

September 2014

Default Normalization and Exit Mechanism in China's Bond Market

Summary

- China's economy is transforming from being investment driven to demand driven. During this transformation, government spending decreases while household consumption increases. The sustainability of China's bond market will depend on structural changes in the economy, the construction of corresponding credit systems as well as the enhancement of financial services.
- The current capital markets are in need of more diversified financing alternatives to meet the funding needs of companies with different business natures. Companies obtaining implicit guarantee and policy support from the government have advantages in issuing bonds, but their inefficiency in business operations sometimes leads to credit events. The government, acting as implicit guarantor, then steps in to bailout the distressed bonds directly or indirectly.
- A mature bond market is a market which has issues of different credit levels, matching expected returns with expected risks. Market liberalization helps to identify risks and allow discrete defaults to occur so that the bond market can achieve sustainable development. Meanwhile, an exit mechanism, a settlement system for defaulted issues involving management organizations and professionals as well as legislation and regulation, has to be established.
- This report analyzes the scenarios of bond defaults and government bailouts, and then examines systematic risk in China. It also compares bankruptcy procedures in China and the U.S. in discussing the establishment of a default exit mechanism. Based on this analysis, we suggest introducing relevant legislation and regulatory systems to normalize defaults in China's bond market.

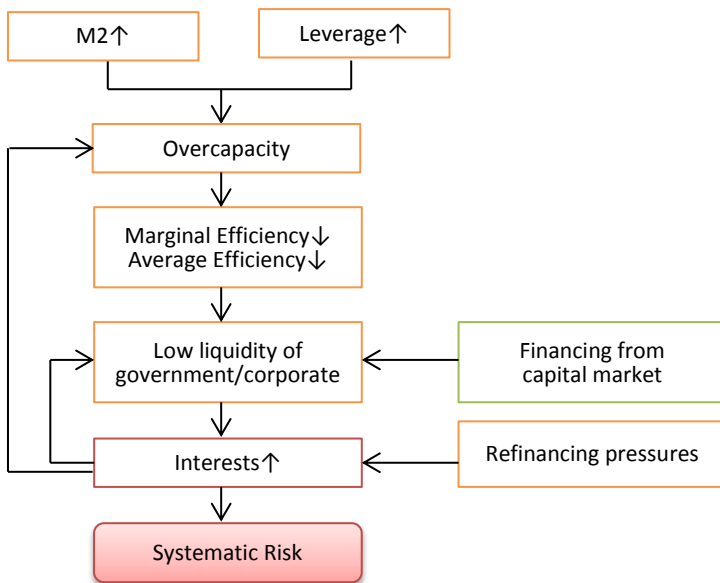
Normalizing Bond Defaults

In March 2014, China's domestic bond market experienced its first actual bond default over the last decade. Prior to the default of Chaori bond, all credit events were resolved by government bailouts. This default case signals changes in China's bond market, indicating a new trend towards market liberalization and default normalization.

(1) Refinancing Pressure and Systematic Risk

Credit risk in China’s bond market has been mounting, caused by excessive investments over the past 30 years (Exhibit 1). Increases in M2 and leverage reduced marginal returns of investments, and structural changes in the economy have led to tight liquidity in local governments, financing platforms and corporations. In May 2012, the average cost of financing reached 7.2%, and this high rate further weakened the ability to refinance.

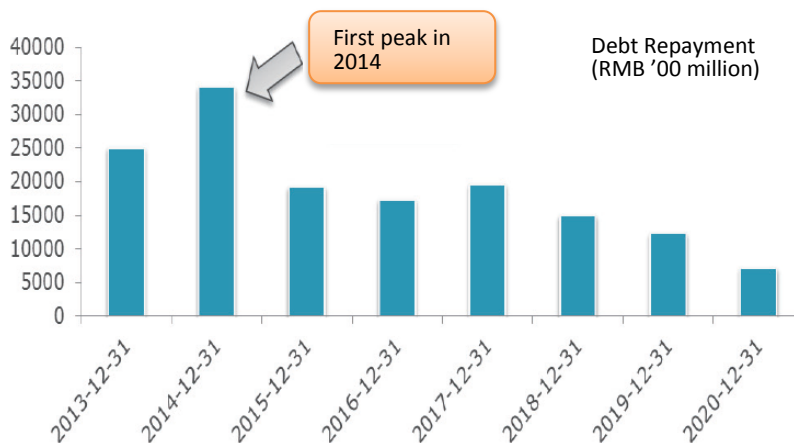
Exhibit 1: Emergence of Systematic Risk



Credit risk in China’s bond market has the following characteristics:

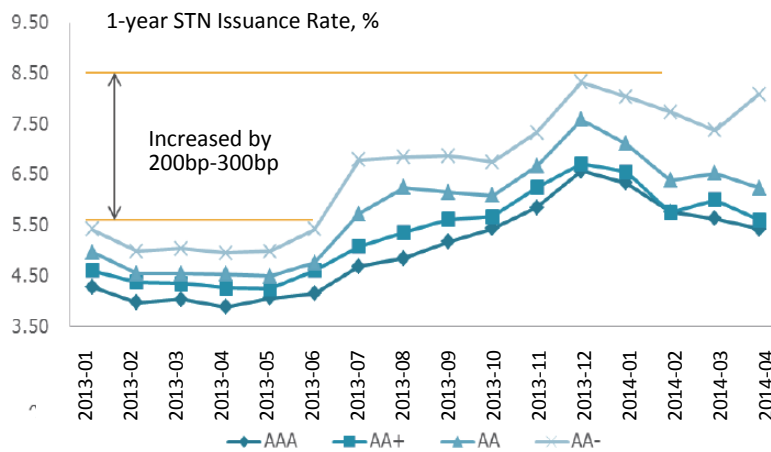
- *Refinancing pressure:* There will be a wave of bonds maturing up to 2020 with the first peak of bond redemption in 2014. Thus, the refinancing pressure in the year will be high.

Exhibit 2: Size of Matured Credit Bonds



- *Financing costs:* From 2013 to 2014, the issuing cost of Short-Term Notes increased by 300bps. Mismatches between risk and return and between fund and user have also accelerated risk.

Exhibit 3: Issuance Rates of Corporate Bond



- *Credit rating downgrade pressure:* The trend of credit rating downgrade for issue and issuer has continued since 2012. Most rating downgrades went to the high polluting, high energy consuming and overcapacity sectors.

Exhibit 4: Changes in Issue/Issuer Rating

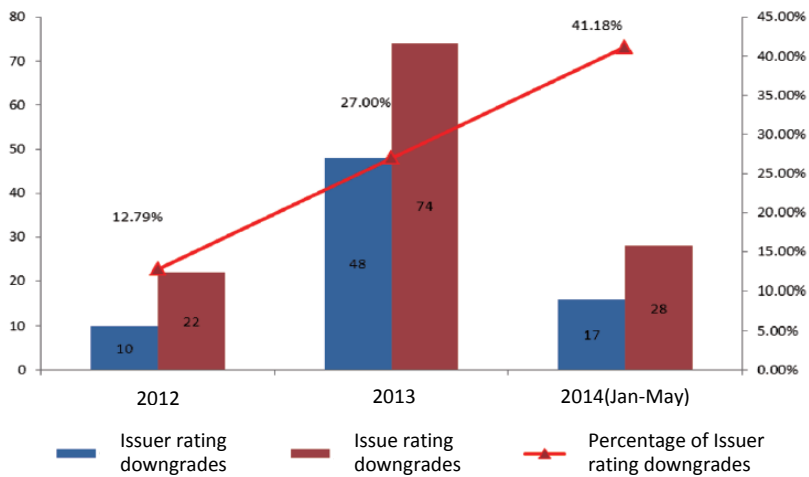


Exhibit 5: Industry Distribution of Rating Downgrades

2013		2014 (Jan-May)	
Industry	Number	Industry	Number
Coal	8	Mechanical equipment	5
Electrical equipment	7	Solar power	4
Steel	7	Chemical	3
Solar power	5	Electrical equipment	2
Textile	4	Steel	2
Nonferrous metals	4	Poultry and livestock	2
Auto	4	Wire and cable	1

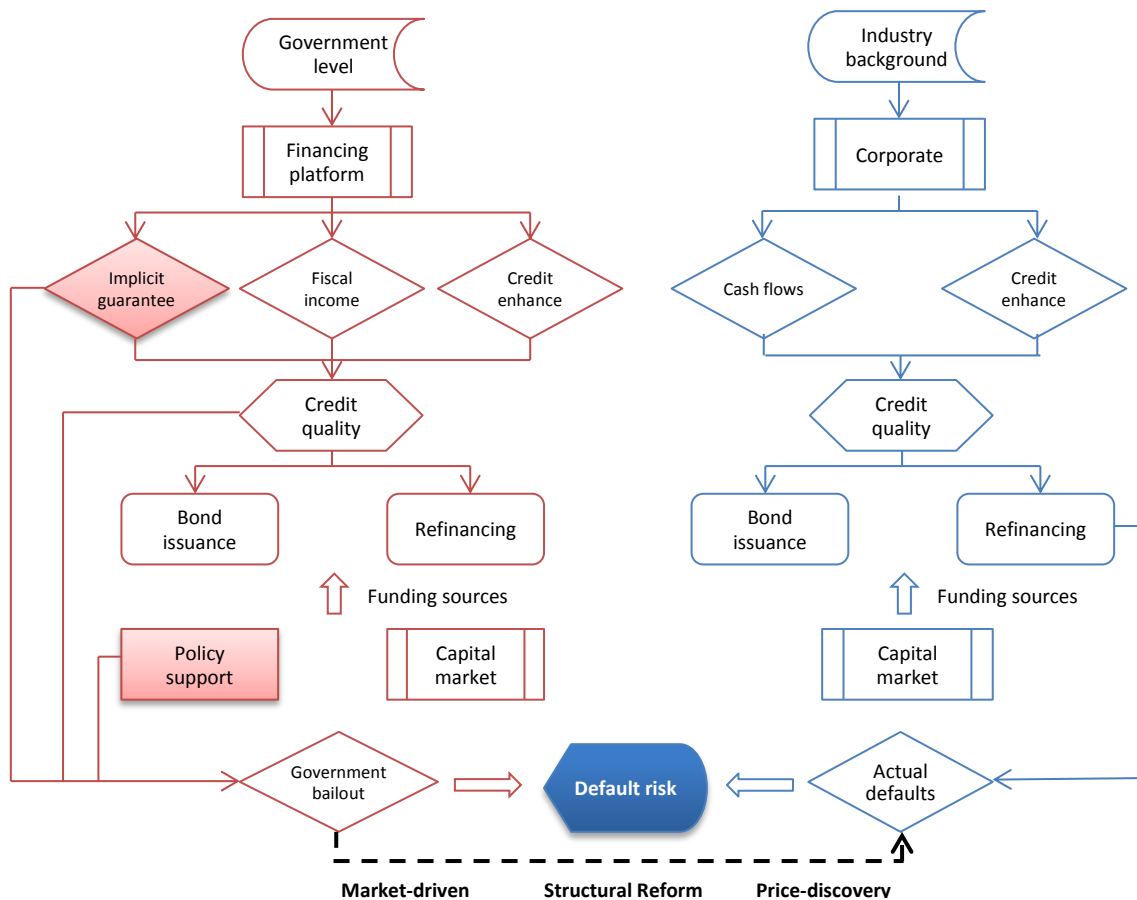
(2) Government Bailouts and Actual Defaults

Refinancing pressure, financing burden and rating downgrade reveal the high level of credit risk accumulated in China’s bond market. The actual default of Chaori bond coexisted with the government bailout for financing platforms. Only with market-driven defaults, can China’s bond market sustain and thrive in the long run.

The emergence of government bailouts and actual defaults in China’s bond market is illustrated in two columns in Exhibit 6. On the left-hand side, there are two problems associated with the financing platforms of local governments: implicit guarantee and policy support. This implies unilateral sentiments that when a credit event occurs, government bailout will come into effect. On the right-hand side, the credit quality of corporate bonds solely relies on the company’s cash flows and credit enhancement. Without government support, the issuer faces market risk so it has a higher probability of default.

Under structural reform, through implementing market-driven principles and price-discovery mechanisms, the bond market will develop along the dashed line as shown in Exhibit 6. Bond defaults will then become a normal phenomenon accepted by the general public.

Exhibit 6: No Default versus Actual Defaults



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(3) Market Discipline to Release Risk

Accumulated risks create a credit bubble. In order to avoid bursting credit bubble and to maintain the stability of the financial market, the risks should be released through default events or risk transmission methods.

The recent launch of government policies have achieved the following results: (i) releasing risk and allowing default through market operations; (ii) promoting consolidation and reorganization of economic entities; (iii) launching municipal bonds in a pilot scheme and separating local governments' credit risk from sovereign credit risk; and (iv) deregulating interest rates. The aim of these policies is to build a firewall that mitigates systematic risk.

Discrete default events help educate market participants, and will appear as a normal phenomenon. Following that, we need to establish a default exit mechanism.

Systematic Risk in China's Bond Market

The systematic risk in China's bond market is different from that of developed countries with mature bond markets. In the financial tsunami of 2008, the financial systematic risk of the U.S. subprime crisis stemmed from a highly developed bond market. Although the amount of subprime products was USD 1.2 trillion, the financial crisis spread out rapidly with a domino effect due to the complicated financial derivatives and maturity mismatches of the underlying assets. In addition, before the crisis, financial market participants were overconfident of their ability and competed to launch products while regulators were not clear about the imbedded risks. As a result, when Lehman Brothers collapsed, market participants lost confidence and overreacted to the market volatility, causing major damage to financial markets and real economies.

(1) Characteristics of China's Systematic Risk

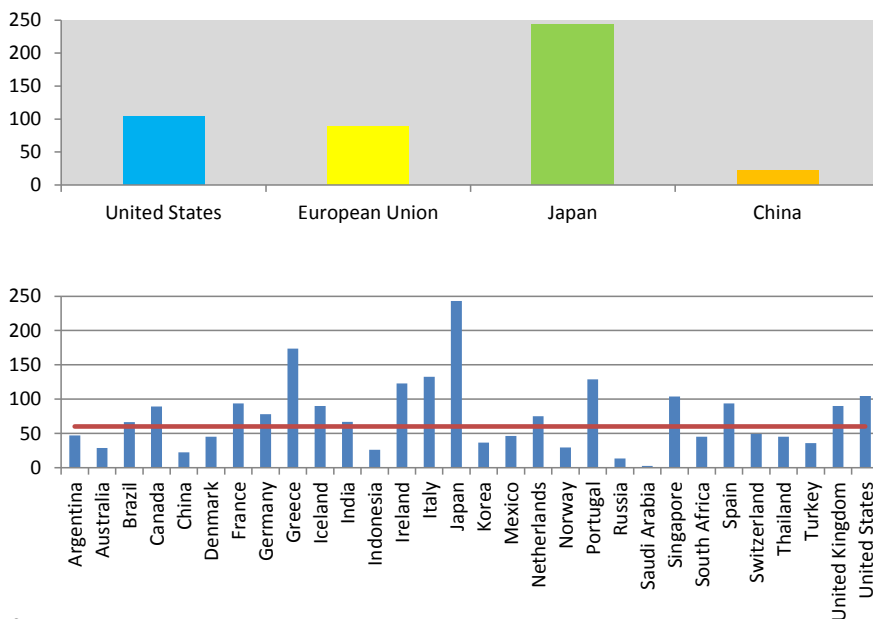
The government debt burden of selected countries is shown in Exhibit 7. The European Union sets a limit of debt-to-GDP at 60% as fiscal discipline, but some E.U. member countries such as Greece and Portugal have fallen out of this range. However, although some non-E.U. countries such as Japan and the U.S. also breached this threshold, they are still solvent owing to Japan's strong domestic demand for government bonds and the dominance of the U.S. dollar in international transactions. China's debt level lies far below 60%, standing at the level of about 25%.

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Exhibit 7: General Government Gross Debt / GDP (2013)



Source: IMF

Furthermore, when GDP grows faster than interest rates, a country can afford to issue more debt. Given the high economic growth rate and large size of the economy, China is able to issue a substantial amount of government debt.

From the above two aspects, size of government debt is not the reason for systematic risk in China.

(2) Systematic Risk and National Credit Utilization

To further interpret systematic risk in China, we analyzed the relationship between the extent of national credit utilization (and efficiency) and risk. In Exhibit 8, the X-axis is the utilization efficiency of national credit while the Y-axis is the extent of national credit utilization and the measurement of systematic risk.

(i) Optimal utilization of national credit and systematic risk

The utilization of national credit has the shape of Laffer Curve. The efficiency (on X-axis) increases as credit utilization (on Y-axis) increases until they meet at a point of optimal amount of credit utilization. The utilization of any amount exceeding this optimal point has lower efficiency, which means national credit is overused. If national credit is overused in the wake of government bailouts, risks will increase exponentially despite that no default actually occurs in the short term. Given the scarcity of national credit, the overreliance on government bailouts leads to mismatches between risks and returns.

(ii) Structural changes in the economy deferring trigger points of systematic risk

Since the economic reform and market opening 30 years ago, China's economic development has been mainly driven by exports and investments. Now, it is becoming demand driven and aims balancing all

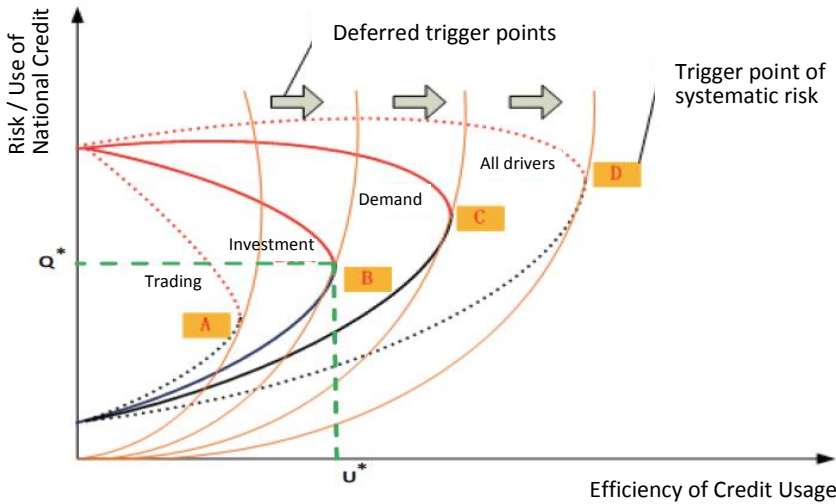
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economic drivers. During this transformation period, the optimal utilization amount varies. Hence, the Chinese government should control the use of national credit, balance between efficiency and risk, and let the invisible hand guide the market.

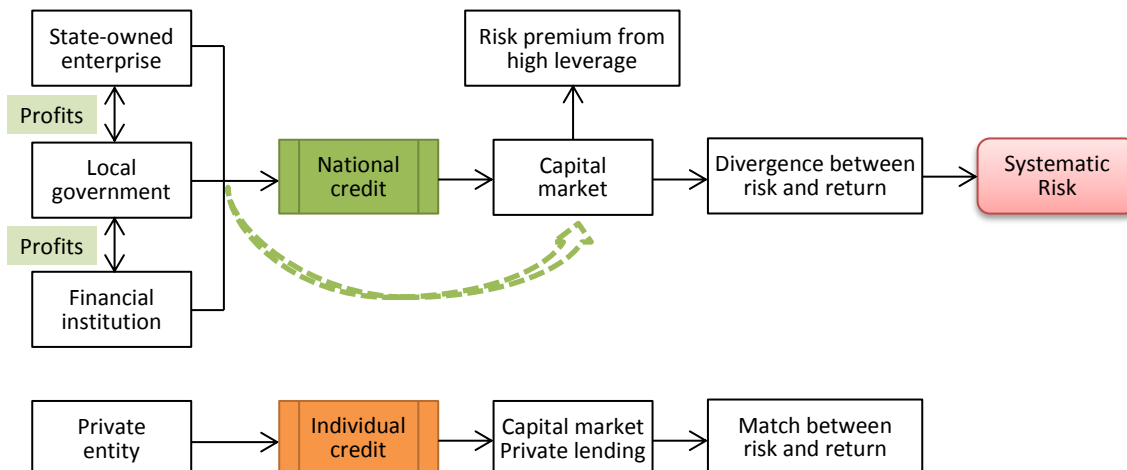
Exhibit 8: Relationship between National Credit and Systematic Risk



(iii) Bond issuers facing market risk without using national credit

By understanding the relationship between national credit and systematic risk, we expect a direct channel skipping the use of national credit (Exhibit 9). The major issuers in the bond market (state-owned enterprises, local governments and financial institutions) should obtain direct financing from the market instead of relying on national credit. For the financing methods of private entities using their own credits, the risks and returns are properly matched. However, the prevailing market reform is not easy given the dominant market position of government-owned entities.

Exhibit 9: Systematic Risk from Overuse of National Credit



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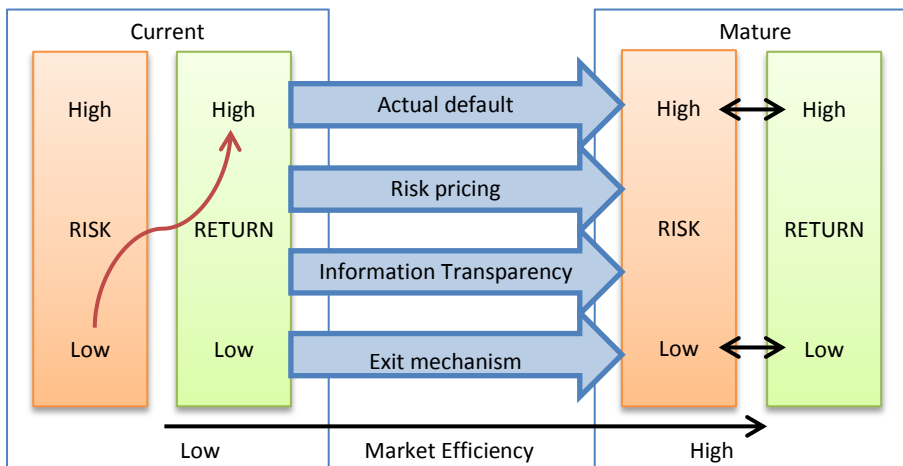
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(iv) Strengthen information disclosure and formulate risk-based pricing

A mature bond market has a stringent risk-pricing mechanism, transparent information disclosure and a clear exit mechanism (Exhibit 10). Under market-driven mechanisms, the current risk-and-return mismatches can be improved. However, a mature bond market is not perfect as a financial crisis may arise during economic cycles.

Exhibit 10: Matching Relations between Risk and Return



In a nutshell, risks cannot be completely eliminated by government intervention. Risks should be mitigated through market forces and regulatory guidelines, which also improve the efficiency of asset allocation in capital markets.

Default Exit Mechanism

Diversified financial intermediaries and sound regulatory systems are required to handle the emergence of bond defaults.

(1) Create Effective Financial Market

To establish regulatory systems of default settlement, the crucial point is to formulate robust risk-based pricing by the market itself.

From a macro perspective, the relationships between government and market and between economy and finance must be managed. The establishment of regulatory systems should aim to achieve higher market efficiency.

From a micro perspective, innovative financial instruments reflect risk-adjusted pricing and are used for speculating, transferring and hedging risks (Exhibit 11). Risk-based pricing involves trading counterparties

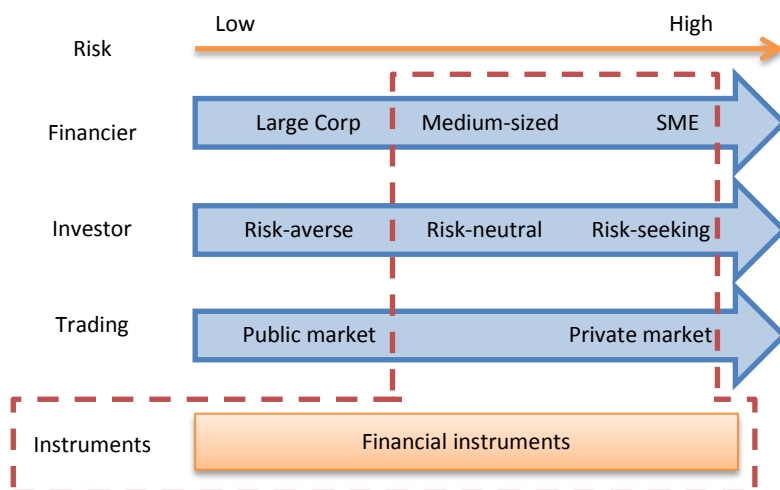
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matching their expected return with expected risk by using financial instruments.

Exhibit 11: Financial Instruments in Effective Market



(2) Different Bankruptcy Procedures

In the earlier 1990s, China's rapid economic growth increased the corporate's needs for debt financing, which resulted in debt chains in companies and banks. This problem was handled by liquidation where assets were divested, packaged and sold out, or contract transformation and contract preservation. The Chinese Enterprise Bankruptcy Law was promulgated in 2006 including three forms of bankruptcy, which are reorganization, exemption and liquidation. Since liquidation usually cannot provide the most benefit to all stakeholders, reorganization becomes the preferred choice. However, due to continual government bailouts and inefficient jurisdiction systems, the restructuring process has not yet been fully implemented in China.

In the Suntech default case, the local government was initially involved, and later planned to withdraw gradually. Government bailouts are usually by way of capital injection of equity or debt. When a company's operating activities are back to normal, the government should sell down its stakes through market trading. This means, the government rescue should be a last resort for long tail and unexpected events only.

In the U.S., procedures for handling bankruptcy are more market driven with little or no government intervention. There are courts and judges specifically for bankruptcy as well as professionals and management organizations working on bankruptcy cases. The Turnaround Management Association (TMA) sets up chapters globally, and the Chief Restructuring Officer (CRO) will replace the CEO for distressed firms. It is worth learning the practices of developed economies.

For bankruptcy cases in the U.S., Bear Stearns, AIG and GM received government financial bailouts by way of capital injection and liquidity provision, but Lehman Brothers was let go bankrupt. The U.S. government has drawn a line about who it rescues although this may not be always correct.

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**Exhibit 12: Comparison of Bankruptcy Mechanisms between the U.S. and China**

	United States	China
Form	Reorganization – Liquidation	Reorganization – Exemption – Liquidation (Exemption is rare in practice)
Law	Bankruptcy Code: Chapter 7, Chapter 11	Enterprise Bankruptcy Law (2006)
Petitioner	Debtor, Creditor, Sponsor (shareholder)	
Jurisdiction	Bankruptcy courts and judges	No specific bankruptcy courts and judges
Organization	Turn around Management Association (TMA) consisting of lawyers, accountants, auditors and Chief Restructuring Officer (CRO)	Manager (individual or organization), no specific restructuring organization
Typical Case	<ul style="list-style-type: none"> • Bear Stearns • Lehman Brothers • AIG • General Motors 	<ul style="list-style-type: none"> • Debt chains in 1990s • Suntech restructuring: creditors obtained 31.55% recovery; Shunfeng acquired all equities and Wuxi Guolian faded out • Chaori default: in process

Conclusions and Implications

The sustainability of China's bond market will depend on the structural changes which transform the economy from investment driven to demand driven. The development of a diversified bond market will reinforce the financial structure of different companies. In addition, in the process of market liberalization of interest rates, expected returns will match expected risks.

Defaults of corporate bonds should be processed by market discipline instead of by government bailouts. The role of the Chinese government is to build a platform with solid and effective financial infrastructure, including financial intermediaries, legislation and regulation systems, and risk-based pricing mechanism. Defaults in the bond market will then become a normal phenomenon.

This report is written by Elle Hu, Senior Credit Analyst, referring to the information in the Chinese report "Default Normalization and Default Exit Mechanism" by China Chengxin International Credit Rating.

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