



Explanatory notes on the Bundesbank's in-house exchange rates

The Bundesbank publishes in-house exchange rates for all the currencies for which services are offered under the Bank's General Terms and Conditions and settled on the basis of in-house exchange rates. In-house exchange rates are usually determined at around 10:00 CET on all TARGET2 operating days and published on the Bank's website. They serve the purposes defined in the General Terms and Conditions.

The Bundesbank routinely reviews the suitability of specific data used to determine and validate its in-house exchange rates. This serves a number of purposes, including the following:

- (a) It helps ensure that the in-house exchange rates are based on reliable and observable market data which reflect economic reality in a given market.
- (b) It guarantees that the in-house exchange rates themselves paint a reliable picture of the foreign exchange market.

The data inputs used when determining the in-house exchange rates are not obtained from panels or surveys, but are transaction data of buyers and sellers in the markets for which such data are available and reflect an adequate volume of liquidity. For thinner markets, some or all of the in-house exchange rates might be based on bid and ask prices or earlier transactions. Expert opinions are used to assess the degree of liquidity in a given market.

The Bundesbank can exercise its discretion with regard to the data inputs it uses when determining an in-house exchange rate. The procedure used to determine the in-house exchange rates includes a validation process in which, amongst other steps, Bundesbank experts check that the data and the proposed in-house exchange rates fall within certain tolerance ranges specified in advance. When it conducts these tolerance checks, the Bank can decide, at its discretion, to include or exclude certain data when determining the in-house exchange rates. Building on the Bundesbank's experience in interpreting market data, Bank experts will also use their own judgement, if necessary, to guarantee the quality and integrity of in-house exchange rates. Specifically, Bundesbank experts are more likely to exercise their own judgement where a market is active but thin and transaction data might not always be available, or where a market is highly volatile.

If rates fluctuate strongly during the course of a business day, it is possible that new in-house exchange rates will be determined later that day. Furthermore, the Bundesbank might refrain from basing its in-house exchange rates on market data and determine different rates if this is necessary owing to monetary and foreign exchange policy objectives.