



**MALAYSIAN RATING CORPORATION BERHAD**  
(Company No. : 364803 V)

[www.marc.com.my](http://www.marc.com.my)

## MARC 2006 Corporate Default and Rating Transition Study

This study, updated through 2006, reviews rating transition and default rates across MARC's corporate rating universe over the course of 10 years, spanning the period 1997-2006. For the purpose of this study, long-term debt ratings are analyzed while all ABS have been excluded. Ratings with bank guarantee and credit support also have been excluded to reflect purely issuers' corporate creditworthiness.

### Overview of the Malaysian economy and bond market performance in 2006

*Snapshot of the economy, interest rate scenario and bond market performance in 2006*

### Default rates edged lower in 2006

*Analysis on MARC's Corporate defaults in 2006 vis-à-vis the long run average and by industry*

### Rating distribution is still skewed towards cohort "A"

*Brief analysis of MARC's corporate rating distribution*

### Downgrades outpaced upgrades in 2006

*Analysis of downgrades and upgrades momentum at the modifier level and also for specific industries*

### Turbulence in the property sector

*Analysis on the sectors that contribute most to downgrades in 2006*

### Procyclical ratings movement prior to 2006

*Correlation Analysis between rating actions taken and the GDP level to assess stability of MARC's Rating-Through-the Cycle approach*

### MARC rating migration rates

*Analysis of rating migration tables*

### 2007 Credit Outlook

*Lingering downgrade trend for selected sectors*

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- Appendix I - Data and Methodologies
- Appendix II - Downgrades Profiles
- Appendix III - Yearly Rating Transition
- Appendix IV - 3-Year Static Pools Migration

*Please read disclaimer on the last page of this report*

## Overview of the Malaysian economy and corporate bond markets

### Benign economic environment in 2006

Economic conditions were generally favorable for much of 2006 with year-on-year economic growth now likely to be within the official forecast of 5.8% after an upward revision of Q1 and Q2 growth numbers. The export sector remained robust in 2006, having registered a growth of 10% as at Q3 2006. Meanwhile, inflation has been maintained below 3.5% after reaching a 7-year high that was driven largely by a petrol price hike in February 2006. Inflation dynamics are not expected to change dramatically in the near term although we expect CPI to trend below 3.00% in 2007. Weakening external demand poses downside risk to the Malaysian economy in coming months, in particular the spillover effects of a slowing U.S. economy. The need to bolster domestic spending and private investments continues to underpin Central Bank of Malaysia's decision to keep its benchmark interest rate unchanged at 3.50%, a level that is supportive of domestic growth.

The gradual strengthening of the Ringgit against the USD has attracted portfolio inflows. As a result, the stock market has witnessed a euphoric rally, with the KLCI breaking through the 1,000 mark in November 2006. The price to earnings ratio which has risen from mid-2005's 4-year low, coupled with a favorable budget announcement is suggestive of a fundamentals-backed rally. The momentum in the equity market is expected to continue in 2007, albeit at a slower pace.

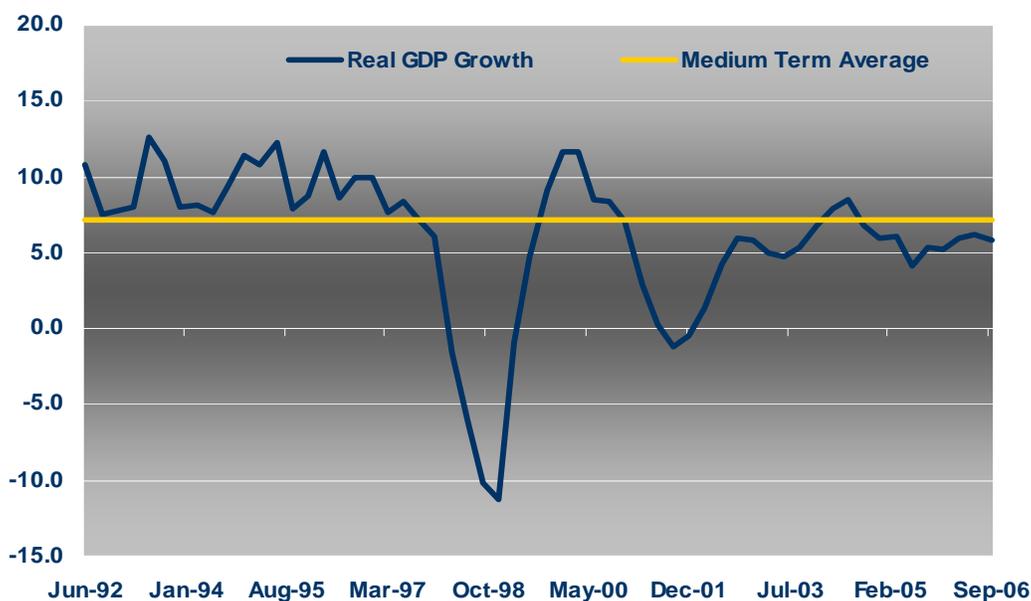
### Downgrades, spreads and new issuance

Despite the seemingly benign economic environment, MARC downgraded 15 bonds in the first 9 months of 2006. The property sector was the industry that was hardest hit in 2006, accounting for 73% of downgrades. The negative credit momentum experienced by the property sector in 2006 can be traced to a softening residential property market towards the end of 2006. Interest rates have had a direct impact on loan affordability, and the current weakness of the domestic residential property and automotive sectors. Since November 2005, Bank Negara Malaysia had hiked its benchmark interest rate by 80 basis points. Increased sensitivity to credit risk developments was reflected in rising corporate spreads, which peaked in August 2006 with the 3-year single A spread climbing to 250 basis points.

The pace of downgrades moderated into the last quarter of the year, contributing in part to a rebound in corporate bonds. Corporate spreads have tightened since September 2006. Bond markets rallied in Q4 2006 and the 10-year MGS was traded below 4.00% for the first time in 2006 on lower interest rate expectations and anticipated economic growth in 2007.

New corporate bond issuance (excluding Cagamas) in 2006 stood at MYR 31.7b vis-à-vis 2005's RM35.6 billion. The manufacturing, utility and transport, storage, and communication recorded the largest reductions in new issuance.

Exhibit 1: Real Economic Growth of 5.8% in 2006



Source: Bloomberg, Bank Negara Malaysia

*Corporate spreads widened in Q3 as downgrades outpaced upgrades significantly...*

*...but rallied towards year end*

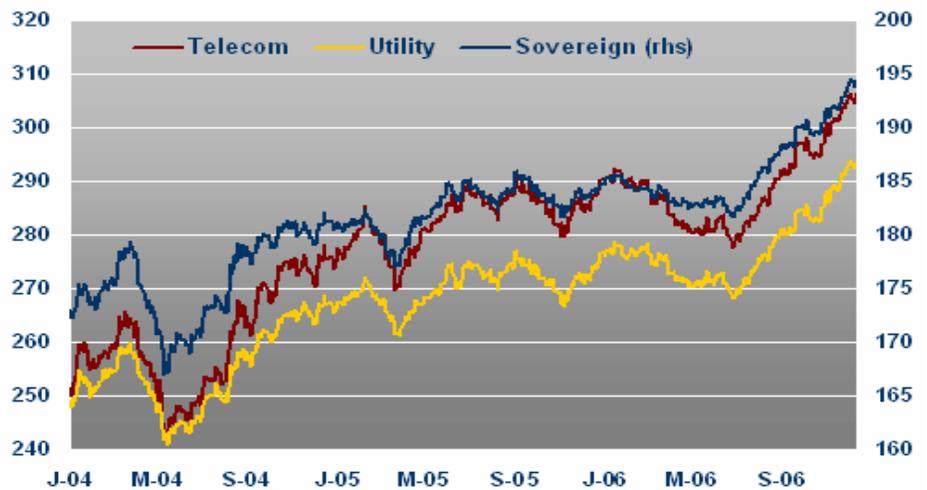
**Exhibit 2: Indicative Corporate Spreads against MGS (3-year)**



Source: Bloomberg, Bank Negara Malaysia

*Overall, 2006 was a good year for the bond market*

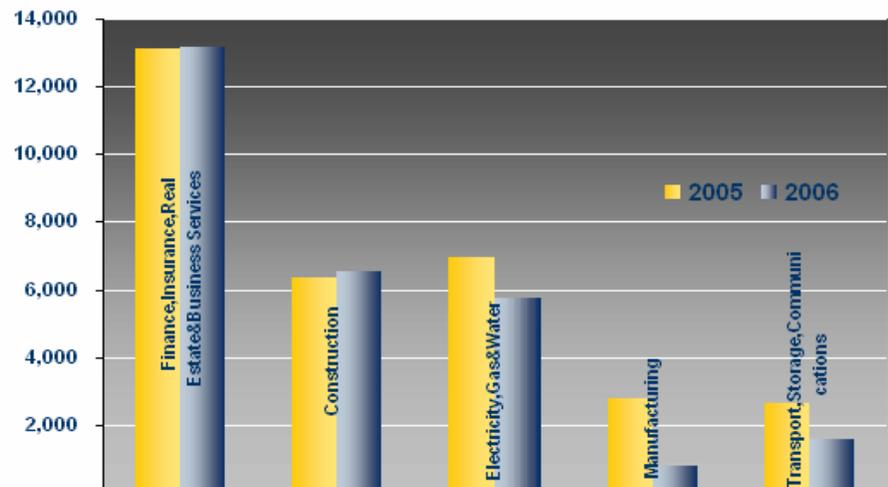
**Exhibit 3: Bond Market Performance-Credit vis-à-vis Sovereign**



Source: Bloomberg, JP Morgan

*Manufacturing, utility and transport, storage, communication sectors recorded the most reduction in 2006 new supply*

**Exhibit 4: New Issuance in MYR m - 2005 vis-à-vis 2006**



Source: Bank Negara Malaysia

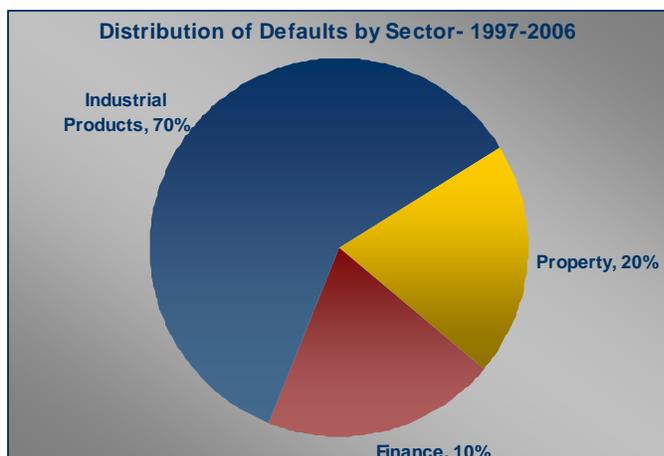
## 2006 default rates edged lower

Corporate defaults declined in 2006, with MARC recording only one default in its long-term corporate bond portfolio compared to three defaults in 2005. The default rate in 2006 was 0.70% vis-à-vis 10-year arithmetic and weighted average of 1.36% and 1.19% respectively. This relative improvement in credit quality needs to be qualified, given that downgrades continue to outnumber upgrades, and the ongoing pressures on corporate credit quality.

Total year to date (1997-2006) defaulted bonds in MARC's corporate bond portfolio stands at five issues. In terms of nominal value, total year to date defaults stand at MYR720 million with 35% of the amount contributed by a default in 2006 by Maxisegar Sdn. Bhd, an issuer in MARC's property portfolio. Maxisegar, which defaulted on a MYR250 million Islamic bond in the first half of 2006, was downgraded from investment grade to speculative grade prior to default.

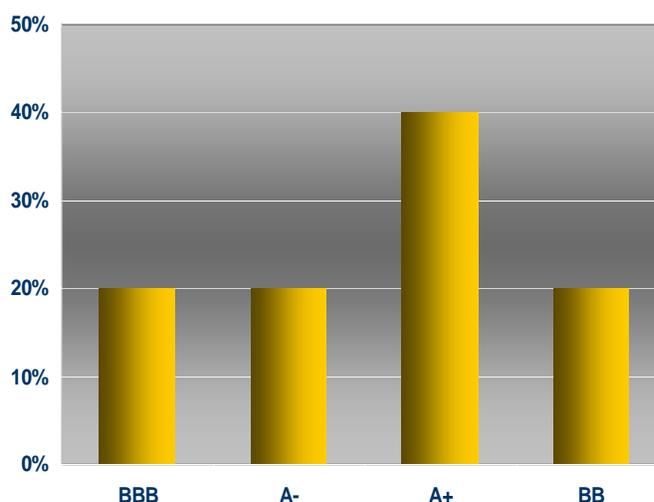
The rating path of MARC's defaulters improved in 2006 as the default came from speculative grade and the slope of the path was not as steep as previous defaulters. The 1997-2005 average rating prior to default was "A", mainly due to the 2005 defaults which came from the "A" band. Nevertheless, the 1997-2006 average rating prior to default fell from A to BBB+, indicating an improvement in default rating path. Exhibit 7 shows that the median ratings curve from one year prior to default improved and the slope is not as steep as it was in 1997-2005 period. MARC's defaults over the course of 1997 to 2006 fall in three major industries. They are finance, industrial products and property sectors (exhibit 5).

**Exhibit 5: MARC Default Distribution-Sectors**



Source: MARC Fixed Income

**Exhibit 6: MARC Default Distribution-Cohorts\***



Source: MARC Fixed Income

**Exhibit 7: Median Ratings from One Year Prior to Default**



Source: MARC Fixed Income

### Exhibit 8: Default Rates by Sectors (%)\*

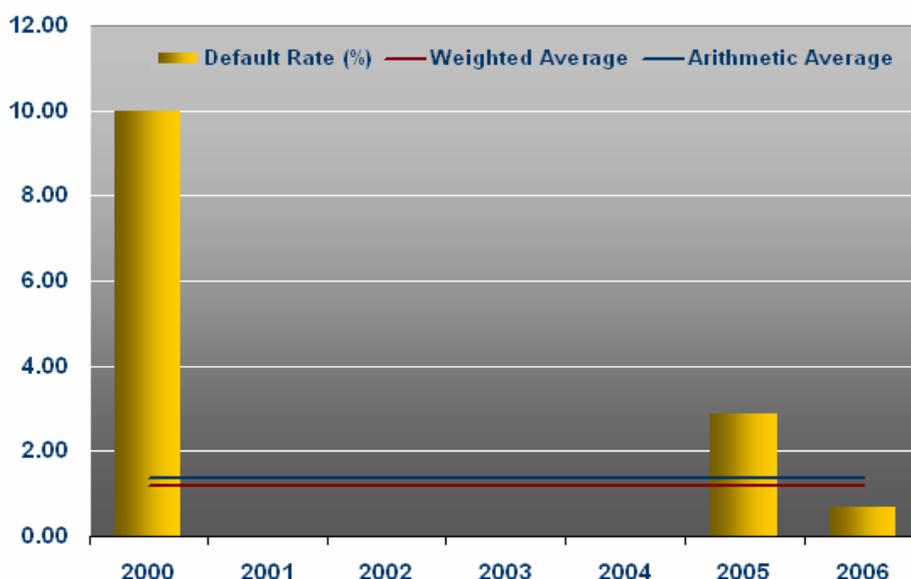
Industry/Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Finance	0.00	0.00	0.00	50.00**	0.00	0.00	0.00	0.00	0.00	0.00
Hotels	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00
Infrastructures & Utilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plantation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Property	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56
Technology	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: MARC Fixed Income

\* Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics.

\*\* Default rate in the finance portfolio depicts an extreme number as MARC had only two issues outstanding at the beginning of year 2000 (Moccist trading Sdn. Bhd. was downgraded to "D").

### Exhibit 9: Default rates vis-à-vis 10-year average (%)



Source: MARC Fixed Income

\* Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics

### Exhibit 10: MARC Corporate Default Summary

Year	Total Defaults	IG Defaults	Non IG Defaults	Default Rate (%)	Amount (MYR m)
1997	0	0	0	0.00	0.00
1998	0	0	0	0.00	0.00
1999	0	0	0	0.00	0.00
2000	1	1	0	10.00	50.00
2001	0	0	0	0.00	0.00
2002	0	0	0	0.00	0.00
2003	0	0	0	0.00	0.00
2004	0	0	0	0.00	0.00
2005	3	3	0	2.88	420.00
2006	1	0	1	0.70	250.00

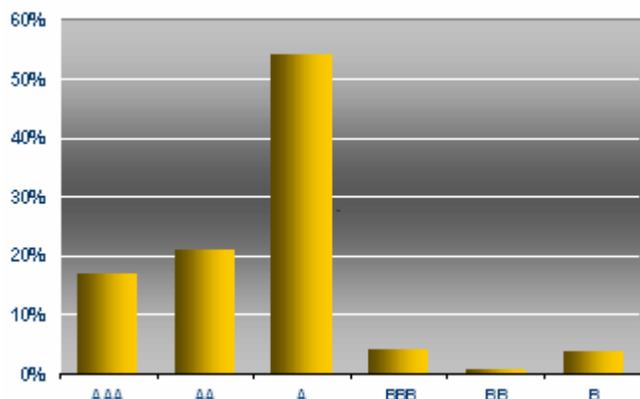
Source: MARC Fixed Income

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## Rating distribution is still skewed towards band “A”

MARC has rated 207 long term bonds under its corporate bond portfolio since inception in 1996. Out of this amount, 167 bonds are still outstanding and represent a total of MYR60.3 billion. Over the course of 1997 through 2006, 35 bonds matured while 5 bonds defaulted, involving total amounts of MYR10.5 billion and MYR720 million respectively.

**Exhibit 11: Distribution by Band-2006**



Source: MARC Fixed Income

### Highlights

- MARC’s rating distribution by category is, and has been clearly skewed towards band “A” since 2000 and this scenario is expected to continue (see exhibit 11 and exhibit 12).
- The number of net outstanding issues in this rating band is 90, representing MYR18 billion or 30% of total outstanding amount.
- The AA band is the second largest portfolio with 35 outstanding bond issues. Though this is the second largest cohort in MARC’s corporate portfolio, the volume difference with cohort A is large.
- The proportion of speculative-grade issues remains very low. Out of 167 outstanding bonds, only 5% are in speculative grade. The absence of rising stars stands out.

**Exhibit 12: MARC Average Rating and Exposure**

Cohort	Index	Issues	Exposure
AAA	17	28	16.77%
AA+	16	9	5.39%
AA	15	10	5.99%
AA-	14	16	9.58%
A+	13	38	22.75%
A	12	40	23.95%
A-	11	12	7.19%
BBB+	10	2	1.20%
BBB	9	3	1.80%
BBB-	8	2	1.20%
BB+	7	0	0.00%
BB	6	1	0.60%
BB-	5	0	0.00%
B+	4	0	0.00%
B	3	0	0.00%
B-	2	6	3.59%
C	1	0	0.00%
<b>Investment Grade</b>	-	<b>158</b>	<b>94.61%</b>
<b>Speculative Grade</b>	-	<b>9</b>	<b>5.39%</b>
<b>Total</b>		<b>167</b>	<b>100.00%</b>
<b>Average Rating</b>	<b>13</b>	<b>A+</b>	

Source: MARC Fixed Income

*The index is a hypothetical number to quantify the cohorts.*

- The vast majority of speculative grade debt in MARC’s rating universe will continue to be represented by fallen angels given that investment grade comprises 95% of MARC’s corporate portfolio. Also, all rated defaulters had originally been assigned an investment grade rating. The limited size of MARC’s rating universe, and uneven rating distribution can therefore result in default rates that are counterintuitive.
- MARC’s rating transition study found that 73% of total downgrades were contributed by 22 issues from the “A” rating band. This cohort faces high downgrade probability in the event of an economic downturn.
- Exhibit 12 depicts the rating distribution at the modifier level, and on average, MARC’s rating falls specifically in “A+”.

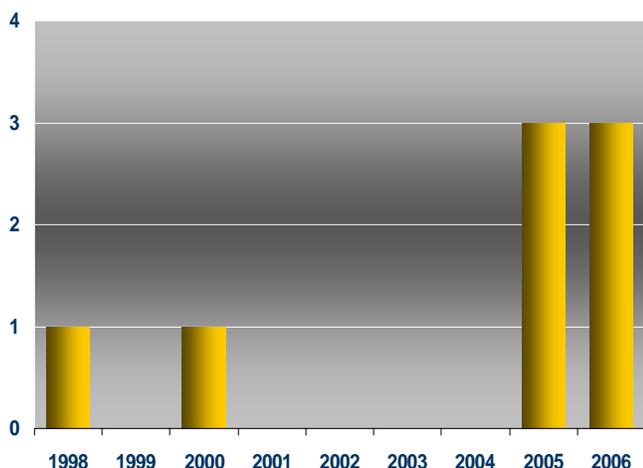
**Exhibit 13: Summary of Corporate Rating Distribution**

	1999	2000	2001	2002	2003	2004	2005	2006
AAA	50.0%	11.1%	20.9%	19.1%	18.9%	17.2%	8.1%	12.5%
AA	12.5%	27.8%	11.6%	23.4%	14.4%	14.8%	17.0%	20.1%
A	0.0%	44.4%	60.5%	51.1%	48.9%	56.3%	58.5%	55.4%
BBB	25.0%	5.6%	4.7%	2.1%	3.3%	4.7%	3.0%	3.1%
BB	0.0%	5.6%	0.0%	2.1%	1.1%	0.8%	0.7%	2.2%
B	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	3.7%	2.7%
C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Default	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	2.2%	0.4%
<b>Investment Grade</b>	<b>87.5%</b>	<b>88.9%</b>	<b>97.7%</b>	<b>95.7%</b>	<b>85.6%</b>	<b>93.0%</b>	<b>86.7%</b>	<b>91.1%</b>
<b>Speculative Grade</b>	<b>0.0%</b>	<b>5.6%</b>	<b>0.0%</b>	<b>2.1%</b>	<b>6.7%</b>	<b>0.8%</b>	<b>4.4%</b>	<b>4.9%</b>
<b>% Rating withdrawn</b>	<b>12.5%</b>	<b>0.0%</b>	<b>2.3%</b>	<b>2.1%</b>	<b>7.8%</b>	<b>6.3%</b>	<b>6.7%</b>	<b>3.6%</b>

Source: MARC Fixed Income

\* Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics.

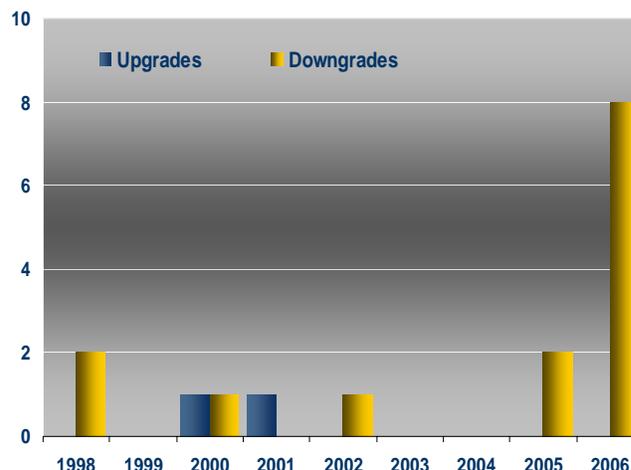
**Exhibit 14: MARC Corporate Fallen Angels (1997-2006)\***



\* A Fallen Angel is an issue downgraded from an investment grade to a speculative/junk grade rating. A Rising Star is an issuer upgraded from a speculative/junk grade to an investment grade rating. There is no Rising Star

Source: MARC Fixed Income

**Exhibit 15: Multi-Notch Rating Actions (1997-2006)\***



\* Multi-Notch Rating Actions is defined here as an upgrade or a downgrade of more than one notch, excluding multiple rating actions. It includes defaulted issues

Source: MARC Fixed Income

Year	Issuer	Initial Cohort	Migrate To
1998	[HLFG] Hong Leong Financial Group Bhd	A	BBB-
2000	[MOCCIST] MOCCIS Trading Sdn Bhd	BBB	D
2005	[SILKSB] Sistem-Lingkar Lebuhraya Kajang Sdn Bhd	A	BB-
2005	[ABI] ABI Malaysia Sdn Bhd	A-	D
2005	[PESAKA] Pesaka Astana (M) Sdn Bhd	A+	D
2006	[MAXISEGAR] Maxisegar Sdn Bhd	A	BB
2006	[AMPLEZONE] Ample Zone Bhd	A	BB
2006	[PEREMBA] Peremba Jaya Holdings Sdn Bhd	A-	BBB-

Source: MARC Fixed Income

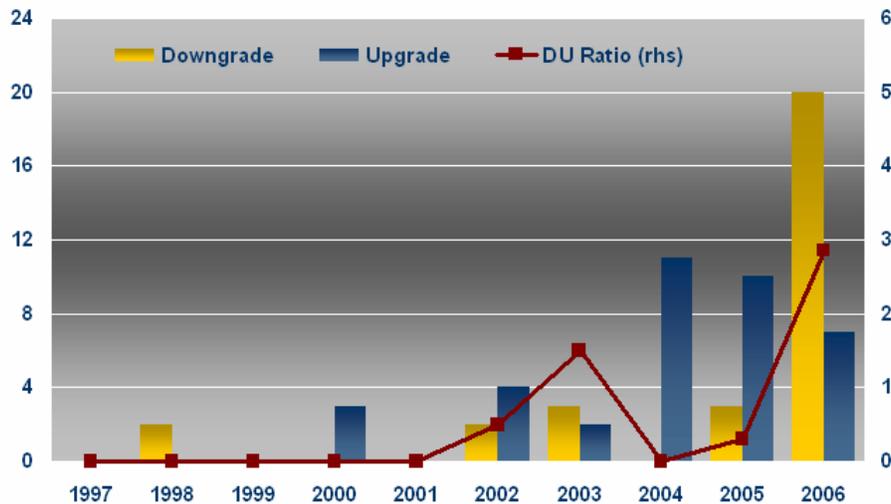
## Downgrades outpaced upgrades in 2006

MARC upgraded seven bonds in its 2006 corporate portfolio. However, there were a total of 20 downgrades in MARC's corporate portfolio in 2006 compared to just three downgrades in 2005. The number of downgrades in 2006 is the highest recorded since MARC's inception in 1997.

### Highlights

- The upgrade rate continues to fall from the level in 2004, the year in which the economy grew at an average 7.3%, the highest in this cycle. The upgrade rate stands at 5.0% in 2006, below its 10-year average of 8.2%.
- The downgrade to upgrade ratio increased substantially from 0.2:1 in 2005 to 2.1:1 in 2006 reflective of the 20 downgrades recorded.
- The downgrade rate increased to 14.3% in 2006 from 2.86% in 2005. The downgrade rate is less than half the rate registered in 1998, during the peak of the Asian financial crisis.
- The key factors driving the rating downgrades include poor financial performance, industry specific issues and rising debt leverage. Of the sectors that experienced a weakening in credit standing in 2006, the property sector stands out for its steep decline in credit quality.
- No clear historical correlation has been found between downgrades and default remoteness in respect of MARC's corporate bond portfolio. Tests were performed at the 10%, 5% and 1% significance levels.
- Historically, rating upgrades are typically limited to one notch adjustments while rating downgrades have, on average, involved multi-notch adjustments (Exhibit 18). It is evident that credit quality becomes less stable at lower rating levels.

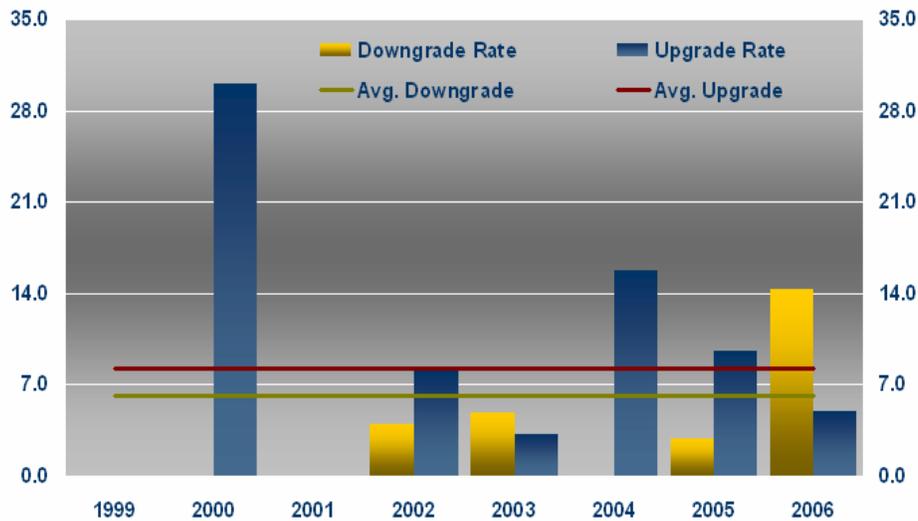
### Exhibit 16: Downgrade to Upgrade Ratio



Source: MARC Fixed Income

\* Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics.

### Exhibit 17: Downgrade and Upgrade Rates vis-à-vis 10-year average (%)



Source: MARC Fixed Income

\* Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics. Downgrade and upgrade rates were calculated by dividing the number of events by the number of outstanding rated issues (exclude rating withdrawn).

### Exhibit 18: Downgrade and Upgrade Notches

Year	Upgrade			Downgrade		
	Events	Notches	Average	Events	Notches	Average
1998	0	0	0.0	2	6	3.0
1999	0	0	0.0	0	0	0.0
2000	3	4	1.3	0	0	0.0
2001	0	0	0.0	0	0	0.0
2002	4	5	1.3	2	3	1.5
2003	2	2	1.0	3	3	1.0
2004	11	11	1.0	0	0	0.0
2005	10	10	1.0	3	9	3.0
2006	7	7	1.0	20	42	2.1
	37	39	1.1	30	63	2.1

Source: MARC Fixed Income

\* Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics.

## Turbulence in the property sector

**Exhibit 19: Distribution of downgrades and upgrades by cohorts (1997-2006)**

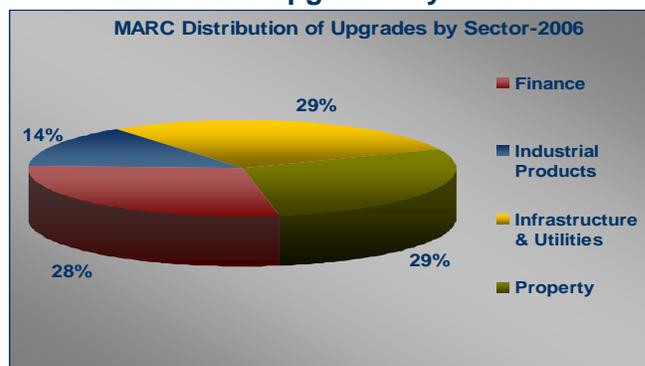


Source: MARC Fixed Income

The limited size of MARC's rating universe and its bias towards "A" rated bonds continues to be reflected in the general trend of its rating actions. Upgrade and downgrade activity, for instance, continues to be centred on "A" rated bonds. Out of 30 downgrades over the course of 1997 through 2006 (20 came from 2006 alone), 22 are from band A, two from band AAA, four from band AA and one downgrade each from bands BBB and BB. On the other hand, cumulative 10-year upgrades in the same portfolio stands at 37, 1.2 times higher than the downgrade number. The A band is also responsible for 73% of the upgrades with the remaining 27% distributed evenly in the AA and BBB bands (exhibit 19). The property sector is the largest portfolio with 44 outstanding bonds, representing a nominal amount of MYR17.6 billion or about 30% of the corporate bond portfolio. MARC downgraded 11 bonds from its property portfolio and that number alone represents more than 50% of the total downgrades in 2006 (exhibit 21). Credit quality in the property sector has been experiencing a reasonably turbulent period since 2005. The rating actions were primarily based on weakening credit fundamentals which were the result of lower sales, margin pressure, lower liquidity due to a build-up in inventory and limited near-term prospects for improved cash flow. Outlooks for individual sector players diverge, and primarily reflect the extent to which an issuer's development projects are competitively well positioned to withstand the currently more challenging operating environment. Notwithstanding, there were two bonds upgraded in the property portfolio due to structural credit enhancements.

MARC continues to maintain its negative outlook for the automotive sector as a whole amid sluggish auto sales, weaker consumer demand, industry overcapacity, growing competition, shorter production

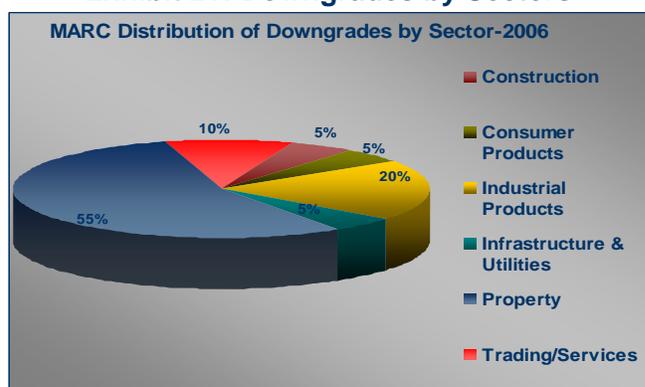
**Exhibit 20: Upgrades by Sectors**



Source: MARC Fixed Income

\*# of upgrades are calculated at the modifier level

**Exhibit 21: Downgrades by Sectors\***

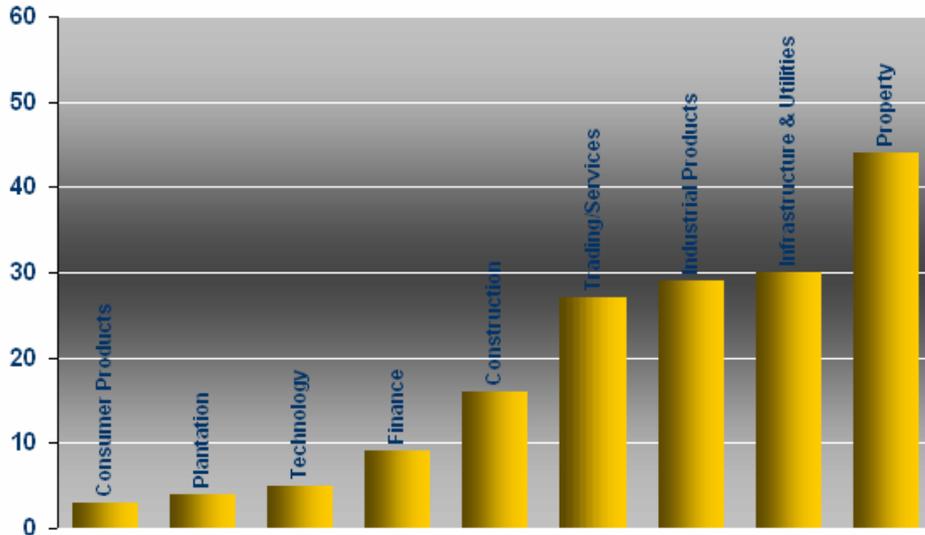


Source: MARC Fixed Income

\*# of downgrades are calculated at the modifier level

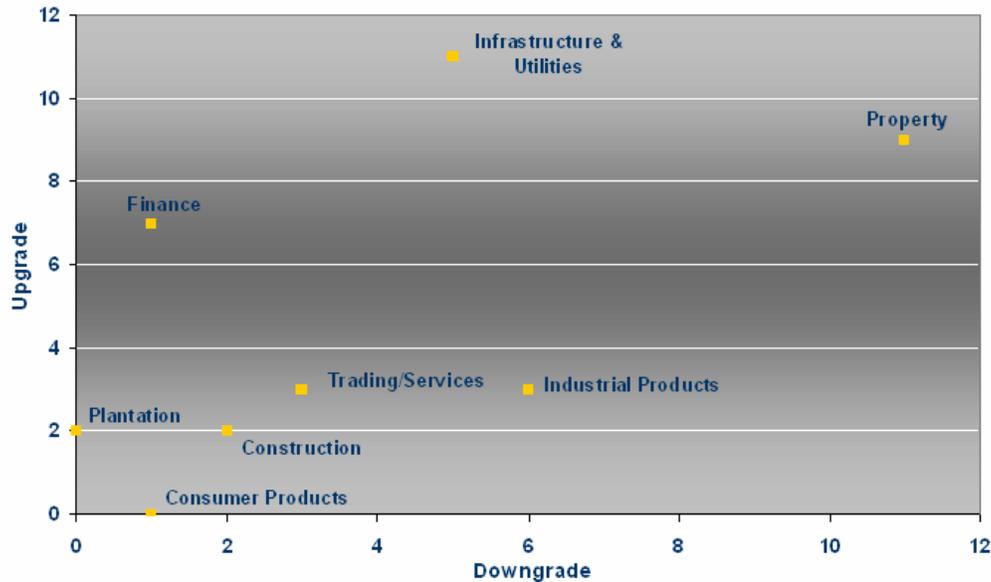
runs and bloated inventories. The outlook for individual rated auto parts and component manufacturers in our rating universe varies, with three out of five players assigned a negative outlook on their issue credit ratings, while outlooks for two others are stable. Historically, the outlook for the auto parts segment has been tied to the fundamentals affecting the domestic automotive industry, a sector that was highly protected from import competition. Both the auto parts suppliers and auto makers are presently in the throes of restructuring and consolidation but political and social sensitivities appear to be slowing the process of restructuring. MARC views credit quality among rated players in the auto parts segment as uneven. Players with broad technical capabilities, meaningful presence in regional markets, and financial strength are responding well to continuing challenges. MARC expects negative rating outlooks to continue to overshadow positive outlooks mostly from a proliferation of higher-risk business strategies, weak competitive positioning, uncertainty regarding industry restructuring and notably weaker financial profiles.

**Exhibit 22: Net Outstanding Issues by Industry-2006**



Source: MARC Fixed Income

**Exhibit 23: Scatter Plot of Industry Downgrades and Upgrades (1997-2006)\***



Source: MARC Fixed Income

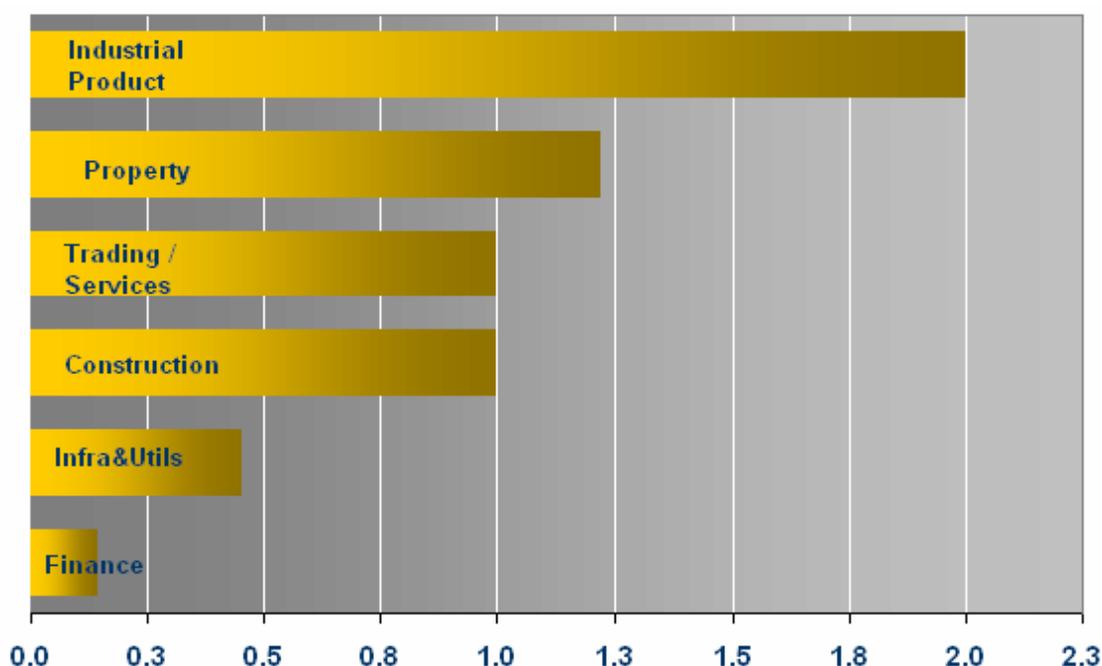
\*Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics. Downgrades and upgrades are calculated at the modifier level.

**Exhibit 24: Summary of Rating Actions by Industry**

	Issues Rated	Default (1997-2006)	Withdrawn (1997-2006)	Net Outstanding	Upgrades (1997-2006)	Downgrades (1997-2006)	Upgrades 2006	Downgrades 2006
Construction	20	-	4	16	2	2	-	1
Consumer Products	3	-	-	3	-	1	-	1
Finance	11	1	1	9	7	1	2	-
Hotels	1	-	1	-	-	1	-	-
Industrial Products	37	3	5	29	3	6	1	4
Infrastructure & Utilities	35	-	5	30	11	5	2	1
Plantation	7	-	3	4	2	-	-	-
Property	57	1	12	44	9	11	2	11
Technology	6	-	1	5	-	-	-	-
Trading/Services	30	-	3	27	3	3	-	2
<b>All Sectors</b>	<b>207</b>	<b>5</b>	<b>35</b>	<b>167</b>	<b>37</b>	<b>30</b>	<b>7</b>	<b>20</b>

Source: MARC Fixed Income

**Exhibit 25: Downgrade to upgrade ratio by industry (1997-2006)\***



Source: MARC Fixed Income

\* Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics. Downgrades and upgrades are calculated at the modifier level.

**Exhibit 26: Summary of Rating Actions by Cohort\***

	Issues Outstanding	Negative Outlook in 2006	Annual upgrades (1997-2006)	Annual Downgrades (1997-2006)	Upgrades in 2006	Downgrades in 2006
AAA	28		-	2	-	1
AA+	9	1	-	1	-	-
AA	10		2	2	-	2
AA-	16	3	3	1	1	1
A+	38	1	2	6	1	6
A	40	7	17	14	4	8
A-	12	4	8	2	1	1
BBB+	2		4	-	-	-
BBB	3	1	-	-	-	-
BBB-	2	1	1	-	-	-
BB+	-	-	-	-	-	-
BB	1	2	-	1	-	-
BB-	-	-	-	1	-	1
B+	-	-	-	-	-	-
B	-	-	-	-	-	-
B-	6		-	-	-	-
C	-	-	-	-	-	-
<b>Investment Grade</b>	<b>158</b>	<b>17</b>	<b>36</b>	<b>28</b>	<b>7</b>	<b>19</b>
<b>Speculative Grade</b>	<b>9</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>1</b>
<b>Total</b>	<b>167</b>	<b>20</b>	<b>37</b>	<b>30</b>	<b>7</b>	<b>20</b>

Source: MARC Fixed Income

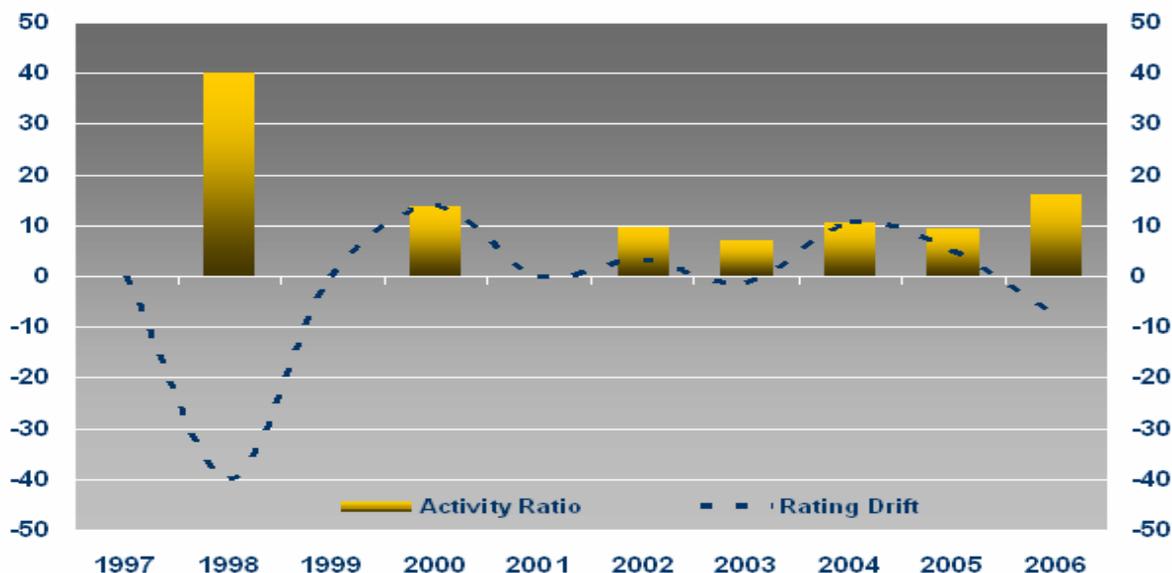
\* Negative outlook counts multiple rating reviews. There were two negative outlooks from cohort BB in 2006 but only one issue outstanding as Maxisegar Sdn. Bhd. defaulted from this cohort. Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics.

## Procyclical ratings movement prior to 2006

The Activity Ratio which measures downgrades and upgrades rating action increased in 2006, reaching its highest level since 1999. Though the ratio is not as high as the number registered in 1998, it still exhibits volatility in 2006, as a result of the significant number of downgrades recorded in 2006. The rating drift which measures an excess of upgrades relative to downgrades also moved into negative territory in 2006 due to general trend of downward rating actions.

Rating actions in 2006, exhibit countercyclical behavior (Exhibit 28) in contrast to the previously established procyclical pattern. This observation can be attributed to the downward rating actions in respect of the property sector, which dominated the overall picture of downgrades in 2006. MARC's efforts in ensuring greater granularity in industry and business risks scoring, and its adoption of a more stringent rating migration policy in 2006 lay down the context for the observed rating trends.

**Exhibit 27: Rating Drift vs. Activity Ratio\***

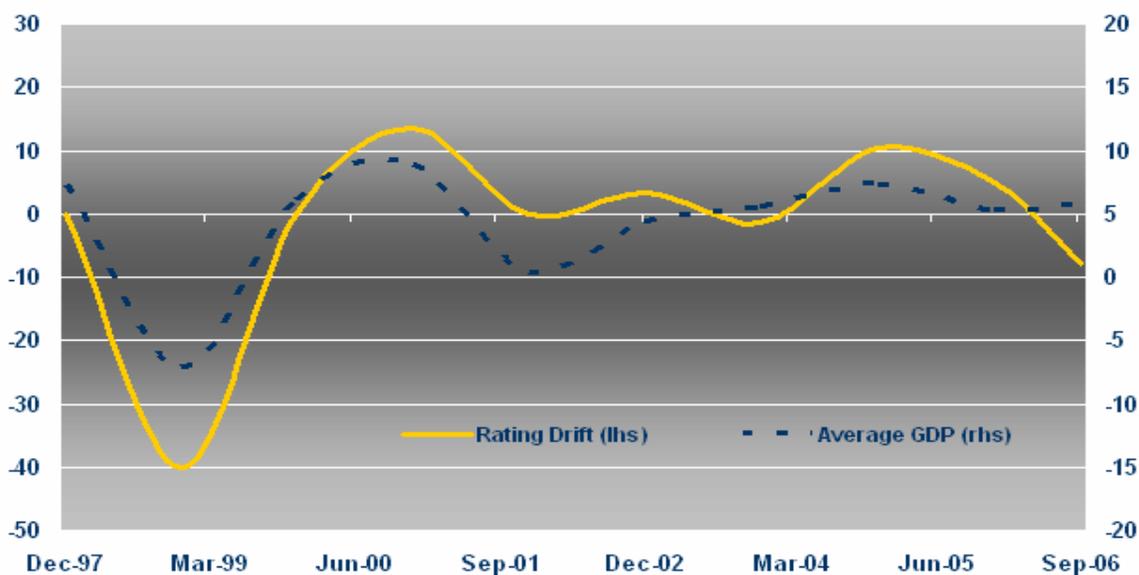


Source: MARC Fixed Income

\* Data enhancement efforts may lead to different results than previously published. Current study supersedes all prior statistics.

\*\*Downgrades and upgrades are calculated at the modifier level.

**Exhibit 28: Rating Drift vis-à-vis Real GDP**



Source: Bloomberg Data, MARC Fixed Income

## Exhibit 29: One-Year Corporate Transition Rates

2006		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	96.55%	3.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	93.94%	6.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.96%	85.58%	3.85%	0.96%	0.00%	0.00%	7.69%	0.96%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2005		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	95.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.17%	0.00%
	AA	0.00%	92.31%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%
	A	0.00%	0.00%	90.00%	0.00%	1.11%	0.00%	0.00%	5.56%	3.33%
	BBB	0.00%	0.00%	40.00%	40.00%	0.00%	0.00%	0.00%	20.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

## Exhibit 30: Average Annual Corporate Transition Rates (1997-2006)

1997-2006		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	95.08%	1.64%	0.00%	0.00%	0.00%	0.00%	0.00%	3.28%	0.00%
	AA	0.00%	95.24%	1.90%	0.00%	0.00%	0.00%	0.00%	2.86%	0.00%
	A	0.00%	0.79%	89.27%	1.57%	0.52%	0.00%	0.00%	6.81%	1.05%
	BBB	0.00%	0.00%	20.00%	70.00%	0.00%	0.00%	0.00%	5.00%	5.00%
	BB	0.00%	0.00%	0.00%	0.00%	66.67%	16.67%	0.00%	16.67%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Source: MARC Fixed Income

### MARC rating migration rates

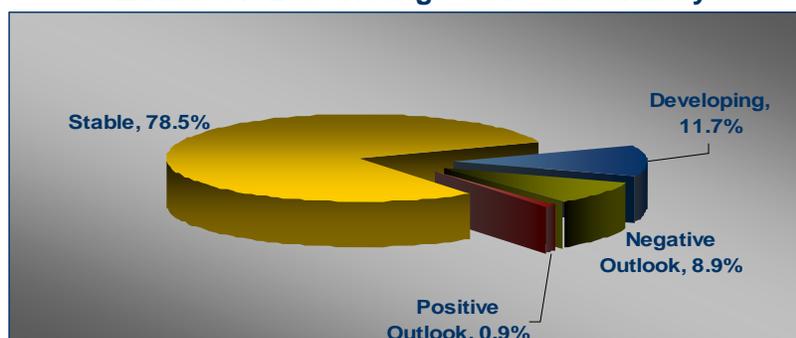
There was only one default recorded in 2006 relative to three corporate defaults in 2005, bringing the default rate to a historical low. 2006 default came from cohort 'BB', an improvement relative to 2005 as all defaults for that year came from band 'A'. Nevertheless, the default from the 'BB' band is not captured in our transition matrix because of multiple rating actions on the defaulter throughout the year. Maxisegar Sdn. Bhd. was downgraded from 'A' to 'BB' in the first quarter 2006 and defaulted in the subsequent quarter. As mentioned in the previous studies, there are a few items worth noting with respect to the historical default frequencies displayed above. Defaults are practically non-existent at bands below 'BBB' due to MARC's historically more limited coverage of non-investment grade issues. Exhibit 12 indicates that there are only seven bonds outstanding in band 'BB' and 'B'. Nevertheless, the default prediction over a 10-year horizon indicates that the lower rated band carries a higher default probability with a 4.00% gap from band

'A' to band 'BBB', as given in exhibit 30. MARC expects all of these anomalies to be diminished over time as both sample sizes and observation years continue to grow. A 10-year period can still be considered as short relative to the sample sizes used by international rating agencies. Bands 'AAA', 'AA' and 'A' continue to give a picture of rating stability with an average of 95.0%, 95.2% and 89.3% unchanged ratings respectively over the course of 10 years. Special caution should be used in examining 'BBB', 'BB' and 'B' bands, which were derived using a small sample. Examining the 2006 migration data at the broad rating category revealed that downgrade rates increased noticeably in 'BB', where it recorded a 100% downgrade to 'B' as there was only one issue in 'BB', Sistem Lingkaran Lebu Raya Kajang (SILK). This issue was downgraded from 'A' to 'BB' in 2005 and has been further downgraded to 'B' in 2006. Downgrade rates for 'AAA', 'AA' and 'A' also increased.

## 2007 Credit Outlook : Lingering downgrade trend for selected sectors

The stable credit trend experienced since 2003 took a negative turn in 2006 although defaults stayed low relative to its long run average. A record high of downgrade and negative outlook statistics for MARC alludes to lingering downside risks for corporate creditworthiness into 2007. Despite the benign macroeconomic backdrop, creditworthiness in a few sectors remains a concern, given the persisting negative trend in property and automotive market fundamentals. The knock-on effect of previous monetary tightening, and rising cost of living with hikes in utility tariffs and toll rates continues to weigh on consumer spending, particularly for lower income households. Rising inventories and modest take up rates are also expected to heighten the risk of further downgrades in the property sector. The automotive sector, which represents 28% of outstanding issuers under industrial products, will also continue to face a tough year in 2007. Apart from economic fundamentals, credit trends will continue to be affected by discretionary strategic and financial policy decisions such as acquisitions, business diversification, corporate share repurchases, and the use of debt to retire equity as well as adverse regulatory developments.

**Exhibit 31: 2006 Ratings Outlook Summary**



Source: MARC Fixed Income

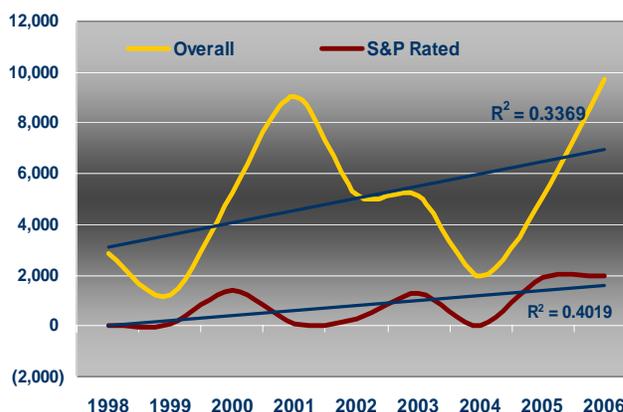
As at end February 2007, 79.0% of corporate debt rating outlooks were stable whilst negative outlooks represent about 9.0% of MARC's outstanding ratings as at year end 2006. The percentages of outlooks that are negative strongly overshadow positive outlooks which stand at just 1%. MARC expects to see a reasonable level of ratings stability in ratings that have been downgraded in 2006. Notwithstanding, the confluence of a number of factors, including the limited size of our rating universe, the concentration of rated credits in certain sectors and rating bands, ongoing credit quality erosion in certain economic sectors and the increasing number of rated marginal companies that are susceptible to default, will likely have exaggerated impact on MARC's credit ratio in 2007. Interestingly, this is consistent with the credit trend experienced by non-financial corporates in Asia Pacific as a whole. Despite the low risk of interest rate hikes in 2007, the combination of the lag impact of previous monetary tightening on consumption, subdued consumer sentiments, and softening liquidity conditions could weaken the overall corporate credit picture. Other possible risks of an external nature include a turn in the global credit cycle and slower-than-expected global economy momentum.

**Exhibit 32: Median Cash Ratio and Leverage Position (N = 100 Listed Companies)**



Source: MARC Fixed Income

**Exhibit 33: M&A Trend in USD million (Cash and Debt related)**



Source: Bloomberg Data, MARC Fixed Income

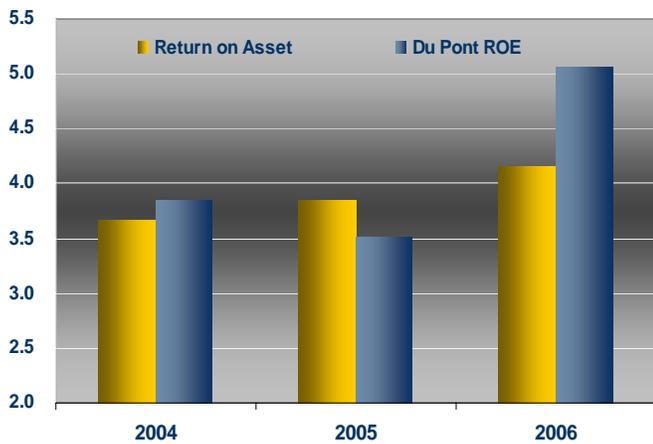
## Merger and Acquisitions at a record high in terms of dollar volume

M&A activity in 2006 recorded the highest number in terms of dollar volume although well below the number of deals recorded in 2002, indicating that some big corporates are aggressively expanding. Liquidity management among corporates presents another credit concern particularly with their perceived over reliance on short term borrowings. Short-term obligations are notoriously susceptible to refinancing difficulties during a liquidity crisis. As depicted in Exhibit 32 and 33, the record high in M&A dollar volumes picking up from 2004 has been at the expense of the cash and leverage ratios. Our analysis on corporate balance sheets in 2006 indicates worsening of liquidity positions while current liabilities are trending upwards. This may be due to business expansion requiring higher levels of working capital. Debt-funded acquisitions and delayed merger and acquisition synergies inevitably result in a weakening in the financial profiles of affected corporates.

## Rising shareholder's returns

Shareholder's return has been on an uptrend since 2004 and registering a new high in 2006, contributing to the current bullish sentiments in the equity markets. However, an examination of Total Debt to Funds Flow from Operations raises some concern about inherent credit risks building up for Malaysian corporations. Corporate strategies to enhance shareholder value in this cycle can be to the detriment of bondholders as well as other creditors.

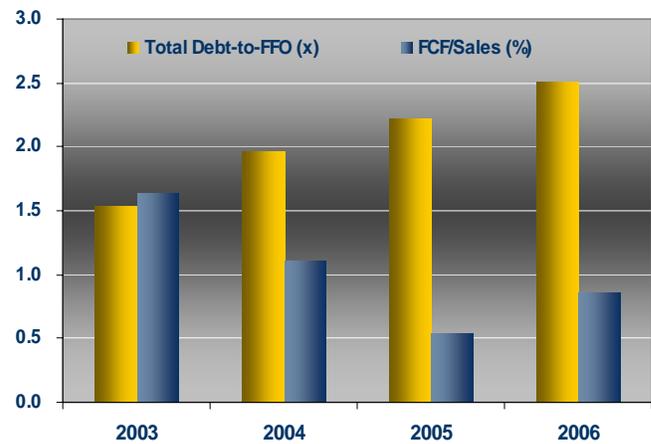
**Exhibit 34: Profitability (%) - Median (N = 100 )\***



Source: MARC Fixed Income.

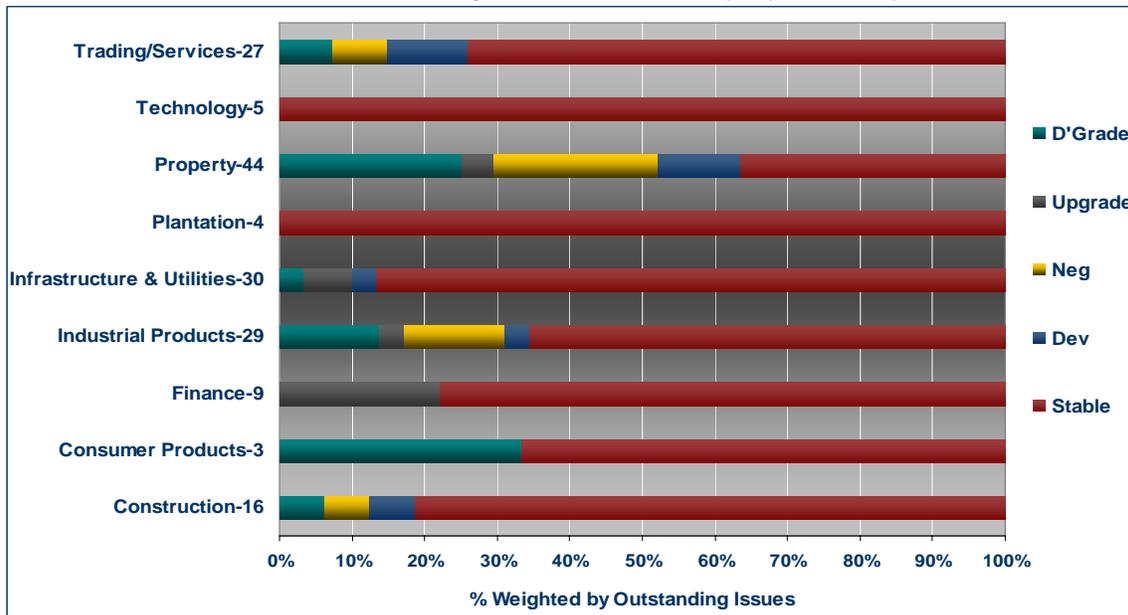
\*DuPont ROE = Net Margin x Asset Turnover x DFL

**Exhibit 35: Cash Flow – Median (N=100)**



Source: MARC Fixed Income

**Exhibit 36: Rating Actions Summary by Industry**



Source: MARC Fixed Income

## Appendix I: Data and Methodologies

### DEFAULT DEFINITION

#### *(Specifically prescribed for MARC's Default and Rating Transition Study: 1997-2006)*

- Issuers will be rated 'D' upon default. Distressed obligations typically are rated along the continuum of 'B' to 'C' ratings categories. In situations where analysis indicates that an instrument is irrevocably impaired where it is not expected to meet payment of interest and/or principal in full in accordance with the terms of the obligation's documentation during the life of the transaction, but where no payment default in accordance with the terms of the documentation is imminent, the obligation may be rated in the 'B' or 'C' categories.
- Default is defined as one of the following:
  - ✓ Failure of an issuer/obligor to make timely payment of principal and/or interest under the contractual terms of the rated financial obligation (first dollar missed payment basis);
  - ✓ Bankruptcy filings, administration, receivership, liquidation, winding-up or cessation of business of an issuer/obligor; or
  - ✓ Distressed or other coercive exchange of a rated financial obligation, where creditors were offered securities with diminished structural or economic terms compared with the existing financial obligation of the issuer/obligor.
- MARC will assign default ratings where it has reasonably determined that payment has not been made on a material obligation in accordance with the requirements of the obligation's documentation, or where it believes that default ratings consistent with MARC's published definition of default are the most appropriate ratings to assign.

### DEFAULT RATE CALCULATION

- The default rate calculation used in MARC's Corporate Bond default study is given by the following formula:

$$d_t = x_t / (n_t - w_t)$$

Where  $x_t$  is the number of defaulted issues in year  $t$ ,  $w_t$  is the number of rating withdrawals and  $n_t$  is the number of outstanding ratings at the beginning of the year and adjusted for the previous defaults.

- The denominator reflect issuers whose ratings were withdrawn and therefore not at risk of default over the measurement period. Hence, there are three possible scenarios that need to be modeled to predict the default rate under the scope of MARC's Corporate Default Study: Survival to the next time period, rating withdrawal and default.

### PARAMETERS OF THE MARC CORPORATE DEFAULT STUDY

- Statistical data captured in this study is based on the long term corporate debt ratings assigned. The long term Asset Backed Securities (ABS) and other structured products ratings are not captured in this study. Corporate credit ratings, issuer ratings and financial strength ratings were excluded.
- Includes all issuers, private limited and public listed companies with debt outstanding
- Short-term ratings were not included in the study.
- Bonds with Bank Guarantee (BG) and credit support were also excluded from the study.
- Rating Transition Matrices are not captured at the modifier level.
- Downgrade and upgrade statistics are computed at the modifier level.
- All statistics for downgrades and upgrades count multiple rating actions throughout the year.
- Each one-year transition matrix compares beginning of year rating with end of year rating and does take into account intermediate rating actions during the year.

MARC's long-term rating scale has a single 'C' rating level between 'B-' and 'D' as compared to global rating agencies which typically have three intermediate categories i.e. 'CCC', 'CC' and 'C'. Also, within the three categories, their practice is to append modifiers (+/-) or 1, 2, and 3 to each genetic.

## Appendix II: Downgrades Profile

Issuer	Date	Previous Rating	Current Rating	Rating Outlook	Amount (MYR m)	Remark
[MAXISEGAR] Maxisegar Sdn Bhd	Jun-06	BB	D		250	Delay of construction progress of development project.
[MAXISEGAR] Maxisegar Sdn Bhd	Jan-06	A	BB	NEG	250	
[PEREMBA] Peremba Jaya Holdings Sdn Bhd	Dec-06	A-	BBB-	NEG	200	Delay of construction progress of development project and non payment from project's owner as well as delay in concluding significant business contract.
[PEREMBA] Peremba Jaya Holdings Sdn Bhd	Feb-06	A	A-		200	
[MMM] Malaysian Merchant Marine Bhd	Mar-06	AA	AA-		120	Deteriorating operational profitability due to higher operating costs.
[MKLAND] MK Land Holding Bhd	Mar-06	A+	A		150	Low take-up rate on the development projects being undertaken.
[MKLAND] MK Land Holding Bhd	Mar-06	A+	A		150	
[INTELBEST] Intelbest Corporation Sdn Bhd	Mar-06	A+	BBB+	DEV	20	Delay of construction progress of development project undertaken.
[INTELBEST] Intelbest Corporation Sdn Bhd	Mar-06	A	BBB	DEV	35	
[INTELBEST] Intelbest Corporation Sdn Bhd	Mar-06	A	BBB	DEV	55	

## Appendix II: Downgrades Profile

Issuer	Date	Previous Rating	Current Rating	Rating Outlook	Amount (MYR m)	Remark
[AMPLEZONE] Ample Zone Bhd	Jul-06	AAA	AA+		50	
[AMPLEZONE] Ample Zone Bhd	Jul-06	AA	A		25	Non payment of rental from major tenant for the building rented out.
[AMPLEZONE] Ample Zone Bhd	Jul-06	A	BB		75	
[GOODWAY] Goodway Integrated Industries Bhd	Aug-06	A+	A		80	Weak financial profile due to lower operating margins and higher consolidated debt resulted from acquisitions.
[PECD] PECD Bhd	Sep-06	A	A-	STA	200	Weak financial profile due to cost overruns and unsettled variation order claims in relation to a project undertaken.
[ANTARASTEEL] Antara Steel Mills Sdn Bhd	Sep-06	A+	A	STA	500	Below capacity operation due to slow demand as well as plant breakdown.
[SILKSB] Sistem-Lingkar Lebuhraya Kajang Sdn Bhd	Sep-06	BB-	B-	DEV	2010	Significantly lower than expected traffic volume vis-à-vis its projection
[PSSBSHIP] PSSB Ship Management Sdn Bhd	Oct-06	AA-	A+	NEG	40	Deteriorating financial profile due to higher operating cost.
[EMASKIARA] Emas Kiara Industries Bhd	Oct-06	A+	A	STA	80	Weak financial profile due to drop in core business's revenue and higher raw materials prices.
[ACEPOL] ACE Polymers (M) Sdn Bhd	Nov-06	A	A-	STA	70	Reliance on domestic auto industry which is now in slowdown phase.
[HYTEXIN] Hytex Integrated Bhd	Dec-06	A	A-	STA	100	Continuous compression in operating margin due to higher raw materials prices and operating costs.

## Appendix III: Yearly Transition 1998-2006

1998		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1999		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2000		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	BB	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2001		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	96.67%	0.00%	0.00%	0.00%	0.00%	3.33%	0.00%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2002		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	2.70%	94.59%	0.00%	0.00%	0.00%	0.00%	2.70%	0.00%
	BBB	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2003		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	90.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%
	A	0.00%	0.00%	83.33%	2.38%	0.00%	0.00%	0.00%	14.29%	0.00%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2004		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	1.54%	92.31%	0.00%	0.00%	0.00%	0.00%	6.15%	0.00%
	BBB	0.00%	0.00%	20.00%	80.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2005		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	95.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.17%	0.00%
	AA	0.00%	92.31%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%
	A	0.00%	0.00%	90.00%	0.00%	1.11%	0.00%	0.00%	5.56%	3.33%
	BBB	0.00%	0.00%	40.00%	40.00%	0.00%	0.00%	0.00%	20.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2006		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	96.55%	3.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	93.94%	6.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.96%	85.58%	3.85%	0.96%	0.00%	0.00%	7.69%	0.96%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

## Appendix IV: Static Pool Transition Matrix

### Cohort 1999 (3-year Static Pool) N=6

Year 0 to Year 1		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 2		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 3		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Cohort 2000 (3-year Static Pool) N=13**

Year 0 to Year 1		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 2		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	14.29%	85.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 3		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%
	A	0.00%	14.29%	71.43%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Cohort 2001 (3-year Static Pool) N=29**

Year 0 to Year 1		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 2		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	75.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	71.43%	4.76%	0.00%	0.00%	0.00%	23.81%	0.00%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 3		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	75.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	57.14%	4.76%	0.00%	0.00%	0.00%	38.10%	0.00%
	BBB	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Cohort 2002 (3-year Static Pool) N=13**

Year 0 to Year 1		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 2		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	12.50%	87.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 3		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	12.50%	87.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Cohort 2003 (3-year Static Pool) N=15**

Year 0 to Year 1		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of-Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 2		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of-Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	83.33%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 3		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of-Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	33.33%	16.67%
	BBB	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Cohort 2004 (2-year Static Pool) N=15**

Year 0 to Year 1		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	93.33%	0.00%	0.00%	0.00%	0.00%	0.00%	6.67%
	BBB	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Year 0 to Year 2		End-of-Year Rating								
		AAA	AA	A	BBB	BB	B	C	Withdrawn	Default
Beginning-of Year	AAA	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AA	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	A	0.00%	0.00%	76.67%	3.33%	0.00%	0.00%	0.00%	10.00%	10.00%
	BBB	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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