

## Request for Comments: Environmental, Social and Governance (ESG) Impact on Credit Rating

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### Summary

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Pengyuan considers ESG factors, both on a quantitative and qualitative basis, when performing credit analysis based on our published rating criteria across all sectors and products.

ESG factors may affect ratings and rating outlooks, with a downward bias in general.

ESG factors may affect an issuer's cash flow and hence impact its capability to fulfill its financial obligations. On the other hand, a strong ESG positioning may not necessarily enhance an issuer's financial profile.

Information for analyzing ESG factors may not be readily available given limited disclosure, while comparison across a sector or multiple sectors is subject to challenges of inconsistent data available.

Our consideration of ESG factors is evolving along with increasing ESG information being made available.

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## Introduction

The awareness of environmental, social and governance (ESG) factors and how they may affect issuers' and their products' credit profile has significantly increased globally. When carrying out credit analyses, Pengyuan also examines both ESG risks and opportunities that might influence the final rating. In this article, we list the key ESG factors and metrics that we consider and explain how these factors are applied in our various rating criteria.

## Key ESG Factors Under Consideration

The following Exhibit 1 is a list of the major environmental, social and governance factors and the related metrics that we are considering in our credit analyses. It should be noted that while there are much more ESG categories which are widely used in public, Pengyuan only takes into consideration the factors that could impact issuers' credit profile:

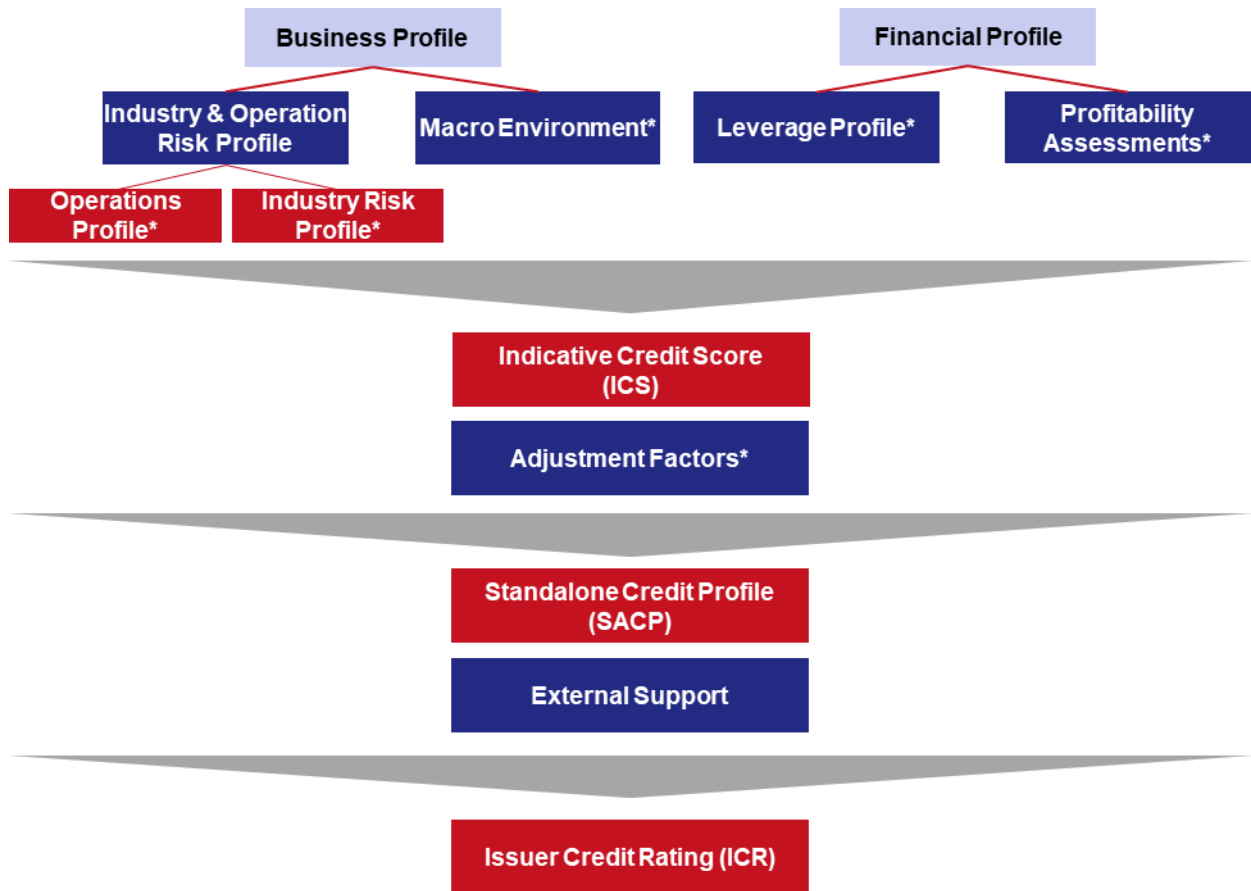
**Exhibit 1: Major ESG factors**

Pillars	Factors	Sample of Themes
Environment	Air and Greenhouse Gas Emissions	Carbon Emissions Greenhouse Gas Emissions
	Energy Management	Energy Consumption Energy Efficiency
	Water Management	Water Usage Water Efficiency
	Pollution and Waste	Hazardous and Non-hazardous Waste Electronic Waste
Social	Demographics	Population Growth Gender Equalities
	Human Capital	Labor Management Health and Safety
	Product Liability	Supply Chain Management Product Safety and Quality
	Stakeholder Relations	Stakeholder Engagement Stakeholder Relations Management
Governance	Corporate Structure	Complexity of Corporate Structure Ownership and Control
	Corporate Governance	Board and Management Management Strategy and Implementation
	Risk Management	Due Diligence and Risk Assessment Compliance with Regulatory Requirements
	Transparency and Disclosure	Accounting Transparency Consistency and Quality of Financial Reporting

## How ESG Factors Are Considered in General Corporate Rating

When analyzing general corporate, we believe that ESG factors might impact industry risk profile, operations profile, leverage profile, profitability assessments and corporate structure and governance in adjustment factor. Exhibit 2 is our overall framework of general corporate rating criteria and the asterisked areas are where we incorporate ESG factors in our analyses.

Exhibit 2: Overall Framework of General Corporate Criteria



## Business Profile

### Macroenvironment

We take ESG factors into considerations when analyzing macroenvironment in which the company operates. Environmental factors such as geography and climate are important in determining economic growth potential and the success of certain industries such as agriculture. Social issues relate to the characteristics and structure of a society in a country is also vital and we access demographic factors such as population growth and gender equality, which might impact a country’s growth and competitiveness in the long run.

### Industry Risk Profile

We consider ESG factors in accessing industry risk profile through entry barrier, growth perspective, profitability level & trend and substitution risk. To elaborate, tightening of environmental regulations regarding emission standards and environmental protection might create material entry barriers of new entrants of a particular industry. The high cost for meeting these regulations might also benefit incumbents that have already invested and had established resources to meet the requirement. For example, a new entrant in the power industry might have a competitive disadvantage in learning how to develop products which can comply with emission standards. Environmental and social risks could also change the growth perspective and profitability & trend of an industry. It might be costly for firms to comply with the environmental requirements going forward, lowering their profitability and trend. Social issues such as aging of the population could also change the demand of products in the long run. ESG issues might also drive secular change to substitution risk. Environmentally unfriendly products might face a higher substitution risk than environmentally friendly products in the long run. For example, ESG factors might accelerate energy transition policies across the globe. Renewable energy such as wind and solar energy becomes more competitive than non-renewable energy such as fossil-fuel.

### Operations Profile

We capture EGS risks and opportunities within products, services and technology (PST), brand image and market share (BIMS) and operating efficiency when accessing a corporate issuer's operations profile.

### Products, Services and Technology

ESG factors might change the customer preference on products, services or technology. Growing demand for sustainable products and services may represent a business opportunity. In some cases, ESG factors has been described as strategic products and services that are sold by companies to their clients to increase client stickiness. On the other hand, faced with environmental regulation, companies might be required to improve production technology, including terminal emission reduction technology and production process technology, in order to comply with the regulation. A company who has advanced technology in compliance with the regulation might have technology advantages over its peers.

### Brand Image and Market Share

ESG factors could influence a company's brand recognition and stickiness of customers. A strong ESG proposition might help companies to maintain high customer loyalty and stickiness. Environmental leader who provides clean products might benefits from increased brand recognition and market share. Adversely, companies that ignore ESG factors might suffer a higher reputational risk.

### Operating Efficiency

ESG factors could also have impact on a company's operating costs and operating efficiency. Companies might be required to change its cost structure to achieve compliance with ESG related legislation. For example, an electricity producer might be required to upgrade its electricity plants and equipment to meet the environmental regulation. On the other hand, some companies might recognize potential penalties or costs of not managing these ESG risks. For instance, a manufacturing company's operating efficiency might be reduced by loss in production caused by high injury and fatality rates.

## Financial Profile

### Leverage Profile and Profitability Assessments

ESG factors might impact a company's future financial obligations, earnings and cash flow. ESG-related litigation could result in potential financial loss. The loss can occur directly as a result of fines or expenses associated with the EGS issues, or indirectly, in terms of management attention to handle such dispute or potential loss in sales due to reputational damage. As a result, the company's future earnings and cash flow might be negatively impacted. If we foresee the potential ESG issues are highly likely to have a credit impact on its future earnings and cash flow, the impact shall be reflected in our forecast in leverage profile and profitability assessments. A corporate with high risk of penalties related to ESG issues could imply higher financial volatility, thus leading to possible toning down of its financial profile.

## Adjustment Factor

### Corporate Structure and Governance

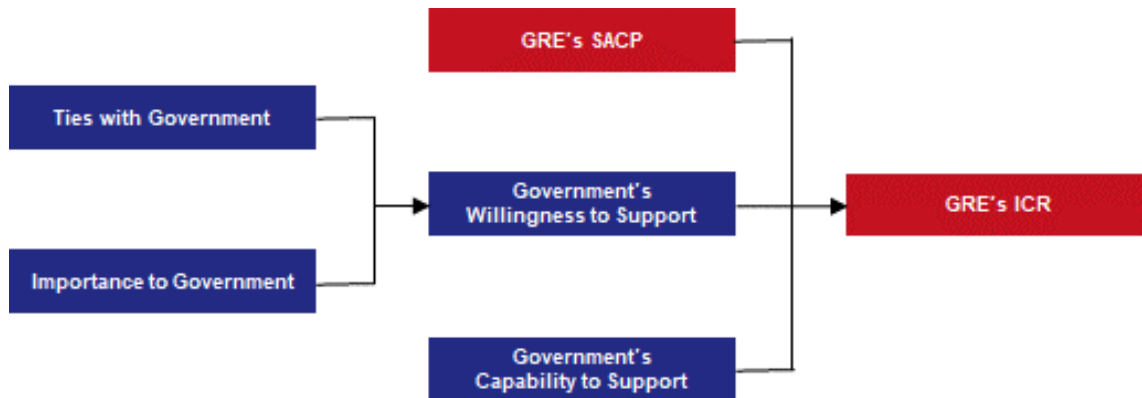
ESG factors are also considered in accessing corporate structure and governance in our adjustment factor. We examine board gender diversity and management capacity in managing environmental and social risks. Mismanagement of environmental and social risks might expose company to a potential credit risk. With a poor corporate structure and governance, we might lower its ICS by up to two notches.

## How ESG Factors Are Considered in Government-Related Entities Rating

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When analyzing government related entities (GREs), we believe that ESG factors might impact Government's Willingness to Support, which includes both Ties with Government and Importance to Government. Exhibit 3 is our overall framework of government related entities rating criteria and the blue areas are where we incorporate ESG factors in our analyses. For assessing Government's Capability to Support, please refer to the session "ESG Factors Impact on Chinese Local Government Rating" in this report.

Exhibit 3: Overall Framework of Government-Related Entities Rating Criteria



### GRE's Ties with the Government

We capture EGS risks and opportunities within Ownership, Board and Management, Business Connections and Policy and Support Record when accessing a GRE issuer's Ties with the Government.

#### Ownership

Having an active and controlling ownership over GREs is one of the ways with which governments can directly influence the GRE's adherence to ESG principles, such as climate change, policies on resources and waste management, etc. In many cases, government ownership is an important indicator of a GRE's linkage with the government as well. We generally regard a high level of ownership that is both long-term and strategic in nature to be indicative of a close linkage between a GRE and the government. We believe an active ownership is amongst the most effective ways to reduce risk and carry out government policies. However, depending on the industry of the GREs engage in, having government ownership is not necessarily identical to solid environmental or social mandates.

#### Board and Management

A high degree of government control over an entity's board and management, as evidenced by the appointment of key personnel, may indicate that the GRE's operations are highly intertwined with key government policies, including ESG principles. The board and management will need to understand how the ESG principles are related to the GRE's long term business strategy and the corresponding opportunities and risks. This can be accomplished by having constructive communication between the shareholders and board of directors to enforce ESG principles and eliminate other poor and short-sighted business decisions of the GRE.

#### Business Connections

GREs may be either for-profit or non-profit organizations. In some cases, GREs may fall into both categories if they concurrently perform public-service roles in some areas and conduct commercial activities in others. Our focus is on a GRE's business connections with the government, as reflected by the way the entity sources its business. We assess ESG factors as how well the business of GRE aligns with environmental and social objectives of the government, and the strength of the business connection with the government.

#### Policy and Support Record

The linkage between a GRE and its related government may be assessed from the track record of extraordinary support provided to the GRE. Since ESG factors might have a negative impact on a GRE's profitability and cash flow as it may need to change its cost structure to comply with ESG requirements, we assess whether there are dedicated subsidies from the government to compensate lower operational profit and cash flow as a result of the GRE's move to ESG compliance. We would also assess the timeliness, magnitude and methods of support record to form an opinion on likely outcomes if the GRE were to experience financial difficulties in the future.

## GRE's Importance to the Government

We capture ESG risks and opportunities within Products and Services Provided, Contribution to the Government, Status within the Political, Social and Legal Systems, and Financial and Social Impacts of Default when accessing a GRE issuer's Importance to the Government.

### Products and Services Provided

Many GREs exist to assist the government in achieving the public policies, including environmental and social objectives. Tightening ESG regulations and growing demand for sustainable products and services may represent a business opportunity for these GREs. Besides, a government-backed GRE who has abundant resources for technological change in compliance with the ESG regulation might have advantages over its peers. Generally, we view as more important GREs that are primarily public policy-oriented, compared to those that are more commercially-oriented.

### Contribution to the Government

A GRE's contribution to the government and the local economy is often a readily observable indicator of its importance to the government. ESG factors could have an impact on a GRE's future financial obligations, earnings and cash flow, subsequently the tax revenues of the government, and potential spillovers to the GRE's suppliers and customers. Depending on a particular jurisdiction's policy priorities, a government may favor GREs that contribute the most in terms of local employment, taxes, investments, profits, environmental and social objectives, or other similar metrics.

### Status within the Political, Social and Legal Systems

While a GRE's financial contribution to the government could usually be quantified, its status within the broader political, social and legally systems may be more difficult to assess. We focus on governance-related factors such as the origin of the GRE, the background of its government-appointed board of directors and management, and the perceived value of a GRE's brand name by the society-at-large. We may also consider the GRE's legal structure and incorporation status to ascertain its standing within the public sector.

### Financial and Social Impacts of Default

We believe the fundamental objectives of a government setting up GREs are to maintain social order, better manage the allocation of local resources, promote sustainable growth and stability, provide public goods and services etc. A GRE's default may lead to severe social impact, such as a disruption in the provision of essential public goods and services, cause significant unemployment, tarnish a country or jurisdiction's reputation, and, in the worst case, create social unrest that may impair the government's ability to effectively carry out its core functions. Financial impacts may include damage to the local economy, the banking system and public securities markets etc.

## How ESG Factors Are Considered in Global Bank and NBF1 Rating

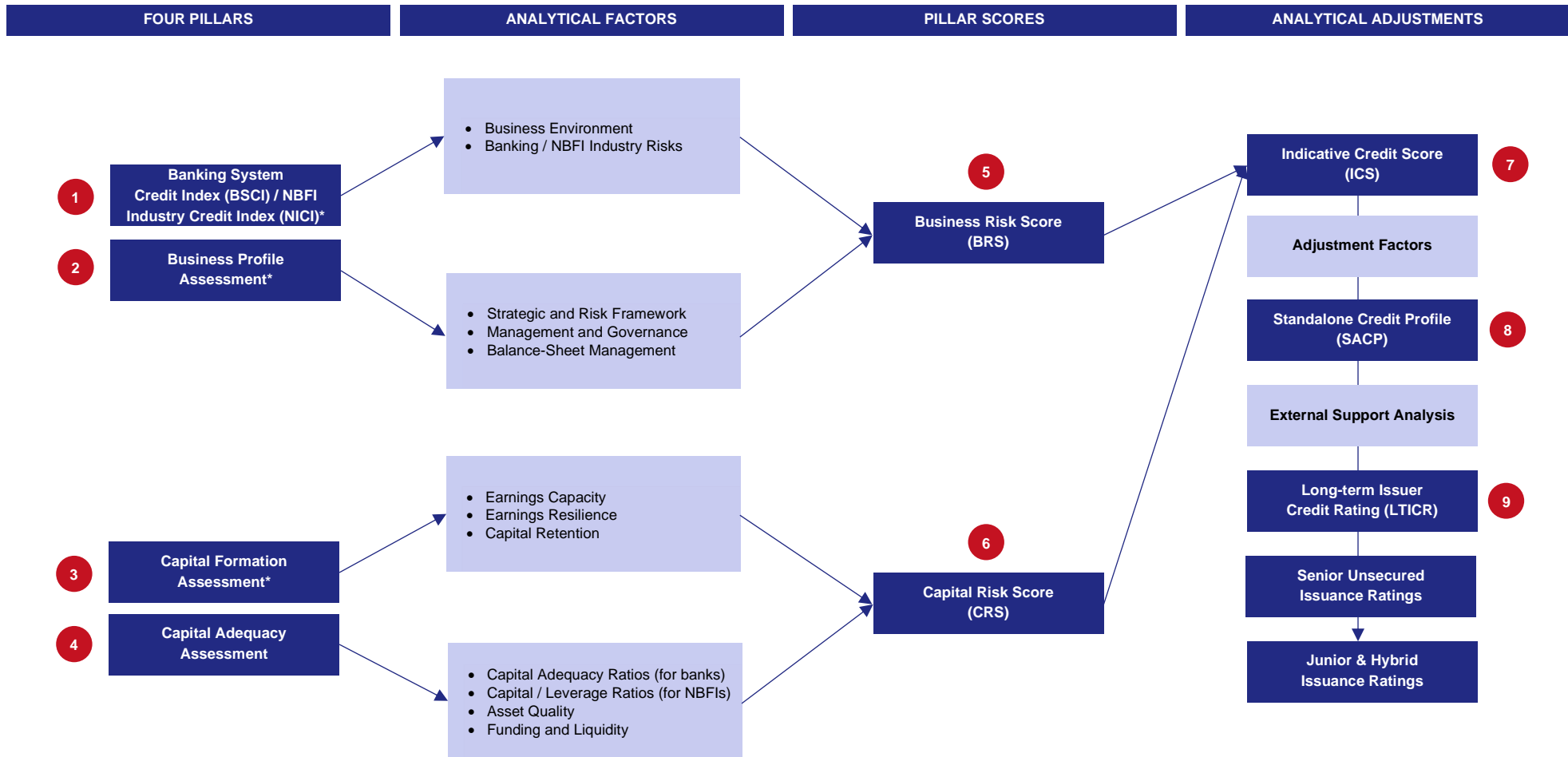
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As shown in Exhibit 4, our global bank and non-bank financial institution (NBF1) analytical frameworks both follow a multi-step approach, encompassing qualitative and quantitative factors that, in our opinion, best capture an entity's credit profile. These factors comprise the four pillars of our credit analysis, namely:

- Pillar 1: Banking System/NBF1 Industry Credit Index (BSCI/NICI);
- Pillar 2: Business Profile Assessment;
- Pillar 3: Capital Formation Assessment; and
- Pillar 4: Capital Adequacy Assessment.

The credit-related ESG factors are mainly considered in Pillars 1, 2 and 3 (the asterisked areas) as part of analytical factors, depending on the nature of the factors and how they could impact the risks of the country and its financial system, as well as the subject financial institution's business and its financials.

Exhibit 4: Global Bank/Non-Bank Financial Institution Rating Frameworks



Pengyuan's Pillar 1 analysis aims to dissect the financial market along two dimensions, namely their Business Environment and Industry-specific Risks. Our Business Environment assessment is driven by our review of a market's Economic Performance and Institutional Strength. For Industry Risks, they mainly emanate from the financial industry's Competitive Dynamics, Regulatory Environment, Banking System Leverage and Vulnerability to Crises. To elaborate on our ESG considerations in our Pillar 1 analysis, we study the region's government and financial systems for their overall quality, governance, transparency, and possible structural issues (such as scalable shadow banking system and lack of regulatory oversight). We also pay attention to potential economic and financial industry risks related to social issues and climate changes, for example economic vulnerability for economies increasingly prone to severe weather catastrophes. These considerations can affect our scores in factors and sub-factors including Economic Resilience Adjustment, General Institutions, financial industry's Competitive Dynamics and Regulatory Environment. Last but not least, when analyzing a multinational financial institution with more than 10% of its assets outside its home jurisdiction, we calculate a weighted average BSCI/NICI score based on asset distribution. In other words, we consider macro ESG factors for all economies the subject financial institution operates in. For instance, the institution is supposed to be subject to higher ESG credit risk if it generates meaningful revenues in overseas regions that are prone to natural catastrophes.

Under Pillar 2 of our analytical framework, we assess a financial institution's business profile with its Strategic and Risk Framework, Management and Governance structure, and Balance-sheet Management capabilities. With regards to ESG considerations, we examine the financial institution's Appropriateness of Strategy for positive or negative implications. For instance, a pioneer bank in green financing could probably have enhanced future business prospects, while loan business in high interest rate unsecured consumer loans could be more subject to regulatory risks and negative publicity, thus affecting future prospects. Moreover, governance considerations are naturally embedded when assessing the Management and Governance. For Balance-sheet Management, we study the Asset Risk for potential ESG credit related issues such as loan exposure to climate-sensitive industries (chemicals production, coal-fired power generation, etc.) and to social-sensitive industry (e.g. gaming, tobacco, etc.). This is because possible shrinkage of climate-sensitive and social-sensitive industries could pose long-term threat to a financial institution with high exposure to such industries, especially if it is unable to effectively refill the revenue gap going forward.

Our Capital Formation Assessment (Pillar 3) is informed by our analysis of a financial institution's Earnings Capacity, Earning Resilience, and Capital Retention. ESG consideration may be needed in the Other Businesses and Diversification sub-factors, since a high business exposure to ESG-sensitive counterparts could negatively impact earnings capacity in stress scenarios.

## How ESG Factors Are Considered in Global Insurance Rating

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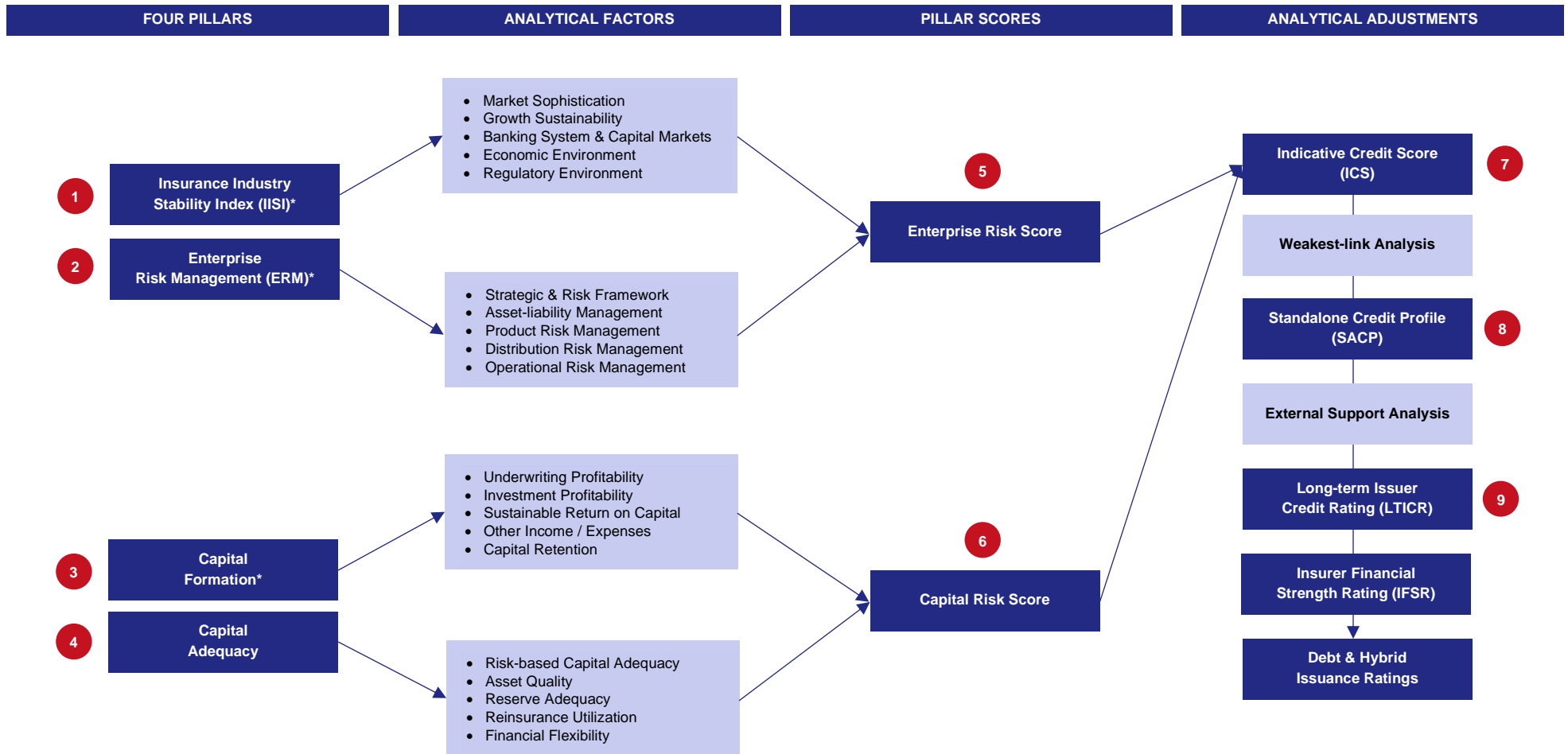
Our global analytical framework for insurance companies follows a multi-step process that encompasses a wide range of qualitative and quantitative factors, some of which are ESG-related, on a forward-looking basis. The basic building blocks of our rating methodology are summarized in Exhibit 5. We adopt a principle- and risk-based approach in evaluating an insurer's credit characteristics. The factors and sub-factors we analyze are grouped into four pillars, which form the basis of our risk evaluation. The four pillars are:

- Pillar 1: Insurance Industry Stability Index (IISI);
- Pillar 2: Enterprise Risk Management (ERM);
- Pillar 3: Capital Formation; and
- Pillar 4: Capital Adequacy.

The credit-related ESG factors are mainly considered in Pillars 1, 2 and 3 (the asterisked areas) as part of analytical factors, depending on the nature of the factors and how they could impact the risks of the country and its insurance industry, as well as the subject insurer's business and its financials.



Exhibit 5: Our Global Insurance Industry Analytical Framework



Pengyuan developed the Insurance Industry Stability Index (IISI) as Pillar 1, which dissects global insurance markets along five dimensions, namely Market Sophistication, Growth Sustainability, Banking and Capital Markets, Economic Environment, and Regulatory Environment. To give examples on how ESG factors are embedded in our Pillar 1 analysis, social demographics factors such as age distribution can affect an economy's Insurance Penetration, Density and Scale when assessing Market Sophistication. When analyzing Growth Sustainability, the Premium Growth prospect is also influenced by social demographics while meaningful exposure to natural catastrophes insurance products could make a country's insurance industry subject to higher Product Diversity risk amid climate change and increasing extreme weather events. Moreover, governance factors such as governance effectiveness and regulatory framework integrity are considered when we study the Banking and Capital Markets as well as Regulatory Environment, while social demographics also plays a role in Economic Environment. Last but not least, when analyzing an insurer with product and geographic diversification, we calculate a weighted average IISI score based on business distribution. In other words, we consider macro ESG factors for all economies and all businesses in which the subject insurer operates. For instance, an insurer is supposed to be subject to higher ESG credit risk if it generates meaningful revenues in the property and casualty (P&C) insurance business in regions that are prone to natural catastrophes.

In Pillar 2 of our analytical framework, the Enterprise Risk Management (ERM) review comprises an evaluation of an insurance organization's Strategic and Risk framework, Asset-liability Management, Product Risk Management, Distribution Risk management, and Operational Risk Management. Obviously, various governance factors, such as risk management and internal controls, are key considerations when assessing the aforementioned ERM categories, while climate-related insurance product exposure is considered in Product Diversity within the Product Risk Management category. Apart from that, social demographic factors and climate-related factors such as natural catastrophe risk are also considered in Geographic Diversity within the Product Risk Management category.

While our analysis of Capital Formation (Pillar 3) is primarily quantitative, environmental factors could still indirectly affect metrics such as Underwriting Profitability for P&C business (e.g. exposure to increasingly frequent extreme weather events). In addition, the level of governance could also impact metrics such as Investment Profitability. For instance, an investment portfolio with high ratio of property developer bonds could be prone to heavy investment loss amid a property sector downcycle.

## How ESG Factors Are Considered in Sovereign Rating

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Pengyuan's sovereign rating framework, as shown in Exhibit 6, attempts to untangle the complicated interaction among key factors of sovereign creditworthiness. These key rating factors into four categories:

1. Debt Burden and Stage of Economic Development;
2. Economic Fundamentals;
3. Institutions and Policies; and
4. Liquidity Risk Movers.

Credit-related ESG factor, such as those regarding governance, are extensively considered in various categories of our sovereign rating analysis and could have meaningful impact on sovereign ratings and outlooks. Amongst the four aforementioned categories, most of the ESG factors are considered in Institutions and Policies. To elaborate, our assessment focuses on the extent to which a country's institutions and policymaking would support (or constrain) a sovereign's ability to service its debt. Sub-factors that relate to ESG include:

### General Institutions

- Political and Social Stability (Examples: Level of social order, frequency of labour strikes and social turmoil);
- Role of Government and Market (Examples: Governance of political institutions, and regulation effectiveness);
- Policy Framework and Targets (Examples: Policy prudence, consistency and timely changes to promote balanced economic growth);
- Crisis Prevention and Risk Management (Examples: Crisis and risk management track record);
- People and Socio-political Aspects of Effective Governance (Examples: Sound check and balance structure);
- Data and Transparency (Examples: Availability of reliable economic, fiscal, financial and trade statistics).

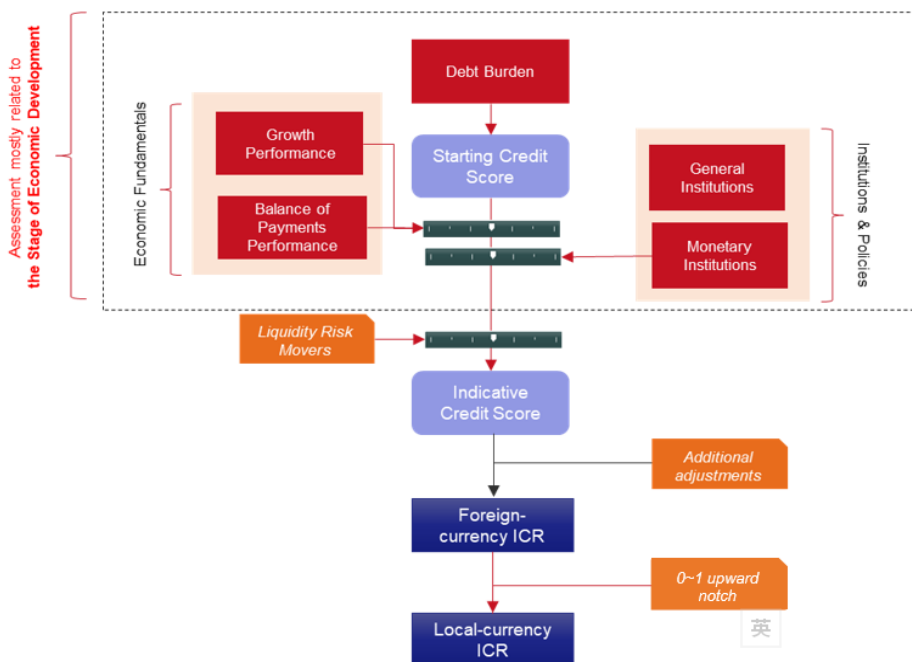
Monetary Institutions

- When deriving the adjustment to the initial inflation score, we consider the credibility of monetary system including the independence of the central bank, financial system stability, as well as currency and exchange rate regime, all of which are governance-related.

Apart from the above, we also incorporate ESG considerations in Additional Adjustments after deriving the Indicative Credit Score (ICS). For instance, when we believe the impact of low-probability high-cost extreme environmental disasters could not be sufficiently captured by individual key rating factors, we would lower the ICS to capture its impact on sovereign creditworthiness.

If there is any material ESG concern(s) that are not captured in our analytical framework for deriving the ICS or in the Additional Adjustments, we would utilise our One Notch Flexibility (either one notch up or down) to derive our final Foreign Currency Issuer Credit Rating (ICR). For instance, if we believe that the global initiative to reduce carbon emission will pose meaningful export revenue threats and carbon neutralisation costs to an economy that has high GDP contribution from carbon-emission-intensive industries, we can consider making the economy’s ICR one notch lower than the ICS. In addition, anticipation of significant fiscal spending on social issues, such as a full revamp of social welfare system or redevelopment of low-income districts, may also justify the downward One Notch Flexibility. On the other hand, the completion of heavy spending on reducing environment catastrophe risk, or on populating renewable energy adoption, can enhance the sovereign outlook and may warrant the upward One Notch Flexibility, since the heavy spending may have dragged the ICS score.

Exhibit 6: Framework for Assigning Sovereign Issuer Credit Rating



## How ESG Factors Are Considered in Chinese Local Government Rating

Our methodology of the Chinese local government (LG) rating encompasses the dimensions of economy, fiscal strength, debt burden, liquidity, governance and financial management. ESG factors have been incorporated in each of these dimensions as well as some qualitative additional consideration in our approach. However, instead of segmenting the ESG factors into different dimensions, we integrate the ESG factors in our whole rating process.

The ESG factors pose various challenges to the governance of socioeconomic systems across different provinces, cities and counties of China. A friendly ecological system and strong socioeconomic governance should render population inflow and

benefit the business environment, which bode well for the regional economic prospects and vice versa. We integrate these factors in our assessment of regional business environment and demographic profile when estimate the economic strength of an LG. When analysing the demographic profile of a region, we evaluate the population composition, dependency ratio, and population migration to comprehend the human capital and consumption power of the region. The economic structure is an essential segment where we bring in the ESG consideration. If a region's economy has concentrated on some high energy consuming and high pollution industries, its economic growth will be possibility more erratic than its peers due to the intensifying policies to tackle the environmental problems launched by central government these years. This has been empirically proved over the past few years when the nation-wide capacity cuts and destocking initiatives hampered some regions' economic growth which has been mainly fueled by industries such as iron and steel, coal, cement and concrete, etc. In addition, we believe the regions with well diversified structure and advanced development stage should see more robust social stability and more sophisticated governance than their counterparties. Therefore, these regions' economic growth tends to be more stable and predictable. Overall, based on our on-going and forward-looking assessment of regional economic strength, we factor in the ESG implications in every amenable aspect.

We estimate the budgetary performance of an LG focusing on the budgetary revenue and balance and incorporate the ESG factors to do so. The central government of China has been addressing on the ESG issues these years and calling for an increased role for fiscal policy in support of the ecological transition, social harmony, efficient governance, etc. This has put some LGs under higher pressure regarding to ESG-related challenges compared to their peers, which could stimulate extra fiscal expenditure and, in turn, exacerbate the fiscal imbalance. For instance, fiscal support to improving the ecological system could be considerable for some LGs due to their environmentally unfriendly industrial structure. As such, these governments entail imperative methods in cultivating "green" industries in their jurisdiction and investing in spheres such as pollution elimination, environment protection and emission reduction. Fiscal resource allocation in improving the social welfare system and community upgrading is also essential to appeal to talent and business. We incorporate these factors when judging the fiscal flexibility and forecasting the future fiscal status of LGs.

The fiscal pressure caused by the ESG-related factors may have cascade implications to the debt burden and liquidity condition of governments. We integrate these implications in our indicators such as debt growth, debt level and liquidity coverage ratio. The LGs strive to cope with ESG challenges tend to raise more funds either through issuing bonds or raising contingent debts. Subsequently, the debt growth will accelerate and the debt burden will exacerbate, and the increasing repayment needs for debts and interests will dampen the liquidity condition of the LG. On the other hand, the LG with advanced environmental and social states should be more magnetic to capitals and enjoy more diverse financing channels and wider liquidity access compared to their peers.

Governance and financial management of the LG is one of the five key dimensions in our rating approach. This section embraces sub-factors of budgetary management, GRE management, transparency and accountability that reflect our focus on some of the key ESG factors. For instance, our assessment of budgetary management stresses how well the budget implementation meets budget planning and budgetary discipline, and whether there is a meaningful medium-term budget, including realistic/prudential capital spending. We evaluate the coverage and timeliness of disclosure of economic, financial and fiscal statistics and information about the local economy and the LG to judge the transparency of LGs. The accountability is assessed based on how well the juridical and regulatory mechanism has been developed to clarify the authorities and responsibilities of the officials and personnel and penalize the wrongdoing ones.

## How ESG Factors Are Considered in Structured Finance Rating

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When assigning and monitoring credit ratings of structured finance transactions, PENGYUAN applies a multifaceted analytical framework, which incorporates the following analytical components:

1. legal structure and documentation;
2. credit quality of the securitized assets;
3. financial structure and cash flow mechanics;
4. counterparty risks; and
5. operational risks.

Credit-related ESG factors (e.g. governance of the counterparty) and ESG incidents (e.g. extreme weather events) are considered in the aforementioned analytical components. While ESG factors can affect the assets being securitized and the

transaction operation, we think that the risks related to those ESG factors can be addressed and mitigated by the legal structure set up for the transaction. For instance, the risk of any extreme weather event for a mortgage-backed securities (MBS) transaction can be mitigated by a rule of collateral diversification in the legal structure. As such, we generally do not expect ESG factors to become a rating driver in structured finance transactions, that is, to cause a rating action.

It should also be noted that while some assets, or collateral, may be perceived as ESG-friendly, they may indeed pose negative credit risks. An example is the electric vehicle (EVs) fleet in an auto loan-backed securities, as the fleet's residual value has higher uncertainty with considerations including, but not limited to, relatively limited track record of used EV sale at the moment and deterioration of the car batteries together with their values. On the other hand, tightening of vehicle emission regulations could also impact future resale value of vehicles with internal combustion engines (ICEs).

To sum up, while Pengyuan considers risks related to credit-related ESG factors when rating structured finance transaction, we think these risks can be mitigated by proper legal structure, such as collateral diversification, and hence is unlikely to drive rating actions.

## Related Criteria and Research

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- General Principles of Credit Ratings, 21 November 2017
- Rating Symbols and Definitions, 7 May 2018
- Government-Related Entities Rating Criteria, 31 August 2018
- General Corporate Rating Criteria, 15 March 2018
- Financial Adjustments and Ratio Definitions, 7 May 2018
- Global Bank Rating Criteria, 16 August 2019
- Global Non-bank Financial Institutions Rating Criteria, 15 June 2018
- Global Insurance Rating Criteria, 7 May 2018
- Sovereign Rating Criteria, 30 May 2018
- Chinese Local Government Rating Criteria, 29 June 2021
- General Structured Finance Rating Criteria, 18 February 2019
- Criteria for Servicer Evaluations, 7 May 2018
- Global Rating Criteria for Corporate CDOs, 16 April 2020
- Chinese Non-Performing Loan Securitizations Rating Criteria, 21 November 2017

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