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Addendum 8 to the CRI Technical Report (Version: 2017, Update 1)

This document updates the Technical Report (Version: 2017, Update 1) and details (1) the replacement of interest rates and (2) the replacement of the stock index in Kuwait. These changes have been implemented for the computation of the Probabilities of Defaults (PDs) and Actuarial Spreads (AS) since 16 April 2018.

I. Replacement of 3-month and 1-year interest rates, Pakistan

Our data provider (Bloomberg) ceased updating the 1 year (*PKR 12 Month Repo*) and 3 month (*PKR 3 Month Repo*) interest rates in September 2016. We have thus used the *Bloomberg State Bank of Pakistan KIBOR Fixing 12 Month* rate and the *Reuters Pakistan Repo 3 Month* rate as replacements for the Pakistan 1 year and 3 month interest rates, respectively.

Henceforth, as of the April 2018 calibration, the *Bloomberg State Bank of Pakistan KIBOR Fixing 12 Month* rate and the *Reuters Pakistan Repo 3 Month* rate are used for all data points starting from 19 April 2004 and 2 January 2002, respectively; we continue to use the *Bloomberg PKR 12 Month Repo* and *Bloomberg PKR 3 Month Repo* interest rates for earlier periods.

II. Replacement of 3-month and 1-year interest rates, Jamaica

The adoption of the overnight deposit rate as its policy rate by the Bank of Jamaica and inconsistencies in available data of the repo rates have prompted the change in interest rates for Jamaica. As of the April 2018 calibration, we use the *Bloomberg Bank of Jamaica 3 Month Treasury Bill Yield* and *Bloomberg Bank of Jamaica 6 Month Treasury Bill Yield* as a replacement for the 3 month and 1 year risk-free rates, respectively. As the *Bloomberg Bank of Jamaica 3 Month Treasury Bill Yield* is only available since 30 November 2010, we continue to use the *Bloomberg JMD 3 Month GC Govt Repo* rates for earlier periods.

III. Replacement of 3-month and 1-year interest rates, Peru

On 30 October 2015, the *Reuters Peru Savings Rate* was discontinued by our data provider and we have thus used the *Bloomberg Asbanc Peru 1 Year Nominal Rate* and the *Bloomberg Asbanc Peru 3 Months Nominal Rate* as replacements for the Peru 1 year and 3 month interest rates, respectively from 30 September 2002.

IV. Replacement of 1-year interest rate, Jordan

As of the April 2018 calibration, the *Bloomberg Jordanian Dinar Interbank Offered Rate 1 Year* is used as a replacement for the 1 year risk free rate in the DTD computation for all data points in Jordan starting from 20 September 2006.

V. Replacement of 1-year interest rate, Bosnia and Herzegovina

Our data provider (Reuters) stopped updating the *BP Real interest rate (%) NADJ* for Bosnia and Herzegovina after the World Bank ceased publication of its data on 30 June 2016. We have thus used the *Reuters Bosnia and Herzegovina, Interest Rates, Deposit Rate* as a replacement for the 1 year risk free rate for Bosnia and Herzegovina in the DTD computation starting from 15 September 1998.

VI. Replacement of 1-year interest rate, Serbia

Due to a lack of liquidity in Serbia's securities market and intermittency in data updates by Bloomberg, we have identified that a more appropriate 1 year risk free rate is available for Serbia. Henceforth, as of April 2018 calibration, the *Bloomberg National Bank of Serbia BELIBOR 6M Rate* is used as the 1 year risk free rate for Serbia; as this interest rate is only available as of 28 January 2005, we continue to use the *Bloomberg Serbia Treasury Bill Auction Results 12 Months Average Accepted Yield* for earlier periods.

VII. Replacement of stock index, Kuwait

In April 2018, Boursa Kuwait implemented new rules as part of the market development initiative, segmenting its stock market into new market categories— Premier Market, Main Market and Auction Market. The Premier Market consists of relatively large and more liquid companies; while the Main and Auction markets list companies with less liquidity and smaller market values. The Premier Market comprises nearly two thirds of all listed firms and is likely the main barometer of the Kuwait stock market available to institutional investors. Our data provider (Bloomberg) discontinued the *Kuwait Stock Exchange Weighted Index* and we have adopted the *Bloomberg Kuwait Premier Market Total Return Index* as a replacement for the stock index since 1 April 2018.