

FTSE Russell Factsheet

Accessing WMR FX Benchmark Rates Via Bloomberg

To view a list of all WMR FX Benchmark services available, please refer to the homepage on Bloomberg which can be found by typing in "WMCO <GO>".

The homepage details the page numbers specific to each WMR FX Benchmark service and base currencies as follows:

	WMR service	Options
1	Daily spot rates	
	 Spot rates current daily fixing 	USD based
		GBP based
		EUR based
2	Daily spot rates and historical	
	 Spot rates current and historical daily fixings 	USD based
		GBP based
		EUR based
		Tokyo fixing
3	Intraday hourly and half-hourly spot rates	
	 Intraday spots hourly and half-hourly 	Hourly USD based
		Hourly GBP based
		Hourly EUR based
		Half-hourly USD/GBP/EUR based
4	Daily forward rates	
	 Forward rates daily fixings 	USD based
		GBP based
		EUR based
5	Daily forward rates and historical	
	 Forward rates current and historical daily fixings 	USD based
		GBP based
		EUR based
6	Intraday forward rates (factored)	
	 Intraday forward pages 	USD based
		GBP based
		EUR based
7	Intraday forwards digital (non-factored)	
	 Intraday forwards digital 	USD based
		GBP based
		EUR based
8	Daily and intraday non- deliverable forward rates	Intraday USD/GBP/EUR based
	 Non-deliverable forward rates 	Daily USD/GBP/EUR based
9	Contact information	
	 WMR contacts 	Contact details
		To request information
10	Pricing sources	
	 WMR pricing sources 	
11	AFMA/NZFMA spot rates	
	 Hedge settlement fixing rates 	AFMA/NZFMA spot rates

Up to date as of January 2020

NB: Page WMAU also provides WMR daily at 10 a.m. and 4 p.m. Australian Easter Standard Time (AEST), and at 2 p.m. New Zealand Standard Time (NZST). It uses the New Zealand Financial Markets Association (NZFMA) reference rates.

The option to view and download the WMR rates is available. When downloading using Bloomberg's API system, the following XDF codes can be used for various WMR services:

Closing spot rates	WMCD
Closing spot and history rates	WMCO
Closing forward rates	WMCF
Closing forward and history rates	WMHF
Closing NDF rates	WMND
Intraday spot rates	WMIS
Intraday forward rates	WMIF
Intraday NDF rates	WMIN
Half-hourly intraday rates	WMHH
Tokyo 9.55 JST fixing	WMTF

Questions and assistance

For information on using Bloomberg tickers (which may differ from WMR currency codes) please refer to page WCV.

If you are experiencing problems retrieving the WMR rates, this may be due to your CUST number not having sufficient permission to view the data.

Please telephone or email the WMR FX Benchmark team directly to resolve this at 0800 023 4130/+44 (0) 131 376 0007 / <u>wmr.sales@lseg.com</u>

Please quote your full office postal address and Bloomberg terminal CUST number (this can be found by typing "IAM <GO>" into your Bloomberg terminal).

For any Bloomberg application questions or assistance, please contact Bloomberg directly by hitting the "HELP" key twice on your Bloomberg terminal.

Please find further information regarding how to view and download specific services below:

Closing rates

Download function: for example, if you wish to download EUR/JPY closing spot rate, you would need to select "WMCD" in the XDF screen and use the following ticker: "EURJPY WMCD Curncy (F11) <GO>".

Download function: for forward rates, use: "AUD1M WMCF Curncy (F11) <GO>" (for AUD/USD one-month forward rate).

Download function: for closing spot rate history data, you must access the corresponding ticker and then type "HP <GO>".

For example, "EURJPY WMCO Curncy (F11) HP <GO>".

Download function: for closing forward rate history data, change setting to "Points" as your preference for viewing forward rates history "PCS <go>". Access the corresponding ticker, then type "HP <GO>". For example, "EURJPY WMHF Curncy (F11) HP <GO>"

View function: for history data, please follow the following example: "WMCO"

Choose options "4 - 6 <GO>" (depending on the base currency required)

Choose the opposing currency e.g., "opt 9 CZK <GO>" "HP <GO>" (historical price)

Please note that the majority of historical data on Bloomberg is available from 1999 – but subject to currency. Ad hoc historical data may be obtained directly from WMR.

Intraday rates

Download function: for example, if you wish to download EUR/JPY intraday spot rate, you would need to select "WMIS" in the XDF screen and use the following ticker: "EURJPY WMIS Curncy (F11) <GO>".

Download function: for intraday forward rates, use the following: "AUD1M WMIF Curncy (F11) <GO>".

View function: all intraday history rates can be accessed through the QRM screen.

For example, "GBP WMIS Curncy (F11), QRM <GO>". 50 days of historical, hourly data is available.

View function: for 9 p.m. UK Time intraday history rates, type in "HP <GO>" from the screen with the specific currency you wish to view.

How to download WMR intraday spot and intraday forward rates from Bloomberg ("WMCO<GO>") into Microsoft Excel®:

The easiest way is to open an Excel worksheet and click on the "Bloomberg" tab at the top. You can find it to the right of the toolbar containing "File", "Edit" and "View". Select "Import Data" from the drop-down menu that appears and select "Historical Intraday Bars".

Next, drag and drop the tickers from the WMCO page using the symbol in the top-right corner of the page (e.g., "WMCO10<GO>" for USD intraday spots) and drop them into the column on the right entitled "Selected securities" in the Bloomberg Excel wizard. Note that this will drag all tickers on the page. However, you can drag and drop them individually too.

After this, click on "Next", check "Trade" under "Market Events" and "Close" under "Interval fields" and select your timeframe for the data you want. Since the fixings are hourly, you can leave the interval size as it is. Click on "Next" twice, select how you want the data to be placed in the sheet and click on "Finish". You will then have the requested data in Excel.

WMR rates - different Bloomberg ticker codes

Please note that Bloomberg utilise some different ticker codes compared to the undernoted WMR currency ISO codes:

WMR forward currency code	Bloomberg ticker code
ARS	APN
BRL	BCN
CLP	CHN
CNY	000
COP	CLN
EGP	EPN
IDR	IHO
INR	IRO
KZT	KTN
MYR	MRO
NGN	NNO
PEN	PSN
PHP	PPO
PKR	PRO
THB	Not available on Bloomberg
TOF	ТНВО
TWD	USD NTO/GBP TRBPO/ EUR TREUO
VND	VDO

WMR NDF currency code	Bloomberg ticker code
CNYNDF	CCN+
IDRNDF	IHN+
INRNDF	IRN+
KZTNDF	KTN+
KRWNDF	KWN+
MYRNDF	MRN+
NGNNDF	NNN+
PHPNDF	PPN+
RUBNDF	RUB+
TWDNDF	NTN+
UAHNDF	UKN+
VNDNDF	VDN+

Please note tickers for Thai baht policy

Bloomberg no longer provide WMR THB (Thai Baht onshore) rates.

Any WMR Thai baht rates on Bloomberg are TOF (Thai Baht offshore).

Tickers THBO (and its aliases THO, THBONSH and USDTHBO), EURTHBO and GBPTHBO have been discontinued. If you have been using these tickers for BGN or CMPN Thai baht spot rates, please use tickers THB, EURTHB and GBPTHB instead.

If you have been using the tickers for rates from WMR on source codes WMCD, WMCO or WMIS, please use tickers THB, EURTHB and GBPTHB and source codes WMTO, WMTH and WMTI as per the following examples:

THBO WMCD \rightarrow THB WMTO

THBO WMCO \rightarrow THB WMTH

THBO WMIS \rightarrow THB WMTI

LSEG is one of the world's largest providers of financial markets data and infrastructure, serving over 40,000 institutions in approximately 190 countries. It provides leading data and insights, trading platforms, and open data and technology platforms that connect a thriving global financial markets community – driving performance in trading, investment, wealth management, regulatory compliance, market data management, enterprise risk and fighting financial crime.

© [2023] London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) FTSE (Beijing) Consulting Limited ("WOFE") (7) Refinitiv Benchmark Services (UK) Limited ("RSL"), (8) Refinitiv Limited ("RL") and (9) Beyond Ratings S.A.S. ("BR"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL, and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", "Beyond Ratings®", "WMR[™], "FR[™] and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.

No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index and/or rate returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index or rate inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index or rate was officially launched. However, back-tested data may reflect the application of the index or rate methodology with the benefit of hindsight, and the historic calculations of an index or rate may change from month to month based on revisions to the underlying economic data used in the calculation of the index or rate.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of LSEG nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from LSEG and/or its licensors. Data definitions available from info@ftserussell.com

To learn more, visit www.ftserussell.com; email info@ftserussell.com; or call your regional Client Services Team office:

EMEA

+44 (0) 20 7866 1810

North America

+1 877 503 6437

Asia-Pacific

Hong Kong +852 2164 3333 Tokyo +81 3 6441 1430 Sydney +61 (0)2 7228 5659