



July 2008

Methodology p. 2

## Overheating indicator still rising

The China overheating indicator (COI)'s trend line continues to rise above the amber warning threshold, suggesting that the demand pressure on overall CPI continues to rise despite the slowing headline CPI in May to 7.7% from 8.5% in April.

The slowing headline inflation in May was due mainly to a slower increase in food prices to 20% yoy compared to 22% in April. Components of the demand-pushed factors in our COI model – imports, retail sales, industrial sales, money supply and credit growth – all recorded strong double-digit growth.

Thus far, the PBC has relied mainly on tightening via hikes in the bank's reserve requirement ratio (RRR), the latest being 100 bp in June taking the RRR to 17.5%. Clearly, the measures have been insufficient to rein in inflationary pressures on the demand side. The PBC has been reluctant to raise interest rates, which is presumably due to the steep correction in the stock market (A shares), which has fallen around 50% year-to-date.

Looking ahead, the hike in fuel prices, which pushes up retail fuel prices by around 15%, will keep headline inflation high even as food prices continue to rise at slower rates. High inflation together with robust growth in monetary data, investment and consumption will support further tightening moves, which may include a hike in interest rates toward the end of Q3 or in Q4 this year.

S. Hansakul, +65 6423-8057 / S. Dyck, +49 69 910-31753

For a description of the thresholds and other methodological aspects please see page 2

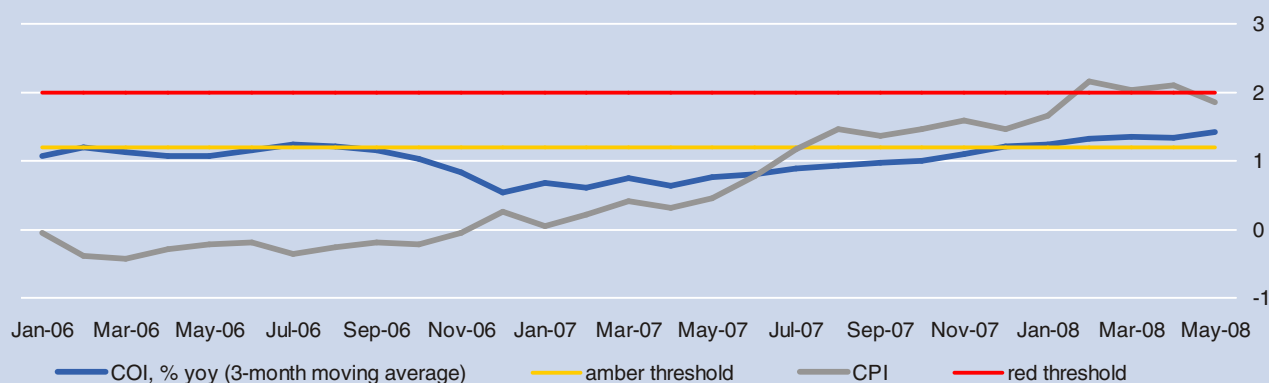
### China Overheating Indicator

% yoy change in standard deviations  
(3M mov. avg.)

May-07	0.76
Jun-07	0.80
Jul-07	0.89
Aug-07	0.93
Sep-07	0.97
Oct-07	1.00
Nov-07	1.10
Dec-07	1.21
Jan-08	1.24
Feb-08	1.32
Mar-08	1.35
Apr-08	1.33
May-08	1.41

### China Overheating Indicator

% yoy changes in standard deviations (3M moving average)



Source: DB Research

# China Overheating Indicator

## A tool to monitor overheating pressures in China

- *There has been increasing concern over overheating pressures building up in China, which could lead to a boom-bust cycle with global repercussions.*
- *We have therefore constructed a China Overheating Indicator (COI) in order to assess overheating pressures, gauge the risk of a hard-landing and derive conclusions for the future policy response by the Chinese government, including exchange-rate policy.*

### **China Overheating Indicator: Description**

Our China Overheating Indicator (COI) tracks demand factors that exert upward pressure on prices and can be used as leading indicator for inflation with a lead of roughly 3-12 months. To gauge the extent of overheating pressures, we have established 2 thresholds, amber and red, which indicate increasingly high degrees of overheating risk. The amber and red thresholds represent 1.2 and 2 % yoy change in standard deviations<sup>1</sup> from the historical average of the series, starting in the period after the last big overheating / high inflation episode in China in the early to mid 1990s. The 2 thresholds are intended to serve as warning: If the COI crosses the “amber threshold” from below, it signifies that the COI is nearly entering overheating territory. Moving above the “red threshold” indicates the presence of overheating. Conversely, if our indicator falls below the “amber threshold” it would indicate that overheating pressures are subsiding.

### **Variables included in the COI**

The COI tries to capture **demand-push factors** that would eventually lead to a rise in inflation. This must be distinguished from exogenous cost-push factors, such as higher oil prices or higher food prices due to adverse weather or other external shocks.

We include **five variables** available in monthly series at least since January 1993 (the year of the latest overheating episode).

The variables are:

- **Merchandise imports** as a gauge of overall domestic investment and consumption demand;
- **Retail sales** as a gauge for private consumption;
- **Industrial sales**, a proxy for industrial production, as a gauge for investment activity;
- **Money supply (M2)** as a gauge for inflationary pressures arising from monetary policy;
- **Financial Institution loans**, to gauge the risk of a boom-bust credit cycle.

S. Hansakul, +65 6423-8057 / S. Dyck, +49 69 910-31753\*

\* The authors thank S. Volk for his contribution.

<sup>1</sup> The thresholds have been adjusted upward slightly as the adjusted model (without the monthly income per capita variable) tends to show slightly lower COI value. The directions of the adjusted COI model are consistent with the original model.

© Copyright 2008. Deutsche Bank AG, DB Research, D-60262 Frankfurt am Main, Germany. All rights reserved. When quoting please cite "Deutsche Bank Research". The above information does not constitute the provision of investment, legal or tax advice. Any views expressed reflect the current views of the author, which do not necessarily correspond to the opinions of Deutsche Bank AG or its affiliates. Opinions expressed may change without notice. Opinions expressed may differ from views set out in other documents, including research, published by Deutsche Bank. The above information is provided for informational purposes only and without any obligation, whether contractual or otherwise. No warranty or representation is made as to the correctness, completeness and accuracy of the information given or the assessments made.

In Germany this information is approved and/or communicated by Deutsche Bank AG Frankfurt, authorised by Bundesanstalt für Finanzdienstleistungsaufsicht. In the United Kingdom this information is approved and/or communicated by Deutsche Bank AG London, a member of the London Stock Exchange regulated by the Financial Services Authority for the conduct of investment business in the UK. This information is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. and in Singapore by Deutsche Bank AG, Singapore Branch. In Japan this information is approved and/or distributed by Deutsche Securities Limited, Tokyo Branch. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product.