

Benchmarks Replacement Plan

ARTICLE 28(2) EU BENCHMARK REGULATION; ARTICLE 118-BIS ITALIAN BANKING ACT

V. 1.1 - JANUARY 2025

1. LEGISLATIVE BACKGROUND AND PURPOSE OF THE DOCUMENT

Article 28(2) of the EU Benchmarks Regulation ¹ requires supervised entities that use benchmarks ² to produce and maintain robust written plans setting out the actions that they would take in the event that such benchmark materially changes or permanently ceases to be provided. Where feasible and appropriate, such plans shall designate one or several alternative benchmarks that could be referenced to substitute the benchmarks that would no longer be provided, indicating the reasons for the suitability of such alternative benchmarks.

Article 118-bis of the Italian Banking Act ³ implements this regime by regulating how banks shall publish, update and inform clients of these plans. It also introduced an obligation upon banks to ensure that fallback clauses are included in their agreements, enabling their clients to identify the changes that would be made in case of a material change to the benchmark or the replacement benchmark that would be used in case of permanent cessation of the original benchmark (hereinafter, **"118-bis fallback clauses"**).

This document therefore outlines the Benchmarks Replacement Plan (hereinafter the **"Plan"**) adopted by J.P. Morgan's Commercial & Investment Bank lending division ⁴ to comply with these regulatory requirements.

2. SCOPE

Article 118-bis is part of the Italian "banking transparency rules" and derives its scope from that set of rules, as it applies to contracts governing transactions and services regulated under Title VI of the Italian Banking Act (and not just those expressly covered by the EU Benchmarks Regulation) ⁵. In turn, the scope of Title VI covers activities conducted by financial institutions "in Italy" ⁶.

On this basis, the Plan intends to cover the bilateral and syndicated lending activities that are carried out by JPMorgan Chase Bank N.A., Milan branch and J.P. Morgan SE in Italy, that are regulated under Title VI of the Italian Banking Act and whose economic terms reference a benchmark.

The Plan also intends to cover the trade and working capital activities that are carried out by J.P. Morgan SE and booked in Frankfurt but for clients located in Italy, that are regulated under Title VI of the Italian Banking Act and whose economic terms reference a benchmark. These include supply chain finance products (buyer led receivables purchase arrangements), core trade products (including, but not limited to, trade loans and corporate draft discounting) and structured working capital products.

Throughout the Plan, the expression **"JPM"** shall be understood to refer to the above entities/businesses.

¹ The EU Benchmarks Regulation (or EU BMR) means Regulation (EU) 2016/1011 of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds, as amended from time to time.

² I.e., indices by reference to which the amount payable under a financial instrument or a financial contract, or the value of a financial instrument, is determined, or used to measure the performance of an investment fund.

³ The Italian Banking Act means Legislative Decree no. 385 of 1 September 1993, as amended.

Article 118-bis was introduced with Legislative Decree no. 207 of 7 December 2023 and requires implementation by January 10, 2025.

⁴ For the purposes of this Plan, the reference to "lending division" includes in-scope lending activity by J.P. Morgan's Markets business. Note that other J.P. Morgan divisions may have adopted separate benchmarks replacement plans.

⁵ As a result, Article 118-bis does not apply to transactions and services that are excluded from the banking transparency rules, even though these may still fall under the plan publication requirement per article 28(2) of the EU Benchmark Regulation. For example, excluded transactions and services include those carried out in the provision of investment services/activities or the placement of financial products ("prodotti finanziari") with an investment purpose, such as bonds and other debt securities, certificates of deposit, derivative contracts, repurchase agreements.

⁶ To determine when a banking activity or service is carried out "in Italy", reference is made to the guidance and provisions published over time by the Bank of Italy in its Supervisory Provisions for banks (Circular 285/2013) and/or its Regulation dated 29.07.2009 on transparency of banking and financial transactions and services and fairness of relations between intermediaries and customers. Pursuant to these regulations, on a general basis (although nuances apply) a banking activity is deemed to be performed "in Italy" if a bank provides to an Italian established/resident client further to an offer addressed to it, irrespective of the booking location of that business within the bank's organisation.

3. FALLBACK PLAN

3.1 Detection of Benchmark Events

JPM constantly monitors the availability of the indexes serving as benchmarks in its client agreements, to detect any “material change” or “cessation” (each, a **“Benchmark Event”**) that would trigger the activation of the Plan.

For the purposes of this Plan:

- 3.1.1 “cessation” means permanent cessation of the calculation, determination or provision of the benchmark by the relevant administrator, including, without limitation:
- (i) where the administrator of the benchmark, or its supervisor, publicly announces that it has ceased or will cease to provide the benchmark permanently or indefinitely and, at that time, there is no successor administrator to continue to provide that benchmark; or
 - (ii) where the administrator of the benchmark, or its supervisor, publicly announces that the benchmark may no longer be used;
 - (iii) where the supervisor of the administrator of the benchmark publicly announces that the benchmark has been or will be permanently or indefinitely discontinued;
 - (iv) where the supervisor of the administrator of the benchmark publicly announces or publishes information stating that in its view the benchmark is no longer, or as of a specified future date will no longer be, representative of the underlying market and the economic reality that it is intended to measure and that such representativeness will not be restored (as determined by such supervisor);
 - (v) where the administrator of the benchmark, or its supervisor, publicly announces that such administrator is insolvent; or information is published in any order, decree, notice, petition or filing, however described, of or filed with a court, tribunal, exchange, regulatory authority or similar administrative, regulatory or judicial body which reasonably confirms that the administrator of the benchmark is insolvent; provided that, in each case, at that time, there is no successor administrator to continue to provide the benchmark; or
 - (vi) the occurrence of any other event or circumstance for which the regulations in force from time to time (including, without limitation, the EU Benchmark Regulation) provide for the designation of a replacement benchmark, even if the benchmark is not subject to replacement by the relevant administrator or its supervisor;
- 3.1.2 “material change” means a change to the methodology, formula or other means of calculation, determination or provision of the benchmark applied by the relevant administrator, for which article 13(1)(c) of the EU Benchmark Regulation would require the initiation of a consultation procedure, including without limitation:
- (i) any change in the type of input data (e.g. counterparty types),
 - (ii) fundamental changes to the determination methodology (e.g. elimination or addition of waterfall levels);
 - (iii) a change to the maturities in which a benchmark is published; or
 - (iv) a change related to a potential discontinuation of a benchmark, including transition arrangements to a new benchmark;
 - (v) a change that impacts the ability of a stakeholder to use the benchmark in the established manner.

Clients should note that, where a benchmark is temporarily unavailable, JPM will replace that benchmark in accordance with the provisions of the relevant agreement, and only for the period during which the benchmark is unavailable.

3.2 Actions taken in the event of a Benchmark Event

Upon becoming aware of a current or forthcoming Benchmark Event in respect of a benchmark utilised in its agreements with clients (for example, following an announcement by the benchmark’s administrator or its supervisor), JPM will endeavour to take the necessary actions to ensure an orderly transition from the existing benchmark to either the resulting benchmark (as materially changed by the Benchmark Event) or to an alternative index.

Notably, JPM's business units that use the benchmark, with the support and coordination of the relevant Wholesale Loan Services, Risk Management, Legal and Compliance functions, using the support of Treasury function, will implement the actions detailed below:

- (i) conduct a qualitative assessment to determine the impact of the Benchmark Event on exposures, as well as the affected contracts, customers, transactions, technology and systems;
- (ii) review applicable regulatory and/or industry guidance published in connection with the Benchmark Event and relevant market practice;
- (iii) assess the impact on the documentation of the impacted contracts;
- (iv) continue using the benchmark as materially changed further to the approach set out in paragraph 3.3 below and/or identify a suitable alternative index (the **"Replacement Benchmark"**) based on the criteria and procedures outlined in paragraph 3.4 below;
- (v) will define a timeline, with the relevant stages, for the implementation of the material changes to the benchmark or the adoption of the Replacement Benchmark, promoting an orderly replacement process;
- (vi) will inform clients and counterparties of the material change or cessation of the benchmark, in relation to impacted contracts, and its replacement, providing them with contact details to refer to in case of questions; and
- (vii) will prepare the necessary steps if the client exercises their right of withdrawal under article 118-bis(3) of the Italian Banking Act.

3.3 Material change to a benchmark

Note that, where a material change to a benchmark is made in accordance with the procedure developed by the administrator pursuant to article 28(1) EU Benchmarks Regulation⁷, JPM would:

- 3.3.1 apply the 118-bis fallback clause (or other applicable fallback clause, as the case may be) in its agreements with clients to either continue using the benchmark as materially changed, or apply any Replacement Benchmark that may be identified therein;
- 3.3.2 If an 118-bis fallback clause is included and refers to this Plan, JPM would consider the criteria identified in paragraph 3.4 below, including market practice. In particular, if regulatory guidance, the index administrator or its supervisor recommend or identify a specific alternative index as a Replacement Benchmark for the benchmark that has materially changed, JPM would adopt that recommended index as Replacement Benchmark. Otherwise, JPM would continue using the benchmark as materially changed.
- 3.3.3 If the agreement with the client does not include a fallback clause, or includes a fallback clause different to an 118-bis fallback clause, JPM would operate as per paragraph 3.3.2 above. Should JPM resolve to adopt a Replacement Benchmark it would proceed per the terms of the applicable fallback clause (if any) and, where required, seek the required consents from its client and/or, where applicable, other parties to the documentation.

In any case, if the material change to the benchmark results or would result in a transfer of value favouring one party, the fixed component of the interest rate may be adjusted to neutralise this potential value transfer.

Finally, in the context of syndicated facilities, the choice to continue using the benchmark as materially amended or to adopt the Replacement Benchmark will be taken by JPM together with the other syndicate lenders, administrative parties and, where applicable, borrower(s) in accordance with the procedures set out in the underlying loan agreement.

3.4 Permanent cessation of a benchmark and identification of the Replacement Benchmark

In the event a benchmark ceases, JPM will adopt the Replacement Benchmark identified in any 118-bis fallback clauses included in its agreements with clients. If no Replacement Benchmark is identified in the underlying agreement, JPM will identify a suitable alternative index according to the criteria outlined in this Plan.

Subject to the terms of the relevant agreement(s), the Replacement Benchmark will be applied from the date on which the cessation takes effect, the benchmark ceases to be published or otherwise becomes unavailable, or ceases to be representative of the underlying market and the economic reality that it is intended to measure, depending on the situation, unless stated otherwise in the notice to be sent to affected clients pursuant to paragraph 3.5 below.

⁷ Concerning the actions to be taken in the event of changes to or the cessation of a benchmark. For example, regarding EURIBOR, JPM will refer to the document "Benchmarks Changes and Cessation Policy" published by the European Money Markets Institute (EMMI) at this [link](#).

In the preparation, monitoring and periodic review of this Plan, JPM aims at identifying in advance suitable alternatives for each benchmark that it uses, where feasible and appropriate based on the then current regulatory framework, market practice, market conditions, technology and systems. These pre-identified Replacement Benchmarks are detailed in the table in paragraph 3.4.2 below⁸

However, it is not always possible to identify in advance alternative indexes for all benchmarks to be included in the Plan. If a Replacement Benchmark for a specific benchmark has not been pre-identified, JPM will, upon the occurrence of a Benchmark Event for that specific benchmark, identify a Replacement Benchmark using the criteria detailed in paragraph 3.4.1 below. Where feasible, JPM will consult with the benchmark administrator.

Finally, in the context of syndicated facilities, the Replacement Benchmark will be identified by JPM together with the other syndicate lenders and administrative parties in accordance with the procedures set out in the underlying loan agreement.

3.4.1 Criteria for the identification of the Replacement Benchmark

In identifying possible alternative index(es), the following would be considered by JPM:

- (i) any designations made by the benchmark administrator, also further to the procedure developed pursuant to article 28(1) EU Benchmarks Regulation;
- (ii) any designations made as a result of statutory law or regulation (including any Replacement Benchmark identified by the European Commission or a national competent authority under articles 23-ter or 23-quarter of the EU Benchmark Regulation);
- (iii) any recommendations published by the benchmark administrator, its supervisor, the relevant central bank or other competent authority or body, or by any working groups/committees officially appointed or mandated for this purpose by the administrator or other authority or body;
- (iv) the compliance of any alternative index(es) with the requirements set by the EU Benchmark Regulation and their suitability to measure the underlying market and economic reality;
- (v) the presence of the indices and/or of their administrator in the register kept by the European Securities and Markets Authority as provided for by article 36 of the EU Benchmark Regulation;
- (vi) the provisions of the guides and definitions published by trade associations (e.g. ISDA, or LMA), where possible and appropriate;
- (vii) current market practice, available technology and systems;
- (viii) the ability to implement the replacement without undue delay;
- (ix) the consistency with the original benchmark in terms of nature, structure, characteristics and market diffusion; and
- (x) the conformity of the Replacement Benchmark with the characteristics of existing products, services and instruments linked to the original benchmark.

⁸ If the evolution of market conditions and practices unforeseen circumstances render a pre-identified Replacement Benchmark in this Plan non-adoptable, JPM shall modify the Plan accordingly, specifying the reasons why the index is no longer a valid alternative to the one being discontinued and detailing the elements that lead to a different solution. JPM shall appropriately document and store the results of the analyses conducted over time.

3.4.2 Table of the benchmark and replacement rates for all products and services in scope of this contingency plan

Original benchmark	Administrator	Replacement Benchmark	Administrator
EURIBOR - Euro Interbank Offered Rate	European Money Markets Institute	A two-level waterfall solution consisting of: (i) Term €STR rate EFTERM (Euro Forward Looking Term Rate) ⁹ on the first level, and	European Money Markets Institute
		(ii) Daily €STR compounded in arrears with a backward-looking methodology, on the second level.	European Central Bank
SONIA - Sterling Overnight Index Average	Bank of England	The Bank of England's bank rate as published by the Bank of England from time to time (the " Central Bank Rate ") plus the 20 per cent. trimmed arithmetic mean (calculated by JPM) of the Central Bank Rate Spreads for the last available period of five most immediately preceding banking days (each a " Reference Day ") for which both SONIA and the Central Bank Rate were available, where: "Central Bank Rate Spread" means, in relation to a Reference Day, the difference (expressed as a percentage rate per annum) between: (a) SONIA for that Reference Day; and (b) the Central Bank Rate prevailing at close of business on that Reference Day.	

⁹ For the calculation of interest, reference is therefore made to the value of the "term €STR rate" published by the European Money Markets Institute, relating to the day and the applicable tenor based on the individual credit agreement.
This Replacement Benchmark was chosen to ensure full compliance with applicable regulatory provisions and in consideration of the recommendations coming from competent bodies, including the Working Group on Euro Risk-Free Rates. The index identified is considered suitable to accurately represent the same economic reality underlying EURIBOR.

Original benchmark	Administrator	Replacement Benchmark	Administrator
Compounded SOFR - Secured Overnight Financing Rate	Federal Reserve Bank of New York	<p>Either: (a) the short-term interest rate target set by the US Federal Open Market Committee as published by the Federal Reserve Bank of New York from time to time; or (b) if that target is not a single figure, the arithmetic means of: (i) the upper bound of the short-term interest rate target range set by the US Federal Open Market Committee and published by the Federal Reserve Bank of New York; and (ii) the lower bound of that target range (the "Central Bank Rate"), plus, in each case, the 20 per cent. trimmed arithmetic mean (calculated by JPM) of the Central Bank Rate Spreads for the last available period of five most immediately preceding banking days (each a "Reference Day") for which both SOFR and the Central Bank Rate were available, where:</p> <p>"Central Bank Rate Spread" means, in relation to a Reference Day, the difference (expressed as a percentage rate per annum) between: (a) SOFR for that Reference Day; and (b) the Central Bank Rate prevailing at close of business on that Reference Day.</p>	
CME TERM SOFR	Chicago Mercantile Exchange	<p>Either:</p> <p>(a) Compounded SOFR; or</p> <p>(b) if that target is not a single figure, the arithmetic means of: (i) the upper bound of the short-term interest rate target range set by the US Federal Open Market Committee and published by the Federal Reserve Bank of New York; and (ii) the lower bound of that target range (the "Central Bank Rate"), plus the 20 per cent. trimmed arithmetic mean (calculated by JPM) of the Central Bank Rate Spreads for the last available period of five most immediately preceding banking days (each a "Reference Day") for which both CME Term SOFR and the Central Bank Rate were available (and, in case of application of the Central Bank Rate as replacement benchmark, the interest periods under the agreement shall be 1 month), where:</p> <p>"Central Bank Rate Spread" means, in relation to a Reference Day, the difference (expressed as a percentage rate per annum) between: (a) CME Term SOFR for that Reference Day; and (b) the Central Bank Rate prevailing at close of business on that Reference Day.</p>	

Original benchmark	Administrator	Replacement Benchmark	Administrator
SARON - Swiss Average Rate Overnight	SIX Swiss Exchange	The policy rate of the Swiss National Bank as published by the Swiss National Bank from time to time (the “ Central Bank Rate ”), plus 20 per cent. trimmed arithmetic mean (calculated by JPM) of the Central Bank Rate Spreads for the last available period of five most immediately preceding banking days (each a “ Reference Day ”) for which both SARON and the Central Bank Rate were available, where: “Central Bank Rate Spread” means, in relation to a Reference Day, the difference (expressed as a percentage rate per annum) between: (a) SARON for that Reference Day; and (b) the Central Bank Rate prevailing at close of business on that Reference Day.	
CAD CORRA - Canadian Overnight Repo Rate Average	Bank of Canada	The Bank of Canada's Target for the Overnight Rate as published by the Bank of Canada from time to time (the “ Central Bank Rate ”), plus the 20 per cent trimmed arithmetic mean (calculated by JPM) of the Central Bank Rate Spreads for the last available period of five most immediately preceding banking days (each a “ Reference Day ”) for which both CAD CORRA and the Central Bank Rate were available, where: “Central Bank Rate Spread” means, in relation to a Reference Day, the difference (expressed as a percentage rate per annum) between (a) CAD CORRA for that Reference Day and (b) the Central Bank Rate prevailing at close of business on that Reference Day	
JPY Tona - Tokyo Overnight Average Rate	Bank of Japan	Either (a) the basic discount rate and basic loan rate of the Bank of Japan as published by the Bank of Japan from time to time; or (b) the short-term policy interest rate of the Bank of Japan as published by the Bank of Japan from time to time.	

3.4.3 Application of the Credit Adjustment Spread

The Replacement Benchmark will be increased by the Credit Adjustment Spread (if any) specified in the 118-bis fallback clause of the relevant agreement. If no such Credit Adjustment Spread is specified, JPM will assess whether an adjustment factor is necessary.

This adjustment factor is intended to neutralise any transfer of value or negative economic impact on the parties during the transition, by ensuring economic equivalence between the original benchmark and the corresponding fallback rate.

For €STR, JPM would generally apply the five-year historical median spread adjustment methodology (i.e., the adjustment factor will be equal to the median of the difference between the values of the discontinued benchmark and the Replacement Benchmark over a five-year reference period or, if shorter, over the shortest publication period of the Replacement Benchmark).

In any case, JPM would take into account any indications that may be included in the announcement of the benchmark cessation by the benchmark administrator or its supervisor, or issued by working groups or trade associations.

Finally, in the context of syndicated facilities, the possible inclusion of a Credit Adjustment Spread will be identified by JPM together with the other syndicate lenders and administrative parties in accordance with the procedures set out in the underlying loan agreement.

3.5 INFORMATION TO CUSTOMERS

Subject to the terms of the relevant agreement(s), within 30 days of the effective date of a material change or permanent cessation of a benchmark, JPM will send a specific communication to the affected clients. This communication will provide the clients with information on the timing and manner in which the contractually agreed interest rate calculation formula will be changed, including in respect of the switch to the Replacement Benchmark (if applicable), according to the applicable 118-bis fallback clauses and the provisions of this Plan.

The communication shall also inform clients of their right to withdraw within two months of receiving the communication, detailing the procedures and costs for doing so, also taking into account the provisions of the relevant agreement.

4. MONITORING AND UPDATING OF THE PLAN

JPM's Wholesale Loan Services, Risk Management, Legal and Compliance functions constantly monitor the validity of the Plan. In the event of regulatory changes, market events, market practice, technology and/or systems developments, organizational changes, or the introduction of new indexes to which JPM's products and services are linked, JPM will evaluate whether an update to the Plan is required. In any case, the Plan will be reviewed at least annually to ensure it remains aligned with industry and regulatory developments.

Updates to the Plan will be communicated to clients at the earliest available opportunity, in accordance with Article 119 of the Italian Banking Act, and at least once per year.