DefaultStudy

2011 Default Statistics and Rating Transition Rates

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INTRODUCTION

Several negative events occurred in 2011, starting from the eruptions of political turmoil in several Middle Eastern and North African countries, the earthquakes and tsunami in Japan, the European debt crisis, and the heavy flooding in Thailand. These negative incidents affected both the global economy and the Thai economy. The Thai economy showed only slight growth of 0.1% in 2011, due to a significant drop in exports and disruptions in economic activities in the last quarter of 2011, resulting from the flood. The National Economic and Social Development Board (NESDB) forecasts that the Thai economy in 2012 will grow by 4.5%-5.5%, as businesses recover and government spending rises. The growth will come off of a lower base in 2011. However, TRIS Rating expect much of the government spending and firms' capital expenditures will be spent on rehabilitation and prevention measures. Thus, there will not be many changes in efficiency and/or productivity in the private sector this year.

In 2011, several companies rated by TRIS Rating faced difficulties. Some were hit by the flood crisis while some export-related companies were affected by the European debt crisis. Industrial estates and residential property developers were sectors that were the most affected by the flood. Consequently, four property developers were assigned "negative" outlooks, and two industrial estate companies were put on "negative alert" status. There were five downgrades and nine upgrades during 2011. Fifteen outlook revisions were issued, eight upwards and seven downwards. Since there was no issuer defaulted, the cumulative number of defaulters since 1994 has remained at 17. The one-, two-, and three-year cumulative default rates in 2011 declined to 2.0%, 4.3%, and 6.5% from 2.2%, 4.8%, and 7.4% in 2010, respectively.

The amount of new bonds issued and registered with the Thai Bond Market Association (ThaiBMA) in 2011 was Bt254,203 million, a 3.7% drop from the previous year. However, in 2012, several companies will need more capital for rehabilitation and investments in flood preventive projects. In addition, several commercial banks issued subordinated debentures in early 2012 to serve their funding needs and strengthen their capital bases. The inflation rate in Thailand is expected to go up this year due to rising oil prices and a minimum wage hike. However, the Bank of Thailand (BOT) is expected to maintain the policy rate at around 3% in order to facilitate economic growth during a tough time.

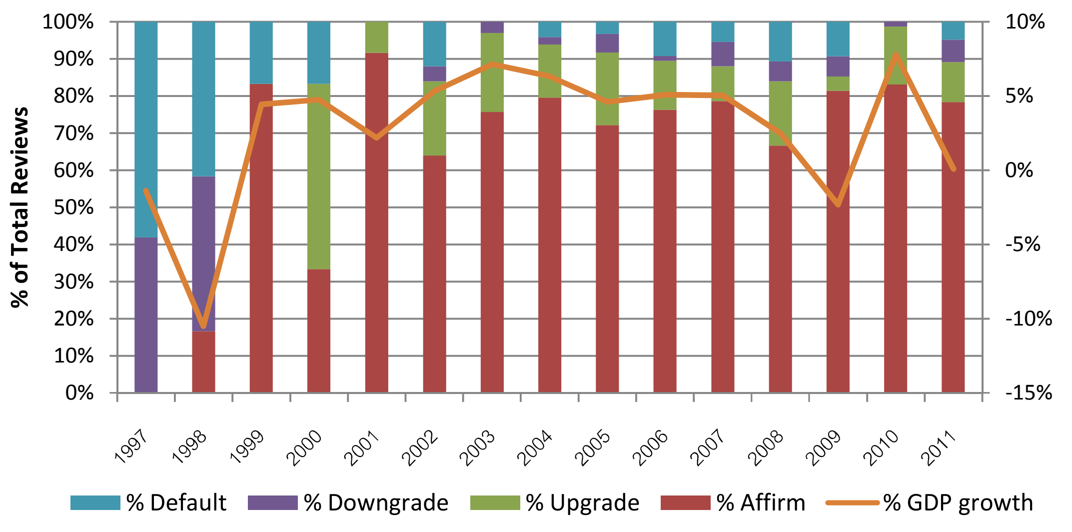
RATING ACTIONS IN 2011

The Thai economy started 2011 with a good momentum. Although several negative factors developed during the year, such as political turmoil in several Middle Eastern and North African countries, the earthquakes and tsunami in Japan, and the European economic crisis, the Thai economy still grew by 3.2% year-on-year (y-o-y) in the first nine months of 2011. However, the flood crisis in Bangkok and several central region provinces caused gross domestic product (GDP) in the 4th quarter of 2011 to drop sharply by 9%. As a result, GDP grew by only 0.1% for the full year.

- **Downgrades increased significantly in 2011**

In 2011, TRIS Rating publicly announced the ratings of 96 companies, of which 13 companies were new clients. The number of corporate issuers was 68, while the number of financial institution issuers was 28. Four issuers withdrew their ratings during the year, comprising one corporate issuer and three financial institution issuers. There were nine upgrades, five downgrades, 15 changes in outlooks, and three CreditAlerts. The number of downgrades in 2011 was relatively high compared with only one downgrade in 2010. Eight issuers received outlook upward revisions and seven received outlook downward revisions. The one-year stability rate of publicly announced ratings in 2011 (excluding new ratings) was 82.3%; of the remainder, 11.4% were upgraded and 6.3% were downgraded. Three issuers were downgraded because of deteriorating operating performances and increased financial leverage due to overinvestment. Two companies were downgraded due to their weakening operating performance as a result of the global economic crisis.

Chart 1: Proportion of Rating Changes[1] and GDP Growth (1997-2011)



Sources: 1) TRIS Rating
2) National Economic and Social Development Board (NESDB)

[1] Proportions of rating changes as a percentage of the total number of reviewed companies or issuers, rated by TRIS Rating, are publicly announced by the end of each year.

The upgrades and upward outlook revisions were distributed among various business segments, while the downward outlook revisions were concentrated in the property development segment. Most property developers reported significant drops in operating performance during the last quarter of 2011. Several property developers, which concentrate in the low-rise housing segment, were directly affected by the flood. In 2012, property developers that focus on the high-rise segment are expected to recover faster than companies that concentrate on low-rise housing in the previously flooded areas. A government tax incentives program is expected to slightly improve the demand for housing. However, soft loans to help flood victims, provided by the BOT and commercial banks, will help stimulate the economy in the near term.

Table 1: List of Issuer Rating Changes Announced in 2011

NO.	Company	Sector	Rating Change		Rating Direction	Outlook Direction	CreditAlert
			From	To			
1	ADLC	Finance & Securities	A-/Stable	A/Stable	Upgrade		
2	AP	Property Development	BBB+/Positive	A-/Stable	Upgrade		
3	BGH	Health Care Services	A/Positive	A+/Stable	Upgrade		
4	BLS	Finance & Securities	A-/Stable	A-/Positive		Upward	
5	CENTEL	Tourism & Leisure	A-/Negative	A-/Stable		Upward	
6	CK	Property Development	BBB+/Negative	BBB/Stable	Downgrade		
7	CPF	Food & Beverage	A+/Positive	AA-/Stable	Upgrade		
8	DBSVT	Finance & Securities	A-/Negative	A-/Stable		Upward	
9	DTC	Tourism & Leisure	A-/Negative	BBB+/Stable	Downgrade		
10	Easy Buy	Finance & Securities					Negative
11	HLTC	Finance & Securities	AAA/Stable	AAA/Negative		Downward	
12	HMPRO	Commerce	A/Stable	A+/Stable	Upgrade		
13	ITD	Property Development	BBB+/Negative	BBB/Stable	Downgrade		
14	KK	Banking	A-/Stable	A-/Positive		Upward	
15	LALIN	Property Development	BBB/Stable	BBB/Positive		Upward	
16	MBK	Property Development	A-/Stable	A/Stable	Upgrade		
17	PF	Property Development	BBB-/Stable	BBB-/Negative		Downward	
18	PL	Finance & Securities	A-/Stable	A-/Positive		Upward	
19	PRIN	Property Development	BBB-/Stable	BBB-/Negative		Downward	
20	PS	Property Development	A/Stable	A/Negative		Downward	
21	QH	Property Development	A-/Stable	A-/Negative		Downward	
22	RATCH	Energy	AA-/Stable	AA/Stable	Upgrade		
23	RCL	Transportation & Logistics	BBB+/Negative	BBB/Negative	Downgrade		
24	Rojana	Property Development					Negative
25	SSI	Steel	BB+/Positive	BB+/Stable		Downward	
26	SST	Transportation & Logistics	BBB/Stable	BBB-/Negative	Downgrade	Downward	
27	STA	Agribusiness	BBB+/Positive	A-/Stable	Upgrade		
28	TICON	Property Development					Negative
29	TSFC	Finance & Securities	BB/Stable	BB+/Positive	Upgrade	Upward	
30	TRUE	Telecommunications	BBB/Negative	BBB/Stable		Upward	

Source: TRIS Rating
Note: See full names of issuers in Appendix II

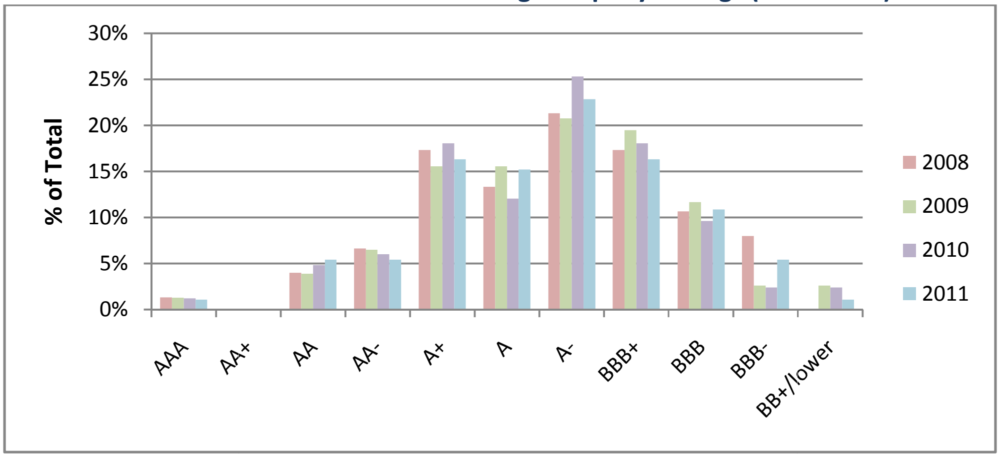
- **Ratings[2] were concentrated in the "A" rating category**

At the end of 2011, companies rated in the "A" category remained the largest proportion of TRIS Rating's portfolio, accounting for 54.3%% of publicly announced ratings (including new issuers but excluding withdrawals

[2] Issuer ratings for this study are based on stand-alone creditworthiness of the publicly announced issuers. For example, instead of using the issue ratings of fully guaranteed debentures, which generally reflect the creditworthiness of the guarantors, this study used the shadow ratings of issuers that are internally assigned to the issuers.

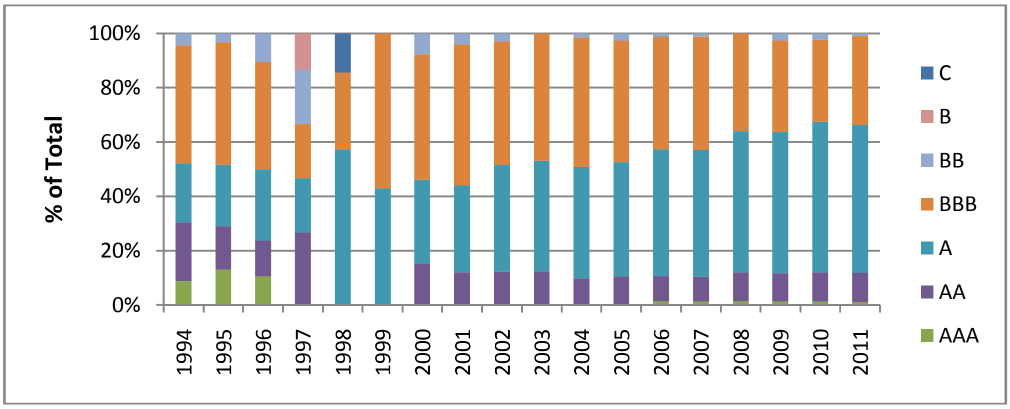
and defaults) close to the proportion of 55.4% in 2010. The second largest portion was the "BBB" rating category, at 32.6%, increased from 30.1% in 2010. The issuers rated in the lower range (i.e., "BB", "B", and "C") have consistently comprised a small portion of rated companies throughout TRIS Rating's history. The proportion is expected to decline further in the future. In 2011, only 1.1% of rated companies were assigned "BB" or below, down from 2.4% in 2010. The relatively small proportion of issuers in these lower rating categories was due to the lack of demand for junk bonds in the Thai debt market. Mutual funds face limitations on investing in non-investment grade bonds. Therefore, issuers with ratings lower than investment grades tend to keep their ratings private or withdraw their ratings. In 2011, one issuer rated at "BB+" withdrew its rating, leaving only one issuer rated in the "BB" category. However, the Securities and Exchange Commission (SEC)'s plan to promote the high yield bond ratings may shift the ratings toward lower end of the spectrum.

Chart 2: Distribution of Outstanding Company Ratings (2008-2011)



Source: TRIS Rating

Chart 3: Distribution of Reviewed Company Ratings by Category (1994-2011)



Source: TRIS Rating

- **Cumulative default rates declined**

The one-, two-, and three-year cumulative average default rates[3] for each rating category were calculated to estimate the probability of default during the one-, two-, and three-year period after a company was rated. As credit ratings should reflect the default risk, the higher the rating, the lower the probability of default should

[3] The calculation methodology of the three-year cumulative average default rate is explained in Appendix I.

be. However, due to both the small sample size and the severe financial crisis faced by all companies in 1997, the default rates of "AA" ratings were abnormally higher than the default rates of "A" ratings. As more samples are added in each year, the reliability of cumulative default rates is expected to improve. With no new default in 2011, the one-, two-, and three-year average cumulative default rates improved in all rating categories. The one-, two-, three-year average cumulative default rates declined to 2.0%, 4.3%, and 6.5% in 2011 from 2.2%, 4.8%, and 7.4% in 2010.

Table 2: Annual Default Rates[4] of Rated Companies Between 1997 and 2011

% Annual Default Rate	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
AAA	0%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0%	0%	0%	0%	0%
AA	33%	0%	n.a.	n.a.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
A	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%
BBB	50%	33%	0%	33%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%
BB	100%	100%	n.a.	n.a.	0%	n.a.	0%	n.a.	0%	0%	0%	n.a.	n.a.	0%	0%
B	n.a.	50%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C	n.a.	n.a.	100%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Investment grade*	31.6%	14.3%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0%	0%
Non-investment grade**	100%	67%	100%	n.a.	0%	n.a.	0%	n.a.	0%	0%	0%	n.a.	n.a.	0%	0%
Total	**35%**	**30%**	**17%**	**17%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**3%**	**0%**	**0%**	**0%**

Source: TRIS Rating
Note: n.a. "not available", means there is no issuer rated in the rating category.
** Investment grade issuers are those that are in the AAA, AA, A, and BBB rating categories.*
*** Non-investment grade issuers are those that are in the BB, B and C rating categories.*

Table 3: TRIS Rating's Average Cumulative Default Rates (CDR) for Long-term Ratings (Adjusted for Withdrawals)

One-, Two-, and Three-Year CDRs, Between 1994-2011

Rating	No. of Sample	One-year	Two-year	Three-year
AAA	14	0.00%	0.00%	0.00%
AA	81	1.23%	4.27%	7.96%
A	307	0.33%	1.14%	2.16%
BBB	285	2.81%	5.78%	8.97%
BB	14	14.29%	25.00%	25.00%
B	2	50.00%	100.00%	100.00%
C	1	100.00%	100.00%	100.00%
Total	**704**	**1.99%**	**4.26%**	**6.46%**

Source: TRIS Rating

[4] Annual default rate is the proportion of the number of defaulted issuers in a rating category divided by the total number of rated issuers in that particular rating category.

Corporate Rating Transitions Between 1994 and 2011

A rating transition is the probability of a given rating moving to another rating category within the specified time period. For example in Table 4, 93.8% of companies rated at “A” were still rated “A” by the end of a year, where as 3.3% were upgraded to “AA” and 2.6% were downgraded to “BBB”. For more than half of the rated companies in any particular rating category, their ratings remained unchanged by the end of that year. The ratings of investment-grade issuers were more likely to remain at the same level over a one-year period than the ratings of non-investment grade issuers. The highlighted cells of Table 4 contain the stability rates of each rating category, e.g., the stability rate is 78.57% for “AAA” issuers.

Table 4: Average One-year Transition Rates Between 1994 and 2011

Ratings	No. of Sample	AAA	AA	A	BBB	BB	B	C	D	Cumulative Withdrawals
AAA	14	78.57%	21.43%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2
AA	81	1.23%	91.36%	6.17%	0.00%	0.00%	0.00%	0.00%	1.23%	7
A	307	0.00%	3.26%	93.81%	2.61%	0.00%	0.00%	0.00%	0.33%	25
BBB	285	0.00%	0.00%	7.02%	87.37%	2.11%	0.70%	0.00%	2.81%	25
BB	14	0.00%	0.00%	0.00%	14.29%	71.43%	0.00%	0.00%	14.29%	8
B	2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	-
C	1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	-
Total	**704**									**67**

Source: TRIS Rating

Structured Finance Rating Transitions Between 1999 and 2011

Due to the relatively few number of structured finance transactions in the Thai market, TRIS Rating has rated only two transactions. The first transaction, LSPV Co., Ltd., involving an inventory securitization, was rated at “A-” in 1999 and was fully redeemed in 2002. The second transaction, DAD SPV Co., Ltd., is the securitization program backed by a 30-year lease and services payments agreement from the Treasury Department. The rating of the second transaction has been maintained at “AAA”.

Table 5: Average One-year Transition Rates for Structured Finance Ratings Between 1999 and 2011

Ratings	Issue-years	AAA	AA	A	BBB	BB	B	C	D
AAA	6	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
AA	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
A	2	0.00%	0.00%	100%	0.00%	0.00%	0.00%	0.00%	**0.00%**
BBB	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
BB	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
B	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
C	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Total	**8**								

Source: TRIS Rating

Appendix I

1. Methodology and Definition

1.1 Default Definition

TRIS Rating assigns a “Default” or “D” rating to an entity on the date when the entity misses a payment of a financial obligation, irrespective of whether the obligation issue is rated or unrated, according to the terms and conditions stipulated in the borrowing agreement.

1.2 Cumulative Default Rates

The default rate is the proportion of the number of defaulted issuers as a percentage of the total number of issuers in each rating category. Therefore, the default rate represents the default probability of companies in each particular rating category. The default rate tends to rise after each subsequent year.

The three-year cumulative default rate of any particular rating category is the probability that companies rated in that category will default within three years. Generally, the cumulative default rate tends to increase as time passes. The average three-year cumulative default rate is computed by subtracting the average three-year cumulative survival rate from 100%. The average three-year cumulative survival rate is derived by multiplying the first-year survival rate by the second-year and the third-year rates. The survival rate for any given year is calculated by subtracting the default rate of that year from 100%.

1.3 Rating Transition Rates

The rating transition rate is the percentage of rating changes from a particular rating category at the beginning of a given year to another rating category by the end of that year. To compute a one-year rating transition rate, issuers rated in each rating category at the beginning of the year are tracked for any rating changes by the end of the year.

2. Scope of the Study

Corporate Ratings

2.1 Credit Ratings Included in the Study

2.1.1 For the corporate ratings, the study uses ratings of entities (companies or issuers) rather than ratings of debenture issues (or debentures). The reason is to simplify the default rate calculation process, particularly for cases in which a company has issued several debentures that might receive different ratings due to different priorities of claims and expected losses in the case of default.

2.1.2 When TRIS Rating assigns a public rating to debentures but the issuer rating is not publicly announced, the rating of the issuer will be assigned internally and used in the study. Typically, the issuer will receive the same rating as the rating of its senior debentures. One exception is when the issuer has a substantial portion of secured debts that might put the holders of senior debentures (or unsecured debts) in a disadvantageous position. In such a case, the issuer rating might be one or two notches higher than the rating of its senior debts.

2.1.3 A debenture that is fully or partially guaranteed by a parent company or a group of guarantors may receive a rating higher than the stand-alone rating of the issuer. In this case, TRIS Rating will internally assign a stand-alone rating to the issuer and will use this rating for the study.

2.1.4 The study period covers ratings from the first year of TRIS Rating's operation in 1993 until year-end 2010. The number of rated companies at the end of each year will be recorded as the static pool of the following year. For example, rated clients at the end of 1993 are recorded as the 1994 pool.

Securitization Ratings

2.1.5 In this paper, TRIS Rating also provides the one-year rating transition rates of securitization securities. For the securitization securities ratings, TRIS Rating uses the ratings of the debentures or a series of debentures issued under the same program.

2.1.6 In this section, TRIS Rating will include rating transition rates across all securitization securities, e.g., asset-backed securities (ABS), collateralized debt obligations (CDO), commercial mortgage-backed securities (CMBS), and residential mortgage-backed securities (RMBS).

2.2 Company Ratings Excluded from the Study

2.2.1 *Ratings that are not publicly announced*

Ratings assigned by TRIS Rating can be categorized into those that are publicly announced and those that are kept private, based on an issuer's wishes.

2.2.2 *Structured finance ratings*

This category includes ratings of project finance instruments, such as Khanom Electricity Generating Co., Ltd. (KEGCO), and partially- or fully-guaranteed debentures.

2.2.3 *Local government ratings*

A crucial factor in determining the rating of a local government organization is the relation between the local and the central government. As such, the local government rating can deviate significantly from its stand-alone rating.

2.3.4 *Ratings that are withdrawn in the specific period*

For example, a company that was initially rated by TRIS Rating in mid-1994 but withdrew its rating in 1997 will be included in the static pools for 1995 and 1996 but not 1997.

2.3 Data Used to Calculate Default Rates

Static pools are established to represent groups of samples for the study. In any given year, a static pool includes all entities with active ratings at the beginning of a year that remain rating clients at the end of a year. For example, there were 20 issuers rated by TRIS Rating on 1 January 1995 and all 20 remained clients through 31 December 1995. The 1995 static pool comprised 20 issuers and the default record of these 20 issuers would be tracked in each subsequent year.

For a given year, the pool is static because no issuer is taken out of the pool even though the issuer may subsequently withdraw its rating. For example, Dhana Siam Securities Co., Ltd. (DS) was initially rated in 1993 but withdrew its rating in 1997, shut down operations, and defaulted on 14 August 1998. In this circumstance, DS was included in the static pool for 1994, 1995, and 1996, but not for 1997. The subsequent default of DS in 1998 was counted as a two-year default for the 1996 static pool, a three-year default for the 1995 static pool, and a four-year default for the 1994 static pool.

3. Database Limitations

The corporate debenture market in Thailand is considered to be at a developing stage. The total value of corporate bonds issued accounted for about 20% of the total outstanding value of the Thai bond market. The bond market is largely dominated by debt instruments issued by the government, the Bank of Thailand, and state enterprises. These debt instruments are not required by law to have credit ratings. As a result, the number of TRIS Rating's clients is considerably less than those of the long-established international rating agencies.

One problem with the limited sample size is that it exaggerates the default rate statistics, as the number of observations in each rating category is used as the denominator to calculate the default rate. Hence, the fewer the observations in any particular rating category, the higher the default rate.

4. Impact of the Financial Crisis on the Cumulative Default Rates

The financial crisis in 1997 and 1998 forced the government to use the managed float exchange rate system. This action raised the value of foreign denominated debts in terms of local currency, and thus the credit risk, of many financial and non-financial companies. As shown in Table 2, the annual default rates of companies rated by TRIS Rating between 1997 and 1998 were unusually high at 35% and 30%, respectively. The annual default rate of 33% in the "AA" rating category in 1997 was the result of a default by a financial institution that was ordered by Bank of Thailand to cease operations. The default rate is thus overstated because of the relatively small number of issuers rated in the particular rating category. In 1997, there were only three companies in the "AA" rating category and 10 companies rated "BBB". The default of one company rated "AA" and five companies rated "BBB" made the annual default rates equal to 33% and 50% in these two rating categories in 1997. Moreover, five out of six defaulting issuers in 1997 were finance companies that defaulted after they were ordered to stop operations by the Bank of Thailand.

Appendix II

Full Names of Issuers

Abbreviation	Company Name
ADLC	Ayudhya Capital Auto Lease PLC
AP	Asian Property Development PLC
BGH	Bangkok Dusit Medical Services PLC
BLS	Bualuang Securities PLC
CENTEL	Central Plaza Hotel PLC
CK	CH. Karnchang PLC
CPF	Charoen Pokphand Foods PLC
DBSVT	DBS Vickers Securities (Thailand) Co., Ltd.
DTC	Dusit Thani PLC
Easy Buy	EASY BUY PLC
HLTC	Honda Leasing (Thailand) Co.,Ltd.
HMPRO	Home Product Center PLC
ITD	Italian-Thai Development PLC
KK	Kiatnakin Bank PLC
LALIN	Lalin Property PLC
MBK	MBK PLC
PF	Property Perfect PLC
PL	Phatra Leasing PLC
PRIN	Prinsiri PLC
PS	Pruksa Real Estate PLC
QH	Quality Houses PLC
RATCH	Ratchaburi Electricity Generating Holding PLC
RCL	Regional Container Lines PLC
Rojana	Rojana Industrial Park PLC
SSI	Sahaviriya Steel Industries PLC
SST	Sub Sri Thai PLC
STA	Sri Trang Agro-Industry PLC
TICON	TICON Industrial Connection PLC
TSFC	TSFC Securities Ltd.
TRUE	TRUE Corporation PLC

Source: TRIS Rating

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