Everything you always wanted to know about Sovereign Bonds but were afraid to ask

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What you should know about Sovereign Bonds

What is Sovereign Debt?

Sovereign debt is a central government's debt. It is issued by the national government and can be denominated in both foreign or domestic currency. Until now the GoI has been issuing sovereign bonds in local currency and only in the domestic market.

India's Plan – First Sovereign Bond Sale in International Markets

Nirmala Sitharaman (Union Budget, July-2019): "India's sovereign external debt to GDP is among the lowest globally at less than 5%. The Government would start raising a part of its gross borrowing programme in external markets in external currencies. This will also have beneficial impact on demand situation for the government securities in domestic market."

- The idea of an <u>overseas sovereign bond</u> has been discussed by Indian governments in the past, but was never pursued.
- India's sovereign debt is considered to be low. As of March 2019, it stood at USD 103.8 bn, 3.8% of the GDP.
- **The government is now planning to borrow 10-15% of the total borrowing offshore**. That works out to at least Rs 71,000 cr, or about USD 10.4 bn. It is expected that the money would be raised in tranches. Other countries typically make issuances of USD 1 bn to USD 5 bn.

The yield of the bond or the borrowing cost is dependent primarily on three factors:

- <u>Creditworthiness</u> - The issuing countries' perceived ability to repay their debts.
- <u>Country Risk</u> - External/Internal factors like unrest and wars tend to jeopardize a country's ability to pay (Current account deficit etc.).
- <u>Exchange Rates-</u> In cases where bonds are issued in foreign currency, fluctuations in exchange rate may lead to increased pressure.

Factors affecting creditworthiness

Inflation hypothesis: Higher inflation lowers sovereign creditworthiness

Reserves hypothesis: High FX reserves (over GDP) increases creditworthiness

Original sin hypothesis: Original sin i.e. stock of debt that has been built so far. Low debt-to-GDP ratio raises sovereign creditworthiness

Banking sector exposure: Greater exposure of the banking sector to government bonds decreases sovereign creditworthiness, because of the mutual reinforcement of sovereign and financial system risk

Sovereign Credit Ratings capture most of these factors. The investment decisions are then supplemented with the analysis of short-term outlook of the economy (issuer government) and the current global macroeconomic situation.

The ABC of rating scales

General summary of the opinions reflected by our ratings

Investment Grade	AAA	Extremely strong capacity to meet financial commitments. Highest rating
	AA	Very strong capacity to meet financial commitments
	A	Strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances
	BBB	Adequate capacity to meet financial commitments, but more subject to adverse economic conditions
	BBB-	Considered lowest investment-grade by market participants
Speculative Grade	BB+	Considered highest speculative-grade by market participants
	BB	Less vulnerable in the near-term but faces major ongoing uncertainties to adverse business, financial and economic conditions
	B	More vulnerable to adverse business, financial and economic conditions but currently has the capacity to meet financial commitments
	CCC	Currently vulnerable and dependent on favorable business, financial and economic conditions to meet financial commitments
	CC	Highly vulnerable; default has not yet occurred, but is expected to be a virtual certainty
	C	Currently highly vulnerable to non-payment, and ultimate recovery is expected to be lower than that of higher rated obligations
	D	Payment default on a financial commitment or breach of an imputed promise; also used when a bankruptcy petition has been filed or similar action taken

Emerging Markets: Sovereign Ratings (Foreign-Currency Long Term)

	S&P Ratings	Moody's Ratings	Fitch Ratings
China	A+	A1	A+
Malaysia	A-	A3	A-
Mexico	BBB+	A3	BBB
Phillipines	BBB+	Baa2	BBB
Thailand	BBB+	Baa1	BBB+
Indonesia	BBB	Baa2	BBB
India	BBB-	Baa2	BBB-
Russia	BBB-	Baa3	BBB-
South Africa	BB	Baa3	BB+
Vietnam	BB	-	-
Brazil	BB-	Ba2	BB-
Turkey	B+	B1	BB
Sri Lanka	B	B2	B
Argentina	B	B2	B

Full Investment Grade

India's bond issue could be similar to which country?

- In terms of ratings, Indonesia and Russia are somewhat similar to India. All three command a full investment grade (IG) i.e. IG by all three rating agencies.

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Experience of other Emerging Markets

- Broadly the coupon rate or the cost of borrowing is linked to the sovereign rating that a country commands.
- However, in some cases, new risks emerge (like trade war etc.) which impact the yield.
- For example, Mexico and the Philippines, both with same credit ratings raised money at different costs at the same time of the year.

Country	Duration (Years)	Issue Date	Coupon Rate	Amount (bn)	Currency	Rating (S&P)	Spread vs. US Yield (at issuance)
China	10	Oct-2018	3.500	1.00	USD	A+	25
China	30	Oct-2018	4.000	0.50	USD	A+	62
Mexico	10	Jan-2018	3.750	2.56	USD	BBB+	122
Phillipines	10	Feb-2018	3.000	2.00	USD	BBB+	39
Indonesia*	10	Apr-2018	4.100	1.00	USD	BBB-	112
Indonesia*	10	Mar-2018	4.400	1.75	USD	BBB-	160
Russia	30	Jun-2017	5.250	4.50	USD	BBB-	254
Russia	10	Mar-2018	4.375	1.50	USD	BBB-	147
South Africa	30	May-2018	6.300	0.60	USD	BB	309
South Africa	12	May-2018	5.875	1.40	USD	BB	281
Brazil	10	Oct-2017	4.625	3.00	USD	BB-	235
Brazil	30	Jul-2016	5.625	3.00	USD	BB-	340
Brazil	20	Feb-2005	8.750	2.25	USD	BB-	875
Turkey	10	Nov-2018	5.200	1.50	EUR	B+	208
Sri Lanka**	10	Apr-2018	6.750	1.25	USD	B+	388
Argentina**	10	Jan-2018	5.875	4.25	USD	B+	334

*Upgraded after issuance
**Downgraded after issuance
NB: Duration in years is rounded off.

Source: Investopoli, Media Reports, Reuters and HDFC Bank

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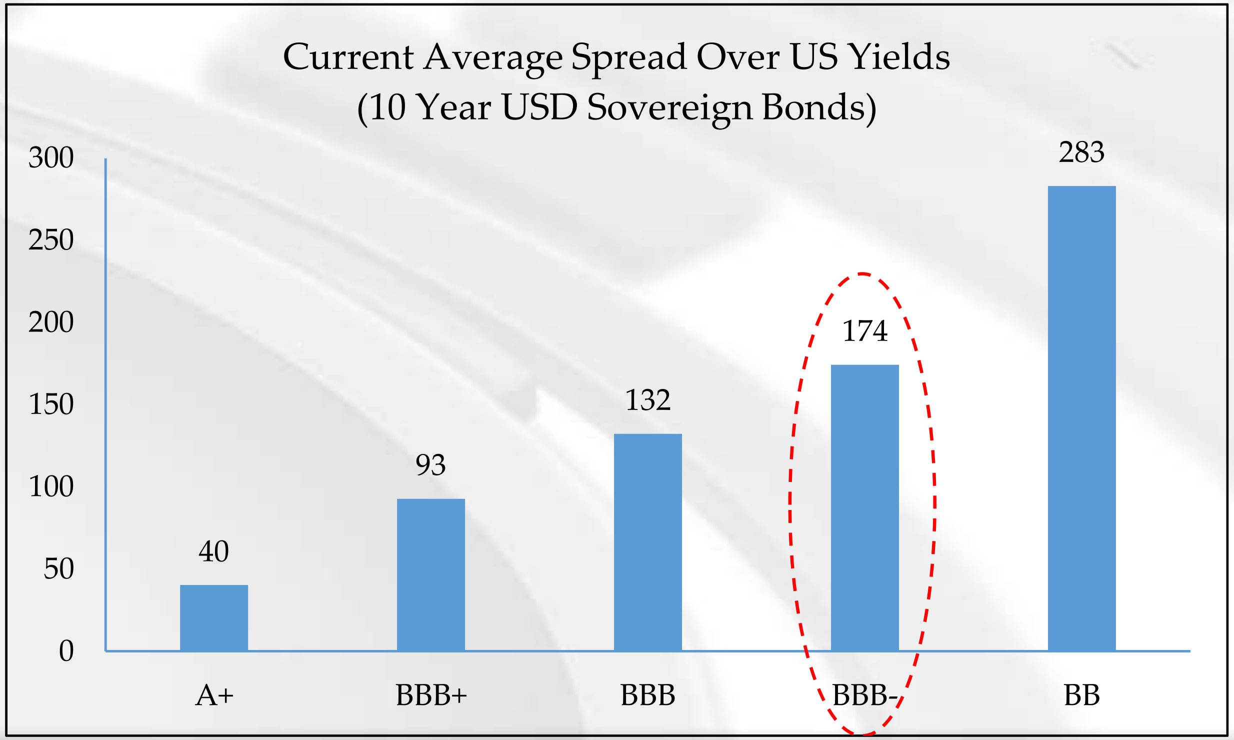
Current Spreads for guidance

- At BBB- rating (India's rating), average spread for 10-year bond (EMs vs. US treasury) is currently around 175 bps.
- While India's credit rating is same as Russia, the spread in case of India could be lower. This is because investors could attach a scarcity premium to Indian bonds (first issuance from India and scarcity of supply of Indian sovereign bonds).
- **In a nutshell, considering the full investment grade of India, the scarcity premium for India, and the better external sector indicators (Slide 11 for reference), Indian sovereign bond could be priced in line with some of the better rated Countries (like Indonesia and the Philippines). The spread for 10 year bond could be around 100 bps in our view.**



US 10-year yield currently at 2.13%

Source: Reuters and HDFC Bank

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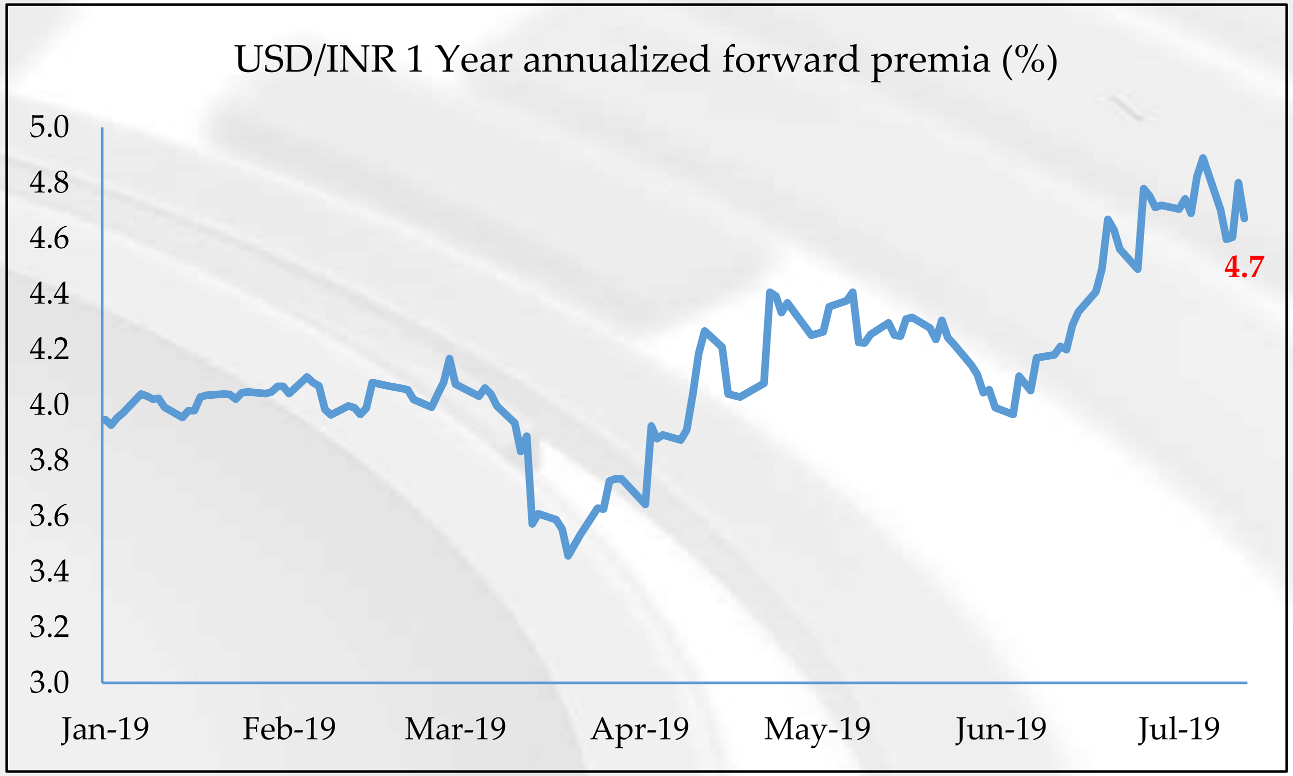
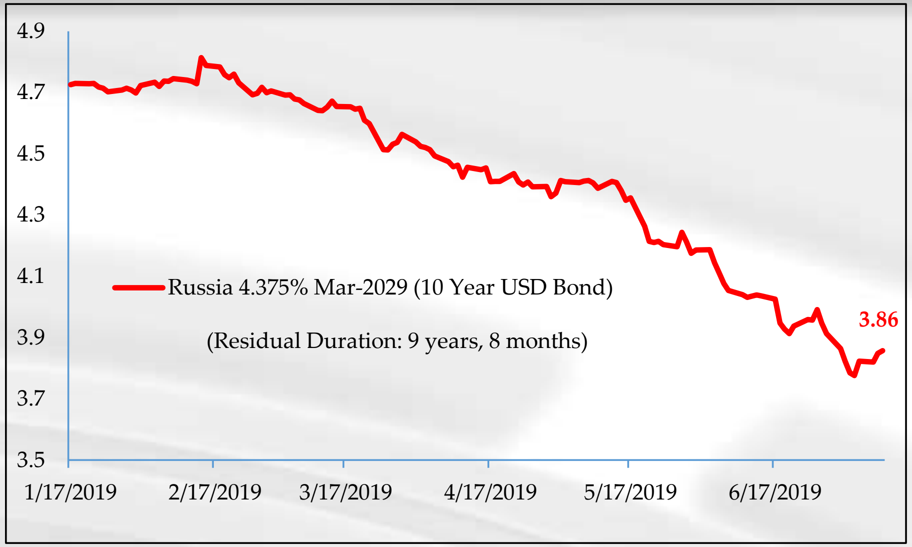
What about the hedging cost?

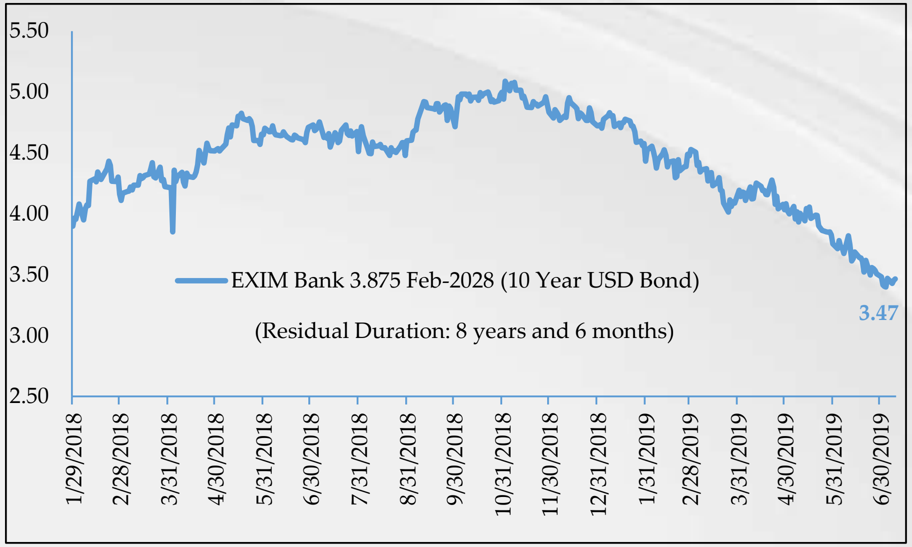
- The 12-month onshore forwards premium is currently running at around 4.5%. If India sovereign bonds are priced at 3.2%, total funding costs would come in at around 7.7%, including the one-year hedge costs. This would be more than the current domestic borrowing cost of 6.5% from the G-Sec market.
- Thus, assuming the coupon rate of 3.2% and 12-month forward premium of 4.5%, it is unlikely that the government will cover its full exposure every year. At these rates, the government shall be able to cover around 75% of its exposure to break even with the domestic cost of borrowing.
- Alternatively, we believe that government could practice a conditional event-based hedging practice. Hedging on one year basis would still leave the currency risk open to some degree (as the forward premia would fluctuate). Hence, conditional hedging could be a preferred strategy to deal with the currency risks.

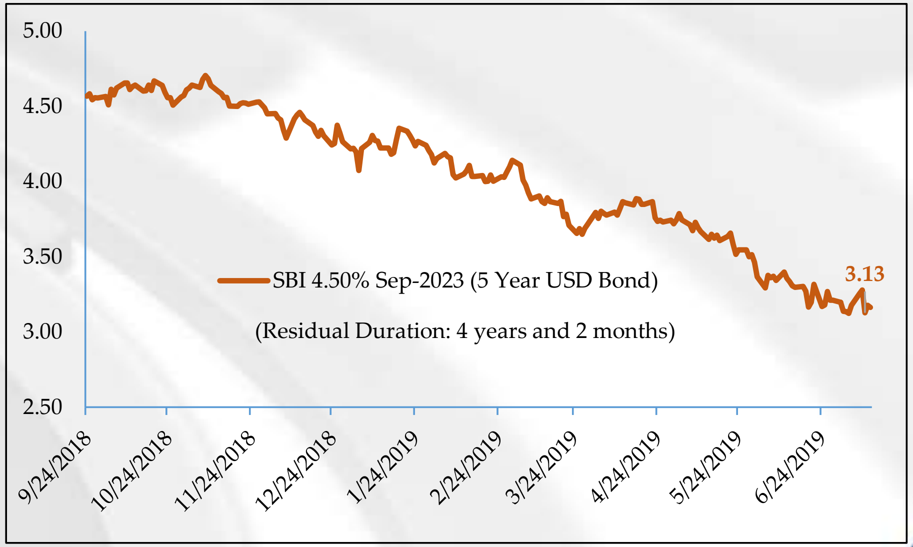


Source: Reuters and HDFC Bank

Some Benchmarks to Track







Source: Reuters and HDFC Bank. Duration of the bond is rounded off

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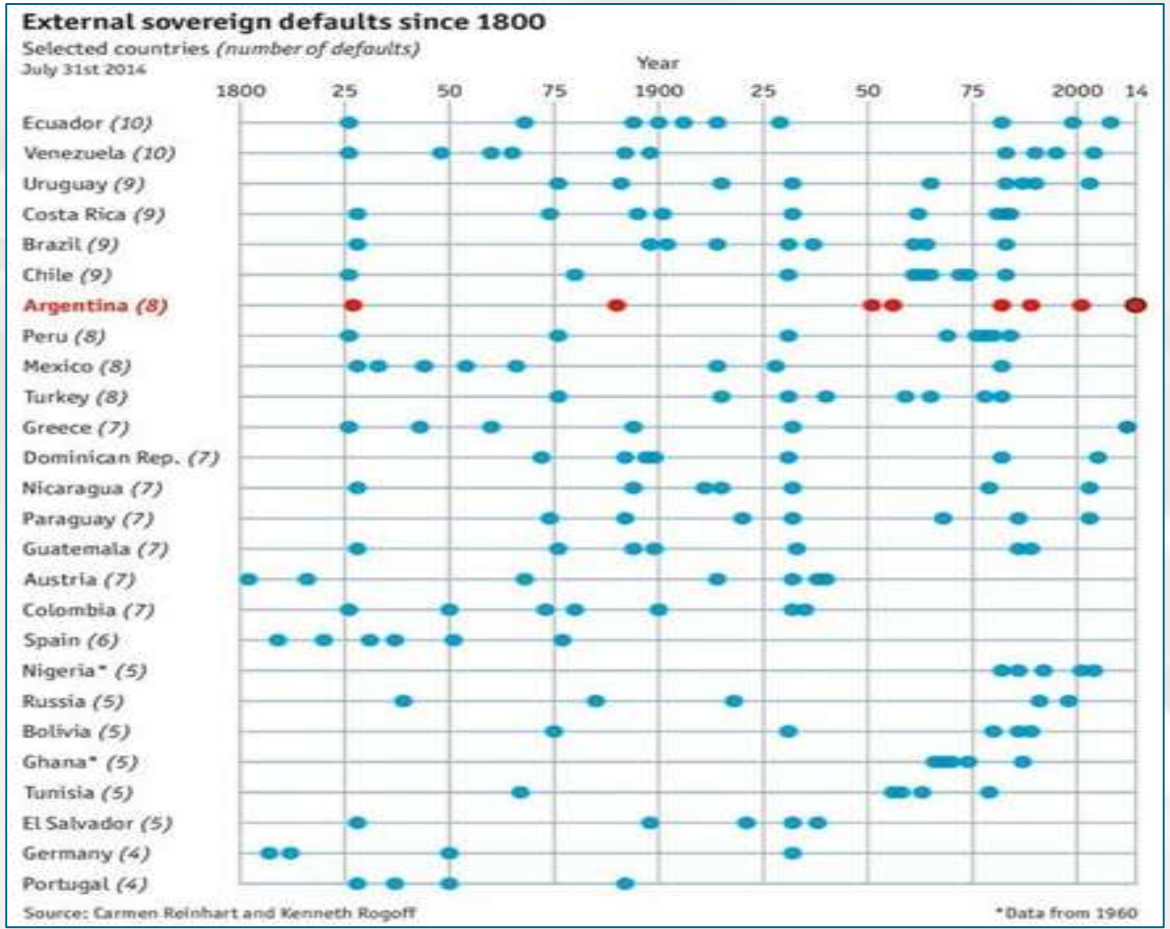
The Risks: The History of Defaults

It should be noted that unlike corporate debt restructuring, there is no mechanism for national governments to declare bankruptcy, which complicates the restructuring of sovereign debts. The restructuring (with bailouts from IMF etc.) generally take the form of conditionalities (austerity etc.) on the fiscal plans of the government.



Source: The Economist

Biggest Sovereign Debt Defaults

- **Greece** became the first developed country to default on its debt to the International Monetary Fund (IMF) when in June- 2015, it missed repayment.
- **In December-2008 Ecuador´s** President Rafael Correa suspended the payment of nearly 40% of the Latin American country´s debt for the third time in 14 years.
- **Argentina** declared a default on around $100 billion of its debt to private creditors on December 23, 2001. It was the largest default in history at the time. Argentina has defaulted on its sovereign debt eight times since independence in 1816.
- **The Russian** government in August 1998 declared a 90-day moratorium on the payment of its foreign debt, announced a de facto devaluation of the ruble and defaulted on its domestic debt. Its foreign debt stood at $141 billion, according to the financial ratings agency Fitch.
- In August 1982 global financial markets and 1,000 creditors received a telex telling them that **Mexico** could no longer service its debt of $86 billion, with $21 billion also owing in interest.

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How much is too much?

- **Insolvency:** Manasse and Roubini (2009) find that the risk of default is particularly high in case of a high stock of external debt (in excess of 50% of GDP). India seems to be safe on this count.
- **Liquidity:** Manasse and Roubini (2009) shows that the risk of default due to illiquidity is especially high if short-term debt exceeds 130% of reserves. For India this ratio currently stands at 26.3%.

India's Key External Debt Indicators			
	1991	**2008**	**2019 P**
External Debt (USD bn)	83.8	224.4	543
Ratio of External Debt to GDP (%)	**27.7**	**18**	**19.7**
Debt Service Ratio (%)	35.3	4.8	6.4
Ratio of Foreign Exchange Reserves to Total Debt (%)	7	138	76
Ratio of Concessional Debt to Total Debt (%)	45.9	19.7	8.7
Ratio of Short-Term Debt to Foreign Exchange Reserves (%)	**146.5**	**14.8**	**26.3**

Source: RBI and HDFC Bank

Cross Country Comparison

Economic Indicators	China	Argentina	Mexico	Phillipines*	Indonesia	Russia	South Africa	India
Inflation (%)	2.7	57.3	4.0	2.7	3.3	4.7	4.5	3.1
GDP Growth (%)	6.4	-5.8	1.2	5.7	5.1	0.5	0.0	5.8
Current Account Balance (% of GDP)	0.4	-5.4	-1.8	-2.4	-3.0	7.0	-3.5	-2.3
Budget Balance (% of GDP)	-2.6	-5.5	-2.1	-3.2	-1.8	2.7	-4.4	-3.4
External Debt (% of GDP)	14.4	51.8	36.5	23.9	36.2	27.4	46.8	19.7
Sovereign External Debt (% of GDP)	1.8	32.0	18.0	12.0	12.0	3.2	18.3	3.8
10-Year Bond Yield (%)	3.19	6.22	7.60	6.88	7.34	7.33	8.13	6.55
FX Reserves (USD bn)	3119	45	174	75	118	408	41	394
Currency (% CYTD appreciation/depreciation)	-0.1	-10.5	3.4	2.6	2.6	9.6	2.6	1.5

*Philippines Sovereign External Debt represents overall Public sector debt. NB: External Debt figures are approximates based on GDP and External Debt data

Source: Reuters, Central Banks, Media Reports, CEIC and HDFC Bank

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