Credit Ratings as a *Public Good* – The RMI Credit Research Initiative

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Outline

- **Credit risk and risk mitigation**

- **The "sell-side" credit rating practice and the credit rating reform**

- **A *public good* view of credit rating**

- **The Risk Management Institute's non-profit credit research initiative**

Credit risk and risk mitigation

- **Different obligors present different risks**

  – **Sovereigns, supranational organizations, big corporates, SMEs, consumers, and SPVs.**

  – **The natures of risk are different which require different approaches to credit risk analysis.**

- **Different credit products call for different default definitions and are influenced by different credit events.**

  – **Is the Greek default a default?**

  – **Is a downgrade to non-investment grade important?**

Credit risk and risk mitigation (continued)

- **Business conventions**
  - Use credit ratings to set collaterals
  - Use credit ratings/scores to make lending decisions

- **Regulatory authority's stance**
  - Use credit ratings to determine eligibility for pension investments
  - Use credit ratings to set capital requirements
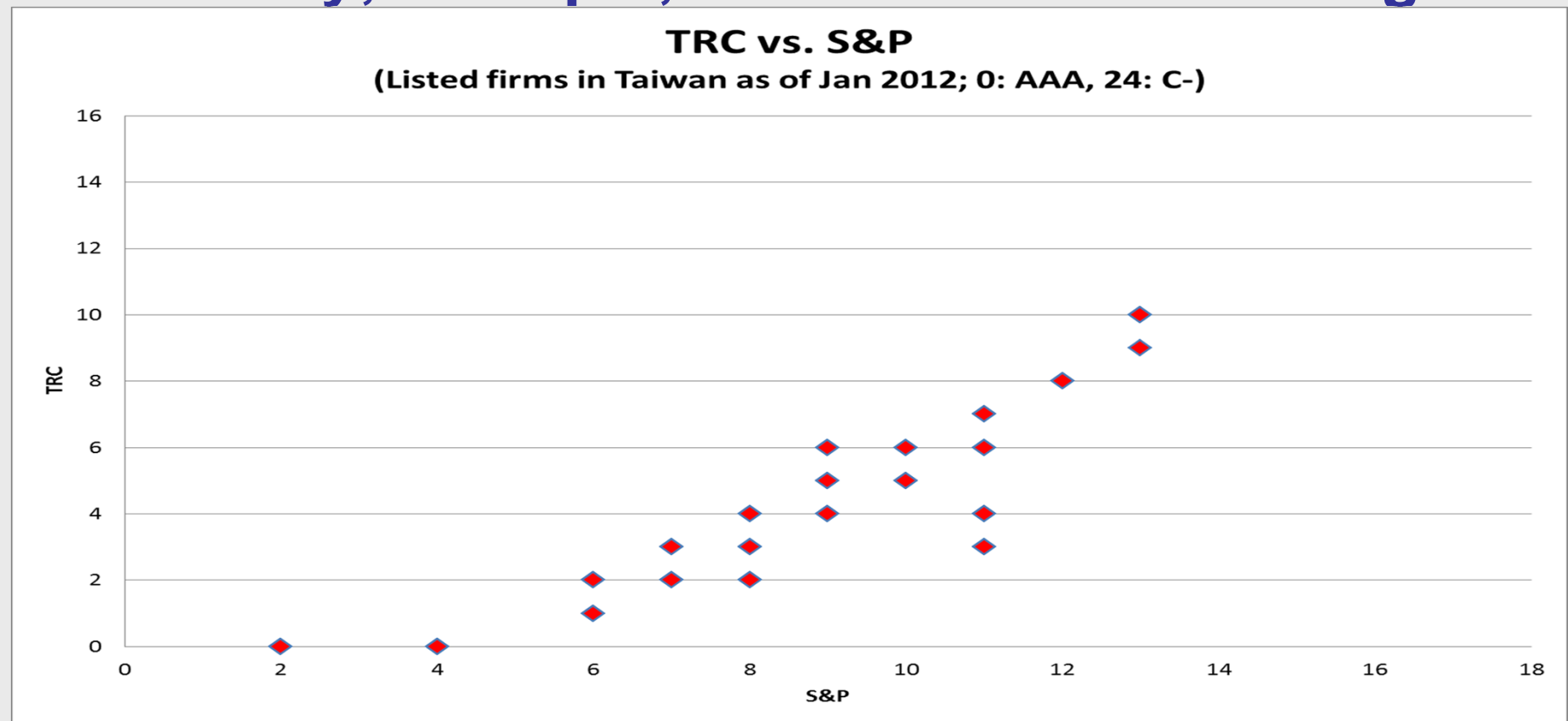
"Sell-side" credit rating and reform

- **Credit rating services can be classified into "buy-side" and "sell-side".**

- **"Buy-side" credit rating is basically based on the user-pay principle, and needs no reform.**

- **"Sell-side" credit rating is structured on the issuer-pay principle; for example, Moody's, S&P and Fitch. From the public interest point of view, it has been demonstrated to be a seriously flawed business model.**

"Sell-side" credit rating and reform (continued)

- **Because major CRAs are for-profit, they need to keep rating methods proprietary which can hinder methodological developments.**

- **Major CRAs have been reluctant to downgrade a firm in distress (e.g., Enron, Lehman, Tokyo Electric Power).**

- **The business model of CRAs is based on the issuer-pay principle. This could lead to moral hazard and rating shopping.**

- **The CFA Institute conducted a survey in 2008. 11% of the 1946 respondents claimed to have personally witness rating changes due to external pressure.**

"Sell-side" credit rating and reform (continued)

- **Ratings by different CRAs are not comparable. This even applies to some CRA and its subsidiary; example, S&P and Taiwan Ratings.**

TRC vs. S&P
(Listed firms in Taiwan as of Jan 2012; 0: AAA, 24: C-)

"Sell-side" credit rating and reform (continued)

- **The US Dodd-Frank Act (July 2010) (1) strips off the legal immunity of CRAs so that they can be sued for the quality of ratings, and (2) removes regulatory references to commercial credit ratings.**

- **According to the joint proposal by the Fed, FDIC and OCC (Dec 2011), the regulatory capital for a US bank's sovereign bondholding will be assessed using the OECD Country Risk Classification (0 being the best and 7 the worst).**

"Sell-side" credit rating and reform (continued)

What is the OECD Country Risk Classification?

- **The Country Risk Assessment Model (CRAM) produces a quantitative assessment of country credit risk based on three groups of risk indicators (the payment experience of the Participants, the financial situation and the economic situation).**

- **A qualitative assessment of the CRAM results by country risk experts from OECD members, considered country-by-country to integrate political risk and/or other risk factors not taken (fully) into account by the CRAM.**

Accordingly, the final country risk classifications are achieved through a thorough discussion amongst experts and a consensus-building process.

Source: OECD website as of February 5, 2012

"Sell-side" credit rating and reform (continued)

Country Risk Classifications of the Participants to the Arrangement on Officially Supported Export Credits

Valid As of: 27 January 2012

	Country Code ISO Alpha 3	Country Name [1]		Classification	
		English	Français	Previous	Current Prevailing
1	AFG	Afghanistan	Afghanistan	7	7
2	ALB	Albania	Albanie	6	6
41	CHN	China	Chine	2	2
42	TWN	Chinese Taipei	Taipeh chinois	1	1
72	DEU	Germany	Allemagne	0	0
73	GHA	Ghana	Ghana	5	5
74	GRC	Greece	Grèce	0	0
154	POL	Poland	Pologne	0	0
155	PRT	Portugal	Portugal	0	0
200	GBR	United Kingdom	Royaume-Uni	0	0
201	USA	United States	États-Unis	0	0

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A *public good* view of credit rating

- **Tinkering with technical aspects of the current "sell-side" credit rating business model won't make any real difference in the end.**

- **We must change the dominance of the current for-profit credit rating business model.**

- **I contend that "sell-side" ratings should be viewed as a "public good".**

A *public good* view of credit rating (continued)

- **Envision a roadway system of a country that is entirely run as a for-profit business and is dominated by three players.**

- **Credit ratings are so essential to the functioning of the financial system that we must treat it as a basic financial infrastructure.**

- **A non-profit approach to "sell-side" rating makes sense.**

The NUS-RMI approach

NUS-RMI's Credit Research Initiative is to

- **Advance scientifically sound credit rating methodologies.**

- **Provide alternative, not-for-profit ratings on listed firms around the world.**

In addition to contributing to the infrastructure of the world financial system, we strive to

- **Promote NUS-RMI as a global credit risk research center.**

The NUS-RMI approach (continued)

- **RMI builds and maintains the rating research and production infrastructure – (1) a comprehensive data base of 90,000 listed firms globally (including delisted ones); (2) an advanced IT system and a team of implementation staff.**

- **Researchers from around the world have been invited to take part in the rating model development. Being not-for-profit, researchers will be able to keep their IP.**

The NUS-RMI approach (continued)

- **Researchers will share the common research infrastructure, but compete to get their models adopted for the RMI ratings. RMI will run parallel implementations for different rating models under consideration.**

- **The RMI rating model will remain current, evolutionary and organic, responding to continual suggestions and/or challenges.**

The NUS-RMI approach (continued)

- **Being a not-for-profit rating undertaking, the RMI rating methodology will be non-proprietary and completely transparent.**

- **Model selection will be based on the commonly accepted scientific principle – statistically superior on a common dataset. The selected model will be independently validated.**

- **Our rating model implementation will be free of ad hoc human judgment, apart from dealing with occasional data errors that are expected from time to time.**

The NUS-RMI approach (continued)

- **RMI has set up an internal management process to sign off responsibilities in order to ensure data and implementation integrity.**

- **There is no plan to set up an independent governing committee. Instead, quality assurance relies on millions of eyes watching much like Wikipedia.**

- **RMI will not apply for any officially sanctioned credit rating agency status. It will remain as a scientific pursuit, advancing rating methodology and offering alternative credit information.**

The NUS-RMI approach (continued)

- **RMI's CRI team**: development team, production team, validation team, market monitor team, and Global Credit Review, a total of around 30 staffs.

- **Volunteers**: 15 model development teams from around the world and over 100 credit analysts participating in repeated surveys.

- **IT system**: a 200+ computer grid and 3 GPU computers, and 2 data servers.

- **Data source**: electronically fed by Bloomberg, Reuters complemented by many research databases.

The NUS-RMI approach (continued)

- **The RMI rating system was released in July 2010 with a coverage of 12 Asian economies with over 17,000 listed firms.**

- **Daily updated default probabilities ranging from one month to two years ahead are provided. The current coverage includes over 28,000 active firms in Asia, North America and Europe. A complete world coverage is expected by the end of 2012.**

- **The rating model is based on Duan, Sun and Wang's (2011) forward default intensity model. True to the spirit of Wikipedia, the provisional credit rating method is meant to be challenged and improved.**

The NUS-RMI approach (continued)

- **Research findings from the CRI are released on a periodic basis via four different channels:**

  1) Daily updated probabilities of default (PDs) are available on the web portal at www.rmi.nus.edu.sg/cri.

  2) The *Weekly Market Brief* summarizes and comment on important market and regulatory developments.

  3) The *Quarterly Credit Report* provides market commentary relating market events and trends to the PDs output by the CRI.

  4) The annual publication: *Global Credit Review* provides information on credit market and state-of-the-art credit rating methodologies.

Screenshots of web portal

Screenshots of web portal (continued)

Screenshots of web portal (continued)

Screenshots of web portal (continued)

Thank you!

For more information, go to:

www.rmi.nus.edu.sg/cri

Feedback and enquiries:

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