

Chailease 2019 Securitization Special Purpose Trust

New Issue

December 11, 2019

Primary Credit Analyst

Caroline Shih

Taipei

+886-2-8722-5859

caroline.shih

@taiwanratings.com.tw

caroline.shih

@spglobal.com

Secondary Credit Analyst

Joe Lin

Taipei

+886-2-8722-5856

joe.lin

@taiwanratings.com.tw

joe.lin

@spglobal.com



中環信用評等
Taiwan Ratings

An **S&P Global** Company

rrs.taiwanratings.com.tw

New Issue: Chailease 2019 Securitization Special Purpose Trust

Contents

- 1 Rationale
- 2 Strength And Weaknesses
- 3 Notable Features
- 4 Transaction Structure
- 5 Asset Segregation And Issuer's Bankruptcy Remoteness
- 6 Note Terms And Conditions
- 7 Priority Of Payments
- 8 Originator/Servicer Overview
- 9 Collateral Eligibility Criteria Of Receivables
- 11 Commingling Risk
- 12 Set-Off Risk
- 13 Counterparty Risk With Respect To The Bank Account Provider
- 14 Counterparty Risk With Respect To The Servicer
- 15 Liquidity Support
- 16 Interest-Rate Risk
- 17 Credit And Cash-Flow Analysis
- 18 Sensitivity Analysis
- 19 Related Criteria And Research

Ratings As of Dec. 11, 2019

Class	Rating	Amount (NT\$)	Minimum credit support (%)*	Credit support provided by subordination (%)
A	twAAA (sf)	3,840,000,000	27.80	27.96
B	twA (sf)	445,000,000	19.60	19.61
C	NR	1,045,148,781	N/A	N/A

NT\$--New Taiwan dollar, N/A--Not applicable, NR--Not rated. *Minimum credit support only reflects estimated losses arising from obligors' default and does not reflect the results of cash-flow analyses.

Profile | [Download](#)

Profile

Closing Date:	December 11, 2019
Final Maturity Date:	December 11, 2026
Collateral:	New Taiwan dollar denominated lease, instalment, and collateralized lending receivables
Structure type:	Lease, instalment, collateralized lending receivables-backed securities with revolving feature
Issuer:	Land Bank of Taiwan as trustee for Chailease 2019 Securitization Special Purpose Trust (the SPT)
Servicer:	Chailease Finance Co. Ltd. (Chailease)
Primary credit enhancement:	Note subordination

Supporting Ratings | [Download](#)

Supporting Ratings

Bank account provider:	Land Bank Of Taiwan
-------------------------------	---------------------

Initial Receivable Pool Statistics | [Download](#)

Receivable Pool Statistics As Of Nov. 30 2019

Total number of contracts	751
Total receivables balance of contracts (NT\$)	5,330,148,781
Total receivables balance of lease contracts (NT\$)	256,663,599
Total receivables balance of installment contracts (NT\$)	4,555,642,026
Total receivables balance of collateralized lending contracts (NT\$)	517,843,156
Maximum receivables balance of contracts (NT\$)	43,008,639
Average receivables balance of contracts (NT\$)	7,097,402
Weighted average interest rate (%)	7.69
Weighted-average contract seasoning (months)	11.10
Weighted-average remaining term to maturity (months)	22.15

Rationale

We assigned our 'twAAA (sf)' rating and 'twA (sf)' rating to the Class A notes and B notes (together 'the notes'), respectively, issued by Land Bank Of Taiwan as trustee of **Chailease 2019 Securitization Special Purpose Trust** (Chailease 2019 Securitization SPT; issuer). The notes are supported by a pool of New Taiwan dollar-denominated (NT\$) lease, instalment, and collateralized lending receivables (receivables) originated by Chailease Finance Co. Ltd. (Chailease). The ratings assigned by Taiwan Ratings Corp. to the notes reflect the likelihood of the issuer to pay interest in full on time and to repay principal no later than the legal final maturity date, according to the terms and conditions of the notes. The ratings reflect the following factors.

The credit risk associated with the underlying collateral portfolio and the credit support available under the Class A notes and B notes are commensurate with our view of credit risk under 'twAAA' and 'twA' rating stress. Our assessment of credit risk also takes into account Chailease's (as the originator and servicer in this transaction) underwriting policy, foreclosure process, business strategy, recent historical performance of the underlying receivables, as well as transaction structure, including but not limited to, the amortization triggers, revolving period, and eligibility criteria of receivables that the SPT can invest in.

The credit support for the Class A notes comprises the subordination of the Class B notes and the Class C notes, while credit support for the Class B notes includes the subordination of the Class C notes only. Any losses on the collateral pool will be absorbed by the Class C notes first, followed by the Class B notes, then the Class A notes. In addition, upon the occurrence of any trust enforcement event, like reaching transaction legal maturity, the transaction can use any balance remaining in the cash reserve amount to repay the notes, providing additional credit support for the transaction. We also consider the potential recovery from the margin principals provided by the underlying obligors.

In our view, the transaction's cash flows can meet the timely payment of interest and ultimate payment of principal to the rated notes by the legal maturity date under stresses commensurate with the ratings assigned. Our rating stresses consider the scenarios including, but not limited to, the assumed default rate and recovery rate under the respective rating scenarios, stressed prepayment speed, stressed fees and expenses, as well as different default patterns.

The timely payment of senior expenses/fees and the rated note coupon is first supported by the use of interest, and then if needed, principal collections from the underlying pool of receivables (i.e. principal draw), and lastly an initial cash reserve equal to 0.23% of the initial note issuance amount which will be amortized by factors like the rated note balance that may be gradually redeemed over the transaction life, based on the pre-determined formula stipulated in the transaction document. The timely payment of senior expenses/fees is also underpinned by the additional cash reserve that the transaction will also set aside from the underlying interest collection during the transaction life if the revolving period ceases.

The transaction has counterparty exposure to Land Bank of Taiwan (twAA/Stable/twA-1+) as a bank account provider. The rating on the bank account provider, coupled with the replacement trigger of the bank account provider if the rating on it falls below a certain level, is consistent with our counterparty criteria to support a 'twAAA' rating on the notes. The rating requirement and replacement language of the eligible investment in transaction documents is akin to the risk as bank account provider, in our view and is also able to support the transaction.

The operational risk of this transaction, particularly Chailease acting as the servicer, is consistent with our operational risk criteria to support a 'twAAA' rating. Our assessment is mainly underpinned by the

New Issue: Chailease 2019 Securitization Special Purpose Trust

transaction's documented provisions regarding servicer termination and replacement, as well as Chailease's franchise value, market position, and experience.

The legal structure of the trust, established as an SPT under the Taiwan Financial Asset Securitization Act, and the transaction structure and terms, reflects our criteria for asset isolation and insolvency remoteness.

Strengths And Weaknesses

Strengths

In Taiwan Ratings Corp.'s opinion, the strengths of the transaction as assessed by our rating analysis are:

- Long operating history of the originator. Chailease has been operating as the leading company in the leasing market in Taiwan for more than four decades and the underlying receivables supporting this transaction are mature products that Chailease has offered to the market for many years. Additionally, the static pool data provided to us has clean payment records that not only cover the originator's recent performance but also during periods of credit downturns in Taiwan (i.e. a long track record).
- Diversified pool. The transaction is backed by the receivables mostly from the small and medium-sized enterprises (SMEs) and each obligor may just stand for a small portion of the total outstanding balance. Based on the initial pool as of November 30, 2019, there are 751 underlying receivable contracts and the maximum receivable represents 0.81% out of the total pool balance. The eligibility criteria stipulated in the transaction documents states that the maximum receivable shall be no higher than 1% out of the total portfolio balance, which also lowers the obligor concentration risk, in our view.
- The experience of the servicer. Chailease has been serving a number of transactions that it originated since 2007 and has accumulated sufficient experience of serving the underlying receivables, particularly in terms of the foreclosure processes toward the defaulted obligors.

Weaknesses

In our opinion, the weaknesses of the transaction and the corresponding mitigants identified through our rating analysis are:

- Potential deterioration of the underlying asset credit quality during the revolving period. The overall credit quality of the underlying receivables may be adversely affected because during the revolving period principal collections may be used to invest in new receivables transferred by Chailease. However, the transaction documents include asset eligibility criteria intended to prevent the pool's credit quality from materially deteriorating during such period. Also the transaction will cease purchasing new receivables from Chailease, and enter the amortization period during which all principal collections from the receivables will be used to pay down the issued notes, if the transaction breaches its amortization triggers; for example, the performance of the underlying receivables deteriorates beyond certain levels.
- Complex recovery sources of the defaulted receivables. The underlying receivables may be secured by different types of collateral, including but not limited to real estate, automobiles, funding targets, and margin principal. The value of such non-standard collateral and the recovery period could be volatile when liquidating, which is subject to the economic condition and respective collateral liquidity. This makes them much more uncertain than other standard collateral. With this, our rating analysis only considers the recoveries from margin principal and excludes potential recoveries from other non-standard collateral, although all of them will be transferred to the SPT and may provide additional support to the transaction if realized.
- Potential payment mismatch between the asset and liability side. The mismatch may occur as the eligibility criteria permit up to 20% of the collateral pool not making payments on a monthly basis, but the payment frequency on the rated notes is monthly. The potential payment mismatch is first

New Issue: Chailease 2019 Securitization Special Purpose Trust

mitigated by the relatively high yields of underlying receivables, then principal collections to meet the shortfall (if any) of senior fees, expenses and rated interest payments, and lastly the liquidity reserve. Taiwan Ratings has conducted a cash flow analysis to evaluate the cash flow adequacy under respective ratings scenarios.

- Commingling risk. This will arise if the servicer fails to remit any payments received from underlying obligors to the SPT. We believe the transaction arrangement largely prevents the occurrence of commingling risk because the underlying obligors will commit their debt service through issuing a set of post-dated checks when the receivables are originated. The post-dated checks will be transferred to the SPT along with the transfer of receivables and their securities interests. If however, the servicer receives payments or recovery amounts from an obligor and fails to transfer such amounts to the SPT within the predetermined period and the unremitted amounts exceed NT\$ 5 million, this would trigger the transaction's amortization.

Notable Features

According to Chailease's underwriting policy, it may require the obligors to provide margin principal as a further payment protection on the receivables. If the obligors comply with the receivable contracts and make all scheduled payments on time, Chailease is required to return the margin principal to the obligors, together with interest on the margin principal as agreed between the obligors and Chailease, when the receivables mature.

In the transaction, all respective collateral, including margin principal, together with the receivables, will be transferred to the SPT. The trustee will then invest the margin principal in consecutive bank time deposits per the transaction documents so that the SPT can meet its interest obligations on the aforementioned margin principal when receivables are fully repaid.

The transaction also sets aside certain amounts of reserves to mitigate potential shortfalls if the deposit interest is insufficient to cover the agreed interest obligations on the margin principal. If there is still a shortfall in the agreed interest obligations after exhausting these reserves, the shortage can be covered by the interest waterfall, ranked junior to rated note interest. Taiwan Ratings has assessed the arrangement of the margin principal investment and the time deposit rate in our analysis, which we believe are able to support the transaction.

Transaction Structure

This is the sixth asset-backed securitization transaction collateralized by receivables that Chailease has originated. At transaction close, the originator will transfer assets, composed of lease, instalment, and collateralized lending receivables, to the SPT, along with their related legal rights and interests with aggregate amount of about NT\$5.3 billion. At the same time, the SPT will issue three classes of trust certificates to fund the transfer. Class A and Class B notes will be publicly offered, while Class C will be held by the originator and shall not be transferred to other parties, according to the trust agreement.

The transaction has a revolving period up to three years after transaction close, followed by an amortization period of about two years. During the revolving period, principal repayments from the receivables will be used to purchase additional eligible lease, instalment, and collateralized lending receivables each month. Upon the occurrence of any early amortization triggers or after the scheduled end of the revolving period (whichever happens earlier), repayments from the receivables will be used to redeem the notes on a sequential basis. The documented early amortization triggers include some collateral performance measures such as cumulative default rate, delinquency ratio and excess spread ratio, as well as performance of the servicer and trustee.

The receivables consist of payment commitments made by obligors in relation to lease, instalment, and collateralized lending contracts, based on the underlying funding targets such as equipment,

New Issue: Chailease 2019 Securitization Special Purpose Trust

machinery, and raw materials. To be specific, lease receivables generally relate to the funding of equipment or machinery, and instalment receivables to raw materials or inventories. Collateralized lending, on the other hand, relates to funding without any specific funding target. For certain receivables, obligors may be requested to provide additional collateral to provide more protection to Chailease. In these cases, collateral may constitute several forms including but not limited to margin principal, real estate, and chattel. The receivables, ownership of their respective funding targets, and all collateral securing the receivables will be transferred to the SPT. The receivable contracts will govern the payment on a monthly basis or other payment terms as agreed between an obligor and Chailease.

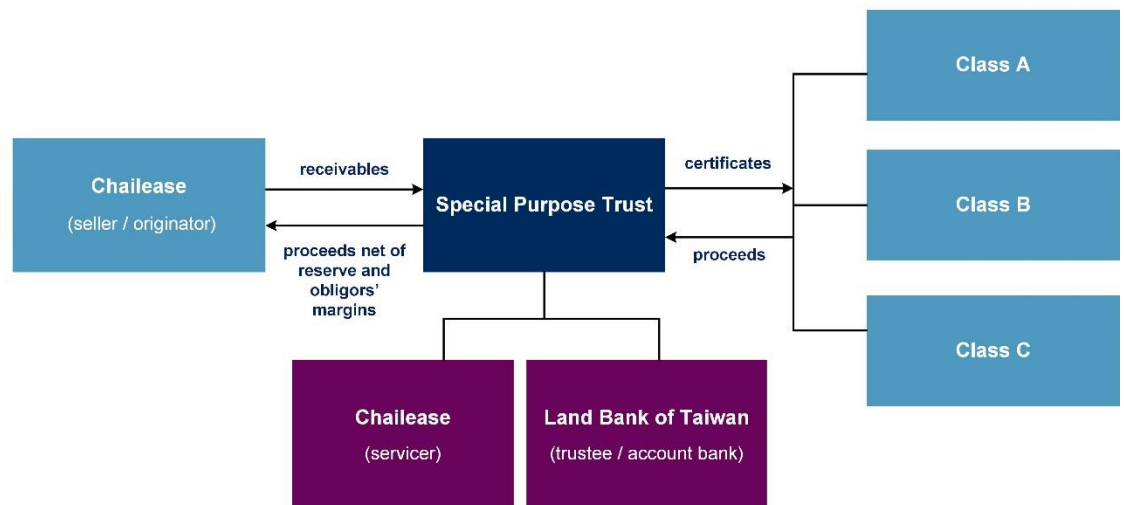
All obligors have to make the scheduled payment in the form of post-dated checks and are required to issue a set of post-dated checks for the life of the receivable to Chailease when entering into the contract. All the post-dated checks will be transferred to the SPT under the title of the trust and will be collected when due.

In addition to the payments made under the receivable contract, the SPT is also entitled to receive money from the disposal of the underlying funding targets as well as collateral.

The receivables transferred to the SPT must comply with the documented eligibility criteria, including but not limited to certain credit quality satisfying the specific internal scores of the originator, specific payment frequency, minimum-required yield, weighted average remaining tenor, and highest concentration of obligors. If a receivable does not comply with the criteria but is transferred, the originator has the obligation to purchase it back from the SPT and needs to bear the related cost.

Chart 1 | [Download](#)

Transaction Structure



Copyright © 2019 by Taiwan Ratings Corp. All rights reserved.

Asset Segregation And Issuer's Bankruptcy Remoteness

The transaction is structured in accordance with the Financial Asset Securitization Act of Taiwan, which provides for the establishment of the bankruptcy-remote SPT, the legally perfected transfer of assets from the originator to the SPT, and the protection of the transferred assets from the originator's creditors' and third parties' claims. This, together with the legal and accounting opinions, supports our view that the asset's true sale and issuer's bankruptcy remoteness in this transaction reflect our special-purpose entity criteria.

Note Terms And Conditions

Interest payment structure

The Class A and B notes will be issued at par at transaction close and carry fixed-rate coupons payable every month in arrears. Interest payments on the Class A notes rank in priority to interest payments on the Class B notes and Class C notes. Interest payments on the Class B notes rank in priority to interest payments on the Class C notes. The Class C notes have no stated coupon and will receive interest payments only after Class A and Class B notes' interest payments are fully met. Interest paid on each class of notes will be calculated based on the outstanding principal, which is the initial principal reduced by cumulative principal repayments on previous payment dates.

The interest payments on the rated notes are supported by the money in the interest collection account, composed of interest payments from the underlying receivables, and interest received from eligible investment of the idle cash of the SPT after satisfying related tax items, senior fees, and expenses. Principal collections and the liquidity reserve are also available to cover any shortage of rated interest payments when due.

Principal payment structure

The transaction has a revolving period and amortization period. During the revolving period, the trustee will use the principal collections, including but not limited to ordinary principal repayment from the underlying obligors, principal recovery amounts from defaulted receivables, originator's buy-back proceeds, and funding targets' insurance proceeds, if any, to purchase new eligible receivables from Chailease. No principal collections will be used to repay the note holders during this period.

During the amortization period, the transaction will adopt a pass-through approach to distribute the principal collections as defined above to repay the Class A and B notes every month on a sequential basis. The Class C notes will receive principal payments only after Class A and Class B notes' principal is fully repaid.

If there is any principal collection amount used to cover the shortfall, if any, of the senior fees, expenses and rated note interest payments during the transaction life, such amounts will be replenished afterward by the interest collection amounts after satisfying certain financial obligations (from related tax items, senior fees and expenses and rated notes' interest payments).

Clean-up call

The originator has a clean-up call option to purchase the underlying receivables from the trust if the aggregate balance of the Class A and Class B notes is 10% or less of their initial aggregate note balance. The originator may exercise its clean-up call option only if the clean-up call price for the receivable will be sufficient to repay in full the rated notes' principal and interest, as well as all fees and expenses of the trust. Upon the originator's exercise of its clean-up call option, the notes will be redeemed and repaid in full and the trust will be liquidated.

Priority Of Payments

The transaction has one interest and two separate principal cash-flow priority of payments before a trust enforcement event, as well as one combined interest and principal cash-flow priority of payment after a trust enforcement event.

The interest waterfall is summarized in table 1. Under this waterfall, the interest payment for the Class A and B notes are on a sequential basis. In most cases, the excess spread, if any, will not be accumulated in the transaction account but will simply go to Class C note holders, unless the loss rate is higher than 19.61% (slightly higher than the minimum credit support level for Class B notes), where the excess spread might be used to pay down the Class A and B notes on a sequential basis, which would accelerate the payment speed of the notes. However, due to the position of this payment in the cash flow waterfall, whereby it ranks below items we cannot size, Taiwan Ratings has not included this feature in its cash flow analysis.

Table 1 | [Download](#)

Priority Of Payment (Summarized)	
1	Taxes - to pay any taxes of the trust due under Taiwan laws that have not been paid, if any
2	Regulatory examination fee, if any, OTC and custody fee on a pari passu basis
3	Senior fees and expenses up to the capped amount
4	Class A interest
5	Class B interest
6	Replenish principal draw
7	Top up cash reserve to the minimum-required level
8	Set aside additional reserve to certain amount if revolving termination event occurs
9	Top up interest and reserve on Margin Principal Account and Interest On Margin Principal Account, if needed
10	Senior fees and expenses not covered in item 3
11	Other indemnities, costs, and expenses
12	Servicer fee
13	If the loss ratio is equal to or lower than 19.61%, the excess spread, if any, can distribute to Class C. Otherwise, the excess spread shall be deemed as the income source of principal waterfall to pay down the rated notes on a sequential basis.

Before the occurrence of a trust enforcement event, which principal waterfall applies depends on whether the transaction is in the revolving or amortization period.

During the revolving period, principal collections will not be used to pay down the notes. Instead, the transaction will use these principal collections to purchase new receivables from the originator. If there are insufficient eligible receivables to purchase, the excess principal collections will remain in the trust account. This principal waterfall is shown in table 2.

Table 2 | [Download](#)

Priority Of Payment (Summarized)	
1	Cover the shortfall in interest waterfall from items 1 to 5 (i.e. principal draw)
2	Purchase new receivables from the originator
3	Balance maintained in the trust account (i.e. idle cash)

New Issue: Chailease 2019 Securitization Special Purpose Trust

During the amortization period, the other principal waterfall will be applied, as indicated in table 3. During this period, principal collections from the underlying collateral pool will no longer be used to purchase new receivables. Instead, the transaction will use these principal collections to pay down the rated notes on a sequential basis. Principal collections can still be used to cover the shortfall, if any, in the interest waterfall from items 1 to 5, providing additional liquidity support to the transaction.

Table 3 | [Download](#)

Priority Of Payment (Summarized)	
1	Cover the shortfall in interest waterfall from item 1 to 5 (i.e. principal draw)
2	Class A principal
3	Class B principal
4	Cover the unpaid amount in the interest waterfall items 9 to 12
5	Class C principal
6	Class C holder, if any

Originator/Servicer Overview

Chailease was established in 1977, and has been the largest leasing company in Taiwan with a market share consistently above 40% over the past four decades. The company provides a variety of financing services including leasing, instalment receivables, collateralized lending and account receivable factoring in Taiwan. Most of its clients are small and mid-size enterprises (SMEs). The company had total assets of NT\$137.8 billion as of Dec. 31, 2018 and held about 47% of Taiwan's lease and instalment financing sectors in terms of contract amount in 2018.

The potential competition for the originator's core business is the SME loans from banks in Taiwan. However, the characteristics of SME loans in banks are quite different from those receivables in Chailease. The key distinction feature is that the SME loans originated by banks are usually qualified for support from the "Small and Medium Business Credit Guarantee Fund of Taiwan (Taiwan SMEG)" that is partially guaranteed by the Taiwan government. Taiwan SMEG will not provide any guarantee for receivables originated by Chailease.

Chailease is currently fully owned by Chailease Holding Co. (total assets and equity are about NT\$400.3 billion and NT\$64 billion, respectively, as of Dec. 31, 2018) The holding company has been listed on Taiwan Stock Market Exchange (TWSE) since Dec. 13, 2011, and also owns other subsidiaries with a long operating history in various markets including U.S.A., Thailand, and Vietnam. Beginning in 2009, the China-based subsidiary, Chailease International Finance Corp., has been growing significantly in China. These two companies, namely Chailease (focusing on Taiwan) and Chailease International (focusing on China) have become the core earning generators for the holding company. All of the subsidiaries, and particularly for Chailease and Chailease International, have a close relationship and share the same resources in terms of risk management, underwriting policies, and staff/managers despite being separate entities from a legal perspective. The entrusted assets backing this transaction are all originated by Chailease.

Collateral

The underlying pool backing this transaction can be composed of three different types of receivables; namely, lease, instalment, and collateralized lending with different repayment frequency. About 99% of the underlying receivables are scheduled to repay their principal and interest on a monthly basis, according to the initial pool cut.

New Issue: Chailease 2019 Securitization Special Purpose Trust

The initial collateral pool contains 751 receivable contracts originated by Chailease and the aggregate outstanding principal balance is about NT\$5.3 billion as of November 30, 2019. The composition of the underlying pool may change during the revolving period because the transaction can use principal collections to purchase new receivables from the originator during this period. Despite this, all receivables must comply with the eligibility criteria of receivables stipulated in the transaction documents.

Given the nature of the revolving period may lead to significant changes in the underlying pool compared with the initial pool, we based our analysis on the eligibility criteria of the receivables rather than the initial pool to construct the most stressful representation lines of the underlying receivables so as to test whether or not the rated notes can pass the cash flow tests under the respective rating scenarios.

Eligibility Criteria Of Receivables

The representations and warranties made by Chailease in respect of the receivables on every trust settlement day during the revolving period are defined as:

1. All receivables comply with the local regulations and are fully entitled to the originator.
2. All receivables are legally existing and follow the credit policy of the originator.
3. The originator's internal scores for the borrowers are ranged from R1 to R6.
4. There is no contract dispute between the originator and the borrowers.
5. The originator is the only creditor for the receivables.
6. The originator is the only owner for the funding targets.
7. All payments of the receivables are denominated in New Taiwan dollars.
8. The interest and principal repayment are in the form of post-dated checks.
9. The outstanding amount of collateralized lending cannot be higher than 10% of the total portfolio balance.
10. The outstanding amount of lease receivables cannot be higher than 10% of the total portfolio balance.
11. The receivables whose repayment method (inclusive of interest and principal) is on a monthly basis cannot be lower than 80% of the total portfolio balance.
12. The interest rates for all receivables are fixed and shall not be less than 4.0% annually.
13. The receivable contracts shall clearly define the repayment method except for the delinquency interest and penalty payment.
14. The tenor of receivables should not exceed 60 months after the issue day of the securitization.
15. There is no delinquent history record of underlying obligors before transferring to the SPT.
16. Repayment of principal and interest shall comply with local accounting rules.
17. The receivable contract states no restriction for transferring receivables, and receivables can be transferred without consent from the obligors.
18. Receivables are never restructured before transferring to the SPT.
19. The weighted average tenors of instalment, lease, and collateralized lending shall not exceed 27, 28, and 15 months, respectively.
20. Aircraft and vessels are ineligible funding targets.
21. The borrowers are required to be eligible obligors.
22. The collaterals of the receivables cannot include post-dated checks of other companies, time deposits, or stocks.
23. The receivables are not generated by the originator's micro-enterprises department or heavy-duty vehicle business sector.
24. The principal balance of each obligor should be less than 1% of the total portfolio balance.
25. The originator has issued all the up-front uniform invoices relating to the underlying receivable.
26. If the receivables are guaranteed, the guarantor shall either sign on the same receivable contract or the letter of guarantee should be explicitly connected to the receivable contract.

New Issue: Chailease 2019 Securitization Special Purpose Trust

If any of the transferred receivables does not comply with the eligibility criteria of receivables, the originator is required to purchase back the asset in the amount of remaining outstanding principal, accrual interest, penalty and related costs.

Commingling Risk

Commingling risk in the transaction is mitigated. This is because when a receivable is initially extended, the obligor will issue a set of post-dated checks to cover all payments during the life of the receivable contract. The trust will be entitled to these checks after the receivable is transferred to the SPT, and the checks will be sent out for collection from the trust account when due. Under this arrangement, it is highly unlikely the collections from the assets will be commingled with the servicer's own money. If for some reason the servicer receives a payment or recovery amount from a receivable and fails to transfer such amounts to the SPT up to NT\$5 million within the predetermined period, this would trigger the transaction's amortization.

Set-Off Risk

We believe there is limited set-off risk for cash deposits in this transaction because Chailease is not an authorized deposit-taking institution in Taiwan. In addition, the documented eligibility criteria for the receivables include that there is no set-off ability in the contracts between the originator and the borrowers.

Counterparty Risk With Respect To The Bank Account Provider

The counterparty risk in this transaction includes the reliance on the account bank, Land Bank of Taiwan, for cash holding and distribution, and the performance of eligible investments in which the trustee temporarily places unused cash and margin principal. After our assessment of the ratings on Land Bank of Taiwan at the time we assigned the ratings for this transaction, the required rating levels for replacement, and the minimum ratings of eligible investments, we believe there is sufficient support for a 'twAAA' rating on this transaction.

Counterparty Risk With Respect To The Servicer

According to the transaction documents, Chailease cannot resign from its role as the initial servicer, but can be replaced if a servicer termination event occurs. Potential servicer termination events include but are not limited to the servicer becoming insolvent, if the servicer fails to remit collections up to NT\$5 million to the issuer after three business days when due, or if the servicer could not remedy a breach of a material covenant that has a material adverse effect on the note holders. If any servicer termination event happens, a note-holder meeting will be held to determine whether to replace the initial servicer. If there is no successor from the market to be the servicer, Land Bank of Taiwan will be the successor servicer for this transaction according to the transaction documents.

All receivable payments in this transaction will be collected through post-dated checks of borrowers (i.e. the SPT will collect the money directly) rather than by other more demanding collection processes. This will minimize the impact to the transaction when the servicers cannot continue its obligations under the transaction documents, reduce the workload of the servicer, and make it easier to find a replacement. Taiwan Ratings has also factored into its analysis a potential increase in servicer fees should a replacement servicer require a higher return. Additionally, the transaction includes a liquidity reserve that is funded upon transaction close and could be used to cover about two months of transaction expenses and rated note interest if asset collections are temporarily unavailable to meet the transaction obligations. In our view, this will allow the transaction sufficient time to find a new servicer and resume asset collections.

Liquidity Support

In the case that the underlying interest collection is not sufficient to satisfy the timely payment of senior expenses and rated note interest, this shortfall is first supported by the use of principal collections (i.e. principal draw), and then, if still insufficient, covered by a liquidity reserve funded at transaction close by Chailease, roughly equal to 0.23% of the initial receivables balance.

The liquidity reserve is amortized per transaction arrangement. If the amount in the liquidity reserve account is higher than the minimum required reserve amount in each payment date, the surplus of this reserve will be returned to the originator. If however the liquidity reserve amount is lower than the minimum required reserve amount in each payment date, it will be topped up by excess spread, if any.

On each payment date, the trustee may use principal collection to cover any shortfall in tax, senior fees/expenses, and interest due to the Class A and Class B notes. If however principal collections are insufficient to cover such a shortfall, the trustee will draw funds in the liquidity reserve account to enhance the liquidity support.

When the transaction enters the amortization period, the SPT will also set aside some additional reserve amount from the excess spread, if any. The purpose of this arrangement is to mitigate the risk that the decreasing collection from the gradually-amortizing underlying assets may not be sufficient to cover the fixed senior fees and expenses during the amortization period. Such amount is not amortized and will not be topped up once the amount reaches the reserve target per the transaction documents.

Upon a trust enforcement event, for example the maturity of the transaction, any balance remaining in these liquidity reserves will be used as one of the payment sources for the notes, creating another source of credit support.

Interest-Rate Risk

The collateralized receivables carry fixed interest rates, and the interest rate is fixed on the Class A and Class B notes. As a result, there is no interest rate mismatch risk in this transaction.

Credit And Cash-Flow Analysis

Taiwan Ratings considers a significant performance deterioration of the underlying receivables under the respective rating scenarios to be the primary factor affecting rating transition in this transaction. We have therefore applied our "Global Equipment ABS Methodology And Assumptions" criteria (see related criteria and research) to the credit risk analyses of this transaction.

Independent portfolio data check report

An agreed-upon procedure is used for the independent data check report conducted by an external party mandated by the issuer. Information provided to us for ratings analyses has been reviewed per this procedure. According to the transaction documents, the mandated accounting firm randomly selected the samples from all information provided by Chailease to conduct certain audit checks, including but not limited to whether the related-receivable documents exist, any inconsistency between documents and data occurs, and whether the entrusted assets meet the eligibility criteria of receivables. As a rating agency, we do not conduct separate due diligence checks on the data or information received.

Historical performance data

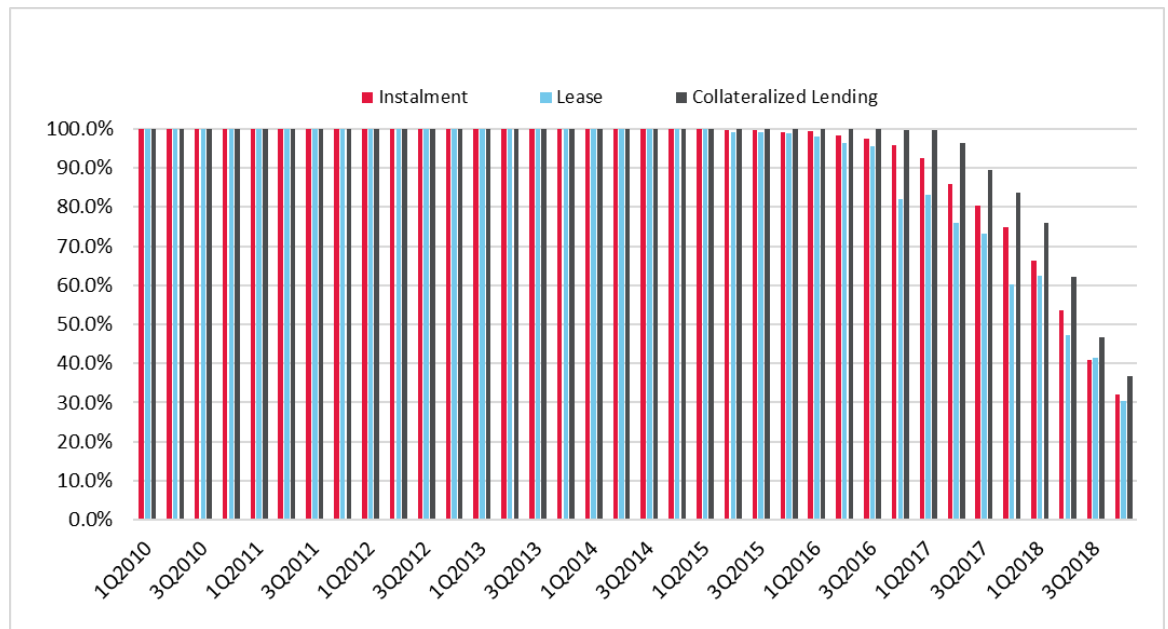
We received the following historical performance data for lease, instalment, and collateralized lending receivables originated by Chailease. The static pool data provided to us has clean payment records that not only cover the recent performance but also credit downturns in Taiwan (i.e. have a long track record). However, we focused more on the performance data from January 2010 to December 2018 because we believe it is more representative, particularly in terms of the business strategy and underwriting policy.

- Static pool data grouped by product type and origination month including detailed origination amounts, repayments every month, and delinquency track every month. The data included vintage performance data from January 2006 to December 2018.
- Recovery data grouped by product type and defaulting month including detailed defaulting amount, recovery amount and source of recovery every month. The data spanned from January 2006 to December 2018.

The pay-out ratios for lease, instalment and collateralized lending receivables for each vintage are depicted in Chart 2.

Chart 2 | [Download](#)

Chailease Receivable Vintage Payout Ratio



In our credit-risk analysis regarding the gross default rate, we assumed all receivables overdue by more than one day would be deemed to be in default, and used this classification to determine the base-case default frequency for each of the underlying receivable types. Although Chailease does not set specific delinquency dates for the recognition of receivable defaults and losses, the company will generally commence foreclosure processes toward defaulted obligors if their receivables are overdue by more than one day. However, this foreclosure process is sometimes subject to a case-by-case determination and Chailease in some cases may agree to restructure the receivables in view of certain factors, including but not limited to the obligor's industry prospects, the result of on-site review, or collateral that the obligors can further provide.

In our credit-risk analysis regarding the recovery rate, we assumed margin principal (secured cash provided by obligors) as the only reliable recovery source for the defaulted receivables. This is because other recovery sources are generally non-standard collateral or funding targets, and their collateral

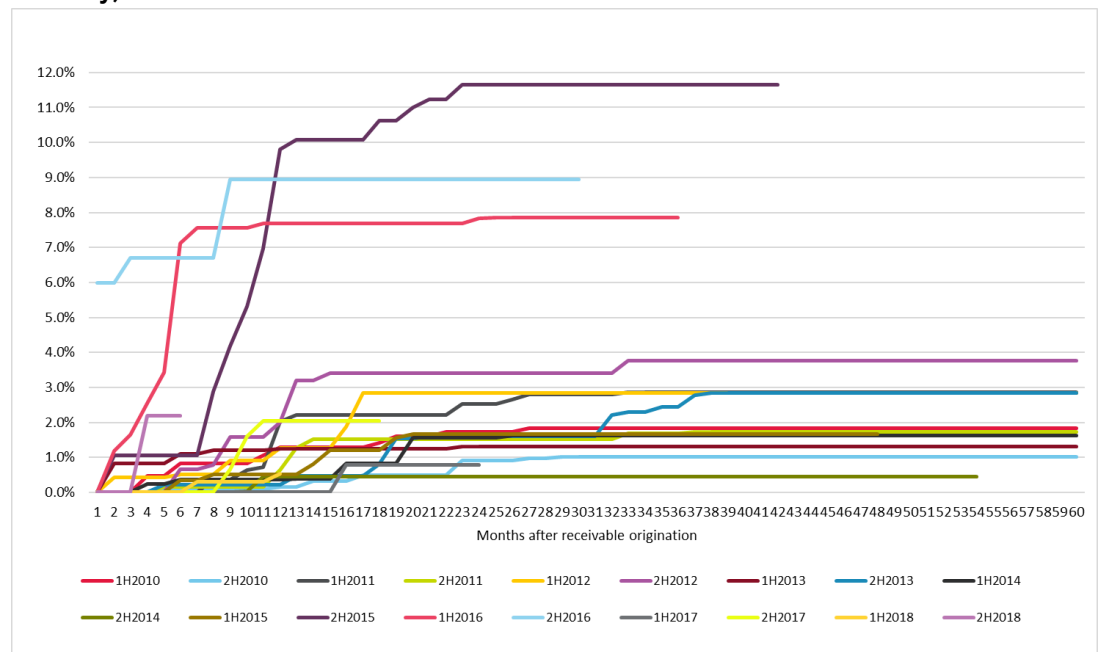
New Issue: Chailease 2019 Securitization Special Purpose Trust

value could be volatile upon liquidation subject to different economic conditions. However, such non-standard collateral and funding targets may provide additional support to the transaction if realized. We determined the pool base-case default rate and loss rate based on the worst case portfolio combination per the documented eligibility criteria, by assuming that the pool will be composed of 90% instalment and 10% lease receivables. These two asset types are the more volatile receivable types based on our analysis of the historical performance of the product types, product nature, and underwriting policy.

Charts 3, 4, and 5 as well as Table 4 illustrate the cumulative default experience and historical recovery rate performances of Chailease's receivable portfolio based on our assumptions of deemed default and recovery rate observed from January 2010 to December 2018.

Chart 3 | [Download](#)

Lease: Gross Default Rate Historical Performance (Receivable Delinquent For More Than One Day)



New Issue: Chailease 2019 Securitization Special Purpose Trust

Chart 4 | [Download](#)

Instalment: Gross Default Rate Historical Performance (Receivable Delinquent For More Than One Day)

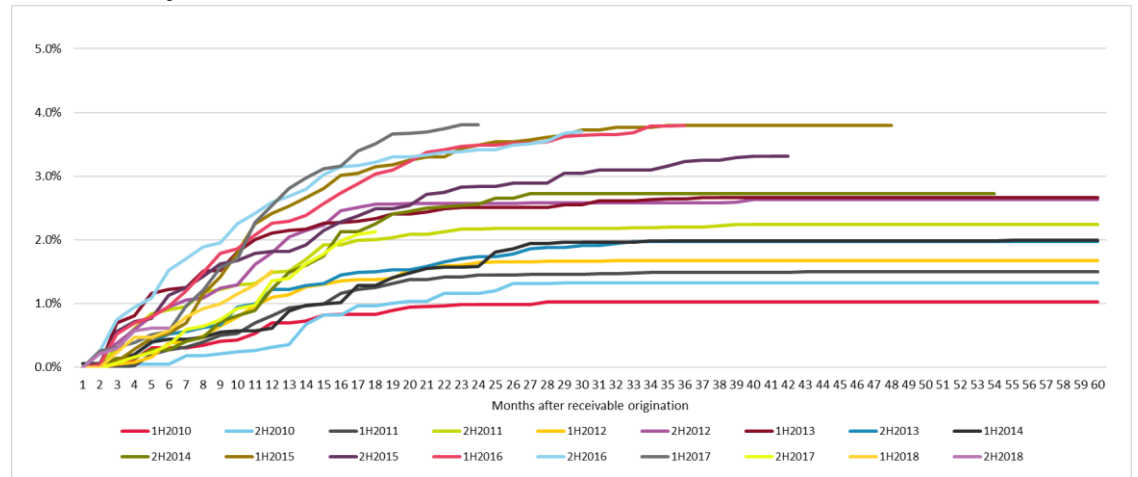


Chart 5 | [Download](#)

Collateralized Lending: Gross Default Rate Historical Performance (Receivable Delinquent For More Than One Day)

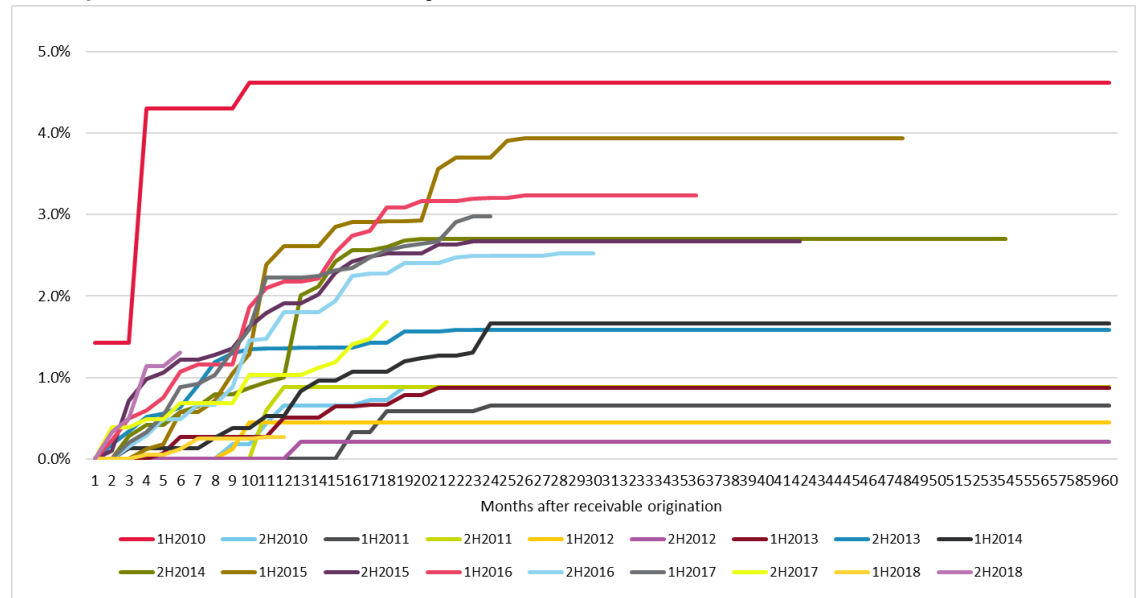


Table 4 | [Download](#)

Historical Recovery Rate Performance		
Product Type	Recovery rate by margin principal	Recovery rate by other non-standard collaterals and funding targets
Lease	16.0%	45.3%
Instalment	17.5%	40.7%
Collateralized lending	11.0%	52.0%

Base-case assumptions and stressed default and loss

Our base-case default assumption for the collateral pool is 6.55%, based on Chailease's business plan in the coming future, the historical performance for each of the three product types observed in the static pools and the worst-case portfolio combination backing the notes per the transaction's eligibility criteria of receivables investment.

We applied respective stress multiples of 4 times and 2.5 times to the base-case default percentage (6.55%) in the 'twAAA' and 'twA' rating scenarios, and the rating level default assumption would therefore be 26.2% and 16.4% respectively. The magnitude of the stress multiple that we applied reflects the notes' respective rating levels that mainly consider Chailease's underwriting policy, transaction structure particularly the length of the revolving period, and the performances of the past five transactions originated by Chailease.

Our base-case recovery assumption for the collateral pool is 17.0%, based on our analysis of how reliable the recovery sources are for these product types. In this assumption, we only consider the recovery amount from the margin principal, and do not factor in other recovery sources. Since margin principal is cash deposited under SPT accounts, we do not apply any haircuts to the base-case recovery assumption. Therefore the rating level recovery assumption will be 17.0% for both 'twAAA' and 'twA' rating scenarios.

We assume the transaction will enter the amortization period upon transaction close due to the occurrence of 6% cumulative net loss of the underlying assets, which is one of the triggers to cease the revolving period.

Our net loss assumptions during the amortization period under the 'twAAA' and 'twA' rating scenarios are 21.8% and 13.6%, respectively, considering our rating level default and recovery assumptions. The total net loss assumption during the transaction life under the 'twAAA' and 'twA' rating scenarios are 27.8% and 19.6%, respectively, with the aforementioned 6% net loss assumption.

The large obligor default assumption per our criteria is not applicable in this transaction. We generally only incorporate this assumption if a single-obligor concentration exceeds about 1.5% of the total pool balance. In this transaction, the eligibility criteria only allow 1% as the maximum threshold for the underlying individual receivable.

The supplemental largest obligor default test per our criteria is also not applicable in this transaction because the default under such a test is lower than that based on the base-case default rate times stress multiples under the respective rating scenarios.

New Issue: Chailease 2019 Securitization Special Purpose Trust

Table 5 shows our credit assessment summary for this transaction.

Table 5 | [Download](#)

Credit Assessment Summary		
	twAAA	twA
Revolving period: net loss (%) (a)	6	6
Amortization period: base-case default frequency (%) (b)	6.55	6.55
Amortization period: stress multiple used (X) (c)	4	2.5
Amortization period: rating level default frequency (%) (d=b*c)	26.2	16.4
Amortization period: rating level recovery rate (%) (e)	17.0	17.0
Amortization period: minimum credit support after credit to recovery (%) [(f=d*(100%-e)]	21.8	13.6
Transaction life: minimum credit support after credit to recovery (%) (g=a+f)	27.8	19.6

The credit enhancement provided for the Class A and Class B notes in this transaction is 27.96%, and 19.61%, respectively. Both levels exceed the minimum credit enhancement levels per our criteria, where for example 'twAAA' rated notes may need 3.5% for the minimum credit enhancement level as a percentage of current balance and 1.75% for the minimum hard credit enhancement level as a percent of current balance.

Cash-flow analysis

We analyzed the capacity of the transaction's cash flows to support the rated notes--i.e., timely interest payments and repayment of principal by the legal maturity date--by running several different scenarios correlated with a 'twAAA' rating level for Class A notes as well as a 'twA' rating level for Class B notes. Our cash-flow analysis included various scenarios that reflect different combinations of the following factors:

- Level of defaults and recoveries commensurate with the rating levels.
- Various default amount and default timing distribution.
- Recovery period (assumed to be three months).
- 4% fixed-rate yield of underlying receivables (i.e. the minimum required yield based on eligibility criteria in the transaction documents).
- Stressed fees and expenses.
- Different prepayment rates.

To evaluate the effect on cash flow of various pool default amounts and default timing distributions, we modeled three different default curves: a front-loaded, back-loaded, and normal default curve. The curves we employed primarily reflected the default timing that we observed from Chailease's historical static default curves.

For the prepayment rates, we modeled three different prepayment curves. The prepayment stresses assumed include voluntary and involuntary (default) prepayments (see table 6). The high and low constant prepayment rate (CPR) is based on the adjustment on historical average CPR rate (i.e. Normal CPR).

New Issue: Chailease 2019 Securitization Special Purpose Trust

Table 6 | [Download](#)

CPR Assumption			
Months from transaction close	Normal CPR (% per year)	High CPR (% per year)	Low CPR (% per year)
1	10.0	15.0	2.0
2	10.0	15.0	2.0
3	10.0	15.0	2.0
4	10.0	15.0	2.0
5	10.0	15.0	2.0
6	10.0	15.0	2.0
7	10.0	15.0	2.0
8+	10.0	15.0	2.0

The transaction can pass all of the scenarios that we analyzed in our cash-flow adequacy tests. Some of the noteworthy features of the transaction cash flows are as follows:

- The balance remaining in the liquidity reserve account on the maturity date will be deemed as one of the payment sources to redeem Class A notes and then Class B notes. This arrangement provides additional support to the transaction, and we factor in this into our cash flow analysis.
- According to the transaction arrangement, the servicer fee will not be ranked senior unless the servicer replacement occurs, and the trustee is required to perform the role of the servicer until successor servicer of the transaction takes over. However, we assume the servicer replacement will occur upon transaction close and also stress the servicer fee to the level in which we believe it will accelerate the transition period of such replacement so as to test if there is any impact on the transaction's cash flow adequacy.
- We assume the interest yield of the underlying receivables to be only 4.0%, which is just enough to meet the eligibility criteria. However, the average yield of the past few transactions originated by Chailease over the past 10 years has generally and consistently been higher than 7.0%. This may provide some support to the transaction if this relatively high yield continues in this transaction.
- Under the scenario in which the majority of receivable defaults occurring late in the transaction's life--the back-loaded default pattern--and a high receivable prepayment rate, our cash-flow analysis indicates that the transaction will use the principal draw to cover the shortfall of the senior fees and expenses as well as rated interest due to insufficient underlying interest collection. However, the principal leakage as a result of the principal draw can be mitigated by the liquidity reserve amounts upon the transaction maturity. Despite that, the expected cash flow at the later stage of the transaction life will reduce further than in other scenarios, and the cash flow buffer will hence decrease significantly.

We analyzed the effect of an immediate moderate macroeconomic stress on the transaction to determine whether the maximum expected rating transition of the notes under such a scenario would be in line with those set out in our "Credit Stability Criteria" (see related criteria and research). The results of our analysis suggest that under a moderate rating stress scenario, the maximum expected rating transition on the Class A notes and Class B notes would still fall within the bounds of those outlined in the criteria.

Sensitivity Analysis

In our cash flow modeling, we also consider two additional scenarios to determine how vulnerable the notes would be to a downgrade under each scenario:

- Scenario 1: Rating level default frequency is 25% higher than our assumed base-case default rate of 6.55% (i.e. 8.19%) .
- Scenario 2: Rating level recovery rate are only 75% of our rating level recovery assumption of 17% (i.e. 13.00%) .

Table 7 sets out the rating level that each class of notes would be under in each scenario.

Table 7 | [Download](#)

Rating Transition		
Scenario	Class A notes	Class B notes
Expected	twAAA (sf)	twA (sf)
Scenario 1	twAA- (sf)	twBBB+ (sf)
Scenario 2	twAA+ (sf)	twA- (sf)

Related Criteria

- Criteria | Structured Finance | ABS: Global Equipment ABS Methodology And Assumptions, May 31, 2019
- Criteria - Structured Finance - General: Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019
- Understanding Taiwan Ratings' Rating Definitions, www.taiwanratings.com –June 26, 2018
- Methodology For National And Regional Scale Credit Ratings, June 25, 2018
- Methodology For Linking Long-Term And Short-Term Ratings, April 07, 2017
- Legal Criteria: Structured Finance: Asset Isolation And Special-Purpose Entity Methodology, March 29, 2017
- Criteria - Structured Finance - General: Global Framework For Assessing Operational Risk In Structured Finance Transactions, October 9, 2014
- Criteria - Structured Finance - General: Global Framework For Cash Flow Analysis Of Structured Finance Securities, October 9, 2014
- General Criteria: Global Investment Criteria For Temporary Investments In Transaction Accounts, May 31, 2012
- General Criteria: Methodology: Credit Stability Criteria, May 3, 2010

Related Research

- Asia Pacific Quarterly: Confidence Is Shaken But Policy Is Stirred, October 1, 2019
- Global Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, December 16, 2016

(Unless otherwise stated, these articles are published on www.standardandpoors.com, access to which requires a registered account)

New Issue: Chailease 2019 Securitization Special Purpose Trust

Copyright © 2019 by Taiwan Ratings Corporation (TRC). All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of TRC. The Content shall not be used for any unlawful or unauthorized purposes. TRC and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively TRC Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. TRC Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. TRC DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall TRC be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. TRC's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. TRC assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. TRC does not act as a fiduciary or an investment advisor except where registered as such. While TRC has obtained information from sources it believes to be reliable, TRC does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, TRC reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. TRC disclaims any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

TRC keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of TRC may have information that is not available to other TRC business units. TRC has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

TRC receives compensation for its solicited ratings and certain analyses, normally from issuers, originators, arrangers, or underwriters of securities or from obligors. TRC reserves the right to disseminate its opinions and analyses. TRC's public ratings and analyses are made available on its Web sites, www.taiwanratings.com (free of charge), and rrs.taiwanratings.com.tw (subscription), and may be distributed through other means, including via TRC publications and third-party redistributors. Please click [here](#) for any other conflict of interests that may affect the credit rating as requested by the regulator.