Recommendation on the rules and methods of conversion of WIBOR-based debt instruments

Document of the National Working Group for benchmark reform

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1. Background

The solutions presented in this Recommendation aim to provide financial market participants with solutions and practices in the area of management of outstanding the debt instruments issued (legacy portfolio) where rules regarding interest rate payments refer to the WIBOR benchmark. This Recommendation also contains a proposal for a fallback clause for new issuance of WIRON-based floating-rate debt instruments.

These recommendations are not obligatory and they may be applied at the discretion of financial market entities based on independent decisions of such financial entities, considering the specific nature of each instrument.

This Recommendation is addressed to the entities engaged in the issuance of debt instruments, in particular debt instrument issuers (Issuers) and calculation agents acting on their behalf. The first stage of work on the conversion of the legacy portfolio should be the analysis of the terms and conditions of individual instruments with regard to the rules on the designation of a replacement for WIBOR, as described in point 3. The results of the analysis will serve as a basis for starting talks with debt instrument holders in the case of a decision to amend the terms and conditions of an instrument (point 4) or on early redemption of debt instruments (point 5). This Recommendation does not refer to the method for determining margin or any other parameters affecting the yield on debt instruments.

The capitalised terms used in this Recommendation (except for proper names) have been defined herein or in the Glossary[1] prepared for the purposes of the National Working Group (NWG).

2. Key assumptions for the Recommendation

This Recommendation is based on an assumed occurrence of a fallback event, i.e. an event resulting in the WIBOR benchmark being ceased[2]. This Recommendation applies therefore only to those debt instruments in which the fixing of WIBOR to determine the coupon rate will be done after WIBOR is abolished. For such issuance, it is necessary to determine how interest rate is to be fixed or how such debt instruments are to be adapted, after the event, to the rules proposed in this Recommendation for new WIRON-based issuance[3]. For the other debt instruments, e.g. instruments maturing or those in which the interest rate

[1] https://www.knf.gov.pl/en/news?articleId=81488&p_id=19 (accessed on 14 September 2023)
[2] https://www.knf.gov.pl/knf/pl/komponenty/img/mapa_drogowa_procesu_zastapienia_wskaznikow_referencyjnych_79725.pdf (accessed on 14 September 2023). According to the adopted Roadmap, the market should be ready to cease to fix and publish WIBID and WIBOR Reference Rates in 2025.
[3] https://www.knf.gov.pl/knf/en/komponenty/img/Recommendation_on_the_application_of_the_WIRON_index_in_issues_of_floating-rate_debt_securities_81484.pdf (accessed on 14 September 2023)

for the last interest period is to be determined before the date when WIBOR is abolished, no change is necessary.

3. Analysis of terms and conditions of individual debt instruments: first stage of conversion

The experts from the NWG's Bonds Stream believe that the first stage of work on the conversion of the legacy portfolio of debt instruments should be the review whether the existing terms and conditions of debt instruments contain a Fallback Clause.

For the debt instruments that do not contain a Fallback Clause, a replacement for WIBOR indicated in the Regulation referred to in Article 61c of the Act of 5 August 2015 on macro-prudential supervision of the financial system and crisis management in the financial system (Regulation on the replacement) will apply.

The same will apply where a Fallback Clause contained in the terms and conditions of debt instruments does not provide for any permanent replacement for WIBOR (Article 23c(3) of Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014, as amended (BMR)).

To collect information about types of Fallback Clauses used in the non-Treasury debt instruments, a survey has been conducted at 13 institutions that, acting as a calculation agent or Issuer, had reported more than 12 000 debt instruments. The survey has provided a list of most common types of contractual clauses and provisions. The most common, by volume and number, are instruments without any provisions on the rules for calculating interest after the cessation of WIBOR. The second and third most frequent fallbacks clauses in debt instruments refer to the last available value of WIBOR and quotes from reference banks. The experts from the NWG's Bonds Stream propose that the afore-mentioned clauses and provisions do not point to a pernament replacemanet for WIBOR, and debt instruments based on them should use a replacement for WIBOR indicated in the Regulation on the replacement.
The other clauses reported in the survey, such as:

- a replacement designated under Article 23c of the BMR,
- a recommendation from a designating entity,
- a recommendation from a working group,
- an index used by the central counterparty,
- an NBP reference rate,
- Index stemming from directly applicable legislation

may constitute a permanent replacement for WIBOR and, if WIBOR is abolished, interest rate on debt instruments may be set using the above-listed methods.

Additionally, in August 2023 the UKNF published its official position on fallback clauses that do not provide for a permanent replacement for a benchmark[4]. A detailed analysis of Fallback Clauses performed by the experts from Stream No 3 is provided in Annex No 1 hereto.

4. Amendment to terms and conditions of individual debt instruments

Having reviewed the terms and conditions of individual debt instruments as referred to in point 3, the Issuer and the debt instrument holders may decide to amend those terms and conditions and adapt them to the rules regarding new issuance, where a new fallback clause refers to WIRON or uses WIRON as a benchmark will be used[5]. An amendment to the terms and conditions may be in the form of:

- an introduction of a Fallback Clause recommended by the NWG's Bonds Stream. As per the clause, if WIBOR is abolished, interest rate on debt instruments would be determined using WIRON. The proposed Fallback Clause is described in point 6 and its contents are in Annex No 2

or alternatively

- an adaptation of the terms and conditions pertaining to the determination of the interest rate, i.e. a modification under which starting from the effective date [of the modifying clause] WIRON will be used in the provisions concerning interest rate and a Fallback Clause for WIRON will be included.

Due to the specific nature of debt instruments, an amendment to the terms and conditions depends on the provisions of the terms and conditions and appropriate rules governing the relevant debt instrument, e.g. for covered bonds, the provisions of the Act of 15 January 2015 on Bonds apply, including the provisions of bondholders meetings laid out in the Article 8(1) point 3 of the Act of 29 August 1997 on covered bonds and mortgage banks. It is therefore necessary to review the rules for amending the terms and conditions of debt instrument, and any review should be based on thorough analysis of both the contents of the terms and conditions and the provisions of statutory law governing that debt instrument.

Below please find the analysis of the Act of 15 January 2015 on Bonds, which provides the basis for the issuance of most debt instruments (in terms of number of series). The Issuers of bonds thereunder are mainly enterprises and local government units. The Act of 15 January 2015 on Bonds, provides for the following procedures for the amendment of the terms and conditions:

- ✓ Signing of identical agreements with all holders of a given series of bonds;
- ✓ Adoption of a resolution by the bondholders meeting – this applies only to the bonds which provide for the institution of a bondholders meeting.

Based on past experience, one could conclude that the signing of identical agreements is operationally achievable in the case of debt instrument held by one or more holders that are known to the Issuer. This is usually the case for bonds issued by local government units.

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[4]https://www.knf.gov.pl/knf/pl/komponenty/img/Stanowisko_UKNF_klauzule_awaryjne_83440.pdf The Polish Financial Supervision Authority (UKNF) Statement of fallback clauses (as defined by BMR) that do not provide for a permanent replacement for a benchmark. This document contains information about the different types of fallback clauses that do not provide for a permanent replacement for the benchmark no longer provided. There is also an explanation for each type.

[5]https://www.knf.gov.pl/knf/en/komponenty/img/Recommendation_on_the_application_of_the_WIRON_index_in_issues_of_floating-rate_debt_securities_81484.pdf (accessed on 14 September 2023)

An amendment to terms and conditions of debt instruments based on a resolution of the bondholders meeting applies only to the debt instruments which provide for the possibility of convening such a meeting. According to the NWG's Bonds Stream experts, the clauses in the terms and conditions pertaining to the establishment of bondholder benefits derived from an instrument, as well as the methods used to determine them, including the conditions for interest payment, represent qualified provisions of the terms and conditions of bonds as defined in Article 49(1) of the Act of 15 January 2015 on Bonds. A resolution of the bondholders meeting amending the qualified provisions of the terms and conditions requires:

- a three-fourths majority vote (for bonds not admitted to trading on a regulated market or admitted to an alternative trading system) or
- approval by all the bondholders present at the meeting (for bonds admitted to trading on a regulated market or admitted to an alternative trading system).

However, it should be noted that the Issuer may set – in the terms and conditions – more stringent rules for adopting[6] resolutions of the bondholders meeting.

5. Early redemption of debt instruments

Instead of amending the terms and conditions of debt instruments, the Issuer may decide to redeem debt instruments before maturity, including redemption in combination with new issuance based on WIRON or a benchmark from the WIRON Compound Indices Family, fixed interest rate or one containing an appropriate Fallback Clause.

In order to do so, the Issuer may choose the option of early redemption (if the terms and conditions provide for such an option) or the option of voluntary early redemption (buy-back/conversion auction) as part of an offer made to investors.

6. Fallback Clause for debt instruments

The NWG's Bonds Stream prepared a proposal for a Fallback Clause recommended for new issuance[7].

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[6]Article 65(4) of the Act of 15 January 2015 on bonds: *4. **The Issuer may set – in the terms and conditions of bond – more stringent rules for adopting resolutions of the bondholders meeting**, in particular they may indicate matters in which the adoption of a resolution by the bondholders meeting will require approval by all the bondholders present at the meeting.*

[7]The supporting documents and materials concerning *Recommendation on the application of the WIRON index in new issues of floating-rate debt instruments* are available on the KNF website: https://www.knf.gov.pl/en/news?articleId=81488&p_id=19

Main assumptions:

- WIBOR is being replaced with a WIRON compound rate with a 5-Business-Day Lookback with Observation Period Shift – it is consistent with the recommendation for new issuance in which WIRON is to be used. The calculations are to be based on a WIRON Compound Index.
- The calculated value is then increased by an adjustment spread calculated and published by Bloomberg[8, 9]. The use of a spread adjustment calculated by Bloomberg aims to apply the rules for replacing WIBOR adopted for derivatives[10].

Where a WIRON Compound Index is not available, the method for calculating the floating interest rate is changed, and the applicable method is the method for determining the value of the floating interest rate based on daily values of ON indices as indicated in the Recommendation.

Where WIRON compound rate is calculated based on daily values of ON indices, the Fallback Clause contains provisions to be applied in case the rate is not available:

- If the unavailability is only temporary, the missing WIRON values are replaced with values of the WIRON index from the previous business day.
- If the unavailability is permanent, an Alternative Index is designated for the WIRON index. The following indices may be used as an Alternative Index:
    A. an index recommended by the NWG or any other similar body, group or organisation appointed to designate a replacement for a given index, in accordance with principles similar to the principles applied by the NWG,
    B. an index indicated by the supervisory authority (KNF),
    C. an NBP reference rate.

Also, an adjustment may be made to the selected Alternative Index: either (i) an adjustment indicated by the NWG (or by any other similar body, group or organisation) for the replacement under point A, or by the KNF for the replacement under point B, or (ii) an adjustment set as the median of the differences between WIRON index and an Alternative Index in the last 5 years.

Annexes:
1. A review of the results review of the results of the survey on clauses in active issuance (Stream No 3 of the NWG – Bonds)
2. Proposal for a fallback clause for new issues of WIBOR-based floating-rate debt instruments

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[8]Information about the value of the spread adjustment is available on the Bloomberg website: https://www.bloomberg.com/professional/solution/libor-resource-center/

[9]Direct link to data for WIBOR: https://assets.bbhub.io/ibor-fallback/PLN_WIBOR_Fallback.csv

[10]https://www.knf.gov.pl/knf/en/komponenty/img/Recommendation_of_the_National_Working_Group_NWG_on_applying_a_fallback_rate_for_the_WIBOR_benchmark_in_interest_rate_derivatives_83020.pdf (accessed on 14 September 2023)

A review of the results of the survey on clauses in active issuance (Stream No 3 of the NWG – Bonds)

Warsaw, March 2023

Agenda

1. A review of the results of the survey on the fallback clauses existing in the market
2. The proposed decision ladder for historic issuance
3. A template of a fallback clause for new WIBOR-based issuance

A review of the results of the Survey on the fallback clauses existing in the market

The review of the results of the survey on fallback clauses

Background

- The survey on fallback clauses aimed to explore potential behaviour of debt instruments in the legacy portfolio after a fallback trigger.
- The survey concerned instruments whose interest rate is based on WIBOR. The survey involved collection of information about issues in which at least one reading of the WIBOR rate will take place after 1 January 2025. The data contributor included, in such information, issuance for which it acted as Calculation Agent and/or own issuance.
- 13 Institutions took part in the survey. More than 12 000 series were reported, in a total nominal value of nearly PLN 80 billion, issued by approx. 1 500 issuers.
- The Institutions reported clauses which contained a reference to both one specific replacement and a group of replacements (a ladder).
- **The review identified 10 different types of clauses (making up 30 different configurations).** The review of the clauses identified related risks and possible solutions.
- Our suggestion from the NWG's Stream No 3 is that the KNF make a statement similar to the statement by the FED on the rules for using the 'problematic' fallback clauses: *quotes from reference banks* and *last available value.*

The number of Institutions that participated in the survey

13

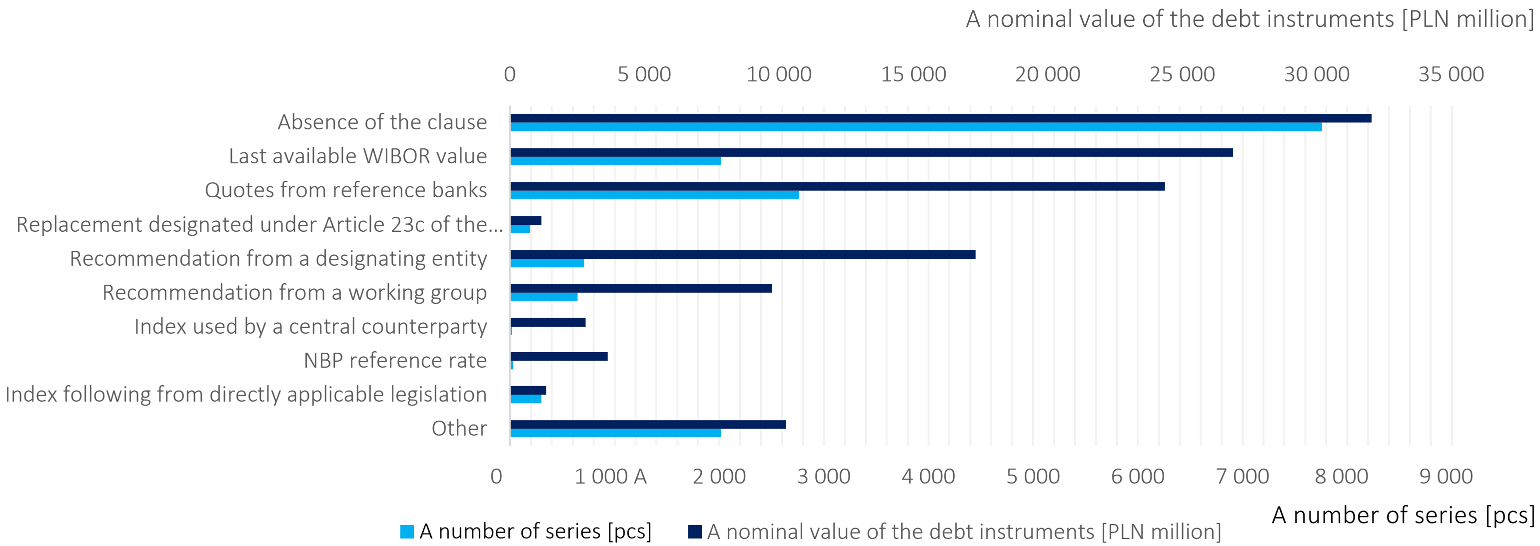
The nominal value of the issues reported

approx. PLN 79.9 billion

The number of the series reported

approx. 12 500

Quantitative analysis



- The above chart shows all 10 types of clauses reported by the institutions in the survey, broken down by the nominal value of debt instruments reported (in PLN million) and by number of the series reported (in pieces).

- The table below shows 10 types of the clauses reported, broken down by location of individual series on the fallback ladder.

- For terms and conditions of issuance that do not contain any clause, i.e. for the case ‘absence of the clause’, WIBOR will be replaced by an index indicated in the Regulation.

Steps of the decision ladder	1st step	2nd step	3rd step	4th step	5th step and next steps	Total
Absence of the clause	7 758	0	0	0	0	7 758
Last available WIBOR value	1 241	462	307	8	0	2 018
Quotes from reference banks	2 410	351	0	0	0	2 761
Replacement designated under Article 23c of the BMR	190	1	0	0	0	191
Recommendation from a designating entity	45	36	627	2	2	712
Recommendation from a working group	0	18	2	625	2	647
Index used by a central counterparty	0	0	4	0	18	22
NBP reference rate	0	0	14	6	27	47
Index following from directly applicable legislation	299	0	0	0	1	300
Other	661	747	9	0	600	2 017

Most common arrangements of replacements

Quantitative data on the 4 most common clause variants (from the 30 clauses reported)

	Variant 1	Variant 2	Variant 3	Variant 4
Relevant replacement by its location on the ladder	1. Quotes from reference banks 2. Last available WIBOR value	1. Last available WIBOR value	1. Quotes from reference banks	1. Replacement designated under Article 23c of the BMR 2. Quotes from reference banks 3. Last available WIBOR value
A nominal value of the debt instruments reported [in PLN million]	PLN 15 479 million (19.37%)	PLN 9 454.0 million (11.83%)	PLN 6 171.0 million (7.72%)	PLN 592.3 million (0.74%)
A number of the series reported	449	1 240	1 918	172

Additional remarks

- Instruments in an aggregate of the nominal value of PLN 32 019 million (40.1%) did not contain fallback clauses.
- Except for the above 5 configurations, the other variants jointly accounted for PLN 16 200 million [20.3%] of all the intruments.

A review of the fallback clauses

- Terms and conditions of issuance may contain one fallback clause or a combination of them.
- ‘Absence of the clause’ means the absence of any reference to a replacement for WIBOR; in such a case the replacement indicated in the Regulation will apply.
- The next part of this document focuses on the review of the clauses indicated in the table on the right side.
- In the case of a combination of clauses, a common practice is to indicate the order of their application:
  - if, following the application of subsequent clauses, we encounter the one which allows us to designate a permanent replacement for WIBOR, the process is complete and the resulting index replaces WIBOR;
  - if no clause allows us to designate a permanent replacement, the process is complete. In such a case, we use the replacement under the Regulation.

Item	Clause	Does it constitute a permanent replacement for WIBOR?
1	Last available WIBOR value	NO
2	Quotes from reference banks	NO
3	Replacement designated under Article 23c of the BMR	YES
4	Recommendation from a designating entity	YES
5	Recommendation from a working group	YES
6	Index used by a central counterparty	YES
7	NBP reference rate	YES
8	Index following from directly applicable legislation	YES

A possibility of amending the existing terms and conditions of debt instruments

A review of terms and conditions of issuance

- Following a fallback trigger, new values of rates from the WIBOR family will no longer be determined. The expected date for the cessation of WIBOR rates is the end of 2024. Therefore, in the debt instrument issues whose interest rate is based on WIBOR with WIBOR fixing after 1 January 2025, it is necessary to verify the method of determining interest rate. Below follows a verification plan and proposed solutions for debt instruments.

- The first stage of the review should be the verification of whether the terms and conditions of issuance contain a fallback clause and what its substance is. If the terms and conditions:

  a) do not contain any fallback clause

  b) following the application of a fallback clause WIBOR is replaced with an index designated based on the BMR

  c) the clause does not indicate any permanent replacement for WIBOR

  d) the fallback clause indicates a permanent replacement for WIBOR

in the case under points a–c the replacement for WIBOR indicated in the Regulation will apply, and in the case under point d – a replacement designated based on the relevant clause. The review of the fallback clauses in the existing issuance in terms of whether they indicate a permanent replacement for WIBOR is provided on next pages.

- Having reviewed the results from stage one, the Issuer can decide to amend the terms and conditions. It is the recommended approach if we want the terms and conditions of bond to comply with the recommendation for new WIRON-based issues as much as possible. An amendment to the terms and conditions would apply to the provisions concerning interest rate, i.e. introduction of a new base rate and the methodology for its calculation. Terms and conditions of bond may be amended in two ways:

  – by signing identical agreements with all holders of a given series of bonds – this applies to all bonds;

  – by convening a Bondholders Meeting – for the issuance that provide for the possibility of convening the meeting. According to the participants in the NWG's Bonds Stream, the definition and rules for designating the base rate represent qualified provisions of the terms and conditions, so any amendment to the terms and conditions requires approval by a three-fourths majority vote (for unlisted bonds) or all the persons present at the meeting (for listed bonds).

- Risk: for listed bonds, a bondholder holding one bond, thus one vote, may block the amendment to the terms and conditions.

- The above applies to bonds. As regards other debt instruments, it is necessary to verify their terms and conditions debt instruments and the provisions of laws governing it.

An amendment to the existing terms and conditions of bond issuance
(annexing depends on the terms and conditions of issuance)

If the terms and conditions of provide for such a possibility.

Please note: if a change of the base rate is deemed as an unqualified amendment to the terms and conditions of bond issuance, it is necessary to check whether the Terms and Conditions allow for it.

Requirements on amending the terms and conditions of bond

1. The Resolution of the bondholders meeting

2. Consent of the issuer

Under agreements between bondholders and the issuer

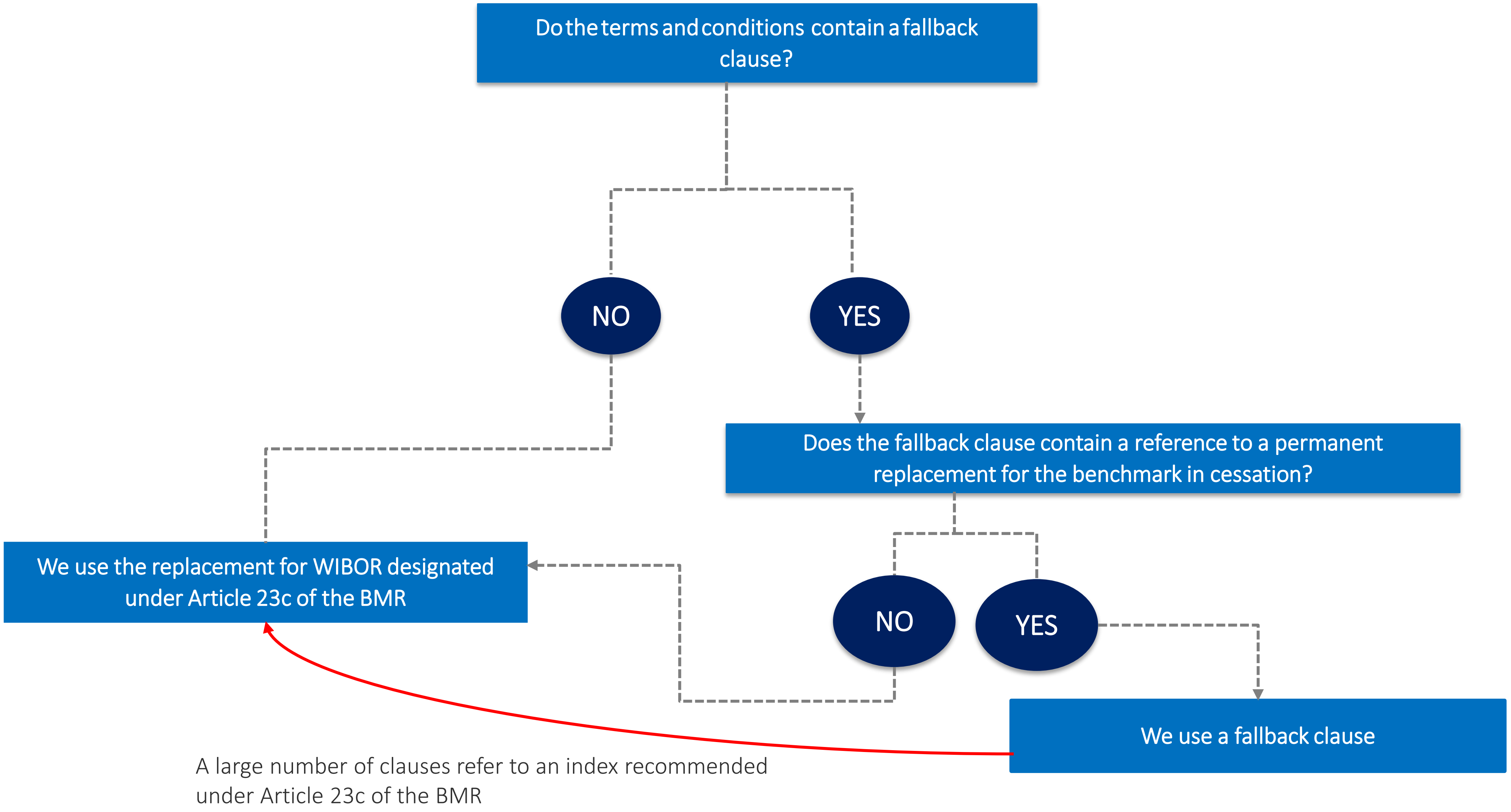
For issuance unlisted on a regulated market or an alternative trading system, a three-fourths majority vote is required.

For issuance listed on a regulated market or an alternative trading system, approval by all the persons present at the meeting is required.

This might be difficult if there are many bondholders and if they are not known to the Issuer.

The above decision tree applies to bonds. As regards other debt instruments, it is necessary to verify their terms and conditions and the provisions of laws governing it.

Issuance verification plan in relation to fallback clauses



A review of existing clauses in relation to a permanent replacement for WIBOR

Last available WIBOR value

cannot be used as a permanent replacement for WIBOR

The number of series that refer to a clause:

2 018

The nominal value of instruments with a clause:

PLN 26 871 million

Description of the replacement

- Another group of clauses provided in the terms and conditions of debt instruments are the clauses that directly refer to the last available value of the WIBOR rate.
- There are two types of provisions that refer to the last available rate. Where no current quote of the base rate is available, the base rate for a given interest period is determined as:
  - the last available value of WIBOR, or
  - the last effective value of WIBOR that was used to calculate interest rate in the previous interest period.
- The replacement was to be used at the time of temporary absence of WIBOR, not as its permanent replacement.

Implications

- For floating-rate debt instruments, this leads to a change of the nature of the contract and actually changes the instruments initially issued as a floating-rate instruments into an instrument indexed to a fixed rate.
- Originally, the debt instrument was offered to potential buyers and was described in the terms and conditions as a floating-rate instrument – so the nature of the contract would change.

Last available WIBOR value

Example of provisions and clauses

Clause 1

If the base rate for a given interest period cannot be determined in accordance with the above-mentioned provisions, the base rate for that interest period will be determined at the level of the last effective base rate in the directly preceding interest period.

Clause 2

If the Base Rate cannot be determined in accordance with the above rules, it will be determined at the level of the last effective Base Rate in the Interest Period directly preceding the Interest Determination Date.

Clause 3

If the Interest Rate for a given Interest Period cannot be determined in accordance with the above-mentioned provisions, the Interest Rate for that Interest Period will be determined at the level of the last [effective Interest Rate in the directly preceding Interest Period/available Interest Rate].

Clause 4

If the Interest Rate cannot be determined for a given Interest Period in the manner specified in point 6.2(a) and (b) above, the Interest Rate in that Interest Period will be determined based on the last available Base Rate.

Quote from reference banks

cannot be used as a permanent replacement for WIBOR

The number of series that refer to a clause:	The nominal value of instruments with a clause:
2 761	PLN 24 339 million

Description of the replacement

- If no current WIBOR rate is available, the Issuer or the Calculation Agent would ask the reference banks listed in the terms and conditions of issuance to provide appropriate quotes of PLN deposits offered by those banks in the inter-bank market for the tenors compatible with the WIBOR tenor.
- Where quotes from the banks are used as a replacement, the Issuer or the Calculation Agent would be requesting the determination of the effective rate, before the interest period starts.
- The replacement was to be used at the time of temporary absence of WIBOR, not as its permanent replacement.
- Due to past experiences related to the transition of other IBOR rates, it is recommended to apply the replacement indicated by the competent authority instead of using the quotes received from third parties.
- In the case of replacement of USD LIBOR, FED pointed out in its communication that in the event for contracts that (text available here):
- *'ii) require that a person (other than a benchmark administrator) conduct a poll, survey, or inquires for quotes or information concerning interbank lending or deposit rates',* the proposed solutions is that *‚the benchmark replacement (…) will be the Board-selected benchmark replacement* and that *no person shall be subject to any claim or cause of action in law or equity or request for equitable relief, or have liability for damages, arising out of the use of the Board-selected benchmark replacement as a benchmark replacement'*.
- According to the participants in the NWG's Stream #3, in the case of transition from WIBOR to WIRON, to mitigate the risk related to such clause being used, it is appropriate to implement a solution at the level of, for example, the Regulation designating the replacement for WIBOR.

Implications

- There is a risk that **the rates** provided by reference banks **will be non-trading rates**, and that might undermine their use in interest rate determination.
- Terms and Conditions of Issuance do not specify adequately the rules for rates quoted by reference banks, which exposes the parties to the transaction to the risk of index manipulation. The risk was one of the main reasons for introducing the BMR.
- There is a risk that if that fallback clause is applied to the debt instruments acquired by retail investors the clause may be considered incompatible with the rules on consumer right protection.
- Moreover, there might be a problem with availability of data from reference banks, e.g. due to unavailability of limits. In consequence, the interest rate determination mechanism would be difficult to use.
- A small number of clauses contains provisions stipulating that the closest replacement for WIBOR should be set by the Paying Agent. The clause mechanism is close to the quotes from reference banks, with the difference that the Paying Agent is a party to the contract which, under the BMR, falls under the rate administrator's regime.
  - Example:
  - *(…) where such rate is no longer published and where no appropriate provisions of law govern the effects of such situation, the Paying Agent, acting in good faith, will specify another manner of determining the base rate, being as close as possible to the previous manner.*

Quotes from reference banks

Example of provisions and clauses

Clause 1

If the WIBOR6M interest rate is not available on the base rate fixing date, the Paying Agent, acting on behalf of the Issuer, will ask the selected reference banks without undue delay to provide the interest rate for deposits in PLN for the period indicated in the Terms and Conditions of Bond, offered by each of those reference banks to the major banks operating in the Polish inter-bank market. In such case, the base rate to be used to calculate interest for a given interest period will be the arithmetic mean of the rates communicated by the reference banks, provided that at least two reference banks will communicate interest rates; if necessary, the arithmetic mean will be rounded to the second decimal place.

Clause 2

If the Base Rate is unavailable, the Issuer will ask the Reference Banks without undue delay to provide the interest rate for PLN deposits (with a duration relevant for the Base Rate) offered by each of those Reference Banks to the major banks operating in the Warsaw inter-bank market and determine the Base Rate as the arithmetic mean of the rates communicated by the Reference Banks, provided that at least 3 Reference Banks will communicate interest rates; if necessary, the arithmetic mean will be rounded to the second decimal place (and 0.005 will be rounded up).

Clause 3

If the WIBOR rate for 3-month deposits is unavailable, the Arranger will ask the reference Banks to provide the interest rate offered for such deposits to the major banks in the Warsaw inter-bank market and calculate the arithmetic mean of the communicated interest rates with the accuracy of 0.01 percentage point (and 0.005 will be rounded up).

Clause 4

If the Reference Rate is not available at or around 11:00 am standard time in Poland on the Interest Rate Determination Date, the reference rate will be determined by the Paying Agent based on the interest rates for maturities that are closer to the Interest Period for which the Reference Rate is being determined, offered by each of those Reference Banks, provided that at least [two/three/four] Reference Banks will provide the interest rates. In such case, the Reference Rate will be the arithmetic mean of the rates provided by the Reference Banks; if necessary, the arithmetic mean will be rounded to the second decimal place (and 0.005 will be rounded up).

Clauses referring to the official successor of/replacement for WIBOR

- Some fallback clauses used in the market contain a definition of WIBOR/Base Rate/Announced Reference Rate, etc., in which the authors refer to an official **successor** of or **replacement** for WIBOR.
- For such clauses, the transition may turn out problematic.
- The participants in the task of the NWG's Stream No 3 suggest that the KNF issue a statement to address the subject.

- ‘Announced Reference Rate’ means the WIBOR rate (i.e. Warsaw Interbank Offered Rate) published at www.gpwbenchmark.pl by GPW Benchmark S.A. <u>or any of its official **successors** for 6-month deposits expressed in PLN.</u>

- ‘Base Rate’ means the WIBOR interest rate communicated by Monitor Rates Services Reuters (…) for 6-month deposits from a quote within the fixing at or around 11:00 am, published on the Interest Rate Fixing Day <u>or any other interest rate that **will replace** the above-mentioned interest rate</u>;

The clauses that refer to the replacement designated under Article 23c of the BMR and the replacement following from the provisions of applicable law

Both clauses may be used as a permanent replacement for WIBOR

Replacement designated under Article 23c of the BMR

- Some of the reported clauses refer to the replacement designated under Article 23c of the BMR. In such a case, under the BMR, the applicable replacement for the current WIBOR rate should be the rate indicated by the authority competent for its administrator or by its administrator.

Example of the clause

- *If the WIBOR rate, (…), is replaced by another reference rate, the Base Rate will be equal to the reference rate communicated by the entity acting as its administrator (as defined in Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014), taking into account an adjustment, if any.*

The number of series that refer to a clause:
191

The nominal value of instruments with a clause:
PLN 1 176 million

Replacement following from the provisions of applicable law

- Some clauses refer to the replacement following from the provisions of applicable law. Here follows an example.

Example of the clause

- *'Alternative Index' means an index which replaces the WIBOR Rate under the provisions of generally applicable law, in particular where the WIBOR Rate is no longer compiled and published, or is abolished. The Alternative Index will be used taking into account the method, formula, adjustment and dates specified in the provisions introducing the application of Alternative Index.*

The number of series that refer to a clause:
300

The nominal value of instruments with a clause:
PLN 1 347 million

Recommendation from Designating Entities

They may be used as a permanent replacement for WIBOR

The number of series that refer to a clause:	The nominal value of instruments with a clause:
711	PLN 17 300 million

Description of the replacement

A significant part of the reported clauses refer to the recommendations from the relevant entities. Those recommendations are:

– Recommendation from one of public authorities: KNF, NBP, Ministry of Finance, and recommendations from the current index administrator,

– Recommendation from a working group: the clause referring to the recommendation of the working group on alternative reference rates operating under the auspices of public authorities or with the central bank

– The index used by a central counterparty (LCH Ltd, KDPW_CCP S.A. or any other central counterparty),

Example of the clause

Alternative Index shall be fixed using one of the following methods:

a) Alternative Index is an index recommended as a replacement for WIBOR by a competent body of public administration (including in particular the minister competent for financial institutions);

b) Alternative Index is an index recommended as a replacement for WIBOR by Komisja Nadzoru Finansowego;

c) Alternative Index is an index recommended as a replacement for WIBOR by Narodowy Bank Polski;

d) Alternative Index is an index recommended as a replacement for WIBOR by the WIBOR administrator;

e) Alternative Index is an index recommended as a replacement for WIBOR by a professional organisation or another entity that has been formally designated, including by a competent body of public administration (including in particular the minister competent for financial institutions), Komisja Nadzoru Finansowego or Narodowy Bank Polski, and that is responsible for preparing proposals on the replacement of WIBOR;

f) Alternative Index is an index used instead of WIBOR by a Central Counterparty in the transactions it clears; or

g) Alternative Index is a reference rate used by Narodowy Bank Polski.

NBP reference rate

It may be used as a permanent replacement for WIBOR

The number of series that refer to a clause:	The nominal value of instruments with a clause:
47	PLN 4 410 million

Description of the replacement

- The NBP reference rate regularly occurs as the last step of the fallback ladder.
- Where the current index cannot be used, the replacement is the reference rate used by Narodowy Bank Polski.
- The NBP reference rate as a replacement for the current WIBOR-type rates is not covered by the BMR because Central Banks are not covered by the Regulation.

Example of the clause

A. (...)
B. (...)
C. (...)
D. (...)
E. (...)
F. Alternative Index is a reference rate used by Narodowy Bank Polski.

Implications

- The NBP reference rate may be used as a permanent replacement for WIBOR.
- The nature of the NBP reference rate allows for the conclusion that there is a high probability that the rate will be implemented as a permanent replacement for the current rate.
- Where the NBP reference rate is applied as the replacement, it is necessary to specify the technical aspects such as the rate compounding period because the NBP reference rate is used for open-market operations for a tenor of up to 7 days.

Annex No 2: Proposal for a fallback clause for new issues of WIBOR-based floating-rate debt instruments

Background

The below proposal for a fallback clause has been prepared by the Stream No 3 working group of the National Working Group for benchmark reform (NWG).

Until the emergence of a liquid market for debt instruments based on WIRON, new issues of floating-rate debt instruments will be based on WIBOR. For such issuance it is recommended to introduce appropriate fallback clauses to ensure that, in the case when WIBOR is not available, such issuance are best adapted to the rules of calculating interest for WIRON-based debt instruments as recommended by the NWG[1].

Assumptions for the proposal for a fallback clause for new issuance[2]:

- WIBOR-based debt instrument;
- The date of determining rights to benefits falls 3 business days before the end of the interest period/maturity date;
- Amount of Interest is calculated according to the following formula:

  $$O = N \times (S+M) \times \frac{ND}{365}$$

  where:

  'O' means Amount of Interest on one bond for a given Interest Period;

  'N' means a nominal value of the bond;

  'S' means the value of the Base Rate on the Interest Rate Fixing Date;

  'M' means margin;

  'ND' means the number of days in a given Interest Period;

  after rounding of the result of this calculation to the nearest 0,01 PLN (rounded up).
- In the case where the publication of the WIBOR benchmark is ceased completely, the fallback clause will be applicable to the fixing of the interest rate on debt instruments. In the first step, WIRON is designated as a replacement rate for WIBOR, while at the same time the data used for calculating interest is adjusted (the formula itself for calculating interest does not change), in accordance with the following assumptions:
  - Instead of WIBOR read on the Interest Rate Fixing Date we are changing to the WIRON compound rate **with 5-business-day lookback with observation period shift** i.e. the observation period starts 5 business days before the beginning of the interest period;
  - Because of the change of the moment of determining the Base Rate, certain definitions have been adjusted e.g. the definition of the Interest Rate Fixing Date. In individual terms and conditions of issuance there may be a need, however, to adjust other definitions as well.

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[1]The supporting documents and materials concerning *Recommendation on the application of the WIRON index in new issues of floating-rate debt instruments* are available on the KNF website: https://www.knf.gov.pl/dla_rynku/Wskazniki_referencyjne/aktualnosci?articleId=81430&p_id=18

[2]These assumptions are based on the most common rules for calculating interest for non-Treasury bonds. For debt instrument based on different rules for calculating interest, appropriate adjustments should be made.

- After compounding WIRON, the WIBOR replacement rate, during the observation period, a Spread Adjustment is added to WIRON. The Spread Adjustment published by Bloomberg Index Services Limited is recommended for such use[3][4].
- In the case of a lack of quote for WIRON, as a replacement for WIBOR, other replacement rates will apply as indicated in Section 1.2 e (i) (A)–(C).

[3]Information about the value of the spread adjustment is available on the Bloomberg website: https://www.bloomberg.com/professional/solution/libor-resource-center/
[4]Direct link to data for WIBOR: https://assets.bbhub.io/ibor-fallback/PLN_WIBOR_Fallback.csv

The content of the recommendation for the fallback clause
Glossary

The glossary includes selected terms defined in the terms and conditions of new issues of bonds under the Act of 15 January 2015 on bonds that are used for the purposes of drafting the fallback clauses or the terms that need to be amended/adapted. In the case where such clauses are introduced to the existing bonds or other debt instruments, it is necessary to adapt the definitions accordingly.

Lack of Authorisation means a situation in which the administrator of the benchmark on the basis of which the interest rate on Bonds[5] is determined has not been granted the authorisation or registration for providing the benchmark or the authorisation or registration has been withdrawn or suspended, which makes it impossible to use the benchmark.

Interest Payment Date means ... [example: 30 January and 30 July of each year, starting on the Issue Date/30 January 2023 until the Maturity Date (inclusive), *or* the days indicated in a supplement to the prospectus], with that date being subject to shifting in accordance with the Modified Following Business Day Convention, as well as due to an immediate [or earlier][6] redemption of the bonds.

Maturity Date means the date indicated in the [Supplement to the Prospectus/Terms and Conditions of Issue][7], given that this date is subject to shifting in accordance with the Modified Following Business Day Convention.

Rights Determination Date means the third Business Day before the date of payment of benefits from Bonds, unless the existing regulations of the National Depository for Securities (KDPW) require that persons entitled to benefits from the bonds should be identified earlier.

Interest Rate Fixing Date means, unless the existing regulations of the Warsaw Stock Exchange (GPW) or of the National Depository for Securities (KDPW) require an earlier fixing of the interest rate, [the third] Business Day before the start of the Interest Period for which the interest rate will be fixed, and in the case where Section 1.2(i) applies, it means the day falling five Business Days before the Interest Payment Date for a given Interest Period in which a given Interest Rate will apply.

Modified Following Business Day Convention means a rule based on which a date to which the Modified Following Business Day Convention applies falling on a Non-Business Day is moved to the nearest Business Day after that date, if that day falls in the same calendar month as that date. Otherwise, the date falling on a Non-Business Day is moved to the nearest Business Day before that date.

Adjustment means a value or action that adjusts the value of an Alternative Index. The value of the Adjustment may be positive, negative, zero, as well as be determined according to a formula or method of calculation (e.g. by compounding or capitalising daily interest rates for the period for which the interest is calculated) and may include other adjustments related to the replacement of WIRON or an Alternative Index. The Adjustment will be determined in accordance with Section 1.2(g), for the avoidance of doubt, the determination of the Adjustment does not imply the start of provision of a new benchmark within the meaning of the BMR.

Announcement on Cessation of Publication means an official statement issued by an index administrator or its supervising authority according to which the benchmark on the basis of which the interest rate on Bonds is determined has ceased or will cease to be published permanently and that, as at the date of that statement, no successor has been designated to continue to calculate or publish that index.

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[5]A term defined independently in individual terms and conditions of issuance.

[6]To be adjusted to terms and conditions of issuance.

[7]To be adjusted to terms and conditions of issuance, terms defined independently in individual terms and conditions of issuance.

Interest Period means a period from the first day of interest accrual (including that day), indicated in the Supplement to the Prospectus, until the first Interest Payment Day (not including that day) and each subsequent period from the Interest Payment Day (including that day) to the next Interest Payment Day (not including that day), provided that the Interest Period may vary in length due to an immediate or earlier redemption of Bonds.

Designating Entity means (i) the National Working Group for benchmark reform, or (ii) other similar body, group or organisation set up to designate a replacement for an index on the basis of which the interest rate for Bonds is determined, according to principles similar to those of the National Working Group for benchmark reform or (iii) Komisja Nadzoru Finansowego (KNF).

BMR means Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014, as amended.

Spread Adjustment means a value equal to the spread adjustment published by Bloomberg Index Services Limited (or its successor designated or selected by ISDA) for the replacement of WIBOR with WIRON (adapted to the term corresponding to the Specified Tenor).[8]

Base Rate means the base rate determined according to Section 1.2.

Interest Rate means the Base Rate increased by the Margin[9], according to which interest is accrued on bonds.

WIBOR means the WIBOR benchmark determined by GPW Benchmark S.A. (or any of its official successors) on the Interest Rate Fixing Date, for a period (term) equal to the Specified Tenor, expressed in percentage points *per annum*.

WIRON means the WIRON benchmark determined by GPW Benchmark S.A. (or any of its official successors) for the O/N term, expressed in percentage points *per annum*.

WIRON Compound Index means the index determined by GPW Benchmark S.A. (or any of its official successors).

Specified Tenor means the period specified in the [Supplement to the Prospectus/Terms and Conditions][10].

Alternative Index means an index determined in accordance with Section 1.2.(e)–(m) that replaces WIRON or other alternative index in the situations described in the Terms and Conditions and in accordance with the BMR (to the extent applicable);

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[8]The current spread value for WIBOR6M is available in Bloomberg system under the WIBOR 6M BISL Spread index.
[9]A term defined independently in individual terms and conditions of issuance.
[10]To take an example we assume it is a 6M period.

Recommended wording of the provisions of the terms and conditions of issuance with regard to the fallback clause

The content below should be adapted to the content and the definitions of individual terms and conditions

1. INTEREST RATE

1.1 Calculation of interest

The interest on each Bond is accrued for a given Interest Period and paid on each Interest Payment Date.

1.2 Fixing the floating interest rate:

(a) The Interest Rate for a given Interest Period will be equal to the sum of the Base Rate and the Margin.

(b) On each Interest Rate Fixing Date [the Calculation Agent/the Issuer] will determine the Base Rate. The Base Rate will be equal to the value of the WIBOR benchmark for the Specified Tenor on the Interest Rate Fixing Date.

(c) When the Base Rate cannot be determined on the Interest Rate Fixing Date in accordance with the above provisions, the Base Rate will be determined at the level of the last available WIBOR value for the Specified Tenor, unless it is related to the Announcement on Cessation of Publication, or when the Lack of Authorisation occurs.

(d) When the Base Rate cannot be determined on the Interest Rate Fixing Date in connection with the Announcement on Cessation of Publication of WIBOR, or when the Lack of Authorisation occurs in relation to WIBOR, the Base Rate will be calculated by [the Calculation Agent/the Issuer], in accordance with Section 1.2.(i), as the WIRON Compound Rate, based on the WIRON Compound Index, and if the Index is not available, based on WIRON, and in each case the Base Rate will be increased by the Spread Adjustment.

(e) In the case when the value of the WIRON Compound Index or of WIRON cannot be determined on a given Interest Rate Fixing Date in connection with the Announcement on Cessation of Publication of the WIRON Compound Index or of WIRON, or when the Lack of Authorisation occurs in relation to the WIRON Compound Index or to WIRON:

(i) WIRON will be replaced with an Alternative Index adjusted by the Adjustment (if applicable) determined by [the Calculation Agent/the Issuer] in accordance with one of the following methods in order from (A) to (C):

(A) Alternative Index is an index recommended by the National Working Group for benchmark reform or any other similar body, group or organisation appointed to designate a replacement for a given index, in accordance with principles similar to the principles applied by the National Working Group for benchmark reform;

(B) Alternative Index is an index recommended for use by the KNF instead of a given index.

(C) Alternative Index is a reference rate determined by the National Bank of Poland.

(ii) The calculations of the Base Rate will be done in accordance with the applicable method described in par. 1.2.(i).(ii) taking into account the Spread Adjustment according to Section 1.2.(d).

(f) If the unavailability of the rate used to determine the Base Rate is related to the Announcement on Cessation of Publication, or when the Lack of Authorisation occurs, WIRON or an Alternative Index, respectively, will replace that rate permanently for the purpose of determining the Base Rate. Otherwise, that rate is used again to determine the Base Rate, as from the Interest Rate Fixing Date on which it is available again.

(g) After an Alternative Index is determined, the Adjustment is determined in accordance with the following rules:

(i) once determined, the Adjustment is applied throughout the application of the Alternative Index;

(ii) if in a given method of determining the Alternative Index, referred to in Section 1.2.(e).(i).(A) and (B) above:

(A) the Designating Entity has designated the Adjustment – such Adjustment is applied;

(B) the Designating Entity has indicated that the Adjustment should not be applied – no Adjustment is applied;

(iii) if in a given method of determining the Alternative Index, referred to in Section 1.2.(e).(i).(A) and (B) above, the Designating Entity has not referred to the Adjustment or if an Alternative Index has been determined in accordance with the method set out in Section 1.2.(e).(i).(C) above:

(A) the Adjustment is equal to the historical median of the differences between the replaced benchmark and the Alternative Index;

(B) the median of the differences is determined:

I. for a period of 60 months preceding: the day on which the replaced benchmark ceased to be published (when the Announcement on Cessation of Publication was made) or the first day on which the Alternative Index is applied (when it has not been published but the Announcement on Cessation of Publication has not been made), or the day on which the Lack of Authorisation occurred;

II. taking into account each day from the period under review on which both the replaced benchmark and the Alternative Index were published.

(h) The procedure for the selection of the Alternative Index and determining the Adjustment in connection with the Announcement on Cessation of Publication or with the Lack of Authorisation is conducted only once which means that the same Alternative Index or the Adjustment are applied instead of WIRON (or each subsequent benchmark replacing it) to calculate the Interest also for the subsequent Interest Periods.

(i) To calculate the Base Rate based on WIRON or the WIRON Compound Index, or the Alternative Index, the following rules are applied:

(i) if the WIRON Compound Index is available, then the WIRON Compound Rate will be determined in the following manner:

SW means the WIRON Compound Rate for a given Interest Period, calculated according to the following formula:

SW = [(Index_koniec/Index_start)-1] x [365]/d

Index_koniec means the value of the WIRON Compound Indexfor the day falling 5 Business Days before the Interest Payment Date for a given Interest Period (index date);

Index_start means the value of the WIRON Compound Index for the day falling 5 Business Days before the start of a given Interest Period (index date);

d means the number of calendar days between the Index_koniec date (exclusive) and the Index_start date (inclusive);

The SW value is rounded to the [fifth] decimal place.

(ii) if the WIRON Compound Index is not available, the WIRON Compound Rate will be determined in the following manner:

SW means the WIRON Compound Rate for a given Interest Period, calculated according to the following formula:

$$\mathbf{SW} = \left[\prod_{i=1}^{d_0}\left(1+\frac{RFR_i \times n_i}{365}\right)-1\right] \times \frac{365}{d}$$

RFR_i means the WIRON value for the i-th reference date (index date);

n_i means the length of the period of application of WIRON for the i-th day meaning the number of calendar days between the i-th Business Day and the next Business Day falling directly after that Business Day;

i means each Business Day in the period beginning 5 Business Days before the start of a given Interest Period (inclusive of that day) and ending on the Business Day falling 6 Business Days before the Interest Payment Date for a given Interest Period (inclusive of that day);

d means the number of days during which the Base Rate for a given Interest Period is effective (**the sum of n_i for the above-described i**);

d_0 for a given Interest Period means 'i' number of days;

The SW value is rounded to the [fifth] decimal place.

If WIRON value is not available on a Business Day, then we use the WIRON value from the previous Business Day;

(j) A change in the method of calculating a benchmark within the meaning of the BMR announced by its administrator, including a change considered by the administrator to be a material change, does not constitute a change of or a basis for changing the Terms and Conditions or for applying the Adjustment.

(k) In the event when, in accordance with point (f), WIRON or an Alternative Index permanently replace the rate used to determine the Base Rate, the provisions relating to WIRON or the Alternative Index apply accordingly to each subsequent Alternative Index.

(l) If the Base Rate is less than zero, for the purpose of fixing the Interest Rate for a given Interest Period, it is assumed that the Base Rate equals zero.

(m) The Issuer will publish on its website the selected Alternative Index and the method for calculating the Adjustment (after such method is created) or an opinion that no Adjustment is required.