

# Rating Research Services

# **New Issue:**

# **Chailease 2016 Securitization Special Purpose Trust**

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# **Chailease 2016 Securitization Special Purpose Trust**

# **Profile**

Ratings				
	Rating	Amount (NT\$)	Credit enhancement	Legal final maturity
Class A	twAAA (sf)	3,750,000,000	24.60%	2023/8/24
Class B	twA (sf)	343,200,000	17.70%	2023/8/24
Class C	Unrated	880,589,481		

NT\$-New Taiwan dollar.

Profile	
Closing Date:	August 24, 2016
Expected Maturity Date:	August 24, 2019 ~ August 24, 2021
Collateral:	New Taiwan dollar denominated lease, instalment, and collaterlized lending receivables
Structure type:	ABS Revolving Commercial Assets - ABS Lease
Issuer:	Land Bank of Taiwan as trustee for Chailease 2016 Securitization Special Purpose Trust (the SPT)
Servicer:	Chailease Finance Co. Ltd. (Chailease)
Primary credit enhancement:	Note subordination and overcollateralization

# **Supporting Ratings**

Bank account provider: Land Bank Of Taiwan

Receivable Pool Statistics As Of July 31, 2016		
Total number of contracts	746	
Total receivables balance of contracts (New Taiwan Dollar)	4,973,789,481	
Total receivables balance of lease contracts (New Taiwan Dollar)	330,345,428	
Total receivables balance of installment contracts (New Taiwan Dollar)	4,183,449,205	
Total receivables balance of collalteralized lending contracts (New Taiwan Dollar)	459,994,848	
Maximum receivables balance of contracts (New Taiwan Dollar)	35,293,491	
Average receivables balance of contracts (New Taiwan Dollar)	6,667,278	
Weighted average interest rate (%)	8.66%	
Weighted-average contract seasoning (months)	6.52	
Weighted-average remaining term to maturity (months)	24.83	

# **Rationale**

The Class A and Class B trust beneficiary certificates (together 'the notes') issued through **Chailease 2016 Securitization Special Purpose Trust** (Chailease 2016 Securitization SPT) are supported by a pool of New Taiwan dollar-denominated (NT\$) lease, instalment, and collateralized lending receivables (receivables) originated by 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. Our ratings reflect our opinions of:

- The credit quality and historical performance of the underlying receivables, in view of the originator's underwriting policy, business strategy, and eligibility criteria of receivables that the SPT can invest in as stipulated in the transaction documents;
- The liquidity reserve set aside at deal closing to cover the shortfall, if any, of taxes, senior fees, expenses and rated interest payments, particularly during the servicer transition period;
- The embedded amortization triggers that will result in the repayment of rated notes on a sequential basis if the underlying asset performances deteriorate beyond certain levels;
- The size of the cash reserve to cover shortfalls on interests to be paid to receivables obligors for the margin principals that they deposit upon receivables origination;
- The payment structure that provides timely rated interests payment every month and ultimate principal payments to rated notes by the legal final maturity date;
- The rating requirement and replacement language on the account bank and eligible investment in transaction documents; and
- The legal framework of the transaction and provisions under related Taiwan laws.

# **Strengths And Weaknesses**

# **Strengths**

In Taiwan Ratings' opinion, the strengths of the transaction observed in the rating analysis are:

- The asset pool comprises receivables with clean payment records and a certain level of creditworthiness under Chailease's internal scoring system.
- Chailease is an experienced servicer, in our opinion, and has been in the lease and instalment industry for more than three decades.

#### Weaknesses

In Taiwan Ratings' opinion, the weaknesses of the transaction and the corresponding mitigants observed in the rating analysis are:

• The overall credit quality of the underlying receivables may be adversely affected because of the new receivables transferred from the originator during the revolving period. The transaction has the predetermined eligibility criteria of receivables stipulated in the transaction documents, which aims to keep the pool's credit quality from deteriorating after the new assets are transferred to the SPT. In addition, the transaction's amortization will be triggered if the performance of underlying receivables deteriorates beyond certain levels. In that circumstance, the transaction will stop investing in new receivables and principal collections from the

- receivables will be used to pay down the issued notes.
- Non-standard collaterals and funding targets may result in uncertainty in the
  recovery periods and recovery levels of defaulted receivables. Our rating analysis
  only considers the recoveries from margin principals and excludes potential
  recoveries from other non-standard collaterals and funding targets, despite the fact
  that all of them will be transferred to the SPT.
- The underlying pool may be concentrated on certain industries or certain groups, raising its vulnerability to event risk or industry risk. The risk of potential asset concentration is reflected in our assumptions of pool losses and stress multiples under respective rating scenarios. Additionally, the eligibility criteria of receivables also set forth certain concentration limits for the underlying receivables' obligors.
- There could be a payment mismatch between the asset side and liability side of the SPT, because the underlying receivables pool allows up to 20% of the receivables not making payments on a monthly basis but the payment frequency on the rated notes is monthly. The potential payment mismatch is mitigated by the relatively high yields of underlying receivables, principal collections to meet the shortfall, if any, of senior fees, expenses and rated interest payments, as well as the liquidity reserve. Taiwan Ratings has conducted a cash flow analysis to evaluate the cash flow adequacy under respective ratings scenarios.
- Commingling risk will arise if the servicer fails to remit any payments received from receivables obligors to the SPT. We believe the transaction arrangement largely prevents the occurrence of commingling risk because the receivables obligors will commit their debt service through issuing a set of post-dated checks when the lease, instalment, and collateralized lending receivables are originated. The post-dated checks will be transferred to the SPT along with the transfer of receivables. If however the servicer receives the payment or recovery amount from an obligor and fails to transfer such amounts within the predetermined period to the SPT up to a certain level, this would trigger the transaction's amortization.

#### **Notable Features**

When Chailease extends credits to obligors, they may be required to deposit margin principals to Chailease as further payment protection on the receivables. If the obligors comply with the receivable contracts and make all scheduled payments on time, Chailease has to return the margin principals to the obligors, together with interests as agreed between obligors and Chailease, when the receivables mature.

When receivables are transferred to the SPT, the respective margin principals will also be transferred to the SPT. The trustee will then invest the margin principals on consecutive bank time deposits per the transaction documents, so that the SPT can have sufficient deposit interests for the interest obligations on the aforementioned margin principals when receivables are fully repaid.

The transaction also sets aside certain amounts of reserves to mitigate potential shortfalls if the deposit interests are insufficient to cover the agreed interest obligations on the margin principals. 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 the rated interests. Taiwan Ratings assessed the arrangement of the margin principal investment and the stressed interests the principal can earn in our cash flow analyses.

# **Transaction Structure**

This is the fifth asset-backed securitization transaction collateralized by receivables that Chailease has originated. At deal closing, 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 value of about NT\$4.97billion. At the same time the SPT will issue three classes of trust certificates to fund the transfer. Class A and Class B certificates will be publicly offered, while Class C will be held by the originator.

The transaction has a revolving period up to three years after the deal closing, 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 every 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 issued notes on a sequential basis. The early amortization triggers include some general performance measures such as cumulative default rate, delinquency ratio, excess spread ratio, and performance of the servicer and trustee, according to the transaction documents.

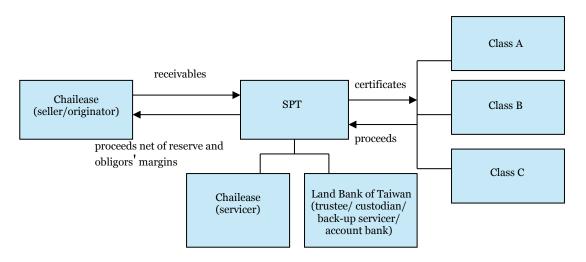
The receivables consist of payment commitments made by obligors in relation to lease, instalment, and collateralized lending contracts, based on the underlying funding targets as equipment, machinery, and raw materials that Chailease assists to fund. To be more specific, lease receivables generally relate to funding on equipment or machinery, instalment receivables to raw materials or inventories. Collateralized lending, on the other hand, does not relate to a specific funding target. For certain receivables, obligors may be requested to provide additional collaterals to provide more protection to the creditor. In these cases, collaterals 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 collaterals supporting 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 prepayments from the obligors and proceeds from the disposal of the underlying funding targets as well as collaterals.

The receivables transferred to the SPT must comply with the eligibility criteria of receivables, including but not limited to certain credit quality, specific payment frequency, minimum-required yield, weighted average remaining tenor, and highest concentration of obligors, as stipulated in the transaction documents. If a receivable does not comply with the criteria but is transferred, the originator has the obligation to buy it back from the SPT.

Chart 1: Transaction Structure | Download



# **Asset Segregation And Issuer's Bankruptcy Remoteness**

The transaction is structured in accordance with the Financial Asset Securitization Law 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, makes us believe the asset true sale and issuer's bankruptcy remoteness in this transaction reflect our special-purpose entity criteria.

#### **Note Terms And Conditions**

# **Interest Payments**

The Class A and B notes will be issued at par at deal closing and carry fixed-rate coupons payable every month in arrears.

The interest payments of the rated notes are supported by the money in the interest collections, composed of interest payments from underlying receivables, and interests received from eligible investment of the idle cash of the SPT after satisfying related tax items, senior fees and expenses. The principal collection and liquidity reserve are both 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 in this period.

During the amortization period, the transaction will adopt the pass-through approach to distribute the principal collections as defined above to repay the Class A and B note holders every month on a sequential basis.

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

# Clean-up call

The originator has a "clean-up call" option to purchase the underlying receivables from the trust if the balance of Class A notes and Class B notes is 10% or less of their initial note balance amount. 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 early termination event, as well as one combined interest and principal cash-flow priority of payment after early termination 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 for Class C holders. However, if the loss rate is higher than 17.7%, the excess spread will be used to pay down the Class A and B notes on a sequential basis and therefore will accelerate the payment speed of the notes.

# 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 side addititional reseve to certain amount if revolving termination evernt occurs
- 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
  - If the loss ratio is lower or equal than 17.7%, 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 an early termination event, one of the two principal waterfalls will apply depending on whether the transaction is in the revolving or amortization period. During the revolving period, the principal collection will not be used to pay down the rated notes. Instead, the transaction will use these principal collections to purchase new receivables from the originator during this period. If there is insufficient eligible receivables to buy, 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 item 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)

The other principal waterfall will be applied, as indicated in table 3, when the transaction enters the amortization period. During this amortization period, the principal collection from the underlying 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. The principal collection can still be used to cover the shortfall, if any, in interest waterfall from item 1 to 5, providing certain 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 interest waterfall item 9 to 12
- 5 Class C principal
- 6 Class C holder, if any

If at any time a trust termination event occurs, the combined interest and principal cash-flow priority of payment will be applied. In this waterfall, all available funds other than Reserve for Interest on Margin Principal Account will be used to make payments in the order of priority listed in table 4 (liquidity reserve will only be used to cover the shortfall for items 1 to 8 in table 4). The trust termination events are mostly related to the issuer's failure to pay the interest of the senior most class outstanding, failure to fully repay the principal of the class A and class B notes on the maturity date, illegality events of the trust, noteholders declaring to terminate the trust, or the transaction reaching legal maturity date of the trust itself.

#### Table 4 | Download

#### **Priority Of Payment (Summarized)**

- 1 Related liquidation expenses
- 2 Taxes to pay any taxes of the trust due under Taiwan laws that have not been paid, if any
- 3 Regulatory examination fee, if any, OTC and custody fee
- 4 Senior fees and expenses
- 5 Class A interest
- 6 Class A principal
- 7 Class B interest
- 8 Class B principal
- 9 Other indemnities, costs, and expenses
- Related interest and reserve to be topped up on Margin Principal Account, Interest On Margin Principal Account, and Cash Reserve Account
- 11 Servicer fee
- 12 Class C principal
- 13 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 higher than 40% over the past three 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\$ 95.1 billion as of Dec. 31, 2015 and held about 54% of Taiwan's lease and instalment financing sectors in terms of contract amount during 2015.

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

Chailease is currently fully owned by Chailease Holding Company (total asset and equity are about NT\$267.5 billion and NT\$40 billion, respectively, as of Dec. 31, 2015), listed on Taiwan Stock Market Exchange (TWSE) since Dec. 13, 2011, which also owns the other subsidiaries with long operating history in various markets including U.S.A., Thailand and Vietnam. Beginning from 2009, the China-based subsidiary, Chailease International Finance Corporation, has been growing significantly in China. These two companies, namely Chailease (focusing on Taiwan) and Chailease International Finance Corporation (focusing on China) are now the core earning generators for the holding company. All of the subsidiaries, particularly for Chailease and Chailease International Finance Corporation, have a close relationship and share the same resources in risk management, underwriting policies, and staff/managers despite the fact that they are 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.

The pool contains 746 receivable contracts originated by Chailease and the aggregate outstanding principal balance is about NT\$4.97 billion as of July 31, 2016. The collateral combination of the underlying pool may change during the revolving period because the transaction can use the principal collection to purchase new receivables from the originator during this period. Despite that, all receivables must comply with the eligibility criteria of receivables stipulated in the transaction documents.

# **Eligibility Criteria Of Receivables**

The representations and warranties made by Chailease in respect of the receivables throughout the transaction life, which is defined as follows:

- 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 payment of the receivables is denominated as New Taiwan Dollar.
- 8. The interest and principal repayment is in the form of post-dated checks.
- 9. Collateralized lending outstanding amount cannot be higher than 10% of total portfolio balance.
- 10. 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.
- 11. The interest rates for all receivables are fixed and shall not be less than 4.00% annually.
- 12. The receivable contracts shall clearly define the repayment method except for delinquency interest and penalty payment.
- 13. The tenor of receivables should not exceed 60 months after the securitization issued day.
- 14. There is no delinquent history record of underlying obligors before transferring to the SPT.
- 15. Repayment of principal and interest shall comply with local accounting rules.
- 16. The receivable contract states no restriction for transferring receivables, and receivables can be transferred without the consent from the obligors.
- 17. Receivables are never restructured before transferring to the SPT.
- 18. The weighted average tenors of instalment, lease, and collateralized lending shall not exceed 25.35, 33.34 and 18.67 months, respectively.
- 19. Aircraft and vessels are ineligible funding targets.
- 20. The borrowers are required to be eligible obligors.
- 21. The collaterals of the receivables cannot include post-dated checks of other companies, time deposits and stocks.
- 22. The receivables are not generated by the originator's micro-enterprises department or heavy-duty vehicle business sector.
- 23. The principal balance of each obligor should be lower than 1% of the total portfolio balance, except the following criteria for the largest two obligors;
  - o Each of them shall be lower than 1.2% of the total portfolio balance.
  - Each of them shall be lower than 1.5% of the total portfolio balance if the obligor is assigned 'twA' or higher rating by TRC or 'BBB' or higher by S&P Global Ratings.

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

# **Commingling Risk**

Commingling risk in the transaction is manageable. 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 whatever reasons the servicer receives the 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 no set-off risk for cash deposits in this transaction because Chailease is not an authorized deposit-taking institution in Taiwan. In addition, the eligibility criteria of receivables stipulated in the transaction documents address there is no set-off dispute 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 principals. The ratings on **Land Bank of Taiwan** (twAA/Stable/twA-1+), the required rating levels for replacement, and the minimum ratings of eligible investments, can support a 'twAAA' rated transaction, according to our criteria.

# **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. Such an event might happen if the servicer were to become insolvent, failed to remit collections up to NT\$5 million to the issuer after three business day when due, or could not remedy a breach of a material covenant that has a material adverse effect on the note holders. If any servicer termination events happen, 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 back-up servicer for this transaction according to the transaction documents.

All loan 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 prevent 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. TRC 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 deal closing and could be used to cover around two months of transaction expenses and rated note interests if asset collections are temporarily unavailable to meet the transaction obligations. The arrangement of the back-up servicer will further mitigate the aforementioned issue.

# **Liquidity Support**

In addition to the interest collection from the underlying pool, timely payment of senior expenses and rated note interest is also supported by the use of principal collections (i.e. principal draw), and a liquidity reserve funded at closing by Chailease, roughly equal to 0.3% of the initial receivables balance.

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 the excess spread.

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 collection is not able to cover such a shortfall, the trustee will draw funds in the liquidity reserve account to enhance the liquidity support. Upon deal maturity, any balance remaining in the liquidity reserve will be used as one of the payment sources for the notes, creating another source of credit support.

When the transaction enters the amortization period, the SPT will also set aside some additional reserve amount from the excess spread. The purpose of this arrangement is to mitigate the issue that the decreasing collection from the gradually-amortized underlying assets in the amortization period may not be sufficient to cover the fixed senior fees and expenses during the amortization period.

#### **Interest-Rate Risk**

The interest-rate risk in this transaction is remote because both of the asset and liability side carries the fixed interest rate.

# **Credit And Cash-Flow Analysis**

Taiwan Ratings considers a significant performance deterioration of the underlying receivables to be the principal factor affecting rating transition in this transaction. We have applied our "Equipment Leasing Criteria: Credit Risks Evaluated In Lease-Backed Securitizations" criteria, published Sept. 1, 2004, to the credit risk analyses in 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 document, the mandated accounting firm randomly selected the samples from all information provided by Chailease to conducts 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.

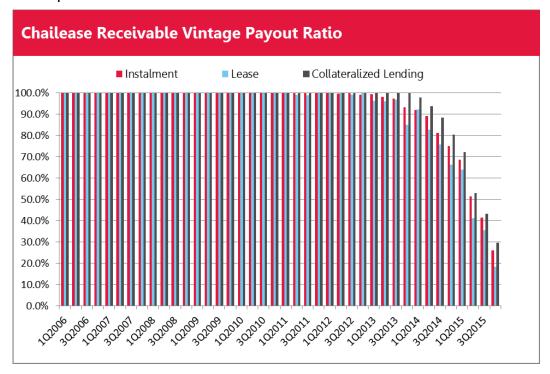
# **Historical performance data**

We received the following historical performance data for lease, instalment, and collateralized lending receivables originated by Chailease.

- 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 Jan. 2006 to Dec. 2015.
- 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 Jan. 2006 to Dec. 2015.

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

Chart 2 | Download



Although Chailease does not set specific delinquency dates for the recognition of receivable defaults and losses, the company will generally conduct the related foreclosure processes toward the defaulted obligors if their receivables are overdue 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 obligor's industry prospectus, the result of on-site review, or collateral that the obligors can further provide.

In our credit-risk analysis, we assumed all receivables overdue more than one day would be deemed as in default, and used this classification to determine the base-case default frequency for each of the underlying receivable type. We assumed margin principals (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 collaterals or funding targets, and their collateral value could be volatile upon liquidation subject to different economic conditions. The pool base-case default rate and loss rate are determined based on the worst case portfolio combination, which is per the eligibility criteria of receivables, that the pool will be entirely composed of the most volatile receivable type, which is instalment, based on our analysis of the historical performance of the product types, product nature, and underlying policy.

Charts 3, 4 and 5 as well as Table 5 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 2006 to December 2015.

Chart 3 | Download

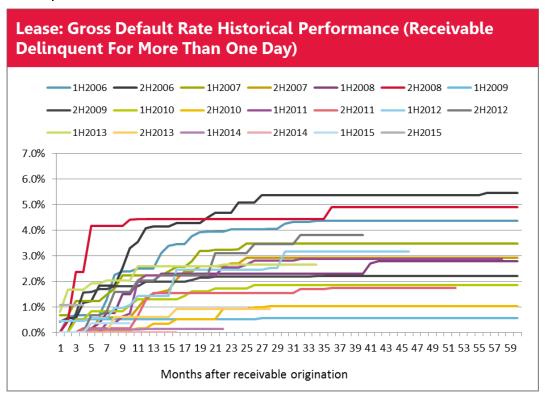


Chart 4 | Download

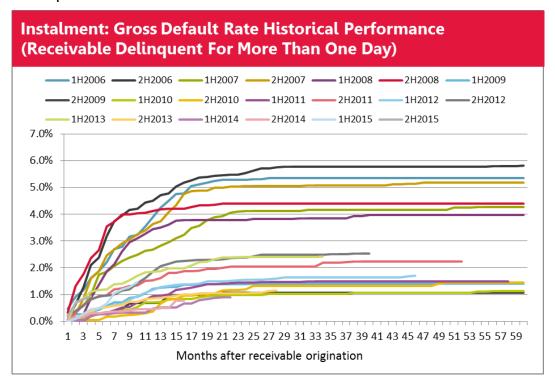


Chart 5 | Download

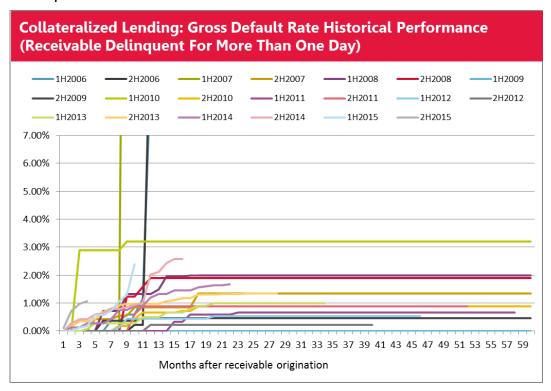


Table 5 | Download

Historical Recovery Rate Performance			
Product Type	Recovery rate by margin principal	Recovery rate by other non-standard collaterals and funding targets	
Lease	13.0%	38.6%	
Instalment	18.2%	45.9%	
Collateralized Lending	15.8%	43.9%	

#### Base-case assumptions and stressed default and loss

Our base-case default assumption for the collateral pool is 5.47%, based on 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 a stress multiple to the base-case default percentage in the 'twAAA' and 'twA' rating scenarios. The magnitude of the stress multiple that we applied reflects the notes' respective rating levels, conservative deal arrangement, the significant franchise value of the servicer/originator, the experiences of important transaction parties and the performances of the past four transactions originated by Chailease.

Our base-case recovery assumption for the collateral pool is 15.0%, 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 principals, and do not factor in other recovery source. In addition, we assume the transaction will enter into the amortization period due to the occurrence of 6% cumulative net loss of the underlying assets during the revolving period. The net loss assumptions during the amortization period under the 'twAAA' and 'twA' rating scenarios are 18.6% and 11.7%, respectively, considering our base-case default assumption, and stress multiples and loss severity under different rating scenarios. The total net loss assumption during the transaction life under the 'twAAA' and 'twA' rating scenarios are 24.6% and 17.7%, respectively, with the aforementioned 6% net loss assumption during the revolving period and the respective net loss assumptions during the amortization period.

Table 6 shows our credit assessment summary for this transaction.

Table 6 | Download

Credit Assessment Summary		
	twAAA	twA
Revolving period: net loss (%) (a)	6	6
Amortization period: base-case default frequency (%) (b)	5.47	5.47
Amortization period: stress multiple used (X) (c)	4	2.5
Amortization period: default frequency (%) (d=b*c)	21.9	13.7
Amortization period: loss severity (%) (e)	85.0	85.0
Amortization period: minimum credit support after credit to recovery (%) (f=d*e)	18.6	11.7
Transaction life: minimum credit support after credit to recovery (%) $(g=a+f)$	24.6	17.7

#### **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 of receivables 11 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 (table 7). The high and low constant prepayment rate (CPR) is based on the adjustment on historical average CPR rate (i.e. Normal CPR).

Table 7 | Download

CPR Assumption			
Months from transaction close	Normal CPR (% per year)	High CPR (% per year)	Low CPR (% per year)
1	0.0	0.0	2.0
2	4.0	4.0	2.0
3	6.0	6.0	2.0
4	8.0	8.0	2.0
5	10.0	10.0	2.0
6	10.0	12.0	2.0
7	10.0	14.0	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 source to redeem class A notes, and then class B notes. This arrangement provides additional support to the transaction.
- According to the transaction arrangement, the servicer fee will not be ranked senior unless the servicer replacement occurs. We assume the servicer replacement will occur upon deal closing and also stress the servicer fee to the level in which we believe it will accelerate the transition period of such replacement 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 4.00% only, which is just to meet the eligibility criteria of receivables 11. However, the average yield of the past four transactions originated by Chailease has generally been higher than 8.00%. This may provide some support to the transaction if this relatively high yield continues in this deal.
- The cash-flow analysis indicates that scenarios with the majority of loan defaults occurring late in the transaction's life--the back-loaded default pattern--and a high loan prepayment rate, will lower the expected excess spread in this transaction, reducing the yield available to cover credit losses. Our cash-flow analysis shows that under these scenarios, the cash flow buffer will decrease significantly.

# **Sensitivity Analysis**

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

- Scenario 1: Base-case default frequency is 25% higher than our expected level of 5.47%.
- Scenario 2: Base recovery rate are only 75% of our expected base recovery rate of 15%.

Table 8 sets out the rating level that each class of notes would be under each scenario.

Table 8 | 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)	

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# **Related Criteria And Research**

# **Related Criteria**

- Understanding Taiwan Ratings' Rating Definitions, www.taiwanratings.com November 18, 2014
- 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
- Criteria Structured Finance General: Counterparty Risk Framework Methodology And Assumptions June 25, 2013

- Legal Criteria: Asset Isolation And Special-Purpose Entity Criteria--Structured Finance -May 7, 2013
- General Criteria: Global Investment Criteria For Temporary Investments In Transaction Accounts May 31, 2012
- General Criteria: Methodology: Credit Stability Criteria May 3, 2010
- Criteria Structured Finance ABS: Equipment Leasing Criteria: Credit Risks Evaluated In Lease-Backed Securitizations September 1, 2004

#### **Related Research**

• Global Structured Finance Scenario And Sensitivity Analysis: Understanding The Effects Of Macroeconomic Factors On Credit Quality, www.globalcreditportal.com - July 2, 2014

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