

非銀行金融機構評等準則

主要準則

範圍

該評等準則報告闡述了惠譽評等為全球非銀行金融機構授予新評等,及監督既有評等時所使用的方法,受評機構包括證券公司、投資管理公司(包括投資公司和投資基金)、商業開發公司(BDC)、融資和租賃公司(包括抵押房地產投資信託公司[REIT]和非銀行政策機構),以及金融市場基礎設施(FMI)公司。除了少數持有銀行牌照的金融機構,本文討論的評等準則並不適用於銀行(銀行的評等準則請參見惠譽「銀行評等準則」),也不適用於保險公司或權益型抵押房地產投資信託公司。如需不在適用範圍內的實體類型之詳細資訊,請參考附件 6。

關鍵評等驅動因素

獨立評估的五個因素:惠譽在評估非銀行金融機構的獨立信用狀況時,通常會考量下述五項關鍵因素:經營環境、公司概況、管理和策略、風險胃納,以及財務狀況。前三項因素的考量在金融機構中相對常見,但對公司風險胃納和財務狀況的評估則更具體針對公司營運所在的子行業。

資產負債表的區分:在非銀行金融機構子行業,惠譽按照資產負債表使用的程度高低對公司 進行了區分。對於資產負債表使用程度高的公司的獲利能力指標,側重於其資產和權益收益 率,槓杆率則側重於對其資本水準的衡量。對於使用輕資產策略的公司,營業利潤率為其獲 利能力的常用指標,並使用現金流比率來評估其槓杆程度。

支援因素:在評估母公司機構和主權實體的潛在支援時,惠譽考慮了支援方及時提供協助的能力和意願。根據支援的強度,評等可能為與支援方一致、較支援方下調或以該實體的獨立信用狀況上調。例如,專屬金融公司的評等往往受惠於較高的支援可能性,因為這些子公司常常會強化母公司的經營地位、策略目標和收入前景。

儘管主權支援通常是非銀行政策機構的評等因素,但對於非銀行金融機構來說,這種情況並 不常見,因為它們的系統重要性較為有限。

違約風險、債務回收預期:如同其他企業金融部門,非銀行金融機構的發行評等反映了惠譽對特定金融承諾(通常是證券)整體信用風險水準的看法。此觀點包括對特定債務違約(或「不履約」風險)可能性的評估,以及債權人在發生違約/不履約時回收債款可能性的評估。

與發行人違約評等一致的優先順位債務: 非銀行金融機構的優先順位無抵押債務之評等通常 與其長期發行人違約評等 (IDR) 一致,但如果具有較強的次級結構性或資產負債表質押比率過 高,則可能下調評等。

本報告包含中文摘譯與英文全文、譯文若與英文有出入、請以英文為準。

This report contains of summary Chinese translation and English full report. In the event of any dispute / misinterpretation, the English version shall prevail.





報告摘要和結構

I. 評等架構

惠譽為非銀行金融機構及其債務提供發行人評等和發行評等。兩個主要的發行人評等分別為:

- 長期 IDR;和
- 短期 IDR。

在少數的情況下,惠譽還可能為非銀行金融機構授予支援評等(SR)、支援評等下限(SRF)和/或衍生性工具交易對手評等(DCR)。如需查看完整的評等定義,請點擊此處。

惠譽在向非銀行金融機構授予長期 IDR 時,通常採取「取其高者」的原則。具體而言,惠譽首先會僅依據非銀行金融機構的獨立財務實力決定其 IDR,或是僅根據其獲得的支援決定其 IDR,前開支援包括支援評等下限(SRF)所反映的政府主權支援,以及通常來自股東的機構支援。惠譽隨後(通常都會)會在沒有國家上限的特殊限制情況下,取上述兩個評等中較高者作為非銀行金融機構的 IDR。

Ⅱ. 獨立評估

對非銀行金融機構的獨立信用狀況進行評估時,惠譽考慮以下五項關鍵因素:

- 經營環境;
- 公司概況;
- 管理和策略;
- 風險胃納;以及
- 財務狀況。

如需惠譽評等架構在獨立評估方面的詳細資訊,請點擊此處。

Ⅲ. 支援

非銀行金融機構最常見的支援來源為股東(機構支援),例如,企業母公司下的財務金融子公司。對於非銀行金融機構來說,其獲得政府的支援(主權支援)比銀行少得多,因為非銀行金融機構的規模通常較小,對一個國家金融體系的影響也較小。若存在主權支援,則往往基於非銀行金融機構的政策作用而非其系統重要性。惠譽對非銀行金融機構在需要時獲得外部支援可能性的看法,反映在非銀行金融機構的支援評等(SR)中。若惠譽認為最有可能的支援形式是主權支援,將反映在非銀行金融機構的支援評等下限(SRF),其代表在假定有特殊支援的情況下,其長期 IDR 可能調降的最低水準。

主權支援評等的關鍵因素包括:

- 主權的支援能力;
- 主權支援特定非銀行部門的意願;以及
- 主權支援特定非銀行金融機構的意願。

機構支援評等的關鍵因素包括:

- 母公司的支援能力;
- 母公司的支援意願;以及
- 法律和監管義務/限制。

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如需支援架構的詳細資訊,請點擊此處。

IV. 發行評等

此評等是對非銀行金融機構的優先、次級/混合證券和其他證券發行項目的評等,包括對特定 債務違約(或「不履約」風險)可能性的評估,以及債權人於違約/不履約時,回收債款可能 性的評估(適用於獲得長期評等的債務證券)。如需詳細資訊,請點擊此處。

V. 附件

如需非銀行金融機構評等準則特定方面的其他資訊、按子行業劃分的非銀行金融機構量化基準和衡量準則摘要,以及某些評等程序的資訊,請點擊此處。

I. 評等架構

本節概述了非銀行金融機構及其發行項目可授予的國際和國內評等,具體說明:不同的評等衡量準則、何時授予評等、根據何種評等等級進行授予,以及如何從廣義上決定評等。本節將介紹非銀行金融機構發行人評等以及發行評等。

第 II、III 和 IV 節分別詳細介紹了授予發行人違約評等 (IDR)、支援評等 (SR)、支援評等下限 (SRF) 和發行評等的評等準則。不希望詳細查看惠譽評等架構的讀者,請跳到這些章節。該架構的簡化版本如下圖所示。



Non-Bank Financial Institutions Rating Criteria

Master

Scope

This criteria report specifies Fitch Ratings' methodology for assigning new ratings to, and monitoring existing ratings of, non-bank financial institutions globally, including securities firms, investment managers (including investment companies and investment funds), business development companies (BDCs), finance and leasing companies (including mortgage real estate investment trusts [REITs] and non-bank policy institutions) and financial market infrastructure (FMI) companies. With the exception of a limited number of financial institutions with banking licenses, the criteria discussed herein do not apply to banks, the rating criteria for which are outlined in Fitch's "Bank Rating Criteria" or to insurance companies or equity REITs. More information on types of entities that may be out of scope can be found in Annex 6.

Key Rating Drivers

Five Factors in Stand-Alone Assessment: In assessing a non-bank financial institution's standalone profile, Fitch considers five key factors: the operating environment; company profile; management and strategy; risk appetite; and financial profile. While the first three factors are relatively common across financial institutions, an assessment of a firm's risk appetite and financial profile is more specific to the subsector in which the company operates.

Balance Sheet Distinction: Within non-bank financial institution subsectors, Fitch also makes distinctions in its analysis for businesses with high balance-sheet usage versus businesses with low balance-sheet usage. Profitability metrics for balance-sheet-intensive businesses are focused on asset and equity yields, while leverage ratios focus on capitalization measures. For asset-light strategies, operating margins are a common indicator of profitability, while cash flow ratios are used to assess leverage.

Support Factors: In assessing potential support from an institutional parent or sovereign entity, Fitch considers both the ability and propensity of the supporter to provide assistance on a timely basis. Depending on the strength of perceived support, ratings can be equalized with the support provider, notched downward form the support provider or notched upward from the entity's stand-alone profile. For example, the ratings of captive finance subsidiaries often benefit from a high probability of support, because they frequently enhance the firm's franchise, strategic objectives and revenue prospects.

While sovereign support is often a rating factor for non-bank policy institutions, it is not common for other non-bank financial institutions, given their more limited systemic importance.

Default Risks, Recovery Prospects: Issue ratings of non-bank financial institutions, in common with other corporate finance sectors, reflect Fitch's view of the overall level of credit risk attached to specific financial commitments, usually securities. This view incorporates an assessment of both the likelihood of default (or "non-performance" risk) on the specific obligation and of potential recoveries for creditors in case of default/non-performance.

Senior Debt Aligned with IDR: Ratings of a non-bank financial institution's senior unsecured obligations are usually equalized with its Long-Term Issuer Default Rating (IDR), although they can be notched downward if there is deep effective subordination or high balance-sheet encumbrance.

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This criteria report replaces the master criteria report titled "Non-Bank Financial Institutions Rating Criteria," dated Oct. 12, 2018.

Related Criteria

Bank Rating Criteria (February 2020)

See page 2 for a list of Analysts



Report Summary and Structure

I. Ratings Framework

Fitch assigns both issuer and issue ratings to non-bank financial institutions and their obligations. The two primary issuer ratings are:

- Long-Term IDRs; and
- Short-Term IDRs.

In limited circumstances, Fitch may also assign Support Ratings (SRs), Support Rating Floors (SRFs) and/or Derivative Counterparty Ratings (DCRs) to non-bank financial institutions. For complete rating definitions, click here.

Fitch generally adopts a "higher of" approach in assigning Long-Term IDRs to non-bank financial institutions. Specifically, Fitch first determines what level of Long-Term IDR a non-bank financial institution could attain based solely on its stand-alone financial strength or based solely on support, whether sovereign support from government authorities (as reflected in the SRF) or institutional support, usually from shareholders. Fitch then (almost always) assigns the non-bank financial institution's IDR at the higher of these two levels absent extraordinary constraints represented by the Country Ceiling.

II. Stand-Alone Assessment

An assessment of the stand-alone credit profile of a non-bank financial institution considers five key factors:

- operating environment;
- company profile;
- management and strategy;
- risk appetite; and
- financial profile.

For details on the stand-alone assessment aspect of Fitch's ratings framework, click here.

III. Support

For non-bank financial institutions, the most usual source of support is from the shareholders (institutional support); for example, when a corporate parent has a finance subsidiary. Support from government authorities (sovereign support) is a much less frequent occurrence for non-bank financial institutions than for banks, given the generally relatively smaller size and influence of a non-bank financial institution on a country's financial system. If present, sovereign support is often based on the non-bank financial institution's policy role and less on its systemic importance. Fitch's view of the likelihood of external support being made available in case of need may be reflected in a non-bank financial institution's SR. Where Fitch believes the most likely form of support is sovereign support, this is also reflected in the non-bank financial institution's SRF, which indicates the minimum level to which the entity's Long-Term IDR could fall for the level of extraordinary support assumed.

The key sovereign support rating factors are:

- sovereign's ability to support;
- sovereign's propensity to support a specific non-bank sector; and
- sovereign's propensity to support a specific non-bank financial institution.

The key institutional support rating factors are:

- parent's ability to support;
- parent's propensity to support; and
- legal and regulatory obligations/constraints.

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For details on the support framework, click here.

IV. Issue Ratings

Ratings of non-banks financial institutions' senior, subordinated/hybrid and other securities issues incorporate an assessment both of the likelihood of default (or "non-performance" risk) on the specific obligation and (for debt securities assigned long-term ratings) of potential recoveries for creditors in case of default/non-performance. For details, click here.

V. Annexes

For additional information on specific aspects of the non-bank financial institutions rating criteria, a summary of non-bank financial institution quantitative benchmarks and metrics by subsector and information on certain rating procedures, click here.

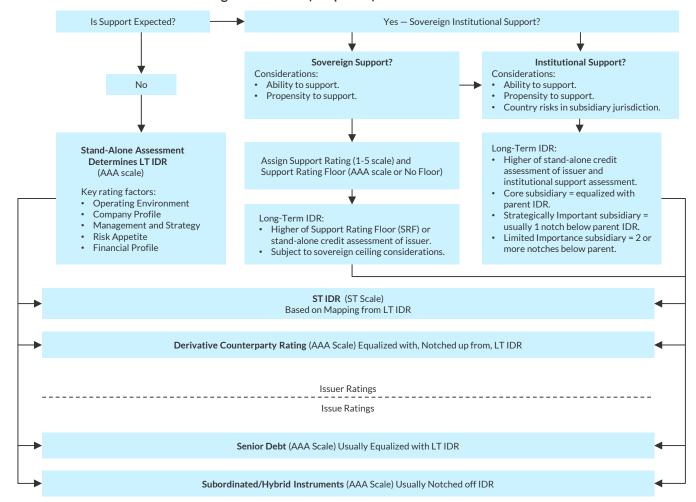
I. Ratings Framework

This section provides an overview of the international and national scale ratings assigned to non-bank financial institutions and their issues, indicating: what the different ratings measure, when they are assigned, the scales on which they are assigned; and how, in broad terms, the rating levels are determined. This section first reviews non-bank financial institution issuer ratings and then issue ratings.

Sections II, III and IV provide more detail on the criteria for assigning IDRs, SRs and SRFs and issue ratings, respectively. Readers who do not wish to review in detail Fitch's rating framework should turn to these sections. A simplified version of the framework is presented in the chart below.



Non-Bank Financial Institutions Ratings Framework (Simplified)



LT IDR – Long-term Issuer Default Rating. ST IDR – Short-term Issuer Default Rating. Source: Fitch Ratings.

I.1. Long-Term Issuer Default Ratings What They Measure

IDRs for non-bank financial institutions, as for issuers in other sectors, express Fitch's opinion on an entity's relative vulnerability to default on its financial obligations. In accordance with Fitch's rating definitions, the default risk addressed by the IDR is generally that of the financial obligations whose non-payment would "best reflect the uncured failure of that entity."

For a small population of mostly prudentially regulated non-bank financial institutions, Fitch considers that the obligations whose non-payment would best reflect uncured failure are usually senior obligations to third-party, non-government creditors. For the larger universe of other non-bank financial institutions, Fitch generally considers that non-payment of both senior and subordinated obligations to third party, non-government creditors (including by way of a distressed debt exchange) would reflect the uncured failure of the issuer. Therefore, for most non-bank financial institutions, only certain hybrid securities that contractually allow for going concern non-performance (e.g. coupon deferral) are likely to fall outside the scope of the IDR. For more details, see below.



What Non-Bank Financial Institution IDRs Reflect: Definition of Reference Obligations

A non-bank financial institution's IDRs usually express Fitch's opinion on the risk of default on its senior unsecured obligations, subordinated obligations (with the exception of a small number of prudentially regulated non-bank financial institutions) or, where material, leases or other major contracts, to third-party, non-government creditors, as in Fitch's view, these are typically the obligations whose non-performance would best reflect the uncured failure of the entity. In accordance with Fitch's rating definitions, and in common with issuers in other sectors, a non-bank financial institution's default may take a number of forms, including non-payment of obligations beyond the available cure period, bail in, a distressed debt exchange or the issuer entering into bankruptcy proceedings.

When considering whether a debt restructuring or exchange should be classified as a distressed debt exchange, Fitch expects both of the following to apply: i) the restructuring imposes a material reduction in terms compared with the original contractual terms; and ii) the restructuring or exchange is conducted to avoid bankruptcy, similar insolvency or intervention (including resolution) proceedings or a traditional payment default.

A non-bank financial institution's SR and SRF, should they be applicable, also rate to the same reference obligations, i.e. they reflect Fitch's view on whether external support will be sufficient for a non-bank financial institution to avoid default on its relevant obligations to third-party, non-government creditors.

The rationale for Fitch's definition of reference obligations for IDRs is as follows:

Third-Party Versus Intra-Group Obligations

Non-bank financial institution IDRs do not usually rate to default risk on funding from entities under common control (e.g. parent/sister companies or related non-financial corporations) for three main reasons. First, these facilities may not be extended with the same expectations of an unaffiliated creditor, for example the borrower may not always be expected to repay, rather than roll over, the facilities at maturity. Second, Fitch would not usually expect there to be a high level of transparency on whether an entity has "defaulted" on intra-group debt, e.g. whether a roll-over has been "voluntary" or "forced". Third, Fitch would not usually regard entities under common control as the main users of its ratings, as in most cases they would have privileged, direct access to information on the financial condition of the borrower.

Private Versus Government Creditors

Non-banks financial institutions are largely funded in the private sector, as they do not generally have access to central bank funding. However, non-bank financial institutions that, for example, have a policy role or that have a banking license but are viewed by Fitch as more akin to non-bank financial institutions may have access to government funding, particularly during periods of market stress. When this is the case, non-bank financial institution IDRs will not usually rate to default risk on obligations owed to central banks and other national government institutions. This reflects the special relationship between a central bank, as lender of last resort, and issuers that benefit from this form of funding, and the fact that, where facilities due to central banks are rolled over or restructured, there is likely to be considerable ambiguity regarding whether such a restructuring should be regarded as "voluntary" or "forced." In addition, it will often be difficult to ascertain in a timely fashion whether an issuer has performed on debt owed to its central bank.

Different Categories of Obligations

In some cases a non-bank financial institution may default on some categories of third-party, private sector debt, while continuing to perform on others. Where Fitch considers there to be significantly different levels of default risk on different categories of senior liabilities, the IDRs will rate to the (material) category with highest risk. If a non-bank financial institution defaults on a material category of third-party, private sector senior debt, but remains current on other categories, its IDRs will be downgraded to 'RD' (Restricted Default).

When They Are Assigned

Long-Term IDRs are assigned to virtually all non-bank financial institutions with international ratings. The main exceptions are rare cases where an entity issues exclusively short-term debt and may therefore be assigned only a Short-Term IDR.

Where Fitch believes it is useful to separately highlight the level of default risk on foreign-currency and local-currency obligations, it may assign separate Foreign-Currency (FC) and Local-Currency (LC) Long-Term IDRs to a non-bank financial institution. This may be done, for example, when the agency considers there to be a material difference in default risk on obligations in different currencies (for intrinsic or support reasons, or because of a greater risk of legal restrictions on servicing foreign-currency debt), or when the assignment of a LC IDR is undertaken as part of the process to derive a non-bank financial institutions' National Rating (see Section I.8).



On Which Scale

Long-Term IDRs are assigned on the 'AAA' scale (see table at left).

How They Are Determined

Fitch generally adopts a "higher of" approach in assigning Long-Term IDRs to non-bank financial institutions. Specifically, the agency first determines what level of Long-Term IDR a non-bank financial institution could attain based solely on its stand-alone financial strength (see Section II, Stand-Alone Assessment) or based solely on support (see Section III, Support), whether it is sovereign support from government authorities (as reflected in the SRF) or institutional support, usually from institutional shareholders. Fitch then (almost always) assigns the FI's Long-Term IDR at the higher of these two levels, absent extraordinary constraints represented by the Country Ceiling.

In some instances non-bank financial institution credit profiles may deteriorate relatively rapidly, while in other instances they can remain fundamentally weak for relatively extended periods of time (e.g. in countries where the sovereign is lowly rated, but relatively stable). Use of '+' or '-' modifiers in the 'CCC' range is more likely for the latter than the former.

Should institutional support exist, the Long-Term IDR is based on Fitch's opinion of the strategic importance of the entity to its parent and an assessment of the parent's propensity and ability to support the subsidiary. In many cases, such as for some captive finance companies, Fitch is not able to form a stand-alone rating opinion on the non-bank financial institution subsidiary, when there are high levels of financial, operational and management integration with the parent entity. For example, if the franchise position of the subsidiary is highly correlated with that of the parent and/or the subsidiary's access to funding is heavily dependent upon the parent, these may limit Fitch's ability to assign a stand-alone rating to the subsidiary.

If the subsidiary is small and of a non-material size relative to the parent, this may also limit Fitch's ability to assign a stand-alone rating to the subsidiary. Stand-alone ratings are not usually assigned to development institutions or other non-bank financial institutions whose operations are largely determined by their policy roles (i.e. they have limited commercial operations).

In certain circumstances, a non-bank financial institutions' Long-Term Foreign-Currency IDR can also be constrained at a level below that implied by the "higher of" approach. This occurs when the non-bank financial institution's stand-alone assessment is higher than the Country Ceiling of the jurisdiction in which it is domiciled, and the Country Ceiling constrains the non-bank financial institution's Long-Term IDR. A non-bank financial institution's SR (unlike its stand-alone assessment) already captures the constraints (the risk of transfer and convertibility restrictions) reflected in the Country Ceiling, and so would not be assigned at a level implying a higher Long-Term IDR than the Country Ceiling.

On rare occasions, a non-bank financial institution's IDR could be above the level implied by its stand-alone assessment. This could occur if the non-bank financial institution has sufficient levels of lower ranking liabilities below the reference liabilities for its IDRs that could be restructured or bailed in to recapitalize the non-bank financial institution without the reference liabilities for its IDRs suffering a default. In determining the sufficiency of the buffers, Fitch will use the same 'qualifying junior debt' principles outlined in the "Bank Rating Criteria."

LC IDRs are generally viewed as reflecting the underlying credit quality of the company and incorporate economic/political risk and liquidity and foreign-exchange risks. While LC IDRs measure the likelihood of repayment in the currency of the jurisdiction, they do not account for the possibility that it may not be possible to convert local currency into foreign currency or make transfers between sovereign jurisdictions (i.e. transfer and convertibility risks).

It is important to note that the LC IDR incorporates the probability of default for all of an issuer's debt obligations (local- and foreign-currency-denominated) in the absence of transfer and convertibility risks. This takes into account the probability that an issuer under stress will default on all obligations and will not pick and choose specific debt instruments on which to default. Therefore, when the LC IDR is at or below the Country Ceiling, the LC IDR and the FC IDR will be equal virtually all of the time.

Long-Term IDR Scale		
Category	/ Brief Description	
AAA	Highest credit quality	
AA	Very high credit quality	
А	High credit quality	
BBB	Good credit quality	
ВВ	Speculative credit quality	
В	Highly speculative credit quality	
CCC	Substantial credit risk	
CC	Very high levels of credit risk	
С	Exceptionally high levels of credit risk	
RD	Restricted default	
D	Default	

The modifiers '+' or '-' may be appended to a rating to denote relative status within categories from 'AA' to 'CCC'. Click here for full descriptions of each rating category.

Source: Fitch Ratings.

Short-Term IDR Scale			
Category	Brief Description		
F1	Highest short-term credit quality		
F2	Good short-term credit quality		
F3	Fair short-term credit quality		
В	Speculative short-term credit quality		
С	High short-term default risk		
RD	Restricted default		
D	Default		

A'+' modifier may be appended to the 'F1' rating to denote exceptionally strong credit quality. Click here for full descriptions of each rating category.

Source: Fitch Ratings.



I.2. Short-Term Issuer Default Ratings

What They Measure

As with issuers in other sectors, Short-term IDRs reflect the non-bank financial institution's vulnerability to default in the short term. For non-bank financial institutions and most other issuers, "short-term" typically means up to 13 months.

When They Are Assigned

Short-Term IDRs are assigned to all non-bank financial institutions that have Long-Term IDRs, except where an issuer does not have, and is not expected to have, material short-term obligations. The short-term instrument most commonly rated by Fitch in the non-bank financial institution space is commercial paper (CP).

On Which Scale

Short-Term IDRs are assigned on a seven-point scale (see table at left).

How Are They Determined

Short-Term IDRs are almost always assigned in accordance with a correspondence table between Long-Term and Short-Term IDRs (see table at left). As outlined in this criteria, the Funding, Liquidity and Coverage factor represents Fitch's assessment of a non-bank financial institution's short-term risks. Fitch uses the Funding, Liquidity and Coverage factor score (mid-point of the three-notch band), as outlined in the various subsections of this report, as the principal determinant of whether the "baseline" or "higher" Short-Term IDR is assigned at cusp points.

Minimum Non-Bank Financial Institution Funding, Liquidity and Coverage Sub-Factor Score to Achieve Higher Short-Term Rating

Short-Term Rating	Minimum Funding, Liquidity and Coverage Score
F1+	aa-
F1	a
F2	bbb+
Source: Fitch Ratings	

In cases when an operating company and its holding company are regulated together and liquidity is fungible, Fitch may assign the same short-term rating to both entities, based on Fitch's view of the consolidated Funding, Liquidity and Coverage profile. However, in cases when an operating company has a first claim on the holding company's liquidity resources and/or when liquidity may not be available to the holding company (e.g. because of regulatory restrictions on capital flows or if ring-fencing, or other structural protections exist to preserve sufficient available liquidity resources at the operating company level.

Where the Long-Term IDR is support driven, the higher of the two possible Short-Term IDRs will typically be assigned where the issuer is rated lower than the supporting entity. This is because Fitch generally views the propensity to support as more certain in the near term.

When the Long-Term IDR is driven by sovereign support, Fitch would consider the potential for simultaneous deterioration in the liquidity profile of both the sovereign and non-bank financial institutions, including in foreign currency. When Fitch judges this "wrong-way" risk to be significant and/or if Fitch has identified other potential impediments to the prompt flow of funds, Fitch would assign the baseline Short-Term IDR to reflect the potential for the sovereign to pay its direct obligations ahead of providing support to the financial sector.

When the Long-Term IDR is driven by institutional support, Fitch typically assigns the higher Short-Term IDR when the mapping table permits this as propensity to support is typically more certain in the near term. An exception to this might be when the subsidiary has "standalone" risk management short-comings or if Fitch has identified potential impediments to the prompt flow of funds to the subsidiary from the institutional support provider (for example, the nature of the subsidiary's role in the group or regulatory/jurisdictional factors can both create potential impediments to support).

Rating Correspondence			
Long-Term Rating	Short-Term Rating		
From AAA to AA-	F1+		
A+	F1 or F1+		
A	F1 or F1+		
A-	F2 or F1		
BBB+	F2 or F1		
BBB	F3 or F2		
BBB-	F3		
From BB+ to B-	В		
From CCC to C	С		
RD	RD		
D	D		

The modifiers '+' or '-' may be appended to a rating to demote relative status within categories from 'AA' to 'CCC'. Click here for full descriptions of each rating category.

Source: Fitch Ratings.



The short-term rating of the supported entity will not be higher than the actual or implied short-term rating of the support rating provider (except in cases when an institutionally supported entity is rated higher due to holding company notching or ring-fencing).

I.3. Viability Ratings

What They Measure

Only in rare circumstances are VRs assigned to non-bank financial institutions. VRs are primarily used to measure the intrinsic creditworthiness of a bank on a stand-alone basis, without the benefit of government or institutional support. Since non-bank financial institutions do not typically have the systemic influence of a bank, they do not generally have the potential to receive sovereign support. As a result, the measure of a non-bank financial institution's stand-alone credit profile is generally encompassed in the Long-Term IDR.

Fitch will assign VRs to non-bank financial institutions, only in limited circumstances, for example to aid transparency when the IDRs are driven by external sovereign support or where the entity has features of a bank (including potentially a banking license and a deposit base), but where Fitch believes that, on balance, the non-bank financial institutions criteria is the main driver for the analysis. If a non-bank financial institution is assigned a VR, it would be in accordance with criteria and standards applicable to determining the stand-alone credit profile of that type of entity, as outlined in this criteria report. For more information on VRs, refer to the "Bank Rating Criteria."

When They Are Assigned

VRs may be assigned to non-bank financial institutions where Fitch expects the entity to be a beneficiary of sovereign support, because of either its systemic importance or policy role, and where Fitch also believes it has sufficient information to determine the stand-alone credit risk profile of the entity independent from the attributes of the associated sovereign support provider.

VRs may also be assigned to non-bank financial institutions where Fitch expects the entity to be a beneficiary of institutional support and Fitch also believes it has sufficient information to determine the stand-alone credit risk profile of the entity independent from the attributes of the associated institutional support provider.

In practice, VRs are rarely assigned to institutional support-driven non-bank financial institutions given challenges associated with determining the stand-alone credit risk profile of the entity independent from the attributes of the associated institutional sponsor, most notably including the stand-alone franchise and funding profile of the entity. Furthermore, non-bank financial institutions rarely exhibit structural or regulatory limits on capital flows to their parent companies, the absence of which increases the likelihood of the entity's credit risk profile being correlated to that of its parent, rather than accurately expressed on a stand-alone basis. The regulatory restrictions on capital flows imposed upon certain financial market infrastructure companies are a potential example of where a VR could potentially accompany an institutional support-driven IDR.

Attributes Likely to Constrain Fitch's Ability to Render a Stand-Alone Credit View for a Support-Driven Non-Bank Financial Institutions

Rationale
The stand-alone franchise position of the subsidiary cannot be sufficiently determined.
The stand-alone financial profile and/or management and strategy of the subsidiary cannot be sufficiently determined.
The subsidiary's ability to independently access external funding has not been demonstrated or cannot be sufficiently relied upon in the context of a stand-alone assessment.
The ability of the subsidiary to operate economically, let alone remain viable, on a stand-alone basis cannot be sufficiently determined.
The subsidiary's ability to underwrite and manage risk in a commercial context cannot be sufficiently determined.



I.4. Support Ratings

What They Measure

Fitch's SRs reflect the agency's view on the likelihood that a non-bank financial institution will receive extraordinary support, in case of need, to prevent it from defaulting. Extraordinary support typically comes from one of two sources: the rated entity's shareholders (institutional support) or the national authorities of the country where it is domiciled (sovereign support). However, in some circumstances SRs may also reflect potential support from other sources, e.g. international financial institutions, regional governments or expected acquirers of the rated entity.

In some cases, Fitch may judge that the likelihood of a non-bank financial institution receiving external support is materially different regarding its foreign- and local-currency obligations. This may happen, for example, when the sovereign that is the potential support provider itself has Foreign- and Local-Currency IDRs assigned at different levels. In such cases, the non-bank financial institution's SR (and SRF) will be assigned based on the obligations less likely to be supported (usually, those in foreign currency), while the non-bank's Foreign-and Local-Currency IDRs may be assigned at different levels to reflect the difference in risk.

SRs do not specifically address transfer and convertibility risk for each and every foreign jurisdiction in which a non-bank financial institution operates, nor do they reflect jurisdiction-specific resolution risks.

When They Are Assigned

SRs may be assigned to non-bank financial institutions that Fitch expects to be beneficiaries of sovereign, subnational, or institutional support and Fitch believes a Support Rating adds further transparency to our analytical approach.

On Which Scale

Source: Fitch Ratings.

SRs are assigned on a five-point scale, with '1' representing an extremely high probability of support, and '5' indicating that support cannot be relied on.

How They Are Determined

Fitch's criteria for assessing the likelihood of external support for a non-bank financial institution are outlined in Section III of this report. Whether considering sovereign or institutional support, Fitch will analyze both the ability and propensity of the supporting entity to provide assistance to the FI concerned and, in the case of institutional support, potential constraints that may be imposed upon the institution as a result of sovereign risk. Once a non-bank financial institution's institutional support-driven IDR or SRF has been determined, its SR is determined in accordance with the below table.

IDR/Implied IDR Based on Support (SRF for Sovereign Support) Rating Probability of Support		
'A-' or Above	A non-bank financial institution for which there is an extremely high probability of external support. The potential provider of support is very highly rated in its own right and has a very high propensity to support the non-bank financial institution in question.	1
'BBB' Category	A non-bank financial institution for which there is a high probability of external support. The potential provider of support is highly rated in its own right and has a high propensity to support the non-bank financial institution in question.	2
'BB' Category	A non-bank financial institution for which there is a moderate probability of support because of uncertainties about the ability or propensity of the potential provider of support to do so.	3
'B+' or 'B'	A non-bank financial institution for which there is a limited probability of support because of significant uncertainties about the ability or propensity of any possible provider of support to do so.	4
'B–' or Below	A non-bank financial institution for which there is a possibility of external support, but it cannot be relied on. This may be due to a lack of propensity to provide support or to very weak financial ability to do so.	5



I.5. Support Rating Floors

What They Measure

SRFs reflect the agency's view about the likelihood that the rated entity will receive extraordinary support, in case of need, specifically from government authorities. This usually means from the national authorities of the country where the non-bank financial institution is domiciled, although in certain cases, Fitch may also factor potential support from subnational or international government institutions into its assessment depending on factors outlined in Section III.1. Therefore, SRFs do not capture the potential for institutional support from the entity's shareholders. SRFs indicate the minimum level to which the entity's Long-Term IDRs could fall if the agency does not change its view on potential sovereign support.

SRFs do not specifically address transfer and convertibility risk for each and every foreign jurisdiction in which a non-bank financial institution operates, nor do they reflect jurisdiction-specific resolution risks.

When They Are Assigned

SRFs are assigned to non-bank financial institutions where Fitch believes the most likely source of potential extraordinary support is government authorities, rather than the non-bank financial institution's shareholders. For example, Fitch may assign a SRF to a non-bank financial institution which exhibits systemic importance or serves as a core component of the financial market infrastructure. They may also be assigned where institutional (shareholder) support is viewed as more reliable, but the agency believes it would be useful to also indicate the level below which the ratings are unlikely to fall due to government support.

On Which Scale

SRFs are assigned on the 'AAA' rating scale. Where there is no reasonable assumption that sovereign support will be forthcoming, an SRF of 'No Floor' is assigned.

How They Are Determined

Fitch's criteria for assessing the likelihood of sovereign support for a non-bank financial institution and assigning its SRF are outlined in Section III.1 of this report. Fitch analyzes the ability of the sovereign to provide support, its propensity to support the specific non-bank sector as a whole and its propensity to support the specific non-bank financial institution in question. The Support Rating Scale Correspondence Table above is used to link a non-bank financial institutions' Support Rating and its institutional support-driven IDR or SRF. The table can be read left to right or right to left, depending on whether the support-driven IDR/SRF or SR is determined first.

I.6. Derivative Counterparty Ratings

What They Measure

In some jurisdictions, developments in resolution frameworks or insolvency frameworks mean the vulnerability to default on a derivative contract could be lower than the vulnerability to default on other senior liabilities, even equally ranking ones. This could be because derivatives enjoy legal preference over, say, senior debt or because of powers granted to resolution authorities to treat equally ranking liabilities differently.

DCRs are issuer-level ratings and express Fitch's opinion on a non-bank financial institution's relative vulnerability to default, due to an inability to pay, on any derivative contract with third-party, non-government counterparties. Short-term 'stays' on derivatives at the outset of a resolution process would not be considered a default.

The vulnerability to default could vary even within this class of exposure (e.g. collateralized derivative exposures or cleared derivatives being less vulnerable to default than uncollateralized). DCRs in effect address the vulnerability to default on the riskiest type of counterparty exposure, which Fitch assumes, either jointly or in isolation, will be an uncollateralized derivative exposure.

Unless Fitch explicitly assigns ratings at the foreign subsidiary level, DCRs apply both to material domestic derivative liabilities and those originated by foreign subsidiaries. However, they do not specifically address transfer and convertibility risk for each and every foreign



jurisdiction in which a non-bank financial institution operates, nor do they reflect jurisdictionspecific resolution risks.

When They Are Assigned

Fitch only assigns DCRs to selected non-bank financial institutions that may be subject to resolution in selected jurisdictions where: i) Fitch believes derivative counterparties may be able to avoid default when other senior creditors suffer default (e.g., due to an effective resolution regime and/or clear legal preference for derivative counterparties) and ii) an issuer either acts as a notable derivative counterparty nationally or internationally, acts as derivative counterparty to Fitch-rated transactions (e.g. structured finance) or where Fitch otherwise understands there to be market interest.

Given that non-bank financial institutions rarely benefit from comparably formalized resolution frameworks as banks, Fitch expects the application of DCRs to stand-alone non-bank financial institutions to be limited to a small number of broker-dealers and FMIs.

On Which Scale

DCRs are assigned on the 'AAA' scale, but with a '(dcr)' suffix (see table at right).

How They Are Determined

DCRs are notched up from an issuer's Long-term IDR if equally ranking senior liabilities are notched up from an issuer's Long-Term IDR to reflect a lower default risk than the risk captured by the issuer's Long-Term IDR. Otherwise, they are aligned with an issuer's Long-Term IDR.

Like IDRs, DCRs are subject to Country Ceilings and other sovereign constraints, for example relating to intervention risk (as outlined in Annex 2: Rating Non-Bank Financial Institutions Above the Sovereign).

1.7 Issue Ratings

What They Measure

Issue ratings of non-bank financial institutions, like those of other corporate finance sectors, reflect Fitch's view of the overall level of credit risk attached to specific financial commitments, usually securities. This view incorporates an assessment of the likelihood of default (or of "non-performance" risk in the case of subordinated/hybrid securities) on the specific obligation, and potential recoveries for creditors in case of default/non-performance. Short-term non-bank financial institution issue ratings, like those of other sectors, incorporate only an assessment of the default risk on the instrument.

Non-performance by a non-bank financial institution on its subordinated/hybrid securities is defined as any of the following:

- the missing (omission or deferral) of a coupon or similar distribution;
- contingent conversion into a more junior instrument to the detriment of the investor (other than at the investor's option);
- the writedown, writeoff, conversion or non-payment of principal; and
- a distressed debt exchange.

When They Are Assigned

Issue ratings may be assigned to individual obligations or debt programs of non-bank financial institutions.

On Which Scale

Non-bank financial institution issues with an initial maturity of more than 13 months are usually rated on the long-term rating scale, whereas issues with an initial maturity of less than 13 months are usually assigned ratings on the short-term rating scale. Whether Fitch rates issues on the short- or long-term rating scale will also depend on market convention and local regulation.

Derivative Counterparty Rating Scale		
Category	Brief Description	
AAA(dcr)	Highest credit quality	
AA(dcr)	Very high credit quality	
A(dcr)	High credit quality	
BBB(dcr)	Good credit quality	
BB(dcr)	Speculative credit quality	
B(dcr)	Highly speculative credit quality	
CCC(dcr)	Substantial credit risk	
CC(dcr)	Very high levels of credit risk	
C(dcr)	Exceptionally high levels of credit risk	
RD(dcr)	Restricted default	
D(dcr)	Default	

The modifiers '+' or '-' may be appended to a rating to denote relative status within categories from 'AA' to 'CCC'. Click here for full descriptions of each rating category. Source: Fitch Ratings.



Where a non-bank financial institution (or corporate) has a Long-Term IDR of 'B+' or below, Fitch also usually assigns a Recovery Rating (RR) to the entity's issues rated on the long-term scale. RRs provide greater transparency on the recovery component of Fitch's assessment of the credit risk of lowly rated issuers' securities.

How They Are Determined

For long-term non-bank financial institution issues, Fitch first determines the likelihood of default/non-performance on the specific obligation, which is measured on the long-term 'AAA' rating scale. This is judged to be either in line with, or notched off of, the obligor's Long-Term IDR, which serves as the "anchor rating" for the issue rating.

Having established the level of default/non-performance risk on the issue, Fitch may then adjust this upwards or downwards to arrive at the issue rating if the agency views the instrument as having above- or below-average recovery prospects. Where recovery prospects are viewed as average, the issue rating will be in line with the assessment of default/non-performance risk. The extent of potential upward/downward adjustment of the issue rating based on the instrument's recovery prospects is shown in the Recovery Rating Scale table on page 99.

Fitch's approach to assigning issue ratings to different classes of securities issued by non-bank financial institutions is outlined in Section IV of this report.

I.8. National Ratings

What They Measure

National scale ratings are an opinion of creditworthiness relative to the universe of issuers and issues within a single country.

When They Are Assigned

National scale ratings are most commonly used in emerging market countries with sub- or low investment grade sovereign ratings on the international scale.

On Which Scale

National scale ratings are assigned on the long-term ('AAA') and short-term ('F1') rating scales, but with a country suffix to identify them as national scale ratings. Cross border issues carry the suffix of the country into which the debt has been issued, rather than the suffix of the issuer's domicile. In some monetary union countries, a single country suffix may be applied (e.g. the 'zaf' suffix for South Africa and Namibia National Ratings).

How They Are Determined

National scale ratings are assigned on the basis that the "best credits or issuers" in the country are rated 'AAA' on the national scale. National Ratings are then assessed using the full range of the national scale based on a comparative analysis of issuers rated under the same national scale to establish a relative ranking of credit worthiness.

Fitch uses the Non-Bank Financial Institutions Rating Criteria to assign national scale ratings to non-bank financial institutions, as it describes how Fitch assesses the relevant qualitative and quantitative factors that reflect the risk profile of issuers and their financial obligations. The rating assignment process uses the same rating framework as for international ratings, i.e. a combination of intrinsic and external support analysis.

Fitch adopts the following steps to assign national scale ratings:

- 1. Using either international or domestic peers as a starting point a comparative analysis is undertaken using the qualitative and quantitative factors of the Non-Bank Financial Institutions Rating Criteria. This process facilitates an initial relative positioning and ranking of credit risk both with other peer issuers within a country and/or internationally.
- Fitch uses equivalence tables, where relevant, to ensure relativities between issuers on the international scale and the more granular, country-specific national long-term rating scale are maintained.



- 3. Where assigned, national short-term ratings are then determined using the same process and principles outlined in section I.2 of this report. National scale short-term issue ratings are aligned with a non-bank financial institution's national short-term rating issuer unless there are exceptional circumstances (e.g. a specific issue is guaranteed by a third party).
- National scale long-term debt ratings are aligned with or notched from an issuer's national long-term rating using the same framework as outlined in section IV of this report.

Fitch does not publish rating navigators for national ratings.

II. Stand-Alone Assessment

In assessing a non-bank financial institution's stand-alone profile, Fitch considers five key factors: operating environment; company profile; management and strategy; risk appetite; and financial profile. Fitch assigns notch-specific scores on the 'aaa' scale at the factor and/or subfactor level for each of these categories. While the analytical approaches for the first three factors are relatively common across banks and non-bank financial institutions, an assessment of a firm's risk appetite and financial profile is more specific to the subsector in which the company operates.

Key Issuer	Default Rating	Framework	Considerations
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	Securities Firms	Investment Managers ^a	BDCs	Finance & Leasing Companies ^b	FMIs
Operating Environment	Implied scor	e based on two core metrics,	GDP per capita and the W	orld Bank's Ease of Doing	Business ranking
Company Profile		Franchise, Bus	siness Model and Organiza	tional Structure	
Management and Strategy	•	Management Quality, Corp	oorate Governance, Strate	gic Objectives and Executi	on
Risk Appetite	Operational Risk	Operational Risk (IMs, IFs)/ Underwriting Standards (ICs)	Underwriting Standards	Underwriting Standards	Operational, Reputational and Legal Risks
	Risk Controls	Risk Controls	Risk Controls	Risk Controls	N.A. ^c
			Growth		
	Market Risk	Market and Counterparty Risk	Market Risk	Market Risk	Counterparty Risk Management
Financial Profile	Asset Quality	Asset Performance (IMs, ICs, IFs) / Asset Quality (ICs)	Asset Quality	Asset Quality	Counterparty Exposure
		·	Earnings and Profitabilit	у	-
			Capitalization and Levera	ge	
		Fu	ınding, Liquidity and Cove	rage	

^aIncludes traditional and alternative investment managers (IMs), investment companies (ICs) and investment funds (IFs). ^bIncludes mortgage real estate investment trusts. ^cDoes not imply that risk controls are not considered, but rather, that the assessment is embedded within the "Operational, Reputational and Legal Risks" and "Counterparty Risk Management" sections. N.A. – Not applicable. Source: Fitch Ratings.

There may be instances where the assessment of the credit profile of an entity includes components of the bank and non-bank financial institution's criteria. For example, several non-bank entities have transitioned to bank/financial holding companies and/or acquired bank subsidiaries since the financial crisis in an effort to access more stable deposit funding. Examples include credit card companies, auto finance companies, commercial lenders and broker-dealers. In these instances, Fitch considers how the entity's credit profile compares to banks and non-bank financial institutions that undertake similar activities. In any case, Fitch would expect to designate the primary criteria in the associated Rating Action Commentary and, where relevant, Ratings Navigator.



All factors are relevant in determining a non-bank financial institution's stand-alone credit risk profile, but their relative importance varies from institution to institution depending on operating environments and the specifics of individual institutions and can change over time. Hence, Fitch does not assign fixed weightings to each factor but rather assigns the relative importance of each key rating factor in the determination of the stand-alone credit risk profile of a given institution. The relative importance indicator, as well as a trend/outlook indicator for each key rating factor and each financial profile subfactor, is generally published by Fitch in its Rating Navigators.

Fitch's assessment of a non-bank financial institution's operating environment usually has an influence on its assessment of other credit factors. This is because the operating environment can impact, for example, the vulnerability of a non-bank financial institution's asset quality and capital, the sustainability of its earnings and the stability of its funding. The operating environment may also affect assessments of non-financial factors, for example, the quality of a non-bank financial institution's franchise (company profile), its ability to execute its strategy (management and strategy) and the risks associated with its underwriting standards (risk appetite).

The operating environment will typically act as a constraint on the stand-alone credit rating, and other key rating factor scores, other than in cases where a non-bank financial institution can demonstrate an ability to insulate itself from the environment(s) in which it operates.

For each rating factor, Fitch has provided subfactor/rating category matrices that provide representative characteristics for that rating category. These characteristics are not necessarily an exhaustive and determinative review of that factor or subfactor. For example, a non-bank financial institution may meet some of the characteristics associated with more than one category, or some characteristics may not apply at all because of the specifics of the non-bank financial institution's profile. In those instances, Fitch will apply the category that best fits.

The stand-alone assessment framework considers five key rating factors:

- operating environment;
- company profile;
- management and strategy;
- risk appetite; and
- financial profile.

The first four key rating factors listed above are predominantly qualitative. However, Fitch uses quantitative measures in its assessment of the operating environment and, where available and relevant, in its assessment of the other factors. Such measures may include market shares and business footprint (company profile) and limit structures (risk management). These qualitative factors, individually or in combination, provide the context in which quantitative financial metrics are considered. Further detail is provided in the relevant sections that follow.

Page References by Key Rating Factor and Non-Bank Financial Institutions Subsector

	Operating Environment	Company Profile	Management and Strategy	Risk Appetite	Financial Profile
Securities Firms	17-22	22-25	26-29	30-32	52-58
Investment Managers	17-22	22-25	26-29	33-36	59-66
Business Development Companies	17-22	22-25	26-29	37-40	67-72
Finance and Leasing Companies	17-22	22-25	26-29	40-43	73-81
Financial Market Infrastructure Companies	17-22	22-25	26-29	43-46	82-86
Source: Fitch Ratings.	•	•	•	-	



Fitch's factor and subfactor assessment framework is based on consideration of "core" and "complementary" attributes. Core attributes are present in the analysis of all or most non-bank financial institutions and in most circumstances. Complementary attributes are present in some, but not all, circumstances. All attributes are considered in the application of the criteria, but where an attribute is either not present or immaterial to the credit profile it will make no, or limited, contribution to the analysis. The materiality and influence of each attribute in the analysis of each factor and subfactor varies by institution. A complementary attribute could carry an elevated influence in the stand-alone analysis, particularly if the rating factor that the attribute underlies is a key rating driver.

For the purposes of this criteria report, Fitch splits the non-bank financial institution universe into five subsectors, but recognizes that there may be issuers whose business model straddles various components of these subsectors or falls outside of the five subsectors. In these cases, Fitch employs a hybrid or bespoke analytical approach, which would be articulated in Fitch's Rating Action Commentary on the issuer.

Furthermore, the analytical approach is guided by the extent of balance-sheet usage employed by the business model being assessed. Typical differentiating factors are outlined in the table below. Business models may have both 'High' and 'Low' balance-sheet-usage characteristics, in which case the assessment is typically driven by which business activity is believed to have more influence on the issuer's risk profile and overall financial performance. In instances where more than one business activity is a meaningful contributor to an entity's risk profile and operational performance, such as the case where a mortgage originator (high balance sheet) also has a large servicing book (low balance sheet) or when an investment manager (low balance sheet) also has a large investment portfolio (high balance sheet), Fitch will attempt to allocate outstanding debt to the different business lines and assess the leverage profile of each according to the relevant benchmark ratios. Where funding facilities are not easy to assign to an activity (as may be the case with unsecured debt), Fitch will look to allocate debt in a manner that will leverage each business to a similar benchmark navigator score.

Typical Differentiating Factors Between High and Low Balance-Sheet-Usage Non-Bank Financial Institutions

Attribute	High Balance-Sheet-Usage Non-Bank Financial Institution	Low Balance-Sheet-Usage Non-Bank Financial Institution
Level of tangible assets on balance sheet	High	Low
Balance-sheet exposure to market, credit and/or residual value risks	High	Low
Primary sources of earnings	Net interest margin, dividend/ interest income, trading/investment gains	Commissions, fees, services, data/information sales
Primary uses of funding	Lending, investing, purchasing lease assets, financing securities inventory	Mergers and acquisitions, capital expenditures, enhanced return on equity, dividend recapitalization
Reliance on funding in order to conduct core		
business activities	High	Low
Primary sources of debt repayment (absent refinancing)	Repayment or liquidation of balance sheet assets	Cash flow generation, monetization of future contractual cash flows, platform sales
Source: Fitch Ratings.		

The five non-bank financial institution subsectors are: securities firms, investment managers, BDCs (which only exist in the U.S.), finance and leasing companies and FMIs. Finance and leasing companies include mortgage REITs, debt purchasers (i.e. companies that buy portfolios of defaulted assets or non-performing loans) and most non-bank policy institutions. FMIs include exchanges, clearing houses and non-bank central securities depositories (CSDs).

The investment manager subsector includes traditional and alternative investment managers, investment companies and investment funds. Traditional and alternative investment managers primarily manage third-party assets and, therefore, typically assume limited balance sheet risk while earning revenue through management fees.

Investment companies typically deploy permanent capital to assume investment/balance sheet risk while seeking to create value through asset appreciation and dividend and interest income. Investment companies that are relatively concentrated (five to 10 investments), have



the ability to exert some influence over portfolio companies and exhibit investment holding periods generally extending over several years, may be rated by Fitch's Corporate group under the criteria titled "Investment Holding Companies Rating Criteria." The magnitude of underlying investments in financial institutions may also influence whether Fitch's "Non-Bank Financial Institutions Rating Criteria" or "Investment Holding Companies Rating Criteria" is applied. More specifically, if the degree of underlying investment exposure to financial institutions is elevated, Fitch is more likely to analyze the entity as an investment company rather than an investment holding company. Investment companies that are affiliated with and/or highly integrated with a non-financial corporate entity may be rated by Fitch's Corporate group under the criteria titled "Corporate Rating Criteria."

Investment funds also invest their own capital and assume the associated investment/balance sheet risk but are typically open-ended vehicles subject to redemption risk that seek to achieve returns primarily through trading gains over a shorter investment horizon. In practice, the primary type of investment fund to which this analytical approach is applicable is openended hedge funds, but it could also encompass pension funds and profit-oriented sovereign wealth funds, which may have lower relative levels of near- and medium-term financial obligations, and as a result, longer-term investment horizons than other investment funds. This may also contribute to a broader revenue mix for such investment funds, including realized/unrealized asset appreciation, dividends and interest income in addition to trading revenue.

Broadly diversified closed-end investment funds with more defined regulatory/structural frameworks, greater asset liquidity and/or more frequent investment turnover are typically rated by Fitch's Funds & Asset Managers group based on its "Closed-End Funds and Market Value Structures Rating Criteria," available on Fitch's website at www.fitchratings.com.

The table below summarizes the various types of business models for the investment manager subsector and the applicable rating criteria.

Analytical Frameworks for Investment Managers, Investment Funds and Investment Companies

		1940 Act-Regulated Closed-End Funds (excluding BDCs)	Traditional Investment Managers	Alternative Investment Managers	Investment Funds	Investment Companies	Investment Holding Companies	Government-Related Entities
Framework	Fitch Analytical Group(s)	Funds and Asset Managers	Financial Institutions	Financial Institutions	Financial Institutions	Financial Institutions	Corporates	International Public Finance and Corporates
Analytical Fra	Applicable Criteria	Closed-End Funds and Market Value Structures Rating Criteria	Non-Bank Financial Institutions Rating Criteria	Non-Bank Financial Institutions Rating Criteria	Non-Bank Financial Institutions Rating Criteria	Non-Bank Financial Institutions Rating Criteria	Investment Holding Companies Rating Criteria	Government-Related Entities Rating Criteria
	Primary Objective	For Profit	For Profit	For Profit	For Profit	For Profit	For Profit	Policy Orientation
	Balance Sheet Risk	High	Low	Low to Medium	High	High	High	High
Business Model	Primary Revenue Sources	Realized/Unrealized Asset Appreciation, Dividends and Interest Income	Base Management Fees	Base and Performance Management Fees	Trading Gains	Realized/Unrealized Asset Appreciation, Dividends and Interest Income	Realized/Unrealized Asset Appreciation, Dividends and Interest Income	Realized/Unrealized Asset Appreciation, Dividends and Interest Income
Bus	Redemption Risk	None	High	Low	Full Spectrum	None	None	Limited to None
	Strength of Regulatory Framework	Strong	Strong	Strong	Modest	Modest to Strong	Modest to Strong	Modest to Strong

^aIf the degree of underlying investment exposure to financial institutions is elevated, Fitch is more likely to analyze the entity as in investment company rather than an investment holding company.1940 Act – Investment Company Act of 1940. BDCs – Business development companies. *Continued on next page.*Source: Fitch Ratings.



Analytical Frameworks for Investment Managers, Investment Funds and Investment Companies (Continued)

		1940 Act-Regulated Closed-End Funds (excluding BDCs)	Traditional Investment Managers	Alternative Investment Managers	Investment Funds	Investment Companies	Investment Holding Companies	Government- Related Entities
0	Degree of Portfolio Diversification	Medium to High	High to Very High	High to Very High	Full Spectrum	Full Spectrum	Low to Medium ^a	High to Very High
ortfoli	Degree of Asset Liquidity	Medium to High	High to Very High	Low to Medium	Full Spectrum	Full Spectrum	Full Spectrum	Full Spectrum
stment Pol	Typical Investment Horizon	Full Spectrum	Short to Medium	Medium to Long	Full Spectrum	Medium to Long	Long to Permanent	Long to Permanent
Inve	Strategic influence on portfolio companies	Low	Low to Medium	High to Very High	Low to Medium	Full Spectrum	Medium to High	Medium to High

^aIf the degree of underlying investment exposure to financial institutions is elevated, Fitch is more likely to analyze the entity as in investment company rather than an investment holding company.1940 Act – Investment Company Act of 1940. BDCs – Business development companies.

Source: Fitch Ratings.

An assessment of the operating environment, company profile and management and strategy is largely common across the various subsectors (as well as banks), although some nuanced considerations are outlined herein. Conversely, assessments of the risk appetite and financial profile of a non-bank financial institution may differ by industry, so these factors are divided into five subcategories.

II.1 Operating Environment Assessment

Importance of this Assessment

The first step in Fitch's assessment of stand-alone creditworthiness is a review of the institution's operating environment, as this sets the range for potential IDRs. The operating environment to a large degree serves as a constraining factor for the IDR, as it is rare for the IDR to be assigned significantly above the operating environment assessment however well the issuer scores on other factors or sub-factors. Exceptions may include institutions that operate exceptionally low-risk business models or are exceptionally strong across other rating factors, making them clearly 'atypical' in that operating environment. In such cases, Fitch would need to believe that the institution can, on a stand-alone basis, successfully mitigate operating environment risks that would otherwise constrain the rating.

In jurisdictions with relatively highly scored operating environments, non-bank financial institution IDRs (and many other factor scores) generally can be significantly lower than the operating environment score reflecting business model, risk appetite or other strategic decisions taken by management together with their effect on financial metrics. In jurisdictions with relatively lower-scored operating environments, the operating environment ordinarily acts as a rating constraint as Fitch expects the vulnerability or volatility created by the operating environment to act as a limit on a number of aspects of the issuer's credit profile.

Fitch's assessment of the operating environment incorporates both sovereign risk and broader country risks related to doing business in a particular jurisdiction. However, it does not capture transfer and convertibility risks, which are reflected separately in Fitch's "Country Ceilings." For institutions that operate in multiple geographies, the subfactor and overall operating environment assessments will take a blended view of the different juris dictions.

An assessment of the operating environment for non-bank financial institutions may not align with that of a bank located in the same jurisdiction and it may also differ across the various subcategories of non-bank financial institutions. The regulatory oversight of banks around the globe is believed to be considerably more robust than that of non-bank financial institution subsectors, which generally will result in operating environment scores for non-bank financial institutions which are no higher than, and often lower than, those assigned to banks.



Implied Operating Environment Score

Fitch begins by determining the country-level operating environment score for each market in which it rates non-bank financial institutions. Most institutions operating primarily within a given country will be assigned the country operating environment score for that market. However, some institutions (i.e. those that operate predominantly in a particular region of a country, have material operations outside of their home country or have more unique business model risks) may be assigned operating environment scores different to the implied country score. Refer to Adjustments to the Implied Operating Environment Score section below.

As a first step to determining an operating environment score for a country, Fitch derives an implied score based on two core metrics, GDP per capita and the World Bank's Ease of Doing Business ranking. Fitch believes these core metrics have the greatest explanatory power in determining the ability of financial institutions to generate business volumes with acceptable levels of risk, and they, therefore, are core factors in determining operating environment scores globally. The implied score for a country is derived based on the matrix as detailed in the table below

Implied Operating Environment Score

5–70 40–5	40-55 <4
а	a bb
a bb	bbb b
bbb b	bb
bb	b
b	b
	b

Source: Fitch Ratings.

GDP per capita helps to explain the operating environment score because it is usually closely correlated with corporate earnings and household income levels, which in turn help to determine business volumes for non-bank financial institutions and the riskiness of operations that they are able to undertake. The Ease of Doing Business ranking ¹ helps to explain the operating environment score, in particular in lower-income economies, because in Fitch's view it is correlated with the transparency and stability of the corporate sector, and therefore helps to determine the ability to generate business volumes with moderate levels of risks.

Fitch usually uses the latest reported, historical values of these metrics to derive the implied operating environment scores. However, Fitch may instead use a forecast value for GDP/capita for the current year (or a year just ended) where it believes this is reasonably reliable and materially differs from the latest reported historical value. Where Fitch believes future values of either of the two core metrics are likely to differ significantly from their latest values it may also adjust the implied score to arrive at the final score (see Adjustments to the Implied Operating Environment Score below). Where a jurisdiction has not been assigned an Ease of Doing Business ranking, Fitch will determine the implied operating environment score based on reported GDP/capita and its view of the transparency and stability of the corporate sector in that market.

Adjustments to the Implied Operating Environment Score

Fitch adjusts the country implied operating environment score upwards or downward where it believes the risks of doing business in a given jurisdiction are significantly higher or lower than those suggested by the implied score or a particular institution on subsector exhibits unique business model attributes not reflected in the country implied country score ². The most common reasons for adjusting the implied score are listed below.

¹The ranking captures the extent to which the regulatory environment is conducive to the starting and operation of a local firm, based on scores on ten topics: starting a business; dealing with construction permits; getting electricity; registering property; getting credit; protecting minority investors; paying taxes; trading across borders; enforcing contracts and resolving insolvency.

² In cases where Fitch views the operating environment as exceptionally strong or weak, these adjustments could result in an operating environment score of 'aaa', or of 'ccc' or below respectively.



Sovereign Rating³: The country operating environment score is usually constrained by the sovereign rating, and therefore may be adjusted downwards where the implied score is above the sovereign rating. This is because a sovereign default is usually accompanied by a sharp deterioration in the operating environment, which often includes recession, weaker public and private-sector balance sheets, funding market dislocations and macroeconomic volatility (see also Annex 2). However, Fitch may assign the operating environment score above the sovereign rating (although not usually by more than one rating category) where (i) we believe there is a reduced linkage between the sovereign credit profile and non-bank financial institutions' operating conditions; or (ii) the sovereign has a very low rating (e.g. 'CCC' category and below) and there are specific sovereign rating drivers that do not directly affect non-bank financial institutions. Where the sovereign is rated significantly above the implied operating environment score, this may result in an upward adjustment to the score because a stronger sovereign may indicate a greater probability of financial market and macroeconomic stability.

For certain non-bank financial institution business models, the geographic diversity of the business activities or the lack of direct credit linkage to the sovereign's financial condition may mean that the sovereign rating acts as a less of a constraint on the operating environment score. For example, aircraft lessors may be domiciled in certain locations for tax purposes but have a portfolio of aircraft that are dispersed among lessees in a variety of countries around the globe. In these cases, Fitch would consider any geographic concentrations and the portability of the collateral, as determined by local law. The same may apply for diversified investment managers, investment companies and investment funds if the funds they manage, the assets they invest in, or the investors they service are in more favourable operating environments or there are ring-fenced assets or cash flows that strongly support rated obligations.

The sovereign rating assessment is likely to have less of an influence on FMIs relative to banks or other non-bank financial institutions, given that many FMIs do not typically have significant credit exposure to sovereigns by holding bonds or placements with central banks. In many ways, FMIs may act like financial utilities, which are unlikely to be materially affected by sovereign stress. Indeed, the performance of certain FMI subsectors, such as exchanges, may be countercyclical to the credit profile of the sovereign, as there may be increased trading activity during periods of stress. As a result, a FMI could have a rating above the sovereign rating, with the primary exception being when the FMI holds a majority of its balance sheet or guarantee fund in sovereign securities, in which case the sovereign rating may take on a higher influence.

Size and Structure of Economy: Fitch may adjust upwards the implied operating environment score where the economy is relatively large or diversified, resulting in a lower risk of macroeconomic volatility and offering non-bank financial institutions greater opportunity to diversify their risk exposures and revenue sources. Conversely, where the domestic economy is small or highly dependent on a small number of sectors, in particular ones which are inherently cyclical or likely to show volatility in performance, this may result in a downward adjustment to the operating environment score. The score may also be adjusted downwards where the involvement of the state in the economy is particularly high, governance is particularly weak or there are other negative structural factors which in Fitch's view are not captured in the Ease of Doing Business ranking.

Conversely, the score may be adjusted upwards where an economy benefits from strong governance and transparency to an extent not captured in the Ease of Doing Business ranking. The score may also be adjusted where Fitch believes there is a strong likelihood that the Ease of Doing Business ranking, or the transparency and governance of the corporate sector more generally, are likely to change significantly in the future.

Economic Performance: Where an economy has a relatively high underlying rate of economic growth, due for example to competitive advantages, convergence with more developed markets or favourable demographics, this may result in an upward adjustment to the operating environment score. This is because economic expansion usually supports non-bank

³ Where a sovereign rating has not been assigned, Fitch will consider the sovereign Credit Opinion (where available) or, more broadly, any marked strengths and weaknesses in the sovereign credit profile.



financial institutions' asset quality and facilitates revenue growth. Moderate, but consistently positive, economic growth, and low volatility of economic performance would also be positive.

However, Fitch may adjust the operating environment score downwards if we believe that high economic growth is unsustainable, likely to be volatile and may give rise to the risk of a sharp negative correction. We may also adjust the score downwards where an economy has suffered, or is expected to suffer, a period of low or negative economic growth or of heightened volatility in economic performance, in particular where this has resulted, or is expected to result, in a significant deterioration in the creditworthiness of domestic borrowers. Increasing, or high, unemployment may also result in a negative adjustment.

Reported and Future GDP/Capita: Fitch may adjust the implied operating environment upwards or downwards where the agency believes that future levels of GDP/capita are likely to significantly diverge from the latest reported level (or from our estimate of the level for the current year or the year just ended). Fitch may also adjust the implied score upwards or downwards where the agency believes the reported GDP/capita level significantly under/overstates the potential for an economy to generate moderate-risk business for non-bank financial institutions.

For example, Fitch may adjust upwards the implied score where a country benefits from significant remittances from abroad (not captured in GDP) or where there is a large unbanked proportion of the population (dragging down the GDP/capita metric, but not necessarily the available business opportunity in a country). Conversely, Fitch may adjust the implied score downwards where GDP is inflated by income accruing to companies not operating primarily in the country concerned and hence not likely to become significant sources of business for non-bank financial institutions in that market.

Macroeconomic Stability: Where an economy has exhibited limited volatility in such variables as inflation, interest rates, exchange rates and asset prices, and Fitch expects this to continue in the future, this is likely to be neutral or moderately positive for the operating environment score. However, where such volatility has been, or Fitch believes could be, significant, or where an economy is more susceptible to negative shocks, this could result in a negative adjustment to the implied operating environment score. In its assessment, Fitch will also consider the authorities' use of macro-prudential tools to mitigate financial stability risks, and the implications of using such tools for the operating environment.

Where a significant proportion of transactions in an economy are conducted in foreign currency, or where non-bank financial institutions' assets and liabilities are to a significant degree denominated in foreign currencies ("dollarization"), this may result in a negative adjustment to the operating environment score. A negative adjustment is more likely in cases where Fitch believes significant exchange rate movements are more likely and where the corporate and/or household sectors have significant currency mismatches (usually short positions in foreign currencies), meaning their ability to service debt would be more likely to be negatively affected in case of a sharp depreciation.

Level and Growth of Credit: Fitch may adjust downwards the operating environment score where the level of credit in an economy is particularly high relative to GDP, or is rising fast. This is because higher borrower leverage may increase the risk of future asset quality problems and limit the potential for further business growth. In assessing leverage in the corporate sector, Fitch may consider not just bank and non-bank financial institution lending, but also other sources of credit, debt issuance and international borrowing; with respect to the household sector, Fitch may consider not just debt levels, but also debt service requirements and debt service capacity, as reflected in household assets and income levels. Where the level of credit in an economy is relatively low, this may result in a moderate upwards adjustment to the implied operating environment score; a low credit/GDP ratio may also significantly offset risks associated with high credit growth.

Financial Market Development: A large, highly developed and concentrated financial sector may result in a positive adjustment to the operating environment score as these market features will usually help financial institutions to grow their franchises, achieve economies of scale and protect margins. The existence of effective institutional frameworks to support the financial system, such as credit bureaus, a depositor protection scheme or deep and liquid domestic capital markets, may be moderately positive for the operating environment



assessment, but the monetary authorities acting as a reliable and transparent lender of last resort would typically only be neutral for the assessment. A small, developing or highly fragmented financial sector may be negative for the operating environment score, as may be limited central bank liquidity support mechanisms, limited broader institutional frameworks and underdeveloped domestic capital markets.

Regulatory and Legal Framework: A relatively strong regulatory and legal framework, characterized by developed legislation and regulations, effective financial regulatory bodies, sound accounting standards, appropriate protection of creditor rights and developed corporate governance standards, may be moderately positive for the operating environment score. Conversely, marked deficiencies in any of these areas, or a high degree of intervention from other parts of government in the regulatory process, could result in a negative adjustment to the score. Negative adjustments for non-bank financial institutions may be more frequent and/or pronounced, relative to banks, to reflect that relatively weaker regulatory and legal frameworks are often present.

BDCs are subject to a variety of regulatory requirements, as dictated by the Investment Company Act of 1940 (40 Act), and Fitch carefully weighs the impact of each in its assessment of the sector. Regulatory asset coverage requirements, which effectively limit balance-sheet leverage to no more than 2.0x, are viewed favourably in terms of serving as constraints on absolute leverage levels. However, most BDCs elect to be treated as Regulated Investment Companies (RICs) for tax purposes, which limits capital retention, and is viewed more negatively by Fitch.

For finance companies that have elected REIT status under the U.S. Internal Revenue Service tax code (i.e. mortgage REITs including commercial mortgage REITs, residential mortgage REITs and hybrid mortgage REITs), Fitch considers the impact of U.S. federal tax legislation. Namely, U.S. mortgage REITs benefit from favorable tax treatment, as they do not pay income taxes on the portion of taxable income paid as dividends to shareholders. Conversely, required dividend distributions weaken REITs' capital retention capabilities relative to other financial institutions that do not have this requirement.

Regional, Industry or Subsector Focus: When a non-bank financial institution's operations are concentrated in a particular region/regions, industry or subsector of a country, its operating environment score may be adjusted up/down from the country score in cases where the regional economy or particular industry or subsector economics are notably stronger/weaker than the national average.

International Operations, Divergence between Domicile and Business Activity: For a non-bank financial institution which has a significant proportion of its business and risk exposures in markets other than its main country of operations (either through foreign subsidiaries or through transactions booked on its own balance sheet), Fitch will typically derive the operating environment score by calculating a weighted average of the scores (with weightings based on risk/asset exposures) for the countries in which the institution does business. The home market may have a proportionally higher influence in this calculation where Fitch believes the benefits or constraints of this are particularly important (e.g. strong/weak lender of last resort and regulatory framework, or dependence of funding access on broader developments in the home market).



Operating Environment

aaa	aa	a	bbb	bb	b	ccc and below
Operating	Operating	Operating	Operating	Operating	Operating	Operating
environment	environment	environment	environment	environment	environment	environment
presents, or is	presents, or is	presents, or is	presents, or is	presents, or is	presents, or is	presents, or is
expected to present,					expected to present,	
exceptionally good	very good	good opportunities	reasonable	moderate	limited opportunities	,
opportunities for	opportunities for	for non-bank	opportunities for	opportunities for	for non-bank	opportunities for
non-bank financial	non-bank financial	financial institutions		non-bank financial	financial institutions	
institutions to do consistently	institutions to do consistently	to do consistently profitable business	institutions to do consistently	institutions to do consistently	to do consistently profitable business	institutions to do consistently
profitable business	profitable business	throughout the	profitable business	profitable business	throughout the	profitable business
throughout the	throughout the	credit cycle. The	throughout the	throughout the	credit cycle. The	throughout the
credit cycle. The	credit cycle. The	economic	credit cycle. The	credit cycle. The	economic	credit cycle. The
economic	economic	environment and	economic	economic	environment and	economic
environment and	environment and	sovereign credit	environment and	environment and	sovereign credit	environment and
sovereign credit	sovereign credit	profile are strong,	sovereign credit	sovereign credit	profile are weak,	sovereign credit
profile are	profile are very	income levels are	profile are good,	profile are less	income levels are	profile are very
exceptionally strong	strong, income levels	quite high and	income levels are	robust, income levels	low and structural	weak, income levels
income levels are	are high and	structural	acceptable and any	are moderate and	weaknesses are	are very low and
very high and	structural	weaknesses are	structural	structural	significant.	structural
structural	weaknesses are very	limited.	weaknesses should	weaknesses are		weaknesses are
weaknesses are	limited.		be manageable.	evident.		prominent.
absent.						
Source: Fitch Ratings.						

II.2 - Company Profile Assessment

Fitch's Company Profile assessment considers the following subfactors:

- franchise;
- business model; and
- organizational structure.

Importance of this Assessment

Assessment of a company's franchise, business model, and organizational structure help identify the types of business risks an institution could face together with its ability to safeguard or defend existing businesses and earnings, and gain new business through an analysis of its longer term competitive strengths, weaknesses, opportunities and threats.

The company profile assessment is typically conditioned, and often constrained, by the operating environment assessment, unless Fitch believes the non-bank financial institution's business profile is insulated from the effects of its operating environment(s). Within that operating environment context, the company profile is determined at a level that primarily reflects the strength and quality of its franchise and stability of its business model.

The following tables identify those company profile attributes that Fitch has defined as 'core' versus 'complementary,' together with an indication of how each attribute is typically assessed. The accompanying subfactor/rating category matrix provides representative characteristics that aid the determination of the overall factor score assigned in each case.



Franchise

Attribute	Core Versus Complementary	Description				
Market Shares	Core	A non-bank financial institution's franchise is typically reflected in market shares in the entity's core offered product(s). Franchise value is assessed on the most relevant basis - global, national or regional - taking into account both the size of the market in which a non-bank financial institution operates and its position within tha market. Small relative market shares, particularly in large markets, are not necessarily negative for the assessment and may be offset by sustainable, competitive advantage and stable performance in core product an client segments. Large market share in a small market can potentially be positive for the assessment, provided it not constrained by the strength or quality of the market itself or the relevant operating environment assessment.				
Competitive Position	Core	A non-bank financial institution's competitive position relative to peers' may be evident in relative product leadership and pricing power as well as reflective of any material barriers to entry. Product leadership will often be a function of scale, where traditional financial products are concerned, and may also reflect technology and efficiency advantages, or deficiencies, relative to peers. In the case of certain niche products or offerings, leadership may be reflected in relevant "league tables."				
Critical Mass	Complementary	Size, taken in isolation, is unlikely to be a driver for the company profile assessment, but may affect pricing power and client relationships. Non-bank financial institutions which lack critical mass are likely to be assigned lower scores.				
Client Relationships	Complementary	Fitch considers the nature of client relationships and the extent to which product range and/or expertise is the key driver of client retention or business volume growth as opposed to price.				
Intragroup Benefits and Risks	Complementary	An institution's franchise may also incorporate any benefits it receives from being part of a larger (typically financial) group. This could include client relationships, funding access, product offering or technical expertise that the institution would not otherwise have access to, as well as potential diversification benefits of other businesses of subsidiaries or related companies. Conversely, a non-bank financial institution's franchise may incorporate contagion risks where a weakness in the broader group's credit profile exists.				

Source: Fitch Ratings.

Business Model

Attribute	Core Versus Complementary	Description
Business Mix	Core	An institution's business model encompasses the ways in which it generates revenue and profits. This includes an assessment of an institution's business mix, such as by asset/product, service composition and proportion of revenue and earnings generated from core business lines.
Earnings Volatility	Core	Business models that are highly reliant on volatile businesses, such as trading, or where market conditions exert a greater influence on business volumes and revenue generation between reporting periods will typically result in a lower business model score relative to other financial institutions with lower observed volatility. Stability in earnings through credit and interest rate cycles will typically contribute to higher scores.
Geographical Diversification	Complementary	A high concentration of a non-bank financial institution's operations in less developed economies is likely to weigh on Fitch's assessment of its business model. Concentrations from a client and/or investor perspective may also be a limiting factor. Geographic diversification may be a positive rating attribute, but expansion into areas that add little or limited overall synergies may be viewed as neutral or negative to the company profile assessment.
Product Concentration	Complementary	The perceived risk associated with the particular product(s) and the quality of the product franchise can influence the assessment for a business model with a narrow product focus, (e.g. a monoline lender) versus one that provides a broader array of products. Product diversification may be a positive rating attribute, but expansion into business areas that add little or limited overall synergies may be viewed as neutral or negative to the company profile assessment.



Business Model Rating Ranges

						Prima	ary Rating Co	nstraints		
Sector	Subsectors	Balance Sheet Usage	Typical Maximum Rating Category ^a	Business Cyclicality		Wholesale Funding	Regulatory Risk	Asset Illiquidity	Market/ Redemption/ Counter- party Risk	Operational Risk
Securities	Broker-Dealers	High	'BBB'	✓	✓	✓			✓	
Firms	Interdealer Brokers	Low	'BBB'	✓	✓		✓	-	-	-
	Retail Brokers	Medium	'A'	✓						✓
Investment	Traditional IMs	Low	'A'	✓	-			-	✓	✓
Managers	Alternative IMs	Low-Medium	'A'	✓	-			-	✓	✓
	Investment Companies	High	'AA'	✓	-			✓	✓	
	Pension Funds	High	'AAA'	✓	•			✓	✓	✓
	Permanent Capital Funds	High	'A'	✓	-			✓	✓	✓
	Open-End Investment Funds (Limited Market Value Risk ^b)	High	'BBB'	√				√	~	√
	Open-End Investment Funds (Elevated Market Value Risk ^c)	High	'BB'	√				√	✓	√
Business Development Companies	N.A.	High	'BBB'	✓	✓	✓		✓	✓	
Finance and Leasing	Consumer Finance	High	'A'	✓	✓	✓	✓	-		-
Companies	Commercial Finance	High	'A'	✓	✓	✓		-	-	-
	Alternative Financial Services Providers	Low	'BBB'	✓	✓	✓	✓			
	Mortgage Servicers	Low	'BB'	✓	✓	✓	✓			✓
	Debt Purchasers	Medium-High	'BB'		✓	✓		-		-
	Mortgage REITs	High	'BBB'	✓	✓	✓				
Financial	Exchanges	Low								✓
Market Infrastructure Companies	Clearing Houses	Low (Aside from Guaranty Funds)	'AA'						√	✓
	CSDs Without Bank License	Low								✓

^aDoes not represent a hard cap but rather the highest stand-alone credit rating category that most entities within given non-bank financial institution subsector normally achieve. ^bOpen-end funds with limited market value risk are characterized by having sensitivity to the market value of underlying assets counterbalanced by well-established redemption frameworks that are subject to the availability of cash proceeds (queues) and therefore provide non-discretionary, structural protection against liquidity mismatches. ^cOpen-end funds with elevated market value risk are characterized by having a) a high level of management discretion over investment strategy, limited transparency over the evolution of risk positions, and potentially rapidly changing risk appetite, b) sensitivity to the market value of underlying assets in conjunction with high investment leverage and/or confidence sensitive funding sources that elevate the fund's sensitivity to market stresses and c) the majority of capital being from non-permanent sources subject to periodic withdrawal. IM – Investment manager. REIT – Real estate investment trust. CSD – Central securities depository.

N.A. – Not applicable.

Source: Fitch Ratings.



Organizational Structure

Attribute	Core Versus Complementary	Description				
Appropriateness Relative to Business Model	Core	A group's organizational structure is typically commensurate with its business model. Group structure rarely affects Fitch's overall rating assessment, but has the potential to when Fitch considers the group as overly complex (relative to its operations and footprint), opaque or with material risks arising from intragroup transactions. Examples of business model complexity include layers of intermediate holding companies whose locations may be mainly tax-driven, or unnecessarily complex structures that appear inconsistent with the size, scale and footprint of the institution/group.				
Opaqueness	Complementary	Unexplained cross-ownership agreements or large minority interests, which are not commensurate with the non bank financial institution's business model, would typically result in a lower company profile score.				
Intragroup Transactions	Complementary	Intragroup transactions may affect risks associated with the rated entity. This is especially important where cash or capital can get trapped in subsidiaries and therefore is not readily available for distribution to the group as a whole.				
Ownership Dynamics	Complementary	Fitch also considers ownership dynamics, including whether an issuer is publicly traded privately held or mutually owned, whether there is private equity ownership and/or non-strategic ownership and whether there is significant influence from related parties to understand the impact on strategic decisions, liquidity and/or capitalization. Mutually owned institutions, such as many clearing houses, may be viewed more favorably to the extent they reduce conflicts of interest between risk management and profit maximization.				

Company Profile

	aaa	aa	a	bbb	bb	b	ccc and Below
Franchise	Dominant franchise in multiple business segments or geographies. Strong competitive advantages likely to endure. Possesses strong competitive advantages and pricing power in principal operating segments. These strengths maintained through economic cycles.	multiple business segments or geographies. Solid competitive advantages likely to endure into the long term. Demonstrated competitive advantages and pricing power. These strengths maintained over	Strong franchise in key markets or businesses. Has leading franchise in some key operating segments or geographies. Demonstrated competitive advantages and pricing power in key operating segments.	Adequate franchise in geographies. Operating in somewhat less developed markets or has limited competitive advantages or pricing power in main operating segments.	Moderate franchise in key business segment or geographies. Operating in somewhat less developed markets or has limited competitive advantages and generally a price taker in main operating segment(s). Limited operating history.	May have nominal franchise in a key business segment or geographies. Operating in less developed markets or has no discernible competitive advantage. Very limited operating history.	Operating in undeveloped markets or has no discernible franchise value or competitive advantage. Extremely limited operating history.
Business Model	Highly diverse and stable business model across multiple operating segments or geographies. Critical mass maintained in all business segments and geographies in which it operates.	Very diverse and stable business model across multiple operating segments or geographies.	business model. Critical mass maintained in key operating segments or geographies in which it operates.	dominated by a key operating segment or geography.		Limited business model stability. May be wholly reliant on volatile businesses or economies.	Business model rapidly evolving or operating in unstable economic environment.
Organizational Structure		aaa/aa' business model. exist principally for clear gh visibility into		ch 'a/bbb' business increased ucture complexity.	Significant organizat complexity. Potentia visibility into mainle	Highly complex, opaque or materially changing organizational structure.	



II.3 - Management and Strategy Assessment

Fitch's assessment of Management and Strategy considers the following subfactors:

- management quality;
- corporate governance;
- strategic objectives; and
- execution.

Importance of this Assessment

An assessment of management, corporate governance, strategic objectives and execution is one of the least tangible aspects of its fundamental analysis but is important in considering how an institution is run, for example through establishing particular business or financial goals, developing a strategy to pursue those goals, and demonstrating an ability to meet these goals, all of which provide insight into motivations and incentives within the institution.

The management and strategy assessment is typically conditioned, and often constrained, by the operating environment and company profile assessments, unless Fitch believes the elements assessed are insulated from the effects of the non-bank financial institution's operating environment(s) and business model. In weaker operating environments, corporate governance issues tend to be more prevalent, strategic objectives may be more likely to shift over time or be more opportunistic, and execution of strategy is often more challenging. It is possible for a management and strategy score to be higher than the operating environment (e.g. a very good management team operating in a weak environment). However, in such cases, it is likely that the management and strategy score would be of lower influence to the rating if the superior management quality is unable to exert meaningful influence on the overall risk profile.

The quality and effectiveness of management is reflected in individuals and the overall management structure, as well as other factors such as corporate governance and strategy. While this is, on the face of it, a subjective assessment, there will typically be some tangible evidence of management's effectiveness through its impact on financial and/or risk metrics.

The following tables identify those management and strategy attributes that Fitch has defined as "core" versus "complementary," together with an indication of how each attribute is typically assessed. The accompanying subfactor/rating category matrix provides representative characteristics that aid the determination of the overall factor score assigned in each case.

Management Quality

Attribute	Core Versus Complementary	Description
Depth and Credibility of Senior Management	Core	A strong management teams will demonstrate a high degree of credibility, experience, and competence and, commensurate with the size and complexity of the institution, reflect those same qualities in an appropriate depth of experienced, capable management. The impact of any turnover is considered in the context of the existence of succession plans (where key person risk is present) and/or the qualities brought by incoming personnel in cases where those individuals have a proven track record with similar institutions or businesses elsewhere.
Corporate Culture	Complementary	A strong and high-integrity culture may help ensure that consistent and long-term business practices are adopted throughout the organization, and remain in place when there are management transitions, and across business cycles. This can prove beneficial to the Management Quality score.
Key Person Risk	Complementary	Smaller, niche institutions may be reliant on a specific individual or a small group of key individuals, often the institution's founder(s). Fitch expects an institution's senior management structure to be commensurate with its scale and complexity but will usually view any reliance on key individuals as a constraint, regardless of how well-intentioned, as a departure could cause material disruption in the organization's future business prospects and damage its franchise. For certain investment managers, there may also be trigger events in fund governing documents (such as the limited partnership [LP] agreements or articles of incorporation) that would permit early redemptions or withdrawals by LPs or the removal of a general partner if a key person left the firm. If there are significant triggers that are easily triggered and create potentially significant liquidity calls, this is likely to be a constraint.



Corporate Governance

Attribute	Core Versus Complementary	Description
Protection of Creditor Rights	Core	Fitch considers the extent to which a non-bank financial institution's intrinsic governance practices provide reasonable protection of creditors' interests, or whether the latter might suffer at the expense of the interests of other stakeholders, in particular shareholders, management, or due to government influence. Fitch considers the effectiveness of the supervisory board collectively, whether it comprises sufficient expertise, resources, independence and credibility to effectively oversee management.
Quality of Financial Reporting and Audit Processes	Complementary	In cases where there are perceived to be weaknesses in financial reporting (quality, frequency and/or timeliness) compared to international best practice, or where internal or external audit processes appear less robust relative to the operating environment, Fitch may assign a lower corporate governance score.
Related Party Transactions	Complementary	The existence of significant related party transactions may be negative for the corporate governance assessment. Their volume, whether they are conducted on market terms and the internal procedures for their review and approval are key elements of this assessment.
Management of Potential Investment Conflicts of Interest	Complementary (for BDCs and Investment Managers)	Fitch will evaluate the governance structure established by the management company to address potential conflicts of interest. Policies may allow establishing both equity and debt positions in the same company in different investment vehicles. In companies undergoing restructuring or facing potential bankruptcy, the ownership of both debt and equity interests can present material conflicts of interest. Fitch will evaluate allocation policies and procedures and board involvement to limit the risks such conflicts may present.
Internal Versus External Management	Complementary (for BDCs and Mortgage REITs)	For BDCs and mortgage REITs, Fitch focuses on whether the company is internally or externally managed. Externally managed entities are typically managed by affiliated companies that, through a management agreement, provide all managerial and operational services. From a corporate governance perspective, Fitch generally has a more favorable view of internal management teams than external management teams, because internal management teams are dedicated so lely to the issuer in question, minimizing conflicts of interest. External management may have several investment vehicles under management, with potentially overlapping investment objectives.
Private/ Partnership Structures	Complementary	Some non-bank financial institutions are privately held or structured as partnerships. This can make insight into management more challenging and mean that managers who are also partners in the firm act as agent and principal at the same time, potentially affecting the governance assessment. If partner-managers act prudently in the general interests of the company and take measured actions or personally suffer the economic consequences of excessive risk-taking, the governance assessment could be positively influenced. Conversely, unchecked decision-making by individuals can be negative to the governance assessment.

Strategic Objectives

Attribute	Core Versus Complementary	Description			
Quantitative Strategic Targets	Core	An institution's strategic objectives are a reflection of its business and financial goals, which may include bus targets for market position/share or financial metrics. Fulfillment of these objectives drives decision-making throughout the organization and often motivates management and employees. Fitch will consider how achievable and sustainable objectives are and will assess underlying assumptions for plausibility, consistence appropriateness, such as taking account of challenges posed by the non-bank financial institution's operating environment, business model and market position. The strategic objectives score is typically influenced by the extent to which financial and business targets are clearly and consistently articulated, and strategic direction appears appropriate to the non-bank financial institution's operating environment, company profile, compet position and management expertise.			
Qualitative Strategic Framework	Core	The strategic objectives assessment reflects the extent to which medium/long-term strategy is well-construed, cohesive and robust, communicated effectively to stakeholders and balances risks and rewards. Fitch will consider management's key strategic philosophies, for example, acquisition-led versus organic growth and/or regional/international expansion versus concentration on domestic markets, as this may highlight strengths or weaknesses in the strategic plan Fitch's assessment may be negatively affected if a non-bank financial institution's business model changes frequently and significantly over time (whether due to organic development or mergers/acquisitions) or the entity undergoes significant restructuring.			
Disclosure	Complementary	Where budgets or forecasts are not available to support management's articulation of strategic direction, Fitch will use judgement in determining the appropriateness and plausibility of the narrative and underlying assumptions.			



Execution

Attribute	Core Versus Complementary	Description
Track Record in Meeting Stated Objectives	Core	Fitch considers the non-bank financial institution's track record of execution against its stated goals and objectives over multiple periods, and in the context of how realistic or appropriate financial and business targets are. An inability to meet a strategic objective, (including a specific target financial metric) in a single reporting period will not necessarily result in a weaker score provided Fitch believes that the strategic objective is achievable over a medium-term horizon.
M&A Activity	Complementary	Poor or slow execution of a merger, acquisition or restructuring initiative or where Fitch considers there to be an inconsistent track record of executing on such transactions or initiatives will likely result in a lower execution score. Effective execution of a business acquisition in line with plan may positively influence the execution score. If Fitch views future execution risk to be elevated, this will also be factored into Fitch's assessment of a non-bank financial institution's execution.

Management and Strategy

	aaa	aa	a	bbb	bb	b	ccc and Below
Management Quality	Management has an unparalleled degree of depth, and experience. Key person risk is non-existent. Management maintains a strong degree of credibility among all major constituencies throughout economic cycles. Institution has a strong and consistent corporate culture.	very high degree of depth, and experience. Key person riskis limited. Management has maintained a very high degree of credibility among all	depth, and experience. Key person riskis modest. Management maintains a high degree of credibility among major constituencies.	major constituencies. Corporate culture is	an acceptable degree of depth, and experience, but noticeably less than higher rated entities. Key person riskis elevated. Reliance on key individuals may be more prevalent than higher-rated	experience. Key person riskishigh.	deficiencies may be significant.
Corporate Governance	Very strong corporateg robust protection of cre Very effective board ov and frequent financial n limited related party tra	governance, providing editors' interests. ersight, high quality eporting and very	providing reasonable creditors' interests.	e protection of Effective board ity financial reporting	developed than for higher rated peers but without presenting clear,	rise to significant risks for creditors due to weak board	rise to major risks for creditors due to very weak board oversight,
Strategic Objectives	Strategic objectives are clearly articulated and reflect long-term sustainable levels of business and financial performance. Strategic objectives remain highly consistent over a lengthy period.	are clearly articulated and reflect a long-term sustainable level of business and financial performance.	are well articulated and reflect a medium-term level of business and financial performance. Strategic objectives may shift modestly	are documented and reflect a medium-	objectives may not be clearly articulated and/or reflect a short- term level of business and financial performance. Strategic	articulated and	Strategic objectives are lacking or likely to be highly variable due to an unstable economic or operating environment.



Management and Strategy (Continued)

	aaa	aa	a	bbb	bb	b	ccc and Below
Execution	Institution consistently meets target business and financial objectives throughout economic and/or market cycles.	meets target business and	meets target business and financial objectives,	meets target business and financial objectives. Execution could be more variable with changes in economic and/or market cycles.	fails to meet target business and financial objectives or has a limited execution	meet target business and financial objectives or has an extremely limited execution	Institution does not meet business or financial objectives or does not havean execution track record.

Source: Fitch Ratings.

II.4 Risk Appetite Assessment Importance of this Assessment

Assessment of a company's underwriting standards, risk controls, growth and market risk are important considerations in determining a non-bank financial institution's stand-alone credit risk profile, as they will ultimately lead to changes in a non-bank financial institution's key financial metrics. Fitch will apply its own judgment as to the degree of risk inherent in a particular business line, product or strategy. Fitch will also consider operational and/or reputational risks where these are material for the institution.

Fitch's analysis of risk appetite is focused on those risks that have a material influence on the overall credit profile. The risk appetite assessment is typically conditioned, and often constrained, by the operating environment and company profile assessments unless Fitch believes the underlying risks can be isolated from the effects of the non-bank financial institution's operating environment(s) and its chosen business model/strategy. It is possible for a risk appetite score to be higher than the operating environment or company profile (e.g. an 'atypical' very low risk appetite relative to the environment or the operating model). However, a very low risk appetite would be expected to be reflected in consistently better asset quality and less earnings volatility.

Stability of results throughout the cycle may be a useful indicator of risk appetite. A high risk appetite may be somewhat mitigated through the employment of strong risk controls, collateral, and risk-based pricing although the natural rating range for non-bank financial institutions with an inherently higher risk appetite will generally be lower than for those non-bank financial institutions whose risk appetite Fitch considers modest or better managed. In addition, risks can be high at non-bank financial institutions with stated low risk appetites, if controls are viewed to be weak or have been ineffective.

The risk controls assessment includes operational (including cyber) and reputational (including litigation) risks where these are material for the institution or an integral part of the business model or operating jurisdiction(s).

Fitch will analyze those aspects of market risk that are considered material to the overall assessment of risk appetite. The most typical form of market risk is interest-rate risk given many non-bank financial institutions' core maturity transformation function, but the assessment will include other elements such as valuation, derivatives and foreign exchange risks where these are material. Market risks will be higher for institutions with material trading operations or where cross-border activity or balance sheet structure gives rise to foreign-exchange risks, so this factor may take on greater relative importance in those instances.

The following tables identify those risk appetite attributes that Fitch has defined as 'core' versus 'complementary,' together with an indication of how each attribute is typically



assessed. The accompanying subfactor/rating category matrix provides representative characteristics that aid the determination of the overall factor score assigned in each case.

II.4.a Securities Firms

Fitch's risk appetite assessment for securities firms considers the following subfactors:

- risk controls
- growth;
- market risk; and
- operational risk.

Risk Controls — Securities Firms

Attribute	Core Versus Complementary	Description
Risk Management Tools	Core	Fitch's assessment of risk controls considers the breadth and sophistication of risk management systems relative to the risk profile of the business and the types of management reporting used, where these are available. This may help indicate how far risk controls permeate the organization with respect to key risks a typical securities firm may incur, such as market, operational, reputational and credit risks. Fitch may also assess how the launch of material new business activities are vetted in the context of the associated credit, market, operational and reputational risks and their effect on the overall franchise.
Staffing and Culture	Complementary	Fitch attempts to understand the level of risk management engagement across the firm, the variety of committees and membership, as well as the independence and authority carried by risk functions. The backgrounds and experience levels of risk management professionals may also be considered.

Growth — Securities Firms

Attribute	Core Versus Complementary	Description
Absolute and Relative Core Rates of Growth		Fitch generally measures overall balance-sheet expansion against underlying economic growth, earnings retention, staffing growth, market activity, and peer, sector and industry averages to identify any outliers and assess the build-up of potential risks. Rapid growth can obscure financial analysis, for example making it difficulto form a view of inventory turnover and may be indicative of a lowering of standards or slowing demand.
Accompanying Complementary Infrastructure Growth		Rapid growth may introduce other challenges such as operational strains, as back-office staff or systems may not be capable of handling increased business volumes and, therefore, would be negative for the assessment of growth.

Market Risk — Securities Firms

Attribute	Core Versus Complementary	Description
Market Risk Exposure	Core (For securities firms with high balance sheet usage) Complementary (For securities firms with low balance sheet usage)	For firms with significant trading activities, Fitch's assessment of market risk focuses on the degree of market risk exposure and the means of measuring and managing it. These usually include value at risk (VaR), stop-loss limits, concentration limits, sensitivity analysis and stress testing.
Sensitivity to Marketwide Dynamics	Core (For securities firms with low balance sheet usage) Complementary (For securities firms with high balance sheet usage)	Although securities firms that do not hold securities on their balance sheets generally have only limited exposure to market risk, their revenue is heavily exposed to the volume of transactions in the market, and therefore, Fitch's assessment of market risk focuses more broadly on the sensitivity of the business model to marketwide dynamics.
Stress Testing and Sensitivity Analysis	Complementary	When available, Fitch evaluates management's reports of specific products' risks, sensitivities and supplemental stress scenarios on a position and consolidated bases. When available, Fitch also reviews reports that include adjusted VaR using liquidity-stressed scenarios or replicate historical periods of stress. Fitch evaluates the use of stress limits, but this is not comparable across peers. When possible, Fitch assesses market risk concentration (by product, issuer/counterparty, industry and country) intrading and investment portfolios and reviews management's oversight of aged inventory. Fitch may also review policies with respect to collateral and margin calls and the reasons for any changes made to these.



Market Risk — Securities Firms (Continued)

Attribute	Core Versus Complementary	Description			
Hedging Activity and Effectiveness	. ,	Collateral and hedging are frequently employed to mitigate market risk, but hedges are imperfect, and so some degree of market and credit exposure generally remains. As a result, both gross and net positions are considered in Fitch's rating evaluation to the extent such information is reported.			
Market Development	Complementary	In markets where volatility and liquidity issues can be extreme, greater emphasis may be placed on the level of nominal/cash limits. In emerging markets, credit/settlement risk can still be significant. Fitch assesses the level of "free of payment" deliveries (in contrast to payment on delivery) particularly closely in emerging markets, where payment may not be so readily forthcoming.			

Market Risk Metrics — Securities Firms

Average VaR/Tangible Equity
Fitch Stressed VaR/Tangible Equity
Principal Daily Trading Revenue/Average Trading VaR
Principal Transaction Revenue/Total Revenue
Source: Fitch Ratings

Operational Risk — Securities Firms

Attribute	Core Versus Complementary	Description
Operational Infrastructure/ Framework	Core	Fitch's assessment of securities firms' operational risk focuses on investment in front-, middle- and back-office systems commensurate with the nature of the business, including new product development/implementation and systems upgrades. Backlogs of settlements, resolutions and customer complaints or a history of problems with the firm's custodian can be indicators of insufficient back-office staff support. These challenges can be exacerbated for institutions that have undertaken material acquisition activity.
Operational Loss Experience	Complementary	If Fitch determines that a firm has a weak operational risk infrastructure or control environment such as systems failures, inaccurate trade processing or limit breaches (such as rogue trading incidents) this will typically have a negative effect on the operational risk assessment, particularly to the extent failures result in reputational damage, loss of business, and or outsized fines/penalties. Operational risk can potentially have a more pronounced effect on less diversified businesses, where an operational shortfall can result in temporary or permanent damage to the company's core franchise.



Risk Appetite — Securities Firms

	aaa	aa	a	bbb	bb	b	ccc and Below
	monitored with minimal changes over lengthy periods. Risk controls permeate the organization. Exposure to	tools are very robust. Risk limits are very conservative. Risk limits are routinely monitored with nominal changes over lengthy periods. Risk controls permeate the organization. Exposure to operational risks is low. New products are carefully vetted and tested before	but may change based on business conditions. Risk controls are centralized. Exposure to operational risks is modest. New products are carefully tested	tools are good. Risk limits are sound and monitored, although they may fluctuate based on opportunities. Risk controls are less pervasive throughout the organization.	monitored less frequently than higher rated institutions. Risk limits may change based on business opportunities. Exposure to operational risks is	tools may be deficient. Risk limits are crude and may not be monitored frequently. Breaches of limits may not trigger heightened management attention. Exposure to operational risks is high. New products are not tested before	There are significant risk control deficiencie
	growth is unlikely to	pressures solvency or outpaces the long-term sustainable growth	growth may at times pressure solvency and exceed the long- term sustainable growth of main	Balance-sheet growth or business growth more often pressures solvency and exceeds the long-term sustainable growth of main business segments. Control environment may lag behind higher business volumes.	often pressures solvency and exceeds the long- term sustainable growth of main business segments.	and the long-term sustainable growth of business segments. Control environment routinely lags behind higher	Growth may be well in excess of sustainable levels. Or unable to sell assets to achieve necessary balance sheet contraction.
(Direct and Indirect)	risks is very low.	risks is low. Structural interest rate and foreign exchange risks are low relative to peers and appropriately mitigated through hedging.	risks is modest.	risks is average. Appropriate hedging techniques are likely to be employed. Proprietary trading may be material. Controls may be satisfactory, but	structural interest rate and foreign		There may be significant market risk. Controls have not been established.
	operational risk infrastructure/fram ework. Demonstrated track record of	Strong operational risk infrastructure/fram ework. Demonstrated track record of limited operational losses.	risk infrastructure/fram ework. Significant operational losses are corrected	Adequate operational risk infrastructure, with some processes outsourced to third-party processors. Operational losses may occur but are manageable.	Limited operational risk infrastructure, with heavy reliance on third-party providers. History of operational losses/issues.	risk infrastructure. History of operational	Significant operational risk management shortfalls.



II.4.b Investment Managers

Fitch's risk appetite assessment for investment managers, investment companies and investment funds considers the following subfactors:

- risk controls;
- growth;
- market risk and counterparty risk; and
- operational risk (for investment managers and investment funds) or underwriting standards (for investment companies).

Risk Controls - Investment Managers

Attribute	Core Versus Complementary	Description
Risk Management Tools	Core	Fitch assesses investment managers' ability to identify, measure, manage and monitor risk, as supported by its risk and reporting systems and investment in technology. Key areas that Fitch takes into consideration are the independence and effectiveness of the risk management and compliance functions, senior management's understanding and involvement in risk management issues and the reporting lines in place, and whether there is a corporatewide investment risk function that monitors investment risks taken by individual managers to evaluate their potential cumulative impact on the firm's asset performance/asset quality, earnings and franchise. Fitch's assessment of risk controls may consider the types of management reporting used, where these are available. This may help indicate how far risk controls permeate the organization. For investment companies and investment funds, risk management oversight and infrastructure is conducted either by the employees of the investment company or through an affiliated but external investment manager. Therefore, the risk management framework at the investment manager level is considered when relevant. The investment manager may also provide the risk framework and strategy of the fund.
Risk Limits	Complementary	Fitch's assessment of risk controls may also extend to formalized risk limits that are in place, particularly for firms or funds with more complex market risk exposures. Fitch's analysis will tend to focus on a firm's VaR or earnings at risk output, stop-loss limits, concentrations and stress test results where available.
Scenario Testing	Complementary	When available and relevant, Fitch will evaluate scenario tests conducted on current/prospective business activities and, to the extent possible, evaluate the performance against risk measurements. In cases where stress testing results are deemed relevant, but are not available, this may lead to lower stand-alone ratings.

Growth – Investment Managers

Attribute	Core Versus Complementary	Description			
Absolute and Relative Core Rates of Growth		Where growth has been organic, Fitch's growth assessment focuses on whether the firm has the appropriate in-house investment expertise to manage new and/or larger strategies, as underperformance on a relative basis could yield meaningful reputational damage for the firm. Fitch also seeks to understand why (F)AUM growth rates may differ among peer firms.			
Impacts of Inorganic Growth	Complementary	For investment managers that have grown rapidly through acquisitions, success of a growth strategy is assessed by evaluating acquisition parameters and price discipline, pre- and post-acquisition performance client turnover, employee retention statistics and the ability to manage firm culture.			
Accompanying Infrastructure Growth	Complementary	Fitch's assessment can be negatively affected in instances when there is not commensurate infrastructure to support growth. On the other hand, successful execution of measured growth with demonstrated discipline in infrastructure and integration management could positively affect Fitch's assessment of growth if accretive to the franchise by building FAUM, earnings power (particularly if it is a stable source), reputation, distribution channels (new client bases) and diversifying product or geographic scope. For investment companies and investment funds, growth can be viewed positively when driven by strong asset appreciation.			



Market Risk and Counterparty Risk — Investment Managers

Attribute	Core Versus Complementary	Description
Asset Valuation Risk	Core	Fitch's assessment of market risk considers the extent to which the investment manager relies on net asset value (NAV)-based fees given the impact of valuation movements on management fees. This risk is more prevalent for traditional investment managers because they operate open-end funds with relatively liquid assets. Alternative investment managers generally have a larger portion of fees based on committed capital or invested capital, which will not be affected by underlying valuation movements or redemption activity, although broader market downtums can slow the pace of fund capital calls/investments and, thereby, pressure fund internal rates of return. Market risk is also an important stand-alone credit rating factor for investment companies, investment funds and for investment managers that co-invest, earn performance fees or defer fees into the fund, as earnings and balance sheet leverage will be based on the valuation of underlying fund investments.
Asset Valuation Process	Complementary	The independence of the periodic valuation processes and whether it is done internally or utilizing third parties can be an important consideration, particularly for private investments, which may require modeling techniques or relying upon comparable sales. In such instances, Fitch reviews the reasonableness of the valuation methodology, how management resolves troubled investments and the use of third parties for valuation purposes. Model validation tools to make sure that valuation processes are reasonable and consistent with the seniority of the investment in the underlying company can be critical. Model risk is less relevant for traditional investment managers given that the majority of their assets are considered Level 1 for accounting purposes, meaning they have a readily available market value. Fitch may gain comfort with a firm's valuation process over time by comparing investment exit values to prior-quarter fair values.
Interest Rate and Foreign Exchange Risk	Complementary	Fitch's market risk assessment may also include a review of methods used to measure, monitor and control interest rate risk, which can manifest itself in several forms including its impact on fee generation (such as for cash management products), investment performance (such as for fixed-income funds) and balance sheet sensitivity (such as for co-investment assets or floating-rate liabilities). Where relevant, Fitch also considers earnings sensitivity to movements in interest rates and currencies and whether the exposure is naturally hedged, with offsets within the asset portfolio, or actively hedged with derivatives. Sizable unhedged exposure is more likely to have a negative impact on Fitch's market risk assessment.
Counterparty Quality and Diversification	Complementary	Counterparty quality and diversification are assessed in the context of the placement of an investment manager's own surplus funds, but also on behalf of managed fund assets, given the potential need to move clearing, trading and/or securities lending activities to other parties should one counterparty face difficulty. Counterparty concentrations could pose increased operational and/or financial risks, which have a negative impact on Fitch's market risk assessment. For investment companies, the reliance on counterparties for hedging and/or funding is typically limited and, as such, counterparty risk is typically allow influence factor. For investment funds, Fitch assesses the diversity of prime brokerage relationships, which are an important source of financing, as well as clearing, settlement and other services. Outsized exposure to a single counterparty that faces financial hardship could result in the fund's inability to withdraw posted collateral or excess funds. Diversification of these counterparties can have a positive influence on the market risk assessment, although this is balanced against the higher cost and potential loss of efficiency when reviewing prime brokerage relationships. Fitch also seeks to understand the extent to which an investment fund requires segregation of its assets, including collateral, or limits on rehypothecation at the broker dealer to ensure access to its securities should its prime broker face difficulties.



Operational Risk — Investment Managers

Attribute	Core Versus Complementary	Description
Operational Infrastructure/ Framework	Core	In assessing operational risk, Fitch considers processes in place relating to compliance, operations, credit and/or investment performance. If Fitch determines that the operational infrastructure is weak or operational risk is not well controlled, this is likely to negatively impact Fitch's operational risk assessment given the potential for reputational risk, legal risk or both. For investment funds, operational risk can be an important consideration, particularly if the fund focuses on trading strategies involving high complexity, volume and/or automation. For investment companies, operational risk is typically a low influence factor given a smaller (relative) number of investments and less frequent (relative) investment turnover. Furthermore, given that value creation is typically premised on asset appreciation, Fitch tends to place more emphasis on investment companies' underwriting standards in terms of sourcing, due diligence, investment committee review, structuring and monitoring.
Operational Outsourcing	Complementary	Many investment managers, investment companies and investment funds outsource key operational functions to outside processors, such as asset custodians, independent pricing services or trade processors. In such cases, operational risk still exists but is controlled by the firm's management and analysis of its vendors. Fitch's operational risk assessment may evaluate how vendor selection and retention are managed.
Operational Loss History	Complementary	Another possible indicator of the quality of operational risk management is past operational loss history, if available. Most publicly traded firms will discuss significant losses in their financial disclosures. For privately held firms, Fitch will seek to review a record of such losses to understand their nature and whether sufficient controls have been put in place to make their recurrence less likely.



Risk Appetite — Investment Managers

	aaa	Aa	a	bbb	bb	b	ccc and Below
Risk Controls	Risk and reporting tools are extremely robust. Risk limits are routinely monitored with minimal changes over lengthy periods. New strategies/industry verticals are heavily vetted and tested before rollout.	tools are very robust. Risk limits are routinely monitored with nominal changes over lengthy periods. New strategies/industry verticals are	tools are robust. Risk limits are monitored, but may change based on business conditions. New strategies/industry	tools are good. Risk limits are sound and monitored, although they may fluctuate based on opportunities. New strategies/industry	acceptable, but may lack depth or sophistication. Risk limits may change based on business opportunities. New strategies/industry	tools may be deficient. Risk limits are crude and may not be monitored frequently. New strategies/industry	significant risk control deficiencies.
Growth	(F)AUM growth or business growth aligned with market opportunities. Control environment is systematically adapted to meet higher business volumes.	(F) AUM growth or business growth generally aligned with market opportunities. Control environment is systematically adapted to meet higher business volumes.	(F)AUM growth or business growth generally aligned with market opportunities. Control environment is usually suitably adapted to meet higher business volumes.	(F)AUM growth or business growth may modestly outpace market opportunities. Control environment may lag behind higher business volumes.	(F)AUM growth or business growth may meaningfully outpace market opportunities. Control environment likely to lag behind higher business volumes.	business growth may significantly outpace market opportunities. Control	(F)AUM growth may be well in excess of sustainable levels.
Market Risk and Counter- party Risk	Exposure to market risks is very low. Interest rate and foreign exchange rate risks are very low relative to peers. Portfolio valuation is fully independent. Counterparty risk is extremely well managed and diversified.	relative to peers and appropriately mitigated. Portfolio valuation is fully	modest. Interest rate and foreign	are appropriately mitigated. Portfolio valuation	compromised. Portfolio valuation is internal.	Exposure to market risk is high or highly variable. Risks may not be effectively hedged. Weak counterparty risk management with high concentration.	risks related to interest rates or foreign exchange.
Operational Risk	Very strong operational risk infrastructure/ framework. Demonstrated track record of limited operational losses.	framework. Demonstrated track record of limited operational	risk infrastructure/ framework. Significant operational losses	Adequate operational risk infrastructure, with some processes outsourced to third-party processors. Operational losses may occur but are manageable.		Weak operational risk infrastructure. History of operational losses/issues.	

Source: Fitch Ratings.



II.4.c Business Development Companies

Fitch's risk appetite assessment for BDCs considers the following subfactors:

- underwriting standards;
- risk controls;
- growth; and
- market risk.

Underwriting Standards — Business Development Companies

Attribute	Core Versus Complementary	Description
Portfolio Construct	• • • • • • • • • • • • • • • • • • • •	Fitch attempts to identify a BDC's general risk appetite by reviewing the portfolio construct, yields, industry and issuer concentrations, and underlying portfolio company statistics, including average EBITDA, leverage interest coverage, and exposure to covenant lite loans. A BDC that is generating outsized portfolio yields relative to peers could indicate an ability to identify and structure unique and complex investments that command a higher yield, which could be a positive factor, or could indicate a higher risk appetite, which would be a negative factor. An observation of portfolio performance over an extended period aids Fitch in its ability to differentiate between these two possibilities.
Underwriting Process	Complementary	Fitch's assessment of a BDC's underwriting standards considers sourcing, due diligence, investment committee review, structuring, funding and monitoring. Fitch may review investment memos and other underwriting documentation, where available, to assesses whether the process is comprehensive, particularly where the BDC does not have a long and established underwriting track record. Fitch also focuses on the development and monitoring of key sponsor relationships to understand concentration risks and the potential for adverse selection.
Performance/ Portfolio Consistency	Complementary	A BDC's credit culture and standards should generally exhibit consistency, although Fitch recognizes that a BDC's origination volume may vary to some extent based on market conditions. An opinion about a BDC's underwriting acumen and consistency is formed over time and best observed based on performance through a full economic cycle. In the absence of that information, Fitch will seek insight into management's prior performance managing similar assets and structures through a variety of market conditions, although a short operating history is generally a limiting rating factor. Evidence of strong and consistent underwriting over an extended period can positively influence Fitch's assessment of underwriting standards.

Risk Controls — Business Development Companies

Attribute	Core Versus Complementary	Description
Risk Management Tools	Core	Fitch's assessment of a BDCs risk controls can be positively influenced by strong and effective risk management tools which allow the BDC to effectively adhere to its risk appetite framework and underwriting standards. These generally include limits pertaining to industry or issuer concentrations, market risks, and operational controls. They may also include tools such as internal ratings, watchlists or other risk monitoring scales.
Risk Reporting	Complementary	Fitch's assessment of a BDC's risk controls may also consider the types of management reporting used, where these are available. This may help indicate how far risk controls permeate the organization with respect to key risks a BDC may incur, such as credit, market and operational risks. A negative driver of Fitch assessment of a BDC's risk controls would be deficiencies in operational risk management that have already manifested themselves and are uncured.



Growth – Business Development Companies

Attribute	Core Versus Complementary	Description
Absolute and Relative Core Rates of Growth		A BDC's growth is assessed on an absolute and relative basis based on market opportunities, underwriting conditions and the firm's own experience and track record in the sector. Outsized growth in competitive market conditions, characterized by tighter spreads, higher leverage and looser covenant packages, could increase the risks of vintage concentrations and lead to potential asset quality issues down the road, which would be viewed negatively. Fitch does consider whether the BDC's size and relationships provide it with more deal selectivity and structuring flexibility despite tougher market conditions, but sacrificing quality for growth would have a negative impact on Fitch's assessment.
Accompanying Infrastructure Growth	Complementary	Fitch assessment of growth also considers whether the BDC's infrastructure is expanding appropriately to manage a larger portfolio. Infrastructure growth should span front-line investment professionals, back-office accounting, finance and administrative support and technology resources. Expansion into new industry verticals should also be measured and accompanied by commensurate growth in appropriately skilled staff. Failure to sufficiently invest in the operating platform could lead to credit and/or operational losses, which would have a negative impact on Fitch's assessment.

Market Risk — Business Development Companies

Attribute	Core Versus Complementary	Description				
Portfolio Valuation Proces	Core	Given the illiquidity of the majority of BDCs' portfolio assets, fair value estimates often require numerous management assumptions. As a result, Fitch views the involvement of independent third-parties in the quarterly valuation process favorably. A BDC that receives independent valuations on its entire portfolio every quarter would be viewed more favorably than a BDC that only has a portion of its portfolio valued by a third party or has its entire portfolio valued by a third party but with less frequency. However, Fitch does expect management and the board to be actively involved in the quarterly process to identify discrepancies or inconsistencies in portfolio company valuation and as a tool to monitor portfolio performance.				
Portfolio Valuation Consistency	Complementary	Fitch assesses a BDC's valuation competency over time by reviewing portfolio company exits versus prior-quarter fair value marks. If sale proceeds are consistently below fair value, Fitch would call into question the sufficiency of the valuation process and/or the competency of the third-party provider. Conversely, if exits are consistently above the prior-quarter fair value, Fitch would consider whether the BDC was being too conservative in its valuation process, in an effort to recognize regular realized gains. Fitch expects the above/below marks to generally average out in the long run.				
Interest Rate and Foreign Exchange Risks	' '	Fitch considers how the BDC's earnings may be affected by a changing rate environment, taking into consideration the fixed/floating asset and funding mix. Where derivatives are employed to manage interest rate exposure, Fitch considers their cost and effectiveness over time, in addition to the counterparty exposure When applicable, Fitch considers the BDC's exposure to foreign currency movements and the potential impact on profitability and leverage. If derivatives are employed to manage the exposure, Fitch considers their cost and effectiveness over time, in addition to the counterparty exposure.				



Risk Appetite — Business Development Companies

	aaa	aa	а	bbb	bb	b	ccc and Below
Underwriting Standards	evident elsewhere in the industry.	conservative than evident elsewhere in the industry. Credit standards are consistent with nominal changes over economic cycles. Long-run performance expectations are incorporated. Portfolio construct is solely secured	risk and generally more stringent than industry practice. Credit standards are largely consistent but may vary modestly over economic cycles. Standards reflect medium-term performance	Credit standards are variable over economic cycles. Standards reflect medium-term performance expectations. Portfolio construct may have minimal exposure to equity	Standards are likely to change noticeably over economic cycles. Portfolio construct may have modest	heightened risk appetite. Credit standards are typically more aggressive than broad industry averages and likely to change considerably over economic cycles. Portfolio construct	record. Standards may fluctuate frequently. Portfolio construct may have significant
Risk Controls	Risk and reporting tools are extremely robust. Risk limits are highly conservative and overwhelmingly adhered to. Risk limits are routinely monitored with minimal changes over lengthy	tools are very robust. Risk limits are very conservative. Risk limits are routinely monitored with nominal changes over lengthy periods. Exposure to operational risks is low. New strategies/industry verticals are carefully vetted and tested before	tools are robust. Risk limits are conservative. Risk limits are monitored but may change based on business conditions. Exposure to operational risks is modest. New	tools are good. Risk limits are sound and monitored, although they may fluctuate based on opportunities. Exposure to operational risks is moderate. New	tools are acceptable, but may lack depth or sophistication. Risk limits are monitored less frequently than higher rated institutions. Risk limits may change based on business	and may not be monitored frequently. Exposure to operational risks is high. New strategies/industry verticals are not tested before rollout.	There are significant risk control deficiencies.
Growth	growth aligned with market opportunities and underwriting	Balance-sheet growth or business growth seldom outpace market opportunities and underwriting conditions. Control environment is systematically adapted to meet higher business volumes.	growth may at times outpace market opportunities and underwriting	growth more often outpace market opportunities and underwriting conditions. Control environment may	growth may modestly outpace market opportunities and underwriting conditions. Control environment likely	outpace market opportunities and underwriting conditions. Control	Growth may be well in excess of sustainable levels.



Risk Appetite - Business Development Companies (Continued)

	aaa	aa	a	bbb	bb	b	ccc and Below
Market Risk	risks is very low. Interest rate and foreign exchange rate risks are very low relative to peers. Portfolio valuation is fully	risks is low. Interest rate and foreign exchange rate risks are low relative to peers and appropriately mitigated. Portfolio valuation is fully independent. Regulatory cushions are significant and	risks is modest. Interest rate and foreign exchange rate risks are modest and appropriately	risks is average. Interest rate and foreign exchange rate risks are appropriately mitigated. Portfolio valuation involves independent third-parties. Regulatory cushions exist and are managed relative to portfolio	risks is heightened. Basic hedging techniques may be employed or effectiveness somewhat compromised. Portfolio valuation is internal. Regulatory cushions may exist	hedged. Regulatory cushions are minimal and are not managed relative to	significant market risks, related to interest rates or foreign exchange.

II.4.d Finance and Leasing Companies

Fitch's risk appetite assessment for finance and leasing companies considers the following subfactors:

- underwriting standards;
- risk controls;
- growth; and
- market risk.

Underwriting Standards — Finance and Leasing Companies

Attribute	Core Versus Complementary	Description
Policies and Procedures	Core	Fitch's assessment of a finance and leasing company's underwriting standards considers internal management credit reports and variances from policy, if available, how problem loans are reported and forbearance practices, to ensure that an issuer is not delaying the recognition of problem credits, particularly in instances where the issuer does not have a long and established track record of underwriting through the cycle.
Residual Value Ris Management	k Complementary	Fitch assesses an issuer's exposure to and management of residual value risk by understanding the company's pricing policies, its ability to monitor the condition of assets under lease, its flexibility to alter lease payments (e.g. additional charges for unfair wear and tear) or amend contracts, the relative market liquidity for used collateral and the leasing company's access to a variety of disposal channels. An ability to control residual value gains/losses effectively through a variety of asset cycles is viewed as the clearest demonstration of residual risk management capabilities.
Business Model Specifics	Complementary	Certain types of finance and leasing companies, such as debt purchasers, do not originate or underwrite the original loans they carry on balance sheet or manage. Their business model means asset quality will be inherently weak and their ability to generate cash flow to service debt will largely be a function of the extent recoveries/collections exceed the price paid for the loans. Consequently, for such companies, Fitch's assessment of underwriting standards will additionally focus on pricing discipline through economic cycles. Industry measures such as 'cash on cash multiples' (i.e. collections to date plus estimated remaining collections divided by purchase price) can be a useful indicator of pricing discipline that Fitch would review, where available.
Source: Fitch Rating	5.	



Risk Controls — Finance and Leasing Companies

Attribute	Core Versus Complementary	Description
Risk Management Tools	Core	Fitch assesses a finance and leasing company's adherence to its risk appetite framework and underwriting standards by considering the strength and effectiveness of its risk management tools and systems. These generally include limits pertaining to credit concentrations, geography, market risks and operational controls. They may also include tools such as custom scorecards, internal ratings or third-party data sources such as national credit bureaus.
Risk Reporting	Complementary	Fitch's assessment of risk controls may consider the types of management reporting used, where these are available. This may help indicate how far risk controls permeate the organization with respect to all risks the finance and leasing company may incur, such as credit, market and operational risks.

Growth — Finance and Leasing Companies

Core Versus Complementary	Description				
e Core	Fitch generally assesses growth in the context of business and balance sheet expansion relative to underlying economic growth, earnings retention, staffing growth and peer, sector and industry averages. Rapid loan growth can also obscure financial analysis, for example, making it more difficult to form a view of true asset quality because loan portfolios have not had time to mature and may be indicative of a lowering of underwriting standards or growth outstripping risk controls.				
Complementary	Fitch's growth assessment may be negatively influenced by rapid growth if it introduces other challenges such as operational strains (as back-office or systems may not be capable of handling increased business volumes) or higher leverage (should growth outstrip earnings retention).				
Complementary	Where growth has been driven by acquisitions of assets or entire companies, Fitch considers the strategic fit, due diligence process, economic impact and integration success. A track record of dilutive transactions, on-boarding missteps and/or expansion into non-core product categories, may negatively influence Fitch's growth assessment.				
	Complementary Core Complementary				

Market Risk — Finance and Leasing Companies

Attribute	Core Versus Complementary	Description
Interest Rate and Core Foreign Exchange Risks	Core	Fitch's assessment of a finance or leasing company's market risk primarily considers interest rate risk, arising from differences in the asset and funding profiles of the firm, but may also include elements such as derivatives use or direct and indirect foreign exchange risks. Market risks will be higher for issuers where cross-border activity gives rise to foreign exchange risks, so this factor may take on greater relative importance in that instance. For mortgage servicers, the valuation of servicing rights will be heavily influenced by the level and direction of interest rates but will also be affected by trends in housing prices, applicable hedges and other portfolio characteristics.
Market Risk Management Tools and Controls	Complementary	Effective mitigation tools and controls, coupled with a robust stress-testing framework, may be strong mitigating factors in reducing market risk. Where market risk is significant, Fitch assesses the appropriateness of controls relative to this risk, hedging practices and other market risk information across the business.



Risk Appetite — Finance and Leasing Companies

	aaa	aa	a	bbb	bb	b	ccc and Below
Underwriting Standards	standards are clearly risk-averse and far more conservative than	evident elsewhere in the industry. Credit standards are consistent with nominal changes over economic cycles. Long-run performance expectations are incorporated. Exposure to residual value risk is low and/orrisk is more conservatively managed relative to	risk and generally more stringent than	standards generally in line with the broad industry practice. Credit standards are variable over economic cycles. Standards reflect medium-term performance expectations. Exposure to residual value risk is average and/or risk is managed generally in line with peers.	generally above- average risk appetite. Credit	averages and likely to change considerably over economic cycles. Exposure to residual value riskis	Underwriting standards lead to high risk exposure and are likely to reflect stress within the entity. Credit standards do not have any discernible track record. Standards may fluctuate frequently. Exposure to residual value risk is very high and/or risk is not appropriately managed.
Risk Controls	Risk and reporting tools are extremely robust. Risk limits are highly conservative and overwhelmingly adhered to. Risk limits are routinely monitored with minimal changes over lengthy periods. Exposure to operational risks is very low. Entry	tools are very robust. Risk limits are very conservative. Risk limits are routinely monitored with nominal changes over lengthy periods. Exposure to operational risks is low. Entry into new businesses/ strategies are carefully vetted and	tools are robust. Risk limits are conservative. Risk limits are monitored, but may change based on business conditions. Exposure to operational risks is modest. Entry into new businesses/strategies is carefully tested	tools are good. Risk limits are sound and monitored, although they may fluctuate based on opportunities. Exposure to operational risks is moderate. Entry into new businesses/ strategies is tested before rollout.	tools are acceptable, but may lack depth or sophistication. Risk limits are monitored less frequently than higher rated institutions. Risk limits may change based on business	are crude and may	significant risk
Growth	Balance-sheet growth or business growth is unlikely to pressure solvency or outpace the long-term sustainable growth of main business segments. Control environment is systematically adapted to meet higher business volumes.	seldom pressures solvency or outpaces the long- term sustainable	growth mayat times pressure solvency and exceed the long- term sustainable	growth more often pressure solvency and exceeds the long-term sustainable growth of main business segments. Control	environment likely to lag behind higher	growth usually pressures solvency and the long-term sustainable growth of business segments. Control environment routinelylags	sustainable levels. Or unable to sell assets to achieve



Risk Appetite — Finance and Leasing Companies (Continued)

	aaa	aa	a	bbb	bb	b	ccc and Below
Market Risk	Exposure to market risks is very low. Interest rate and foreign exchange rate risks are very low relative to peers.	relative to peers	modest. Interest	Exposure to market risks is average. Interest rate and foreign exchange rate risks are appropriately mitigated.	hedging	Exposure to market risk is high or highly variable. Risks may not be e effectively hedged	risks, related to interest rates or

Source: Fitch Ratings.

II.4.e Financial Market Infrastructure Companies

Fitch's risk appetite assessment for FMIs considers the following subfactors:

- operational, reputational and legal risk;
- counterparty risk management; and
- growth.

Operational, Reputational and Legal Risks — Financial Market Infrastructure Companies

Attribute	Core Versus Complementary	Description
Operational Risk Infrastructure	Core	Fitch's assessment of operational, reputational and legal risk centers on the ability to accurately and efficiently process large volumes of transactions as supported by an operational risk infrastructure with robust technological platforms, and appropriate controls and back-office operations. Fitch's assessment will typically be negatively affected if Fitch determines a FMI has a weak or outdated operational risk infrastructure or control environment. In this context, Fitch considers the level of capital expenditures for technology upgrades when assessing operational risk for FMIs. Additionally, legal risk can arise from a FMI processing trades incorrectly or from a breach of applicable laws or regulations (e.g. if it is in breach of sanctions).
Business Continuity and System Availability	Complementary	To ensure business continuity in the event of physical disasters, FMIs must operate effective duplicate and backup computer systems and develop and maintain business continuity plans, including disaster recovery sites that are geographically dispersed. Fitch also considers the system availability ratios (defined as the time a given FMI platform is actually available to operate versus the maximum time a given FMI platform is expected to be available to operate), relative to peers and industry standards as well as frequency and average duration of system outages when activity is interrupted on one or more platforms.



Counterparty Risk Management — Financial Market Infrastructure Companies

Attribute	Core Versus Complementary	Description				
Collateral Core Margining		FMIs seek to minimize counterparty risk by taking significant counterparty collateral that can be utilized in the event of counterparty default. Fitch's counterparty risk management assessment considers the initial sizing and ongoing maintenance of this collateral, along with the predefined counterparty/customer default mechanisms.				
Default Processes/ Waterfalls	Core	Fitch's assessment maybe positively influenced by robust and clearly defined default procedures that protect the clearing house and non-defaulting clearing members from a clearing member default. This may include prescribed processes via default waterfalls in place that include using a defaulting clearing member's collateral (margin) and guarantee fund contributions to reduce or eliminate losses. In the event that all losses are not covered, the clearing house can then access clearing house capital contributions, non-defaulting clearing member guarantee fund contributions and potentially further resources of non-defaulting clearing members. Fitch's assessment of counterparty risk management focuses on mechanisms that do not rely upon the imposition of economic losses to clearing participants. Thus, the use of clearing suspension mechanisms, or loss-sharing components at the end of default waterfall, including write-downs of non-defaulting members' contributions to default funds or variation margin gains haircutting would be viewed negatively by Fitch. From a quantitative perspective, Fitch also may assess the level of largest counterparties' exposure in excess of collateral held against the resources allocated by a clearing house for loss mitigation (referred to as "skin in the game") before collective funds can be drawn.				
Clearing Member Standards	Complementary	Counterparty risk is managed by stringent clearing member standards, margin requirements, acceptable collateral requirements and guaranty funds. Fitch generally reviews clearing houses' policies and procedures with respect to counterparty risk management to determine the extent to which they capture potential counterparty risks in a comprehensive and forward-looking manner. Fitch considers the factors outlined in the Considerations for FMIs' Counterparty Risk Management Framework table below when assessing the sufficiency of a clearing house's counterparty risk management framework.				
Business Model Specifics	Complementary	Pure exchanges and CSDs without banking licenses act simply as a venue for trading activity or securities depository and direct subsequent settlement and clearing to third parties. With the exception of minimal counterparty risk arising from trade invoices and potentially from investments in financial assets, exchanges and CSDs without banking licenses are not materially exposed to counterparty risk. As such, counterparty risk is not a key stand-alone ratings driver for exchanges or CSDs without banking licenses, although both types of organizations typically subject their members to minimum qualitative and quantitative requirements.				

Jour cc. Fitch Ratings.

Considerations for Financial Market Infrastructure Companies' Counterparty Risk Management Framework

Counterparty Risk Management	Margin Procedures	Guaranty Funds	Dedicated Resources (i.e. "Skin in the Game")
Initial Margin/Variation Margin	Calculation	Size Versus Counterparty Exposure	Size Versus Counterparty Exposure
Financial Requirements	Frequency	Frequency of Resizing	Size Versus Member Contributions
Due Diligence	Posting	Quality	Determination Mechanism (i.e. re-sizing based on exposure amounts)
Remediation	Valuation	Diversification	
Membership Rules	Buffers	Custody	•
Concentration Management	Haircuts	-	•
	Review	-	
Source: Fitch Ratings.	•		



$Growth-Financial\,Market\,Infrastructure\,Companies$

Attribute	Core Versus Complementary	Description
Absolute and Core Relative Rates of Growth		Fitch assesses FMIs' growth in the context of balance sheet and/or business growth relative to underlying market conditions, volatility and peer averages. Generally, clearing houses have significant margin deposit and guaranty fund contribution offsets on both sides of the balance sheet associated with the respective securities cleared. Growth of these balance sheet components are highly correlated to overall market conditions. When assessing the growth of a clearing house, Fitch excludes these balances from its primary analysis, as these funds are for the benefit of clearing member creditors and do not reflect growth of the core balance sheet. That said, the trend in the growth of the consolidated balance can be informative over the longer term.
Accompanying Infrastructure Growth	Complementary	Fitch's growth assessment may be negatively influenced if rapid growth strains the ability of technology platforms and back-office operations to handle increased trading, clearing or depository volumes.
Impacts of Inorganic Growth	Complementary	Non-accretive acquisitions may negatively affect Fitch's growth assessment if they do not complement the long-term strategy of the combined entity. Additionally, acquisitions could negatively affect Fitch's growth assessment if leverage metrics are elevated and/or integration costs are high.



Risk Appetite — Financial Market Infrastructure Companies

	aaa	aa	a	bbb	bb	b	ccc and Below
		of capital expenditure for technology. Frequent development and enhancements to technology platforms. Very strong systems, controls, procedures; beta testing of new technology platforms and	occurrences of technical glitches that result in reputational or legal damage. High level of capital expenditure for technology. Frequent development and enhancements to technology platforms. Strong systems, controls, procedures; beta testing of new technology platforms and	damage. Average level of capital expenditure for technology. Average development and enhancements to technology platforms. Sound systems, controls, procedures; beta testing of new technology platforms and	damage. Below- average level of	systems, controls, procedures; beta testing of new technology platforms and	legal damage.No capital
Risk	Extremely strong counterparty/ customer oversight both initially and ongoing. Extremely strong financial safeguards for margin calculations and settlements, acceptable collateral and guaranty fund. Extremely strong default procedures. Extremely strong management of customer exposure and collateral.	both initially and ongoing. Very strong financial safeguards for margin calculations and settlements, acceptable collateral and guaranty fund. Very strong default procedures. Very strong management	both initially and ongoing. Strong financial safeguards for margin calculations and settlements, acceptable collateral and guaranty fund. Strong default procedures. Strong management of	initially and ongoing. Sound	counterparty/ customer oversight both initially and ongoing. Good financial safeguards for margin calculations and settlements, acceptable collateral and guaranty fund. Moderate default procedures. Moderate management of	calculations and settlements, acceptable collateral	counterparty/ customer oversight both initially and ongoing. Limited or evolving financial safeguards for margin calculations and settlements, acceptable
Growth Source: Fitch Ra	long-term sustainable growth of main business segments. Control environment is systematically adapted to meet higher business volumes.	Balance sheet or business growth seldom outpaces long-term sustainable growth of main business segments. Control environment is systematically adapted to meet higher business volumes.	long-term	of main business	term sustainable growth of main business segments. Control	environment routinelylags	Growth may be well in excess of sustainable levels.



II.5 Financial Profile Assessment

Importance of this Assessment

A non-bank financial institution's financial profile, which can often be measured by analyzing key financial metrics and trends in and stability of those metrics, is relevant because it provides a strong indication of how the firm is performing across key dimensions of creditworthiness. In many respects, financial measures are the outcome of the non-bank financial institution's operating environment, company profile, management and strategy and risk appetite.

Risk measures enable an analysis of how a non-bank financial institution's risk appetite and management compare with those of peers and whether performance is commensurate with business cycles. Asset quality is relevant because weak asset quality can undermine a non-bank financial institution's balance sheet solvency and ultimately its ability to meet obligations to creditors. Leverage and capital adequacy measures are relevant because they determine a non-bank financial institution's ability to grow and absorb unexpected losses. Funding and liquidity are relevant because inadequacies in these two areas often lead to non-bank financial institution failures as a result of asset/liability mismatches or asset illiquidity. Profitability matters as it determines the non-bank financial institution's ability to service debt and/or generate capital internally to act as a first line of defense against rising impairment charges or other sources of risk or loss.

Fitch's starting point is typically audited financial statements, but it will generally also consider unaudited and interim financial statements. Fitch makes adjustments to allow for greater comparability across jurisdictions (IFRS versus U.S. GAAP), such as re-classification of items to fit its standard spreadsheets and ratio calculations. Adjustments could entail exclusion of one-off gains/losses or non-cash earnings and expenses from operating profitability, exclusion of intangible assets from capital or inclusion of restructured loans as part of impaired assets.

Fitch generally employs its own stress tests on various aspects of a non-bank financial institution's financial profile (see Annex 4) such as asset quality, capital adequacy or liquidity. These may include various institution-specific, regional or broad industry scenarios to determine an institution's ability to withstand a rapid shift in the operating environment. The results of these stress tests are informative on both an absolute and relative basis but by themselves may not necessarily drive rating decisions. Fitch also considers issuer-generated stress tests to understand how these drive decision-making within the organization.

Quantitative Ranges

For each non-bank financial institution subsector, Fitch uses a set of core metrics and complementary metrics for financial profile factors. Figures in the sections below set out the indicative quantitative ranges for core financial profile metrics. Fitch uses a four-year average (where data are available) to determine the implied factor scores for asset quality/performance, earnings and profitability and funding, liquidity and coverage metrics, in an attempt to not over-weight the most current period. In the case of capitalization and leverage, Fitch uses the latest available data point, as this is viewed as a more reliable indicator of the level of the metric in the future. Four-year averages represent an average of the metric in question over each of the four individual periods, as opposed to an aggregation of the numerators and denominators for the cumulative period.

Consistent with financial benchmarks for banks, Fitch's financial benchmarks for finance and leasing companies and securities firms with high balance sheet usage are derived by combining the entity's operating environment with the financial metric value. This reflects Fitch's expectation that the operating environment will account for a significant proportion of actual metric differences across countries and regions because of differences in the financial risk profiles that arise directly from the environments in which the entities operate. Tiering by operating environment is not applied to other non-bank financial institution subsectors given such entities have balance sheet light business models where metrics are less influenced by operating environment dynamics (such as for balance sheet light investment managers, financial and leasing companies and securities firms) or operating environment differences are not present (such as for BDCs, which operate in a single operating environment).



While a single metric cannot explain a factor score in its entirety, the implied factor score is the starting point in the determination of the actual score. For example, the view of a non-bank financial institution's asset quality would incorporate other aspects such as the rate of growth, collateral and loss allowances and loan writeoffs, which may result in the implied factor score being adjusted before arriving at the final factor score. Some of these other aspects of a non-bank financial institution's financial profile are captured in complementary metrics, but Fitch combines quantitative analysis with qualitative judgement to determine the assigned factor scores, which are expressed by a three-notch range.

The most common analytical reasons for adjusting the implied factor scores are outlined in the sections below. Adjustments may negatively or positively influence the final factor score. In general terms, the adjustments tend to fall into two broad categories: (1) Fitch adjusts for specific risk elements or business profile features that may not be adequately captured in the core financial ratios; and (2) Fitch adjusts for cyclical and/or structural elements that, in Fitch's opinion, mean that historical ratios may not be reliable predictors of future performance.

Adjustments to Implied Asset Quality/Asset Performance/ Counterparty Exposure Factor Score

The most common adjustments to a non-bank financial institution's implied asset quality/asset performance score are as follow:

Growth: High growth relative to peers or the domestic economy(ies) may lead to a significant deterioration in asset quality or asset performance. In addition, high growth rates may reduce asset quality ratios due to the lag effect on the numerator, while deleveraging may inflate it. Significantly lower growth than peers could be viewed as conservative and positive for the assigned factor score, particularly if market conditions are challenging.

Collateral and Reserves: Strong loan loss allowance (sometimes referred to as loan loss 'reserve') coverage of impaired loans relative to peers, as reflected in the ratio of loan loss allowance to impaired loans for finance and leasing companies with high balance sheet usage, or a high proportion of secured or government lending (e.g. guaranteed student loans) may reduce the risks from the non-bank financial institution's impaired exposures. Conversely, a focus on unsecured lending or weak reserve coverage would likely have the opposite effect. Deficiencies in the legislative framework that could impact a non-bank financial institution's ability to liquidate collateral, or enforce its rights as a creditor generally, may result in a downward adjustment to the implied score.

Loan Writeoffs or Impairment Policy: The impaired loans/gross loans ratio may not fully capture the non-bank financial institution's underlying asset quality performance where it writes off a high proportion of loans soon after they become impaired or, conversely, retains legacy problem loans on its balance sheet for an extended period after they become delinquent. Therefore, Fitch also considers the loan impairments generated in recent periods, as reflected in the complementary ratio of loan impairment charges to average gross loans. For leasing companies, impairment levels may not fully reflect risks related to the underlying leased assets, since asset values and impairment levels vary through economic cycles. Impairment policies also may not capture other asset quality considerations, such as asset liquidity, lessee credit quality, and technological obsolescence risk. Additionally, if leasing companies have depreciation policies that Fitch views as highly conservative, such policies may lead to a lower risk of impairment, and Fitch may adjust such issuers' asset quality scores accordingly.

Loan Classification Policies: If Fitch believes a non-bank financial institution has a relatively large proportion of high-risk assets that are not captured by traditional impaired asset definitions, (e.g. because they have been restructured or are classified in the watch category), this may weigh on Fitch's assessment of asset quality. Conservative asset classification relative to peers may be moderately positive for Fitch's assessment.

Concentrations: The existence of high concentration exposures with respect to single borrowers/counterparties, sectors or asset classes (for example equities, fixed income or alternatives for investment managers) may increase vulnerability to cyclical asset performance fluctuations. Conversely, good portfolio/product diversification may be a moderately positive factor in assessing asset quality or asset performance.



Non-Loan Exposures: Fitch may adjust downward the asset quality score where it believes there are material risks of losses arising from non-loan and lease assets, such as securities, derivative fair values or foreclosed assets or from off-balance-sheet exposures, such as managed funds, guarantees and commitments. Conversely, where a relatively high proportion of a non-bank financial institution's risk exposures are outside of the loan book and these are low risk (e.g. highly rated securities or off-balance sheet trade finance exposures), this may result in a positive adjustment to the implied asset quality score.

Risk Appetite and Business Model: Fitch may adjust the asset quality score downwards where it views the non-bank financial institution as having a relatively high risk appetite, or a business model or asset class specialization which in the agency's view may be more likely to result in future asset quality deterioration or volatility. In such cases, Fitch may take the view that recently reported asset quality metrics are more vulnerable to deterioration as loan and other exposures season. Conversely, a low risk appetite or lower risk business model may result in a moderate positive adjustment to the asset quality score. However, the scope for any positive adjustment is likely to be limited in cases where asset quality metrics are weak due to legacy problem exposures and the non-bank financial institution has only recently reduced its risk appetite.

Historical and Future Metrics: Fitch may view historical asset quality metrics as not being reliable indicators of future metrics, for example, due to changes in a non-bank financial institution's strategy or operations, because mergers, acquisitions or disposals may have a material impact on group risk exposures, Fitch's economic expectations materially deviate from past conditions, or recent asset quality metrics correspond to a particularly favorable or unfavorable part of the credit cycle.

Relative Size: The absolute size of an investment manager's AUM will affect net client flow percentages. Net inflows could outpace peers on a dollar basis but lag as a percentage of AUM. Outsized client flows could be troublesome if investable assets exceed investment opportunities, while below-average flows could be appropriate depending on market conditions.

Adjustments to Implied Earnings and Profitability Factor Score

The most common adjustments to a non-bank financial institution's implied earnings and profitability score are as follow:

Portfolio Risk: For a given business model, earnings may be lower than its peers if a non-bank financial institution is managing a lower risk and, thus, lower yielding portfolio. In such cases, Fitch will also utilize risk-adjusted return measures to assess overall profitability.

Revenue Diversification: Fitch assesses more favorably a non-bank financial institution's performance where operating revenues are more diversified than its peers. Reliance on a single or concentrated set of business lines, client relationships or revenue streams could negatively affect Fitch's assessment.

Earnings Stability: A positive adjustment could be made to a non-bank financial institution's earnings and profitability score where earnings have proved to be stable through a cycle or where recent performance suggests a sustainable improvement compared to the non-bank financial institution's four-year average. Conversely, high earnings volatility or a recent structural weakening of performance could lead to a negative adjustment. Certain business models or asset classes may also be more vulnerable to cyclical performance swings, even if these have not been observed to date; in such cases, recently reported data may not be sustainable or representative of expected performance through a cycle, which could warrant a downward adjustment to the earnings and performance score.

Historical and Future Metrics: Fitch may view historical earnings and profitability metrics as not being reliably indicative of future metrics, for example, due to changes in a non-bank financial institution's strategy or operations, because mergers, acquisitions or disposals may have a material impact on group profitability, because Fitch's economic expectations materially deviate from past conditions, or because recent performance metrics correspond to a particularly favorable or unfavorable part of the credit cycle.



Ownership and Structural Considerations: While non-bank financial institutions with external shareholders will often be focused on consistently maximizing earnings, non-bank financial institutions that are narrowly owned or employee-owned may have more flexibility to sacrifice current earnings in exchange for future growth potential, competitive positioning and/or employee retention. This flexibility will be factored into a non-bank financial institution's earnings assessment.

Adjustments to Implied Capitalization and Leverage Factor Score

The most common adjustments to a non-bank financial institution's implied capitalization and leverage score are as follow:

Reserve Coverage and Asset Valuation: An adjustment to capital may be required to reflect any material under- or over-provisioning of impaired assets, as captured in the ratio of impaired loans less loan loss allowances to tangible equity. Aggressive or conservative valuations of performing assets or high volumes of other higher risk assets (e.g. foreclosed assets) could also affect Fitch's assessment of capitalization.

Profitability, Payouts and Growth: Fitch may adjust downward the capitalization and leverage score where a non-bank financial institution's earnings retention is weak (e.g. due to weak profitability and/or high pay-out ratios or share repurchase rates) or the non-bank financial institution's expected rate of growth is high, to reflect the likely negative impact this will have on capital metrics. Conversely, strong earnings retention or low growth may result in a positive adjustment to the capitalization and leverage score.

Concentrations: The existence of high concentration to single borrowers/counterparties, sectors or asset classes may increase the vulnerability of capital to asset performance fluctuations. Conversely, good portfolio diversification may be a moderately positive factor in assessing capitalization and leverage.

Size: A small (in absolute terms) capital base can leave an institution more vulnerable to unforeseen events, especially where there are risk concentrations, even if capital ratios are relatively strong. This may result in a downward adjustment of a non-bank financial institution's capitalization and leverage score. A large (in absolute terms) capital base could be moderately positive for the assessment.

Fungibility: Fitch may adjust downward a parent non-bank financial institution's capitalization and leverage score where it has material subsidiaries, in particular regulated or foreign ones, and there are significant restrictions on transfers of capital within the group. Weaker standalone capital ratios than for the group on a consolidated basis would increase the likelihood of such an adjustment.

Capital Raising (or Distribution): Fitch may adjust the capitalization and leverage score to reflect capital raising or distribution (or expectations of these) that have occurred subsequent to the last financial reporting date.

Risk Appetite and Business Model: Certain business models or asset class specializations may be more vulnerable to cyclical performance swings, such that a larger capital buffer is required to achieve a given capitalization and leverage score. Conversely, a positive adjustment could be made where performance has proved to be stable through a cycle or if the entity benefits from both balance sheet assets and cash flow generation capability. The capitalization and leverage score for non-bank financial institutions assessed on the basis of cash flow leverage (debt/EBITDA) could also be adjusted to reflect variability in EBITDA generation.

Historical and Future Metrics: Fitch may view the most recent reported capitalization and leverage metrics as not being reliable indicators of future metrics, for example, due to changes in a non-bank financial institution's strategy or operations, because mergers, acquisitions or disposals may have a material impact on the group profile or because of anticipated changes in the bank's asset-quality performance or profitability.

Sustained, Elevated Cash Balances: Although Fitch tends to focus on leverage ratios based on gross debt, the agency may adjust the capitalization and leverage score upward where, for example, a non-bank financial institution has consistently maintained elevated cash balances, in which case Fitch may place greater emphasis on net debt leverage ratios. Consideration of net debt leverage ratios would be supported by the presence of structural features that ensure the ongoing



availability of cash to benefit debtholders, demonstration of cash maintenance through periods of stress or public articulation of a strategy to maintain such cash balances. The absence of these features would make such an upward adjustment unlikely.

Adjustments to Implied Funding, Liquidity and Coverage Factor Score

The most common adjustments to a non-bank financial institution's implied funding, liquidity and coverage score are as follow:

Liquidity Coverage: Strong or weak coverage of a non-bank financial institution's short-term liabilities by liquid assets could result in upward or downward adjustment, respectively, to the funding, liquidity and coverage score. Fitch will consider the volume, quality and encumbrance of a non-bank financial institution's liquid assets in making this assessment. The absence of near- and medium-term debt maturities may reduce the need for significant liquidity, particularly if liability maturities extend beyond asset maturities. Similarly, the funding, liquid and coverage score may be adjusted upwards for investment funds with limited near- and medium-term financial obligations.

Cash Flow Generative Business Model: A higher funding, liquidity and coverage score could result if the non-bank financial institution's business model is viewed as highly cash flow generative, particularly during times of stress, economic slowdown and/or reduced capital expenditures. For example, certain business models with contractual cash flows (servicers, rental/leasing companies) have historically demonstrated an ability to generate significant cash flow once discretionary capital expenditures are moderated.

Confidence Sensitivity: Fitch will consider a non-bank financial institution's term structure, diversification by source and reliability of market access in assessing risks associated with its wholesale funding. Stable long-term funding (e.g. due to well-established market access) could result in an upward adjustment to the funding, liquidity and coverage score. Conversely, a non-bank financial institution's implied funding, liquidity and coverage score may be adjusted downward where it has inconsistent or limited access to the capital markets.

Foreign Currency Liquidity: A non-bank financial institution's funding, liquidity and coverage score may be adjusted downward where coverage of foreign currency liabilities by foreign currency liquidity is weak, in particular where it could be difficult for a non-bank financial institution to convert local currency into foreign currency, in case of need.

Fungibility: Fitch may adjust downward a non-bank financial institution's funding, liquidity and coverage score where it has material subsidiaries, in particular foreign or regulated ones, and there are significant restrictions on transfers of liquidity within the group. Weaker standalone liquidity and funding ratios than for the group on a consolidated basis would increase the likelihood of such an adjustment.

Contingent Access: A relatively strong ability to access contingent liquidity, for example, as a result of sizable, committed and long-duration credit lines, could result in a positive adjustment to the funding, liquidity and coverage score. Conversely, undue reliance on short-duration or uncommitted funding could result in a negative adjustment.

Historical and Future Metrics: Fitch may view historical funding and liquidity metrics as not being reliable indicators of future metrics, for example, due to changes in a non-bank financial institution's strategy or operations or because mergers, acquisitions or disposals may have a material impact on balance-sheet structure.

Financial measures are usually influenced by the operating environment, and Fitch views them in that context. Therefore, comparisons of financial measures across geographies will reflect the differing operating, legal, and regulatory environments for non-banks. Consequently, comparisons of financial measures of direct or in-market peers will generally take on greater importance in this assessment.

Fitch does not employ pre-set weightings for factors or subfactors, as their relative influence may vary. For example, the relative importance of capitalization and leverage and asset quality for the stand-alone credit profile of a non-bank financial institution suffering from a material capital shortfall as a result of high idiosyncratic loan losses is likely to be high (and the stand-alone credit rating very low), even if the non-bank financial institution fares well or better on other factors or subfactors.

EBITDA Calculation^a

Pre-tax income

+ interest expense

+ depreciation

+ amortization

+/- adjustments for non-recurring items

+/- other analytical adjustments (e.g. noncash items)

= EBITDA

^aFor investment managers, Fitch typically uses a fee-based EBITDA calculation (FEBITDA) as defined on page 60. Source: Fitch Ratings.

Tangible Equity Calculation

Total shareholders' equity

- Goodwill and intangibles

- Deferred tax assets related to net operating losses brought forward (if available and at a minimum value of zero), otherwise net deferred tax assets in its entirety (at a minimum value of zero)
- Non-controlling interests, unless believed to exhibit loss absorption capacity
- + Equity portion of any hybrid capital
- = Tangible equity

Source: Fitch Ratings.



Throughout the remainder of the Financial Profile section of the criteria, reference is periodically made to EBITDA. For the avoidance of doubt, Fitch typically adjusts EBITDA calculations to account for various analytical considerations, including, but not limited to, non-recurring items, performance-related items or other non-cash expenses, such as stock compensation.

Throughout the remainder of the Financial Profile section of the criteria, reference is periodically made to common equity. For the avoidance of doubt, Fitch focuses on tangible equity, excluding goodwill and other intangibles, deferred tax assets, and no loss-absorbing non-controlling interests plus the equity portion of any hybrid capital instruments. Where available and relevant, Fitch may also consider complementary capitalization metrics based on regulatory capital measures such as Common Equity Tier 1 (CET1) and/or Fitch Core Capital (FCC), as defined in the table right.

The following tables identify those financial profile attributes that Fitch has defined as 'core' versus 'complementary,' together with an indication of how each attribute is typically assessed. The accompanying subfactor/rating category matrix provides representative characteristics that aid the determination of the overall factor score assigned in each case.

II.5.a Securities Firms

Fitch's financial profile assessment for securities firms considers the following subfactors:

- asset quality;
- earnings and profitability;
- capitalization and leverage; and
- funding, liquidity and coverage.

Fitch Core Capital Calculation

Total shareholders' equity

- Goodwill and intangibles (including mortgage servicing rights)
- Deferred tax assets related to net operating losses brought forward (if available and at a minimum value of zero), otherwise net deferred tax assets in its entirety (at a minimum value of zero)
- Non-controlling interests, unless believed to exhibit loss absorption capacity
- First-loss tranches of securitizations on- and off-balance sheet
- The credit component of fair value changes in the issuer's own debt
- Net asset value or embedded value of any insurance companies held
- + Equity portion of any hybrid capital
- = Fitch Core Capital

Source: Fitch Ratings.

Risk Characteristics of Securities Firms' Primary Business Activities

Activity	Balance Sheet Usage	Risk Level	Level of Profitability	Stability of Profitability
Securities Market Making	High	High	Medium	Cyclical
Prime Brokerage	High	High	Medium	Cyclical
Proprietary Trading	High	High	Medium	Cyclical
Securities Underwriting	High	Medium	High	Cyclical
Lending	High	Medium	Low	Cyclical
Securities Broking	Low	Medium	Low	Cyclical
Financial Advisory	Low	Low	Medium	Cyclical
Post Trade Services	Low	Low	Low	Stable
Investment Management	Low	Low	Medium-to-High	Stable
Source: Fitch Ratings.	•	*		



Asset Quality — Securities Firms

Attribute	Core Versus Complementary	Description
Impaired and Nonperforming Ratio ^a	Core (For Securities Firms with Meaningful Lending Activity)	For securities firms with more meaningful balance sheet exposure to investing and lending activities, the assessment of asset quality is akin to Fitch's analysis for other non-bank financial institution lenders, taking into account loan impairments, related loan loss allowances and asset growth. For securities firms with low balance-sheet usage, asset quality may be a lower influence consideration or may even be viewed as not applicable.
Coverage, Collateral and Margin	Complementary (For Securities Firms with Meaningful Lending Activity)	Fitch considers reserve coverage ratios, the adequacy of collateral and margin requirements and the ability to enforce security claims. Fitch's focus is to determine whether the firm's capital is likely to be negatively affected due to inadequate reserve coverage levels. For assets held at fair or market value, Fitch assesses measurement methodologies, particularly regarding model-based valuations. Fitch also considers the management of non-performing assets and management's approach to restructuring and rescheduling impaired assets.
Counterparty and Settlement Risks	Complementary	Counterparty risk is a consideration for firms engaged in securities and derivatives transactions. The absence of independent credit functions and scoring or rating policies for securities/derivative counterparty exposures would negatively influence Fitch's asset quality assessment. However, credit risk is not as significant for pure brokerage activity (such as for some interdealer brokers) or for firms that provide advisory services, rather than invest in securities transactions. A credit risk department independent of the sales and trading desks that determines counterparty limits, actively monitors usage and reports violations could positively influence Fitch's asset quality assessment, as could risk parameters with respect to the credit quality of the main custodians used.
Securitization and Other Off Balance Sheet Exposure	Complementary (For Securities Firms with Meaningful Lending Activity)	To the extent that Fitch is able to ascertain and evaluate a securities firm's exposure to securitization risks, first-loss tranches of off-balance-sheet securitizations are deducted from tangible equity. The agency may also add these risks to the balance sheet if they are not already reported as such. Fitch considers off-balance sheet risks and commitments where these are large in relation either to capital or risk-weighted assets, or where they pose significant reputational or liquidity risks. This is likely to be an inherent risk faced by firms that have agreed to fund special purpose vehicles or other non-consolidated contingencies but is also important for firms that sponsor investment funds.

^aWhere disclosed under IFRS 9, impaired loans will be loans classified as being at 'stage 3'. Source: Fitch Ratings.

Asset Quality Metrics – Securities Firms

Core Versus Complementary		
Core (for Securities Firms with Meaningful Lending Activity)		
Complementary		

 $^{^{\}rm a}$ Where disclosed under IFRS 9, impaired loans will be loans classified as being at 'stage 3'. Source: Fitch Ratings.



Earnings and Profitability — Securities Firms

Attribute	Core Versus Complementary	Description
Operating Profit/Average Equity	Core (For Securities Firms with High Balance Sheet Usage)	Earnings and profitability are important considerations in Fitch's analysis of securities firms with high balance sheet usage because they indicate a securities firm's ability to generate, or conversely erode, its capital. Strong or weak performance may also affect market confidence in the issuer and, hence, its access to funding. The core metric, operating profit/average equity, captures a securities firm's ability to generate recurring profits relative to the risks it assumes.
EBITDA/ Revenue	Core (For Securities Firms with Low Balance Sheet Usage)	For securities firms with limited balance sheet-intensive activities, the primary cash flow profitability measure is EBITDA margin. Given many securities firms with low balance sheet usage have a continual need to invest in technology development. Fitch also considers the amount of operating cash flow generated to support capital expenditures.
Earnings Stability	Complementary	Fitch's earnings and profitability assessment may be negatively influenced by proprietary trading and investment activity due to the significant potential earnings volatility it can introduce. Conversely, if higher risk businesses are supplemented with more stable operating revenue, such as investment management, clearing operations or securities financings, this can positively influence Fitch's earnings and profitability assessment.
Compensation Expenses	Complementary	Compensation expenses are often analyzed as a percentage of net revenue, to determine the costs relative to activity levels, with outsized compensation ratios potentially constraining stand-alone credit ratings. However, business mix is an important consideration in evaluating this ratio as specific business lines may require greater or less infrastructure and personnel support. The stability of the compensation ratio through various revenue cycles is also an important measure of the flexibility of the cost structure. Fitch evaluates the effectiveness of a firm's compensation, mainly its bonus, policy in controlling compensation expenses. This includes the extent to which bonuses are linked to company or individual performance, are spread out over time, or are paid in shares or options rather than cash.
Non- Compensation Expenses	Complementary	Fitch evaluates non-staff costs as a percentage of non-interest expenses in aggregate and, where possible or relevant, by individual line items. The agency may also consider the business mix of the firm in evaluating non-staff cost ratios. Although an abnormally high non-staff costs expense ratio or a rising trend may indicate a lack of management control over expense levels, low ratios may indicate insufficient reinvestment in systems technology and infrastructure to enhance productivity, meet regulatory requirements and sustain the firm's competitiveness or to maintain good oversight of risk development.

Source: Fitch Ratings.

Earnings and Profitability Benchmarks — Securities Firms

	-	Implied Factor Score						
Metric	Operating Environment Score	aa and Above	a	bbb	bb	b and Below		
Operating Profit/Average Equity (%) ^a	'aa' category or higher	x>20	10 <x≤20< td=""><td>5<x≤10< td=""><td>3<x≤5< td=""><td>x≤3</td></x≤5<></td></x≤10<></td></x≤20<>	5 <x≤10< td=""><td>3<x≤5< td=""><td>x≤3</td></x≤5<></td></x≤10<>	3 <x≤5< td=""><td>x≤3</td></x≤5<>	x≤3		
Operating Income/Average Equity (%) ^a	'a' category	x>25	15 <x≤25< td=""><td>5<x≤15< td=""><td>3<x≤5< td=""><td>x≤3</td></x≤5<></td></x≤15<></td></x≤25<>	5 <x≤15< td=""><td>3<x≤5< td=""><td>x≤3</td></x≤5<></td></x≤15<>	3 <x≤5< td=""><td>x≤3</td></x≤5<>	x≤3		
Operating Income/Average Equity (%) ^a	'bbb' category	·	x>15	10 <x≤15< td=""><td>3<x≤10< td=""><td>x≤3</td></x≤10<></td></x≤15<>	3 <x≤10< td=""><td>x≤3</td></x≤10<>	x≤3		
Operating Income/Average Equity (%) ^a	'bb' category	·	·	x>15	10 <x≤15< td=""><td>x≤10</td></x≤15<>	x≤10		
Operating Income/Average Equity (%)a	'b' category or lower	·	·	•	x>15	x≤15		
EBITDA/Revenue (%) ^b	All	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10		

 a For securities firms with high balance sheet usage. b For securities firms with low balance sheet usage. Source: Fitch Ratings.



Earnings and Profitability Metrics — Securities Firms

High Balance Sheet Usage	Core Versus Complementary	
Operating Profit/Average Equity	Core	
Net Income/Average Equity	Complementary	
Operating Expense/Total Revenue	Complementary	
Compensation/Net Revenue	Complementary	
Low Balance Sheet Usage	Core Versus Complementary	
EBITDA/Revenue	Core	
Source: Fitch Ratings.		

Capitalization and Leverage — Securities Firms

Attribute	Core Versus Complementary	Description
Net Adjusted Leverage (tangible assets less reverse repo and securities borrowed over tangible equity, or its inverse)	firms with high balance sheet	For those securities firms that maintain a substantial volume of assets on balance sheet or commitments that could require financing, Fitch's assessment of leverage more closely reflects a bank analysis. The quality and absolute size of a firm's capital and its capital adequacy (i.e. the size of its capital in relation to its risks) as expressed by the net adjusted leverage ratio, is the fundamental consideration in assessing balance sheet intensive securities firms' capitalization and leverage.
Gross Debt/ EBITDA	Core (For securities firms with low balance sheet usage)	For securities firms carrying relatively few risk assets, the assessment of debt coverage is based more on cash flows. For interdealer brokers and some other securities firms, a large proportion of cash is usually tied up in subsidiaries for regulatory and operational purposes, so leverage is best assessed on a gross debt basis. Fitch also considers net debt/EBITDA, but recognizes that excess cash can be otherwise consumed or deployed, particularly during periods of stress. For securities firms that have a combination of businesses which have different degrees of balance sheet usage, such a retail brokers, Fitch will typically evaluate both cash flow and balance sheet leverage ratios, with balance sheet ratios taking increasing importance in the analysis in instances where balance sheet usage is more pronounced.
Double Leverage	Complementary	Where relevant, Fitch also looks at double leverage, defined as equity investments in subsidiaries plus holding company intangibles divided by equity, which reflects debt issued at the parent company level that has been downstreamed as equity into subsidiaries. While a small amount of double leverage can be expected, Fitch is concerned when double leverage is high (i.e. above 120% or more of a parent company's common equity) on a sustained basis, unless mitigated by some other means (e.g. subsidiary liquidity support agreement). A high degree of double leverage can result in increased rating differentials between a parent company and its subsidiaries, particularly if regulated subsidiaries are involved, since dividends from these entities may be restricted. When feasible, Fitch will review a regulated subsidiary's dividend capacity relative to the holding company's fixed costs and dividends.
Internal, Regulatory and Covenant- Based Capital	Complementary	In addition to Fitch's capital measures, a firm's capital management plans and an understanding of its economic capital models are important to the ratings. Fitch views economic capital models that positively influence business activities and support stable and robust capital levels over an extended period of time as positive for the ratings. When relevant, Fitch monitors regulatory capital ratios and capital covenant ratios to ensure the firm is not in danger of becoming non-compliant.



Capitalization and Leverage Benchmarks — Securities Firms

angible Assets – Reverse Repo – Securities errowed)/Tangible Equity (x) ^a		Implied Factor Score					
Metric	Operating Environment Score	aa and Above	a	bbb	bb	b and Below	
(Tangible Assets – Reverse Repo – Securities Borrowed)/Tangible Equity (x) ^a	ʻaa' category or higher	x<5.0	5.0≤x<10	10.0≤x<15.0	15.0≤x<20.0	x≥20.0	
(Tangible Assets – Reverse Repo – Sec. Borrowed)/ Tangible Equity (x) ^a	'a' category	x<2.5	2.5≤x<10.0	10.0≤x<15.0	15.0≤x<20.0	x≥20.0	
(Tangible Assets – Reverse Repo – Sec. Borrowed)/ Tangible Equity (x) ^a	'bbb' category		x<5.0	5.0≤x<10.0	10.0≤x<15	x≥15	
(Tangible Assets – Reverse Repo – Sec. Borrowed)/ Tangible Equity (x) ^a	'bb' category			x<5.0	5.0≤x<12.0	x≥12.0	
(Tangible Assets – Reverse Repo – Sec. Borrowed)/ Tangible Equity (x) ^a	'b' category or lower				x<7.0	x≥7.0	
Gross Debt/EBITDA (x) ^b	All	x<0.5	0.5≤x<1.5	1.5≤x<2.5	2.5≤x<3.5	x≥3.5	

 $^{^{}a}$ For securities firms with high balance sheet usage. b For securities firms with low balance sheet usage. Source: Fitch Ratings.

Funding, Liquidity and Coverage — Securities Firms

Attribute	Core Versus Complementary	Description
Liquid Assets/ Short-Term Funding	Core (For securities firms with high balance sheet usage)	It is important that securities firms appropriately match the term of their funding to the liquidity of their assets, with particular focus on the amount of liquid assets available to support short-term funding sources, which are subject to refinancing risk. To the extent that short-term repurchase agreements (repos) are used primarily to finance highly liquid assets that can be pledged to an exchange, this is viewed as more appropriate.
EBITDA/Interest Expense	Core (For securities Firms with Low Balance Sheet Usage)	For securities firms with low balance sheet usage, funding, liquidity and coverage are primarily evaluated in the context of EBITDA to interest expense.
Long-Term Funding/ Illiquid Assets	Complementary (For Securities Firms with High Balance Sheet Usage)	Fitch evaluates the funding of illiquid assets, such as merchant banking and high-yield securities, fixed assets, and private equity, and considers the extent to which they are funded by long-term debt and capital. Fitch also evaluates any contingent funding requirements the firm may face, such as liquidity lines or backup facilities extended, or additional collateral calls that may be made on it if market conditions change.
Funding Diversity	Complementary	Fitch assesses a securities firm's funding diversity, debt maturity profile, liquidity status and the proportion of unencumbered liquid assets. Access to central bank liquidity facilities can also a positive factor in the funding, liquidity and coverage assessment, but not all securities firms benefit from this, as such access depends on jurisdiction and legal status within that jurisdiction.
Covenant Compliance	Complementary	Fitch's funding, liquidity and coverage assessment may also include consideration of an issuer's compliance with any funding covenants, the extent to which compliance with such covenants fluctuates and management's ability to operate the business and obtain funding without being unduly constrained by covenant requirements.
Source: Fitch Ratings.		



Funding, Liquidity and Coverage Benchmarks — Securities Firms

Metric Liquid Assets/Short-Term Funding (%) ^a Liquid Assets/Short-Term Funding (%) ^a		Implied Factor Score					
	Operating Environment Score	aa and Above	a	bbb	bb	b and Below	
Liquid Assets/Short-Term Funding (%) ^a	'aa' category or higher	x>200	150 <x≤200< td=""><td>100<x≤150< td=""><td>85<x≤100< td=""><td>x≤85</td></x≤100<></td></x≤150<></td></x≤200<>	100 <x≤150< td=""><td>85<x≤100< td=""><td>x≤85</td></x≤100<></td></x≤150<>	85 <x≤100< td=""><td>x≤85</td></x≤100<>	x≤85	
Liquid Assets/Short-Term Funding (%) ^a	'a' category	x>300	175 <x≤300< td=""><td>100<x≤175< td=""><td>85<x≤100< td=""><td>x≤85</td></x≤100<></td></x≤175<></td></x≤300<>	100 <x≤175< td=""><td>85<x≤100< td=""><td>x≤85</td></x≤100<></td></x≤175<>	85 <x≤100< td=""><td>x≤85</td></x≤100<>	x≤85	
Liquid Assets/Short-Term Funding (%) ^a	'bbb' category		x>300	175 <x≤300< td=""><td>100<x≤175< td=""><td>x≤100</td></x≤175<></td></x≤300<>	100 <x≤175< td=""><td>x≤100</td></x≤175<>	x≤100	
Liquid Assets/Short-Term Funding (%) ^a	'bb' category			x>300	150 <x≤300< td=""><td>x≤150</td></x≤300<>	x≤150	
Liquid Assets/Short-Term Funding (%) ^a	'b' category or lower	-	•		x>200	x≤200	
EBITDA/Interest Expense (x) ^b	All	x>15	10 <x≤15< td=""><td>6<x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<></td></x≤15<>	6 <x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<>	3 <x≤6< td=""><td>x≤3</td></x≤6<>	x≤3	

 $^{^{}a}$ For securities firms with high balance sheet usage. b For securities firms with low balance sheet usage. Source: Fitch Ratings.

Funding, Liquidity and Coverage Metrics — Securities Firms

High Balance Sheet Usage	Core Versus Complementary		
Liquid Assets/Short-Term Funding	Core		
Long-Term Funding/Illiquid Assets	Complementary		
Low Balance Sheet Usage	Core Versus Complementary		
EBITDA/Interest Expense	Core		
Liquid Assets/Short-Term Funding	Complementary		
Source: Fitch Ratings.	·		

Financial Profile — Securities Firms

	aaa	aa	a	bbb	bb	b	ccc and Below
Asset Quality	Lending and Investing Activities: Extremely stable throughout market cycles. Asset- quality measures are consistently better than comparable institutions. Concentration risks are very low. Trading Activities: Counterparty risk is extremely well managed and diversified.	throughout market cycles. Asset- quality measures are better than comparable institutions. Concentration risks are low. Trading Activities:	Lending and Investing Activities: Has a high degree of stability throughout market cycles. Assetquality measures are likely to be modestly better than at peer institutions or less vulnerable to economic rate cycles. Concentration risks may be modestly better than peers. Trading Activities: Counterparty risk is reasonably managed and diversified	cycles. Asset- quality and/or concentration risk measures are generally in line with broad industry	than broad industry averages. Concentration risks may be above average.	based on changes in economic/market cycles and generally significantly worse or more vulnerable than broad industry averages. Concentration risks may be very high. Trading Activities: Weak counterparty	counterparty risk management shortfalls.



Financial Profile — Securities Firms (Continued)

	aaa	aa	a	bbb	bb	b	ccc and Below
Earnings and Profitability	Earnings and profitability are highly predictable throughout economic and/or interest rate cycles. Limited reliance on transactional revenue. Highly variable cost structure. Superior returns relative to peer.	over multiple economic and interest rate cycles. Limited reliance on transactional revenue. Highly variable cost structure. Strong	Earnings and profitability are moderately variable over economic and/or interest rate cycles. Modest reliance on transactional revenue. Largely variable cost structure. Solid returns relative to peer.	be variable over economic and/or interest rate cycles. Modest reliance on transactional revenue. Largely variable cost structure.	Earnings and profitability may be highly variable over economic and/or interest rate cycles. Moderate reliance on transactional revenue. Cost structure is less variable than peer firms. Below-average returns relative to peer.	Earnings and profitability are volatile and highly correlated with economic and/or interest rate cycles. Heavy reliance on transactional revenue. Cost structure is largely fixed. Weak returns relative to peer.	May be structurally unprofitable on either a reported or operating basis. Return to break-even or sustainable profitability is highly uncertain.
Capitalization and Leverage	Capitalization and leverage are extremely strong and commensurate with risk. Capitalization and leverage are maintained with very significant buffers over regulatory minimums as well as peer institutions. Capital and leverage targets incorporate ability to withstand severe shocks.	institutions. Capital and leverage targets incorporate ability to withstand	Capitalization and leverage levels broadly commensurate with risk. Capitalization and leverage are maintained with solid buffers versus regulatory minimums and generally above peer institutions. Capital and leverage levels may be relatively more volatile but likely only modestly affected by severe asset quality and market value shocks.	and leverage may not be fully commensurate with risk. Capitalization and leverage are maintained with satisfactory buffers over regulatory minimums and generally in line with peer institutions. Capital and leverage levels may be more	Capitalization and leverage are not fully commensurate with risk. Capitalization and leverage are maintained with moderate buffers over regulatory minimums and may be below peer institutions or are somewhat vulnerable due to significant country risks. Capital and leverage are highly vulnerable to sever shocks, but capable of withstanding moderate shocks.	-	may require capital
Funding, Liquidity and Coverage	Funding and liquidity are exceptionally stable. Minimal reliance on wholesale funding. Funding is not confidence sensitive. Fund sources are highly diverse. Extremely robust contingency funding plans are in place.	predominantly long-term with established investor appetite. Funding is relatively less	Funding and liquidity are stable. Wholesale funding is predominantly long term. Funding may be modestly confidence sensitive. Funding	although there may be moderate funding concentrations or reliance on less stable wholesale funding sources. Funding is confidence sensitive and liquidity may	are generally stable, although there may be material funding concentrations or meaningful reliance	during periods of	liquidity are unstable absent any formal extraordinary support mechanisms. Contingent funding plans are non-

Source: Fitch Ratings.



II.5.b Investment Managers

Fitch's financial profile assessment for investment managers, investment companies and investment funds considers the following subfactors:

- asset performance (and asset quality for investment companies);
- earnings and profitability;
- capitalization and leverage; and
- funding, liquidity and coverage.

Investment Manager Earnings Definitions

Base Management Fees
(+) Transaction and Advisory Fees
(-) Non-Incentive Compensation
(-) Equity Compensation
(-) Operating Expenses
(-) Interest Expense
(=) Fee-Related Earnings
(+) Equity Compensation
(+) Interest Expense
(+) Depreciation and Amortization
(-) Non-Cash Revenues
(=) (F)EBITDA
Source: Fitch Ratings.

Asset Performance – Investment Managers

Attribute	Core Versus Complementary	Description
Net Client Flows/ Beginning (F)AUM	Core (for investment managers and investment funds)	Fitch evaluates fund flows on an absolute and relative basis to understand a firm's ability to take advantage of market conditions to invest and/or exit investments and, for liquid funds, to assess net inflows or redemptions over a variety of market cycles. More stable fund flows translate into greater fee stability over time. To the extent that the manager or fund has more predictable inflows and/or an ability to manage the pace of outflows, these could positively influence Fitch's assessment. Examples of more predictable inflows could include an investment manager with a sister insurance company which uses the investment manager to manage all or a portion of its general investment account or a pension fund established to manage the contributions of a defined portion of employees or citizens. Examples of managed outflows could include fund structures where the investment manager can influence the timing or amount of redemption.
Asset Performance and Quality	Complementary (for investment companies)	For investment companies, Fitch considers a combination of asset performance and asset quality factors. Asset performance is intended to indicate how market value appreciation/depreciation has impacted the value of assets collateralizing outstanding debt while also providing an indication as to the asset selection capabilities of the investment company (or its investment manager). Asset quality is intended to indicate the quality of the investments collateralizing outstanding debt and the quality/reliability of the upstream dividend and interest income received from portfolio companies. For investment companies that invest in a finite number (less than 30) of portfolio companies or exhibit material portfolio concentration (individual holding greater than 15%), Fitch considers the credit quality and seniority of the underlying investments to assess the overall asset quality profile. This is typically achieved by looking to Fitch's ratings of such portfolio companies or by considering other external sources of information in the absence of such information. To the extent that a portfolio company comprising a large portion (greater than 15%) of the portfolio is unrated, Fitch may elect to conduct an internal Credit Opinion of such entity to support the rating of the investment company.
Performance Relative to Benchmarks and Peers	Complementary	Fitch considers the stability of investment performance, on an absolute basis and relative to investor expectations. Fitch will consider firm-specific benchmarks when assessing fund performance, but will also look to independent sources for performance data, where available, to understand relative fund performance based on vintage, size, geography, and strategy. However, prolonged periods of unexplained outperformance would also require further analysis and could lead to a negative adjustment to Fitch's asset performance assessment if material weaknesses in risk management and/or style drift were the catalyst.
Management Fee Stability	Complementary	Fitch will also assess management fee stability by looking at earnings contributions by fund, strategy and/or segment. Similarly, outsized exposure to a sector or industry strategy could increase correlations and volatility in fee streams. Fitch reviews average fee rates on individual strategies on a relative basis to assess the investment manager's pricing power and ability to withstand incremental fee pressure.



Asset Performance Benchmark — Investment Managers

	aa and Above	а	bbb	bb	b and Below
Net Client Flows/Beginning (F)AUM (%) ^a	x>10	5 <x≤10< td=""><td>5≥x>(5)</td><td>(5)≥x>(10)</td><td>x≤(10)</td></x≤10<>	5≥x>(5)	(5)≥x>(10)	x≤(10)

^aFor investment managers and investment funds. Source: Fitch Ratings.

Asset Performance/Asset Quality Metrics — Investment Managers

Investment Managers and Investment Funds	Core Versus Complementary
Net Client Flows/Beginning (F)AUM	Core
(F)AUM	Complementary
(F)AUM Growth	Complementary
Management Fees/Average (F)AUM	Complementary
Total Revenue/Average (F)AUM	Complementary
(F)EBITDA/Average (F)AUM	Complementary
Investment Companies	Core Versus Complementary
Weighted Average Credit Quality of Investments/Portfolio Companies	Complementary
Source: Fitch Ratings.	·

Earnings and Profitability – Investment Managers

Attribute	Core Versus Complementary	Description
(F)EBITDA/ Fee Revenue	Core (for Investment Managers)	Fitch assesses investment managers' earnings and profitability primary on the basis of fee-related earnings measures, such as (F)EBITDA margin. (F)EBITDA includes transaction, monitoring and advisory fees, but Fitch may remove them from its recurring cash flow calculation if they are believed to be very volatile over time. Conversely, interest and/or dividend income that an alternative investment manager may earn from balance sheet investments could be added to (F)EBITDA if the revenue is believed to be contractual (e.g. interest coupons and preferred dividends), less correlated with core management fees and relatively stable over time.
Returns on Assets	Core (for Investment Companies and Investment Funds)	For more balance-sheet intensive investment managers, returns on assets (ROA) is the primary earnings and profitability consideration. For investment companies, earnings and profitability is typically a lower influence rating factor given the analytical focus on asset overcollateralization and liquidity relative to debt and that earnings can be periodically influenced by unrealized gains/losses as a result of changes in the market values of underlying investments. On a complementary basis, earnings and profitability may also be assessed on the basis of return on equity (ROE).
Earnings Stability and Diversity	Complementary	Fitch's evaluation of earnings and profitability considers the historical trend of an investment manager's earnings performance, the diversity, stability, and quality of its earnings, and the investment manager's capacity to generate profits through cycles. The product mix and strength of performance by product are key factors in providing earnings stability. An additional component in assessing the stability of earnings and fees is whether there are lock-ups on fund investors.
Incentive Fee Generation	Complementary	While Fitch focuses on recurring cash flow measures when assessing an investment manager's core earnings performance, the agency does not ignore the generation of co-investment income or incentive income (also known as carry income and performance fees), as they can provide an additional cushion for debt service capacity and speak to the success of the fund manager, which aids the company in the raising of future funds and, hence, the generation of future management fees. Carried interest can be material, but has significant variability over time.
Fund Structures and Maturities	Complementary	Fitch views fund structures with lock-ups, particularly longer term ones, more favorably as they provide a more stable base upon which to earn fees. Laddered funds and lock-ups are also generally viewed more favorably from an earnings perspective since they ensure that the closure of one fund does not result in a dramatic drop in fees and consequently earnings.



Earnings and Profitability Benchmark — Investment Managers

	aa and Above	a	bbb	bb	b and Below
(F)EBITDA/Fee Revenue (%)	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10
Courses Fitch Detines	•				

Earnings and Profitability Metrics — Investment Managers

Investment Managers	Core Versus Complementary		
(F)EBITDA/Fee Revenue	Core		
Management Fees/Total Fees	Complementary		
Management Fees/Total Revenues	Complementary		
(Base Compensation + Operating Expenses)/Total Fee Revenue	Complementary		
Incentive Compensation/Incentive Revenue	Complementary		
Fee-Related Earnings (Net Income)/Fee Revenue	Complementary		
Net Income/Average Equity	Complementary		
Investment Companies and Investment Funds	Core Versus Complementary		
Net Income/Average Assets	Core		
Net Income/Average Equity	Complementary		

Source: Fitch Ratings.

Capitalization and Leverage — Investment Managers

Attribute	Core Versus Complementary	Description
Gross Debt/(F)EBITDA	Core (for Investment Managers)	Leverage, as measured by debt divided by (F)EBITDA, is analyzed from a trend perspective and relative to peer firms and Fitch's general tolerance levels for a given rating. Fitch applies more conservative leverage benchmarks for investment managers with the majority of their fees assessed against NAV, compared ones with the majority of their fees assessed against committed capital.
Gross Debt/ Tangible Equity	Core (for Investment Companies)	For investment companies, investment funds and investment managers that have material coinvestment exposure, balance sheet capitalization is a more meaningful consideration. In reviewing the adequacy of capitalization, Fitch considers the size of the capital base in relation to the investment manager, investment company, or investment fund's risks. To the extent capital is a meaningful analytical factor, Fitch takes into account management's policies with regard to minimum capital ratio objectives, share buyback programs, and dividend payouts, as well as the ability to raise new capital and internally generate capital. If subject to regulatory capital requirements, Fitch will also review these, whether at the firm itself or at any regulated subsidiary.
Gross Debt (Long + Short) to NAV	Core (for Investment Funds)	For investment funds, Fitch typically analyzes leverage similarly to securities firms, using NAV as a substitute for equity. High levels of leverage would be viewed as a negative ratings attribute for investment funds given less stable earnings and the fact that repayment on obligations usually comes from asset sales and these assets are often less liquid. That said, leverage for investment funds can vary widely depending on the risk profile, liquidity and duration of assets.
Balance Sheet Size and Composition	Complementary	Fitch notes that investment managers that solely manage assets for external investors often do not have sizable balance sheets that require meaningful loss absorption. In such cases, capitalization could be lower and tangible common equity could be negative, even at an investment-grade capitalization and leverage score level. However, Fitch would expect such investment managers to have enough cash and cash generation capacity to offset unexpected litigation or operational losses as appropriate given the scope of their operations. All things being equal, an investment manager that makes extensive use of its balance sheet and invests in illiquid investments will tend to have a lower capitalization and leverage score than one that makes little use of its balance sheet. However, other factors such as capitalization, access to capital and liquidity may counterbalance these factors.
Continued on next page. Source: Fitch Ratings.		



Capitalization and Leverage — Investment Managers (Continued)

Attribute	Core Versus Complementary	Description
Goodwill	Complementary	Many investment managers grow by acquisition and, therefore, will carry a significant amount of goodwill and other intangibles on their balance sheet. These assets are also subject to impairment if the viability of the acquired business deteriorates. Fitch will factor the potential for such impairment into its capitalization and leverage analysis as appropriate. Fitch notes that impairment will not have any impact on tangible equity, as goodwill is excluded from this measure. However, significant impairment would be a negative indicator of the overall health of an investment manager's core earnings.
Consolidated Leverage	Complementary (for Investment Companies)	For investment companies, Fitch tends to focus on unconsolidated debt to equity as the primary leverage metric and considers cash flow leverage metrics to be of a low influence. Consolidated leverage may be considered as a complementary metric to assess the aggregate degree of leverage across underlying portfolio investments. Fitch may also focus more on consolidated leverage metrics in its analysis to the extent that an investment company has a sustained track record of providing financial support to portfolio companies.

Capitalization and Leverage Benchmarks — Investment Managers

	aa and Above	а	bbb	bb	b and Below
Gross Debt/(F)EBITDA (x) ^a	x<0.25	0.25≤x<1.5	1.5≤x<3.0	3.0≤x<5.0	≥5.0
Gross Debt/(F)EBITDA (x) ^b	x<0.50	0.50≤x<2.5	2.5≤x<4.0	4.0≤x<6.0	≥6.0
Gross Debt/Tangible Equity (x) ^c	x<0.15	0.15≤x<0.35	0.35≤x<0.50	0.50≤x<1.0	≥1.0

^aFor investment managers with the majority of their fees assessed against net asset value. ^bFor asset managers with the majority of their fees assessed against invested capital or committed capital. ^cFor investment companies. Source: Fitch Ratings.

Capitalization and Leverage Metrics — Investment Managers

Investment Managers	Core Versus Complementary
Gross Debt/(F)EBITDA	Core
Net Debt/(F)EBITDA	Complementary
Gross Debt/Tangible Equity	Complementary
Net Debt/Tangible Equity	Complementary
Investment Companies	Core Versus Complementary
Gross Debt/Tangible Equity	Core
Investment Funds	Core Versus Complementary
(Gross Long Investment Positions + Gross Short Positions)/Net Asset Value	Core
Source: Fitch Ratings.	



Funding, Liquidity and Coverage — Investment Managers

Investment Managers	Attribute	Core Versus Complementary	Description
and Interest Income Coverage of Holdco Interest Expense Companies) Investment Companies Investment		Investment	Fitch assesses investment managers' funding, liquidity and coverage primarily on the basis of interest coverage. Fitch applies more conservative interest coverage benchmarks for investment managers with the majority of their fees assessed against NAV relative to investment managers with the majority of their fees assessed against committed capital. For investment managers that pay preferred dividends, Fitch would also calculate (F)EBITDA coverage of both interest expense and preferred dividends.
Assets)/Unsecured Debt Funding Stability and Diversity The Stability of the funding sources, Fitch reviews the maturity profile of the debt, sources repayment for any near-term maturities, the nature of significant debt covenants and current and recer performance under those covenants. Access to unsecured debt and lack of reliance on any single funding sources are viewed as positive factors for the funding, liquidity and coverage score, as is laddering of debt maturities. For investment companies, investment funds and investment managers with more material: balance sheet exposure, Fitch also considers the debt maturity profile of the firm's funding sources relat its asset maturities and asset liquidity. Liquidity Sources and Complementary Terms Complementary Fitch considers investment managers' sources of liquidity including committed facilities, cash flow gener capacity, unencumbered balance sheet cash and balance sheet investments. With respect to liability-base ources of liquidity, Fitch considers the terms and maturities of the facilities, associated covenants and quality of the funding providers. For alternative investment managers, Fitch reviews liquidity levels relauntly of the funding providers. For alternative investment managers that do not make extension to balance sheet cash and liquid securities as a percer unfunded commitments. The same considerations apply, albeit to a lesser degree, for investment managers that do not make extension to balance sheet cash and liquid securities as a percer unfunded commitments. The same considerations apply, albeit to a lesser degree, for investment managers to have reasonable levels of callability-based liquidity to meet unexpected losses, expected debt maturities, interest service and other outflows. Distributions Complementary Investment managers tend to distribute a significant portion of their earnings on an annual basis. While believes investment managers have the flexibility to adjust distributions as necessary, liquidity constrained to the relati	and Interest Income Coverage of Holdco	Investment	For investment companies, coverage is evaluated in the context of upstream dividend and interest income from portfolio companies and investments relative to holding company operating expenses, interest expenses and dividends, with greater than two years' coverage being viewed as consistent with an investment-grade funding, liquidity and coverage score. For investment companies that are privately held and do not have stated dividend policies, Fitch will likely remove holding company dividends from the denominator of this ratio reflecting the highly discretionary nature of any such dividends and the absence of similar reputational risk that a publicly traded investment company may face by reducing or cutting its dividend.
repayment for any near-term maturities, the nature of significant debt covenants and current and recer performance under those covenants. Access to unsecured debt and lack of reliance on any single funding source are viewed as positive factors for the funding, liquidity and coverage score, as is laddering of deb maturities. For investment companies, investment funds and investment managers with more material balance sheet exposure, Fitch also considers the debt maturity profile of the firm's funding sources relatives are maturities and asset liquidity. Eitch considers investment managers' sources of liquidity including committed facilities, cash flow gener capacity, unencumbered balance sheet cash and balance sheet investments. With respect to liability-ba sources of liquidity, Fitch considers the terms and maturities of the facilities, associated covenants and to quality of the funding providers. For alternative investment managers, Fitch reviews liquidity levels relaunfunded commitments. The same considerations apply, albeit to a lesser degree, for investment managers that do not make exteuse of their own balance sheet. Fitch expects such investment managers to have reasonable levels of carliability-based liquidity to meet unexpected losses, expected debt maturities, interest service and other outflows. Distributions Complementary Investment managers tend to distribute a significant portion of their earnings on an annual basis. While believes investment managers have the flexibility to adjust distributions as necessary, liquidity constraint of ten develop during tougher economic and market environments, when supplementary earnings streat to be relatively low. As a result, a high distribution rate can be a constraint on the funding, liquidity and coverage score. Fitch assesses the track record of providing financial support to funds, considering both the frequency a magnitude of such support. In conjunction with this review, Fitch will also seek to assess if past support created a perception among fund i	Assets)/Unsecured		For investment funds, Fitch focuses more heavily on the liquidity of the assets rather than their cash flow generation capacity.
Terms capacity, unencumbered balance sheet cash and balance sheet investments. With respect to liability-ba sources of liquidity, Fitch considers the terms and maturities of the facilities, associated covenants and the quality of the funding providers. For alternative investment managers, Fitch reviews liquidity levels related unfunded commitments, with particular attention to balance sheet cash and liquid securities as a percert unfunded commitments. The same considerations apply, albeit to a lesser degree, for investment managers that do not make extense of their own balance sheet. Fitch expects such investment managers to have reasonable levels of cash liability-based liquidity to meet unexpected losses, expected debt maturities, interest service and other outflows. Distributions Complementary Investment managers tend to distribute a significant portion of their earnings on an annual basis. While believes investment managers have the flexibility to adjust distributions as necessary, liquidity constrait often develop during tougher economic and market environments, when supplementary earnings stream to be relatively low. As a result, a high distribution rate can be a constraint on the funding, liquidity and coverage score. Fitch assesses the track record of providing financial support to funds, considering both the frequency as magnitude of such support. In conjunction with this review, Fitch will also seek to assess if past support created a perception among fund investors that future support of funds may be more likely. Material level expected future support may negatively affect an issuer's funding, liquidity and coverage score.		Complementary	In assessing the stability of such funding sources, Fitch reviews the maturity profile of the debt, sources of repayment for any near-term maturities, the nature of significant debt covenants and current and recent performance under those covenants. Access to unsecured debt and lack of reliance on any single funding source are viewed as positive factors for the funding, liquidity and coverage score, as is laddering of debt maturities. For investment companies, investment funds and investment managers with more material sheet balance sheet exposure, Fitch also considers the debt maturity profile of the firm's funding sources relative to its asset maturities and asset liquidity.
believes investment managers have the flexibility to adjust distributions as necessary, liquidity constraint often develop during tougher economic and market environments, when supplementary earnings stream to be relatively low. As a result, a high distribution rate can be a constraint on the funding, liquidity and coverage score. Track Record of Fund Complementary Support Fitch assesses the track record of providing financial support to funds, considering both the frequency as magnitude of such support. In conjunction with this review, Fitch will also seek to assess if past support created a perception among fund investors that future support of funds may be more likely. Material levex expected future support may negatively affect an issuer's funding, liquidity and coverage score.	' '	Complementary	The same considerations apply, albeit to a lesser degree, for investment managers that do not make extensive use of their own balance sheet. Fitch expects such investment managers to have reasonable levels of cash or liability-based liquidity to meet unexpected losses, expected debt maturities, interest service and other
Support magnitude of such support. In conjunction with this review, Fitch will also seek to assess if past support created a perception among fund investors that future support of funds may be more likely. Material level expected future support may negatively affect an issuer's funding, liquidity and coverage score.	Distributions	Complementary	, , ,
		Complementary	Fitch assesses the track record of providing financial support to funds, considering both the frequency and magnitude of such support. In conjunction with this review, Fitch will also seek to assess if past support has created a perception among fund investors that future support of funds may be more likely. Material levels of expected future support may negatively affect an issuer's funding, liquidity and coverage score.
	Redemption Risk	•	For investment funds, Fitch analyzes the structure of the initial lock-up period, redemption parameters (frequency, notice period, amount, etc.) of the funds thereafter, as well as any gates in its assessment of liquidity management.



Funding, Liquidity and Coverage Benchmarks — Investment Managers

	aa and Above	a	bbb	bb b	and Below
(F)EBITDA/Interest Expense (x) ^a	x>18	12 <x≤18< th=""><th>6<x≤12< th=""><th>3<x≤6< th=""><th>x≤3</th></x≤6<></th></x≤12<></th></x≤18<>	6 <x≤12< th=""><th>3<x≤6< th=""><th>x≤3</th></x≤6<></th></x≤12<>	3 <x≤6< th=""><th>x≤3</th></x≤6<>	x≤3
(F)EBITDA/Interest Expense (x) ^b	x>12	8 <x≤12< td=""><td>4<x≤8< td=""><td>2<x≤4< td=""><td>x≤2</td></x≤4<></td></x≤8<></td></x≤12<>	4 <x≤8< td=""><td>2<x≤4< td=""><td>x≤2</td></x≤4<></td></x≤8<>	2 <x≤4< td=""><td>x≤2</td></x≤4<>	x≤2
One Year's Upstream Dividend and Interest Income Coverage of One Year's Holdco Interest Expense (x) ^c	x>10	6 <x≤10< td=""><td>3.5<x≤6.0< td=""><td>2.5<x≤3.5< td=""><td>x≤2.5</td></x≤3.5<></td></x≤6.0<></td></x≤10<>	3.5 <x≤6.0< td=""><td>2.5<x≤3.5< td=""><td>x≤2.5</td></x≤3.5<></td></x≤6.0<>	2.5 <x≤3.5< td=""><td>x≤2.5</td></x≤3.5<>	x≤2.5
One Year's Upstream Dividend and Interest Income Coverage of Two Years' Holdco Operating Expenses, Interest Expense and Dividends (x) ^{c,d}	x>1.0	x>1.0	x>1.0	x≤1.0	x≤1.0

^aFor investment managers with the majority of their fees assessed against net asset value. ^bFor asset managers with the majority of their fees assessed against invested capital or committed capital. ^cFor investment companies. ^dFor investment companies that are privately held and do not have stated dividend policies, Fitch will likely remove holding company dividends from the denominator of this ratio.

Source: Fitch Ratings.

Funding, Liquidity and Coverage Metrics — Investment Managers

Investment Managers	Core Versus Complementary
(F)EBITDA/Interest Expense	Core
(Cash + Liquid Assets)/ Total Assets	Complementary
(Cash + Liquid Assets)/Debt	Complementary
(Cash + Liquid Assets + Co-Investments)/Debt	Complementary
Liquid Assets/Fund Commitments	Complementary
Dividends/Cash Earnings	Complementary
Investment Companies	Core Versus Complementary
One year's upstream dividend and interest income coverage of one year's holdco interest expense	Core
One year's upstream dividend and interest income coverage of two years' holdco operating expenses, interest expense and dividends	Core
Investment Funds	Core Versus Complementary
(Cash + Unpledged Assets)/Unsecured Debt	Core
Total Illiquid Assets/Net Asset Value	Complementary
Source: Fitch Ratings.	•



Financial Profile — Investment Managers

	aaa	aa	a	bbb	bb	b	ccc and Below
Asset Performance	record of (F)AUM inflows/stability through market cycles. Exceptional performance versus benchmarks and/or top quartile fund performance across strategies. Fee rates and incentive	record of (F)AUM inflows/stability through market cycles. Consistent outperformance vs. benchmarks and/or top quartile fund performance across strategies. Fee rates and incentive structures are well-above industry standards. Concentration risks (industry, vintage and investor) are low or effectively mitigated.		conditions/trends. Sound investment/fund performance; but may frequently underperform or lag benchmark. Fee rates and incentive structures largely in-line with	be significantly affected by market conditions/trends. Investment/fund	stress due to concentration in product/fund type. Persistently weak	highly volatile due to significant concentration within funds/asset classes. Very weak investment/fund performance. Fee rates and incentive structures are well
Earnings and Profitability	Earnings and profitability are highly predictable throughout economic and/or interest rate cycles. Limited reliance on transactional revenue. Highly variable cost structure. Superior returns relative to peer.	over multiple economic and interest rate cycles. Limited reliance on transactional revenue. Highly variable cost structure. Strong	Earnings and profitability are moderately variable over economic and/or interest rate cycles. Modest reliance on transactional revenue. Largely variable cost structure. Solid		Earnings and profitability may be highly variable over economic and/or interest rate cycles. Moderate reliance on transactional revenue. Cost structure is less variable than peer firms. Belowaverage returns relative to peer.	reliance on transactional revenue. Cost	May be structurally unprofitable on either a reported or operating basis. Return to breakeven or sustainable profitability is highly uncertain.
Capitalization and Leverage	Capitalization and leverage are	Capitalization and leverage are strong and commensurate with balance sheet risk and/or earnings variability. Leverage targets incorporate ability to withstand significant asset	Capitalization and leverage levels broadly commensurate with balance sheet risk and/or earnings variability. Leverage levels may be relatively more volatile, but likely only	leverage levels may not be fully commensurate with balance sheet risk and/or earnings variability. Leverage levels may be more vulnerable to severe asset	Capitalization and leverage are not fully commensurate with balance sheet risk and/or earnings variability. Leverage is above peer but should be capable of	Capitalization and leverage are not commensurate with balance sheet risk and/or earnings variability. Leverage levels may be well above peer institutions and highly vulnerable to asset	leverage have clear deficiencies



Financial Profile — Investment Managers (Continued)

	aaa	aa	a	bbb	bb	b	ccc and Below
Funding, Liquidity and Coverage	liquidity are exceptionally stable. Minimal reliance on wholesale funding. Funding is not confidence sensitive. Funding sources are highly diverse. Funding is fully unsecured. Extremely robust contingency funding plans are in place.	is predominantly long-term with established investor appetite. Funding is relatively less confidence sensitive. Funding	confidence sensitive. Funding sources are relatively diverse. Funding is largely unsecured. Robust contingency funding plans are in place.	generally stable, although there may be moderate funding concentrations or reliance on less stable wholesale funding sources. Funding is confidence sensitive and	be funding concentrations or meaningful reliance on less-stable wholesale sources of funding. Access to funding may be uncertain during periods of market stress. Funding sources are relatively limited. Lack of an unsecured funding component. Contingency funding plans may not be sufficient.	changes in creditor sentiment. Access	Contingent funding plans are nonexistent.

Source: Fitch Ratings.



II.5.c Business Development Companies

Fitch's financial profile assessment for BDCs considers the following subfactors:

- asset quality;
- earnings and profitability;
- capitalization and leverage; and
- funding, liquidity and coverage.

BDC Earnings Definitions				
Interest Income				
(+) Dividend Income				
(+) Transaction and Advisory Fees				
(-) Base Management and Incentive Fees				
(-) Interest Expense				
(-) Operating Expenses				
(=) Pre-Tax Net Investment Income				
(+) Realized Gains				
(-) Realized Losses				
(=) Taxable Income (approx.)				
Source: Fitch Ratings.				

Asset Quality — Business Development Companies

Attribute	Core Versus Complementary	Description
Net Realized Gains/ Average Portfolio, at Value	Core	For BDCs, Fitch assesses asset quality primarily by using net realized gains as a percent of average portfolio value as a proxy for net chargeoffs. The generation of significant cumulative net realized portfolio losses over a cycle may be an indicator of weak underwriting particularly if performance is meaningfully weaker than peer BDCs. Still, realized losses may also be generated due to portfolio optimization strategies, where lower yielding securities are sold so that proceeds may be reinvested into higher earning assets. In all cases, Fitch attempts to understand the source of realized losses.
Unrealized Portfolio Depreciation	Complementary	Trends in unrealized portfolio depreciation can serve as an early warning signal of potential asset quality issues, as BDCs must incorporate the credit profile of the underlying borrower into quarterly valuation decisions. Relative trends can also provide insight into the strength of a BDC's risk assessment and/or valuation processes. For example, an increase in portfolio depreciation which runs counter to peer-trends and the then-current credit environment may indicate weak underwriting and/or flawed valuation procedures. An increase in non-cash interest coupons (also known as payment-in-kind [PIK]) can also signal weaker underlying portfolio credit, as portfolio companies may have insufficient cash flows to service their interest payments and the capitalization of coupon payments may be a precursor to eventual writeoffs.
Portfolio Concentrations	Complementary	Industry: Certain industry concentrations may be supported by a successful track record and in-house expertise, but Fitch believes outsized concentrations could increase correlations in portfolio company performance, negatively influencing Fitch's asset quality assessment. Issuer: Fitch evaluates the largest portfolio investments, at fair value, as a percentage of assets and equity to gauge a BDC's sensitivity to valuation declines in individual investments. Fitch also considers the magnitude of exposure to equity securities, which may experience more volatile valuation movements. Many BDCs are invested in diversified loan funds or portfolio companies that are themselves large, diversified lenders. This underlying diversification may reduce the sensitivity of the investment to valuation movements, although this may be offset by the subordination of the BDC's investment, which is typically a majority equity stake. Outsized issued concentration may negatively influence Fitch's asset quality assessment. Vintage: For vintage concentrations, Fitch considers the underwriting environment. A significant amount of origination activity during highly competitive market conditions could yield asset quality issues down the road, negatively influencing Fitch's asset quality assessment. Fitch considers underlying portfolio company statistics including leverage, interest coverage, and average EBITDA to assess the potential for asset quality weakening in a stressed environment.

Source: Fitch Ratings.

Typical Asset Quality Benchmark — Business Development Companies

	aa and Above	а	bbb	bb	b and Below
Net Realized Gains/Average Portfolio, at Value (%)	x>5	2≥x>5	(3)≥x>2	(3)≥x>(6)	x≤(6)
Source: Fitch Ratings.					



Asset Quality Metrics – Business Development Companies

Metric	Core Versus Complementary		
Net Realized Gains/Average Portfolio, at Value	Core		
Non-Accruals/Portfolio, at Cost	Complementary		
Non-Accruals/Portfolio, at Value	Complementary		
Net Unrealized Appreciation (Depreciation)/Beginning Portfolio, at Cost	Complementary		
Top 10 Portfolio Investments/Equity	Complementary		
Source: Fitch Ratings.			

Earnings and Profitability – Business Development Companies

Attribute	Core Versus Complementary	Description
Net Investment Income/Average Portfolio, at Cost	Core	Earnings and profitability tends to be a lower influence factor for BDCs given they are primarily secured lenders, seeking return of principal at an appropriate risk adjusted return. In this context, outsized investment returns can be as much of a concern as investment returns that are low (or negative), as the former could indicate an elevated risk appetite while the latter could signal weak underwriting and/or pricing power.
Earnings Mix	Complementary	Fitch views earnings profiles comprised primarily of interest income favorably given the relative stability of this income stream. Outsized contributions from transactional fees, driven by originations and/or repayment volume or more episodic equity yields are viewed negatively by Fitch, as these revenue sources are likely to be more volatile over time or provide the wrong motivation for growth. For example, a BDC may be inclined to continue to originate investments in a competitive credit environment if fee income is needed to meet dividend payments.
Realized and Unrealized Gains/Losses	Complementary	When considering unrealized gains and losses arising from the GAAP requirement to mark the portfolio to fair value every quarter, Fitch focuses on what gave rise to the changes and the likelihood these will be realized. Generally speaking, Fitch expects net realized portfolio gains and losses to be relatively modest over time, particularly if underwriting standards are prudent and exposure to equity investments is minimal. However, since BDCs are not allowed to create loan loss allowances, it is realistic to assume that a BDC will have periodic realized credit losses. Therefore, Fitch assesses a firm's net realized loss performance over time and on a relative basis to gain insight into the strength of its underwriting standards.
Cost Structure	Complementary	A BDC's cost structure is analyzed for the amount of flexibility provided when market conditions are less favorable. In this regard, Fitch considers how much of the cost base is variable. Fitch also considers the structure of the management contract for externally managed firms and views total return requirements more favorably. A review of a BDC's expenses as a percentage of the portfolio at cost provides insight into the scalability of the platform and its appropriateness relative to the business model and strategy. If expense ratios are high, it could be an indicator that the BDC has a significant fixed cost burden. Conversely, if expense ratios are too low, it could signal a lack of sufficient infrastructure to manage the portfolio.

Source: Fitch Ratings.

Earnings and Profitability Benchmark — Business Development Companies

	aa and Above	a	bbb	bb	b and below
Net Investment Income/Average Portfolio, at Cost (%)	5 <x≤10< td=""><td>5<x≤10< td=""><td>5<x≤10< td=""><td>x≤5 or x>10</td><td>x≤5 or x>10</td></x≤10<></td></x≤10<></td></x≤10<>	5 <x≤10< td=""><td>5<x≤10< td=""><td>x≤5 or x>10</td><td>x≤5 or x>10</td></x≤10<></td></x≤10<>	5 <x≤10< td=""><td>x≤5 or x>10</td><td>x≤5 or x>10</td></x≤10<>	x≤5 or x>10	x≤5 or x>10
Source: Fitch Ratings.		·			

Earnings and Profitability Metrics — Business Development Companies

Metric	Core Versus Complementary		
Net Investment Income/Average Portfolio, at Cost	Core		
Investment Income/Average Portfolio, at Cost	Complementary		
Non-Interest and Non-Incentive Expenses/Average Portfolio, at Cost	Complementary		
Compensation/Average Portfolio, at Cost	Complementary		
Net Income/Average Assets	Complementary		
Source: Fitch Ratings.			



Capitalization and Leverage — Business Development Companies

Attribute	Core Versus Complementary	Description
Asset Coverage Cushion	Core	The 40 Act requires BDCs to maintain asset coverage of 200%, which essentially limits debt/equity to 1.0x. However, the passage of the Small Business Credit Availability Act in March 2018 permits BDCs to reduce asset coverage requirements to 150%, subject to board and/or shareholder approval, which essentially limits debt/equity to 2.0x. A breach of the relevant limit precludes the firm from incurring additional debt or paying a dividend and will often result in covenant breaches on a BDC's credit facilities. A BDC's asset coverage cushion is a function of the firm's leverage target and is evaluated in the context of the portfolio construct and the market environment. A BDC should allow for adequate cushion relative to the chosen limitation to account for potential variability in portfolio valuation on a quarterly basis. Fitch believes the cushion should increase when a BDC's investment portfolio is more heavily weighted to lower parts of the borrower's capital structure. For example, a BDC with outsized exposure to subordinated debt and/or equity investments would be expected to have a lower leverage target (and thus higher asset coverage cushion) than a BDC focused on senior secured debt investments, all else equal. As the 40 Act allows for the exclusion of Small Business Administration (SBA) borrowings from the calculation of asset coverage compliance, Fitch similarly excludes such borrowings from its asset coverage cushion calculation.
Debt/Tangible Equity	Complementary	A BDC's asset coverage cushion and leverage ratio are inter-related. Fitch considers a BDC's leverage target on an absolute basis but also relative to the portfolio construct and market conditions. The leverage target should provide for adequate cushion relative to the chosen asset coverage limitation to account for potential variability in portfolio valuation on a quarterly basis. Fitch would expect a BDC to operate below its leverage target if the portfolio construct is riskier than its stated goals. Fitch includes SBA borrowings in its debt/tangible equity calculation.
Adherence to Leverage Policy	Complementary	Most BDCs articulate a leverage target/range which they are expected to adhere to during the normal course of business operations. In such instances, Fitch evaluates the BDC's historical leverage relative to the target. Frequent and/or sustained breaches of the leverage target (absent a material change in portfolio mix) or periodic changes to the articulated strategy could negatively impact Fitch's capitalization and leverage assessment. Conversely, strict adherence to the target, including instances of actively deleveraging in order to maintain compliance, could positively affect Fitch's capitalization and leverage assessment.

Source: Fitch Ratings.

Capitalization and Leverage Benchmark — Business Development Companies

	aa and Above	a	bbb	bb	b and Below
Asset Coverage Cushion	x>60%	33% <x≤60%< td=""><td>11%<x≤33%< td=""><td>0%<x≤11%< td=""><td>x = 0%</td></x≤11%<></td></x≤33%<></td></x≤60%<>	11% <x≤33%< td=""><td>0%<x≤11%< td=""><td>x = 0%</td></x≤11%<></td></x≤33%<>	0% <x≤11%< td=""><td>x = 0%</td></x≤11%<>	x = 0%
Leverage Implied by Asset Coverage Cushion		•		•	
Debt/Tangible Equity (x) at 200% Asset Coverage Requirement	x<0.25	0.25≤x<0.50	0.50≤x<0.80	0.80≤x<1.00	x≥1.00
Debt/Tangible Equity (x) at 150% Asset Coverage Requirement	x<0.36	0.36≤x<0.80	0.80≤x<1.45	1.45≤x<2.00	x≥2.00

Note: A BDC may elect to reduce its asset coverage requirement to 150% but maintain a leverage target at-or-below 1.0x in order to increase its asset coverage cushion without increasing its leverage profile. While such a scenario would be viewed as incrementally positive by Fitch, Fitch's assessment of capitalization and leverage may be lower than implied by the benchmark score, depending on the portfolio risk profile, the BDC's track record in credit, and its ability to consistently manage leverage and portfolio mix at the stated targets.

Source: Fitch Ratings.

Source: Fitch Ratings.

Capitalization and Leverage Metrics — Business Development Companies

Metric	Core Versus Complementary
(Total Assets - Total Liabilities Excluding Regulatory Debt ^a - [Regulatory Debt x Asset Coverage Requirement])/(Total Assets - Total Liabilities Excluding Regulatory Debt)	Core
Debt/Tangible Equity	Complementary
(Total Assets - Total Liabilities Excluding Regulatory Debt ^a)/ Regulatory Debt	Complementary
(Equity-Interest-Bearing Liabilities)/ Portfolio, at Value	Complementary
^a Regulatory debt is defined as term corporate debt excluding Small Business Administration borrowings.	



Funding, Liquidity and Coverage — Business Development Companies

Attribute	Core Versus Complementary	Description
Unsecured Debt/ Total Debt	Core	Fitch considers the mix of secured and unsecured funding in the BDC capital structure and views a meaningful unsecured funding component positively given that it provides the BDC with the flexibility to add a security interest in the event of a significant disruption in the capital markets. BDCs often have secured bank revolving credit lines with blanket liens on all investment assets, which does not technically provide for an unencumbered pool of assets for unsecured creditors. However, BDCs are generally able to issue secured term debt, which shares in the revolver's blanket lien, if economic access to unsecured funding is not available.
Funding Diversity	Complementary	A BDC with a diverse set of available funding sources, which could consist of revolving credit facilities, special purpose vehicles, securitizations, SBA funding, private placements, public notes and equity, would be viewed more favorably. Fitch tends to view commitments from a diverse group of banks more favorably than single or concentrated lender relationships, as changing conditions at any one financial institution could result in a reduction in lending to the industry and a cancellation of the existing commitment upon maturity, or before if permissible.
Liquidity	Complementary	Liquidity is evaluated based on unrestricted balance sheet cash, undrawn borrowing capacity on revolving facilities, portfolio cash generation and cash earnings coverage of dividend payments. Fitch expects a BDC to have sufficient cash on hand and undrawn capacity on its credit facilities to, at a minimum, provide for follow-on investments in portfolio companies, as necessary, and to meet near-term debt maturities. However, BDCs which maintain borrowing (and leverage) capacity to take advantage of attractive market opportunities as they arise are viewed more favorably.
Net Interest Income Coverage of Dividends	Complementary	BDCs electing to be considered RICs for tax purposes are required to distribute 90% of their taxable income on an annual basis to shareholders. As a result, Fitch expects NII to fund the majority of dividends over time. For its dividend coverage calculation, Fitch adjusts NII by non-cash income and expenses to match cash earnings with dividend payments. Non-cash earnings are generally in the form of PIK interest, which is capitalized to the principal amount of the loan. PIK interest is included in taxable income and is, therefore, subject to distribution, but it may never be collected in cash if the investment is restructured or written off. Fitch views a BDC with outsized exposure to PIK earnings more negatively given the greater disconnect between cash earnings and taxable income. When realized portfolio gains occur, Fitch views it more favorably when those proceeds are distributed as a special dividend or carried over into the next taxable year, as spillover income, which Fitch believes provides more stability to the dividend over time. Raising the regular quarterly dividend due to the generation of realized gains is likely to pressure dividend coverage in the future, as those gains are generally episodic. Realized gains can also be used to backfill NII dividend shortfalls, particularly when underperforming debt investments have been restructured into equity. Fitch believes a decline in cash NII coverage of dividends below 100% for an extended period of time should be met with a dividend reduction. Any indication that the BDC is borrowing or raising equity capital to fund its distribution would be viewed negatively.

Source: Fitch Ratings.

Funding, Liquidity and Coverage Benchmark — Business Development Companies

	aa and Above	a	bbb	bb	b and Below
Unsecured Debt/Total Debt (%)	x>90	50 <x≤90< td=""><td>35<x≤50< td=""><td>x≤35</td><td>x = 0</td></x≤50<></td></x≤90<>	35 <x≤50< td=""><td>x≤35</td><td>x = 0</td></x≤50<>	x≤35	x = 0

Source: Fitch Ratings.

Funding, Liquidity and Coverage Metrics — Business Development Companies

Metric	Core Versus Complementary
Unsecured Debt/Total Debt	Core
EBITDA/Interest Expense	Complementary
(Net Investment Income - Non-Cash Earnings + Non-Cash Expenses)//Dividends Declared	Complementary
Cash Net Investment Income/Dividends Declared	Complementary
Non-Cash Income/Interest and Dividend Income	Complementary
Source: Fitch Ratings.	



Financial Profile — Business Development Companies

-	aaa		a	bbb	bb	b	ccc and Below
	as reflected in very low levels of non-accruals and/or minimal losses throughout economic and/or interest rate cycles. Asset-quality measures are consistently better than comparable institutions. Concentration risks are very low or effectively mitigated.	degree of stability as reflected in low levels of non-accruals and/or low losses over multiple economic and/or interest rate cycles. Asset-quality measures are better than comparable institutions. Concentration risks are low or effectively mitigated. Absence of cumulative net realized portfolio losses over a cycle.	levels of non-accruals and/or losses. Asset quality is moderately variable over economic or interest rate cycles. Asset-quality measures are likely to be modestly better than at peer institutions or less vulnerable to economic and/or interest rate cycles.	stability as may be reflected in average levels of non-accruals and/or losses. Asset quality measures are likely to fluctuate over economic and/or interest rate cycles. Asset-quality measures are generally in line with broad industry averages. Portfolio concentrations are moderate. May have modest cumulative net realized portfolio	losses. Asset quality measures are likely to be more volatile in the face of changes in economic and/or interest rate cycles and generally worse or more vulnerable than broad industry averages. Portfolio concentrations are high. May have meaningful cumulative net realized portfolio	above -average non-accruals and losses. Asset quality measures are likely to be very volatile based on changes in economic and/or interest rate cycles and generally significantly worse or more vulnerable than broad industry averages. Portfolio	weaker than industry
	profitability are highly predictable throughout economic and/or interest rate cycles. Limited reliance on transactional revenue. Highly variable cost structure. Profitability measures are consistently commensurate with risk-averse nature.	Earnings and profitability are very predictable over multiple economic and interest rate cycles. Limited reliance on transactional revenue. Highly variable cost structure. Profitability measures are commensurate with very low risk but may vary modestly, although they remain generally superior to	Earnings and profitability are moderately variable over economic and/or interestrate cycles. Modest reliance on transactional revenue. Largely variable cost structure. Profitability measures are commensurate with low risk, but subject	economic and/or interest rate cycles. Modest reliance on transactional revenue. Largely variable cost structure. Profitability measures reflect inherent risk or a highly competitive	highly variable over economic and/or interest rate cycles. Moderate reliance on transactional revenue. Cost structure is less variable than peer firms. Profitability measures may not fully reflect inherent risk and are subject to variability. Profitability is below average relative to broad	profitability are volatile and highly correlated with economic and/or interest rate cycles. Heavy reliance on transactional revenue. Cost structure is largely fixed. Profitability measures may not fully reflect inherent risk and are subject to variability. Profitability is well below average relative to broad	May be structurally unprofitable on either a reported or operating basis. Return to breakeven or sustainable profitability is highly uncertain.
and Leverage	and commensurate with risk. Asset coverage cushion is maintained with	very strong and commensurate with risk. Asset coverage cushion is maintained with comfortable buffers versus regulatory minimums as well as	risk. Asset coverage cushion is maintained with solid buffers versus regulatory	Capital levels broadly	not be fully commensurate with risk. Asset coverage cushion is maintained with	not commensurate with risk. Asset coverage cushion is low and buffers	deficienciesthat



Financial Profile — Business Development Companies (Continued)

	aaa	aa	a	bbb	bb	b	ccc and Below
Funding, Liquidity and Coverage	fully unsecured. Funding duration significantly exceeds average maturity of portfolio assets. Demonstrated access to equity markets across cycles. Absence of non-cash income. Cash net investment income significantly exceeds dividend payments. Extremely robust contingency	Funding and liquidity are very stable. Minimal reliance on short-term funding Wholesale funding is predominantly long termwith established investor appetite. Funding sources are very diverse. Funding is predominantly unsecured. Funding duration exceeds average maturity of portfolio assets. Demonstrated access to equity markets across cycles. Minimal non-cash income. Cash net investment income meaningfully exceeds dividend payments. Very robust contingency funding plans are in place.	confidence sensitive. Funding sources are relatively diverse. Funding is largely unsecured. Funding duration is commensurate with average maturity of portfolio assets. Demonstrated access to equity markets across cycles. Minimal non-cash income. Cash net investment income exceeds dividend payments. Robust contingency funding plans are in	generally stable, although there may be moderate funding concentrations. Reliance on less stable wholesale funding sources. Funding is confidence sensitive, and liquidity may become more expensive or less stable during periods of stress. Meaningful unsecured funding component. Funding duration is commensurate with average maturity of portfolio assets. Demonstrated access to equity markets but may be more sensitive to	meaningful reliance on less stable wholesale sources of funding. Access to funding may be uncertain during periods of market stress. Lack of an unsecured funding component. Funding duration may not be commensurate with average maturity of portfolio assets. No proven ability to access the equity markets. Moderate non-cash income. Cash net investment income is below dividend payments. Contingency funding plans may not be sufficient.	changes in creditor sentiment. Access to funding during periods of market stress is very uncertain. Lack of an unsecured funding component. Funding duration may not commensurate with average maturity of portfolio assets. Inability to access the equity markets. Meaningful noncash income. Cash net investment income is well below dividend payments.	of an unsecured funding component. Significant non-cash income. Cash net investment income is significantly below dividend payments. Contingent funding plans are non-existent.



II.5.d Finance and Leasing Companies

Fitch's financial profile assessment for finance and leasing companies considers the following subfactors:

- asset quality;
- earnings and profitability;
- capitalization and leverage; and
- funding, liquidity and coverage.

Risk Characteristics of Finance and Leasing Companies' Primary Business Activities

Activity	Balance Sheet Usage ^b	Primary Funding Source ^a	Residual Value Risk?	Primary Earnings Source	Stability of Profitability
Leasing	•	-			•
Aircraft Leasing	High	Secured/ABS/Unsecured	Yes	Lease Income	More Cyclical
Container Leasing	High	ABS/Secured Bank Lines	Yes	Lease Income	Cyclical
Fleet Leasing	High	ABS/Unsecured	Generally No	Lease Income	Less Cyclical
Truck Leasing	High	Unsecured/Secured	Yes	Lease Income	Less Cyclical
Railcar Leasing	High	Unsecured/Secured	Yes	Lease Income	Cyclical
Rental	•	•	•		•
Rental Car	High	ABS	Yes	Rental Income	More Cyclical
Rental Equipment	High	Secured	Yes	Rental Income	More Cyclical
Consumer and Commer	rcial Finance				
Commercial Lending	High	Deposits/Unsecured	No	Spread Income	Cyclical
Auto Lending	High	ABS/Deposits/Unsecured	Yes	Spread Income	Cyclical
Credit Card	High	ABS/Deposits	No	Spread Income	Cyclical
Student Lending	High	ABS/Deposits	No	Spread Income	Stable
Mortgage Origination	High	Secured	No	Origination Fees/Servicing Revenue	Stable
Factoring	High	Deposits/Unsecured	No	Fee Income	Cyclical
Pawn Brokerage	High	Unsecured	Yes	Fee Income/Merchandise Sales	Cyclical
Payday Lending	High	Secured Bank Lines	No	Spread and Fee Income	Cyclical
Debt Purchasers	Medium-High	Bank Lines/Secured Debt	No	Fees/Excess Collections over Purchase Price	Less Cyclical
Financial Services					
Marketplace Lending	Low	Non-Recourse Retail/Institutional	No	Origination Fees	Cyclical
Mortgage Servicing	Low	Secured	No	Servicing Revenue	Cyclical

^aOther than bank lines, ^bDespite an issuer exhibiting high balance sheet usage, Fitch may focus on cash flow metrics or employ a hybrid analysis between balance sheet and cash flow metrics to assess 'Earnings and Profitability', 'Capitalization and Leverage' and 'Funding, Liquidity and Coverage' factor scores in instances where re-lease risk is relatively low, the lessees are of a high credit quality, cash flow is more predictable, residual value risk is limited and/or structural barriers to entry/competition exist.

Source: Fitch Ratings.



Asset Quality — Finance and Leasing Companies

Attribute	Core Versus Complementary	Description
Impaired and Nonperforming Ratio ^a	Core (For finance and leasing companies with high balance sheet usage)	Fitch's assessment of finance and leasing companies' asset quality primarily focuses on loan impairments or impairments on leased assets but also considers delinquencies, non-accruals, net charge-offs and loss allowance rates. Fitch considers the performance of these metrics over time and through market cycles, relative to the firm's underwriting criteria and articulated risk appetite and compares measures to peer firms with like products.
Borrower Profile	Complementary	For consumer lenders, Fitch may review data on the loan portfolio, such as the average balance per account and average yield, as well as variations from the mean. This may also involve demographic data on the underlying portfolio or an internal or external credit score. For commercial lenders and lessors, Fitch may review the types of businesses or equipment financed, loan to value ratios, as well as any internal credit rankings or watchlists with respect to lessees. For rental companies, lessee quality may be less relevant depending on the duration of the rental agreement and the type of equipment being rented.
Servicing, Collections and Disposition	Complementary	Fitch believes that a robust servicing and collection platform is an integral part of asset quality, since it can have a significant influence on impairment/delinquency and chargeoff experience. For example, Fitch considers an issuer's collection strategies for impaired/delinquent accounts and the ability to improve upon expected roll rates. For leasing companies, Fitch also considers an issuer's ability to repossess and dispose of collateral in an economic and efficient manner. Fitch considers the issuer's flexibility with regard to disposal channels and seeks to assess an issuer's ability to rapidly de-fleet or re-fleet in response to changing market conditions. Collateral sale proceeds are considered over time relative to residual values to assess the effectiveness of a leasing company's depreciation policies.
Seasonality and Growth Impacts	Complementary	Since asset quality can be distorted by growth, where possible, Fitch may perform analysis on a static-pool basis to measure asset quality of different vintages. Static-pool or vintage analysis can provide an early warning of problems, such as rapid asset-quality deterioration, forcing accelerated chargeoffs, which may highlight loosening of underwriting policies. Fitch recognizes that seasonality can play a role in distorting asset quality and, to complement static-pool analysis, Fitch may analyze other growth-adjusted asset-quality metrics, looking at impairment/delinquency and net chargeoff ratios on both a coincident (current) and lagged basis. In addition, portfolio shrinkage can also skew coincident and lagged credit metrics, so, in these instances, Fitch will also track the relative absolute change in portfolio impairments/delinquencies and losses from one period to another.
Business Model Specifics	Complementary	The key asset quality metrics for finance and leasing companies are less relevant for debt purchasers, whose assets are typically impaired, but acquired at a significant discount. Instead, Fitch will focus on the stability and resilience of cash flow generation from acquired portfolios relative to their purchase price. Fitch will also review industry measures such as gross 'cash on cash' multiples, net cash on cash multiples (net of collection activity costs) and price paid/face value of purchased assets, where available.

^aWhere disclosed under IFRS 9, impaired loans will be loans classified as being at 'stage 3 Source: Fitch Ratings.

Asset Quality Benchmarks — Finance and Leasing Companies

			Impli	ed Factor Scor	·e	
Metric	Operating Environment Score	aa and Above	a	bbb	bb	b and Below
Impaired and Nonperforming Ratio ^a	'aa' category or higher	x≤1	1 <x≤3< td=""><td>3<x≤6< td=""><td>6<x≤14< td=""><td>x>14</td></x≤14<></td></x≤6<></td></x≤3<>	3 <x≤6< td=""><td>6<x≤14< td=""><td>x>14</td></x≤14<></td></x≤6<>	6 <x≤14< td=""><td>x>14</td></x≤14<>	x>14
Impaired and Nonperforming Ratio ^a	'a' category	x≤0.25	0.25 <x≤2< td=""><td>2<x≤5< td=""><td>5<x≤12< td=""><td>x>12</td></x≤12<></td></x≤5<></td></x≤2<>	2 <x≤5< td=""><td>5<x≤12< td=""><td>x>12</td></x≤12<></td></x≤5<>	5 <x≤12< td=""><td>x>12</td></x≤12<>	x>12
Impaired and Nonperforming Ratio ^a	'bbb' category		X≤0.5	0.5 <x≤4< td=""><td>4<x≤10< td=""><td>x>10</td></x≤10<></td></x≤4<>	4 <x≤10< td=""><td>x>10</td></x≤10<>	x>10
Impaired and Nonperforming Ratio ^a	'bb' category			x≤0.75	0.75 <x≤5< td=""><td>x>5</td></x≤5<>	x>5
Impaired and Nonperforming Ratio ^a	'b' category or lower		-	-	x≤1	x>1

^aFor countries and/or asset classes where the impaired and non-performing framework is not utilized, delinquency ratios (typically 30-day) may be used as a substitute. For leasing companies, the impairment ratio is calculated as impairments on leased assets plus incurred gains and losses on the sale of leased assets/total leased assets. Note: Fitch may exclude or normalize a quarterly data point if it is believed to be unduly influenced by seasonality rather than reflecting a longer term asset quality trend.

Source: Fitch Ratings.



Asset Quality Metrics — Finance and Leasing Companies

Core Versus Complementary
Core
Complementary
Complementary
Complementary
Complementary

Note: Fitch may exclude or normalize a quarterly data point if it is believed to be unduly influenced by seasonality rather than reflecting a longer term asset quality trend. For leasing companies, asset-quality ratios are calculated as impairments on leased assets plus incurred gains and losses on the sale of leased assets/total leased assets. Source: Fitch Ratings.

Earnings and Profitability — Finance and Leasing Companies

Attribute	Core Versus Complementary	Description
Pre-Tax Net Income/ Average Assets	Core (For Finance and Leasing Companies with High Balance Sheet Usage)	For finance and leasing companies with high balance sheet usage, Fitch focuses primarily on portfolio yields and return on assets and return on equity measures, which are more easily comparable across the bank and non-bank universes. Fitch will also consider risk-adjusted margins, which measure the level of profitability for the risk taken, since it deducts provision expense and interest expense from total net operating revenue. A review of earnings quality primarily reflects an assessment of recurring cash-based earnings, principally net interest and lease and fee income, as opposed to nonrecurring gains/losses, noncash gains or mark-to-market gains on derivatives or investments.
EBITDA/ Revenues	Core (For Finance and Leasing Companies with Low Balance Sheet Usage)	For finance and leasing companies with low balance sheet usage, Fitch places emphasis on EBITDA margin analysis. Where core income is from fee-type sources, as is the case with finance and leasing companies with low balance sheet usage, Fitch evaluates the reliability and variability of these fees over a cycle. Additionally, Fitch may also review accruals for fee-type services, such as rewards for credit card usage or fee suppression policies for unearned income, to assess the collectability over time, where applicable. For leasing companies where the average lease term is relatively short, such as rental car companies and small ticket lessors, and for companies with proven stable asset-based cash generation and/or significant non-balance sheet-related earnings, such as debt purchasers, Fitch's analysis of earnings and profitability typically focuses on cash flow metrics and analysis. Fitch may make adjustments to its EBITDA calculation to exclude depreciation expense if it is believed to be a recurring operating expense and no significant change in leased asset levels is expected. However, in that case, Fitch would look to add back proceeds from the sale of leased assets to its calculation of cash flow, as it would likely be deemed a significant source of debt repayment.
Operating Expenses	Complementary	Fitch also looks at operating expenses relative to revenue, loans or leases, including the mix of variable and fixed costs. Fitch recognizes that finance and leasing companies may have very different cost structures. For example, a company with a global footprint, like an aircraft lessor, is likely to have a higher level of operating expenses versus one that relies on centralized functions but this may be offset by other factors such as lower credit losses or higher asset yields.
Depreciation and Non-Cash Items	Complementary	Depreciation expense is typically a significant noncash item for leasing companies and Fitch views it as an important cost, since such companies typically need to continually replace equipment involved in operating leases and stay within certain age parameters. To the extent an issuer reports a material amount of noncash income, Fitch may request a reconciliation of reported earnings to operating cash flows. Fitch views significant noncash items as lowering the quality of earnings.
Treatment of Securitizations	Complementary	To the extent that a finance and leasing company securitizes receivables and removes them from its balance sheet or services assets not on its balance sheet, Fitch focuses on managed measures of profitability, which consider reported profits and expenses relative to the company's serviced portfolio of loans or leases. This provides a clearer picture of the underlying profitability of the book of business, since an issuer typically earns a fee for servicing the assets in the securitization vehicle.



Earnings and Profitability Benchmarks — Finance and Leasing Companies

	•	ore				
Metric	Operating Environment Score	aa and Above	a	bbb	bb	b and Below
Pre-Tax Income/Average Assets (%) ^a	'aa' category or higher	x>4.0	3.0 <x≤4.0< td=""><td>2.0<x≤3.0< td=""><td>1.0<x≤2.0< td=""><td>x≤1.0</td></x≤2.0<></td></x≤3.0<></td></x≤4.0<>	2.0 <x≤3.0< td=""><td>1.0<x≤2.0< td=""><td>x≤1.0</td></x≤2.0<></td></x≤3.0<>	1.0 <x≤2.0< td=""><td>x≤1.0</td></x≤2.0<>	x≤1.0
Pre-Tax Income/Average Assets (%) ^a	ʻa' category	x>5.0	3.5 <x≤5.0< td=""><td>2.5<x≤3.5< td=""><td>1.0<x≤2.5< td=""><td>x≤1.0</td></x≤2.5<></td></x≤3.5<></td></x≤5.0<>	2.5 <x≤3.5< td=""><td>1.0<x≤2.5< td=""><td>x≤1.0</td></x≤2.5<></td></x≤3.5<>	1.0 <x≤2.5< td=""><td>x≤1.0</td></x≤2.5<>	x≤1.0
Pre-Tax Income/Average Assets (%) ^a	'bbb' category		x>6.0	4.0 <x≤6.0< td=""><td>1.0<x≤4.0< td=""><td>x≤1</td></x≤4.0<></td></x≤6.0<>	1.0 <x≤4.0< td=""><td>x≤1</td></x≤4.0<>	x≤1
Pre-Tax Income/Average Assets (%) ^a	'bb' category			x>6.0	2.0 <x≤6.0< td=""><td>x≤2.0</td></x≤6.0<>	x≤2.0
Pre-Tax Income/Average Assets (%) ^a	'b' category or lower			.	x>7.0	x≤7.0
EBITDA/Revenues (%) ^b	All	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10

^aFor high balance sheet usage finance and leasing companies. ^bFor low balance sheet usage finance and leasing companies. Source: Fitch Ratings.

Earnings and Profitability Metrics — Finance and Leasing Companies

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High Balance Sheet Usage	Core Versus Complementary	
Pre-Tax Net Income/Average Assets	Core	
Pre-Tax Net Income/Average Equity	Complementary	
Residual Value Gains (Losses)/Pre-Tax Income	Complementary	
Operating Expenses/Total Net Revenues	Complementary	
Depreciation Expenses/Total Revenues	Complementary	
Low Balance Sheet Usage	Core Versus Complementary	
EBITDA/Revenues	Core	
Pre-Tax Income/Revenues	Complementary	
Source: Fitch Ratings.	•	

Capitalization and Leverage — Finance and Leasing Companies

Attribute	Core Versus Complementary	Description
Debt/ Tangible Equity	Core (For Finance and Leasing Companies with High Balance Sheet Usage)	Fitch's assessment of a finance and leasing company's capitalization and leverage metrics focuses primarily on debt to tangible equity for finance and leasing companies with high balance sheet usage. With respect to equipment lessors, Fitch will not exclude maintenance right assets and lease premiums from tangible equity if these balance sheet items are believed to contain sufficient economic value to support creditors.
Debt/ EBITDA	Core (For Finance and Leasing Companies with Low Balance Sheet Usage)	Fitch's assessment of a finance and leasing company's capitalization and leverage metrics focuses primarily on debt/EBITDA for finance and leasing companies with low balance sheet usage and for companies with proven stable asset-based cash generation and/or significant non-balance-sheet-related earnings, such as debt purchasers.
Business Model Specifics	Complementary	For leasing companies with weaker quality lessees and/or material residual value risk, such as large equipment lessors, the primary capitalization and leverage focus is typically on balance sheet metrics such a debt to equity. For large equipment lessors which benefit from high quality lessees, long-term contractual cash flows, limited order book/impairment risk and/or structural barriers to entry/competition, Fitch's analysis of leverage and capitalization may take a corporate approach, in which the primary focus is on cash flow coverage and debt service. Fitch uses EBITDA as a proxy for cash flow. The same may be applicable for leasing companies where the average lease term is relatively short, such as rental car companies and small ticket lessors, and for companies with proven stable asset-based cash generation and/or significant non-balance sheet-related earnings, such as debt purchasers. For debt purchasers, Fitch will also assess gross debt/estimated remaining collections, where available.



Capitalization and Leverage — Finance and Leasing Companies (Continued)

Attribute	Core Versus Complementary	Description
Double Leverage	Complementary	Where relevant, Fitch also looks at double leverage, defined as equity investments in subsidiaries plus holding company intangibles divided by equity, which reflects debt issued at the parent company level that has been down streamed as equity into subsidiaries. While a small amount of double leverage can be expected, Fitch is concerned when double leverage is high (i.e. above 120% or more of a parent company's common equity) on a sustained basis, unless mitigated by some other means (e.g. subsidiary liquidity support agreement). A high degree of double leverage can result in increased rating differentials between a parent company and its subsidiaries, particularly if regulated subsidiaries are involved, since dividends from these entities may be restricted. When feasible, Fitch will review a regulated subsidiary's dividend capacity relative to the holding company's fixed costs and dividends.

Capitalization and Leverage Benchmarks — Finance and Leasing Companies

		Implied Factor Score							
Metric	Operating Environment Score	aa and Above	a	bbb	bb	b and Below			
Debt/Tangible Equity (x) ^a	'aa' category or higher	x<1.0	1.0≤x<3.0	3.0≤x<5.0	5.0≤x<8.0	x≥8.0			
Debt/Tangible Equity (x) ^a	'a' category	x<0.8	0.8≤x<3.0	3.0≤x<5.0	5.0≤x<7.5	x≥7.5			
Debt/Tangible Equity (x) ^a	'bbb' category	-	x<0.75	0.75≤x<4.0	4.0≤x<7.0	x≥7.0			
Debt/Tangible Equity (x) ^a	'bb' category			x<0.6	0.6≤x<5.5	x≥5.5			
Debt/Tangible Equity (x) ^a	'b' category or lower	-	·		x<0.5	x≥0.5			
Debt/EBITDA (x) ^b	All	x<0.5	0.5≤x<1.5	1.5≤x<2.5	2.5≤x<3.5	x≥3.5			

^aFor high balance sheet usage finance and leasing companies. ^bFor low balance sheet usage finance and leasing companies. Source: Fitch Ratings.

Capitalization and Leverage Metrics — Finance and Leasing Companies

High Balance Sheet Usage	Core Versus Complementary		
Debt/Tangible Equity	Core		
Tangible Equity/Tangible Assets	Complementary		
(Net Income-Dividends-Share Repurchases)/Beginning Equity	Complementary		
Low Balance Sheet Usage	Core Versus Complementary		
Debt/EBITDA	Core		
Source: Fitch Ratings.			



Funding, Liquidity and Coverage — Finance and Leasing Companies

Attribute	Core Versus Complementary	Description
Unsecured Debt/Total Debt		Fitch believes an overreliance on secured financing sources such as asset-backed securitization, repurchase agreements, covered bonds, or secured bank loans, may constrain a finance and leasing company's funding, liquidity and coverage assessment, as a high proportion of encumbered assets will reduce financial flexibility. In assessing creditor protections, when information is available, Fitch will focus on unsecured debt as a percent total debt and, by extension, unencumbered assets relative to unsecured debt. This encompasses not only the amount, but also the relative quality of assets supporting unsecured debt obligations. Fitch typically stresses asset values by applying haircuts, depending on the riskiness of the asset class. In considering unencumbered assets, Fitch also makes adjustments based on seniority of liens that may exist in financing agreements and for pledged assets.
EBITDA/ Interest Expense	•	For finance and leasing companies with low balance sheet usage, Fitch assesses funding, liquidity and coverage, primarily on the basis of interest coverage more so than funding or liquidity. For leasing companies where the average lease term is relatively short, such as rental car companies and small ticket lessors, and for companies with proven stable asset-based cash generation and/or significant non-balance sheet-related earnings, such as debt purchasers, Fitch's analysis of funding, liquidity and coverage typically focuses on cash flow metrics. For finance and leasing companies that pay preferred dividends, Fitch would also calculate EBITDA coverage of both interest expense and preferred dividends.
Reliance on Short-Term Funding	Complementary	Fitch understands that issuers may be motivated to fund themselves with short-term debt, since this is often less costly; however, it is Fitch's view that an overreliance on short-term financing can be very problematic, especially during times of market duress. In thinking about short-term financing, Fitch focuses on asset maturities. For example, an issuer with very short-dated assets (charge card, factoring receivables, auto floorplan loans or certain consumer loans) may be better able to rely upon asset cash flow to support a reasonable component of short-term financing than an issuer with long-dated assets, such as mortgages, student loans or aircraft. Nonetheless, even when asset maturities are very short term, a degree of longer term financing should be in place to finance the book of business.
Contingent Funding	Complementary	Sound contingency plans should be established to cover the potential that short-term assets financed by short-term debt may not produce expected levels of cash flow in all phases of a business or product cycle. This would include coverage for potential extension of hold periods for assets expected to be sold and that are funded by short-term debt. Contingent funding should be reasonably accessible during times of financial duress and should not rely on an issuer to maintain covenant compliance. Fitch would expect investment-grade finance and leasing companies to be able to demonstrate contingency plans that allow the entity to navigate a prolonged disruption in liquidity and funding markets. This can be demonstrated by an ability to fund core operations over a 12-month period via cash flow generation and committed financing facilities from appropriately rated entities but excluding access to public unsecured markets if that is the primary source of funding in periods of normal market conditions. Additionally, Fitch may evaluate a firm's wind-down or liquidation scenarios to gain an understanding of how effectively and efficiently assets can be liquidated to cover costs, including debt service, on a timely basis.
Order Books	Complementary	Contingency funding plans take on added significance for leasing companies with large order books, particularly given that these obligations must be financed through a variety of economic environments. Order books are more prevalent in the aircraft, railcar and container leasing sectors, and represent commitments to purchase assets from manufacturers, in some cases years before they will be leased. The existence of committed financing, such as warehouse facilities, helps to mitigate some of this risk; however, the maturity of the facilities may pre-date order deliveries, which can yield refinancing risk. Fitch considers a lessor's order book size in relation to the size of its balance sheet, existing fleet, operational and marketing capabilities, the extent to which committed leases are in place at the time of the order, as well as its capital raising track record. However, the existence of significant or derbooks, particularly if they are long-tailed, may be a rating constraint.
Funding Quality and Diversity	Complementary	Fitch views diverse sources of funding, in terms of markets, investors and geography, as well as funding stability, to be positive for the funding, liquidity and coverage score. Fitch looks at the portion of credit facilities that is committed versus uncommitted, the composition of the credit providers and the frequency with which facilities are utilized. Fitch looks at the length of the relationships, as well as other business flows (such as cash management or securities underwriting) that a finance and leasing company maintains with its credit providers, since this may have a material impact on whether lenders accommodate the issuer during periods of financial duress. Fitch may only take account of available liquidity from backup lines of credit from highly rated banks and/or banks rated the same or higher than the issuer itself.



Funding, Liquidity and Coverage — Finance and Leasing Companies (Continued)

Attribute	Core Versus Complementary	Description
Treatment of Securitization	Complementary s	When there is a significant portion of securitization activity, Fitch may compare the quality of securitized receivables to those remaining unencumbered to ensure that no "cherry picking" or adverse selection has occurred. Fitch believes that securitized receivables should reflect a cross-section of originated loans or leases. A a result, strategies that rely on either selling the weakest or strongest credits may negatively affect the funding, liquidity and coverage score. Moreover, Fitch believes a finance and leasing company should be able to demonstrate liquidity in all the asset types it originates. For example, if an issuer cannot demonstrate secondary market liquidity for a particular asset class, Fitch may view additional capital and/or liquidity to support that particular asset as appropriate. Additionally, Fitch may factor in an increased likelihood of voluntary support for non-recourse obligations for finance and leasing companies that are overly reliant on securitization as a source of funding. Voluntary support could arise as a means for the issuer to limit reputational damage and potential loss of market access to this funding source in the event of underperformance.
Covenant Compliance	Complementary	Fitch may consider covenants in credit agreements to understand covenant and security features, as these can have a bearing on a finance and leasing company's ability to conduct its business. Although technical defaults, such as a financial covenant violation, may often be waived, this usually comes at considerable expense. Therefore, a covenant breach may negatively affect Fitch's funding, liquidity and coverage assessment if it is viewed as an indicator of a material change in the entity's risk profile or financial flexibility.
Payout Ratio	Complementary	Many finance and leasing companies pay out some portion of earnings, either to a parent company or to public/private shareholders, which is a cash use. For payout ratios, Fitch focuses on combined measures, which include both dividends and net share repurchases, in order to assess the impact on liquidity.
Mortgage REIT Specifics	Γ Complementary	Fitch typically views mortgage REITs as having weaker liquidity positions than similar finance companies that have not elected REIT status, as REITs have weaker capital retention flexibility. However, REITs that address required dividend distributions through the issuance of new shares as opposed to cash dividend payments may have stronger liquidity than REITs that pay out the majority of taxable income as cash dividends to stockholders. Based on guidelines established by the National Association of Real Estate Investment Trusts, funds from operations (FFO) for mortgage REITs are defined as net income excluding gains (or losses) from property sales, plus depreciation and amortization, plus adjustments for unconsolidated partnerships and joint ventures. Fitch compares dividends paid to stockholders with FFO for mortgage REITs. Adjustments for unconsolidated partnerships and joint ventures will be calculated to reflect FFO on the same basis. Fitch subtracts capital expenditures and excludes noncash items included in FFO to arrive at adjusted funds from operations (AFFO) for mortgage REITs and compares dividends paid to stockholders with AFFO. Although FFO and AFFO are after-interest expense measures, these measures are relevant to bondholders and preferred stockholders. Namely, if FFO or AFFO payout ratios are close to or exceed 100%, it indicates the REIT is not retaining cash flow for future liquidity to meet its fixed -charge obligations and is accessing other forms of cash flow to pay its dividends, which Fitch views negatively.

Source: Fitch Ratings.

Funding, Liquidity and Coverage Benchmarks — Finance and Leasing Companies

	Implied Factor Score								
Metric	Operating Environment Score	aa and Above	a	bbb	bb	b and Below			
	'aa' category or		-	•	•				
Unsecured Debt/Total Debt (%) ^a	higher	x>90	50 <x≤90< td=""><td>35<x≤50< td=""><td>x≤35</td><td>x = 0</td></x≤50<></td></x≤90<>	35 <x≤50< td=""><td>x≤35</td><td>x = 0</td></x≤50<>	x≤35	x = 0			
Unsecured Debt/Total Debt (%) ^a	'a' category	x>95	60 <x≤95< td=""><td>40<x≤60< td=""><td>10<x≤40< td=""><td>x≤10</td></x≤40<></td></x≤60<></td></x≤95<>	40 <x≤60< td=""><td>10<x≤40< td=""><td>x≤10</td></x≤40<></td></x≤60<>	10 <x≤40< td=""><td>x≤10</td></x≤40<>	x≤10			
Unsecured Debt/Total Debt (%) ^a	'bbb' category		x>95	75 <x≤95< td=""><td>20<x≤75< td=""><td>x≤20</td></x≤75<></td></x≤95<>	20 <x≤75< td=""><td>x≤20</td></x≤75<>	x≤20			
Unsecured Debt/Total Debt (%) ^a	'bb' category		-	X=100	50 <x≤100< td=""><td>x≤50</td></x≤100<>	x≤50			
Unsecured Debt/Total Debt (%) ^a	'b' category or lower	•	•	•	X>95	x≤95			
EBITDA/Interest Expense (x) ^b	All	x>15	10 <x≤15< td=""><td>6<x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<></td></x≤15<>	6 <x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<>	3 <x≤6< td=""><td>x≤3</td></x≤6<>	x≤3			

^aFor high balance sheet usage finance and leasing companies. ^bFor low balance sheet usage finance and leasing companies. Source: Fitch Ratings.



Funding, Liquidity and Coverage Metrics — Finance and Leasing Companies

High Balance Sheet Usage	Core Versus Complementary		
Unsecured Debt/Total Debt	Core		
Short-Term Debt/Total Debt	Complementary		
EBITDA/Interest Expense	Complementary		
Unencumbered Assets/Unsecured Debt	Complementary		
Dividends/Net Income	Complementary		
Low Balance Sheet Usage	Core Versus Complementary		
EBITDA/Interest Expense	Core		
Source: Fitch Ratings.			

Financial Profile — Finance and Leasing Companies

	aaa	aa	Α	Bbb	bb	b	ccc and Below
Asset Quality	as reflected in very low levels of impaired assets and/or minimal	as reflected in low	Has a high degree of stability as may be reflected in modest levels of impaired assets and/or losses. Asset quality is moderately variable over economic or interest rate cycles. Asset-quality measures are likely to be modestly better than at peer institutions or less vulnerable to economic and/or interest rate cycles. Concentration risks may be modestly better than peers.	Has a degree of stability as may be reflected in average levels of impaired assets and/or losses. Asset quality measures are likely to fluctuate over economic and/or interest rate cycles. Asset-quality and/or concentration risk measures are generally in line with broad industry averages.	levels of impaired assets and losses. Asset quality measures are likely to be more volatile in the face of changes in economic and/or interest rate cycles and generally worse or more vulnerable than broad industry averages. Concentration risks may be above	measures are likely to be very volatile based on changes in economic and/or interest rate cycles and generally significantly worse or more vulnerable than broad industry averages. Concentration	have asset-quality measures that are considerably weaker than industry benchmarks or historical norms.
Earnings and Profitability	Earnings and profitability are highly predictable throughout economic and/or interest rate cycles. Profitability measures are consistently commensurate with risk-averse nature.	over multiple economic and interest rate cycles. Profitability measures are commensurate with very low risk but may vary modestly, although they remain	measures are commensurate with low risk but subject to	Earnings and profitability may be variable over economic and/or interest rate cycles. Profitability measures reflect inherent risk or a highly competitive environment and can be subject to increased variability. Profitability is average relative to broad industry averages.	over economic and/or interest rate cycles. Profitability measures may not fully reflect inherent risk and are subject to variability. Profitability is below average relative to broad	correlated with economic and/or interest rate cycles. Profitability	May be structurally unprofitable on either a reported or operating basis. Return to breakeven or sustainable profitability is highly uncertain.



Financial Profile — Finance and Leasing Companies (Continued)

	aaa	aa	а	bbb	bb	b	ccc and Below
Capitalization and Leverage	Capitalization is extremely strong and commensurate with risk. Capital and leverage targets incorporate ability to withstand severe asset quality and market value shocks.	and leverage targets incorporate ability	Capitalization levels broadly commensurate with risk. Capital and leverage levels may be relatively more volatile but likely only modestly affected by severe asset quality and market value shocks.	not be fully commensurate with risk. Capital and leverage levels may be more vulnerable to severe asset quality and market	withstand asset quality and market value shocks.	not commensurate with risk. Capital and leverage levels may be well	Capitalization and leverage have clear deficiencies that have or may require capital injections.
Funding, Liquidity and Coverage	Funding is not confidence sensitive. Funding sources are highly diverse. Funding duration significantly exceeds average maturity of portfolio assets. Funding is fully unsecured, supported by	stable. Minimal reliance on short-term funding. Wholesale funding is predominantly long term with established investor appetite. Funding is relatively less confidence sensitive. Funding sources are very diverse. Funding duration exceeds average maturity of portfolio assets. Funding is predominantly unsecured, supported by a very robust pool of unencumbered	predominantly long term. Funding may be modestly confidence sensitive. Funding sources are relatively diverse. Funding duration is commensurate with average maturity of portfolio assets. Funding is largely unsecured, supported by a robust pool of unencumbered assets. Robust contingency funding plans are	concentrations. Reliance on less stable wholesale funding sources. Funding is	may be uncertain during periods of market stress. Funding duration may not be commensurate with average maturity of portfolio assets. Meaningful secured funding, with some encumbrance of	uncertain. Funding duration is not commensurate	Funding duration is very short term. Fully secured funded and fully encumbered balance sheet. Contingent funding plans are non-existent.

Non-Bank Financial Institutions Rating Criteria | February 28, 2020



II.5.e Financial Market Infrastructure Companies

Fitch's financial profile assessment for FMIs considers the following subfactors:

- capitalization and leverage;
- funding, liquidity and coverage;
- earnings and profitability; and
- counterparty exposure;

FMI Subsector Typical Characteristics and Analytical Considerations

	CSDs Without Banking License	Bank-Licensed CSDs
n an exchange, s ade comparison, a		
rty C	Operational	Operational, counterparty
ide from L ed guaranty funds	Limited	Present, but often low risk
L	Limited	Modest
DA, supplemented Diency of guaranty		Core capital to weighted risks; regulatory ratios
argin, E		Operating costs relative to fees
		Bank Rating Criteria
F	inancial	inancial Non-Bank Financial Institutions

${\bf Capitalization\, and\, Leverage\, - \, Financial\, Market\, Infrastructure\, Companies}$

Attribute	Core Versus Complementary	Description
Gross Debt/ EBITDA	Core	Fitch primarily focuses on cash flow leverage metrics when assessing FMIs due to the low balance sheet usage of their businesses. In these cases, debt repayment is likely to be a function of cash flow generated by the business as opposed to liquidation of collateral or monetization of assets on the balance sheet. Fitch defines cash flow leverage as gross debt to EBITDA. Fitch may focus on net debt/EBITDA where cash is set aside for near-term debt service. Where applicable, Fitch may additionally assess lease adjusted debt to EBITDAR to account for material operating lease expenses. Under this approach, Fitch adjusts gross debt by adding the net present value of future lease payments, or 8.0x the current rental expense and adjusts EBITDA by adding the current rental expense.
Gross Debt/ Tangible Equity	Complementary	For clearing houses, Fitch considers cash flow leverage metrics, especially in the cases where a clearing house does not take legal ownership of margin deposits but also will review balance sheet leverage metrics, collateral margining and guarantee fund contributions relative to counterparty exposure. With respect to balance sheet leverage metrics, Fitch primarily considers gross debt to tangible equity. As a result of consolidation and mergers and acquisitions, a substantial amount of goodwill is recorded on the balance sheets of many FMIs, which Fitch excludes when calculating balance sheet leverage metrics.
Capital Structure and Capital Expenditures	Complementary	Fitch's assessment of capital adequacy will also take into consideration a FMI's capital structure and regulatory requirements, where applicable. Fitch also considers free cash flow relative to gross debt, in order to assess cash flow leverage net of the amount of capital expenditures FMIs are making to maintain and upgrade technology platforms.
Capital Outside the Default Waterfall	Complementary	As a clearing house bears all losses that are not associated with a clearing member default, Fitch may also assess the capital available outside the waterfall to manage potential losses outside of the clearing mechanism. Such losses could include losses on margin collateral or losses/impairments associated with acquisitions.
Source: Fitch Ratings	5.	



Capitalization and Leverage Benchmarks — Financial Market Infrastructure Companies

	aa or Above	a	bbb	bb	b or Below
Gross Debt/EBITDA (x)	x<0.5	0.5≤x<2.0	2.0≤x<3.5	3.5≤x<5.5	x≥5.5
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		•	

Source: Fitch Ratings.

Capitalization and Leverage Metrics — Financial Market Infrastructure Companies

Metric	Core Versus Complementary
Gross Debt/EBITDA	Core
Free Cash Flow/Gross Debt	Complementary
Gross Debt/Tangible Equity	Complementary

Source: Fitch Ratings.

Funding, Liquidity and Coverage — Financial Market Infrastructure Companies

Core Versus Complementary	Description
Core	Fitch assesses FMIs' funding, liquidity and coverage primarily on the basis of interest coverage. Where applicable Fitch additionally assesses lease EBITDAR to interest expense to account for material operating lease expenses.
Complementary	Under normal operating conditions, an exchange or CSD without a banking license has limited liquidity needs and primarily relies on operating cash flows to support capital expenditures and near-term debt maturities. Liquidity needs may be elevated during periods of stress and, as such, Fitch considers contingent funding sources such as lines of credit relative to capital expenditures and general corporate purposes. On the other hand, clearing houses have more distinct liquidity needs related to clearing and settlement functions in the event of a temporary market disruption or a clearing member or custody bank default. As such, Fitch considers the amount of contingent funding available, including access to committed credit facilities, the size of available lines, for which offered products the lines can be utilized and unrestricted cash and investment securities on the balance sheet.
Complementary	Fitch will review a FMI's compliance with covenants (financial and negative) related to lines of credit and debt. Non-compliance with debt covenants is likely to negatively influence Fitch's funding, liquidity and coverage assessment unless the assessment already reflects a high probability of non-compliance.
Complementary	Many FMIs pay out some portion of earnings, either to a parent company or to public/private shareholders, which is a cash use. For payout ratios, Fitch focuses on combined measures, which include both dividends and net share repurchases, in order to assess the impact on liquidity.
Complementary	Certain clearing houses take legal ownership of margin deposits. In such instances, Fitch will consider the percentage of liquid assets relative to potential outflows and the historical level and fluctuation of customer deposits when evaluating the liquidity of clearing house.
	Complementary Complementary Complementary Complementary

Funding, Liquidity and Coverage Benchmark — Financial Market Infrastructure Companies

	aa and Above	a	bbb	bb	b and Below
EBITDA/Interest Expense (x)	x>15	10 <x≤15< td=""><td>6<x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<></td></x≤15<>	6 <x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<>	3 <x≤6< td=""><td>x≤3</td></x≤6<>	x≤3

Source: Fitch Ratings.

Funding, Liquidity and Coverage Metrics — Financial Market Infrastructure Companies

Metric	Core Versus Complementary
EBITDA/Interest Expense	Core
Unrestricted Cash and Marketable (investments) Securities/Short-Term Debt	Complementary
Source: Fitch Ratings.	



$Earnings \ and \ Profitability-Financial \ Market \ Infrastructure \ Companies$

Attribute	Core Versus Complementary	Description
EBITDA/ Total Revenues	Core	A key profitability measure for exchanges, clearing houses and CSDs without banking licenses is EBITDA margin, defined as EBITDA divided by total revenues. Fitch evaluates the reliability and variability of these margins over time to assess sensitivity to market conditions.
Earnings Stability and Diversity	Complementary	For FMIs that are not member owned, Fitch evaluates the ability to generate profits through various market cycles. Fitch considers whether revenues are highly dependent on transaction volumes (executed, cleared and/or settled), which are driven by market conditions and looks at trends with a longer term horizon. Fitch also evaluates non-transactional revenue sources such as market data and information services, which can help diversify and stabilize performance over market cycles. Fitch also evaluates revenue contributions by product and geography, revenue by asset class relative to volume (rate per contract), revenue volatility and volume volatility. Cost controls, the flexibility and variability of expenses and performance relative to peers are also reviewed by Fitch. Lastly, for those clearinghouses that take legal ownership of margin deposits, Fitch may also consider the extent to which net interest income contributes to earnings stability and diversity.
Capital Expenditures	Complementary	Fitch will consider trends in capital expenditures as a percentage of depreciation and amortization to ascertain the degree of reinvestment in the business through cycles. The magnitude of the ratio is not ne cessarily as important as whether it is positive (implying increased investment in the business), neutral (implying balanced reinvestment in the business) or negative (implying reduced investment in the business).
Business Model Specifics	Complementary	In analyzing the profitability of FMIs, it is necessary to ascertain whether the entity is operating as a profit-maximizing entity or not. If it is not a profit-maximizing entity (i.e. it is member-owned), the likely focus is on cost controls (maintaining low execution, clearing and/or settlement costs) and break-even results. Excess profits in the form of dividends or rebates are typically returned to owner-members. In these instances, Fitch will assess the ability of a FMI to limit payouts to its owner-members during stressed marked conditions, which could positively influence the earnings and profitability score.

Source: Fitch Ratings.

Earnings and Profitability Metrics — Financial Market Infrastructure Companies

Metric	Core Versus Complementary		
EBITDA/Total Revenues	Core		
Rate per Contract	Complementary		
Capital Expenditure/Revenue	Complementary		
Capital Expenditure/Depreciation and Amortization	Complementary		
Source: Fitch Ratings.	·		

$Earnings \ and \ Profitability \ Benchmark - Financial \ Market \ Infrastructure \ Companies$

(%)	aa and Above	a	bbb	bb	b and Below
EBITDA/Total Revenues	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10
Source: Fitch Ratings.			•		

Counterparty Exposure – Financial Market Infrastructure Companies

Attribute	Core Versus Complementary	Description
Member Concentration	Core	With respect to clearing houses, Fitch assesses clearing member concentrations and the steps the clearing house takes to monitor and minimize exposure to individual clearing members. Fitch reviews guarantee fund contributions by clearing member, top 10 counterparty exposures, guarantee fund coverage of the largest counterparty exposures and margin deposits (by asset class) compared to respective volumes.
Limits and Remediation	Complementary	Fitch also reviews clearing houses' limits for clearing members and steps taken when limits are breached.



Financial Profile — Financial Market Infrastructure Companies

	aaa	aa	а	bbb	bb	b	ccc and Below
Capitalization and Leverage	leverage are maintained with very significant buffers over regulatory minimums or as compared to peer institutions. Capital and leverage targets	leverage are strong and	leverage levels broadly commensurate with risk. Capitalization and leverage are maintained with solid buffers versus regulatory minimums and generally above peer institutions. Capital and leverage levels may be relatively more volatile but likely only modestly affected by	leverage may not be fully commensurate with risk. Capitalization and leverage are maintained with satisfactory buffers over regulatory minimums and generally in line with peer institutions. Capital and leverage levels may be more vulnerable to	Capitalization and leverage are not fully commensurate with risk. Capitalization and leverage are maintained with moderate buffers over regulatory minimums and may be below peer institutions. Capital and leverage are highly vulnerable to significant shocks but can withstand moderate shocks.	leverage are not commensurate with risk. Capitalization and leverage are low, and buffers over regulatory minimums are small. Capital and leverage levels may be well below peer institutions and highly	and leverage have clear deficiencies that
Funding, Liquidity and Coverage	levels relative to capital expenditures, operational needs and near-term debt maturities. Lines of credit and contingent funding more than sufficient for	and near-term debt maturities.	relative to capital expenditures, operational needs and near-term debt maturities. Lines of credit and contingent funding consistent with business model and liquidity needs.	and near-term debt maturities. Lines of credit and contingent funding are generally able	contingent funding are adequate to support business model and liquidity	operational needs and near-term debt maturities. Lines of credit and contingent funding are	relative to capital expenditures, operational needs and near-term debt maturities. No access to lines of credit and/or contingent
Earnings and Profitability	Earnings and profitability are highly predictable throughout economic cycles. Profitability measures are commensurate with risk-averse nature and consistently superior to comparable peer institutions.	Earnings and profitability are very predictable over multiple economic cycles. Profitability measures are commensurate with very low risk but may vary modestly. Profitability measures generally superior to comparable institutions.	Earnings and profitability are moderately variable over economic cycles. Profitability measures are commensurate with low risk but subject to variability. Profitability is generally better than broad industry averages.	economic cycles. Profitability measures reflect inherent risk or a highly competitive environment and can be subject to increased	are subject to variability. Profitability is below average relative to broad	volatile and highly correlated with economic rate	either a reported or operating basis. Return to break- even or sustainable profitability is highly uncertain.



Financial Profile — Financial Market Infrastructure Companies (Continued)

	aaa	aa	a	bbb	bb	b	ccc and Below
Counterparty Exposure	from the simulta default of at leas largest clearing Appropriate lev collateral to sup and guarantee fir requirements. E prudent investor	tration. covers loss aneous st two of its members. el of port margin und xtremely nent of ad extension	Limited clearing member concentration. Guarantee fund covers loss from the simultaneous default of at least two of its largest clearing members. Appropriate level of collateral to support margin and guarantee fund requirements. Prudent investment of surplus funds and extension of credit to facilitate settlement.	fund covers los simultaneous d only two of its clearing membe Satisfactory lev collateral to su	Guarantee is from the lefault of largest ers. vel of pport arantee fund Less ment of and edit to	Above-average clearing member concentration. Guarantee fund covers loss from default of largest clearing member. Sufficient level of collateral to support margin and guarantee fund requirements. Aggressive investment of surplus funds and extension of credit to facilitate settlement.	Significant clearing member concentration. Guarantee fund does not cover loss from the default of largest clearing member. Insufficient level of collateral to support margin and guarantee fund requirements. Very aggressive investment of surplus funds and extension of credit to facilitate settlement.

Source: Fitch Ratings.

III. Support

Unlike banks, most non-bank financial institutions do not often receive extraordinary sovereign support that allows them to continue performing on their obligations in case of failure. As indicated in Section I of this report, the most usual source of support for non-bank financial institutions is shareholders (institutional support), with support from government authorities (sovereign support) being much less common. Fitch's view of the likelihood of support being made available in case of need may be reflected in an entity's SR. Where the agency believes the most likely form of support is sovereign support, this is also reflected in the non-bank financial institution's SRF. Where there is no reasonable assumption that extraordinary sovereign support is likely for a given issuer, a SRF will not be assigned. Section III.1 below focuses on sovereign support and section III.2 focuses on institutional support.

III.1. Sovereign Support

In assessing the likelihood of extraordinary government support for a non-bank financial institution, Fitch's primary focus is on potential assistance from the national authorities in the issuer's home country. This is because it is the non-bank financial institution's national authorities that are most likely to have both an incentive to prevent the entity from defaulting and the regulatory and legal powers to intervene. However, in certain cases, Fitch also assesses the possibility of support being made available to a failing non-bank financial institution from a combination of national sovereign authorities, subnational authorities and/or international public institutions.

Sovereign support decisions for non-bank financial institutions may be more often driven by an assessment of the entity's policy role as opposed to its systemic importance, although certain non-bank financial institutions whose activities are more akin to financial utilities may have a higher potential to exhibit systemic importance.

Sovereign Ratings and Support Rating Floors

Sovereign Rating	Typical SRFs in Case of High Support Propensity
AAA, AA+	A+ to A-
AA, AA-	A or A-
A category	1–2 notches below sovereign rating
BBB category	0–2 notches below sovereign rating
BB category	0-1 notch below sovereign rating
B category and below	Equalized with sovereign rating
Source: Fitch Ratings.	



III.1.1 Ability of Sovereign to Provide Support

Importance of this Assessment: For a non-bank financial institution to receive government support, the sovereign must, by definition, be both able and willing to provide it. Where the ability of the sovereign to provide support is more constrained, support will usually be less likely, resulting in lower SRs and SRFs or the absence of SRs and SRFs.

In assessing a government's ability to provide support, Fitch's starting point is the sovereign's own ratings (or potentially a Fitch Credit Opinion if the opinion is in the single 'B' rating category or lower). The sovereign rating used is almost always the sovereign in which the entity is domiciled, but could sometimes be a subnational and/or third-party sovereign with an interest in supporting the non-bank financial institution.

In rare cases where Fitch does not assign a credit rating or Credit Opinion to the sovereign, Fitch will either not assign a sovereign support-driven SR/SRF (no assessment undertaken) or assign them at '5'/'No floor' (e.g., unable to reliably assess sovereign creditworthiness or sovereign ability/propensity support concerns are present). Although the sovereign's ratings reflect Fitch's view only on the likelihood of the government servicing its own debt, in practice this is usually closely correlated with its broader financial flexibility and, therefore, ability to provide support to financial institutions. Typical SRFs at each sovereign rating level are outlined in the Key Factors in Assigning Support Rating Floors table.

Key Factors in Assigning Support Rating Floors^a

	Factor	Positive (Higher SRF)	Neutral	Negative (Lower SRF)
	Size of financial system relative to economy	Small	Average	Large
	Size of potential problem	Low vulnerability of financial sector to large losses in downturn	Moderate vulnerability of financial sector to large losses in downturn	High vulnerability of financial sector to large losses in downturn
Sovereign Ability to Support	Structure of financial system	Low concentration, ownership mainly by strong shareholders	Moderate concentration, some ownership by strong shareholders	High concentration, limited ownership by strong shareholders
Зарроге	Liability structure of financial system	Predominantly long-term/stable local-currency funding	Moderate funding instability and/or foreign-currency liabilities	Considerable short-term foreign- currency funding
	Sovereign financial flexibility (for rating level)	Superior (e.g. low debt, large FX reserves and/or good market access)	Average (e.g. average debt and reserves and/or reasonable market access)	Weak (e.g. high debt, low FX reserves and/or uncertain market access)
	Systemic importance or policy role	Exceptionally high systemic importance to financial system and contagion risk; dominant market shares or highly strategic policy role	Strong significance to financial system and economy; high contagion risk or meaningful policy role	Moderate or low systemic significance, more limited contagion risk or limited policy role
Institution	Liability structure of financial institutions	Very limited politically acceptable, if any, possibilities to bail in senior creditors	Significant foreign / wholesale funds, which could be politically acceptable to bail-in in some circumstances	High foreign/wholesale funding, which could be politically acceptable to bail-in in many scenarios
	Ownership	Strategic government ownership or private domestic owners with strong government relations.		Foreign ownership or domestic owners with poor government relations
	Specifics of non-bank financial institution failure	N.A.	More likely to fail as a result of usual operating activities	Significant risk that failure could result from corporate governance weaknesses

^aThe factors identified in this table determine the levels of SRFs relative to the ranges indicated in the Sovereign Ratings and Support Rating Floors table. For each factor, other relevant considerations may exist that are not explicitly referenced here. Source: Fitch Ratings.



III.1.1 Propensity of Sovereign to Provide Support

Non-bank financial institutions are generally less likely to be deemed as systemically important as banks, especially if not integral to a country's financial system. As a result, most non-bank financial institutions are not likely to receive sovereign support. Having a policy role is a more likely reason for a non-bank financial institution to receive sovereign support, although systemic importance and interconnectedness with the financial system are other possible reasons for the sovereign to consider supporting the non-bank financial institution.

III.2. Institutional Support

Fitch's ratings of non-bank financial institution subsidiaries may or may not factor in a high probability of support from parent institutions. On one end of the spectrum, a captive finance subsidiary may be afforded a high probability of support, because its existence enhances the parent's franchise, strategic objectives and revenue growth prospects. The other end of the spectrum could be an entity that is afforded a lower probability of support because it is held primarily as a tax-advantaged investment opportunity, such as an aircraft leasing subsidiary of an insurance company.

In determining potential support for non-bank financial institution subsidiaries from parent institutions, Fitch considers the parent's ability and propensity to provide support and a subsidiary's ability to make use of parental support, as outlined in sections III.2.1 and III.2.2 below and in Annex 2.

III.2.1 Parent's Ability to Support Subsidiary and Subsidiary's Ability to Use Support

Importance of this Assessment: For a non-bank financial institution to receive shareholder support, the owner must, by definition, be both able and willing to provide it and a subsidiary must be able to make use of parental support to avoid default.

Parent IDRs: Fitch's assessment of the parent's ability to support its subsidiary starts by considering the parent's Long-Term IDRs. These ratings cap the ability of the parent to provide support, as Fitch would not expect support for a subsidiary to be forthcoming when the parent is itself in default. In addition, other factors, namely parent/group regulation and relative size, may also affect the ability of the parent to provide support.

Parent VR: In cases where the parent's Long-Term IDR is driven by potential sovereign support, such as if the parent is a bank, Fitch will consider whether this support would be allowed to flow through to subsidiaries, in particular those operating in foreign jurisdictions. In Fitch's view, parent regulators will in many cases have quite strong incentives to allow support to flow through to subsidiaries given the potential negative impact of a subsidiary default on the group's operations and reputation.

However, in cases where Fitch judges there to be significant uncertainty about support flowing through, it may increase the notching between parent and subsidiary Long-Term IDRs compared to what would usually be applied given the propensity of the parent to support. Where the agency considers there to be high uncertainty about support flowing through, it may use the parent's VR or stand-alone credit risk assessment, rather than its Long-Term IDR, as its anchor rating in assessing the parent's ability to support its subsidiary.

Where the Long-Term IDR of the group's primary operating subsidiary is notched up from its VR – because of a large buffer of junior debt and/or holding company debt – the parent IDR will usually serve as the anchor rating for the IDRs of highly integrated domestic subsidiaries, and highly integrated international subsidiaries in which a large junior debt buffer has also been pre-positioned or where other features (e.g. accepted resolution plans) exist that mean the subsidiary should benefit from the parent's debt buffers. Otherwise, subsidiary IDRs will usually be notched (see Notching of Subsidiaries table page 93) off the parent's VR, reflecting significant uncertainty as to whether subsidiary senior creditors would benefit from the parent's junior debt buffer in case of the latter's failure. Fitch's treatment of non-bank financial institutions which are subsidiaries of bank holding companies is further outlined in section IV of the "Bank Rating Criteria".

Where possible, Fitch may consult with representatives of the parent's regulatory authorities to form a view on whether support would flow through. In addition, many of the factors determining a parent's propensity to support a subsidiary (e.g. strategic importance,



parent/group regulation, integration and ownership) will, in Fitch's view, also be likely to influence a parent regulator's decision on whether to let support flow through to the subsidiary.

Parent/Group Regulation: Significant regulatory restrictions at the parent level could reduce the fungibility of capital and liquidity within a group, particularly in cross-jurisdictional situations, reducing the ability of the parent to provide support to a subsidiary.

Conversely, regulatory requirements to support subsidiaries can positively influence the levels of IDRs assigned to a subsidiary, resulting in them being closely aligned to those of the parent even where propensity to support might otherwise have been low. Formal or informal agreements between parent and subsidiary regulators, including agreed resolution plans that envisage a subsidiary being within a parent's resolution group, could also make it more likely that support would be forthcoming.

Relative Size: In cases where subsidiaries form a relatively large part of the consolidated group, the parent may find it more difficult to provide sufficient and timely extraordinary support, even in cases where its own (stand-alone) balance sheet remains relatively unimpaired. This risk will be greater where Fitch believes that different subsidiaries' needs for support are likely to be quite highly correlated, for example, because they operate in a single region. Where subsidiaries are large relative to the consolidated group, Fitch may increase the notching between parent and subsidiary Long-Term IDRs, where the latter are driven by parental support.

Common Ratings: In some cases, where a subsidiary is very large (for example, accounting for more than 25% of group assets), the parent may not be able to support the subsidiary because its balance sheet is simply not big enough, it does not generate sufficient operating cash flow, or it does not have meaningful access to the capital markets. Furthermore, such very large subsidiaries tend to be highly integrated with their parents in terms of management, balance sheet fungibility and systems, meaning subsidiary and parent credit profiles are likely to be highly correlated. In such cases, Fitch will not base the subsidiary's ratings on support from the parent, but will instead assign 'common' ratings, to parent and subsidiary, reflecting the fact that their credit profiles cannot be meaningfully disentangled.

Both the size and integration characteristics must be met for common IDRs to be assigned. If a subsidiary is highly integrated, but relatively small and does not make a significant contribution to the group's overall credit profile, then its IDR, if assigned, will be based on either its parent rating (if parental support is believed to be forthcoming) or its own standalone profile (if parental support is not believed to be forthcoming). Common VRs and, hence IDRs, may also be applied to sister entities or entities in the same group, for example, under a holding company structure, when their operations are highly integrated or complementary to the functioning of the group or where regulation effectively makes entities within a group liable for each other's losses.

Country Risks: Fitch considers whether country risks in the jurisdiction of the subsidiary may limit its ability to utilize parent support to service its obligations. Where country risks are high, subsidiary ratings may be capped at levels significantly below those which would be possible based on the parent's ability and propensity to provide support. The domestic Country Ceiling, which captures transfer and convertibility risk, will almost always cap the subsidiary's Long-Term Foreign Currency IDR unless there are strong mitigating circumstances (e.g. material assets and cash flows are outside the country and available to service debt.) Broader country risks will usually prevent the subsidiary's Long-Term Foreign and LC IDRs being more than three notches above the sovereign. For more details, see Annex 2: Rating Non-Bank Financial Institutions Above the Sovereign.

III.2.2 Parent's Propensity to Support Subsidiary

Importance of this assessment: Even if a parent is deemed to have the ability to provide support to a subsidiary, whether it does or not will depend on the parent's propensity to provide support. In general, Fitch believes that prudentially regulated entities that have a regulatory requirement to support their subsidiaries or entities whose non-bank financial institution subsidiaries support the parent's core business (e.g. captive auto lenders or institutions acting as group treasuries) are likely to exhibit a higher propensity to support non-



bank financial institution subsidiaries than parents whose subsidiaries are more akin to investments driven by return, tax and/or diversification goals.

In assessing support propensity, Fitch analyzes the factors listed below (also see the Notching of Subsidiaries table). In the absence of ability constraints (including country risk), a subsidiary that Fitch views as "core" will usually have ratings equalized with the parent; a subsidiary viewed as "strategically important" will usually have ratings one notch (but in some cases, two notches) lower than the parent; and a subsidiary viewed as being of "limited importance" will usually be rated at least two notches below the parent or notched up from its stand-alone rating. Where a parent has adopted a resolution plan, Fitch may review this, where possible, for indications as to whether the parent would be likely to support the subsidiary in case of need.

Role in Group: A subsidiary's role in the broader group is often a key factor in determining the parent's propensity to provide support. Where the subsidiary represents a key and integral part of the group's business, providing some of the group's core products/services to customers in core markets, the propensity to support will usually be higher than when the subsidiary has limited synergies with the parent and is not operating in a target market. In some cases, Fitch's view of the strategic importance of the market where a subsidiary operates will take into account the role of a group of subsidiaries. An example may be a small foreign subsidiary which is of limited importance by itself but is one of several subsidiaries operating in a strategically important region for the parent.

Fitch will typically rate foreign subsidiaries operating in non-core markets at least one notch below their parents. This reflects the usually somewhat lower strategic importance and integration of foreign entities, and moderately less severe contagion risk from a foreign subsidiary default, compared to that of a domestic entity. It also reflects the somewhat lower likelihood of pressure from the parent's regulator to provide support to a foreign subsidiary, as opposed to a domestic subsidiary.

On the other hand, Fitch will often equalize the ratings of a foreign subsidiary with its parent institution where the subsidiary operates in a market long regarded as core by the parent.

Potential for Disposal: Where the potential for disposal is very low, for example, because the sale of the subsidiary would significantly alter the overall shape of the group and deprive the group of a key part of its business, subsidiary ratings are more likely to be equalized with those of the parent. Where the subsidiary could be more easily separated from the group and, in particular, where the entity is already up for sale or being prepared for sale, Fitch usually views the support propensity as being less strong.

Country risks can also affect the long-term financial prospects of an overseas subsidiary and thus weaken a parent's commitment to maintaining a presence in a country. This means subsidiary ratings are usually capped no more than two notches (three notches where Fitch views the commitment as being very robust in a high sovereign stress scenario) above a sovereign IDR even if a country ceiling is higher.

Implication of Subsidiary Default: The parent institution's decision on whether to support a subsidiary will in many cases consider the near-term costs and benefits of providing (or not providing) support. Where default would constitute a huge reputational risk to the parent and could undermine its franchise or even viability, the propensity to support will often be higher than when reputational risk is limited and the direct impact on the parent will be containable.

Integration: A high level of management, operational and balance sheet integration between parent and subsidiary would usually be viewed by Fitch as underlining the parent's strategic commitment to the subsidiary and making a default of the subsidiary potentially more onerous and costly for the parent. These factors would typically result in a higher propensity to support, in the agency's view and, therefore, reduced notching or equalization of ratings between parent and subsidiary Long-Term IDRs. In particular, if the parent provides a high proportion of the subsidiary's non-equity funding, this could raise considerably the cost for the parent of the subsidiary's default and potential bankruptcy and increase the incentive to provide support.



Where the degree of integration between parent and subsidiary is very high, such that the latter operates similarly to a branch, or is effectively a booking entity, Fitch may equalize the Long-Term IDRs of parent and subsidiary or assign these within one notch of each other.

Ownership: Fitch does not usually distinguish between full and large majority (over 75%) ownership in assessing a parent's propensity to support a subsidiary. However, if a minority owner has a relatively large (over 25%) stake, this could moderately reduce the perceived moral obligation of the parent to unilaterally support the subsidiary and might complicate and delay decisions on the provision of joint support. Therefore, Fitch will be less likely to equalize ratings where a large minority shareholder exists. Furthermore, the agency might notch twice or more, rather than once, where the stakes of majority and minority shareholders are close to parity, or where some element of competition or confrontation exists between the shareholders.

Support Track Record: A strong track record of provision of timely extraordinary support to a subsidiary (or to other subsidiaries within the group) under a broad range of stress scenarios can positively influence Fitch's assessment of a parent institution's propensity to provide support, and thus limit the notching of a subsidiary's Long-Term IDR relative to that of its parent. In addition, Fitch views positively a high level of 'ordinary' support, whereby a parent operates a subsidiary with comfortable liquidity and, in particular, capital buffers, rather than simply meeting minimum regulatory requirements. A track record of not providing support, or the absence of a track record altogether given a limited operating history, could constrain the degree of institutional support uplift.

In the event of a default by its home sovereign, the stand-alone profile of a subsidiary will probably have suffered significant impairment. Potential uplift of a subsidiary's rating above the sovereign rating of its domicile will, therefore, usually be limited because of some uncertainty that the owner's commitment to providing continued support will remain in place in a sovereign default scenario. Uplift will be usually be limited to two notches above a sovereign IDR (or three notches if Fitch views support as being very robust in a high sovereign stress scenario) even if a country ceiling is higher.

Subsidiary Performance and Prospects: A strongly performing subsidiary with generally good prospects will usually, in Fitch's view, be somewhat more likely to be supported by its parent than a subsidiary with a track record of moderate or weak performance. At the same time, the agency also takes into account that a subsidiary in need of extraordinary support has by definition suffered a sharp deterioration in its performance, which weakens the relevance of any historically strong profitability in assessing future prospects.

Branding: Where a subsidiary shares branding with its parent institution, this may signal an increased commitment to, or greater integration with, the subsidiary on the part of the parent. Common branding may also increase reputational risk for the parent in case of a subsidiary default, potentially also increasing the propensity to support.



Notching of Subsidiaries

Notching Relative to Parent Rating ^a	Core/Equalized	Strategically Important/ One (or in Some Cases Two) Notches	Limited Importance/ Two or More Notches ^b
Parent Ability to Suppo	rt and Subsidiary's Ability to Use Support		
Parent/Group Regulation	Parent regulator and/or regulation would be likely to favor support of subsidiary by parent entity		Parent not regulated or parent regulator/ regulation may restrict support or capital/tax implications of support may be very onerous
Relative Size	Any required support would be immaterial relative to ability of parent to provide it	Any required support would likely be manageable relative to ability of parent to provide it	Required support could be considerable relative to ability of parent to provide it
Country Risks	Country Risks do not constrain subsidiary's ability to use parent support.	Country risks (e.g. transfer and convertibility risks) represent moderate constraint on subsidiary's ability to use parent support	Country risks (e.g. transfer and convertibility risks) represent significant constraint on subsidiary's ability to use parent support
Parent Propensity to Su	pport		
Role in Group	Key and integral part of the group's business, provides some of group's core products/services in same jurisdiction as parent or to core market(s)	Strong synergies with parent, providing products/services in jurisdictions or markets identified as strategically important	Limited synergies with parent, not operating in target jurisdictions or markets
Potential for Disposal	Sale is very hard to conceive; disposal would noticeably alter overall shape of group	No plans to sell, although disposal would not fundamentally alter overall group franchise; country risks raise moderate doubts over long-term commitment to the subsidiary	Potential candidate for sale, or might already be up for sale; disposal would not be material for group franchise; country risks raise more material doubts over long-term commitment to the subsidiary
Implication of Subsidiary Default	Default would constitute huge reputational risk to parent, and very materially damage its franchise	High reputational risk for parent, with potential for significant negative impact on other parts of group	Reputational risk would probably be containable for parent
Integration	High level of management and operational integration; capital and funding largely fungible	Significant management independence; some operational/regulatory restrictions on transfers of capital and funding	Considerable management independence; significant operational/regulatory restrictions on transfers of capital and funding
Size of Ownership Stake	Full ownership or large majority stake (typically more than 75%)	Ownership of less than 75%, but limited influence of minority shareholder(s) on subsidiary operations	Ownership of less than 75%, and significant influence of minority shareholder(s) on subsidiary operations
Support Track Record	Support is unquestioned, reflecting high level of integration and fungibility of capital/funding	Timely and sufficient provision of support, when the need has arisen, or no prior cases of support being needed; country risks raise moderate concerns over support in a sovereign default scenario	Support has been provided with some delays, has only been moderate in volume relative to subsidiary needs or has not been observed given a limited operating history; country risks raise more material concerns over support in a sovereign default scenario
Subsidiary Performance and Prospects	Long and successful track record in supporting group objectives, which is likely to continue	Limited track record of successful operation, or moderate long-term prospects	Weak performance track record, or question marks over long-term viability of business
Branding	Shares same brand as parent	Combines parent and own branding	Subsidiary branded independently from parent
Legal Commitments	Parent has made strong legal commitment to support subsidiary or there is a regulatory requirement to support.	Parent has made non-binding commitment to support subsidiary	Parent has not made any legal commitment to support subsidiary
Cross-Default Clauses	Potential acceleration of parent debt provides strong incentive to prevent subsidiary default	Potential acceleration of parent debt provides moderate incentive to prevent subsidiary default	Subsidiary default would not trigger acceleration of parent debt

^aIndicates typical differential between support-driven Long-Term IDR of subsidiary and Long-Term IDR of parent. Subsidiary could be rated higher than the level implied by parental support if it has a higher stand-alone profile or SRF. ^bWhere Fitch judges support to be unlikely or highly uncertain, the Long-Term IDR of a subsidiary with limited importance may be based solely on its stand-alone strength, or may be notched up from a rating level commensurate with its stand-alone strength. Source: Fitch Ratings.



Legal Commitments: An unconditional and irrevocable guarantee, which contains specific third-party beneficiary language, and permits subsidiary creditors to press claims against the guarantor in the event of default by the subsidiary, would also serve to create a floor for the IDR of the subsidiary and/or its guaranteed debt at the same level as the guarantor.

A formal support agreement entered into by the parent entity, for example, to maintain capital and liquidity requirements of a non-bank financial institution subsidiary above a defined threshold, will be regarded as moderately positive for subsidiary ratings. However, although certain support agreements are legally binding while in force, they are usually revocable and can also be withdrawn if the subsidiary is divested, meaning they will typically provide very limited uplift, if any, for a subsidiary's ratings.

In rare cases, a subsidiary may be incorporated with unlimited liability, creating a clear legal obligation for the parent institution to provide support. In such cases, Fitch would be likely to equalize the Long-Term IDRs of the subsidiary and parent, unless constraints arise from country risks.

Non-binding commitments from parents to support subsidiaries, such as public management comfort letters (for example, in bond prospectuses), strategic statements (for example, in annual reports) or letters lodged with subsidiary regulators, can be positive for Fitch's assessment of support by defining management's intent and potentially providing a stronger moral obligation on the part of the parent to provide support to the subsidiary. However, as such non-binding commitments are not enforceable, they can have limited direct bearing on rating decisions in and of themselves.

Cross-Default Clauses: Cross-default clauses in parent funding agreements may specify that a subsidiary default will constitute an event of default on parent obligations, thereby granting acceleration rights to parent creditors. While this creates no obligation for the parent to support the subsidiary, it may create a significant incentive to do so, raising the propensity to provide support. The strength of this incentive will depend, among other things, on the volume of obligations potentially subject to acceleration, whether the terms of the acceleration would be attractive to creditors and hence be taken up (for example, whether the redemption price would be above or below the current market price) and whether creditors might waive their acceleration rights, perhaps for a fee.

Level of Parent IDRs: Where the parent institution's Long-Term IDR is at a low, speculative-grade level (typically in the 'B' range or below), Fitch is more likely to equalize parent and subsidiary Long-Term IDRs. This reflects the fact at the lower end of the rating scale the difference in default risk between successive rating notches becomes greater and so it may be appropriate to assign a parent and subsidiary with relatively little risk differential the same levels of Long-Term IDRs.

Ratings of Foreign Branches: When IDRs and/or debt ratings are assigned to foreign branches, Fitch aligns them with the head office IDRs and debt ratings, unless there are country risk constraints, because they are part of the same legal entity. Although jurisdictions such as the U.S. and the EU have powers to resolve branch assets and liabilities separately, Fitch would normally expect a coordinated resolution of the entire legal entity led by the home country authorities.

The Foreign-Currency IDRs of branches are likely to be capped at the Country Ceiling as any transfer and convertibility restrictions imposed by the sovereign are likely to apply to liabilities of branches. However, foreign-currency debt issued by the branch may be rated higher than the Country Ceiling and in line with debt issued by the head office, where investors are typically outside the country and branch assets placed outside the country (for example, deposits at central treasury) are sufficient to repay the debt, or where Fitch believes that the issuer would use non-branch assets to service debt in case of transfer and convertibility restrictions. A branch's Local-Currency IDRs may also factor in country risks where Fitch believes that any potential restrictions on local issuers servicing local-currency obligations could also be applied to branches.

Where Fitch does not assign ratings to a foreign branch, country risks (notably transfer and convertibility risk, but also regulatory intervention risk in general) represent limitations to using head office ratings as a proxy for branch default risk.



Bank Parent Companies: A non-bank financial institution which is a subsidiary of a prudentially-regulated banking group may potentially benefit from the resolution framework governing the bank holding company. Fitch will assess the propensity of support under this construct by following the rating approach outlined in the Rating Bank Holding Companies section of the "Bank Rating Criteria".

Non-Bank Parent Companies: The propensity and ability of non-bank parent companies to support non-bank financial institution subsidiaries is assessed using similar principles as for bank parents. The relative size of the parent and subsidiary, the parent's creditworthiness and financial flexibility and the importance of the subsidiary to the core business of the parent will be relevant considerations. In the case of more highly regulated non-bank parent companies (e.g. insurance companies), Fitch will also consider the extent to which regulatory restrictions on capital/liquidity may impact the non-bank parent company's ability to support its subsidiary. In general, Fitch believes parent companies whose non-bank financial institution subsidiaries support the parent's core business (e.g. captive auto lenders or finance subsidiaries acting as group treasuries) are likely to have a higher propensity to support non-bank financial institution subsidiaries than corporate parent companies whose subsidiaries are more akin to investments, driven by return, tax and/or diversification goals.

Support from Sister Entities: Fitch may factor support from sister entities, as well as parent institutions, into non-bank financial institution ratings, where it believes this potential support to be strong. However, in assessing this potential support, Fitch will consider in particular: (i) whether the sister company's propensity to support could be materially weaker because it does not hold a stake and, therefore, would not suffer any direct balance sheet impairment as a result of the rated entity's bankruptcy; and (ii) whether the regulator of the sister institution may seek to restrict support to safeguard the solvency of the former.

Subnational Governments: Fitch sometimes views potential support from federal, state or other subnational (regional, municipal or local) authorities as sufficiently strong to drive a non-bank financial institution's IDR. Fitch usually treats this as a form of institutional support and, therefore, typically does not assign SRFs based on support from a subnational. However, in exceptional cases, for example, when the subnational itself benefits from a robust and tested framework of integration and support at the national level, Fitch may also assign a SRF based on subnational support.

In Fitch's view, it is very unlikely that a subnational would seek to provide support to a non-bank financial institution subsector in its entirety, and so the agency's assessment of support will focus on the subnational's ability and propensity to support specific institutions. In assessing a subnational's ability to support, the following additional considerations will apply in respect to some of the factors listed in the Notching of Subsidiaries table.

Relative Size: Fitch will consider the overall financial flexibility of the subnational government (to the extent that this may be somewhat greater or lower than suggested by its ratings), including the size of its budget, available liquidity and ability to raise additional debt, if required.

Role in Group: Fitch will consider the existence of any special relationship between the subnational and the non-bank financial institution (e.g. the non-bank financial institution has an important policy role or agency function in the region).

Implication of Subsidiary Default: Fitch will consider the systemic importance of the non-bank financial institution to the regional financial system and economy as a whole (as measured, for example, by its shares of loans in the region).

Domestic Presence: Ratings based on subnational support are more likely where a non-bank financial institution has a strong presence in its home region but limited operations in the rest of the country or internationally.



Changes in Support Propensity and Sale of Subsidiary

Based on changes in circumstances, Fitch may change its view on a parent's propensity to support a given subsidiary. In some cases, for example, if Fitch were to perceive a sharp change in a subsidiary's role in the group, the potential change in a subsidiary's Support Rating and IDR could be significant (e.g. by multiple notches).

Gradual Trend: If Fitch believes that a parent's propensity to support a given subsidiary is gradually changing, whether because of changes in strategic importance or due to other factors listed above, Fitch may change the Rating Outlook on the subsidiary's Long-Term IDR (assuming it is support-driven), and the revised Rating Outlook could be different to that on the parent's Long-Term IDR. For example, if a parent has a Stable Rating Outlook, but Fitch believes a core FI subsidiary is becoming less important to the group, Fitch could change the Rating Outlook on the subsidiary to Negative to indicate the potential change in rating associated with its lessening strategic importance. Conversely, a gradual increase in a subsidiary's strategic importance could result in its Long-Term IDR having a Positive Rating Outlook while the Rating Outlook on the parent's Long-Term IDR is Stable.

Sale Risk: Fitch does not explicitly capture sale risk in its ratings, prior to a formal announcement that a subsidiary is to be sold or is up for sale. However, in the agency's view, there is usually a close correlation between a subsidiary's strategic importance and the likelihood of it being sold. Sale risk should therefore usually be low in cases where a subsidiary's Long-Term IDR is equalized with, or within one notch of, that of its parent.

Sale Announced, Buyer not Identified: If a parent announces that a subsidiary is up for sale without a buyer yet being identified or that management is exploring strategic alternatives with respect to the entity or if, for example, a regulator requires that a parent divest a subsidiary, then Fitch will reassess the parent's propensity to provide support to the entity concerned. If the agency believes the strategic importance of the subsidiary has reduced, such that the parent will have a lower propensity to provide support prior to the sale, or in case a sale does not go through, the Long-Term IDR of the subsidiary may be downgraded. If Fitch believes there is a significant probability a sale will take place, the ratings of the subsidiary are also likely to be placed on Rating Watch.

In taking rating actions following a sale announcement, Fitch will also consider whether a relatively narrow group of highly-rated potential acquirers has already been identified. In such cases, the risk of the subsidiary's Long-Term IDR being downgraded may be limited, and the ratings may therefore be maintained at their former levels even when Fitch believes the subsidiary has become less strategically important for its current parent.

Conversely, if Fitch believes that a subsidiary will most likely be sold to an entity with a much lower rating than the current parent, then the subsidiary's Long-Term IDR may be downgraded immediately following the announcement concerning the potential sale. This may be the case, for example, when a highly rated parent is exiting an emerging market and Fitch believes that local, more lowly rated entities are more likely acquirers than other highly rated foreign entities.

Sale Announced, Buyer Identified: If a parent announces that it has reached an agreement to sell a subsidiary to a specific buyer, and, in Fitch's view the probability of support from the new buyer differs from that of the current owner (with the potential to affect the subsidiary's Long-Term IDR), then Fitch will place the subsidiary's Long-Term IDR on Rating Watch. The Rating Watch may be Positive, Negative or Evolving, depending on the potential impact of support from the new owner on the rating.

If the Long-Term IDR is likely to be downgraded following the sale, and if Fitch believes the current owner would have a materially lower propensity to support the subsidiary should the sale not go through for any reason - i.e. in all likely scenarios the ratings will be downgraded - then it may downgrade the IDR immediately following the announcement. If Fitch believes that the sale could also result in material changes in the subsidiary's stand-alone profile, e.g. because of the loss of 'ordinary support' or because of changes in strategy, then its stand-alone credit profile may also be adversely affected.

Upon completion of the sale, or earlier if appropriate, Fitch will resolve the Rating Watch on the IDR based on its assessment of the probability of support from the new owner.



IV. Issue Ratings

As indicated in section I.6 of this report, long-term issue ratings of non-bank financial institutions, like those of other corporate finance sectors, incorporate an assessment both of the likelihood of default (or of non-performance risk in the case of subordinated/hybrid securities) on the specific obligation and of potential recoveries for creditors in case of default/non-performance. This section outlines how Fitch assesses default/non-performance risks and recovery prospects on different types of non-bank financial institution securities and how this is factored into ratings and RRs assigned to issues.

IV.1 Short-Term Debt

Short-Term IDRs are almost always assigned in accordance with a correspondence table between Long-Term and Short-Term IDRs (see the Rating Correspondence table). Where the Long-Term IDR can correspond to either of two Short-Term IDRs, the Short-Term IDR will be principally determined based on the issuer's Funding, Liquidity and Coverage factor score (mid-point of the three-notch band), as outlined in the various sub-sections of this criteria.

Short-term debt ratings reflect only vulnerability to default and are typically aligned with the issuer's Short-Term IDR. An exception would be a non-bank financial institution that is owned by a bank and has had its senior debt notched up from its IDR as a result of the ratings approach outlined in the Issue Ratings section of the "Bank Rating Criteria." In such cases, short-term debt ratings are determined from the equivalent long-term debt rating using the Rating Correspondence table.

If a non-bank financial institution's CP funding does not match its normal asset conversion cycle or operational free cash flow, the issuer must seek to refund CP notes already in the market, either with the issuance of new CP notes or long-term bonds or by accessing committed, CP-specific or general corporate purpose bank lines that enable same-day funding. If the issuer does not have such immediate funding, the company may not be able to repay maturing obligations. As such, Fitch considers backup liquidity for outstanding CP and other short-term debt obligations an important element in assigning instrument-level ratings, as well as an element in assessing the Long-Term IDR.

Liquidity backup is either adequate or inadequate. More than adequate liquidity backup does not justify a higher short-term credit rating. On the other hand, when CP is explicitly enhanced, such as if it is backed by a direct-pay line of credit or similar form of guarantee, the ultimate CP rating will be the higher of the direct-pay line of credit or similar credit enhancement or the short-term rating of the issuer itself.

Fitch typically expects investment-grade-rated CP issuers to have full (100%) liquidity backup available for its outstanding CP and other short-term obligations, regardless of the credit rating of the entity. Backup liquidity may not only be in the form of bank commitments but may also include cash or marketable securities, expected operational cash flow sources, tangible parental support or other alternative forms of liquidity support depending on how reliable these sources may be.

If the majority of backup facilities are maturing in one year or less, the CP issuer is exposed to non-renewal risk, since some banks may be unwilling to renew their maturing commitments. For issuers with substantial amounts of CP outstanding, the need for multiyear liquidity backup is even more important. Companies with multiple long-term backup facilities can reduce non-renewal risk by having tiered maturities.

IV.2 Senior Unsecured Obligations

IV.2.1 Overview

Ratings of senior unsecured obligations are usually assigned in line with a non-bank financial institution's Long-Term IDR, because:

 Fitch almost always views the likelihood of default on any given senior unsecured obligation as the same as the likelihood of default of the non-bank financial institution (as reflected by the Long-Term IDR) because default on any material class of senior unsecured obligations would be treated by Fitch as a default of the entity.



Fitch usually treats senior unsecured obligations of non-bank financial institutions as
having average recovery prospects. In view of the high uncertainty regarding what a
non-bank financial institution's balance sheet will look like upon default, Fitch requires
a high burden of proof to notch senior debt upwards or downwards based on recovery
prospects. RRs on non-bank financial institutions' senior unsecured debt, where
assigned, are therefore usually 'RR4', consistent with an average recovery rate of 31%50%.

Nevertheless, in the circumstances outlined below, senior unsecured issue ratings may be assigned at levels below, or above, the non-bank financial institution's Long-Term IDR:

Weak Recovery Prospects, Lower Issue Rating: In some cases in which an issuer has substantial levels of secured borrowings, Fitch may view a senior unsecured issue as having weaker-than-average recovery prospects, resulting in it being assigned an issue rating below the Long-Term IDR. This may be because of general concerns about the quality of a non-bank financial institution's assets, potentially impairing recovery prospects for all creditors in case of default. Or it may be driven by specific concerns related to the non-bank financial institution's funding structure; for example, very high levels of balance sheet encumbrance or very deep subordination of senior unsecured creditors in the liability structure.

Secured funding has historically been a cost efficient method for funding non-bank financial institution assets. Therefore, unsecured debt may be a very small part of the capital structure and may be rated one-notch below the Long-Term IDR until it accounts for a meaningful part of the funding mix.

Strong Recovery Prospects, Higher Issue Rating: Fitch will not usually rate senior unsecured liabilities higher than the non-bank financial institution's Long-Term IDR because of high uncertainty in assessing recovery prospects. An example might be when an entity is closer to default and there is greater visibility on recovery prospects for senior unsecured creditors.

Higher Default Risk, Lower Rating: In rare cases, Fitch may take the view that a non-bank financial institution may selectively default on certain senior unsecured obligations, but that such a default would not indicate the uncured failure of the entity because of the specific circumstances of the default, usually relating to some form of regulatory intervention and/or because the obligations in question do not comprise a significant part of the overall funding base. In such a case, the issue ratings may reflect the specific selective default risk relating to the instruments concerned, while the Long-Term IDR will continue to reflect the risk of default on the bulk of the issuer's senior liabilities.

Lower Default Risk, Higher Rating: In exceptional circumstances Fitch may rate certain senior unsecured obligations higher than the obligor's Long-Term IDR because the agency believes default on the securities is less likely than on other reference obligations to which the IDRs rate

Substitution and Variation Clauses: Periodically, senior debt securities include clauses that permit the contractual terms of the securities to be varied or the securities themselves to be substituted with new securities. Such clauses may be at an issuer's discretion, subject to approval by a trustee, etc.

Fitch assesses whether such clauses should affect a bond's rating on a case-by-case basis. Where both the probability of variation or substitution is considered high and there is a high degree of clarity over the form of the substitution/variation securities, Fitch will rate to the terms of the likely substitution or variation securities.

Bank Parent Companies: Where a non-bank financial institution is owned by a bank, its senior debt rating could be notched up from its IDR if it is expected to be incrementally protected in resolution, by following the ratings approach outlined in the Issue Ratings section of the "Bank Rating Criteria."

IV.2.2 Recovery Rating Analysis

Where a non-bank financial institution has a Long-Term IDR of 'B+' or below, Fitch typically assigns a RR to the entity's issues rated on the long-term scale based on a bespoke recovery analysis. RRs provide greater transparency on the recovery component of Fitch's assessment of the credit risk of lowly rated issuers' securities, based on a scale ranging from 'RR1' for the



strongest recovery prospects to 'RR6' for poor recovery prospects, as per the table below. However, when insufficient data are available or the potential recovery outcome is highly variable, Fitch would not assign a RR.

Credit ratings for the obligations of issuers rated between 'AAA' and 'BB-' for the most part take aggregate recoveries on the defaulted bond market as a whole into consideration, as per the Notching Guidance for 'BB-' and Above Rated Issuers table. Instruments of a particular priority and security position will be assigned credit ratings that reflect the average recoveries expected to be received by such an instrument in the event of a default. Fitch does not typically conduct bespoke recovery analysis for such obligations as they are so far from default that assumptions that might be used for the analysis of a default scenario could be too speculative to be of added value.

Recovery Rating Scale

Rating	Recovery Prospects Given Default	Typical Historical Recoveries (%)	Notching of Issue Rating ^a
RR1	Outstanding	91-100	3
RR2	Superior	71-90	2
RR3	Good	51-70	1
RR4	Average	31-50	0
RR5	Below Average	11-30	(1)
RR6	Poor	0-10	(2)

Click here for full descriptions of each rating.

^aRelative to level of non-performance risk. As outlined in the 'Strong Recovery Prospects, Higher Issue Rating' sub-section of IV.2.1, it is exceptionally rare for Fitch to notch up senior unsecured debt for recovery reasons.

Source: Fitch Ratings.

At any rating level where the bespoke recovery approach is not used, Fitch can denote contractual or structural subordination that is detrimental to the unsecured debt by rating it lower than the IDR. This can potentially be the case where there are large proportions of secured debt relative to total debt, particularly where leverage is relatively high, or where a portion of debt is structurally removed from the operations and, therefore, relies on dividend flows for debt servicing. Forms of subordination can also include lower levels of guarantees from group entities for a particular tranche of debt.

Issue ratings are linked to Issuer Ratings through an assessment of relative recovery prospects. Recovery Ratings are only assigned below 'BB-'. Therefore, an IDR that is upgraded from 'B+' to the 'BB' rating category is unlikely to see the instrument rating that had previously been assessed 'RR1' or 'RR2' being upgraded unless superior recoveries are expected.

Instrument Ratings for Combinations of IDRs and RRs

	Long-Term IDR							
Recovery Rating	B+	В	B-	CCC+	ссс	CCC-	СС	C/RD/D
RR1	BB+	BB	BB-	B+	В	B-	CCC+	CCC
RR2	BB	BB-	B+	В	B-	CCC+	CCC	CCC-
RR3	BB-	B+	В	B-	CCC+	CCC	CCC-	CC
RR4	B+	В	B-	CCC+	CCC	CCC-	СС	С
RR5	В	B-	CCC+	CCC	CCC-	СС	С	С
RR6	B-	CCC+	CCC	CCC-	CC	С	С	С

Note: Assumes no incremental non-performance risk in instrument rating relative to the IDR. As outlined in the 'Strong Recovery Prospects, Higher Issue Rating' sub-section of IV.2.1, it is exceptionally rare for Fitch to notch upsenior unsecured debt for recovery reasons. Source: Fitch Ratings.

Conversely, should an IDR migrate from 'BB-' or above to the 'B' rating category where bespoke recovery analysis is undertaken, Fitch may position ratings assigned to secured and



unsecured tranches of debt by undertaking recovery analysis so that an upgrade of the instrument rating does not occur when the IDR is downgraded.

How Recovery Ratings Are Determined

Fitch first determines the likelihood of default/non-performance by an issuer, which it measures on the long-term 'AAA' rating scale. Fitch then arrives at the issue rating as a function of its recovery prospects in case of default/non-performance. As per the table below, where recovery prospects are viewed as average, the issue rating will be in line with the assessment of default/non-performance risk. If the agency views the instrument as having above- or below-average recovery prospects, for example as a function of leverage, funding mix and stressed valuation, Fitch may adjust upwards or downwards, respectively, from the default/non-performance risk to arrive at the issue rating. The extent of potential upward/downward adjustment of the issue rating based on the instrument's recovery prospects is shown in the table below.

Notching Guidance for 'BB-' and Above Rated Issuers

	Invest	ment Grade	High Speculative Grade 'BB+' to 'BB-'		
Notches from IDR	Secured Debt	Unsecured Debt	Secured Debt	Unsecured Debt	
3					
2					
1			Notched by +0 and +3,		
+0	Notched by +0 to +1	At average recoveries: +0 Notch. At below average recoveries +0 to -1 notches	but capped at 'BBB-'	Low levels of secured debt: +0 to +1 Notch	
-1		- Subordinated debt:		Unsecured and/or subordinated	
-2		-0 to -2 notches		with secured debt: -0 to -2 notches	

For issuers with IDRs of 'B+' and below, Fitch performs a recovery analysis for each class of debt and hybrid security. The three steps in this analysis include estimating a post-restructuring or post-liquidation enterprise value (EV), estimating creditor claims and distributing the EV according to the priority of claims.

Estimating Post-Restructuring/Liquidation Valuation

The valuation methods Fitch typically applies for deriving the RR of issuances by non-bank financial institutions include the liquidation value (LV) approach or the going-concern (GC) approach. The choice of valuation techniques employed may be influenced by common practice for specific non-bank financial institution segments, the issuer's ownership status, the make-up of multi-entity groups and applicable insolvency regimes.

For subsectors with high balance sheet usage, there tends to be a bias toward the LV approach in Fitch's analysis, possibly supplemented with a stressed NAV or net book value calculation. For subsectors with low balance sheet usage, it is more common for the GC approach to be used, possibly supplemented with the LV approach.

Where both methods are deemed by Fitch to be viable outcomes, it will apply both and opt for the one that results in the higher enterprise value, consistent with the practice of creditors seeking to maximize firm value under bankruptcy proceedings.

In deriving a consolidated enterprise value, Fitch may separate an entity's operating units by segment or by region to distinctly apply the most relevant valuation method to the various components.

Liquidation Approach: Under the liquidation approach, Fitch typically conducts a break-up analysis of the issuer's balance sheet to assess potential recoveries for creditors. Fitch applies haircuts to the issuer's assets to reflect Fitch's expectation that these assets would likely be sold for less than book value in a liquidation scenario. Fitch then allocates the cash generated



by asset sales to the creditors, based on the expected priority of claims. Unencumbered cash will be reduced by a minimum of 50% to reflect its likely usage in a distress scenario leading up to liquidation. Deferred tax assets are not given any credit.

Securitizations and other secured financings that exist within the rated group may have collateral or cash flow in excess of what is required to satisfy the creditors of the securitization or secured financing vehicle. That said, to the extent that these creditors are sufficiently ring-fenced and cannot be contractually forced to release their collateral, there could be some delay in the excess cash flow or residual value of the assets flowing to the unsecured creditors. As such, Fitch's base case assumption is that the issuer's creditors will not have the immediate benefit of any such surplus residual values or cash flows associated with securitization or other secured financings.

Hence, assets consolidated on balance sheets but assigned directly to specific creditors of the institution will be excluded from the recovery calculation, as will the associated debt. Similarly, assets still on balance sheet but pledged to support securitization issues will be excluded from recovery calculations.

Haircuts applied can vary significantly by business model, asset class and region, among other factors, and Fitch will assess this on a case-by-case basis. By way of guidance, the table below reflects typical discount ranges for a number of broad asset classes that are often found on the balance sheets of asset-heavy non-bank financial institutions.

Asset Haircuts^a

Asset	Characteristics	Discount (%)
Cash and Equivalents	No risk, but adjusted to reflect expected balance at default	50+
Fixed Income Securities	Variability in risk and liquidity	5-75+
Equities	Variability in liquidity and volatility	15-100
Tangible Fixed Assets	Variability in liquidity and volatility	15-75+
Mortgage Lending	Low risk if first charge, higher risk if second charge; variable liquidity	5-40
Unsecured Personal Lending	High risk	25-50+
Associates and JVs	Illiquid and variable value	20-60
Intangible Assets ^b	Illiquid and questionable value in distress	70-100

^aFor assets purchased at a significant discount (e.g. in the case of debt purchasers), Fitch will typically apply a haircut at the lower end of the indicated range to reflect more limited additional write-down risk in a stressed scenario. ^bFor non-bank financial institutions with sizable balance sheet-light subsidiaries (that could be sold as a going concern in their entirety), haircuts on intangibles might be at the lower end of the cited 70% to 100% range.

Source: Fitch Ratings.

Going Concern Approach: The GC approach involves a two-step process:

- Estimate the level of post-default earnings, typically stressed EBITDA, upon which to base the valuation.
- Apply a conservative valuation multiple reflecting a company's relative position within
 its sector based on actual or expected market and/or distressed multiples. Where no
 statistically significant sample of market transactions is available, analysts will seek out
 near-proxy sectors or make assumptions based on general trends for distressed
 market transactions.

Valuation multiple ranges provided in the Valuation Method by Non-Bank Financial Institution Segment table are purposefully broad for the various subsectors. The actual multiple that is applied in the recovery analysis will be dependent upon a review of then-current market conditions and an assessment of valuation multiples applied to similar market transactions around the time of the analysis.

For some non-bank financial institutions segments, Fitch may apply additional segment-specific valuation approaches. For example, for investment managers Fitch may consider valuation as percentage of stressed AUM in addition to a stressed EBITDA multiple approach. For mortgage REITs, Fitch considers stressed values based on the criteria reports "U.S. and



Canadian Multiborrower CMBS Rating Criteria" and "Structured Finance CDOs Surveillance Rating Criteria," in addition to a stressed EBITDA multiple approach.

The table below shows the valuation methods and multiples typically used by Fitch by main subsector.

Valuation Method by Non-Bank Financial Institution Segment

Non-Bank Financial Institutions Subsector	Liquidation Approach Typically Applied?	Going Concern Approach Applied When Relevan (Typical Multiple Range)	
Securities Firms			
Cash Flow Business Model	Yes	Stressed EBITDA multiple (5.0x-10x)	
Balance Sheet Business Model	Yes	Stressed tangible book multiple (0.3x-1.5x)	
Investment Managers			
Cash Flow Business Model	Yes	Stressed EBITDA multiple (4.0x-10x)	
Balance Sheet Business Model	Yes	Stressed NAV (0.5x-1.0x)	
Business Development Companies	Yes	Stressed NAV (0.5x-1.0x)	
Finance and Leasing Companies			
Cash Flow Business Model	Yes	Stressed EBITDA multiple (4.0x-10x)	
Balance Sheet Business Model	Yes	Stressed tangible book multiple (0.3x-1.5x)	
Financial Market Infrastructure Companies			
Exchanges, CCPs and Non-Bank CSDs	Yes	Stressed EBITDA Multiple (5.0x-10.0x)	
Source: Fitch Ratings.			

Estimating Creditor Claims

In an effort to estimate creditor claims Fitch's analysis takes into consideration:

- Revolving Claims: Fitch assumes that unused portions of committed lines of credit (secured or unsecured), revolving credit facilities and letter of credit commitments not subject to borrowing base requirements are fully drawn to the extent permitted. Greater judgment is exercised for facilities that can only be drawn for specific uses, such as those designated for use for acquisitions and capital expenditures. Fitch will assess the extent to which such drawings may also give rise to additional recoverable assets according to the purposes for which these credit lines are typically utilized.
- Priority Administrative Claims: These are assumed to be 10% of distressed enterprise value, unless believed to be higher or lower based on the institution's country, size and/or complexity. For example, a highly complex entity or a country with a less developed bankruptcy regime could result in higher administrative costs, whereas for a very large issuer a lower administrative cost (on a percentage basis) would still generate sufficient compensation for the administrator (on an absolute basis).
- Lease Rejection Claims: Where lease rejection claims have been made, Fitch assesses the ability of the issuer to rationalize leases in a default scenario and notes that under the GC approach a certain level must typically be maintained, while under the LV approach 100% of non-residential leases are typically deemed rejected. The value of rejected leases is calculated consistent with the bankruptcy code applicable in each jurisdiction, where such concepts exist.
- Concession Assumption: The value distributed to senior unsecured creditors may be reduced by an amount that is redistributed to junior claimants to secure their approval of the plan of reorganization or liquidation. The amount of such concession payments is highly dependent on circumstances.
- Pension and Other Post-Employment Benefit Obligations: Underfunded pension plans and other post-employment benefit claims can be significant claims on the bankruptcy estate, although the claims may vary in priority depending on jurisdiction and issuer-specific intercreditor agreements.



- Other Claims: Other non-debt and contingent claims, including material lawsuits and contingent liabilities (and guarantees) may be considered, where these are particularly pertinent to an institution.
- Related-Party Funding: Where a non-bank financial institution has a large amount of related-party funding, Fitch will consider whether related-party creditors would be likely to effectively become senior to creditors by withdrawing their funds prior to default.

Distribution of Enterprise Value

Fitch's recovery analysis typically takes a legal waterfall approach, with the resulting post-restructuring/liquidation EV being allocated to creditors in the order of the relative seniority of their claims. However, application of value is not only affected by relative priority of instruments for a particular issuer but also by organizational structure. Absent a specific legal or regulatory construct to the contrary, Fitch will assume creditors of specific legal entities have a priority claim on assets of that entity relative to creditors of affiliates and related entities. In instances where there are multiple entities in a group, Fitch may establish valuation and claims at the entity level and consider the residual values available for creditors of parent or affiliated entities.

In this context, Fitch will generally use an entity's unconsolidated balance sheet as the basis for its recovery calculations. Factors that may partially offset the effect of structural subordination include the presence of upstream guarantees and intercompany obligations owed by the subsidiary to the parent. Cross-border complexities may add conservatism to the analysis of recoveries for non-bank financial institutions that operate internationally.

Fitch acknowledges that an analysis based on the LV or GC approach requires a large number of important assumptions concerning the structure of an issuer's financial profile upon default. In view of these assumptions, the agency will not necessarily map expected recoveries to corresponding RRs and long-term issue ratings. Instead, Fitch may increase or reduce the RRs suggested by the valuation and notching approaches, depending on the sensitivities of expected recoveries to small changes in assumptions, pending events, contractual terms within specific instruments (i.e. structural subordination or structural priority), scope of collateral or views about the operating environment of a particular company.

Fitch's recovery analysis does not attempt to capture the full spectrum of possibly conflicting motivations for creditors or the speed with which such motivations can change. Fitch would not assign RRs where it believes available information to be insufficient or the outcome of the analysis to be particularly unpredictable.

Fitch has provided country caps for RRs to encompass the creditor-friendliness (or otherwise) of jurisdictions and enforceability of security in the event of a default (see "Country-Specific Treatment of Recovery Ratings Criteria"). These caps permit the compression of senior and junior obligations where jurisdictional or other structural features indicate that this is warranted. Fitch will endeavor to explain findings from its issuer-specific recovery analysis in its research.

IV.3 Subordinated and Hybrid Securities

Typically speaking, subordinated and hybrid instruments issued by non-bank financial institutions will follow the ratings approach and potential equity credit methodology outlined in the criteria report "Corporates Hybrids Treatment and Notching Criteria" (for traditional subordinated debt and hybrid securities) or the "Corporate Rating Criteria" (for shareholder loans). In instances in which such instruments are determined not to qualify as debt per the "Corporates Hybrids Treatment and Notching Criteria" or "Corporate Rating Criteria," Fitch will typically afford 100% equity credit for such instruments if balance sheet capitalization metrics are relevant to the analysis of the issuing entity.

If a subordinated or hybrid instrument is issued by a non-bank financial institution prudentially regulated under a similar framework as banks, the ratings approach will follow the rationale outlined in the "Bank Rating Criteria." If a subordinated or hybrid instrument is issued by a policy institution or other entity with some form of government sponsorship, linkage or ownership, the ratings approach will follow the rationale outlined in the "Bank Rating Criteria."



If a subordinated or hybrid instrument is issued by a non-bank financial institution prudentially regulated under a similar framework as insurance companies, the ratings approach will follow the rationale outlined in the criteria report "Insurance Rating Criteria."

IV.4 Guaranteed and Secured Debt

Guaranteed Debt: Fitch usually rates fully guaranteed debt (or debt that Fitch deems to be exposed to an equivalent degree of credit risk as guaranteed debt) in line with the higher of the senior unsecured debt of the guarantor or of the issuer. Equalization of the guaranteed debt rating with the senior unsecured rating of the guarantor will depend on the guarantee ranking equally with the guarantor's senior unsecured debt, the jurisdiction of the guarantee being acceptable to Fitch at the rating level, its enforceability, timeliness and/or expectations that the guarantor will honor the guarantee. A non-bank financial institution's debt benefiting from a guarantee that ranks equally with the guarantor's subordinated obligations is usually rated in line with the subordinated debt of the guarantor.

Determining Ratings and Potential Equity Credit for Subordinated and Hybrid Securities Issued by Non-Bank Financial Institutions

Issuer Type	Applicable Criteria
Traditional non-bank financial institutions (i.e. does not fall under one of the three categories outlined below)	"Corporates Hybrids Treatment and Notching Criteria" (for traditional subordinated debt and hybrid securities) or "Corporate Rating Criteria" (for shareholder loans)
Non-bank financial institutions prudentially regulated under a similar framework as banks	"Bank Rating Criteria"
Non-bank policy institution or other entity with some form of government sponsorship, linkage or ownership	"Bank Rating Criteria"
Non-bank financial institution prudentially regulated under a similar framework as insurance companies	"Insurance Rating Criteria"
Source: Fitch Ratings.	insurance nating enteria

Secured or Collateralized Debt: In cases where Fitch has sufficient information to analyze and monitor the underlying collateral, it will rate long-term secured obligations of non-bank financial institutions, particularly those with relatively straightforward structures, using the default risk/recovery prospects approach outlined in the Notching Guidance for 'BB-' and Above Rated Issuers table.

Issues with more complex forms of structural enhancement (e.g. securitizations, covered bonds or other stand-alone fund/special purpose vehicle structures) are not rated under Fitch's "Non-Bank Financial Institutions Rating Criteria" and instead will be evaluated by Fitch's Structured Finance, Covered Bonds or Funds and Asset Managers groups, based on separate criteria, or otherwise not rated by Fitch.

Other long-term senior secured debt, including debt issued by an issuance vehicle that benefits from a full parent guarantee, may be rated under this criteria and will receive a one notch uplift above the non-bank financial institution's Long-term IDR if the bondholder has recourse both to the collateral and issuer; collateral cannot be substituted beyond established parameters that Fitch is in a position to monitor; and collateral clearly indicates above-average recovery prospects. Otherwise, Fitch will rate such senior secured debt in line with the issuer's Long-term IDR.

Where a debt obligation is both guaranteed and secured, the rating will primarily reflect the guarantee unless all three conditions for uplift for secured or collateralized debt are met.

Ratings of non-bank financial institutions' short-term obligations are based solely on the issues' default risk and so do not take account of structural enhancements that may improve recoveries in case of default.

IV.5 Market-Linked Notes

Some non-bank financial institutions issue or guarantee securities that return amounts referenced to a market risk essentially independent of the issuer's/guarantor's own creditworthiness (sometimes referred to as market-linked notes or MLNs). In some cases, only



the coupon stream references the market risk (referred to as principal-protected notes) and, in others, both the coupon stream and principal repayment are driven by the reference market risk (referred to as non-principal-protected notes). MLNs may reference a very broad array of risks, most commonly related to equities, currencies and commodities and are often structured in response to reverse inquiries.

MLN ratings are aligned with the ratings of a given issuer or guarantor's traditional debt instruments of an equivalent seniority (senior debt, preferred senior debt, etc.). Ratings are assigned by Fitch only when the principal is protected and solely address the credit risk of the issuer or guarantor. Coupon risk unrelated to the issuer or guarantor's credit risk is thus excluded from MLN ratings. Dual currency notes may be rated provided they can or will be settled in an equivalent amount of a second currency.

Fitch does not rate notes whose risk of principal return is unrelated to the issuer's credit risk. Consequently, for the avoidance of doubt, Fitch will not rate credit-linked notes, which reference the credit risk of a third party or basket of third parties, under this criteria. These notes may be rated by Fitch's Structured Finance Group.

IV.6 Debt Issuance Distinctions Between Holding Companies and Non-Bank-Financial Institution Operating Subsidiaries

When rating debt instruments that are structurally subordinated to other debt instruments within a group structure, for example debt issued by a holding company or debt-issuing vehicle, Fitch will assess the strategic, operational or legal links between the different elements in the structure.

If Fitch's analysis determines that such debt is sufficiently isolated from the remainder of the group, failure to service it may have limited implications for the creditworthiness of the operating subsidiaries. Fitch's analysis will still start with an assessment of the operating subsidiaries' credit profiles. However, this analysis will likely be supplemented by an assessment of the stand-alone profile of the issuing entity. In this case, Fitch's analysis would likely incorporate elements of Fitch's rating approach for investment companies, notably when assessing the issuer's capitalization and leverage as well as its funding, liquidity and coverage profile. Fitch may assign a public rating to the issuing entity, informing investors of its different default probability compared with the operating subsidiaries.

Under certain circumstances, for instance, if there is a strong ring-fencing mechanism in place (as may be the case where operating subsidiaries are prudentially regulated, for example), this could lead Fitch to exclude such holding company or debt-issuing vehicle debt from the analysis of the ring-fenced group.

On the other hand, if Fitch concludes that the strategic, operational or legal links between a holding company or debt-issuing vehicle and an operating entity are relatively significant and there is no or limited ring-fencing in place protecting the operating entity and holders of its debt, the structurally subordinated debt will most likely be consolidated in the analysis of the operating entity and the issue rating of the holding company or debt issuance vehicle's debt instrument will be determined through a notching approach.

In determining the notching relativities between a holding company or debt-issuing vehicle and an operating company and their respective debt instruments, Fitch assesses potential differences in default probabilities. As part of this assessment, Fitch analyzes relevant regulatory and legislative aspects, the operating entity's ability to upstream dividends to the issuing entity in comparison to the debt quantum and interest expenses of the issuing entity and the potential structural subordination of holding company debt relative to operating company debt. Fitch would also take other potential income streams of the issuing entity into consideration, including, where relevant, interest income on intercompany loans and cash flows from other group entities.



Annex 1: Variations from Criteria

Fitch's criteria are designed to be used in conjunction with experienced analytical judgment exercised through a committee process. The combination of transparent criteria, analytical judgment applied on a transaction-by-transaction or issuer-by-issuer basis and full disclosure via rating commentary strengthens Fitch's rating process while assisting market participants in understanding the analysis behind the ratings.

A rating committee may adjust the application of these criteria to reflect the risks of a specific transaction or entity. Such adjustments are called variations. All variations will be disclosed in the respective rating action commentaries, including their impact on the rating where appropriate.

A variation can be approved by a ratings committee where the risk, feature or other factor relevant to the assignment of a rating and the methodology applied to it are both included within the scope of the criteria, but where the analysis described in the criteria requires modification to address factors specific to the particular transaction or entity.



Annex 2: Rating Non-Bank Financial Institutions Above the Sovereign

Fitch is more likely to rate a non-bank financial institution above the sovereign – i.e. assign a LC Long-Term IDR to the non-bank financial institution above the sovereign LC Long-Term IDR, or a FC Long-Term IDR to the non-bank financial institution above the sovereign FC Long-Term IDR – when both of two conditions hold. First, Fitch must believe that a non-bank financial institution would probably retain the capacity to service its obligations in the relevant currency following a sovereign default in that currency. This capacity may be retained either because the non-bank financial institution receives external support or because the non-bank financial institution's intrinsic strength, as reflected in its stand-alone credit risk profile, is sufficient to enable it to continue servicing its obligations after a sovereign default.

Second, the agency must believe that the sovereign, following its own default in a currency, would probably not impose restrictions on the non-bank financial institution's ability to service its obligations in that currency. Restrictions may be applied to FC or LC obligations. Fitch usually regards restrictions to the former as somewhat more likely than the latter, which tends to result in the non-bank financial institution's LC ratings being less constrained, relative to the sovereign, than FC ratings. However, in some countries where governments have been more interventionist, both FC and LC ratings of non-bank financial institutions may be capped at the level of the sovereign.

Additionally, unlike banks, which often have strong ties to the credit profile of the sovereign in which they reside, non-banks may not experience the same linkage or potential restrictions on their ability to service their own debt. As an example, a global investment manager may have the majority of its capital invested in other countries, with limited exposure to the economy in which it domiciled. Therefore, the credit profile of the investment manager may not be directly affected by the credit profile of the sovereign.



Annex 3: Information Used to Issue and Maintain Ratings

Key Principles

Fitch bases its research and rating analysis on a thorough analysis of all relevant information known and believed to be relevant to the analysis and the rating decision.

This information includes publicly available information, information provided directly by the issuer and information provided by third parties and relevant information gathered by Fitch during its interaction with other issuers.

All rating committees are required to verify that data was sufficient and robust relative to the rating decision. Where there is insufficient information to assign or maintain a rating, no rating shall be assigned or maintained.

Criteria Data Sources

The key rating assumptions for the criteria are informed by discussions with external parties, such as issuers, institutional owners, supervisors and governments and Fitch's analysis of financial and non-financial information, such as issuer financial statements and annual reports, bond documentation and financial market, industry, academic and economic data, research and history.

Information Threshold

The core information relied on in the rating process is publicly available information such as annual and interim financial statements (typically at least three years of audited accounts), transaction documents for public issues, public statements, presentations and other ad hoc disclosure made by issuer management, public regulatory filings and official industry commentary. This public information represents the minimum requirements for investors to form an investment decision and is based on the level and type of information typically presented by a publicly listed company.

Public disclosure is often supplemented by additional information provided directly by issuer management. Such additional information may take the form of more frequent or confidential updates of information typically disclosed publicly and/or specific non-public information considered analytically important. Meetings may be held with members of issuer management to discuss the information provided and to understand any assumptions used in the preparation of the information. Non-financial information used in the rating process would typically include a description of the institution's core products, client base, geographical markets, risk management framework, group structure, ownership and strategy.

Fitch works with the most recent information available. Public disclosure will generally be predictable in its timing; periodic updates of other information will typically be timed to coincide with a scheduled review, or ad hoc, in response to changing conditions. This supplemental information can provide periodic insights, but its provision is subject to the discretion of the rated entity. Historical time series information provides important insight but the most recent information typically has a greater weighting in the prospective rating opinion.

Fitch undertakes a reasonable verification of the factual information relied on in accordance with the relevant rating methodology and criteria as far as is possible from information from independent sources, to the extent such sources are available.

Surveillance

Analysts perform ongoing surveillance of information received and/or requested. Where a factor or trend could have an impact on the rating, Fitch will determine the appropriate course of action, which may be one of the following:

- The non-bank financial institution is taken to rating committee.
- The non-bank financial institution is issued with a request for additional specific information (Fitch may also consider it appropriate to place it on Rating Watch at this point).

Fitch may also conclude that no action is necessary. There are no differences between new rating analysis and surveillance analysis.



Annex 4: Use of Stress Testing and Other Tools in the Rating Process

Key Principles

Where relevant, Fitch will complement its analysis of the relevant information with an assessment of the potential impact of a range of reasonable/plausible stress scenarios or simulations.

Assumptions

Assumptions used in stress or scenario analyses will vary but will typically incorporate macro-economic variables, loss rates and changes in risk parameters (such as probability of default and loss given default), and the impact will typically be framed in the context of impact on earnings, liquidity, interest coverage and/or capital/leverage. The variable(s) selected will be driven by the nature and/or severity of the stress envisaged or being tested and will be established at an issuer-specific, sector, country and/or region level.

Tools Used in the Rating Process

Where relevant, Fitch will use a range of standardized tools to simulate the effect of asset quality/performance, earnings, capital and liquidity stresses. Stress testing may be carried out on an issuer-specific or sector basis and may be supplemented by bespoke simulations in cases where standardized approaches may not be appropriate.

To the extent that regulators in various jurisdictions may conduct stress tests or asset quality reviews across a country or sector, Fitch may use its own similar tools to understand better regulatory stress tests and their sensitivities, recognizing the varying degrees of disclosure regarding factors such as baseline data and stress variables.

Inputs and Outputs

Stress and scenario testing may require standard issuer inputs of a non-public nature, and Fitch will request those that are considered necessary. If such inputs are not provided, Fitch will use conservative estimates based on analytical judgment together with its broader industry and sector knowledge. Alternatively, Fitch may be provided with an issuer's own scenario analyses. In such cases, Fitch will discuss these with issuer management to understand the underlying assumptions used in the analysis and, if appropriate, make further analytical adjustments to management's underlying assumptions.

Outputs may, at Fitch's discretion, be disclosed in full or part where such disclosure adds value to the analysis and/or research. However, the presence of non-public data typically results in disclosure being in aggregate or summarized form. Fitch will use peer comparison, where relevant, to evaluate relative resilience to specific stresses or scenarios.



Annex 5: Rating Assumption Sensitivity

Fitch's opinions are forward looking and include the agency's views of future performance. Non-bank financial institution ratings are subject to positive or negative adjustment based on actual or projected financial and operational performance. The list below includes a non-exhaustive list of the primary assumption sensitivities, or shifts in key rating drivers for individual credits, that can influence the ratings.

- Operating Environment Risk: Deterioration in an issuer's operating environment due
 to weakening of general economic environment, sovereign risks, financial market
 health, changes in regulatory/legislative requirements or conditions and systemic
 governance in the countries where the issuer is operating as well as possible imposition
 of foreign exchange controls.
- Business Risk: Developments in an issuer's ability to withstand competitive pressures
 as shown in its position/franchise in key markets, its business model/diversification, its
 level of pricing power and its operating efficiency.
- **Financial Risk:** Changes in an issuer's financial profile due to the impact of operational developments, a weakening of an issuer's operating environment, the issuer's financial policy or risk appetite or the availability of funding in case of market disruption.
- Event Risk: An unforeseen event, which, until it is explicit and defined, is excluded from existing ratings. Event risks can be externally triggered a change in law, a natural disaster, a political shock or an ownership change or internally triggered, such as a change in policy on capitalization, a major acquisition, fraud or a management or strategic restructuring. As most non-bank financial institutions tend to have an asset-liability mismatch (asset duration longer than funding duration), they can be vulnerable to extreme liquidity stress. While funding, liquidity and coverage are core parts of Fitch's rating analysis, sometimes idiosyncratic events can cause a rapid, potentially materially detrimental, deterioration in liquidity.
- Change in Support Risk: A change in extraordinary support likely to be available to an issuer, for example, due to a change in ownership or developments in resolution frameworks. Event risk and changes in support can often have more material implications for non-bank financial institution ratings than other risks outlined above.
- Instrument-Specific Risk: In the case of issue-level ratings, these may be sensitive to changes in the company's issuer-level ratings, performance risk relative to the risk captured in issuer-level ratings (e.g. hybrid securities) and changes in default risk or recovery prospects for such instrument, for example as a function of the seniority of the instrument, the volume of pari passu liabilities, the volume and relative ranking of other liabilities, the availability of unencumbered assets and/ or the enterprise value of the business.



Annex 6: Additional Criteria Applicability Considerations and Limitations

The non-bank financial institutions rating criteria contemplates a "going concern" analysis of well-established entities with clearly defined strategic objectives and manageable exposure to measurable market risks. The criteria are applicable to a wide range of financial institutions. However, the criteria as constructed may prove insufficient to rate all non-bank financial institutions. The following types of attributes may not be fully addressed in these criteria. Therefore, institutions presenting certain of these attributes may not be rated using criteria for non-bank financial institutions. Structures outside the scope of these rating criteria may be evaluated by or in conjunction with other analytical groups within Fitch or otherwise not rated by Fitch.

Criteria Applicability Considerations

Attribute	Not Ratable Under Non-Bank Financial Institutions Criteria	Potentially Ratable Under Non-Bank Financial Institutions Criteria
Special purpose vehicles (excluding guaranteed debt-issuing subsidiaries of rated entities)	✓	
Fixed life vehicles	✓	
Investment vehicles with unidentified assets at inception	✓	
Investment vehicles invested in real/non-financial assets for which there is limited insight into the credit risk, market risk, cash flow stability and/or leveragability of the asset class(es)	✓	
Open-end investment vehicles with a very high degree of market value risk ^a as a result of the reliance on the sale of less liquid assets or the reliance or the sale of moderately liquid assets but within a very short time frame to meet redemptions	✓	
Open-end investment vehicles with an elevated but generally manageable degree of market value risk ^a , as a result of the reliance on the sale of liquid assets to meet near-term redemptions		✓
Open-end investment vehicles with a limited degree of market value risk ^a as a result of well-established redemption frameworks that are subject to the availability of cash proceeds (queues) and therefore provide non-discretionary, structural protection against liquidity mismatches		✓
Quasi open-end investment vehicles with a limited degree of market risk due the lack of near-term redemption risk, highly predictable cash inflows and outflows, and the ability to increase the former and/or reduce the latter		√
Closed-end investment vehicles with permanent capital and no requirements for the liquidation or forced sale of underlying assets		✓

^aMarket value risks include valuation risk with respect to underlying assets, the use of leverage and/or confidence-sensitive funding sources which may magnify such valuation risks, and/or redemption risks associated with non-permanent capital sources.
Source: Fitch Ratings.

This criteria report identifies factors that are considered by Fitch in assigning ratings to a particular entity or obligation within the scope of the master criteria. Not all factors in these criteria may apply to each individual rating or rating action. Each specific rating action commentary or rating report will discuss those factors most relevant to the individual rating action.

Ratings, including Rating Watches and Rating Outlooks, assigned by Fitch are subject to the limitations specified in Fitch's Rating Definitions, available at www.fitchratings.com/site/definitions. More specifically to non-bank financial institutions, IDRs, VRs, SRs, SRFs and DCRs do not specifically address transfer and convertibility risk for each and every foreign jurisdiction in which a non-bank financial institution operates, nor do they reflect jurisdiction-specific resolution risks.



Annex 7: Factors Differentiating Highly Speculative and Distressed Ratings

Text-based descriptions of differentiating attributes across non-bank financial institution subsectors and rating categories are noted throughout this criteria report. That said, these generalizations can sometimes become less instructive at and between highly speculative (i.e. 'B' category) and distressed (i.e. 'CCC' category and below) levels given the more issuer-specific nature of the attributes or trends that often influence ratings at these levels.

Fitch's firmwide rating definitions state that, at the 'CCC' rating category, "default is a real possibility." In the context of non-bank financial institution ratings, attributes that may be indicative of at least this degree of financial distress are detailed in the table below.

Factors Differentiating Highly Speculative and Distressed Ratings

Qualitative Versus Quantitative	Attribute	Relative Importance at 'B' Category	Relative Importance at 'CCC' Category and Below
Qualitative		-	
	Unsuccessful operating history	Higher	Lower
	Undefined or changing underwriting standards	Higher	Lower
	Ineffective risk management	Higher	Lower
	Heightened execution risk and/or strategy that lacks credibility	Higher	Moderate
	Escalating regulatory actions and/or intervention	Moderate	Higher
	Material management and/or governance shortcomings	Higher	Higher
	Business model instability, impairment or disruption	Higher	Higher
Quantitative		•	
	Extremely limited scale	Moderate	Higher
	Structurally unprofitable construct with return to break-even highly uncertain	Moderate	Higher
	Imminent breaching of financial covenants or the requesting of waivers from covenant	Moderate	Higher
	Sustained asset quality considerably weaker than norms	Higher	Higher
	Clear capitalization deficiencies and/or significant outlier	Higher	Higher
	Material near-term refinancing risk and/or other liquidity or coverage weaknesses	Higher	Higher

Note: While any of the above attributes can be the primary rating driver at a given rating category, those attributes listed as 'Higher' importance represent ones Fitch believes are more likely to drive a rating outcome at a given rating category, while those attributes listed as 'Lower' importance represent ones Fitch believes are less likely to drive a rating outcome at a given rating category. Those attributes listed as 'Moderate' importance represent ones Fitch believes could have a moderate influence on a rating outcome at a given rating category. Source: Fitch Ratings.



Annex 8: Related Criteria

This criteria has been published together with the following criteria:

Bank Rating Criteria

The following cross-sector criteria reports remain in force and will be applied to the ratings of non-bank financial institutions and other financial institutions, where appropriate:

Country Ceilings Criteria

Sukuk Rating Criteria

National Scale Ratings Criteria

Corporate Rating Criteria

Corporates Hybrids Treatment and Notching Criteria

Corporates Notching and Recovery Ratings Criteria

Country-Specific Treatment of Recovery Ratings Criteria

Third-Party Partial Credit Guarantees Rating Criteria



Annex 9: Subsector Financial Ratios and Definitions

Summary of Non-Bank Financial Institution Core Ratios and Quantitative Benchmarks

		Operating Environment Score	aa or Above		bbb	bb	b or Below
Securities Firms (Hig	h Balance Sheet Usage)		715070				20.011
Earnings and Profitability	Operating Income/Average Equity(%)	ʻaa' category or higher	x>20	10 <x≤20< td=""><td>5<x≤10< td=""><td>3<x≤5< td=""><td>x≤3</td></x≤5<></td></x≤10<></td></x≤20<>	5 <x≤10< td=""><td>3<x≤5< td=""><td>x≤3</td></x≤5<></td></x≤10<>	3 <x≤5< td=""><td>x≤3</td></x≤5<>	x≤3
•	Operating Income/Average Equity (%)	'a' category	x>25	15 <x≤25< td=""><td>5<x≤15< td=""><td>3<x≤5< td=""><td>x≤3</td></x≤5<></td></x≤15<></td></x≤25<>	5 <x≤15< td=""><td>3<x≤5< td=""><td>x≤3</td></x≤5<></td></x≤15<>	3 <x≤5< td=""><td>x≤3</td></x≤5<>	x≤3
	Operating Income/Average Equity(%)	ʻbbb' category		x>15	10 <x≤15< td=""><td>3<x≤10< td=""><td>x≤3</td></x≤10<></td></x≤15<>	3 <x≤10< td=""><td>x≤3</td></x≤10<>	x≤3
	Operating Income/Average Equity (%)	'bb' category		X 13	x>15	10 <x≤15< td=""><td>x≤10</td></x≤15<>	x≤10
	Operating Income/Average Equity(%)	'b' category or lower				x>15	x≤15
Capitalization and Leverage	(Tangible Assets - Reverse Repo - Sec. Borrowed)/ Tangible Equity (x)	'aa' category or higher	v<5.0	5.0≤x<10.0	10.0≤	15.0≤x<20.0	x≥20.0
and Level age	(Tangible Equity (x) (Tangible Assets – Reverse Repo – Sec. Borrowed)/ Tangible Equity (x)	'a' category		2.5≤x<10.0	10.0≤	15.0≤x<20.0	x≥20.0
	(Tangible Assets – Reverse Repo – Sec. Borrowed)/ Tangible Equity (x)	'bbb' category	X\2.5		5.0≤x<10.0	10.0≤x<15	x≥15
	(Tangible Assets – Reverse Repo – Sec. Borrowed)/ Tangible Equity (x)	'bb' category			x<5.0	5.0≤x<12.0	x≥12.0
	(Tangible Assets – Reverse Repo – Sec. Borrowed)/ Tangible Equity (x)	ʻb' category or lower				x<7.0	x≥7.0
Funding, Liquidity and Coverage	Liquid Assets/Short-Term Funding (%)	ʻaa' category or higher			100 <x≤150< td=""><td>85<x≤100< td=""><td>x≤85</td></x≤100<></td></x≤150<>	85 <x≤100< td=""><td>x≤85</td></x≤100<>	x≤85
	Liquid Assets/Short-Term Funding (%)	'a' category	x>300	175 <x≤300< td=""><td>100<x≤175< td=""><td>85<x≤100< td=""><td>x≤85</td></x≤100<></td></x≤175<></td></x≤300<>	100 <x≤175< td=""><td>85<x≤100< td=""><td>x≤85</td></x≤100<></td></x≤175<>	85 <x≤100< td=""><td>x≤85</td></x≤100<>	x≤85
	Liquid Assets/Short-Term Funding (%)	ʻbbb' category		x>300	175 <x≤300< td=""><td>100<x≤175< td=""><td>x≤100</td></x≤175<></td></x≤300<>	100 <x≤175< td=""><td>x≤100</td></x≤175<>	x≤100
	Liquid Assets/Short-Term Funding (%)	'bb' category			x>300	150 <x≤300< td=""><td>x≤150</td></x≤300<>	x≤150
	Liquid Assets/Short-Term Funding (%)	'b' category or lower				x>200	x≤200
	v Balance Sheet Usage)		-	·			
Earnings and Profitability	EBITDA/Revenue (%)	All	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10
Capitalization and Leverage	Gross Debt/EBITDA (x)	All	x<0.5	0.5≤x<1.5	1.5≤x<2.5	2.5≤x<3.5	x≥3.5
Funding, Liquidity ar Coverage	nd EBITDA/Interest Expense (x)	All	x>15	10 <x≤15< td=""><td>6<x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<></td></x≤15<>	6 <x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<>	3 <x≤6< td=""><td>x≤3</td></x≤6<>	x≤3
Investment Manager	s Primarily Charging Fees Based on Net Asset Value (T	raditional Invest	ment Man	agers and He	dge Fund Mar	nagers)	
Asset Performance	Net Client Flows/Beginning (F)AUM (%)	All	x>10	5 <x≤10< td=""><td>5≥x>(5)</td><td>(5)≥x>(10)</td><td>x≤(10)</td></x≤10<>	5≥x>(5)	(5)≥x>(10)	x≤(10)
Earnings and Profitability	(F)EBITDA/Fee Revenue (%)	AII	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10
Capitalization and Leverage	Gross Debt/Adjusted (F)EBITDA (x)	All	x<0.25	0.25≤x<1.5	1.5≤x<3.0	3.0≤x<5.0	≥5.0
Funding, Liquidity and Coverage	(F)EBITDA/Interest Expense (x)	All	x>18	12 <x≤18< td=""><td>6<x≤12< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤12<></td></x≤18<>	6 <x≤12< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤12<>	3 <x≤6< td=""><td>x≤3</td></x≤6<>	x≤3

^aRegulatory debt is defined as term corporate debt excluding Small Business Administration borrowings. ^bIn instances where asset quality metrics exhibit seasonal differences in performance, Fitch may seek to normalize such metrics when assessing asset quality at a given point in time. Fitch may exclude or normalize a quarterly data point if it is believed to be unduly influenced by seasonality rather than reflecting a longer term asset quality trend. For leasing companies, asset-quality ratios are calculated as impairments on leased assets plus incurred gains and losses on the sale of leased assets/total leased assets. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. *Continued on next page*.

Source: Fitch Ratings.



Summary of Non-Bank Financial Institution Core Ratios and Quantitative Benchmarks (Continued)

		Operating Environment Score	aa or Above	a	bbb	bb	b or Below
Investment Manager	s Primarily Charging Fees Based on Invested/Committ						
Asset Performance	Net Client Flows/Beginning (F)AUM (%)	All	x>10	5 <x≤10< td=""><td></td><td>(5)≥x>(10)</td><td>x≤(10)</td></x≤10<>		(5)≥x>(10)	x≤(10)
Earnings and Profitability	(F)EBITDA/Fee Revenue (%)	All	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10
Capitalization and Leverage	Gross Debt/Adjusted (F)EBITDA (x)	All	x<0.50	0.50≤x<2.5	2.5≤x<4.0	4.0≤x<6.0	≥6.0
Funding, Liquidity and Coverage	(F)EBITDA/Interest Expense (x)	All	x>12	8 <x≤12< td=""><td>4<x≤8< td=""><td>2<x≤4< td=""><td>x≤2</td></x≤4<></td></x≤8<></td></x≤12<>	4 <x≤8< td=""><td>2<x≤4< td=""><td>x≤2</td></x≤4<></td></x≤8<>	2 <x≤4< td=""><td>x≤2</td></x≤4<>	x≤2
Investment Compan	ies						
Capitalization	Constant Tourish Francis	AII	015	0.15 <v<0.35< td=""><td>0.35≤x<0.50</td><td>0.50≤x<1.0</td><td>≥1.0</td></v<0.35<>	0.35≤x<0.50	0.50≤x<1.0	≥1.0
and Leverage	Gross Debt/Tangible Equity (x) One year's upstream dividend and interest income	All	X<0.15	0.13-3×0.33	0.5528	0.30381.0	
Funding, Liquidity and Coverage	coverage of one years' holdco interest expense (x)	All	x>10	6 <x≤10< td=""><td>3.5<x≤6.0< td=""><td>2.5<x≤3.5< td=""><td>x≤2.5</td></x≤3.5<></td></x≤6.0<></td></x≤10<>	3.5 <x≤6.0< td=""><td>2.5<x≤3.5< td=""><td>x≤2.5</td></x≤3.5<></td></x≤6.0<>	2.5 <x≤3.5< td=""><td>x≤2.5</td></x≤3.5<>	x≤2.5
Funding, Liquidity and Coverage	One year's upstream dividend and interest income coverage of two years' holdco operating expenses, interest						
	expense and dividends (x)	All	x>1.0	x>1.0	x>1.0	x≤1.0	x≤1.0
Business Developme		-					
Asset Quality	Net Realized Gains/Average Portfolio, at Value (%)	All	x>5	2≥x>5	(3)≥x>2	(3)≥x>(6)	x≤(6)
Earnings and Profitability	Net Investment Income/Average Portfolio, at Cost (%)	All	5 <x≤10< td=""><td>5<x≤10< td=""><td>5<x≤10< td=""><td>x≤5 or x>10</td><td>x≤5 or x>10</td></x≤10<></td></x≤10<></td></x≤10<>	5 <x≤10< td=""><td>5<x≤10< td=""><td>x≤5 or x>10</td><td>x≤5 or x>10</td></x≤10<></td></x≤10<>	5 <x≤10< td=""><td>x≤5 or x>10</td><td>x≤5 or x>10</td></x≤10<>	x≤5 or x>10	x≤5 or x>10
Capitalization and Leverage	(Total Assets-Total Liabilities Excluding Regulatory Debt ^a -[Regulatory Debt x Asset Coverage						
	Requirement])/(Total Assets-Total Liabilities Excluding Regulatory Debt) (%)	All	x>60%	33% <x≤60%< td=""><td>11%<x≤33%< td=""><td>0%<x≤11%< td=""><td>x = 0%</td></x≤11%<></td></x≤33%<></td></x≤60%<>	11% <x≤33%< td=""><td>0%<x≤11%< td=""><td>x = 0%</td></x≤11%<></td></x≤33%<>	0% <x≤11%< td=""><td>x = 0%</td></x≤11%<>	x = 0%
	Implied Debt/Tangible Equity (200% Asset Coverage Requirement)	All	x<0.25	0.25≤x<0.50	0.50≤x<0.80	0.80≤x<1.00	x≥1.00
	Implied Debt/Tangible Equity (150% Asset Coverage Requirement)	All	x<0.36	0.36≤x<0.80	0.80≤x<1.45	1.45≤x<2.00	x≥2.00
Funding, Liquidity and Coverage	Unsecured Debt/Total Debt (%)	All	x>90	50 <x≤90< td=""><td>35<x≤50< td=""><td>x≤35</td><td>x = 0</td></x≤50<></td></x≤90<>	35 <x≤50< td=""><td>x≤35</td><td>x = 0</td></x≤50<>	x≤35	x = 0
Finance and Leasing	Companies (High-Balance-Sheet Usage)						
Asset Quality ^b	Impaired Loans/Gross Loans or Impairments on Leased Assets/ Total Leased Assets (%)	'aa' category or higher	x≤1	1 <x≤3< td=""><td>3<x≤6< td=""><td>6<x≤14< td=""><td>x>14</td></x≤14<></td></x≤6<></td></x≤3<>	3 <x≤6< td=""><td>6<x≤14< td=""><td>x>14</td></x≤14<></td></x≤6<>	6 <x≤14< td=""><td>x>14</td></x≤14<>	x>14
	Impaired Loans/Gross Loans or Impairments on Leased Assets/ Total Leased Assets (%)	'a' category	x≤0.25	0.25 <x≤2< td=""><td>2<x≤5< td=""><td>5<x≤12< td=""><td>x>12</td></x≤12<></td></x≤5<></td></x≤2<>	2 <x≤5< td=""><td>5<x≤12< td=""><td>x>12</td></x≤12<></td></x≤5<>	5 <x≤12< td=""><td>x>12</td></x≤12<>	x>12
	Impaired Loans/Gross Loans or Impairments on	'bbb'					
	Leased Assets/Total Leased Assets (%)	category		X≤0.5	0.5 <x≤4< td=""><td>4<x≤10< td=""><td>x>10</td></x≤10<></td></x≤4<>	4 <x≤10< td=""><td>x>10</td></x≤10<>	x>10
	Impaired Loans/Gross Loans or Impairments on Leased Assets/ Total Leased Assets (%)	'bb' category			x≤0.75	0.75 <x≤5< td=""><td>x>5</td></x≤5<>	x>5
	Impaired Loans/Gross Loans or Impairments on Leased Assets/Total Leased Assets (%)	'b' category or lower				x≤1	x>1
Earnings and Profitability	Pre-Tax Income/Average Assets (%)	'aa' category or higher	x>4.0	3.0 <x≤4.0< td=""><td>2.0<x≤3.0< td=""><td>1.0<x≤2.0< td=""><td>x≤1.0</td></x≤2.0<></td></x≤3.0<></td></x≤4.0<>	2.0 <x≤3.0< td=""><td>1.0<x≤2.0< td=""><td>x≤1.0</td></x≤2.0<></td></x≤3.0<>	1.0 <x≤2.0< td=""><td>x≤1.0</td></x≤2.0<>	x≤1.0
	Pre-Tax Income/Average Assets (%)	'a' category	x>5.0	3.5 <x≤5.0< td=""><td>2.5<x≤3.5< td=""><td>1.0<x≤2.5< td=""><td>x≤1.0</td></x≤2.5<></td></x≤3.5<></td></x≤5.0<>	2.5 <x≤3.5< td=""><td>1.0<x≤2.5< td=""><td>x≤1.0</td></x≤2.5<></td></x≤3.5<>	1.0 <x≤2.5< td=""><td>x≤1.0</td></x≤2.5<>	x≤1.0
	Pre-Tax Income/Average Assets (%)	ʻbbb' category		x>6.0	4.0 <x≤6.0< td=""><td>1.0<x≤4.0< td=""><td>x≤1</td></x≤4.0<></td></x≤6.0<>	1.0 <x≤4.0< td=""><td>x≤1</td></x≤4.0<>	x≤1
	Pre-Tax Income/Average Assets (%)	'bb' category		*******	x>6.0	2.0 <x≤4.0< td=""><td>x≤2.0</td></x≤4.0<>	x≤2.0
	Pre-Tax Income/Average Assets (%)	'b' category or lower			X 3.0	x>7.0	x≤7.0
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^aRegulatory debt is defined as term corporate debt excluding Small Business Administration borrowings. ^bIn instances where asset quality metrics exhibit seasonal differences in performance, Fitch may seek to normalize such metrics when assessing asset quality at a given point in time. Fitch may exclude or normalize a quarterly data point if it is believed to be unduly influenced by seasonality rather than reflecting a longer term asset quality trend. For leasing companies, asset-quality ratios are calculated as impairments on leased assets plus incurred gains and losses on the sale of leased assets/total leased assets. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. *Continued on next page*.

Source: Fitch Ratings.



Summary of Non-Bank Financial Institution Core Ratios and Quantitative Benchmarks (Continued)

		Operating Environment Score	aa or Above	a	bbb	bb	b or Below
Finance and Leasing	Companies (High-Balance-Sheet Usage) (cont.)	-		-			
Capitalization and Leverage	Debt/Tangible Equity (x)	'aa' category or higher	x<1.0	1.0≤x<3.0	3.0≤x<5.0	5.0≤x<8.0	x≥8.0
	Debt/Tangible Equity (x)	'a' category	x<0.8	0.8≤x<3.0	3.0≤x<5.0	5.0≤x<7.5	x≥7.5
	Debt/Tangible Equity (x)	ʻbbb' category	·	x<0.75	0.75≤x<4.0	4.0≤x<7.0	x≥7.0
	Debt/Tangible Equity (x)	'bb' category		-	x<0.6	0.6≤x<5.5	x≥5.5
	Debt/Tangible Equity (x)	ʻb' category or lower	·			x<0.5	x≥0.5
Funding, Liquidity and Coverage	Unsecured Debt/Total Debt (%)	ʻaa' category or higher	x>90	50 <x≤90< td=""><td>35<x≤50< td=""><td>x≤35</td><td>x = 0</td></x≤50<></td></x≤90<>	35 <x≤50< td=""><td>x≤35</td><td>x = 0</td></x≤50<>	x≤35	x = 0
	Unsecured Debt/Total Debt (%)	'a' category	x>95	60 <x≤95< td=""><td>40<x≤60< td=""><td>10<x≤40< td=""><td>x≤10</td></x≤40<></td></x≤60<></td></x≤95<>	40 <x≤60< td=""><td>10<x≤40< td=""><td>x≤10</td></x≤40<></td></x≤60<>	10 <x≤40< td=""><td>x≤10</td></x≤40<>	x≤10
	Unsecured Debt/Total Debt (%)	ʻbbb' category		x>95	75 <x≤95< td=""><td>20<x≤75< td=""><td>x≤20</td></x≤75<></td></x≤95<>	20 <x≤75< td=""><td>x≤20</td></x≤75<>	x≤20
	Unsecured Debt/Total Debt (%)	'bb' category			X=100	50 <x≤100< td=""><td>x≤50</td></x≤100<>	x≤50
	Unsecured Debt/Total Debt (%)	ʻb' category or lower	·			X>95	x≤95
Finance and Leasing	Companies (Low Balance Sheet Usage)						
Earnings and Profitability	EBITDA/Revenues (%)	All	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10
Capitalization and Leverage	Debt/EBITDA (x)	All	x<0.5	0.5≤x<1.5	1.5≤x<2.5	2.5≤x<3.5	x≥3.5
Funding, Liquidity and Coverage	EBITDA/Interest Expense (x)	All	x>15	10 <x≤15< td=""><td>6<x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<></td></x≤15<>	6 <x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<>	3 <x≤6< td=""><td>x≤3</td></x≤6<>	x≤3
Financial Market Inf	rastructure Companies (Exchanges, CCPs and Non-E	Bank CSDs)			•	·	
Earnings and Profitability	EBITDA/Revenue (%)	All	x>50	30 <x≤50< td=""><td>20<x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<></td></x≤50<>	20 <x≤30< td=""><td>10<x≤20< td=""><td>x≤10</td></x≤20<></td></x≤30<>	10 <x≤20< td=""><td>x≤10</td></x≤20<>	x≤10
Capitalization and Leverage	Gross Debt/EBITDA (x)	All	x<0.5	0.5≤x<2.0	2.0≤x<3.5	3.5≤x<5.5	x≥5.5
Funding, Liquidity and Coverage	EBITDA/Interest Expense (x)	All	x>15	10 <x≤15< td=""><td>6<x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<></td></x≤15<>	6 <x≤10< td=""><td>3<x≤6< td=""><td>x≤3</td></x≤6<></td></x≤10<>	3 <x≤6< td=""><td>x≤3</td></x≤6<>	x≤3

^aRegulatory debt is defined as term corporate debt excluding Small Business Administration borrowings. ^bIn instances where asset quality metrics exhibit seasonal differences in performance, Fitch may seek to normalize such metrics when assessing asset quality at a given point in time. Fitch may exclude or normalize a quarterly data point if it is believed to be unduly influenced by seasonality rather than reflecting a longer term asset quality trend For leasing companies, asset-quality ratios are calculated as impairments on leased assets plus incurred gains and losses on the sale of leased assets/total leased assets. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. Source: Fitch Ratings.



Securities Firm Ratios

Metric	Definition	Core or Complementary	Firms with High Balance Sheet Usage	Firms with Low Balance Sheet Usage
Asset Quality Ratios				
Impaired and Nonperforming Ratio	Loans where income has stopped accruing, loan has been restructured or the receivable is deemed otherwise impaired/period-end loans.	Complementary	√	
Loan Loss Allowances/ Impaired Loans	Allowances for Impairments/Impaired Loans	Complementary	✓	
Loan Impairment Charges/Average Gross Loans	Impairment Charges on Loans/Average Gross Loans	Complementary	✓	
Impaired Loans Less Loan Loss Allowances/ Tangible Equity	(Impaired Loans and Leases – Loan Loss Allowances)/Tangible Equity	Complementary	✓	
Growth of Gross Loans	Increase in total customer loans at the end of the accounting period less total customer loans at the beginning of the accounting period as a percentage of customer loans at the beginning of the accounting period.	Complementary	√	
Market Risk Ratios			•	
Average VaR/Tangible Equity	Average period trading VaR considered as reported and adjusted to 99% confidence interval and one-day holding period; data are assessed both including and excluding attributed diversification.	Complementary	√	
Fitch Stressed VaR/ Tangible Equity	Fitch stressed VaR is calculated by multiplying the aggregated 10-day, 99% level maximum VaR by a factor of five; intended to capture market risk under extremely severe market conditions.	Complementary	✓	
Trading Efficiency Ratio	Principal daily trading revenue (annual/252 days) or (quarterly/63 days)/average trading VaR (99%, one day, U.S. dollars)	Complementary	√	
Earnings and Profitability Ra	tios		-	
Operating Profit/ Average Equity	Pre-tax profit before non-recurring and non-operating income and expenses as a percentage of average reported equity.	Core	✓	
EBITDA/Revenue	EBITDA with adjustments for significant non-cash items, such as non-cash compensation expenses, as a percentage of total revenue.	Core		√
Adjusted ROAE	Reported net income, excluding discontinued operations and extraordinary one-time items and the effects of CVA/DVA, as a percentage of average reported equity.	Complementary	√	
Operating Expense/ Revenue	Operating expenses, including interest expense, as a percentage of total revenue.	Complementary	✓	
Compensation/ Net Revenue	Compensation paid in the period as a percentage of net revenue, isolated for brokers and traders compensation where possible	Complementary	√	

^aWhere disclosed under IFRS 9, impaired loans will be loans classified as being at 'stage 3'. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. *Continued on next page*.

Source: Fitch Ratings.



Securities Firm Ratios (Continued)

Metric	Definition	Core or Complementary	Firms with High Balance Sheet Usage	Firms with Low Balance Sheet Usage
Capitalization and Leverage	Ratios			
Net Adjusted Leverage	(Tangible Assets - Reverse Repurchase Agreements - Securities Borrowed)/Tangible Equity	Core	✓	
Gross Debt/EBITDA	Gross debt divided by EBITDA, with adjustments for significant non-cash items such as non-cash compensation expenses	Core		√
Gross Leverage	Total assets divided by total equity	Complementary	✓	
Tangible Gross Leverage	(Tangible Assets plus Gross ups for Derivatives, Reverse Repurchase Agreements and Securities Borrowed)/Tangible Equity Tangible assets equal total assets minus goodwill and intangibles Derivatives, reverse repurchase agreements and securities borrowed are grossed up for any netting amounts that may otherwise be excluded from amounts reported on the balance sheet	Complementary	✓	
Adjusted Leverage	(Tangible Assets - Reverse Repurchase Agreements)/Tangible Equity	Complementary	✓	•
Common Equity Tier I Capital Ratio ^a	Ratio as reported to the regulators in the relevant jurisdiction; the calculation is: common equity as defined by local regulators as a percentage of risk weighted assets as defined by local regulators.	Complementary	√	
Funding and Liquidity Ratios	5			
Liquid Assets/ST Funding	Total assets minus illiquid assets (defined below) as a percentage of wholesale funding due within 12 months Illiquid assets typically include high yield debt + merchant bank, private equity investments + emerging market + consumer loans + bank loans + goodwill + intangibles + non-investment-grade derivatives marked to market + other assets + non-investment-grade residual assets	Core	√	
EBITDA/Interest Expense	EBITDA with adjustments for significant noncash items, such as noncash compensation expenses, as a multiple of interest expense	Core		✓
LT Funding/Illiquid Assets	Equity and long-term borrowing as a percentage of illiquid assets (as defined above)	Complementary	√	

^aWhere disclosed under IFRS 9, impaired loans will be loans classified as being at 'stage 3'. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. Continued on next page.

Source: Fitch Ratings.



Simplified Balance Sheet and Calculation of Capitalization Ratios

Description	Value
Condensed Balance Sheet	
Cash	15
Securities Borrowed (Net)	15
Reverse Repo (Net)	10
Derivative Instruments (Net)	5
Other Securities Inventory	50
Goodwill and Intangibles	5
Total Assets	100
Total Liabilities	75
Non-Equity Hybrid Capital	5
Capital	10
Retained Earnings	10
Total Equity	25
Other Inputs from Notes to the Financial Statements	
Securities Borrowed (Gross)	25
Reverse Repos (Gross)	20
Derivative Instruments (Gross)	15
Risk Weighted Assets	40
Calculations	Formula
Tangible Assets	95 = F-E
Tangible Equity	15 = H-G-E
Securities Borrowed Gross Up	10 = I-B
Reverse Repo Gross Up	10 = J-C
Derivative Instruments Gross Up	10 = K-D
Gross Leverage	4.0 = F/H
Tangible Gross Leverage	8.3 = (M+O+P+Q)/N
Adjusted Leverage	5.7 = (M-C)/N
Net Adjusted Leverage	4.7 = (M-B-C)/N
	Condensed Balance Sheet Cash Securities Borrowed (Net) Reverse Repo (Net) Derivative Instruments (Net) Other Securities Inventory Goodwill and Intangibles Total Assets Total Liabilities Non-Equity Hybrid Capital Capital Retained Earnings Total Equity Other Inputs from Notes to the Financial Statements Securities Borrowed (Gross) Reverse Repos (Gross) Derivative Instruments (Gross) Risk Weighted Assets Calculations Tangible Assets Tangible Equity Securities Borrowed Gross Up Reverse Repo Gross Up Derivative Instruments Gross Up Gross Leverage Tangible Gross Leverage Adjusted Leverage



Investment Manager Ratios

Metric	Definition	Core or Complementary	Alternative Investment Managers	Traditional Investment Managers
Asset Performance Ratios	- Definition	Comprehentary	Managers	- Ivianagers
(F)AUM Growth Rate	(Ending (F)AUM/Beginning (F)AUM)-1	Core	√	
Fundraising Success	(Gross Inflows - Gross Redemptions - Gross Distributions)/ Beginning (F)AUM	Complementary	√	✓
Management Fee Yield	Management Fees/Average (F)AUM	Complementary	✓	✓
Revenue Yield	Total Revenue/Average (F)AUM	Complementary	✓	√
F)EBITDA Yield	(F)EBITDA/Average (F)AUM	Complementary	✓	✓
Earnings and Profitability Rati		-		-
F)EBITDA Margin	(F)EBITDA/Total Fee Revenue	Core	✓	✓
<u> </u>	Management Fees/Total Fees	Complementary	✓	-
Γotal Management Fee	Management Fees/Total Revenue	Complementary		
Contribution		Complementary	✓	
Operating Efficiency	(Base Compensation + Operating Expenses)/Total Fee Revenue	Complementary	✓	√
ncentive Compensation Ratio	Incentive Compensation/Incentive Revenue	Complementary	✓	
ee-Related Earnings Margin	Fee-Related Earnings (Net Income)/Fee Revenue	Complementary	✓	
Return on Average Equity	(Economic) Net Income/Average Equity	Complementary	✓	✓
Capitalization and Leverage Ra	atios			
Cash Flow Leverage	Gross Interest-Bearing Liabilities/(F)EBITDA, with adjustments made for significant noncash and nonrecurring items FEBITDA is defined as management, transaction, monitoring, and advisory fees - operating expenses + interest expense + depreciation + amortization + equity compensation. Interest and dividend revenue may be included if deemed recurring in nature.	Core	√	√
Net Cash Flow Leverage	(Gross Interest-Bearing Liabilities - Balance Sheet Cash and Equivalents)/(F)EBITDA, with adjustments made for significant noncash and nonrecurring items	Complementary	✓	✓
Balance Sheet Leverage	Gross Interest-Bearing Liabilities/Tangible equity Fitch defines tangible equity as equity less goodwill and other intangibles. In making balance sheet leverage calculations for investment managers, Fitch typically focuses on the unconsolidated balance sheet to exclude the effects of non- recourse assets and liabilities.	Complementary	√	√
Net Balance Sheet Leverage	(Gross Interest-Bearing Liabilities - Cash and Equivalents)/Tangible Equity	Complementary	✓	✓
iquidity Ratios				
nterest Coverage	(F)EBITDA, with Adjustments for Significant Noncash and/or Nonrecurring Items/Interest Expense	Core	√	√
iquid Asset Debt Coverage	(Cash + liquid investments)/Gross interest-bearing liabilities	Complementary	✓	✓
Asset Debt Coverage	(Cash + Liquid Investments + Balance Sheet Co-Investments)/ Gross Interest-Bearing Liabilities	Complementary	✓	✓
iquid Coverage of Co-	(Cash + Liquid Securities)/			
nvestment Commitments	Uncalled Co-Investment Commitments	Complementary	✓	✓
iquid Assets	(Cash + Liquid Assets)/Total Assets	Complementary	✓	✓
Payout Ratio	Distributions/Cash Earnings	Complementary	√	

Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. Source: Fitch Ratings.



Investment Company and Investment Fund Ratios

		Core or	Investment	Open-End Investment	Other Investment
Metric	Definition	Complementary	Companies	Funds	Funds
Asset Quality/Performance Ra	tios				
Portfolio Credit Risk Profile	Weighted Average Credit Quality of Investments/ Portfolio Companies	Complementary	✓		
Earnings and Profitability Rati	os				
Return on Average Assets	Net Income/Average Assets	Core	✓	✓	✓
Return on Average Equity	Net Income/Average Equity	Complementary	✓	✓	✓
Capitalization and Leverage Ra	atios	-	•		
Balance Sheet Leverage	Gross Debt/Tangible Equity or Total Interest-Bearing Liabilities/Net Asset Value	Core	✓		√
Gross Leverage	(Gross Long Investment Positions + Gross Short Positions)/Net Asset Value	Core		✓	
Funding, Liquidity and Coverage	ge Ratios	-		-	•
Cash and Unencumbered Securities Coverage	(Cash + Unpledged Assets)/Unsecured Debt	Core		✓	√
Interest Coverage	One year's upstream dividend and interest income (or EBITDA) coverage of one year's holdcooperating interest expense	Core	√		
Operating Expense Coverage ^a	One year's upstream dividend and interest income (or EBITDA) coverage of two years' holdco operating expenses, interest expense and dividends	Core	√		
Illiquid Assets	Total Illiquid Assets/Net Asset Value	Complementary	-	✓	

^aFor investment companies that are privately held and do not have stated dividend policies, Fitch will likely remove holding company dividends from the denominator of this ratio. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer.

Source: Fitch Ratings.



Business Development Company Ratios

Metric	Definition	Core or Complementary
Asset Quality Ratios		
Net Portfolio Gains (Losses)	Net Realized Gains/Average Portfolio, at Value	Core
Non-Accruals, at Cost	Non-Accruals/Portfolio, at Cost	Complementary
Non-Accruals, at Fair Value	Non-Accruals/Portfolio, at Fair Value	Complementary
Net Portfolio Valuation Marks	Net Unrealized Appreciation (Depreciation)/Beginning Portfolio, at Cost	Complementary
Portfolio Concentrations	Top 10 Portfolio Investments, at Value/Equity	Complementary
Earnings and Profitability Ratios		
Net Investment Income Yield	Net Investment Income/Average Portfolio, at Cost	Core
Investment Income Yield	Investment Income/Average Portfolio, at Cost	Complementary
Operating Efficiency	Non-Interest and Non-Incentive Expenses/Average Portfolio, at Cost	Complementary
Compensation Ratio	Compensation/Average Portfolio, at Cost	Complementary
Return on Average Assets	Net Income/Average Assets	Complementary
Capitalization and Leverage Ratios		
Asset Coverage Cushion ^a	(Total Assets - Total Liabilities Excluding Regulatory Debt - [Par Value of Regulatory Debt x Asset Coverage Requirement])/ (Total Assets - Total Liabilities Excluding Regulatory Debt)	Core
Leverage	Interest-Bearing Liabilities/Tangible Equity	Complementary
Asset Coverage Ratio ^a	(Total Assets - Toal Liabilities Excluding Regulatory Debt)/Regulatory Debt	Complementary
Sensitivity to Leverage Cap	(Equity - Interest Bearing Liabilities)/Portfolio, at Value	Complementary
Funding and Liquidity Ratios		
Funding Mix	Unsecured Debt/Total Debt	Core
Interest Coverage	EBITDA/Interest Expense	Complementary
Cash Earnings Coverage of Dividend	(Net Investment Income - Non-Cash Earnings + Non-Cash Expenses)/ Dividends Declared	Complementary
Earnings Coverage of Dividend	Net Investment Income/Dividends Declared	Complementary
Non-Cash Income ^b	Non-Cash Income/Interest and Dividend Income	Complementary

^aRegulatory debt is defined as term corporate debt excluding Small Business Administration borrowings. ^bAdjusted for non-cash earnings received in cash, where available. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. Source: Fitch Ratings.



Finance and Leasing Company Ratios

Metric	Definition	Core or Complementary	Consumer and Commercial Finance	Leasing	Financial Services
Asset Quality Ratios		-		-	*
Impaired and Non-Performing Ratio	Loans or leases Where Income has Either Stopped Accruing, Loan has Been Restructured, or the Receivable is Deemed Otherwise Impaired/Period-End Loans or Leases	Core ^a	✓	✓	✓
Impairment to Capital Ratio	(Impaired Loans and Leases – Loan Loss Allowances)/ Tangible Equity	Complementary	✓	✓	✓
Net Chargeoff Rate	(Gross Principal Losses - Recoveries)/ Average Loans During the Period	Complementary	✓	✓	✓
Reserve Coverage of Impaired Loans	Allowances for Impairments/Impaired Loans and Leases	Complementary	✓	✓	✓
Residual Gain (Loss) Rate	Gain or Loss on Sale of Residual Vehicles and Equipment/ Depreciated Value of the Assets Sold	Complementary		✓	
Earnings and Profitability Rat	tios				
Pre-Tax Return on Average Assets	Reported Pre-Tax Net Income/Average Assets	Core ^a	✓	✓	✓
EBITDA Margin	Earnings Before Interest, Taxes, Depreciation and Amortization/Revenues with adjustments for significant non-cash items Fitch may make adjustments to its EBITDA calculation to exclude depreciation expense if it is believed to be a recurring operating expense and no significant change in leased asset levels is expected. However, in that case, Fitch would look to add back proceeds from the sale of leased assets to its calculation of cash flow, as it would likely be deemed a significant source of debt repayment.	Core ^b	√	√	~
Pre-Tax Return on Average Equity	Reported Pre-Tax Net Income/Average Equity	Complementary	✓	✓	✓
Pre-Tax Income Margin	Pre-Tax Operating Income/Total Revenues	Complementary	✓	✓	✓
Operating Expense Ratio	Operating Expenses/Total Net Revenues	Complementary	✓	✓	✓
Depreciation Expense Ratio	Depreciation Expenses/Total Revenues	Complementary		✓	
Residual Value Gain (Loss) Contribution	Gain or Loss on Sale of Residual Vehicles and Equipment/Reported Pre-Tax Net Income	Complementary		✓	
Capitalization and Leverage R	tatios				
Tangible Balance Sheet Leverage	(Reported Debt + Debt Portion of Hybrid Capital)/(Total Shareholders' Equity - Goodwill - Intangibles - deferred tax assets related to net operating losses brought forward (if available and at a minimum value of zero), otherwise net deferred tax assets in its entirety (at a minimum value of zero) - Non-Controlling Interests ^d + Equity Portion of Hybrid Capital)	Core ^a	√	√	√
Cash Flow Leverage	Total Debt/Earnings Before Interest, Taxes, Depreciation and Amortization (see EBITDA definition above	Core ^b	✓	√	√

^aApplicable for finance and leasing companies with high balance sheet usage. Where disclosed under IFRS 9, impaired loans will be loans classified as being at 'stage 3'. For leasing companies, asset quality ratios are calculated as impairments on leased assets plus incurred losses on the sale of leased assets /total leased assets. With respect to equipment lessors, Fitch will not exclude maintenance right assets and lease premiums from tangible equity if these balance sheet items are believed to contain sufficient economic value to support creditors. ^bApplicable for finance and leasing companies with low balance sheet usage. ^cApplicable to bank-licensed finance and leasing companies only. ⁴Non-controlling interests are excluded unless believed to exhibit loss absorption capacity. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. *Continued on next page.*Source: Fitch Ratings.



Finance and Leasing Company Ratios (Continued)

Metric	Definition	Core or Complementary	Consumer and Commercial Finance	Leasing	Financial Services
Funding and Liquidity		-		-	•
Unsecured Debt Usage	Debt Unsecured by Corporate Assets/ Total Interest-Bearing Liabilities	Core	✓	√	√
Interest Coverage	Earnings Before Interest, Taxes, Depreciation and Amortization/Interest Expense	Core ^b	✓	✓	√
Total Short-Term Funding Reliance	(Short-Term Debt + Current Portion of Long-Term Debt)/ Total Interest-Bearing Liabilities	Complementary	✓	✓	✓
Unencumbered Asset Coverage	Amount of Assets Free and Clear of Any Encumbrance/ Unsecured Debt	Complementary	✓	✓	✓
Payout Ratio	Dividends/Reported Net Income	Complementary	✓	✓	✓

^aApplicable for finance and leasing companies with high balance sheet usage. Where disclosed under IFRS 9, impaired loans will be loans classified as being at 'stage 3'. For leasing companies, asset quality ratios are calculated as impairments on leased assets plus incurred losses on the sale of leased assets /total leased assets. With respect to equipment lessors, Fitch will not exclude maintenance right assets and lease premiums from tangible equity if these balance sheet items are believed to contain sufficient economic value to support creditors. ^bApplicable for finance and leasing companies with low balance sheet usage. ^cApplicable to bank-licensed finance and leasing companies only. ^dNon-controlling interests are excluded unless believed to exhibit loss absorption capacity. Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer.

Source: Fitch Ratings.

Financial Market Infrastructure Company Ratios

Ratio	Definitions	Core or Complementary	Exchanges	Clearing Houses	CSDs Without Banking License
Capitalization and Leverage				-	-
Gross Debt/EBITDA	Gross debt divided by EBITDA, with adjustments for significant non-cash items such as non-cash compensation	Core	√	√	√
Free Cash Flow/Gross Debt	Net cash provided by operations less capital expenditures and dividends divided by gross debt	Complementary	✓	✓	✓
Gross Debt/Tangible Equity	Gross debt divided by tangible equity	Complementary		✓	-
Funding, Liquidity and Coverage				-	-
EBITDA/Interest Expense	EBITDA with adjustments for significant non-cash items as a multiple of interest expense	Core	✓	✓	√
Unrestricted Cash and Marketable (Investments) Securities/Short-Term Debt	Unrestricted cash and marketable (investment) securities divided by short-term debt	Complementary		✓	
Earnings and Profitability				-	-
EBITDA Margin	EBITDA with adjustments for significant non-cash items as a percentage of total revenue	Core	✓	√	✓
Rate per Contract	Revenue divided by contract volume	Complementary	✓	✓	-
Capital Expenditure/Revenues	Capital expenditures divided by total revenues	Complementary	✓	✓	✓
Capital Expenditure/Depreciation and Amortization	Capital expenditures divided by depreciation and amortization	Complementary	✓	✓	√

Note: If/when additional ratios are considered material on an issuer-specific basis, such ratios will be articulated in the accompanying Rating Action Commentary for such issuer. Source: Fitch Ratings.



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