

Avg. duration of JGBs

Methodology

Our estimations are based on publicly available data released by the Ministry of Finance (MoF) as well as by the Bank of Japan (BoJ). To estimate average duration and maturity values of Japanese Government Securities, following statistics are our main source of inputs.

“Auction Results of JGBs / Treasury Discount Bills” (MoF)

“Results of Auction for Enhanced Liquidity” (MoF)

“Buy-back Results” (MoF)

"Official Gazette" (MoF, available only in Japanese)

"Annual Statistical Report on Japanese Government Bonds" (MoF, available only in Japanese)

“National Government Debt” (BoJ)

We calculate average duration and maturity of four series listed below.

"JGBs":

This includes 2-year bonds, 5-year bonds, 10-year bonds, 20-year bonds, 30-year bonds, 40-year bonds, 15-year floating-rate bonds, and 10-year inflation-indexed bonds. This definition is the same as bonds to be purchased by BoJ.

We use our calculated figures for the amount of "JGBs".

"Internal gov. securities":

This includes JGBs, Japanese government bonds for individual investors, Government Bonds converted, Subsidy Bonds, Subscription / Contribution Bonds.

After the integration of Financing Bills and Treasury Bills in February 2009, Treasury Bills were excluded from "Internal gov. securities". However, those Treasury Bills which were issued before the integration remain included. This definition is equal to the definition of "Internal Japanese Government Securities Issued in Japan" published by BoJ. This definition is different from the definition of "Government Bonds" published by MoF, which include Treasury Bills but not include Financing Bills, both of which are issued as Treasury Discount Bills.

We use "Internal Japanese Government Securities Issued in Japan" (published by BoJ) for outstanding amount of "Internal gov. securities".

"JGBs+TBs":

This includes "JGBs" and Treasury Discount Bills. We use "Treasury Discount Bills" (published by BoJ) for outstanding amount of Treasury Discount Bills, which include Financing Bills issued before the integration of Financing Bills and Treasury Bills in February 2009.

"Internal gov. securities +TBs":

This includes "Internal gov. securities" and Treasury Discount Bills. We use "Treasury Discount Bills" (published by BoJ) for outstanding amount of Treasury Discount Bills, which include Financing Bills issued before the integration of Financing Bills and Treasury Bills in February 2009.

We use face value for allocating weights in calculation average duration and maturity.

When we calculate average duration and maturity of "JGB issued in Japan" and "JGB issued in Japan and Treasury Discount Bills", we exclude Subsidy Bonds and Subscription / Contribution Bonds from calculation. However, outstanding of those series include Subsidy Bonds and Subscription / Contribution Bonds.

Our use of terms

Following are brief explanations for some terminologies to help clarify ambiguities.

“Maturity”: We define “maturity” as the time remaining before the principal part of debt securities is scheduled to be repaid.

“Duration”: In principal, we use Macaulay duration as the “duration” of debt instruments we evaluate. There are a few notable exceptions though. For inflation index bonds, we use real interest rates, instead of nominal rates, to calculate the present value of flows of values. For floating rate bonds, we consider all variable rate bonds to have duration equal to the time remaining before the next coupon payment.

Publication schedule

As of June 2013, the BoJ publishes the National Government Debt on the sixth business day of the month after next. We publish our series at 5pm on the following day. For the schedule of official data releases, please see here <http://www.boj.or.jp/en/statistics/outline/index.htm/>