

Economic Watch

India

Hong Kong,
February 5, 2014
Economic Analysis

Asia

Senior Economist
Sumedh Deorukhkar
sumedh.deorukhkar@bbva.com

Chief Economist of Asia
Stephen Schwartz
stephen.schwartz@bbva.com.hk

Rocky road to recovery

- **India's GDP growth slowed for a third straight year in 2013**, to below 5%, the slowest in a decade. The slowdown came amidst high inflation and concerns over external financing that led the Reserve Bank of India to hike interest rates. Wide-ranging reform efforts by the government have yet to revive the investment cycle. At the same time the authorities are evaluating difficult political choices to contain a rising fiscal deficit – a key constraint on India's sovereign ratings – ahead of national elections scheduled this year.
- **The slowdown in growth has given rise to questions about how much of it is cyclical on the one hand, versus structural on the other.** By comparing potential and actual growth outturns, we attribute more than half of the slowdown to cyclical factors, leaving a substantial share attributable to structural impediments that have undermined India's growth potential. In particular, we estimate that potential growth has slowed, to an estimated 6.1% in 2013 from 8.2% in 2007.
- **Cyclical headwinds have eased of late, mainly on the external front.** Global demand is improving, and commodity prices have stabilized. Locally, policy reforms are underway to address structural hurdles to growth.
- **However, the domestic macro environment remains challenging** given rising interest rates, high inflation and slowing public capital spending. These together have weakened investment activity and consumption demand. Also, the reforms process has been a mixed bag with encouraging progress in some areas whereas rather piecemeal or non-existent in others.
- **Looking ahead to the remainder of 2014, we foresee a rocky recovery for India.** We expect a moderate growth pick-up to 5.1% from 4.7% in 2013, softer inflation and a healthier external balance. We pin higher hopes on 2H14 as investment reforms take effect and greater clarity emerges on the new government. As such, the loss in potential output is reversible with effective and speedier policy reforms such as cutting the fuel subsidy burden, implementing taxation reforms and clearing the backlog of stalled infrastructure projects, particularly in the power sector.

Outlook – A rocky road to recovery

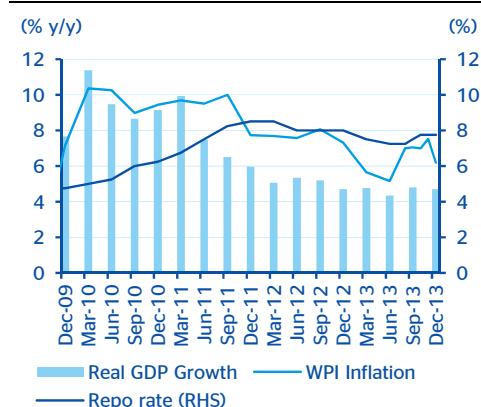
India's growth momentum slowed for a third consecutive year in 2013, halving to around 5% in 2013 from near double-digit levels during 2009-11. In recent months high inflation and external pressures have led the Reserve Bank of India to hike interest rates, adding further headwinds to the growth outlook (Chart 1). That said, GDP growth has recently shown signs of stabilizing, rising to 4.8% y/y in 3Q13 from a four-year low of 4.4% in Q2, led by a pick-up in exports and favourable agricultural output. Furthermore, since last September, RBI has taken advantage of the previous breathing space from the temporary delay in the US Fed's QE tapering decision to implement exceptional policy measures and address external financing risks. While these measures have placed the economy in a stronger position to weather the Fed's tapering, which is now underway, the government's broader reform measures have yet to revive investment, and investor confidence remains fragile amidst a rising fiscal deficit – a key constraint on India's sovereign ratings – and national elections scheduled in April-May 2014.

Deciphering the slowdown: is it structural or cyclical?

In contrast to popular perception, we find that the bulk of the recent slowdown is actually cyclical in nature. Our assessment adopts a similar methodology applied to BRICS economies in the IMF's 2013 World Economic Outlook. In particular, we take the difference in changes to India's actual and potential GDP growth rates over the past decade to distinguish between cyclical and structural factors (Chart 2 and Appendix1).

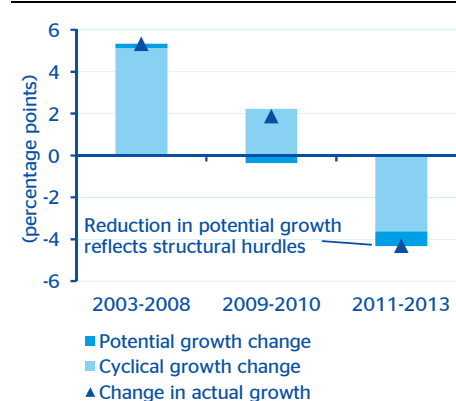
We find that the impressive GDP growth rates of 2009-11, when growth jumped from 6.7% to 9.3%, are due mainly to cyclical factors associated with lax global liquidity, subdued commodity prices, and expansionary domestic fiscal and monetary policies. In contrast, during that period India's potential growth was already beginning to decline, from 7.6% in 2009 to 6.8% y/y in 2011, due to a lack of investment reforms, ineffective governance and public service and

Chart 1
Growth has slowed to multiyear lows



* RBI hiked repo rate further by 25 bps at its 28th January 2014 policy meet to 8.0%.
Source: BBVA Research, RBI data
infrastructure bottlenecks.

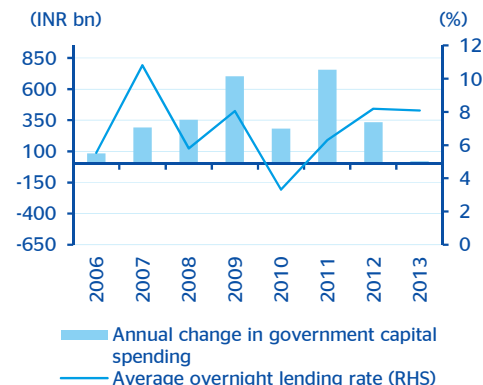
Chart 2
Bulk of India's slowdown is cyclical although structural hurdles have hurt potential growth



Source: BBVA Research, RBI data

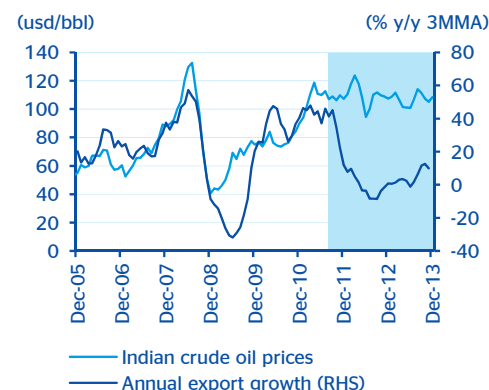
Since 2011, cyclical support factors have weakened as the government has cut capital spending to reduce the fiscal deficit (Chart 3) and as RBI has hiked interest rates to combat inflation and currency depreciation pressures. Externally, global demand has slowed (Chart 4). Furthermore, political instability, governance issues, and sluggish reform implementation have led to slower net capital formation (Chart 5) and lower total factor productivity (Chart 6).

Chart 3
Cyclical factors including cutbacks in public capital spending and tighter interest rates...



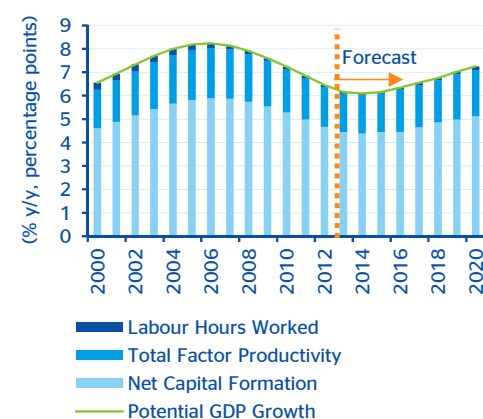
Source: BBVA Research, RBI data

Chart 4
...alongside high global oil prices and sluggish external demand have weighed on growth



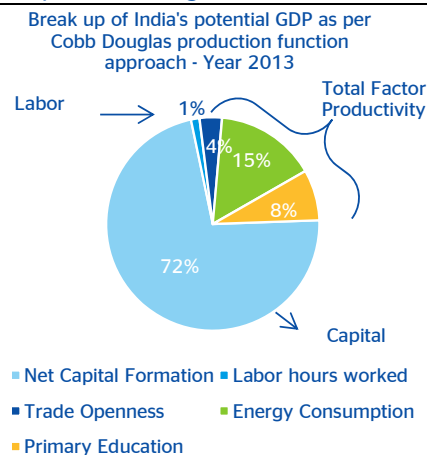
Source: BBVA Research, RBI data

Chart 5
Structural issues have predominantly hurt net capital formation ...



* Fiscal year ending March.
Source: BBVA Research, RBI data

Chart 6
... which contributes for more than 70% to India's potential GDP growth



* Fiscal year ending March.
Source: BBVA Research, RBI data

The economy is on the mend, but still too early to celebrate

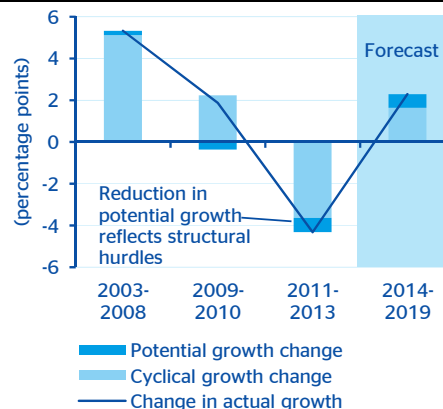
Cyclical headwinds have recently eased, especially on the external front. Global demand is improving, commodity prices have been stable (Chart 7), and RBI's measures to reduce external vulnerability have been effective in encouraging capital inflows. However, headwinds persist on the domestic front given the tight policy stance in the wake of RBI rate hikes and the government's efforts to trim the fiscal deficit. While the government has stepped up the reform momentum, more needs to be done.

Chart 7
Global commodity prices have stabilised



Source: BBVA Research, Haver Analytics data

Chart 8
India's growth is improving on the margin



Source: BBVA Research, Government of India

We expect an improvement in the second half of 2014 as ongoing investment reforms take effect, and after uncertainty is cleared up following the general elections in April-May 2014 (Chart 8). Also, declining inflation should enable RBI to begin reducing policy rates. Recent positive trade dynamics and an improvement in the current account deficit (Est.: -2.2% of GDP in fiscal year ending March 2014 vs. -4.8% in FY13) should broadly continue over the upcoming year (Est.: -2.5% in FY15) on favourable export growth and a limited pick up in local demand.

We project GDP growth for the calendar years of 2013 and 2014 at 4.7% y/y and 5.1% y/y respectively. (On a fiscal year basis, we estimate GDP growth to average 4.7% y/y for FY14 and 5.3% y/y for FY15.) While we expect inflation to gradually ease, delays in addressing supply-side issues could pose additional risk to our 2014 WPI inflation forecast of 5.8%y/y.

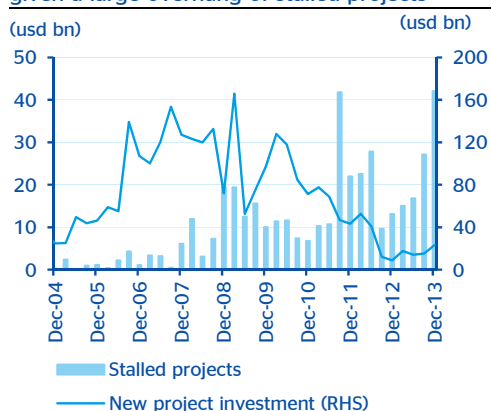
Meanwhile, we expect RBI to maintain its two-pronged approach of curbing inflation with a tight monetary stance while ensuring adequate credit flow to productive sectors. RBI would thus maintain a close watch on inflation, aiming to lower it to below 8.0% y/y by year end (from 9.9% currently) – in line with the recent recommendations of an expert panel that has proposed RBI to adopt the CPI as the nominal anchor for policy. The national election outcome is a key event risk ahead, while concerns over the high fiscal deficit will likely keep the rupee under pressure.

Economic reforms have been a mixed bag so far

While we estimate India's potential growth to have slowed, we believe the trend can be reversed with effective government reforms aimed at capacity building through infrastructure development, facilitating investment (Chart 9), addressing supply side bottlenecks, and resolving structural issues underlying India's twin deficits on the fiscal and current accounts. The government's policy efforts on this front so far have been a mixed bag, marked by encouraging progress in some areas (Chart 10 and Table 1), but only piecemeal or non-existent progress in others.

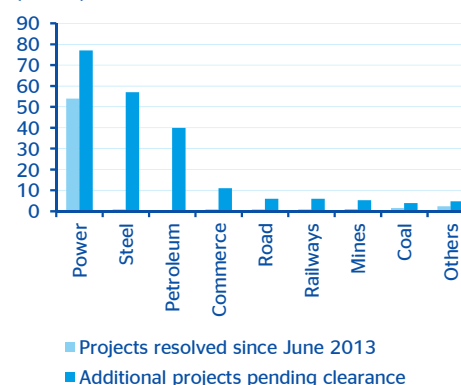
On the fiscal front, progress on tax reforms has been slow given delays in implementing the Goods and Services Tax (GST), while the passage of the controversial Food Security Bill, which guarantees subsidized food to two-third of India's population, has put significant pressure on the fiscal deficit.

Chart 9
Pace of new investments has slowed markedly given a large overhang of stalled projects



Source: BBVA Research, CMIE

Chart 10
Reassuringly, project clearance has quickened since June 2013, though the backlog is huge



Source: BBVA Research, Government of India

Finally, with national elections due April-May 2014, we think bolder, politically sensitive reforms such as complete deregulation of diesel prices to reduce fuel subsidies may be difficult to achieve. Also, firms may delay their investment decisions until after the elections as they await greater clarity on any changes in policy decisions or new policy formulations by the next government.

Table 1

Recent policy efforts to unlock investment growth

Issue	Action
1 Infrastructure bottlenecks	<ul style="list-style-type: none"> Government has finalized a Dispute Resolution Bill – a fast track mechanism to resolve disputes in Public Private Partnership projects (PPP) covering all infrastructure sectors. To improve the finances of road developers, government has allowed them to sell 100% stake in highway projects and approved rescheduling of premiums paid by them. Tariffs for new terminals at ports have been partially decontrolled. Measures underway to attract private participation in Indian railways.
2 Stalled mining projects	<ul style="list-style-type: none"> Long held iron ore mining ban in Karnataka state – since 2011- has been lifted; talks under progress to lift the mining ban in Goa state. Coal mines are now allowed to raise production by 25% without a public hearing.
3 Power outage and high debt burden of power distribution companies	<ul style="list-style-type: none"> Efforts to restructure the debt of state electricity boards through tariff hikes, reduction in distribution losses and deferment of premium on debt. A model electricity distribution responsibility bill is being penned to instil greater financial discipline. Indian ministry of Power has sought fast track approval for six power projects involving 390 bn rupees (USD 6.3 bn) in investments, totalling 6310 megawatts
4 Environmental clearance issues	<ul style="list-style-type: none"> Environmental clearance norms have been eased for highway and mining projects. Committees have been constituted to re-examine and overhaul environmental clearance issues related to stalled projects.
5 Land acquisition issues	<ul style="list-style-type: none"> Parliament has passed a new land acquisition bill which although raising the cost of land, provides uniform and clearer legal framework.
6 Energy supply shortage	<ul style="list-style-type: none"> Fuel supply agreements with a capacity of around 70,000 MW have been signed by Coal India with independent power producers. Natural gas price has been hiked. 6 captive coal blocks are likely to be auctioned to private companies before January 2014 with estimated reserves of over 2000 million tonnes. Regulators have granted compensatory power tariff hikes to some private power producers for higher coal cost incurred.

Source: RBI and BBVA Research

Scope for a meaningful fall in inflation appears limited

A protracted period of high inflation (Chart 11) since the global financial crisis has been a key factor undermining India's savings rate (down to 30.2% in FY13 from 36.8% in FY08) and discouraging investment as real returns stay negative. WPI inflation moderated somewhat last year (to an average 6.3% y/y in 2013 from 7.5% and 9.5% in the previous two years) but is still above RBI's 5% comfort level while retail inflation as measured by CPI is a bigger worry, averaging 10% y/y over the past year. Unlike WPI, the latter includes services and has higher weight on food at 50%.

From a longer term perspective, India's inflation overhang can be attributed to a mix of demand and supply side factors (Table 2) but more recently, the impact of temporary weather related disruption in primary food supply, vegetables and fruits in particular (Chart 12), and the pass through effect from rupee depreciation have stood out. These have offset ongoing disinflationary forces, namely back to back policy rate hikes, and a negative output gap (of -1.4% by our estimates).

Reassuringly, food price pressures ebbed in December 2013, which combined with recent stabilization in the rupee and a bumper harvest should help soften inflation pressures over the near term. However, core inflation has stayed firm and given elevated inflation expectations (Chart 13), imminent hikes in energy prices, lingering currency pressures and underlying structural rigidities, we foresee limited scope for a meaningful moderation in inflation in 2014 (BBVA Est.: WPI at 5.8% y/y and CPI at 9.0% y/y for 2014).

Elevated inflation provides limited scope for RBI to ease interest rates (Chart 14). RBI's baseline projections reflect moderating inflation with no further policy tightening anticipated in the near term. Our baseline forecast expects policy rates to stay unchanged at 8.0% during 1H14 with scope for 50 bps of easing in 2H14 amid.

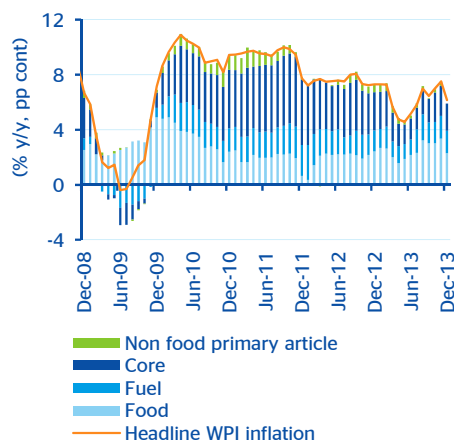
Table 2

Structural deterrents to India's high and sticky inflation

Factors	Explanation
1 Widening demand supply gap	Per capita availability of food commodities, including pulses, cereals and oilseeds is either stagnant or declining even as rising per capita incomes have resulted in rise in demand.
2 Inefficiencies in domestic food supply and export management policy	Excess buffer stock held by India's food procurement and distribution agency - the Food Corporation of India - implies lower open market availability, which aggravates retail food inflation and encourages speculation and hoarding. Better export management is key as food exports have increased at the time of domestic supply shortage.
3 Minimum support prices	Amid rising wages and increasing input costs, higher MSPs have increased pressures in food inflation.
4 Indexation of rural wages to CPI inflation	Since 2011, rural wage rate is indexed to CPI - agricultural labourers. Indian agriculture being labour intensive, persistent wage pressure has kept food prices high for a prolonged period.
5 Rising cost of production of food commodities	Due to rising farm input prices, rising labour cost, low productivity, fragmented land holdings, and inadequate agriculture infrastructure. Lack of proper logistics and warehousing facilities has further increased cost pressure.
6 Shift in dietary habits towards protein rich food	Increasing share of high value and protein rich food - pulses, milk, eggs, fish and meat - in total per capita consumer expenditure on food increased in rural and urban India since 2004-05.
7 Suppressed fuel price inflation	Despite incremental fuel price reforms - phased hikes in diesel prices by Rs 0.5/ltr per month - recent rupee depreciation has increased suppressed fuel price inflation.

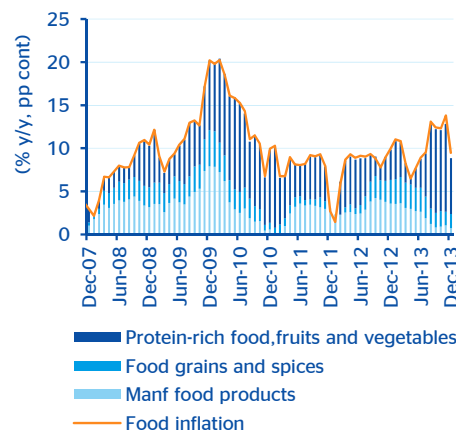
Source: BBVA Research

Chart 11
Stubbornly high inflation pressures have eased marginally over the past month...



* Core inflation = non-food manufactured products inflation.
 Source: BBVA Research, RBI data

Chart 12
...led by declining food inflation, amid bumper harvest and efforts to address supply issues



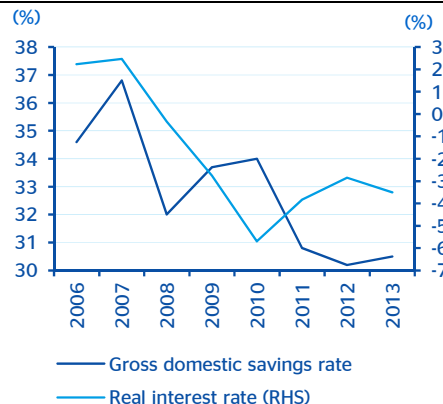
* Protein rich food items include milk, eggs, meat, and fish.
 Source: BBVA Research, RBI data

Chart 13
Rising inflation expectations and weak rupee to keep inflation sticky above RBI's comfort...



* REER is the 6 country weighted real effective exchange rate.
 Source: BBVA Research, RBI data

Chart 14
... prodding RBI to keep a tight policy bias for boosting domestic savings by raising real rates

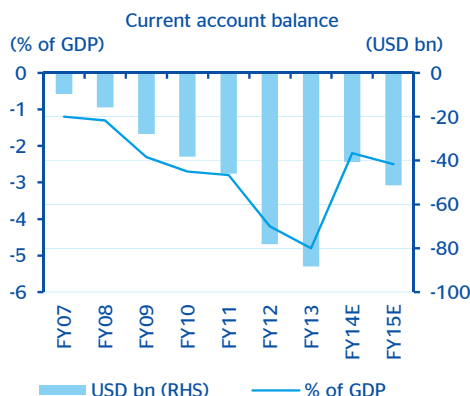


* Real interest rates = Repo rate minus current inflation expectations.
 Source: BBVA Research, RBI data

Authorities have effectively stemmed the current account deficit

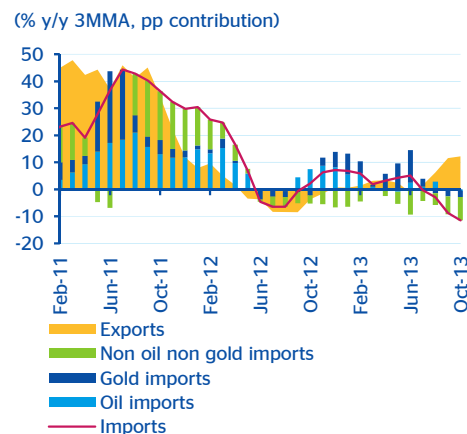
India's current account deficit (CAD) fell to -1.2% of GDP (-USD 5.2 bn) in 3Q13 from -4.9% (-USD 21.8 bn) in the previous quarter led by concerted efforts by policymakers to curb gold imports (Chart 15 and Table 3), alongside lower oil imports, weakening domestic demand and a pickup in exports (Chart 16). These developments helped check the overall balance of payments gap (-USD10.4 bn vs. -0.3 bn in 2Q13) during the period as fears of an early QE taper by the Fed drove capital outflows from emerging market economies, especially those with a high dependence on portfolio flows to finance current account deficits.

Chart 15
India's external balance position has improved significantly over recent quarters...



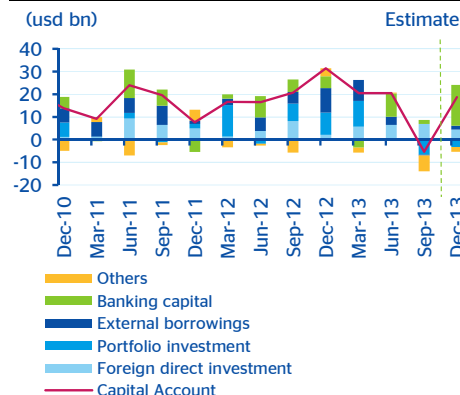
*FY stands for Fiscal year ending March.
Source: BBVA Research, RBI data

Chart 16
... led by a pick-up in exports, policy curbs on gold imports and easing domestic demand



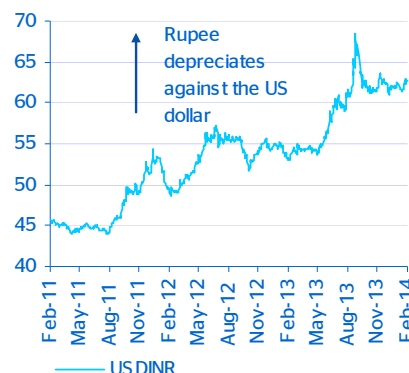
* Fiscal year ending March.
Source: BBVA Research, RBI data

Chart 17
RBI's measures alongside favourable global factors have helped augment capital inflows...



Source: BBVA Research, RBI data

Chart 18
... in turn helping stabilise the rupee since last September, although near historically low levels

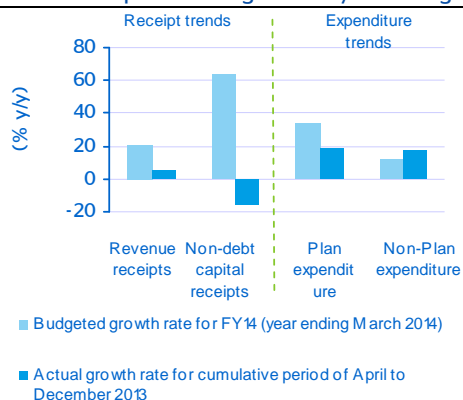


Source: BBVA Research, RBI data

In a big positive, RBI has utilized the window offered by subsequent postponement of the Fed's taper plans to augment capital inflows and rebuild India's foreign exchange buffer (at USD 292.2 bn by January end vs. USD 275 bn in early September 2013). Among other measures (Table 3), RBI's temporary window offering a special interest rate swap facility for banks on their foreign currency dollar deposits by non-resident Indians and on overseas bank borrowings have been the most impactful (Chart 17). These developments have better prepared India to withstand potential external shocks and the Fed's ongoing tapering.

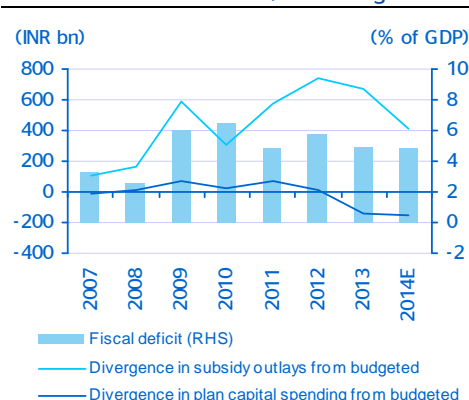
In response the rupee has stabilised at around 62 against the US Dollar, after a record weak level of 68.9 on August 28th 2013 (Chart 18). Looking ahead, we expect India's trade dynamics to stay broadly positive over 1H14 given an improving external demand outlook, extended curbs on non-essential imports and a weakening domestic demand outlook amid high interest rates and elevated inflation pressures (BBVA Current Account Deficit Est.: 2.2% of GDP for fiscal year ending March 2014 and 2.5% for FY15). That said, we do not discount a seasonal pick up in gold imports over the ongoing wedding season, although we expect its impact to be relatively muted this time given slowing income growth.

Chart 19
Fiscal trends are a concern given sluggish revenue receipts and a high subsidy overhang



Source: BBVA Research, RBI data

Chart 20
Subsidy rollovers and cuts in capital spending seem inevitable to meet 4.8% fiscal target



Source: BBVA Research, RBI data

External funding risks linger amid disconcerting fiscal trends

Our outlook on the rupee continues to remain cautious, with USDINR expected to stay biased towards the higher end of 61.5 to 63.5 range in 1H14 as investor remain watchful of the implications of Fed's gradual QE tapering process and the national election outcome. As noted earlier, a smooth normalization of QE is critical, while at home we would be wary of an unclear national election verdict, which may dampen investor confidence, although a clear mandate would boost sentiment and the currency.

Importantly, we believe that disconcerting trends on the fiscal front are a key risk for the currency and foreign investment flows from the sustainability perspective (Chart 19). Sluggish indirect tax revenues and a rising fuel subsidy burden has heightened pressure on the government to adhere to its 4.8% fiscal deficit target for FY14 (year ending March 2014) - a key constraint on India's sovereign ratings that stands a notch above speculative grade. By December 2013, i.e. 9 months into the fiscal year 2014, the government had already hit 95% of the budgeted fiscal deficit target (80% during same period last year). The current run rate on net tax revenues is strikingly slow (7% y/y vs. a budgeted growth rate of 19%), led by a significant slowdown in indirect tax revenues. Digging deeper, negative growth in excise taxes (-7% y/y vs. 12% budgeted) so far this fiscal is reflective of the declining profitability of Indian companies against a challenging macro backdrop. Progress on planned privatisation of public sector companies has been slower than expected, although we expect a likely catch up in the last quarter.

Meanwhile, the Government has done well to keep expenditures under control with total expenditure growth until December at 18% y/y, in line with yearly target. On the downside, however, public capital spending growth has been sacrificed, which has increased at a slower than budgeted pace (28% y/y vs. 37%) while revenue expenditures are running high, led by mounting under-recoveries (losses) on sale of fuel at subsidised rates. Despite periodic hikes in diesel prices, we expect gross under-recoveries to hit Rs 1.37 tn (approx. USD 22.3 bn) for the fiscal year 2014, surpassing the government's annual fuel subsidy budget of Rs 650 bn (USD 10.5 bn) by a wide margin. To manage its subsidy burden, however, we expect the government to ask upstream oil companies to share a larger portion of the oil under recoveries (around 53% instead of 37% last year) and also rollover excess subsidies into next year (See Chart-20). While these steps, together with further cuts in public capital expenditure would help keep a check on India's sovereign ratings downgrade threats, they do not augur well for the

quality of fiscal correction going forward. In this context, bolder measures such as deregulating of diesel prices alongside quicker implementation of taxation reforms - goods and services tax and the direct tax code - are essential to achieve long run fiscal sustainability; the chances of these being announced ahead of national elections next summer are significantly low.

Table 3

Measures by RBI and Government to address external market pressures

Objective	Measures taken	Impact
1 Narrow the Current Account Deficit through curbs on Gold imports (Average 11% of total imports)	a) Staged increase in import duty on Gold to 10% from 2%. Import duty on silver and platinum also hiked to 10%. b) Bans imports of coins and medallions and mandates upfront cash payment for buyers of gold from importers c) Tighter norms for firms lending against Gold	3Q13 saw a 60% y/y contraction in gold and silver imports as compared to an 81% y/y jump in the previous quarter.
2 To address external financing concerns by attracting capital inflows	a) Expanded the bilateral currency swap arrangement with Japan from USD 15 bn previously to USD 50 bn. b) A USD 100 bn Contingent Reserve Arrangement was formed between BRICS countries to counter currency shocks. c) Special concessional interest rate swap facility for domestic banks on non-resident dollar deposits and overseas bank borrowings d) Relaxation of external commercial borrowing norms e) Allowing domestic oil companies to directly buy dollars from the RBI	RBI's special swap window, which ended November 30 th , has been the most impactful garnering USD 34 bn dollars in deposits since it was announced in early September 2013.
3 Banking sector reforms	a) Issuing more bank licenses in the domestic private banking space b) Liberalizing the banking sector by assuring greater operational flexibility to foreign banks who set up wholly owned subsidiaries in India c) Currently, the mergers and acquisition route for foreign banks is under consideration with the RBI	Measures aimed at increasing competition and efficiency in domestic banking sector, which would in turn boost financial inclusion.
4 Measures to boost financial savings	To introduce Consumer price index inflation linked bonds for retail investors by December end	Serves to hedge household savings against high inflation

Source: RBI, BBVA Research

Appendix

1. Estimating India's potential GDP growth

We estimate the potential growth rate for India by adopting a growth accounting framework using a multivariate production function approach. The study uses a log-log OLS regression analysis corrected for autocorrelation. Our dependent variable is real gross domestic product at factor cost. Independent variables include

1) Net capital formation, 2) Labour hours worked per year (Working age population x Labour participation rate x hours worked per year), 3) Primary school enrolment, 4) Annual energy consumption (Coal+Lignite+Crude Oil+Natural Gas+Electricity), and 5) Trade openness (Annual exports as a share of GDP)

We use annual data since 1974. Our estimates suggest a softening in India's potential GDP growth from a record high of 8.0% during 2005-06 to 6.0% y/y over the past year. Net capital formation is the key driver of India's growth potential (71% share) followed by energy

consumption (16%), primary education (8%), trade openness (4%) and labor (1%). Contribution of net capital stock declined from 5.9 pp in 2007 to just 4.3 pp in 2013 amid lack of policy reforms to boost infrastructure investments and capacity creation. Absence of policy efforts to ease energy supply bottlenecks through easier regulatory approvals and pricing policy reforms have exaggerated India's energy shortage over past five years.

Final results after correcting for auto-correlation

- All variables significant at 5% level except trade (significant at 10% level) and Durbin Watson statistic near 2.

Table 4

After adjusting for positive autocorrelation

Dependent Variable: Real GDP at Factor Cost

Method: Least Squares

Date: 08/26/13 Time: 13:30

Sample (adjusted): 1981 2012

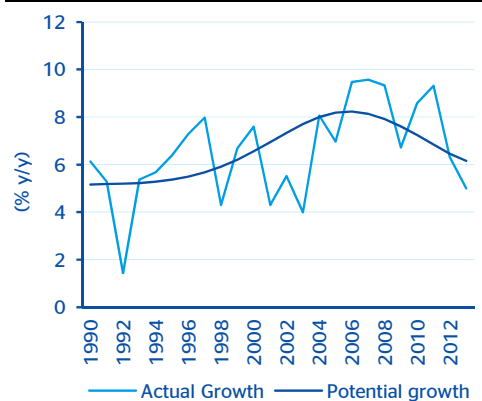
Included observations: 32 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Net Capital Formation	0.674	0.061	11.017	0.000
Labor Hours Worked	0.162	0.052	3.138	0.004
Primary Education	0.238	0.108	2.206	0.036
Trade Openness	0.056	0.030	1.851	0.075
Energy Consumption	0.213	0.039	5.457	0.000
R-squared	0.998	Mean dependent var		10.18
Adjusted R-squared	0.998	S.D. dependent var		0.35
S.E. of regression	0.01	Akaike info criterion		-5.48
Sum squared resid	0.01	Schwarz criterion		-5.25
Log likelihood	92.73	Hannan-Quinn criter.		-5.41
Durbin-Watson stat	1.84			

Source: BBVA Research, RBI, Government of India

Chart 21

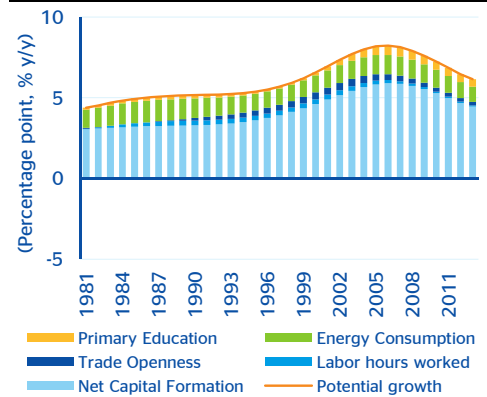
Potential growth has slowed from record high levels...



Source: BBVA Research, RBI data

Chart 22

...led mainly by declining net capital formation and an increasing energy supply shortage



Source: BBVA Research, RBI data

DISCLAIMER

This document and the information, opinions, estimates and recommendations expressed herein, have been prepared by Banco Bilbao Vizcaya Argentaria, S.A. (hereinafter called "BBVA") to provide its customers with general information and are current as of the date of issue and subject to changes without prior notice. BBVA is not liable for giving notice of such changes or for updating the contents hereof.

This document and its contents do not constitute an offer, invitation or solicitation to purchase or subscribe to any securities or other instruments, or to undertake or divest investments. Neither shall this document nor its contents form the basis of any contract, commitment or decision of any kind.

Investors who have access to this document should be aware that the securities, instruments or investments to which it refers may not be appropriate for them due to their specific investment goals, financial positions or risk profiles, as these have not been taken into account to prepare this report. Therefore, investors should make their own investment decisions considering the said circumstances and obtaining such specialized advice as may be necessary. The contents of this document are based upon information available to the public that has been obtained from sources considered to be reliable. However, such information has not been independently verified by BBVA and therefore no warranty, either express or implicit, is given regarding its accuracy, integrity or correctness. BBVA accepts no liability of any type for any direct or indirect losses arising from the use of the document or its contents. Investors should note that the past performance of securities or instruments or the historical results of investments do not guarantee future performance.

The market prices of securities or instruments or the results of investments could fluctuate against the interests of investors. Investors should be aware that they could even face a loss of their investment. Transactions in futures, options and securities or high-yield securities can involve high risks and are not appropriate for every investor. Indeed, in the case of some investments, the potential losses may exceed the amount of initial investment and, in such circumstances; investors may be required to pay more money to support those losses. Thus, before undertaking any transaction with these instruments, investors should be aware of their operation, as well as the rights, liabilities and risks implied by the same and the underlying stocks. Investors should also be aware that secondary markets for the said instruments may be limited or even not exist.

BBVA or any of its affiliates, as well as their respective executives and employees, may have a position in any of the securities or instruments referred to, directly or indirectly, in this document, or in any other related thereto; they may trade for their own account or for third-party account in those securities, provide consulting or other services to the issuer of the aforementioned securities or instruments or to companies related thereto or to their shareholders, executives or employees, or may have interests or perform transactions in those securities or instruments or related investments before or after the publication of this report, to the extent permitted by the applicable law.

BBVA or any of its affiliates' salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to its clients that reflect opinions that are contrary to the opinions expressed herein. Furthermore, BBVA or any of its affiliates' proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. No part of this document may be (i) copied, photocopied or duplicated by any other form or means (ii) redistributed or (iii) quoted, without the prior written consent of BBVA. No part of this report may be copied, conveyed, distributed or furnished to any person or entity in any country (or persons or entities in the same) in which its distribution is prohibited by law. Failure to comply with these restrictions may breach the laws of the relevant jurisdiction.

In the United Kingdom, this document is directed only at persons who (i) have professional experience in matters relating to investments falling within article 19(5) of the financial services and markets act 2000 (financial promotion) order 2005 (as amended, the "financial promotion order"), (ii) are persons falling within article 49(2) (a) to (d) ("high net worth companies, unincorporated associations, etc.") Of the financial promotion order, or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the financial services and markets act 2000) may otherwise lawfully be communicated (all such persons together being referred to as "relevant persons"). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons. The remuneration system concerning the analyst/s author/s of this report is based on multiple criteria, including the revenues obtained by BBVA and, indirectly, the results of BBVA Group in the fiscal year, which, in turn, include the results generated by the investment banking business; nevertheless, they do not receive any remuneration based on revenues from any specific transaction in investment banking.

BBVA is not a member of the FINRA and is not subject to the rules of disclosure affecting such members.

BBVA is subject to the BBVA Group Code of Conduct for Security Market Operations which, among other regulations, includes rules to prevent and avoid conflicts of interests with the ratings given, including information barriers. The BBVA Group Code of Conduct for Security Market Operations is available for reference at the following web site: www.bbva.com / Corporate Governance".

BBVA is a bank supervised by the Bank of Spain and by Spain's Stock Exchange Commission (CNMV), registered with the Bank of Spain with number 0182.