

### INDIA

Yiping Huang

+852-2501-2735 yiping.huang @citigroup.com Hong Kong

### Moh Siong Sim

+65-6328-5721 mohsiong.sim@citigroup.com Singapore

Rohini Malkani

+91-22-5631-9876 rohini.malkani @citicorp.com Mumbai

Note Released:

20-Apr-07

# Asia Macro Views

## **Rupee's Long-Term Appreciation**

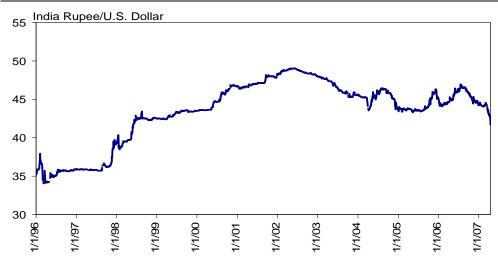
### **Key points**

- Despite recent market jitters we expect rupee to stay on a long-term gradual appreciation path, although the forward market continues to predict a weakening trend for the currency
- ► Rupee appreciated sharply over the past weeks, surpassing even our nonconsensus call. But the currency's near-term outlook could be clouded by deceleration in exports and possible measures to stem capital flows in the upcoming RBI monetary policy meeting
- ▶ If India can tame overheating pressures and sustain 8-10% GDP growth over the coming decade as we expect, then the rupee should maintain a steady appreciation trend, much the same as the experiences of most other rapidly growing Asian economies
- > The key risk factors that could disrupt the currency appreciation trend include sharp deterioration of the current account, prolonged burst of asset price bubbles or collapse of the economy. But none is in our base case

### Discussions

Our forecasts for rupee have been a non-consensus call and we maintain our expectation of steady appreciation over time despite recent market jitters. On April 17, the Indian rupee/U.S. dollar exchange rate fell below the 42-mark for the first time in almost ten years (see Figure 1). Two days later, it eased back to above-42 level. Only a month ago, the exchange rate was still above 44. Ironically, for months the forward market has been expecting the rupee to depreciate, predicting weakening of the exchange rate from 42.80 in 1-month to 44.33 in 12-months.





Source: CEIC Data Company and Citigroup estimates



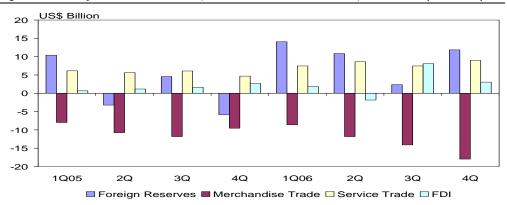
**Overheating of the economy was probably the key reason in Reserve Bank of India's (RBI) latest tolerance of a sharply stronger rupee.** In a report published on October 31, 2006, RBI defined an "overheating" economy as one that is "growing so rapidly that its productive capacity cannot keep pace with resulting demand pressures". Today, the Indian economy suffers from a full range of "overheating" symptoms. WPI rose to 6.7% in February from 4% a year ago, while CPI increased to 7.6% for industrial workers and 9.5% for rural labor. Data on asset prices, wage pressures and infrastructure bottlenecks also convey the same message. RBI hiked the repo rates five times during the past nine months and has recently refrained from active currency intervention. Currency appreciation is an important means to tighten the monetary conditions.

Equally important, both the economy and markets remained resilient, despite the tightening policies. While the tightening policies pose downside risks to economic growth and asset prices, so far they have had limited impact on economic momentum. Stock prices still rose by 8.3% during the past month and growth of industrial production and infrastructure activity remained robust. Abundant liquidity conditions, evidenced by rapidly growing money supply and bank credit, also imply that risks of immediate collapse of asset prices are not high. Tightening measures taken so far, with the prospects of more, should help prevent a hard landing. During the past years, Asian equity markets regained strength remarkably quickly. Against such a backdrop, rises in interest rates may be seen as an incentive for more capital inflows, which, in turn, should add further upward pressure on the currency.

However, recent deceleration in exports may cloud the near-term outlook for the currency. Export growth slowed from around 25-30% during the first eleven months of last year to below-10% levels after December. Trade deficits during the first two months of 2007 surged by 78% from a year ago (see Figure 2). If this trend continues, India's current account could deteriorate rapidly, adding downward pressure on the currency. More importantly, worsening of the external account balances may soon encourage RBI to step up its intervention. Recently escalated concerns about "overheating" and expectations of further tightening policies could point to downside risks for economic growth and thereby generate additional downward pressure.

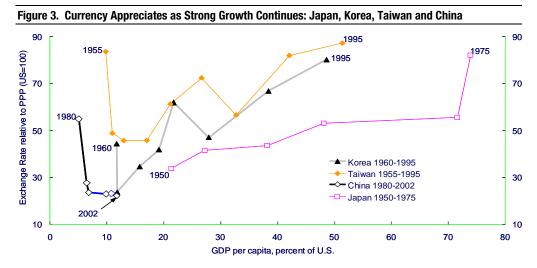


Figure 2. Quarterly Reserve Accumulation, Trade Balances and FDI Inflows, 1Q05 - 4Q06 (US\$ Billion)



Source: CEIC Data Company and Citigroup estimates.

**Over time we expect the rupee to remain on a gradual strengthening path, on our relatively upbeat macroeconomic outlook.** At the current growth rate of above-9%, the economy is probably expanding too rapidly, compared with its growth potential, likely at around 8%. We believe that is why India is suffering from the overheating problems. But for the past two decades, India has successfully lifted its growth potential from around 4.5% in the 1990s to 6% in the 1990s and again to around 8% currently. So with continued reforms and investment, India might be able to ease the overstretched resource constraints and to promote productivity growth. Eventually, India's growth potential may shift to around 10%. But even in a relatively less optimistic scenario in which India's growth potential remains at 8%, its growth should still at least double the pace of the world economy. Experiences of other Asian economies have shown that currency would often appreciate steadily if the economy maintains rapid growth (see Figure 3). This was certainly the case for Japan, Korea and Taiwan in the past. China has started to show the beginning of the same process. And India should not be an exception.

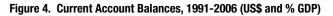


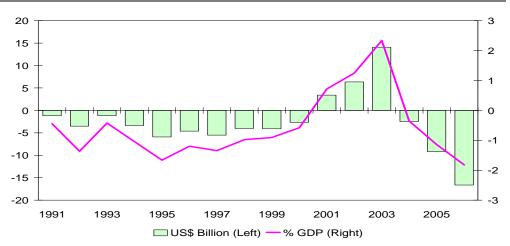
Source: CEIC Data Company and Citigroup estimates.



At least what happened to the currency market since July last year has been generally consistent with our expectation, not the consensus view. While rupee strengthened by 10% against the dollar during the past nine months, half of that appreciation occurred during the past month.

However, if the current account deteriorates persistently, it could become a major drag on the currency. The shift of the current account from surplus to deficit during the past years was a major concern for market participants (see Figure 4). While current account deficits could challenge sustainability of India's rapid growth, the risk is probably limited in the medium term. It is not entirely surprising why a rapidly growing emerging market economy like India needs to import capital. The deficits have stayed at below-2% of GDP for the past two years. And strong capital inflows help maintain a healthy position for India's balance of payment. An open question is what happens over time. If India's growth pattern does not support stronger export growth, then current account deficits could persist and even widen. Then macroeconomic risk could rise significantly if capital inflows become less stable.





Source: CEIC Data Company and Citigroup estimates.

We expect the rupee/dollar exchange rate to trade in a range of around 41.50 to 42.50 in the next three months. Near term risks to the outlook include possible measures to stem capital flows in the RBI's monetary policy due on April 24. These include tightening overseas borrowing norms and reducing interest rates on NRI deposits. Possible factors that might potentially disrupt the long-term appreciation trend include sharp deterioration of the current account, prolonged burst of asset bubbles and collapse of the economy. These are the risk factors that we should monitor closely, but they are not in our base case scenario.



Торіс	Date
Tightening Policies Will Not Slow China's Growth	26-Mar-07
Malaysia: Further Capital Control Liberalization - A Two-Way Street	21-Mar-07
Singapore: Spring Cleaning and a Plunge in Short-Term Rates	15-Mar-07
China's Global Stock Market Influence	12-Mar-07
Déjà Vu: Sell-off Not Fundamental	28-Feb-07
Will Equity Rallies Boost Consumption?	15-Feb-07
Vietnam — Bubble Trouble?	14-Feb-07
Malaysia — Consumers, Down but Not Out	6-Feb-07
Singapore - The Deferred Payment Scheme: Healthy or Speculator's Fuel?	2-Feb-07
Singapore Economy: The New and The Dual	4-Jan-07
Thailand: Out of Proportion	20-Dec-06
Tech Leading Index Dives on Weak US Orders	30-Nov-06
Singapore: Comparing the Current Boom to the Early 90s $-$ Sustainable or Bust in the Making?	7-Nov-06
Malaysia: Avoiding Marginalization and Regaining Investor Confidence	27-0ct-06
Politics-Proof Markets	18-0ct-06
North Korea's Nuclear Tests: Crossing the "Red Line"	9-0ct-06
Asia Ready to Rebound	5-0ct-06
Leading Tech Indices Recovering From Recent Lows	3-0ct-06
Singapore Population Policy: A Matter of Life and Death	21-Sep-06
This Is Not 1997	20-Sep-06
A US Slowdown: Asia Decoupling or Vulnerable?	4-Sep-06
After the Washington Consensus and Asian Crisis: An Asian Consensus?	24-Aug-06
Malaysia: Consumer Blues	21-Aug-06
Singapore: Restructuring and an Upper Middle Class Squeeze	4-Aug-06
Doha Breakdown Modestly Negative for Asia	28-Jul-06
Singapore: A Dual Economy?	25-Jul-06
Tech Lull Dims Asian Growth Prospects	14-Jul-06
Limited Balance of Payment Pressure from Market Sell-Off	5-Jul-06

# Analyst Certification

We, Yiping Huang, Moh Siong Sim and Rohini Malkani hereby certify that all of the views expressed in this research report accurately reflect our personal views about any and all of the subject issuer(s) or securities. We also certify that no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or views in this report.

### **Other Disclosures**

### ADDITIONAL INFORMATION REGARDING THIS REPORT IS AVAILABLE ON REQUEST.

Citigroup research analysts receive compensation based on a variety of factors. Like all Citigroup employees, analysts receive compensation that is impacted by Citigroup's overall profitability, which includes revenues from, among other things, investment banking activities. Analyst compensation is determined by Citigroup research management and other senior management (not including investment banking personnel).

### **ISSUER-SPECIFIC DISCLOSURES**

Citigroup, its officers, directors and/or employees, may from time to time have long or short positions in, act as principal in connection with, and buy or sell securities or derivatives (including options and warrants) discussed in this report. For purposes of your review of this report, you should assume that this is the case with respect to the securities covered herein.

Citigroup does and/or seeks to do business with many issuers, including through the provision of investment banking or other services. For purposes of your review of this report, you should assume that Citigroup has acted as a manager or co-manager of an offering of securities discussed in this report within the prior 12 months or has provided other services to the issuer within the prior 12 months for which it has received or expects to receive compensation.

Citigroup is an active market maker or liquidity provider for many fixed-income securities and from time to time takes principal positions in such securities or related derivatives. For purposes of your review of this report, you should assume that this is the case with respect to the securities covered herein.

#### **OTHER GENERAL DISCLOSURES**

This research report was prepared by Citigroup Global Markets Inc. ("CGMI") and/or one or more of its affiliates (collectively, "Citigroup"), as further detailed in the report, and is provided for information and discussion purposes only. It does not constitute an offer or solicitation to purchase or sell any securities or other financial products.

This report does not take into account the investment objectives, financial situation or particular needs of any particular person. Investing in securities and other financial products entails certain risks, including the possible loss of the entire principal amount invested. Certain investments in particular, including those involving structured products, futures, options and other derivatives, are complex, may entail substantial risk and are not suitable for all investors. The price and value of, and income produced by, securities and other financial products may fluctuate and may be adversely impacted by exchange rates, interest rates or other factors. Prior to effecting any transaction in options or options-related products, investors should read and understand the current Options Clearing Corporation Disclosure Document, a copy of which may be obtained on request from your Citigroup representative. Certain securities may not be registered with, or subject to the reporting requirements of, the US Securities and Exchange Commission or any comparable regulatory authority. Information available on such securities may be limited. Investors should obtain advice from their own tax, financial, legal and other advisors and only make investment decisions on the basis of the investor's own objectives, experience and resources.

The information contained in this report is based on generally available information and, although obtained from sources believed to be reliable, its accuracy and completeness is not guaranteed. The analysis contained in this report is based on a number of assumptions. Changes in such assumptions could produce materially different results. This communication is not intended to forecast or predict future events. Past performance is not a guarantee or indication of future results.

Citigroup research analysts may communicate with sales and trading personnel and other Citigroup personnel for the purposes of gathering and analyzing market information and may discuss with such personnel information regarding, among other things, market trends, economic trends, the market for bonds of a specific issuer and other market information (such as current prices, spreads and liquidity), so long as such communications do not impair the analyst's independent ability to express accurately his or her personal views about any and all of the subject securities or issuers. Other Citigroup personnel who do not function as research analysts, including sales and trading personnel, may provide oral or written market commentary or trade ideas to Citigroup's customers or proprietary trading desks that differ from the views expressed in this report. Citigroup's proprietary trading and asset management businesses may make investment decisions that are different from the recommendations contained in this report.

Citigroup has no duty to update this report and the opinions, estimates and other views expressed in this report may change without notice. No liability whatsoever is accepted for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained in or derived from this report.

Securities recommended, offered or sold by Citigroup (unless expressly stated otherwise): (i) are not insured by the Federal Deposit Insurance Corporation or any other body; and (ii) are not deposits or other obligations of Citibank, N.A. or any other insured depository institution.

Citigroup does not provide tax advice and nothing contained herein is intended to be, or should be construed as, tax advice. Any discussion of US tax matters contained in this report was written to support the promotion or marketing of the transactions or other matters addressed herein and is not intended to be used, and must not be used by any recipient, for the purpose of avoiding US federal tax penalties. Recipients of this report should seek tax advice based on the recipient's own particular circumstances from an independent tax adviser.

This report is intended for distribution solely to customers of Citigroup in those jurisdictions where such distribution is permitted. No part of this report may be copied or redistributed by any recipient for any purpose without Citigroup's prior written consent.

Local law requirements may prohibit certain investors from effecting a transaction in the security or securities covered in this report. US persons wishing further information or to effect a transaction should contact a registered representative of CGMI in the United States. Non-US persons wishing further information or to effect a transaction should contact a Citigroup entity located in their own jurisdiction unless applicable governing law permits otherwise.

AUSTRALIA: This report is made available in Australia to wholesale clients through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992) and to retail clients through Citigroup Wealth Advisors Pty Ltd. (ABN 19 009 145 555 and AFSL No. 240813), participants of the ASX Group, and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. CANADA: If this report is being made available in certain provinces of Canada by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. CHINA: This report is made available in China through Citibank, N.A. Beijing Branch, 16F Tower 1 Bright China Chang-an Bldg., 7

Jianguomen Nei Avenue, Beijing, 100005 P.R. China. Citibank, N.A. Beijing Branch is regulated by the China Banking Regulatory Commission. CZECH REPUBLIC: This report is being distributed within the territory of the Czech Republic by Citibank a.s. Citibank a.s. is a bank and securities broker/deater regulated by the Czech National Bank, Na Príkope 28, Prague 1, Czech Republic. Unless expressly stated otherwise. Citibank a.s. is only distributing this report and, upon its distribution, it has not changed or amended the actual content of this report in any way (as such was prepared by respective entities and/or individuals as further detailed in the report). HONG KONG: If this report is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by the Hong Kong Securities and Futures Commission. If this report is made available in Hong Kong by Citibank, N.A., it is attributable to Citibank, N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank, N.A. is regulated by the Hong Kong Monetary Authority. INDIA: The Product is made available in India by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. INDONESIA: This report is made available in Indonesia through Citibank, N.A. Indonesia Branch, Citibank Tower Lt 7, Jend. Sudirman Kav 54-55, Jakarta. Citibank, N.A. Indonesia Branch is regulated by the Bank of Indonesia. JAPAN: This report is being distributed in Japan by Nikko Citigroup Limited. If this report was prepared by a Citigroup affiliate of Nikko Citigroup Limited, it is being distributed by Nikko Citigroup Limited under license. If this report was prepared by Nikko Citigroup Limited, it may be based in part on a report produced by one of its affiliates used under license. If this report was prepared by Nikko Citigroup Limited and is being distributed in other jurisdictions by other Citigroup affiliates, or by Nikko Cordial Securities Inc., it is being distributed by them under license. Nikko Citigroup Limited is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Akasaka Park Building, 2-20, Akasaka 5-chome, Minatoku, Tokyo 107-6122. KOREA: The Product is made available in Korea by Citibank Korea Inc., which is regulated by the Financial Supervisory Commission and the Financial Supervisory Service. Address is Dadong 39, Jung Gu, Seoul, Korea, 100-180. MEXICO: This report is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, and Banco Nacional de México S.A. Acciones y Valores Banamex is regulated by Comision Nacional Bancaria y de Valores. Its address is Reforma 398, Col. Juarez, 06600 Mexico, D.F. Banco Nacional de México S.A. is regulated by the Comisión Nacional Bancaria y de Valores. Its address is Actuario Roberto Medellín 800, Col. Santa Fé, (01210) Mexico City, Mexico. NEW ZEALAND: This report is made available in New Zealand through Citigroup Global Markets New Zealand Limited (Company No. 604457), a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 11, 23 Customs Street East, Auckland, New Zealand, PHILIPPINES: This report is made available in the Philippines through Citibank, N.A. Philippine Branch, 8741 Paseo de Roxas, Makati City, Philippines. Citibank, N.A. Philippine Branch is regulated by the Bangko Sentral ng Pilpinas. POLAND: The Product is made available in Poland by Dom Maklerski Banku Handlowego SA, an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Papierów Wartosciowych i Gield. Bank Handlowy w Warszawie S.A. ul. Senatorska 16, 00-923 Warszawa. RUSSIA: The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. SINGAPORE: The Product is made available in Singapore through Citigroup Global Markets Singapore Pte. Ltd. and Citicorp Investment Bank Singapore Ltd. Citigroup Global Markets Singapore Pte. Ltd. is a Capital Markets Services License holder and regulated by the Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. Citicorp Investment Bank Singapore Ltd. is a Merchant Banking License holder and regulated by the Monetary Authority of Singapore. 3 Temasek Avenue, #17-00 Centennial Tower, Singapore 039190. SOUTH AFRICA: Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by the JSE Securities Exchange South Africa, the South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. TAIWAN: The Product is made available in Taiwan through Citibank, N.A., Taipei Branch, which is regulated by the Financial Supervisory Commission. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. F.8 No. 169, Section 4, Jen Ai Road, Taipei, Taiwan. **UNITED KINGDOM:** This report is being distributed in the United Kingdom by Citibank, N.A., London Branch, or Citigroup Global Markets Limited, Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, UK. This material is directed exclusively at market professional and institutional investor customers in the United Kingdom and is not for distribution to private customers in the United Kingdom as defined by the Financial Services Authority. Any investment or service to which this material may relate will not be made available to such private customers. This material may relate to investments or services of a person outside the United Kingdom or to other matters which are not regulated by the Financial Services Authority and further details as to where this may be the case are available on request in respect of this material. UNITED STATES: This report is being distributed in the United States by CGMI. If this report was prepared in whole or in part by a non-U.S. affiliate of CGMI, CGMI accepts responsibility for its contents (subject to the notices above). If this report covers non-U.S. securities, U.S. investors should be aware that non-U.S. companies may not be subject to uniform audit and reporting standards, practices and requirements comparable to those in the United States. Securities of some non-U.S. companies may be less liquid and their prices may be more volatile than securities of comparable U.S. companies. Exchange rate movements may have an adverse effect on the value of an investment in non-U.S. securities and its corresponding dividend payment for U.S. investors. CGMI is a member of the Securities Investor Protection Corporation. EUROPEAN UNION: Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by the Financial Services Authority. Many European regulators require that the firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publishing or distribution of investment research. The policy applicable to research analysts within Citigroup's Fixed Income Strategy and Analysis and Economic & Market Analysis divisions, as well as the investment research they produce, can be obtained by contacting Citigroup Global Markets Inc., 388 Greenwich Street 11th floor, NY NY 10013, Attention: Fixed Income Publishing.

© Citigroup Global Markets Inc., 2007. All rights reserved. Smith Barney is a division and service mark of Citigroup Global Markets Inc. and its affiliates and is used and registered throughout the world. Citi and Citi and Arc Design are trademarks and service marks of Citigroup Inc. or its affiliates and are used and registered throughout the world. CitiFx® is a service mark of Citicorp Inc.. Nikko is a service mark of Nikko Cordial Corporation. Any unauthorized use, duplication or disclosure is prohibited by law and may result in prosecution.