	-	-	-	-	-	50.00	-	-	-
A	-	-	20.00	20.00	20.00	20.00	-	-	-	-	-	-	-	-	-	-	-	20.00	-
A-	-	-	-	-	40.00	10.00	30.00	-	10.00	-	10.00	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	-	25.00	25.00	25.00	25.00	-	-	25.00	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	33.33	33.33	16.67	33.33	-	16.67	-	-	-	-	-	-	-
BB+	-	-	-	-	-	-	25.00	25.00	25.00	25.00	-	25.00	-	25.00	-	-	-	-	-
BB	-	-	-	-	-	-	20.00	20.00	40.00	20.00	20.00	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	25.00	25.00	-	-	-	-	50.00	-	-	-	-	-	25.00
B+	-	-	-	-	-	-	-	-	40.00	-	-	-	-	-	20.00	-	40.00	-	-
B	-	-	-	-	-	-	-	-	14.29	14.29	-	-	14.29	14.29	28.57	-	-	-	28.57
B-	-	-	-	-	-	-	-	-	-	-	-	-	16.67	16.67	-	-	-	16.67	50.00
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.33	66.67

Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	-
AA+	-	-	-
AA	-	-	-
AA-	-	-	-
A+	-	-	20.00
A	-	-	-
A-	-	-	-
BBB+	-	-	-
BBB	-	-	-
BBB-	-	-	-
BB+	-	-	-
BB	-	-	-
BB-	-	-	-
B+	-	-	-
B	-	10.00	-
B-	-	50.00	16.67
CCC to C	50.00	100.00	33.33

Source: Fitch

Appendix: Sovereign Transition Matrices

Average Annual Transition Matrix: 1995-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	98.08	1.54	-	0.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	11.43	78.57	7.14	2.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	9.09	83.84	4.04	2.02	1.01	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	13.43	73.13	5.97	-	1.49	1.49	2.99	-	-	-	-	-	-	1.49	-	-	-
A+	-	-	-	8.33	84.72	2.78	1.39	-	-	1.39	1.39	-	-	-	-	-	-	-	-
A	-	-	-	-	14.86	78.38	1.35	4.05	1.35	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	12.99	79.22	7.79	-	-	-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	3.08	16.92	66.15	9.23	3.08	-	-	-	-	-	-	-	-	1.54
BBB	-	-	-	-	-	-	2.91	17.48	71.84	5.83	0.97	-	0.97	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	-	-	17.24	73.28	7.76	-	-	-	0.86	-	0.86	-	-
BB+	-	-	-	-	-	-	-	-	1.72	18.97	70.69	5.17	1.72	-	-	-	-	1.72	-
BB	-	-	-	-	-	-	-	-	1.45	2.90	20.29	66.67	7.25	-	-	-	-	1.45	-
BB-	-	-	-	-	-	-	-	-	-	-	1.71	7.69	77.78	7.69	3.42	1.71	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	1.02	17.35	69.39	7.14	2.04	1.02	-	2.04
B	-	-	-	-	-	-	-	-	-	-	-	-	3.03	15.15	70.71	6.06	3.03	1.01	1.01
B-	-	-	-	-	-	-	-	-	-	-	1.61	-	-	1.61	22.58	59.68	8.06	1.61	4.84
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.35	21.74	39.13	26.09	8.70

Source: Fitch

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International Public Finance 2014 Transition and Default Study

Downgrades Exceed Upgrades: European sovereign economic and political challenges, resulted in the negative rating drift for international public finance (IPF) in 2014. Europe accounts for over 80% of Fitch-rated IPF ratings and nearly all of the sector's downgrades for 2014. Downgrades outpaced upgrades by 2.2 to 1, a narrower margin than the 5.4 to 1 in 2013. The resulting 2014 IPF downgrade rate was 15.7% and the upgrade rate, 7.2%, compared with 26.2% and 4.9%, respectively, in 2013.

Sovereign Moves Reflected: Sovereign downgrades of France and Ukraine, as well as Argentina's default triggered respective downgrades of IPF entities. These downgrades accounted for nearly 80% of the year's sector downgrades. Conversely, Spain's sovereign upgrade – reflecting improved financing conditions and economic outlook – affected ratings of both public entities and local and regional governments (LRGs) accounting for the bulk of upgrades.

No Defaults Recorded in 2014: There were no Fitch-rated IPF foreign currency defaults registered in 2014 for the seventh consecutive year. Over the period 1995-2014, IPF defaults have been infrequent, the resulting average annual default rate is 0.34%.

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Eurozone Outlooks: Weak economic growth in the eurozone and potential deflation is leading most countries to look for ways to cut local government expenditure, reviewing the services provided, their funding and the organizational framework necessary for service delivery.

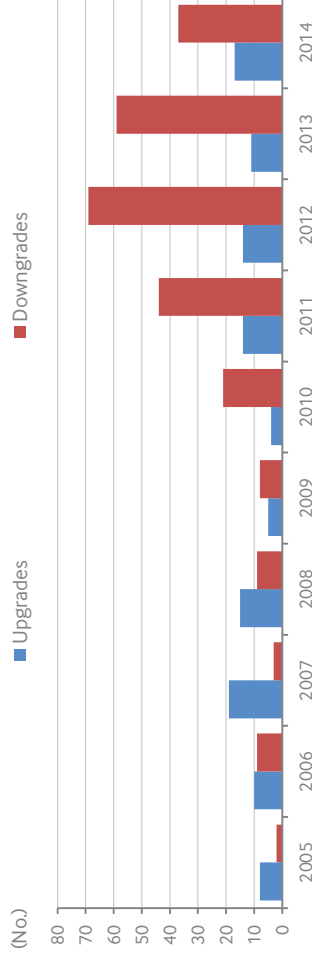
More Regional Outlooks: Steady levels of economic growth underpin stable outlooks for subnationals in Asia-Pacific. Changes in energy and commodity prices could bring some economic volatility, which may lead to falls in income for some Australian states dependent on royalties.

Elsewhere, weaker oil and commodity prices have resulted in lower revenues for a number of subnationals benefitting from these transfers including Mexican, Brazilian and Nigerian states.

Study Overview: This study provides data and analysis on the performance of Fitch's IPF foreign currency ratings in 2014 and historically, since 1995. The report offers summary statistics on the year's rating transitions for LRGs and other international public entities (PE), including social housing, higher education, healthcare and public transportation.

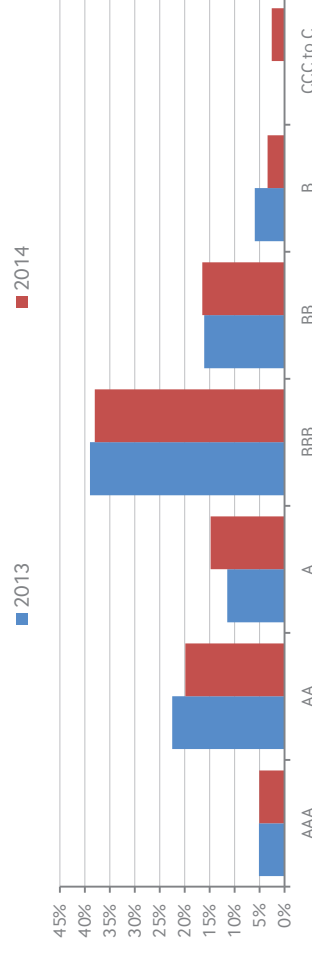
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International Public Finance Historical Rating Activity



Source: Fitch

International Public Finance Ratings Distribution^a



^aYear-end ratings. Source: Fitch

International Public Finance Average Cumulative Default Rates: 1995-2014

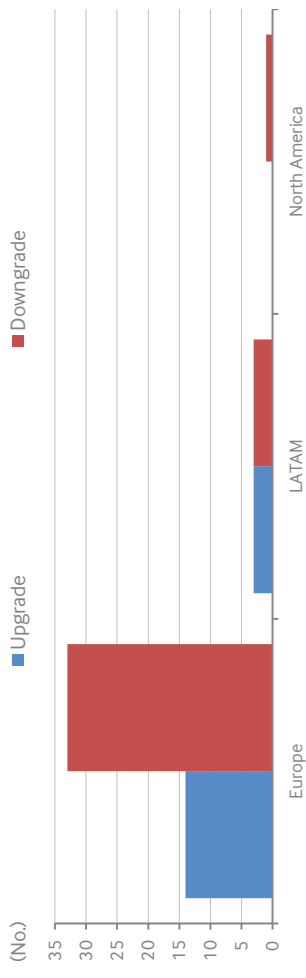
%	1 Year	2 Year	3 Year	4 Year	5 Year
Investment Grade	-	-	-	-	-
Speculative Grade	1.78	3.27	4.71	6.21	7.95
All International Public Finance	0.34	0.61	0.84	1.06	1.28

Source: Fitch

Beyond Sovereigns; Actions Muted: Robust or constrained revenue was a common thread for non-sovereign-related actions – both up and down the rating scale – in Russia, Italy and the single Canadian LRG represented. A notable downgrade occurred for the Russian region of Krasnodar Region, reflecting in part the region's debt growth to fund Winter Olympics projects and the future costs to maintain that infrastructure.

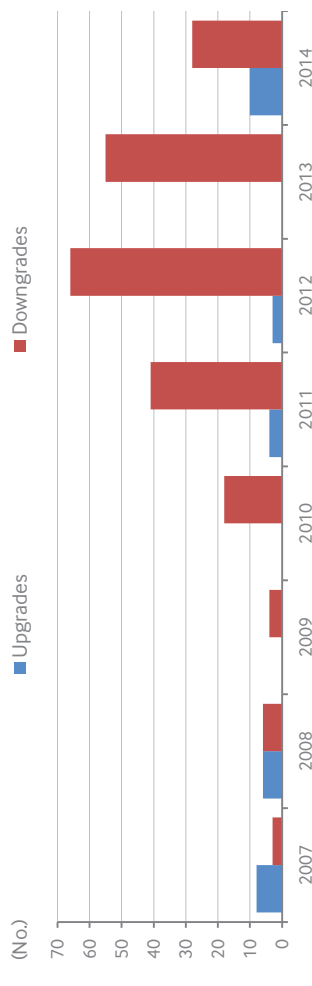
Emerging vs. Developed Markets: Developed markets continue to account for the majority of IPF ratings – 54%, however the size of emerging market issuers has grown substantially to 46% at the end of 2014 from 25% in 2007. Negative rating activity led each respective market segments in 2014, with both affected by sovereign downgrades. As for emerging markets, downgrades surpassed upgrades for the first time since 2002, with Argentine, Ukrainian and Russian downgrades, resulting in downgrades exceeding upgrades, 1.3 to 1.

International Public Finance Rating Activity by Region: 2014



Note: No IPF upgrades or downgrades occurred in APAC, the Middle East or Africa in 2014. Source: Fitch

Developed Market International Public Finance Historical Rating Activity



Source: Fitch

International Public Finance One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	BBB	BB	CCC to C	D	WD
AAA	100.00	-	-	-	-	-	-	-	-	-
AA	-	83.02	11.32	-	-	-	-	-	-	5.66
A	-	-	96.30	-	-	-	-	-	-	3.70
BBB	-	-	-	93.48	-	-	-	-	-	6.52
BB	-	-	-	2.63	89.47	-	-	-	-	7.89
B	-	-	-	-	7.14	42.86	42.86	-	-	7.14
CCC to C	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Fitch-Rated International Public Finance IDR Defaults: 1995-2014

City of Odessa: The city of Odessa failed to repay its UAH61 million municipal bond and interest (UAH30 million), June 1998.

Republic of Sakha (Yakutia): The republic defaulted on domestic bonds, August 1998.

Province of Buenos Aires: The province defaulted on debt service payments on its EMTNs in the amount of USD25.5 million, January 2002.

Province of Santiago del Estero: The province defaulted on debt service payments due on provincial consolidated debt, February 2002.

Province of Tucuman: The province defaulted on debt service payments due on provincial consolidated debt, February 2002.

Province of Mendoza: The province missed a bond interest payment of USD12.5 million, March 2002.

City of Buenos Aires: The city missed an interest payment on its euro medium-term note program (EMTNs), May 2002.

Province of San Juan: The province missed a bond interest payment of USD5.035 million on its 13.25% federally guaranteed bonds, July 2002.

City of Taranto: The city missed a debt installment repayment, January 2007.

Methodology

All Fitch publicly rated, IPF long-term foreign-currency International Default Ratings (IDR) from 1995 to the present are included in Fitch's transition and default statistics, which includes more than 2,376 data points from the past 20 years. Additionally, this report contains recent and historical transition data for supranationals, capturing all public long term IDR ratings – a total of 171 data points – with 21 supranationals rated at year-end 2014. Fitch's continuing data enhancement efforts may result in slightly different statistics than in previously published studies. Therefore, this most recent study supersedes all prior versions.

It is important to observe that the rating transitions outlined in this study represent a distinct historical period and might not represent future rating migration patterns. Transition rates are influenced by a number of factors, including credit enhancement levels, macroeconomic variables, state of the financial markets, size of subsectors and ratings portfolio and credit conditions generally.

Fitch employs a static pool approach in calculating default and transition data. The static pools or, alternatively, cohorts are created by grouping issuer ratings according to the year in which the ratings were active and outstanding at the beginning of the year. For example, issuers with ratings outstanding at the beginning of 1995 constitute the 1995 cohort, with the same true for additional cohorts. Issuers newly rated by Fitch in any given year are included in the following year's cohort. For example, the performance of ratings initiated in mid-1995 would be followed as part of the

1996 and future cohorts. Ratings withdrawn in midyear are excluded from subsequent cohorts since they are no longer active.

Issuer ratings may reside in multiple static pools, as long as their ratings are outstanding at the beginning and end of the year or multiple-year horizons under observation. For example, the annual performance of an issuer rating initiated in 1994, and therefore outstanding at the beginning of 1995 and withdrawn in 1999 would be included in the 1995, 1996, 1997 and 1998 static pools. The rating's performance over multiple-year horizons would also be included in the two-year, three-year and four-year transition rates for each of the cohorts noted and included in the five-year transition rates as a transition to withdrawn.

In all, Fitch's transition and default data contains 20 static pools or cohorts from 1995–2014, allowing for 20 unique one-year transition rates, 19 two-year transition rates, 18 three-year transition rates and so forth.

An examination of the 2014 one-year rating transition data at the major rating categories identifies the movement of ratings both up and down the rating scale – from A to BBB, for example as opposed to the modifier level, which counts each notch change or from A to A–, for example (see the Fitch IPF 2014 Transition Rates at the modifier in the Appendix commencing on page 7). The vertical left-hand column identifies ratings outstanding at the beginning of 2014, while the horizontal axis provides information on the migration pattern of those ratings by year end. The table reads from the top left-hand corner, beginning

with 'AAA' and following the diagonal to the right in order to examine the stability of each consecutive rating category.

Default Rates

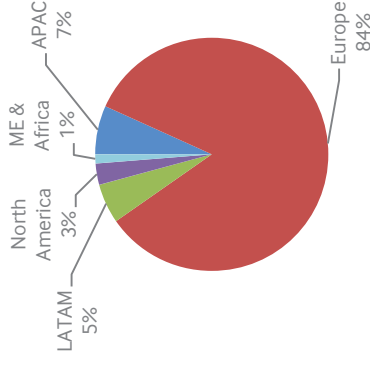
Fitch's definition of default is available on Fitch's website, see [Fitch's ratings definitions](#).

Fitch's default rates are calculated on an issuer basis, as opposed to dollar amounts. First, defaults are examined by year for each static pool and individual rating category. For example, if 25 issuers defaulted in 2002, and that static pool consisted of 2,000 issuer ratings, the resulting annual default rate for all ratings in 2002 would be 1.3%. If 10 of these defaults consisted of defaults among issuers rated 'BB' at the beginning of the year and the 'BB' cohort at the beginning of the year totaled 500, the 'BB' 2002 default rate would be 2% (10/500).

From these annual default rates, Fitch derives average annual default rates by weighting each cohort's default rates by the number of ratings outstanding in the given cohort relative to the number of total ratings outstanding for all cohorts. In other words, following the example above, the 2002 'BB' annual default rate of 2% might be followed by a 2003 'BB' annual default rate of 1%. A straight average of these two rates would ignore potential differences in the size of the two cohorts. Rather, weighting the results based on the relative number of 'BB' ratings outstanding in 2002 and 2003 gives greater emphasis to the results of the 'BB' cohort with the most observations.

The same technique is used to calculate average default rates over multiple-year horizons. For example, the two-year default rate for the 2002 'BB' rating pool would be averaged with the two-year default rate for the 2003 'BB' rating pool by weighting the default rates by the relative size of each pool.

International Public Finance Ratings Distribution by Region – 2014*



*Year-end. Source: Fitch

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Related Research

Report Data - Excel File



The Fitch Global Structure Finance 2014 Transition and Default Study data is available in an Excel format. Click [here](#) to download.

Related reports

Global Corporate Finance 2014 Transition and Default Study (March 2015)

Global Sovereign 2014 Transition and Default Study (March 2015)

Global Structured Finance 2014 Transition and Default Study (March 2015)

U.S. Public Finance 2014 Transition and Default Study (March 2015)

Fitch Ratings Global Cross-Asset First-Half 2014 Default Update (September 2014)

Risk Radar (September 2014)

The Credit Outlook (January 2015)

Appendix: International Public Finance Default Rates

Average Cumulative Default Rates: 1995-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year	10-Year
AAA	-	-	-	-	-	-
AA+	-	-	-	-	-	-
AA	-	-	-	-	-	-
AA-	-	-	-	-	-	-
A+	-	-	-	-	-	-
A	-	-	-	-	-	-
A-	-	-	-	-	-	-
BBB+	-	-	-	-	-	-
BBB	-	-	-	-	-	-
BBB-	-	-	-	-	-	-
BB+	-	-	-	-	-	-
BB	-	1.41	5.17	8.33	10.26	40.00
BB-	-	2.38	2.70	3.08	3.85	15.38
B+	1.32	1.43	1.67	2.00	2.50	10.00
B	-	5.56	8.82	14.29	21.74	45.45
B-	-	-	-	-	-	-
CCC to C	16.28	16.28	16.28	16.28	16.28	14.63
Investment Grade	-	-	-	-	-	-
Speculative Grade	1.78	3.27	4.71	6.21	7.95	19.15
All International Public Finance	0.34	0.61	0.84	1.06	1.28	3.07

Source: Fitch

10-Year Average of Three-Year Cumulative Default Rates (CDRs)

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
2003 - 2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Most Recent Three-Year Cumulative Default Rates (CDRs)

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Appendix: International Public Finance Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	21.05	73.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.26
AA	-	-	68.42	26.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.26
AA-	-	-	-	53.33	40.00	-	-	-	-	-	-	-	-	-	-	-	-	-	6.67
A+	-	-	-	-	80.00	20.00	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	20.00	73.33	-	-	-	-	-	-	-	-	-	-	-	6.67
BBB+	-	-	-	-	-	-	-	73.91	8.70	-	-	-	-	-	-	-	-	-	17.39
BBB	-	-	-	-	-	-	-	18.75	78.13	-	-	-	-	-	-	-	-	-	3.13
BBB-	-	-	-	-	-	-	-	2.70	8.11	86.49	-	-	-	-	-	-	-	-	2.70
BB+	-	-	-	-	-	-	-	-	7.14	7.14	71.43	7.14	-	-	-	-	-	-	14.29
BB	-	-	-	-	-	-	-	-	-	-	-	86.67	13.33	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	11.11	77.78	-	-	-	-	-	11.11
B+	-	-	-	-	-	-	-	-	-	-	-	-	16.67	83.33	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.29
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85.71

Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	32.00	16.00	44.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.00
AA+	-	-	42.86	7.14	-	50.00	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	-	13.33	20.00	6.67	6.67	20.00	6.67	-	-	-	-	-	-	-	-	-	-	26.67
AA-	-	-	-	20.00	13.33	-	13.33	26.67	6.67	-	-	-	-	-	-	-	-	-	20.00
A+	-	-	-	8.82	2.94	-	2.94	26.47	17.65	5.88	-	-	-	-	-	-	-	-	35.29
A	-	-	-	-	-	-	-	5.88	11.76	5.88	-	-	-	-	-	-	-	-	76.47
A-	-	-	-	-	-	-	30.00	-	20.00	30.00	-	-	-	-	-	-	-	-	20.00
BBB+	-	-	-	-	-	-	-	28.57	28.57	14.29	-	-	-	-	-	-	-	-	28.57
BBB	-	-	-	-	-	-	-	12.50	87.50	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	-	5.26	15.79	63.16	5.26	-	-	-	-	-	-	-	10.53
BB+	-	-	-	-	-	-	-	21.43	21.43	7.14	21.43	7.14	-	-	-	-	-	-	50.00
BB	-	-	-	-	-	-	-	-	-	20.00	60.00	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	11.11	22.22	44.44	-	-	-	-	-	22.22
B+	-	-	-	-	-	-	-	-	-	-	-	10.00	20.00	40.00	-	-	-	-	30.00
B	-	-	-	-	-	-	-	-	-	-	-	-	16.67	-	-	-	-	-	50.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.33
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00

Source: Fitch

Appendix: International Public Finance Transition Matrices

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	10.00	-	26.67	3.33	3.33	3.33	-	3.33	-	-	-	-	-	-	-	-	-	-	50.00
AA+	-	50.00	-	-	-	37.50	-	-	-	-	-	-	-	-	-	-	-	-	12.50
AA	-	-	8.33	-	8.33	16.67	-	16.67	16.67	8.33	-	-	-	-	-	-	-	-	25.00
AA-	-	-	-	7.41	-	-	-	14.81	3.70	11.11	-	-	-	-	-	-	-	-	62.96
A+	-	-	10.00	-	20.00	-	-	-	20.00	10.00	-	-	-	-	-	-	-	-	40.00
A	-	-	-	25.00	-	-	-	-	25.00	25.00	-	-	-	-	-	-	-	-	25.00
A-	-	-	-	-	-	-	-	-	33.33	-	-	-	-	-	-	-	-	-	66.67
BBB+	-	-	-	-	-	-	50.00	-	-	-	-	-	-	-	-	-	-	-	50.00
BBB	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	-	-	75.00	-	-	-	-	-	-	-	-	-	25.00
BB+	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	50.00	-	-	-	-	-	-	-	-	50.00
BB-	-	-	-	-	-	-	-	-	-	-	50.00	-	-	-	-	-	-	-	100.00
B+	-	-	-	-	-	-	-	-	-	-	-	50.00	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	50.00	-	-	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	-	-	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	50.00	-	-	-	-	-	-	100.00	-	50.00

Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	-
AA+	-	-	-
AA	-	-	-
AA-	-	-	-
A+	-	-	-
A	-	-	-
A-	-	-	-
BBB+	-	-	-
BBB	-	-	-
BBB-	-	-	-
BB+	-	-	-
BB	-	-	-
BB-	-	-	-
B+	-	-	-
B	-	-	-
B-	-	-	-
CCC to C	-	-	-

Source: Fitch

Appendix: International Public Finance Transition Matrices

Average Annual Transition Matrix: 1995-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	90.36	5.57	0.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.85
AA+	4.83	69.66	16.55	4.14	-	-	2.07	-	-	-	-	-	-	-	-	-	-	-	2.76
AA	-	3.20	77.20	11.20	2.80	0.80	-	0.40	-	-	-	-	-	-	-	-	-	-	4.40
AA-	-	-	2.85	80.34	8.55	2.56	0.28	0.28	1.71	-	-	-	-	-	-	-	-	-	3.42
A+	-	-	-	2.87	67.82	6.32	11.49	1.15	2.87	-	1.15	-	-	-	-	-	-	-	6.32
A	-	-	-	-	3.51	66.67	14.04	3.51	1.75	0.88	-	-	-	-	-	-	-	-	9.65
A-	-	-	-	-	-	7.08	61.06	15.93	2.65	3.54	-	-	-	-	-	-	-	-	9.73
BBB+	-	-	-	-	-	-	7.59	67.09	8.86	2.53	-	-	-	-	-	-	-	-	13.92
BBB	-	-	-	-	-	-	-	10.38	80.19	6.60	-	-	-	-	-	-	-	-	2.83
BBB-	-	-	-	-	-	-	-	0.79	7.09	83.46	3.94	-	-	-	-	-	-	-	4.72
BB+	-	-	-	-	-	-	-	-	15.96	69.15	3.19	-	-	-	-	-	-	-	9.57
BB	-	-	-	-	-	-	-	-	1.16	15.12	74.42	3.49	-	-	-	-	-	-	3.49
BB-	-	-	-	-	-	-	-	-	-	5.38	15.05	67.74	2.15	1.08	-	-	-	-	6.45
B+	-	-	-	-	-	-	-	-	-	-	1.32	15.79	69.74	1.32	3.95	-	-	-	5.26
B	-	-	-	-	-	-	-	-	-	-	-	-	5.41	8.11	54.05	8.11	-	-	16.22
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.52	47.62	28.57	-	-	14.29
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	6.98	2.33	2.33	58.14	16.28	13.95

Source: Fitch

Appendix: Supranational Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	50.00	50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-
BB+	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD
AAA	83.33	8.33	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-
BB+	-	-	-	-	-	-	-	-	-	-	8.33	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	8.33	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	8.33	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	8.33	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.33	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.33	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Appendix: Supranational Transition Matrices and Default Rates

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	WD
AAA	90.00	10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB+	-	-	-	-	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	-
AA+	-	-	-
AA	-	-	-
AA-	-	-	-
A+	-	-	-
A	-	-	-
A-	-	-	-
BBB+	-	-	-
BBB	-	-	-
BBB-	-	-	-
BB+	-	-	-
BB	-	-	-
BB-	-	-	-
B+	-	-	-
B	-	-	-
B-	-	-	-
CCC to C	-	-	-

Source: Fitch

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U.S. Public Finance 2014 Transition and Default Study

U.S. Economic Conditions Improve: State governments benefitted from revenue growth in 2014 as economic growth, credit conditions, lower energy prices and even job creation improved after a post recession lull. A positive rating drift returned to Fitch U.S. public finance rating activity, reversing the negative rating trend which began following the recession. Downgrades trailed upgrades in 2014, by a margin of 0.7 to 1, compared with the 2 to 1 ratio recorded in 2013.

Ratings Stability: The share of municipal ratings downgraded and upgraded was relatively low at 3.4% and 4.9% in 2014, respectively, with volume similar to 2013 when downgrades (4.9%) exceeded upgrades (2.5%). The overall majority of ratings – 86.9% – remained the same year over year, with 4.8% of security ratings withdrawn.

Sector Moves: The tax-supported sector represents the majority - 57% - of Fitch public finance security ratings and thus led rating activity with largely even results – 3.9% downgraded versus 4.1% upgraded. Rating activity was generally positive across the other public finance sectors, with education upgrades modestly lower at 1.5% to downgrades of 3%.

No Defaults: U.S. Public Finance security ratings recorded no defaults in 2014. Over the

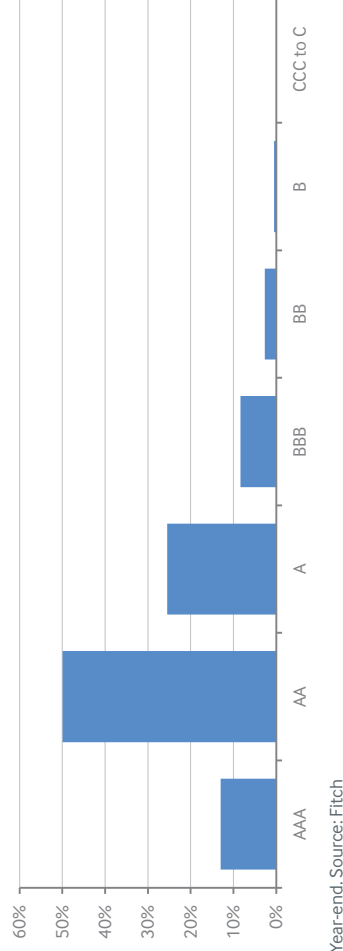
long term, 1999 – 2014, the U.S. public finance average annual long term security default rate is 0.04%.

Rating Distribution: Fitch’s U.S. public finance rating distribution reflects a low propensity to default, with the vast majority of securities rated high investment grade (‘A’ and above).

Outlooks: Fitch expects the majority of U.S. public finance security ratings to maintain Stable Outlooks in 2015. The rebound of the U.S. economy coupled with lower oil prices will sustain revenue growth among state and local governments, while other factors both economic and regulatory remain hurdles for utilities and healthcare facilities. (For more on the outlooks, see 2015 U.S. Public Finance Outlooks, Jan 2015)

Study Overview: This study analyzes the rating migration and default experience of unenhanced Fitch-rated U.S. public finance securities over the period 1999-2014. Issuing entities include states and their authorities; local governments, such as cities, counties, school districts and special districts; municipal enterprise systems, such as water and sewer districts; and private educational, cultural, senior living and healthcare organizations.

U.S. Public Finance Ratings Distribution: 2014^a



^aYear-end. Source: Fitch

U.S. Public Finance Rating Changes

By Sector	2013		2014	
	Upgrade	Downgrade	Upgrade	Downgrade
Education & Nonprofit	1.01	12.12	1.50	3.00
Healthcare	3.91	5.73	8.09	3.92
Tax Exempt Housing	-	0.85	12.44	1.44
Utilities	4.22	2.39	4.15	2.43
Tax-Supported	2.02	5.44	4.14	3.93
Investment Grade	2.40	4.70	4.85	3.28
Speculative Grade	5.62	13.48	7.77	7.77
All U.S. Public Finance	2.48	4.93	4.94	3.42

Source: Fitch

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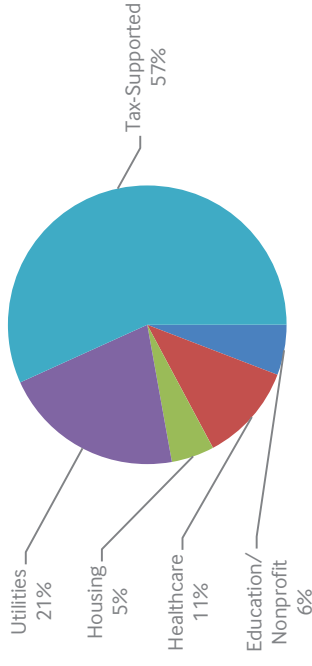
State-by-state: Florida accounted for the most downgrades in 2014, followed by California and Michigan. Florida led upgrades as well, due in part to upgrades to Florida Housing Guaranty Fund. California and New York also contributed to total upgrades. Among Fitch's U.S. public finance ratings, the states which led security counts at the end of 2014 were California (16%), Florida (14%) and Texas (12%). North Carolina and New York followed, each with 3.5%.

Speculative Grade Represented: U.S. Public Finance transitions recorded at the 'BB', 'B' and 'CCC' to 'C' categories may be uneven due to their small sample sizes – with only 3.2% of Fitch-rated U.S. public finance securities ratings

at year-end 2014 rated below investment grade. Therefore, minor rating changes between these categories can have a disproportionately large effect on their transition rates.

U.S. Public Finance Default History: The long-term (1999–2014) average annual default rate across Fitch-rated U.S. public finance securities ratings was zero at the investment-grade level and 1.70% at the speculative-grade level. Historically, the healthcare sector has accounted for the majority of Fitch-rated defaults (10), with a healthcare sector average annual default rate of 0.2% across the long term period.

U.S. Public Finance Ratings Distribution by Sector: 2014



Note: Year-end. Source: Fitch

U.S. Public Finance Average Cumulative Default Rates: 1999-2014

%	1 Year	2 Year	3 Year	4 Year	5 Year
AAA	-	-	-	-	-
AA	-	-	-	-	-
A	-	0.01	0.02	0.04	0.05
BBB	0.04	0.09	0.17	0.26	0.43
BB	0.34	1.80	3.70	4.76	5.02
B	2.53	4.20	4.51	4.10	3.57
CCC to C	10.00	14.10	14.93	20.34	22.81
Investment Grade	0.00	0.01	0.03	0.05	0.07
Speculative Grade	1.70	3.60	5.06	6.26	6.76
All U.S. Public Finance	0.04	0.08	0.12	0.15	0.18

Source: Fitch

U.S. Public Finance One-Year Transition Matrix: 2014

%	AAA	AA	A	BBB	BB	B	CCC to C	D	WD ^a
AAA	93.92	0.23	-	-	-	-	-	-	5.86
AA	0.53	94.99	1.30	0.06	0.06	-	-	-	3.06
A	-	2.27	90.01	1.02	0.23	-	-	-	6.47
BBB	-	-	5.39	84.85	3.37	0.34	0.34	-	5.72
BB	-	-	-	5.81	83.72	4.65	-	-	5.81
B	-	-	-	-	-	73.33	-	-	26.67
CCC to C	-	-	-	-	-	-	-	-	100.00

^aSecurities prefunded or redeemed are included in the withdrawn figures. Source: Fitch

Methodology

All Fitch publicly rated unenhanced U.S. public finance long-term ratings from 1999 through the present are included in Fitch's transition and default statistics. As of Dec. 31, 2013, Fitch rated more than 22,000 long-term unenhanced individual public finance issues. However, the par value and number of bonds issued by a small number of large and/or frequent issuers can be quite high relative to the median issuer. Therefore, for the purpose of this study, Fitch has employed a security rating derived by consolidating identical ratings on all public, unenhanced parity obligations. Fitch-rated U.S. public finance derived security ratings totaled 3,362 at year-end 2014. Additionally, global infrastructure and project finance (GIG) transitions are included in the appendix of this study, utilizing the same methodology as U.S. public finance, capturing the unenhanced long term security rating – totaling 376 at year-end 2014.

It is important to observe that the rating transitions outlined in this study represent a distinct historical period and might not represent future rating migration patterns. Transition rates are influenced by a number of factors, including credit enhancement levels, macroeconomic variables, state of the financial markets, size of subsectors and ratings portfolio and credit conditions generally.

Fitch employs a static pool approach in calculating default and transition data. The static pools or, alternatively, cohorts are created by grouping issuer ratings according to the year in which the ratings were active and outstanding at the beginning of the year. For example, issuers with ratings outstanding at the

beginning of 1999 constitute the 1999 cohort, with the same true for additional cohorts. Issuers newly rated by Fitch in any given year are included in the following year's cohort. For example, the performance of ratings initiated in mid-1999 would be followed as part of the 2000 and future cohorts. Ratings withdrawn in midyear are excluded from subsequent cohorts since they are no longer active.

Issuer ratings may reside in multiple static pools, as long as their ratings are outstanding at the beginning and end of the year or multiple-year horizons under observation. For example, the annual performance of an issuer rating initiated in 2000, and therefore outstanding at the beginning of 2001 and withdrawn in 2005 would be included in the 2001, 2002, 2003 and 2004 static pools. The rating's performance over multiple-year horizons would also be included in the two-year, three-year and four-year transition rates for each of the cohorts noted and included in the five-year transition rates as a transition to withdrawn.

In all, Fitch's transition and default data contains 16 static pools or cohorts from 1999–2014, allowing for 16 unique one-year transition rates, 15 two-year transition rates, 14 three-year transition rates and so forth.

An examination of the 2014 one-year rating transition data at the major rating categories identifies the movement of ratings both up and down the rating scale – from A to BBB), for example as opposed to the modifier level, which counts each notch change or from A to A–, for example (see the Fitch Public Finance 2014 Transition Rates at the modifier in the

Appendix commencing on page 6). The vertical left-hand column identifies ratings outstanding at the beginning of 2014, while the horizontal axis provides information on the migration pattern of those ratings by year end. The table reads from the top left-hand corner, beginning with 'AAA' and following the diagonal to the right in order to examine the stability of each consecutive rating category.

Default Rates

Fitch's definition of default is available on Fitch's website, see [Fitch's ratings definitions](#).

Fitch's default rates are calculated on an issuer basis, as opposed to dollar amounts. First, defaults are examined by year for each static pool and individual rating category. For example, if 25 issuers defaulted in 2002, and that static pool consisted of 2,000 issuer ratings, the resulting annual default rate for all ratings in 2002 would be 1.3%. If 10 of these defaults consisted of defaults among issuers rated 'BB' at the beginning of the year and the 'BB' cohort at the beginning of the year totaled 500, the 'BB' 2002 default rate would be 2% (10/500).

From these annual default rates, Fitch derives average annual default rates by weighting each cohort's default rates by the number of ratings outstanding in the given cohort relative to the number of total ratings outstanding for all cohorts. Following the example above, the 2002 'BB' annual default rate of 2% might be followed by a 2003 'BB' annual default rate of 1%. A straight average of these two rates would ignore potential differences in the size of the

two cohorts. Rather, weighting the results based on the relative number of 'BB' ratings outstanding in 2002 and 2003 gives greater emphasis to the results of the 'BB' cohort with the most observations.

The same technique is used to calculate average default rates over multiple-year horizons. For example, the two-year default rate for the 2002 'BB' rating pool would be averaged with the two-year default rate for the 2003 'BB' rating pool by weighting the default rates by the relative size of each pool.

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Related Research

Report Data - Excel File



The Fitch Global Structure Finance 2014 Transition and Default Study data is available in an Excel format. Click [here](#) to download.

Related reports

[Global Corporate Finance 2014 Transition and Default Study](#) (March 2015)

[Global Sovereign 2014 Transition and Default Study](#) (March 2015)

[Global Structured Finance 2014 Transition and Default Study](#) (March 2015)

[International Public Finance 2014 Transition and Default Study](#) (March 2015)

[Fitch Ratings Global Cross-Asset First-Half 2014 Default Update](#) (September 2014)

[Risk Radar](#) (September 2014)

[The Credit Outlook](#) (January 2015)

Appendix: U.S. Public Finance Default Rates

Average Cumulative Default Rates: 1999-2014

%	One-Year	Two-Year	Three-Year	Four-Year	Five-Year	10-Year
AAA	-	-	-	-	-	-
AA+	-	-	-	-	-	-
AA	-	-	-	-	-	-
AA-	-	-	-	-	-	-
A+	-	-	-	-	-	-
A	-	-	0.02	0.05	0.07	0.20
A-	-	0.03	0.06	0.10	0.11	-
BBB+	-	-	0.06	0.14	0.22	0.45
BBB	-	0.06	0.07	0.07	0.31	0.45
BBB-	0.17	0.28	0.50	0.76	0.94	3.36
BB+	-	-	1.47	2.31	2.11	13.95
BB	0.46	2.65	4.82	6.58	6.82	4.76
BB-	1.15	5.56	7.94	7.55	8.89	5.56
B+	2.04	4.44	4.65	2.56	2.63	5.26
B	2.41	2.70	2.99	3.17	1.85	-
B-	3.85	8.33	8.70	10.00	10.00	20.00
CCC to C	10.00	14.10	14.93	20.34	22.81	37.14
Investment Grade	-	0.01	0.03	0.05	0.07	0.18
Speculative Grade	1.70	3.60	5.06	6.26	6.76	12.02
All U.S. Public Finance	0.04	0.08	0.12	0.15	0.18	0.36

Source: Fitch

10-Year Average of Three-Year Cumulative Default Rates (CDRs)

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
2003-2012	-	-	-	-	-	0.03	0.07	-	-	0.25	1.57	4.55	9.26	2.86	3.08	8.70

Most Recent Three-Year Cumulative Default Rates (CDRs)

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
2012	-	-	-	-	-	-	-	-	-	-	-	7.14	20.00	25.00	-	-
2011	-	-	-	-	-	-	-	-	-	-	6.45	10.00	-	-	11.11	-

Source: Fitch

Appendix: U.S. Public Finance Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD*
AAA	93.92	0.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.86
AA+	2.03	93.91	2.03	0.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.81
AA	-	3.41	89.27	3.09	-	-	0.16	-	-	-	-	-	-	-	-	-	-	-	4.07
AA-	-	0.16	4.38	88.91	3.13	0.31	-	-	-	-	-	-	0.16	-	-	-	-	-	2.97
A+	-	-	-	4.63	84.32	2.31	2.06	0.26	-	-	-	-	0.26	-	-	-	-	-	6.17
A	-	-	-	0.75	3.38	91.35	1.50	-	0.38	-	-	-	-	-	-	-	-	-	2.26
A-	-	-	-	-	13.27	4.87	66.81	2.21	0.88	-	-	-	-	-	-	-	-	-	11.95
BBB+	-	-	-	-	-	2.29	8.40	77.86	5.34	2.29	-	-	-	-	-	-	-	-	3.82
BBB	-	-	-	-	-	-	2.22	6.67	76.67	1.11	2.22	1.11	-	-	-	-	-	-	10.00
BBB-	-	-	-	-	-	-	2.63	2.63	10.53	71.05	2.63	1.32	5.26	1.32	-	-	1.32	-	3.95
BB+	-	-	-	-	-	-	-	-	4.76	83.33	2.38	2.38	-	-	2.38	-	-	-	7.14
BB	-	-	-	-	-	-	-	-	6.90	6.90	6.90	72.41	6.90	3.45	-	-	-	-	3.45
BB-	-	-	-	-	-	-	-	-	6.67	6.67	6.67	6.67	66.67	6.67	6.67	-	-	-	6.67
B+	-	-	-	-	-	-	-	-	-	-	50.00	25.00	-	-	-	-	-	-	25.00
B	-	-	-	-	-	-	-	-	-	-	-	77.78	-	-	-	-	-	-	22.22
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	-	-	50.00
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00

*Securities preredempted or redeemed are included in the withdrawn figures. Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD*
AAA	83.01	2.61	0.44	0.44	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	13.29
AA+	3.71	81.21	5.80	1.39	0.46	-	-	-	-	-	-	-	-	-	-	-	-	-	7.42
AA	-	5.79	75.30	5.45	2.21	0.34	0.17	0.34	-	-	-	-	-	-	-	-	-	-	10.39
AA-	-	0.43	8.42	69.76	5.71	1.28	0.57	0.29	0.14	-	-	-	0.14	-	-	-	-	-	13.27
A+	-	-	0.72	7.00	62.80	5.56	2.90	0.48	0.24	0.24	0.24	-	0.24	-	-	-	-	-	19.57
A	-	-	-	0.79	7.54	70.24	3.97	1.59	2.38	0.79	0.79	-	0.40	-	0.40	-	-	-	11.11
A-	-	-	-	0.38	11.32	7.55	39.62	4.91	3.40	0.75	0.75	0.75	-	-	-	-	-	-	30.57
BBB+	-	-	-	-	-	2.46	12.30	47.54	10.66	4.10	0.82	2.46	4.10	-	0.82	-	0.82	-	13.93
BBB	-	-	-	-	-	1.06	6.38	12.77	30.85	12.77	5.32	6.38	1.06	1.06	1.06	-	-	-	21.28
BBB-	-	-	-	-	-	1.43	4.29	15.71	38.57	10.00	10.00	4.29	4.29	4.29	1.43	-	-	-	15.71
BB+	-	-	-	-	-	-	3.23	6.45	16.13	6.45	45.16	16.13	6.45	-	3.23	-	-	-	19.35
BB	-	-	-	-	-	-	7.14	21.43	35.71	7.14	21.43	35.71	7.14	7.14	10.00	-	-	-	21.43
BB-	-	-	-	-	-	-	-	-	-	40.00	-	-	40.00	-	-	-	-	-	30.00
B+	-	-	-	-	-	-	-	-	-	-	50.00	-	-	50.00	-	-	-	-	25.00
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	-	-	-	50.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00

*Securities preredempted or redeemed are included in the withdrawn figures. Source: Fitch



Appendix: U.S. Public Finance Transition Matrices

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD*
AAA	77.54	4.24	0.42	0.42	0.42	-	-	-	-	-	-	-	-	-	-	-	-	-	16.95
AA+	42.21	35.71	4.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.53
AA	13.10	34.48	17.70	5.06	1.84	0.23	0.46	-	-	-	-	-	-	-	-	-	-	-	27.13
AA-	1.02	14.83	30.43	15.86	4.35	1.53	0.26	0.77	-	-	-	-	-	-	-	-	-	-	30.95
A+	-	2.24	14.87	27.70	9.16	2.44	1.22	0.81	0.20	0.81	-	-	-	-	-	-	-	-	40.53
A	-	1.19	3.56	20.67	20.67	8.55	1.66	0.71	0.71	0.71	0.71	0.71	0.24	-	0.48	-	0.48	-	39.67
A-	-	-	1.89	10.19	15.47	14.34	7.92	3.40	2.26	1.89	0.38	0.75	0.38	-	-	-	-	-	41.13
BBB+	-	-	-	2.33	9.30	9.30	17.05	13.18	3.10	1.55	1.55	-	-	-	-	-	-	-	42.64
BBB	-	-	1.80	-	2.70	7.21	10.81	9.01	2.70	2.70	2.70	0.90	1.80	-	-	-	-	-	57.66
BBB-	-	-	-	-	1.39	-	5.56	5.56	5.56	2.78	4.17	2.78	1.39	-	4.17	-	-	-	66.67
BB+	-	-	-	-	-	9.09	9.09	-	18.18	-	-	-	-	-	-	-	-	9.09	54.55
BB	-	-	-	-	-	18.18	-	-	9.09	-	-	9.09	-	-	-	-	-	9.09	54.55
BB-	-	-	-	-	-	-	-	-	-	-	-	9.09	-	-	-	-	-	25.00	75.00
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.00	60.00

*Securities preredempted or redeemed are included in the withdrawn figures. Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	-
AA+	-	-	-
AA	-	-	-
AA-	-	-	-
A+	-	-	-
A	-	-	0.48
A-	-	-	-
BBB+	-	-	-
BBB	-	-	-
BBB-	-	-	-
BB+	-	-	9.09
BB	-	7.14	9.09
BB-	-	20.00	25.00
B+	-	25.00	-
B	-	-	-
B-	-	-	-
CCC to C	-	-	40.00

Source: Fitch

Appendix: U.S. Public Finance Transition Matrices

Average Annual Transition Matrix: 1999-2014

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD*
AAA	96.54	0.77	0.32	0.05	0.02	-	0.02	-	-	-	-	-	-	-	-	-	-	-	2.28
AA+	5.91	89.85	2.02	0.34	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	1.86
AA	0.56	7.41	87.14	2.26	0.23	0.10	0.04	0.03	-	-	-	-	-	-	-	-	-	-	2.23
AA-	0.06	0.11	9.37	84.28	2.76	0.37	0.14	0.04	0.04	0.01	0.01	-	0.01	-	-	-	-	-	2.78
A+	0.30	0.01	0.40	9.89	82.96	1.93	1.53	0.20	0.09	0.01	0.04	-	0.01	-	-	-	0.01	-	2.60
A	-	-	0.17	3.39	9.47	82.19	1.85	0.39	0.37	0.15	0.06	0.04	0.04	-	0.06	-	0.02	-	1.81
A-	-	-	-	0.18	4.02	6.85	81.07	2.36	1.09	0.26	0.03	0.16	-	-	0.10	-	-	-	3.89
BBB+	-	-	-	0.11	0.27	3.07	8.72	78.36	3.98	1.51	0.16	0.43	0.11	0.05	0.16	0.05	-	-	3.01
BBB	-	-	-	0.12	0.12	0.37	2.98	8.28	77.54	3.65	1.10	0.73	0.24	0.18	0.24	0.06	-	-	4.38
BBB-	-	-	-	-	0.09	0.09	0.17	2.71	6.46	77.99	4.02	1.92	0.87	0.17	0.52	0.26	0.17	0.17	4.37
BB+	-	-	-	-	-	-	-	-	1.42	6.38	74.47	4.61	4.96	0.71	1.06	0.35	-	-	6.03
BB	-	-	-	-	-	-	-	0.46	0.92	5.50	6.88	70.18	3.21	2.29	1.38	0.92	0.92	0.46	6.88
BB-	-	-	-	-	-	-	-	-	-	1.15	3.45	6.90	63.22	3.45	6.90	1.15	4.60	1.15	8.05
B+	-	-	-	-	-	-	-	-	2.04	2.04	2.04	6.12	2.04	65.31	2.04	6.12	4.08	2.04	8.16
B	-	-	-	-	-	-	-	-	4.82	4.82	-	4.82	1.20	2.41	61.45	4.82	4.82	2.41	13.25
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.38	38.46	11.54	3.85	30.77
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00	-	70.00	10.00	15.00

*Securities preredempted or redeemed are included in the withdrawn figures. Source: Fitch

Appendix: Global Infrastructure and Project Finance Transition Matrices

One-Year Transition Matrix: 2014 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD*
AAA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	-	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA-	-	-	94.44	5.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	92.16	5.88	-	-	-	-	-	-	-	-	-	-	-	-	-	1.96
A	-	-	-	-	96.36	4.44	86.67	6.67	-	-	-	-	-	-	-	-	-	-	3.64
A-	-	-	-	-	-	4.44	86.67	6.67	-	-	-	-	-	-	-	-	-	-	2.22
BBB+	-	-	-	-	-	3.03	81.82	3.03	-	-	-	-	-	-	-	-	-	-	12.12
BBB	-	-	-	-	-	2.78	72.22	5.56	2.78	-	-	-	-	-	-	-	-	-	16.67
BBB-	-	-	-	-	-	2.13	4.26	91.49	2.13	-	-	-	-	-	-	-	-	-	-
BB+	-	-	-	-	-	-	-	76.92	15.38	-	-	-	-	-	-	-	-	-	7.69
BB	-	-	-	-	-	-	-	9.09	63.64	-	-	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	88.89	-	-	-	-	-	-	-	-	-	11.11
B+	-	-	-	-	-	-	-	-	-	-	85.71	14.29	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	14.29	57.14	-	-	-	-	-	-	14.29
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-	-	-	-	-
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	42.86	7.14

*Securities preredempted or redeemed are included in the withdrawn figures. Source: Fitch

Three-Year Transition Matrix: 2012 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD*
AAA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA+	-	50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00
AA	-	11.76	52.94	5.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.41
AA-	-	-	3.33	56.67	36.67	3.33	-	-	-	-	-	-	-	-	-	-	-	-	-
A+	-	-	-	81.58	10.53	-	-	-	-	-	-	-	-	-	-	-	-	-	7.89
A	-	-	-	5.08	72.88	10.20	61.22	16.33	5.08	-	1.69	-	-	-	-	-	-	-	15.25
A-	-	-	-	-	-	10.20	61.22	16.33	-	-	-	-	-	-	-	-	-	-	12.24
BBB+	-	-	-	-	-	18.52	62.96	7.41	3.70	-	-	-	-	-	-	-	-	-	7.41
BBB	-	-	-	-	-	2.86	5.71	37.14	5.71	-	-	5.71	-	-	2.86	-	-	-	37.14
BBB-	-	-	-	-	-	2.86	2.86	62.86	8.57	8.57	2.86	2.86	-	-	-	-	-	-	11.43
BB+	-	-	-	-	-	-	-	50.00	8.33	8.33	-	8.33	-	-	-	-	-	-	8.33
BB	-	-	-	-	-	-	-	30.00	10.00	10.00	-	20.00	-	-	-	-	-	-	20.00
BB-	-	-	-	-	-	-	-	-	-	-	36.36	9.09	-	-	-	-	-	-	9.09
B+	-	-	-	-	-	-	-	-	-	-	28.57	42.86	14.29	-	-	-	-	-	14.29
B	-	-	-	-	-	-	-	-	-	-	14.29	28.57	14.29	-	-	-	-	-	28.57
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.67	16.67	-	-	-	33.33
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.33	33.33	16.67

*Securities preredempted or redeemed are included in the withdrawn figures. Source: Fitch

Appendix: Global Infrastructure and Project Finance Transition Matrices

10-Year Transition Matrix: 2005 Cohort

%	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC to C	D	WD*
AAA	-	-	-	-	-	-	-	-	-	-	-	16.67	-	-	-	-	-	-	83.33
AA+	-	-	-	-	-	50.00	-	-	-	-	-	-	-	-	-	-	-	-	50.00
AA	-	11.76	41.18	5.88	-	-	-	-	-	-	-	-	-	5.88	-	-	-	-	35.29
AA-	-	-	4.76	47.62	38.10	-	-	-	-	-	-	-	-	-	-	-	-	-	9.52
A+	-	-	2.22	6.67	37.78	26.67	-	4.44	-	-	-	-	-	-	-	-	-	-	22.22
A	-	-	-	-	10.00	31.43	10.00	4.29	1.43	1.43	-	2.86	-	1.43	-	1.43	-	1.43	34.29
A-	-	-	-	-	-	20.00	46.67	10.00	-	3.33	-	-	-	-	-	-	-	-	20.00
BBB+	-	-	-	-	4.76	-	-	33.33	14.29	9.52	4.76	4.76	-	4.76	-	-	-	4.76	19.05
BBB	-	-	-	-	-	5.00	5.00	2.50	5.00	2.50	7.50	2.50	-	2.50	2.50	-	2.50	5.00	65.00
BBB-	-	-	-	-	-	-	-	3.45	-	6.90	6.90	-	6.90	-	-	3.45	-	10.34	62.07
BB+	-	-	-	-	-	-	-	-	33.33	-	-	-	-	-	-	-	-	-	66.67
BB	-	-	-	-	-	-	-	-	-	6.67	-	-	13.33	-	-	6.67	-	-	73.33
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.00	50.00
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
CCC to C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00

*Securities preredempted or redeemed are included in the withdrawn figures. Source: Fitch

Default Rates by Cohort

%	One-Year 2014 Cohort	Three-Year 2012 Cohort	10-Year 2005 Cohort
AAA	-	-	-
AA+	-	-	-
AA	-	-	-
AA-	-	-	-
A+	-	-	-
A	-	-	1.43
A-	-	-	-
BBB+	-	-	4.76
BBB	-	-	5.00
BBB-	-	-	10.34
BB+	-	-	-
BB	-	10.00	-
BB-	-	18.18	50.00
B+	-	-	100.00
B	14.29	28.57	-
B-	-	33.33	-
CCC to C	42.86	33.33	-

Source: Fitch

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