# Choosing the Companies within NUS-RMI's Selected Coverage of Individual PD

--Asian 1000 and North American 600

#### Introduction

NUS-RMI's Credit Rating Initiative focuses on rating publicly-listed companies within US, Canada, and 12 Asian economies consisting of Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, the Philippines, Singapore, South Korea, Taiwan and Thailand. The NUS-RMI Asian 1000 and North America 600 companies represent a sampled showcase of the company ratings derived from this initiative.

#### **Objectives**

We adhere to 3 main criteria when selecting the companies to be included in the initiative:

- 1. To have a representative sample of companies that reflects the makeup of companies within the sectors of interest.
- 2. To display the range of NUS-RMI's credit ratings that characterizes the credit outlook for companies.
- 3. To capture the attention of the market audience through a sampling of noteworthy companies within different sectors.

#### **Selection Methodology**

The selection process begins by determining the number of companies in each economy. The number of companies is determined according to the size of each economy. To prevent under-representation of smaller economies, the number of companies representing an economy cannot fall under a pre-allocated amount. With the number of companies to be selected from each sector determined, the companies are further allocated proportionally according to the size of each industry sector within that economy. Finally the *N* largest companies in each industry sector are selected based on the market capitalization. This process is described in detail as follows:

#### Allocation of companies to individual economies

A total number of 1000 companies from Asian 12 economies, 500 from the US, and 100 from Canada was first determined.

Regarding the allocation of the 1000 companies from Asia, in order to prevent under-representation of companies from smaller economies, a minimum allocation of 30 companies to each of the 12 Asian economies were first implemented. The remaining 640 companies were then allocated proportionally to the size of each economy. The size of an economy was determined using the average market capitalization of its publicly listed companies<sup>1</sup>. Rounding to the nearest integer, we obtained the company list containing 1004 companies.

<sup>&</sup>lt;sup>1</sup> We firstly computed the daily average market capitalization in the period from 1 June 2009 to 31 May 2010. Only companies that were domiciled in this economy with at least 50 trading days in this period were included in the

#### Allocation of companies within each economy

We used average market capitalization of each industry sector as the weighting to determine the allocation of companies within each economy<sup>2</sup>. The Bloomberg Industry Classification Standard (BICS) was used to classify the industry sectors. This taxonomy contains 13 sectors, namely, Asset Backed Securities, Basic Materials, Communications, Consumer cyclical, Consumer non-cyclical, Diversified, Energy, Financial, Funds, Government, Industrial, Technology and Utilities. Companies in Asset Backed Securities, Funds, or Government sector were excluded in our sample because of their different nature from corporates. Our rating efforts focused on the companies in the remaining 10 industry sectors.

#### Selection of companies in each industry sector

Within each industry sector in an economy, if the number of companies to be selected had been determined to be N in the previous step, then the N largest companies by average daily market capitalization were chosen to be included in the NUS-RMI Asian  $1000^3$ .

#### **Exclusion of selected companies**

Finally, if any of the companies selected in this way had a market capitalization of less than USD 100 million (there was one such violation after the first three steps), we delete this company from our list. Additionally, we examined the companies of which trading was suspended on 31st May, 2010 (there were four such companies). There was one company that was suspended for possible delisting. We removed this company from our list. Finally, we discovered that the financial information for one company was not available because this company was in accounting fraud and under investigation. We removed this company from the list as well.

In summary, the above selection process is demonstrated in Figure 1. The final sample of firms with company forecast available on CRI website includes 1000 companies from 12 Asian economies, 500 companies from US and 100 companies from Canada. The detailed distribution of the selected 1600 companies is shown on Figure 2. Figure 3 shows the industry breakdown of the selected companies in each of the economies.

sample. If a company does not have a market capitalization for a particular day, then we use the previous value unless a company event (e.g. merger) has occurred that gives reason not to use the previous market capitalization. We then took the overall average across the period to obtain the average market capitalization data for each economy for the comparison purpose.

<sup>&</sup>lt;sup>2</sup> The calculation of industry average market capitalization for Asian companies follows the same steps as in the calculation of average market capitalization for each economy. Please see footnote 1. The average daily market capitalizations for companies from US and Canada from 1 Nov 2009 to 31 Oct 2010 were used.

<sup>&</sup>lt;sup>3</sup> Due to rounding issues in the industry allocation step, 501 companies were first chosen for US. The smallest company is then removed to get a list of 500.

Figure 1: Selection Process of the NUS-RMI Asian 1000 and North American 600 Companies

#### Step One: Allocation of companies to each economy

Pre-allocate 1000 to Asian 12 economies, 500 to US, and 100 to Canada. Based on market cap of each Asian economy, determine the number of companies from each economy to be selected.

#### Step Two: Allocation of companies within each economy

Within an economy, based on market cap of each industry, determine the number of companies N from each industry to be selected.

#### Step Three: Selecting comapanies in each industry sector

Within each industry in an economy, based on market cap of each company, determine the N largest companies to be selected.

#### **Step Four: Excluding certain companies:**

Remove companies with market cap less than USD100 million or suspended for possible delisting or no model output due to insufficient data.

Figure 2. Distribution of the Selected Companies (Updated on 13 Dec 2010)

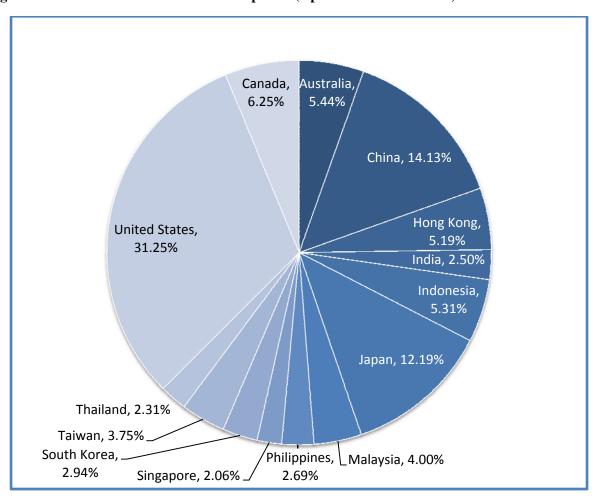
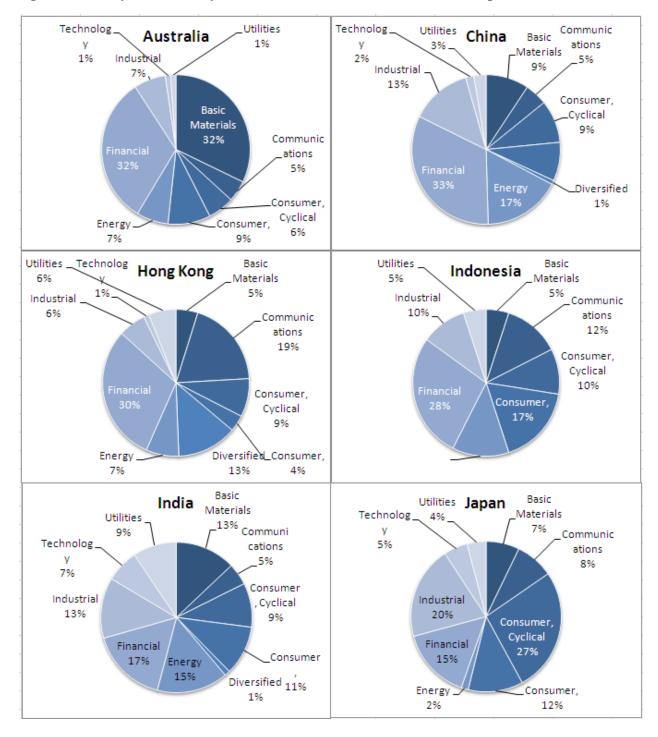
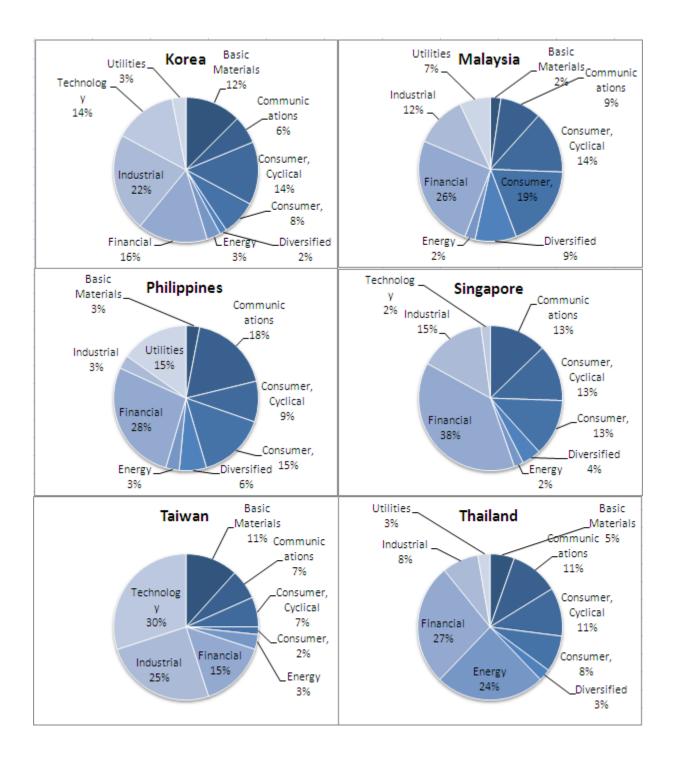
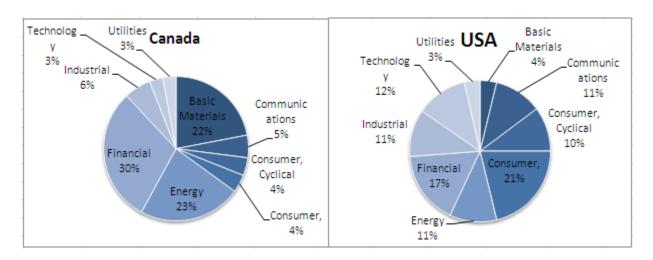


Figure 3 Industry and Economy Distribution of the NUS-RMI CRI 1600 (Updated on 13 Dec 2010)







#### **Annual Update of the Selected Companies**

The current list of companies will be reviewed once a year, taking average market cap for the previous year to monitor any major changes in the list. Examples of major changes include material changes in the market capitalization of an industry relative to peers due to new IPOs of major companies; material changes in the market capitalization of a country relative to peers due to macro-economic changes.

#### **Removal and Replacement of the Selected Companies**

Aside from the yearly review, a company can be removed if it is affected by a major event, such as bankruptcy, mergers, acquisitions, delisting from the stock exchange, or extended period of trading suspension. In the event of any of the above, the company will be replaced by the company with the next largest market capitalization in the economy.

#### **Notes:**

Date: Dec 11, 2010

Innitially, OTC-BB companies in the US and the TSX Venture Exchange companies in Canada were being considered in the calibration and aggregation of results. While these firms have similar reporting requirements as those listed on the larger exchanges, OTC-BB companies are formally considered as unlisted companies and we have decided to exclude them in model calibration and economy/sector aggregates. As well, the inclusion of this large number of small firms was affecting the model calibration and aggregation in a minor way. Since common perceptions of different economies are in terms of the large-cap and mid-cap companies, we have made the decision to include only the major exchanges in each economy, and exclude exchanges that have substantially lesser listing requirements.

# **Appendix 1: Distribution of the Selected Companies (Updated on 13 Dec 2010)**

Country	Country Total number of listed companies		Further allocation based on economy's average market cap	Total allocation	Percentage in the 1600 companies	
Asia	20531			1000	62.50%	
Australia	1885	30	57	87	5.44%	
China	2005	30	194	226	14.13%	
Hong Kong	1383	30	56	83	5.19%	
India	5211	30	56	40	2.50%	
Indonesia	422	30	10	85	5.31%	
Japan	3691	30	165	195	12.19%	
Malaysia	978	30	13	64	4.00%	
Philippines	251	30	3	43	2.69%	
Singapore	748	30	17	33	2.06%	
South Korea	1794	30	35	47	2.94%	
Taiwan	1622	30	30	60	3.75%	
Thailand	541	30	8	37	2.31%	
North America	5641			600	37.50%	
United States	States 4571		500		31.25%	
Canada	1070	100		100	6.25%	
Total	26172			1600	100.00%	

## Appendix 2: Industry and Economy Distribution of the NUS-RMI CRI 1600 (Updated on 13 Dec 2010)

	AUS	CHN	HK	IDN	IND	JPN	KOR	MYS	PHL	SGP	TWN	THA	CAN	USA
RMI coverage	87	226	83	40	85	195	64	43	33	47	60	37	100	500
Basic Materials	28	21	4	2	11	14	8	1	1		7	2	22	19
Communications	4	11	16	5	4	16	4	4	6	6	4	4	5	55
Consumer, Cyclical	5	21	7	4	8	52	9	6	3	6	4	4	4	51
Consumer, Non-cyclical	8	19	3	7	9	23	5	8	5	6	1	3	4	106
Diversified		2	11		1		1	4	2	2		1		
Energy	6	38	6	5	13	3	2	1	1	1	2	9	23	54
Financial	28	74	25	11	14	30	10	11	9	18	9	10	30	84
Industrial	6	30	5	4	11	39	14	5	1	7	15	3	6	54
Technology	1	4	1		6	10	9			1	18		3	59
Utilities	1	6	5	2	8	8	2	3	5			1	3	18

### **Appendix 3: Change of the Selected Companies (Updated on 6 Jan 2011)**

Effective Date	Replaced Companies	Domicile	Reason	Action	
May 31 <sup>st</sup> , 2010	Neosemitech Corporation	South Korea	It had been suspended since 24 Mar, 2010 and faced possible delisting because of audit opinions	Removed	
	Satyam Computer Services Ltd	India	It was under investigation by the market regulator after its chairman stepped down over an accounting scandal in January 2009	Removed	
July 6 <sup>th</sup> , 2010	Eternal Energy Pcl	Thailand	Market capitalization less than USD 100MN	Replaced by Indorama Ventures Pcl	
Sep 2 <sup>nd</sup> , 2010	Indorama Ventures Pcl	Thailand	Decided not to replace Eternal Energy Pcl with Indorama Ventures Pcl	Removed	
Oct 1 <sup>st</sup> , 2010	Denway Motors Ltd	Hong Kong	Delisted from the stock market on 26 <sup>th</sup> Aug, 2010	Replaced by Kingboard Chemical Holdings	
	Arrow Energy Ltd	Australia	Delisted from the stock market on 26 <sup>th</sup> Aug, 2011	Replaced by Asciano Ltd	
	Tanjong PLC	Malaysia	Delisted from the stock market on 29 <sup>th</sup> Sep, 2010	Replaced by Parkson Holdings Berhad	
	China Enterprise Co Ltd	China	Suspended since 15 <sup>th</sup> Mar, 2010	Removed	
	Henan Shuanghui Investment & Development Co Ltd	China	Suspended since 20 <sup>th</sup> Mar, 2010	Replaced by Agricultural Bank of China Ltd	

Effective Date	Replaced Companies	Domicile	Reason	Action
	Parkway Holdings Ltd	Singapore	Delisted from the stock market on 24 <sup>th</sup> Nov, 2010	Replaced by Flextronics International Ltd
Dec 6 <sup>th</sup> , 2010	Enterprise GP Holdings LP	United States	Delisted from the stock market on 23 <sup>rd</sup> Nov, 2010	Replaced by General Motors
	Fannie Mae	United States	Moved to OTC market on 8 <sup>th</sup> Jul, 2010	Replaced by DTE Energy Company
Dec 13 <sup>th</sup> , 2010	Petrominerales Ltd	Canada	Country of domicile changed to Colombia	Replaced by TransAlta Corp
Jan 3 <sup>rd</sup> , 2011	Siam City Bank PCL	y Bank Delisted from the stock market on 13 <sup>th</sup> Dec, 2010		Replaced by Indorama Ventures PCL
Feb 8 <sup>th</sup> , 2011	Andean Resources Ltd	Australia	Delisted from the stock market on 6 <sup>th</sup> Jan, 2011	Replaced by Sims Metal Management Ltd
March 1 <sup>st</sup> , 2011	McAfee, Inc. United States		Acquired by Intel Corporation and delisted from the stock market on 1 <sup>st</sup> March 2011	Replaced by CF Industries Holdings Inc