BoJ joins the party

Central Bank	Excess Liquidity Absorption Rate	Main Refinancing Rate	Motivation	History of Negative Rates
European Central Bank (ECB)	-0.40% (deposit facility rate)	0.00% (main refinancing operations rate)	The ECB seeks to counter low inflation.	First went negative in June 2014 (-0.10%); further downside inflation surprises prompted another rate cut to -0.20% in September 2014. Cut the deposit facility rate to -0.30% in December 2015 to boost still-low inflation, then to -0.40% in March 2016.
Swiss National Bank (SNB)	-0.75% (rate on sight deposits)	0.50% (liquidity-shortage financing rate)**	The SNB seeks to prevent appreciation of the Swiss franc.	First went negative in December 2014 (-0.25%) as currency appreciation pressure increased; lowered rates further to current levels when abandoning the CHF cap against the EUR in January 2015.
Danish Nationalbank	-0.65% (7-day deposit rate)	0.05% (lending rate)	The Nationalbank seeks to prevent appreciation of the krone, targeting a level of 7.46038 DKK/EUR.	First went negative (-0.20%) in July 2012 amid rising inflows on the back of Euro area break-up risk; as this risk subsided, the bank raised rates to positive levels in March 2014. Went negative again in September 2014 following ECB easing. Made a further series of cuts to -0.75% in response to increased speculative inflows into Denmark after the SNB abandoned its currency floor in December 2014. Hiked rates 10bp to -0.65% in January 2016 following capital outflows.
Swedish Riksbank	-0.60%* (repo rate + daily absorption operations)	-0.50% (weekly absorption operations rate)	The Riksbank seeks to counter low inflation and prevent a strengthening of the krona.	First adopted a negative deposit rate from July 2009-July 2010 and again in July 2014; however, only an insignificant amount of funds makes recourse to this facility. Took its repo rate—the key policy rate, which is presently equivalent to a deposit rate—negative in February 2015 in response to increased risk of inflation expectations de-anchoring. Cut the repo rate further in March 2015 at a non-policy meeting owing to FX strength and in July 2015 on the back of uncertainty (related to Greece) and FX strength. Most recently, cut by a larger-than-expected 15bp in February 2016 on the inflation outlook and in anticipation of FX strength due to easing by foreign central banks.
Bank of Japan (BoJ)	-0.1% (policy-rate balance)	0.1% (basic balance) 0.0% (macro added-on balance)	The BoJ seeks to counter deflation.	Introduced negative rates in Feb 2016 to mitigate the risk of volatility in financial markets derailing an improvement in corporate sentiment and prolonging the deflationary mindset among various economic entities.

^{*}The rate at which the Riksbank absorbs daily liquidity is now -0.60% owing to the combination of having the repo rate at -0.50% and a 10 bp spread in its daily absorption operations.

**Special rate on repo transactions to meet unexpected liquidity shortages. For normal open market operations, the SNB provides liquidity such that the 3-month CHF LIBOR is within its target range, currently -1.25% to -0.25%.

Source: Respective central banks, Goldman Sachs Research.