VND VNIBOR

Methodology consultation



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1. Responding to this consultation

Introduction

FTSE Russell is committed to transparency when reviewing benchmark methodologies or considering material changes to its benchmarks. To that end, FTSE Russell is seeking feedback from interested parties on reforming VND VNIBOR. FTSE Russell invites comments on all proposals put forward in this paper and in particular on the specific questions in section 8. Please structure your comments to:

- Respond to the questions stated
- Contain a clear rationale that includes evidence to support the views expressed
- Describe any alternative choices that FTSE Russell should consider

Submission of responses

Please email your comments to <u>index_queries@lseg.com</u> with 'VND VNIBOR consultation' in the subject by no later than 17:00UK on 31 May 2024. Please note that comments submitted after this deadline or submitted via other means may not be processed.

Handling of responses

All responses to this consultation will be treated as confidential and will not be made public. A summary of anonymised feedback received, and decisions made may be made available in due course.

2. Introduction

Refinitiv benchmarks have been rebranded and are now part of FTSE Russell. For further details about this change, please visit https://www.lseg.com/content/dam/lseg/en_us/documents/fag/benchmark-and-indices-rebrand-fags.pdf.

FTSE Russell, a London Stock Exchange Group business, is a leading calculator and administrator of benchmarks and indices. Under the FTSE Russell group, Refinitiv Benchmark Services (UK) Limited ("RBSL") administers various interest rate benchmarks including but not limited to Saudi Arabian Interbank Offered Rate (SAIBOR), FTSE USD IBOR Cash Fallbacks (the ARRC's recommended fallback rates), Tokyo Swap Rate and FTSE Term €STR.

For the Vietnamese market, FTSE Russell produces VND VNIBOR, USD VNIBOR and VNDFIX. VND VNIBOR is the rate at which local Vietnamese banks, who are active in the Vietnamese money market are willing to lend to other banks in Vietnamese Dong (VND). USD VNIBOR is the rate at which local Vietnamese banks, who are active in the Vietnamese money market are willing to lend to other banks in US dollars (USD). VNDFIX includes VND-USD spot and forward FX rates as well as an implied interest rate benchmark based on exchanging VND into USD at the spot rate, lending at USD VNIBOR and converting back into VND using the forward FX rate. These benchmarks are calculated using contributions from a panel of banks.

Historically many interest rate benchmarks have been calculated using contributions from a panel of banks. A combination of changes in the way banks fund themselves and attempted manipulation left some benchmarks at risk of not being sufficiently representative or robust. In 2014 the Financial Stability Board (FSB) recommended strengthening existing IBORs based on unsecured bank funding costs by underpinning them to the greatest extent possible with transactions data and developing alternative, nearly risk-free reference rates, may be more appropriate for certain transactions such as derivatives. These recommendations have been implemented globally and widely used benchmarks have undergone significant changes – e.g.,

- 35 LIBOR settings representing a range of currencies and tenors ceased (or became non-representative) between the end
 of 2021 and middle of 2023 and were replaced by various risk-free rates (including term rate benchmarks) such as SOFR,
 SONIA and TONA
- In Singapore, SOR (an implied interest rate benchmark) was discontinued immediately after 30 June 2023, 6M SIBOR was discontinued on 31 March 2022 and 1M and 3M SIBOR will be discontinued immediately after 31 December 2024
- In the eurozone, EURIBOR was reformed and adopted a hybrid methodology, which included both transaction data (when available) and other related market pricing sources. Plus, the overnight risk-free rate €STR was introduced.

FTSE Russell is now reviewing the VND VNIBOR methodology with the objective of aligning it with industry best practice. This consultation seeks market participant feedback on proposals to (1) replace contributions with executed trade data, (2) cease tenors where there is no active underlying market and (3) launch new compound average overnight rates.

Overview of existing VND VNIBOR methodology

VND VNIBOR is an interbank offered rate for Vietnamese Dong (VND). A panel of local banks, who are active in the Vietnamese money market (see appendix for list of banks), contribute rates during the 10:00 to 10:50VNT collection window on each business day. Submissions should be representative of the offered rate at which deposits in VND are being quoted to prime banks in the Vietnamese interbank market at 11:00 VNT. The last submission received from each bank before close of the contribution window is taken for use in the calculation. Once the top and bottom quartiles have been disregarded (see Table 1 below), the arithmetic mean is calculated from the remaining rates and the benchmark is published at 11:00VNT in overnight, spot week, 2W, 1M, 2M, 3M, 6M, 9M and 1Y tenors.

Table 1: Discarded submissions

Submissions received	Number of submissions discarded
5 – 7	Highest 1, Lowest 1
8 – 9	Highest 2, Lowest 2
10 - 13	Highest 3, Lowest 3
14 - 17	Highest 4, Lowest 4

If fewer than five banks contribute rates during the collection window publication is delayed, and the submission window is extended for a further 30 minutes. If five or more banks have still not contributed by the end of the extended collection window, then "No Fix" is published.

VND VNIBOR is not re-fixed if an error in one or more bank contributions is identified after publication time. If a material error (i.e., +/-1bps) is identified in the calculation before 12:00VNT, the administrator will use reasonable efforts to re-calculate and republish the benchmark by 13:00 VNT. Users will be notified via an alert on the ASIAFIXREFIX page.

4. Proposed methodology enhancements to select tenors

Level 1

FTSE Russell propose to replace contributions from a panel of banks with VND deposit transactions sourced from LSEG Conversational Dealing. In due course, once liquidity migrates across, the intention is to also include LSEG Advanced Dealing. Where multiple sides of a trade are captured, only one side will be used in the benchmark calculation.

To be eligible for inclusion in the benchmark calculation transactions must meet the following criteria:

- Deal status "Confirmed"
- Confirm timestamp between 08:00 and 16:00VNT
- Volume of at least VND 50BN
- Interest accrual starts within two days after the execution date (i.e., T+0, T+1 and T+2)

Transactions are mapped to tenors based on the following convention for overnight, spot-week and two-week tenors and based on the modified following convention for one- and three-month tenors. A specified number of days (shown in Table 2 below) is added and

subtracted to the end of interest accrual period to determine a date range for each tenor mapping. Transactions that aren't mapped to one of the tenors are disregarded.

Where there are multiple similar transactions between the same counterparty on the same day, the number of eligible transaction included in the benchmark calculation is capped.

Subject to sufficient eligible transactions, the benchmark is calculated as the median of eligible transactions.

Table 2: Date ranges for tenor mapping

Tenor	Number of business days either side of end of interest accrual period
Overnight	+/- 0-days
spot-week	+/- 1-day
2-weeks	+/- 2-day
1-month	+/- 5 days
3-months	+/- 10 days

Level 2

If there are insufficient eligible transactions, the collection window is extended to include transactions from both 08:00-16:00VNT today and 08:00-16:00VNT on the previous business day. If there are sufficient transactions the median is calculated. If there are still too few transactions the collection window is extended by a further day. This process of extending the collection window continues until there are sufficient eligible transactions; subject to the collection window not exceeding 08:00-16:00VNT for a maximum of 5 business days.

Level 3

If for tenor T, there are still too few transactions after extending the collection window to the maximum of 5 business days, a spread adjustment is applied to today's publication of a reference tenor. The reference tenor is the closest tenor published today that is shorter than tenor T that is calculated using either level 1 or level 2. The spread adjustment is calculated as the difference between Tenor T and the reference tenor on the last date for which they were both calculated using either Level 1 or 2. For example, if there were too few transactions to calculate the 3-month tenor using level 1 or level 2, it would be calculating by applying a spread adjustment to the 1-month tenor for the most recent date that both the 1-month and 3-month tenors were calculated.

Level 3 will only be used to calculate an individual benchmark tenor for a maximum of 10 consecutive business days. After this, if the rate can't be calculated using levels 1 or 2, "No Fix" will be published.

The benchmark will be published at or around 16:30VNT on each business day. If following publication, a material error is identified in the input data or the determination of the benchmarks but before 17:30 VNT, FTSE Russell shall endeavour to refix the benchmark. A material error is one that results in a change of +/- 1 basis point to the published value. Any error identified after 17:30 VNT will not lead to a refix.

5. Performance of the proposed new methodology

The performance of the proposed new methodology has been back tested and compared to VND VNIBOR for the period July 2021 to June 2023. Appendix B includes charts comparing VND VNIBOR to the proposed new methodology. For all five tenors the correlation coefficient is above 97% with shorter tenors having a slightly stronger correlation. The average absolute difference between the VND VNIBOR and the proposed new methodology is between 9bps and 39 bps with higher absolute differences on longer tenors. A substantial portion of the increased difference for the 3-month tenor is due to the new methodology producing higher rates than VND VNIBOR during Q4 2022 when the market was experiencing significant stress. The elevated rates produced by the proposed new methodology are broadly consistent with VNDFIX Reference Rate (our implied VND interest rate benchmark described in section 2), which during this period also produced a higher rate than VND VNIBOR. Given the proposed new methodology is based on executed

trades and is consistent with VNDFIX Reference Rate, FTSE Russell believe the proposed new methodology may be more representative of the market than the current methodology.

Table 3: Comparison of rate calculated using existing VND VNIBOR to proposed new methodology July 2021-June 2023

Tenor	Correlation coefficient	AVG delta (%)	Standard deviation of delta (%)	AVG absolute delta (%)	Standard deviation of absolute delta (%)
O/N	99.8%	0.01	0.15	0.09	0.11
1W	99.5%	0.02	0.21	0.13	0.16
2W	99.1%	0.03	0.30	0.18	0.24
1M	99.2%	0.12	0.30	0.23	0.23
3M	97.4%	0.28	0.65	0.39	0.58

The overnight VND deposit market is very active and there is consistently sufficient trading activity to exceed the minimum number of trades. However, for longer tenors whilst trades are executed on most days, the number of trades is lower. This means its more common that level 2 of the proposed methodology is used in the back testing. When level 2 is used the average collection window is extended by between 1 and 1.54 days (i.e., a collection window of 2-2.54 days).

Whilst it is rare, there are instances where level 3 was used in November 2021, October 2022, December 2022 and in March 2023. Of the 13 instances of level 3 being used for the 3-month tenor over the back test period, there was (i) one instance of level 3 being used on a single day, (ii) three instances of Level 3 being used on two consecutive days and (iii) one instance of Level 3 being used on six consecutive days.

Table 4: Number of days VND VNIBOR is calculated using levels 1-3 of the proposed new methodology

July 2021-June 2023, Number of days (#)

Tenor	Level 1	Level 2	Level 3
O/N	500	0	0
1W	497	3	0
2W	346	153	1
1M ¹	215	283	1
3M ¹	193	293	13

^{1.} Back testing only carried out on 499 days for the 1 and 3-month tenors due to insufficient data to calculate the benchmark on 1 July 2021

Table 5: Average length of look back period where rate is calculated using Level 2

July 2021-June 2023, Number of days (#)

Tenor	Average length of look back
O/N	N/A
1W	1.00
2W	1.37
1M	1.46
3M	1.54

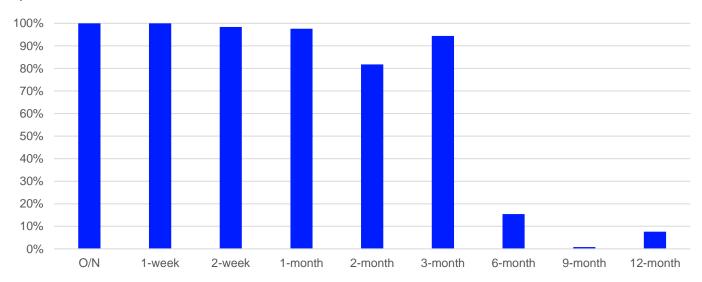
Note: average look back period of 1.54 days means the total collection window is on average 2.54 days

6. Proposed cessation of select tenors

The VND deposit market is typically more active in shorter tenors. There are few trades in tenors longer than 3-months. For 6-month, 9-month and 12-month tenors trades were executed on less than 20% of business days. FTSE Russell do not believe it is suitable to produce a benchmark for which there is no, or insufficient active market given the need for benchmarks to be representative of an underlying market¹. For this reason, FTSE Russell propose to cease 2-months, 6-months, 9-months and 12-months tenors. If a cessation announcement is issued, FTSE Russell intend on providing 6-months' notice prior to the intended final publication date (subject to sufficient contributions). FTSE Russell does not expect to publish a fallback. **This consultation paper is not a cessation notice for VND VNIBOR.**

Chart 1: Percentage of days with VND deposit transactions

July 2021-June 2023



Note: includes trades >50BN VND executed between 08:00-16:00VNT Source: LSEG Conversational Dealing, FTSE Russell analysis

7. Compounded in arrears overnight

A number of markets have adopted overnight risk-free rates (e.g. SOFR for USD, SONIA for GBP, TONA for JPY, etc.) in place of IBORs. These rates are commonly used in bond and derivative markets as compounded average rates. Given the lack of transactions in longer dated VND deposits or alternative instruments means it is not possible to calculate a robust forward-looking VND interbank rate beyond 3-months, FTSE Russell propose to follow the convention of other markets and introduce compounded rates. FTSE Russell propose to introduce these for 1-month, 2-month, 6-month, 9-month and 12-month tenors. These compounded average rates perform differently (see Appendix C) to VND VNIBOR because (1) they are backward-looking and (2) these are (almost) risk free.

In keeping with international best practice, the overnight rate will be accompanied with (i) annualized average rates in arrears (such as 1-month, 2-month, 3-month, 6-month, 9-month and 12-month) and (ii) a compounding total return index. These shall facilitate adoption and use of the overnight rate.

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¹ Principle 6 of the <u>IOSCO Principles for Financial Benchmarks</u> ("The design of the Benchmark should seek to achieve, and result in an accurate and reliable representation of the economic realities of the Interest it seeks to measure, and eliminate factors that might result in a distortion of the price, rate, index or value of the Benchmark.")

8. Questions

General

In which types of products (e.g., retail loans, corporate loans, trade finance, bonds, securitised products, derivatives, etc.)
and use cases (e.g., as a reference rate in financial contracts, pricing and valuation, risk, etc.) have you adopted VND
VNIBOR?

Methodology

- Do you agree with FTSE Russell's proposal to replace contributions by a panel of banks with executed trade data as the input for calculating the VND VNIBOR?
- 2. Do you agree that small trades that are not representative of typical sized trade in the interdealer market size should be excluded from the calculation? Do you agree that this should be set at VND 50BN?
- 3. To protect against manipulation of the benchmark FTSE Russell propose to cap the impact that similar trades done between the same counterparties on the same day have on calculation of the benchmark. Do you agree?
- 4. Do you agree with extending the collection window from 10:00 to 10:50VNT to 08:00-15:59VNT to collect sufficient executed trades? Do you agree that Confirmed time from the Dealing platform is most appropriate or would Extracted be a more appropriate timestamp?
- 5. Do you agree with delaying publication of the benchmark from 11:00VNT to at or around 16:30VNT on the same day (in order to reflect the longer collection window)?
- 6. If there are insufficient eligible trades to calculate VND VNIBOR, do you agree with extending the collection window to include the previous business day? Do you agree the collection window should only be extended up to a maximum of 5 business days?
- 7. If there are insufficient eligible executed trades over a 5-business day window, do you agree with calculating the rate by applying a spread adjustment to the closest tenor (as per the methodology described in section 4)?
- 8. Should there be a limit on how many consecutive days the benchmark is calculated using level 3? E.g. After 10 consecutive business days of calculating the benchmark using level 3, "No Fix" could be published.
- 9. Do you prefer the rate being calculated as the trimmed mean or median?

Cessation

- 1. As VND deposit transactions are infrequent in 6, 9 and 12-month tenors and the small number of trades in the 2-month tenor, FTSE Russell believe these markets are too illiquid to accurately and reliably measure the interest rate so propose to cease these tenors of VND VNIBOR. Do you agree with the proposed cessation? If not, please provide your reason(s) for disagreeing.
- 2. Do you use 2M, 6M, 9M and 12M tenors as references rates in financial contracts? If so, please state:
 - a. What instrument types (e.g., trade finance, corporate lending, bonds, derivatives, etc.)
 - b. How many contracts for each instrument type
 - c. What is the aggregate value of each instrument type
 - d. What is the last date these contracts expire / mature
- 3. Would 6-months' notice prior to cessation of 2M, 6M, 9M and 12M tenors provide you with sufficient notice to find a replacement benchmark?
- 4. Would you need a fallback? If yes, please explain why.

Compounded overnight VND VNIBOR

1. Compounded average risk-free rates have become widely used in some bond and derivative markets. Would you be interested in using compounded average overnight VND VNIBOR in VND bond and derivative transactions?

Appendix A: VND VNIBOR contributors

Agribank Vietnam
Asia Commercial bank
BIDV bank
HD bank
Maritime Bank
Military Commercial JS Bank
Sacom bank
Techcom bank
TP Bank - Tien Phong Bank
Vietcom Bank
Vietinbank
Vietnam Export Import bank
Vietnam International Bank
VP Bank

Appendix B: Comparison of VND VNIBOR with proposed new methodology

Chart 2: Comparison of Overnight VND VNIBOR with the proposed new methodology





Chart 3: Comparison of spot-week VND VNIBOR with the proposed new methodology

July 2021 to June 2023 (%)



Chart 4: Comparison of 2-week VND VNIBOR with the proposed new methodology

July 2021 to June 2023 (%)

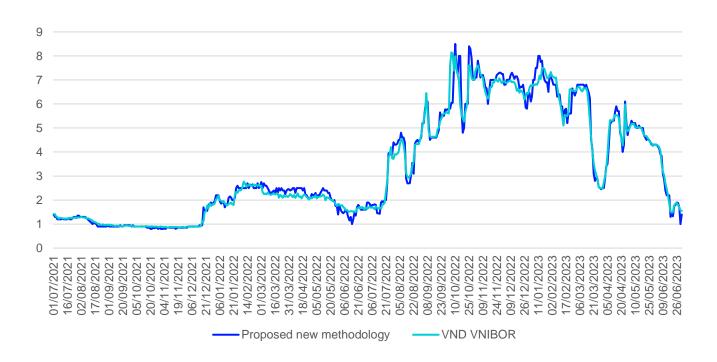


Chart 5: Comparison of 1-month VND VNIBOR with the proposed new methodology

July 2021 to June 2023 (%)

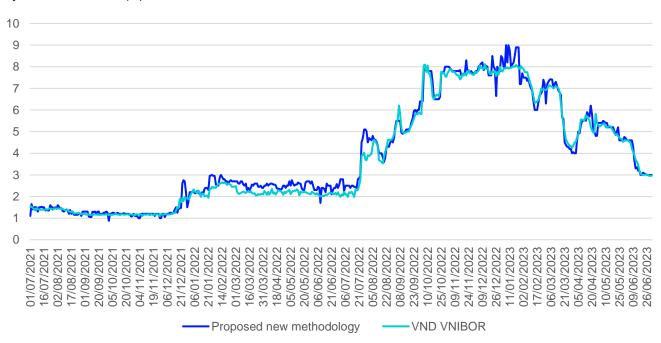
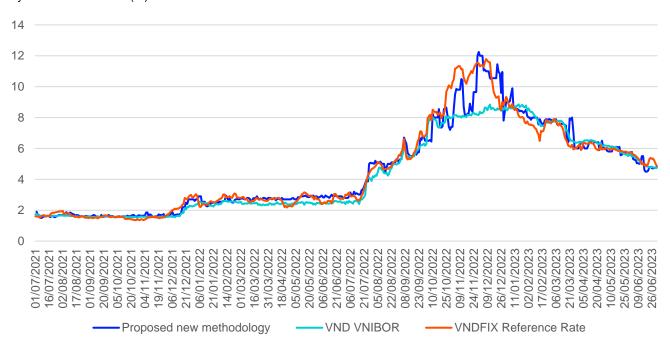


Chart 6: Comparison of 3-month VND VNIBOR with the proposed new methodology

July 2021 to June 2023 (%)



Appendix C: Comparison of compounded average overnight VND VNIBOR (using proposed new methodology) to VND VNIBOR

Chart 7: Comparison of proposed 1-month compounded rate with 1-month VND VNIBOR

July 2021 to May 2023, (%)

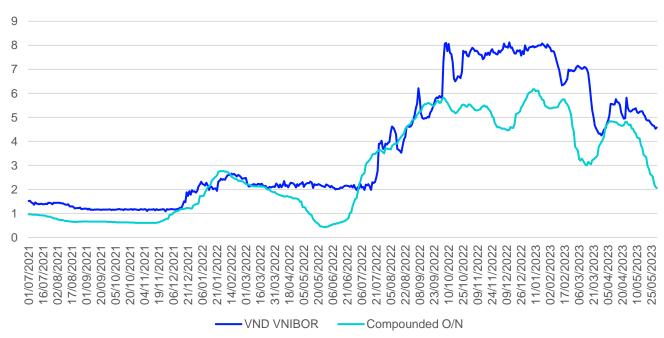


Chart 8: Comparison of proposed 2-month compounded rate with 2-month VND VNIBOR

July 2021 to April 2023, (%)

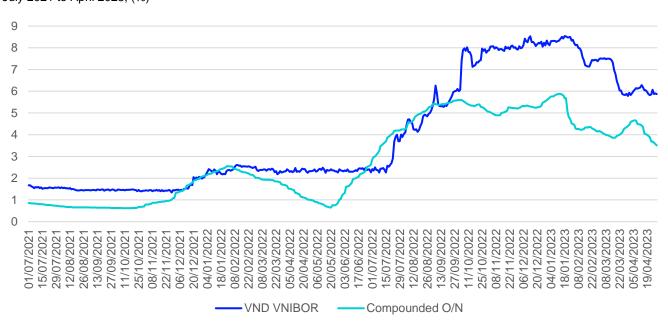


Chart 9: Comparison of proposed 3-month compounded rate with 3-month VND VNIBOR

July 2021 to March 2023, (%)

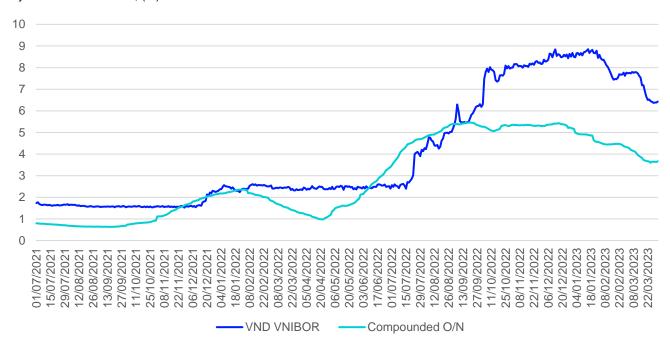


Chart 10: Comparison of proposed 6-month compounded rate with 6-month VND VNIBOR

July 2021 to December 2022, (%)

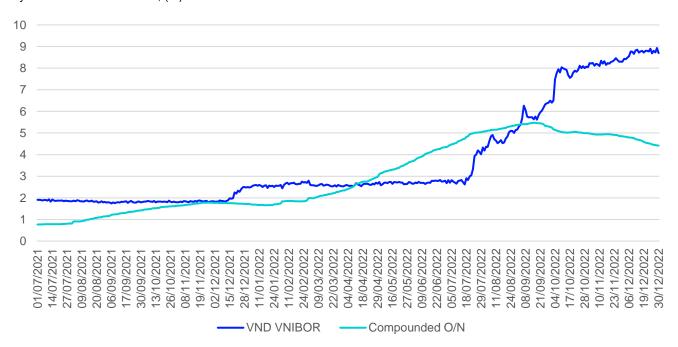


Chart 11: Comparison of proposed 9-month compounded rate with 9-month VND VNIBOR

July 2021 to September 2022, (%)

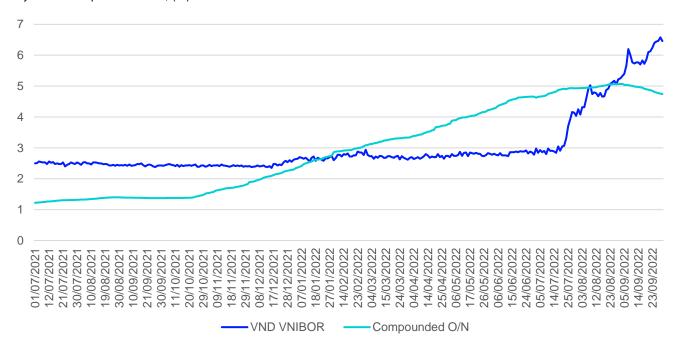
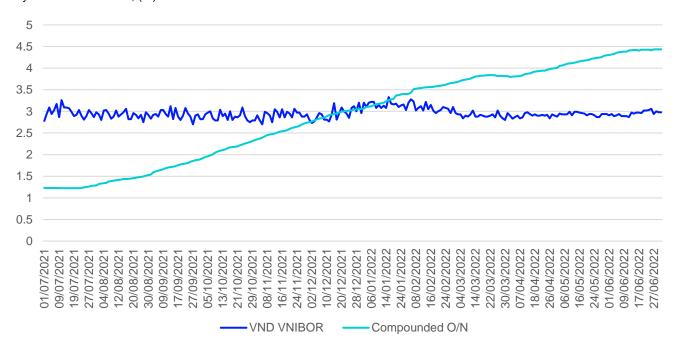


Chart 12: Comparison of proposed 12-month compounded rate with 12-month VND VNIBOR

July 2021 to June 2022, (%)



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