

India

A study in contrasts



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Overview

1

India rising

2

The catch in catching up

3

Conclusion and outlook





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The catch in catching up

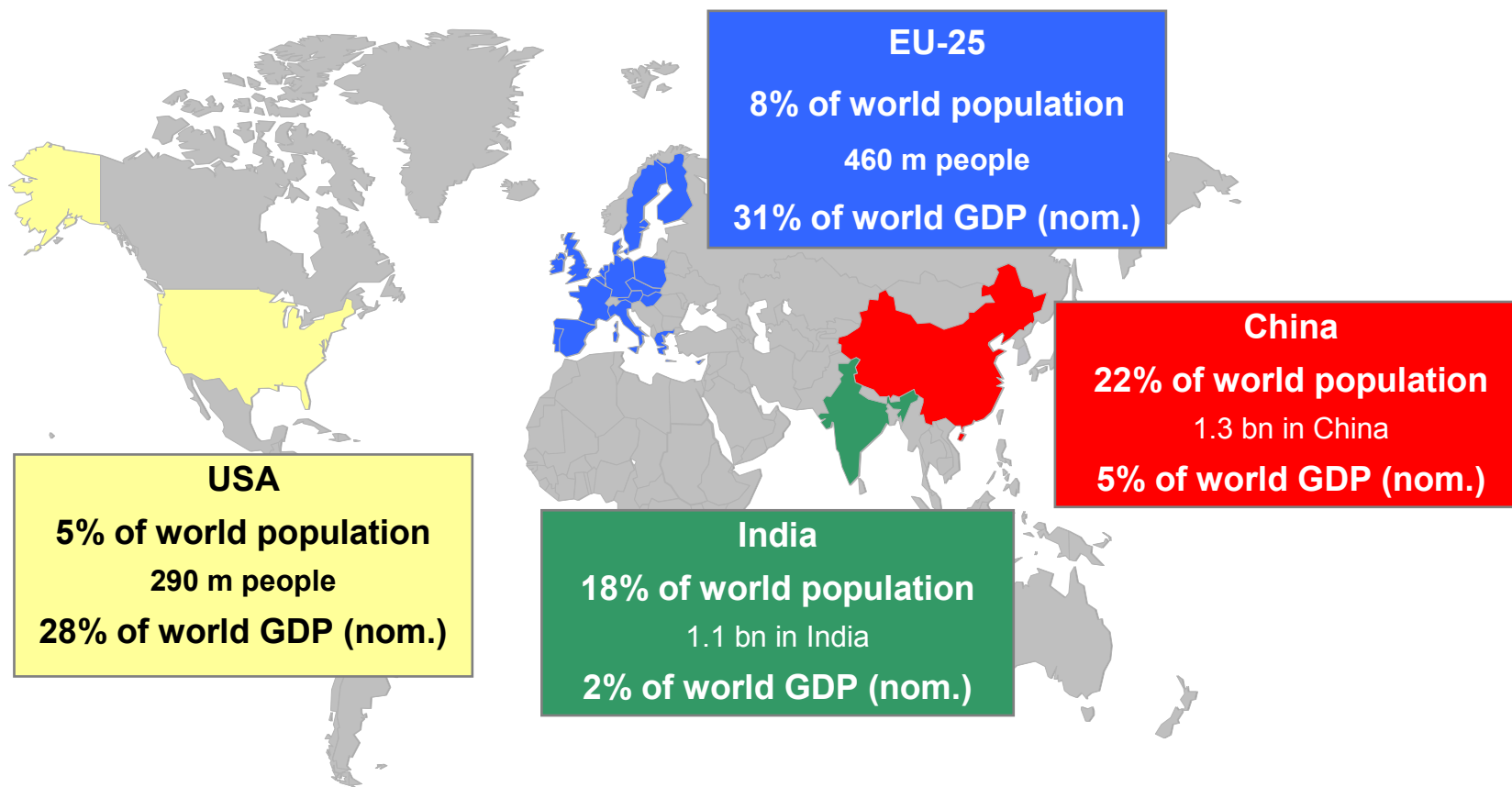
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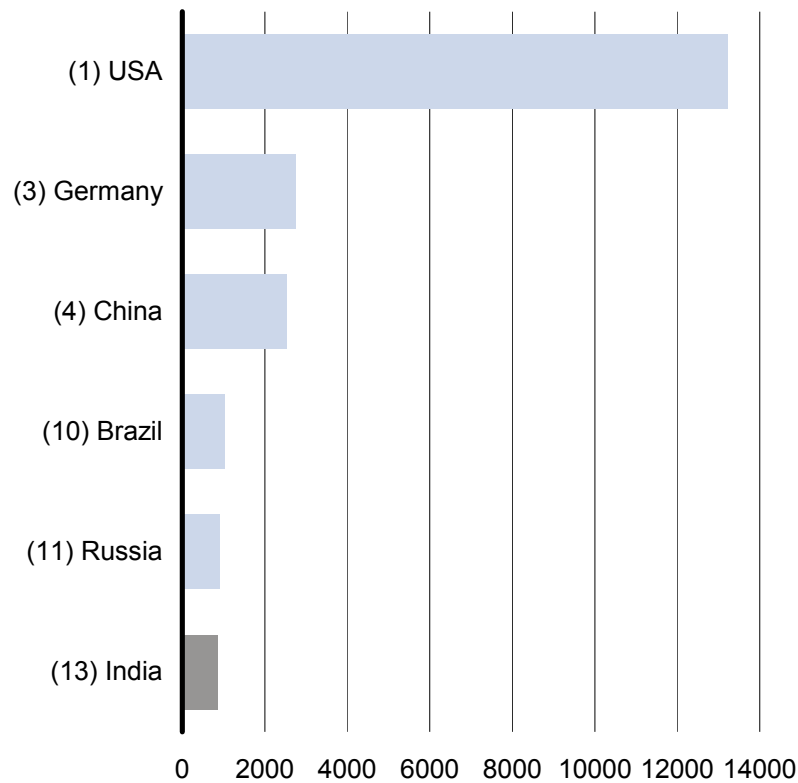
A world power in terms of population, but not (yet) in terms of world output





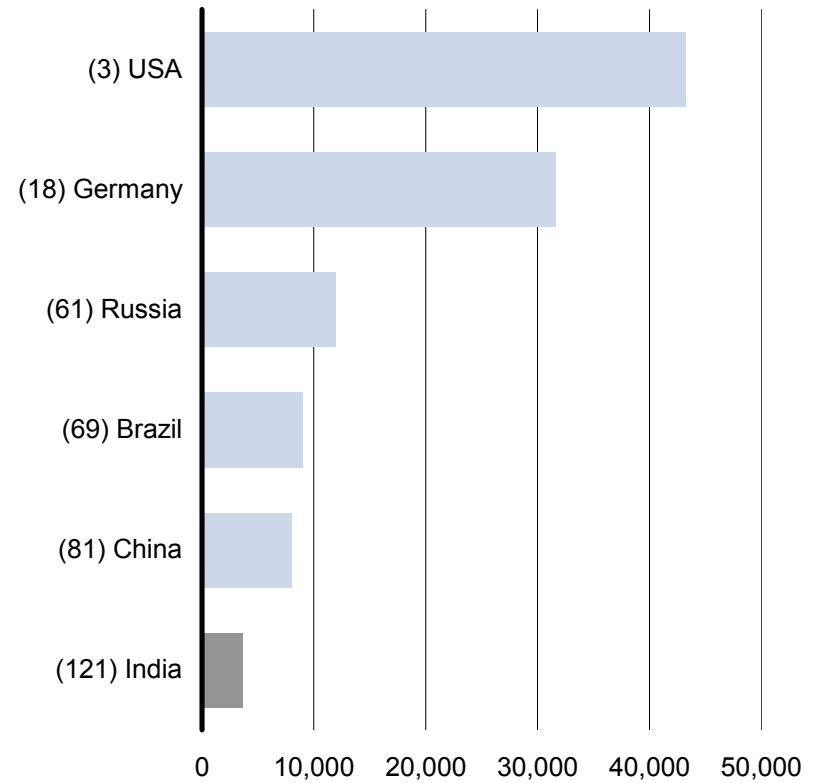
Smallest BRIC economy in terms of size and per capita income...

Nominal GDP, USD bn (global rank in brackets), USD bn



Source: IMF WEO

GDP (PPP) per capita (global rank in brackets), USD

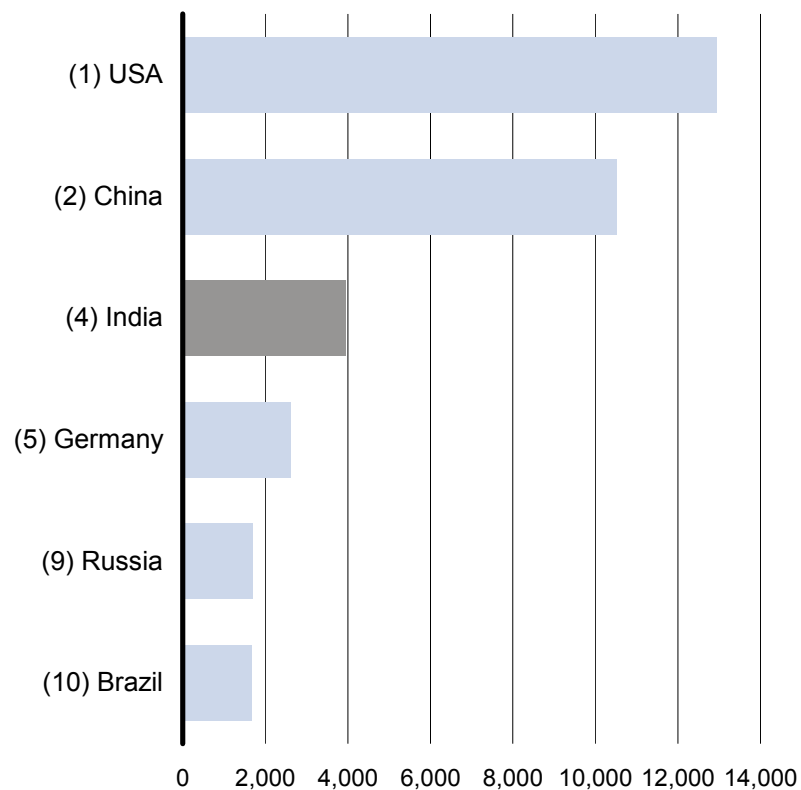


Source: IMF WEO



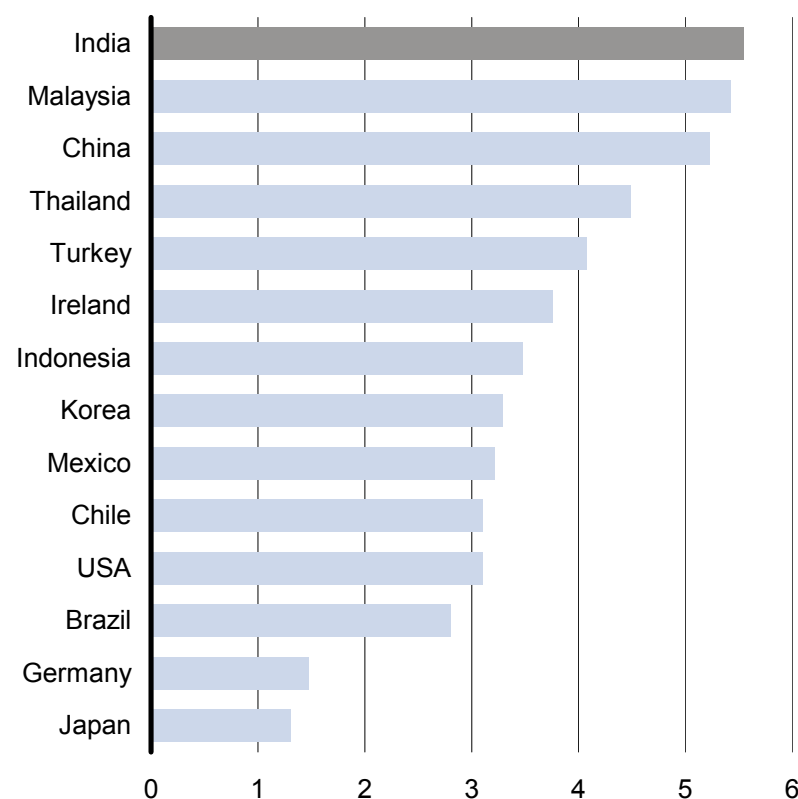
... but already with significant purchasing power and a DB Research growth star

GDP in PPP (global rank in brackets), USD bn



Source: IMF WEO

Ranking of GDP growth 2006-20, % p.a.

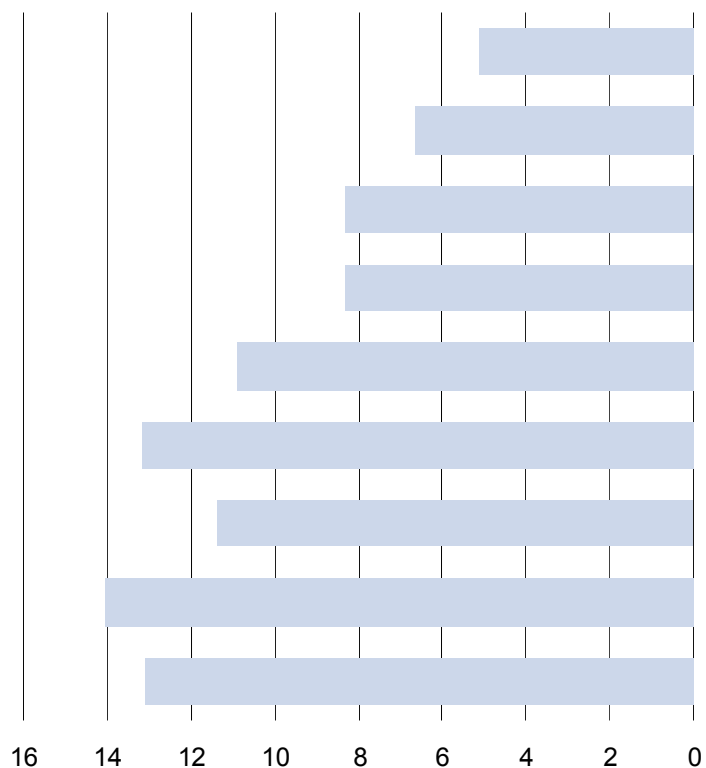


Source: Deutsche Bank Research, *Formel-G*

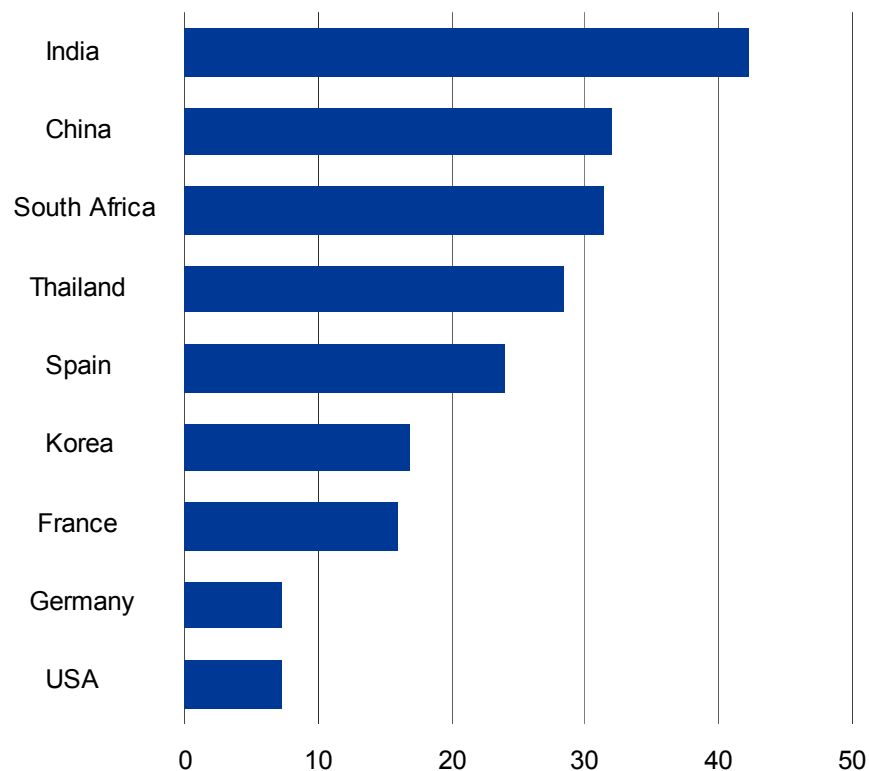


Huge improvements in the quality of workforce is a major driver of growth ...

Average years of education in 2005



Change in years of education 2005-2020 in %

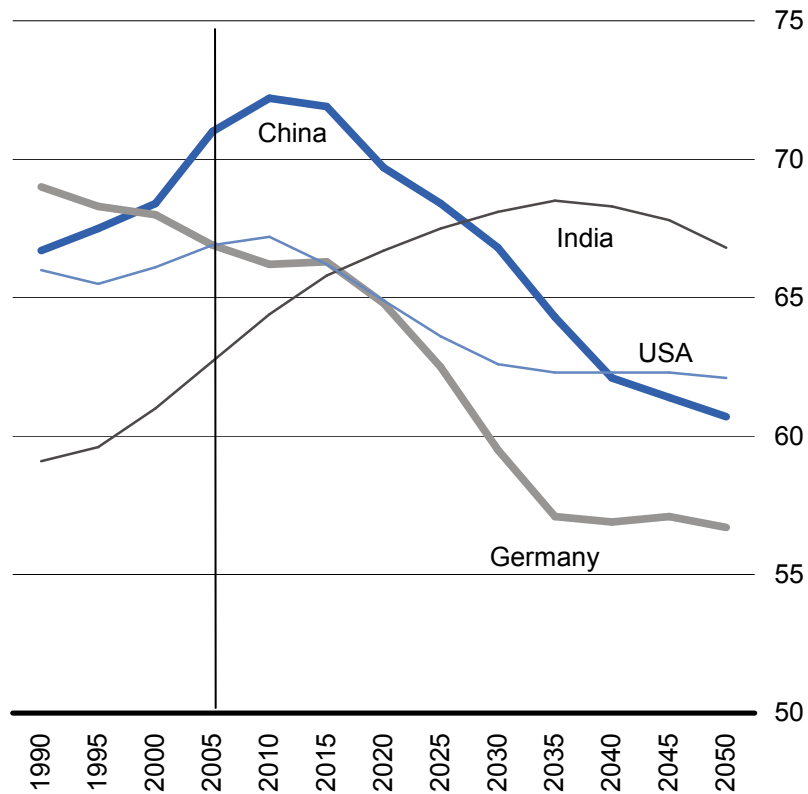


Sources: OECD, Deutsche Bank Research



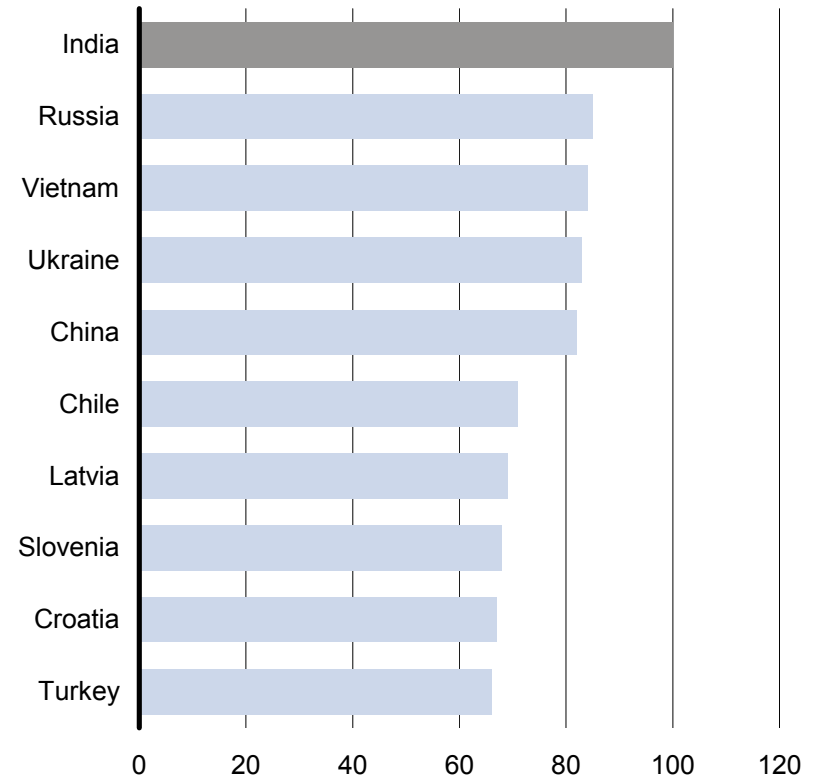
... plus a young population eager to consume

15-64 year-olds in % of total population



Source: UN

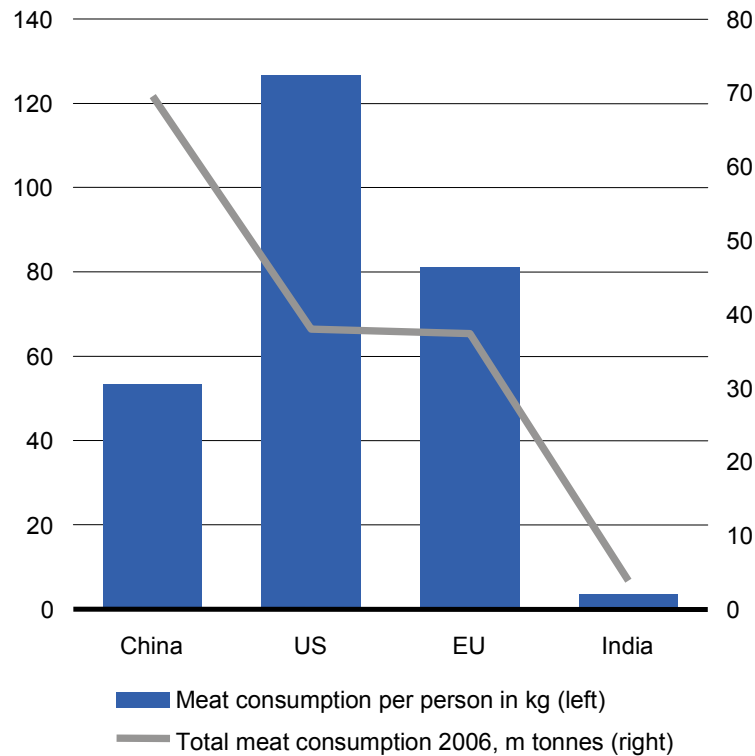
A.T. Kearney 2006 Global Retail Development Index
(the higher the score, the higher the urgency for retailers to enter the market)



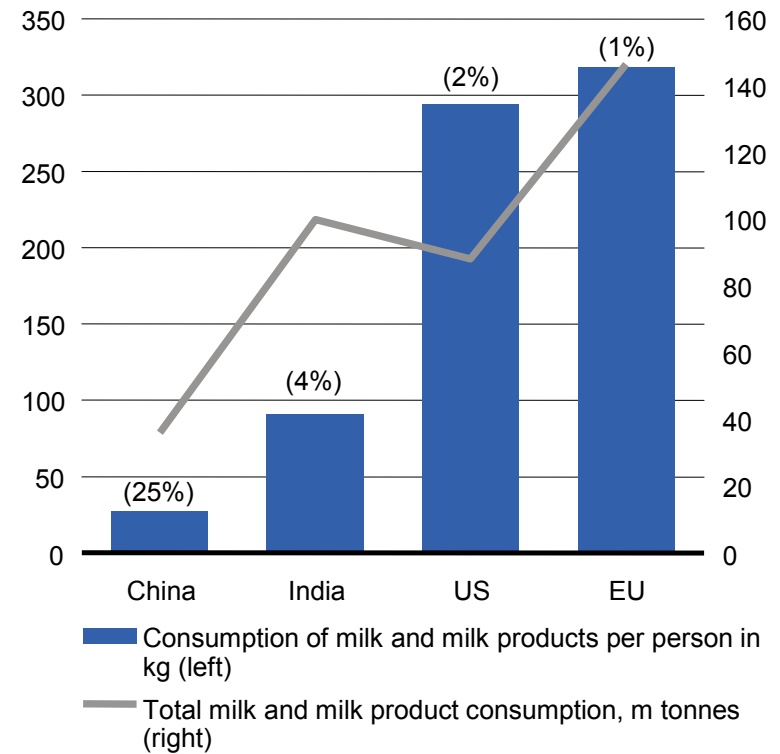
Source: A.T. Kearney



Per capita consumption of many necessities still low = huge market potential !

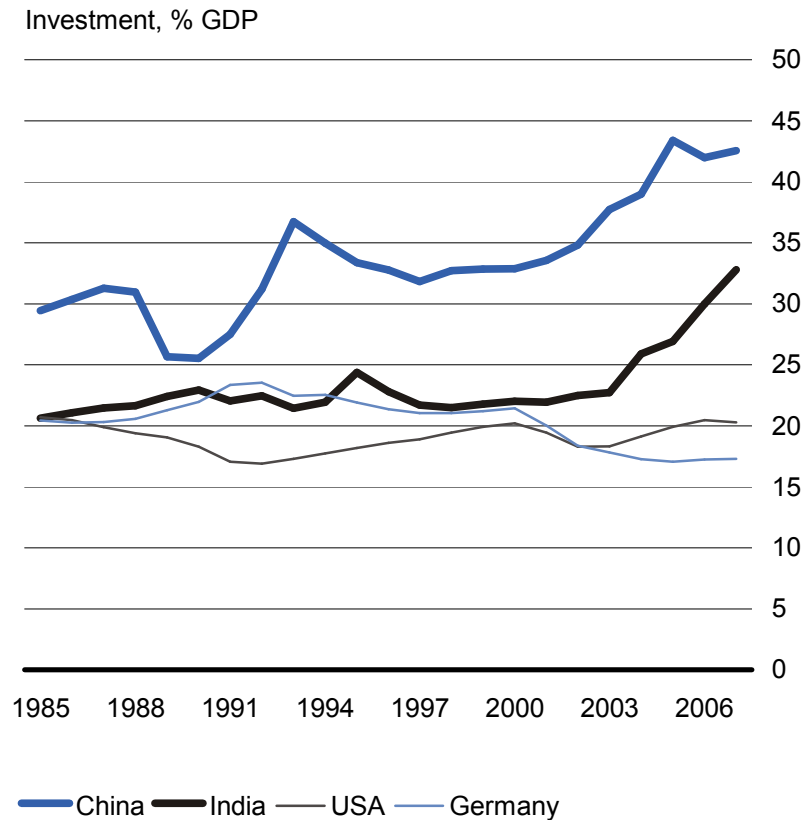


Source: Own calculations based on USDA data



() average annual change in total milk and milk product consumption 2002-06
 Source: Own calculations based on USDA data

Rising investments have also become a driver of growth in India

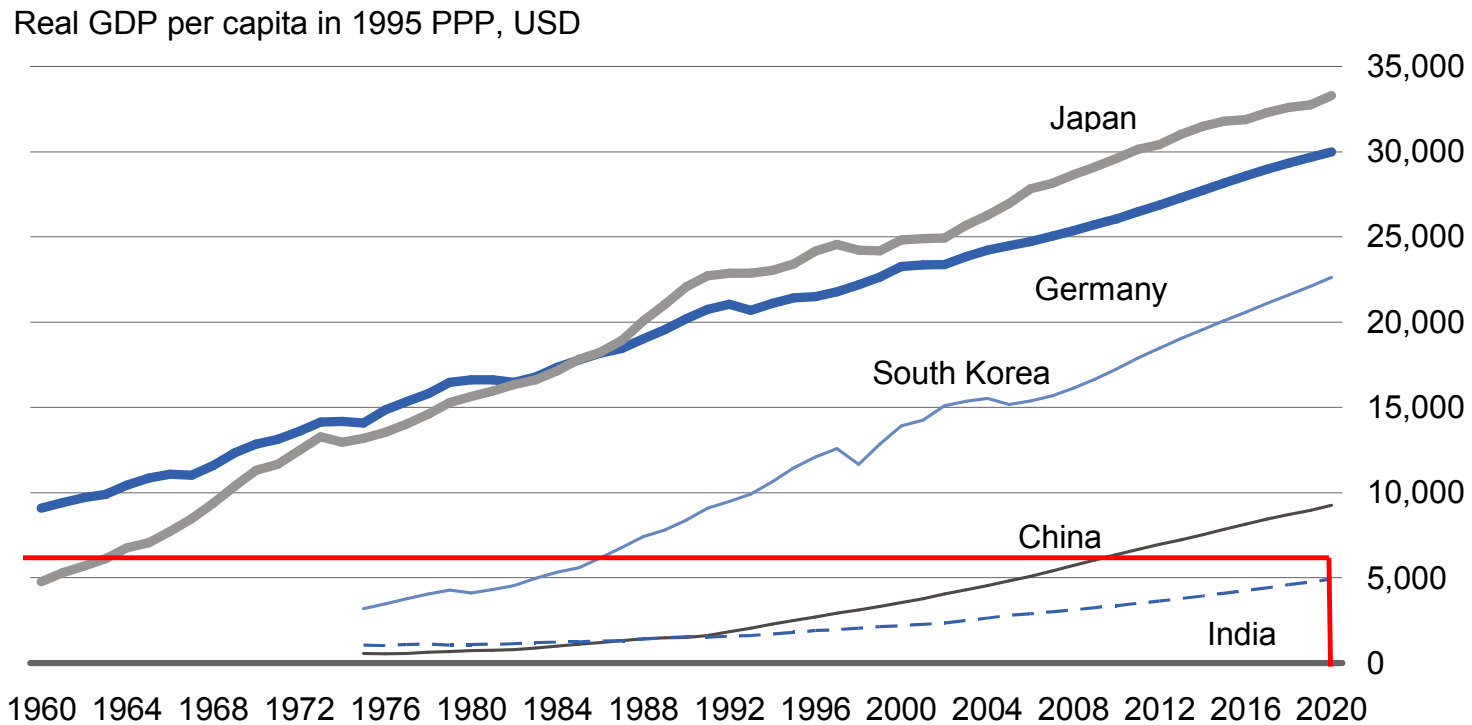


Sources: WEFA, DB Research



Source: Deutsche Bank Research

At the end of the next decade, India could reach Japan's living standard of 1960 or Korea's of the early 1980s



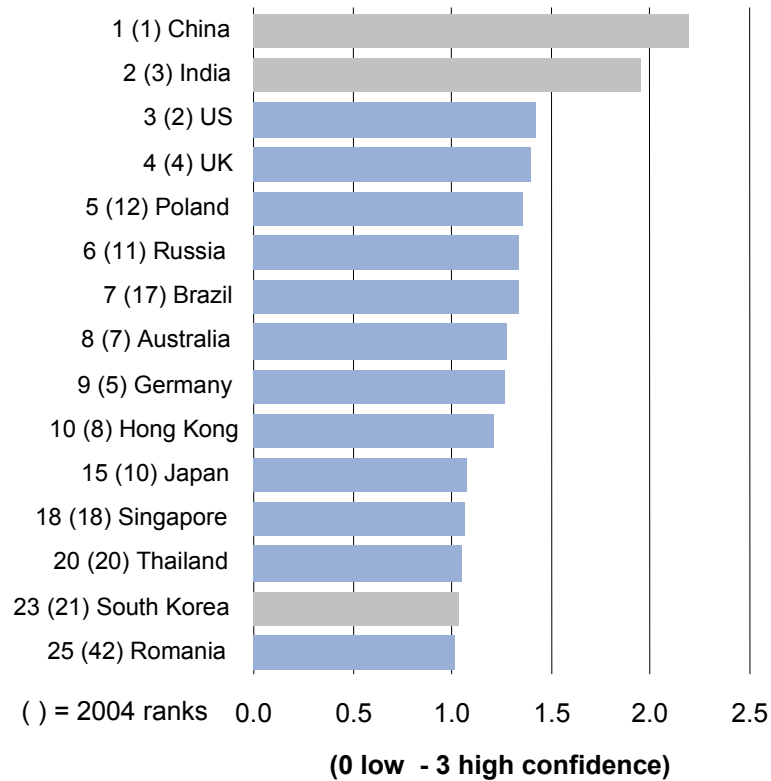
Source: Deutsche Bank Research Formel-G





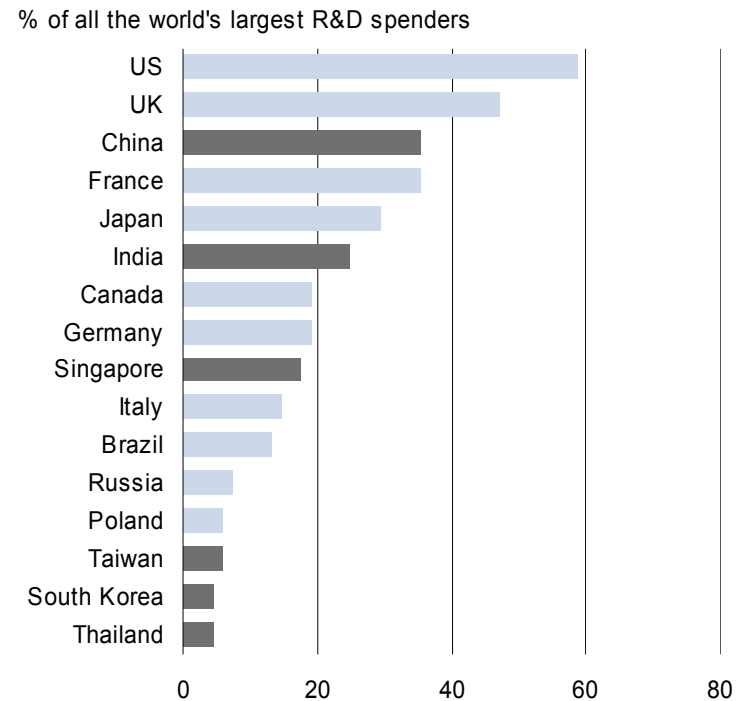
India's attractiveness for foreign investors is increasing

A.T.Kearney FDI Confidence Index 2005



Source: A.T. Kearney

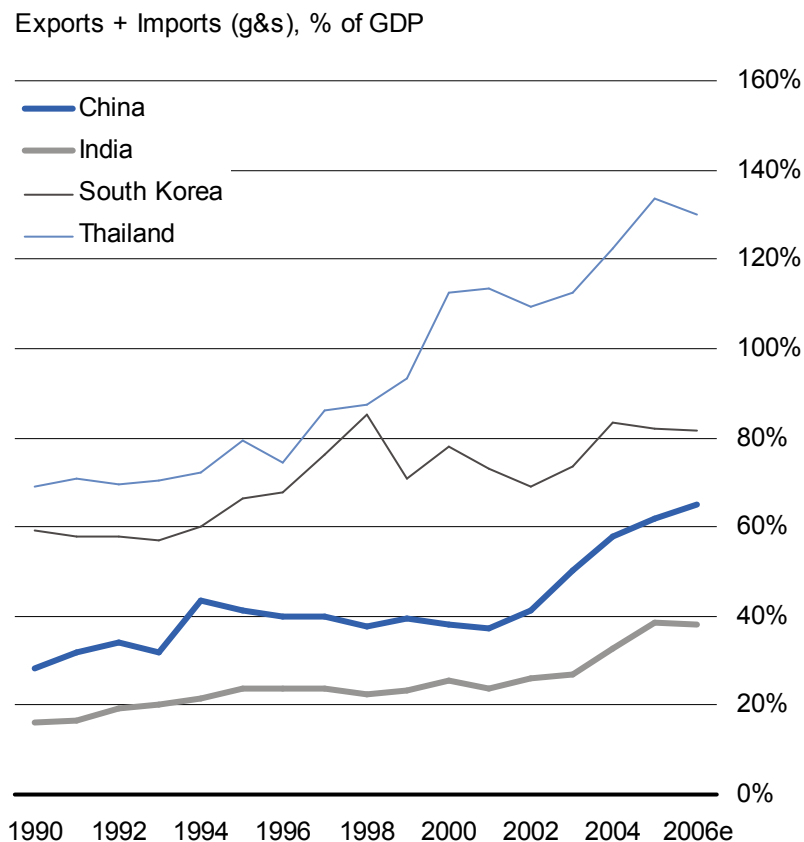
Locations of foreign R&D efforts (based on a survey of the world's largest R&D spenders)



Source: UNCTAD WIR 2005



Trade openness to increase further



Source: DB Research

- Tariffs have declined significantly, indicating India's gradual process of opening its economy.
 - weighted average tariff has more than halved between 1990 and 2003, from 50% to just slightly above 20%.
 - However, the current average is still high when compared to the average of the ASEAN-5.
- Current initiatives:
 - Increasing trade alliances with ASEAN, China and with developed countries
 - Developing new special economic zones (SEZ)





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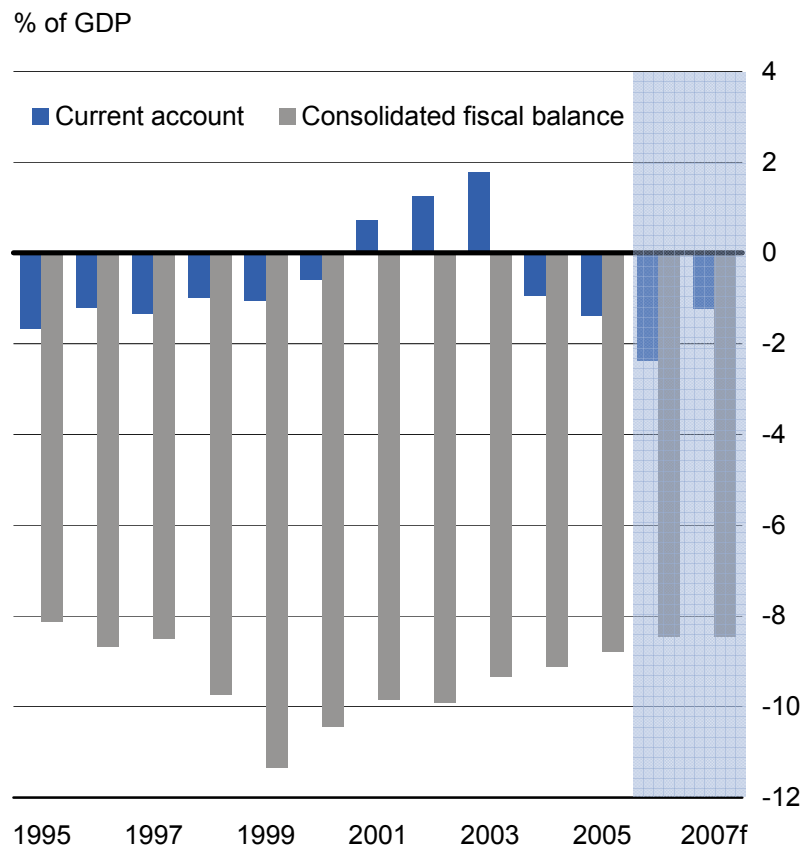
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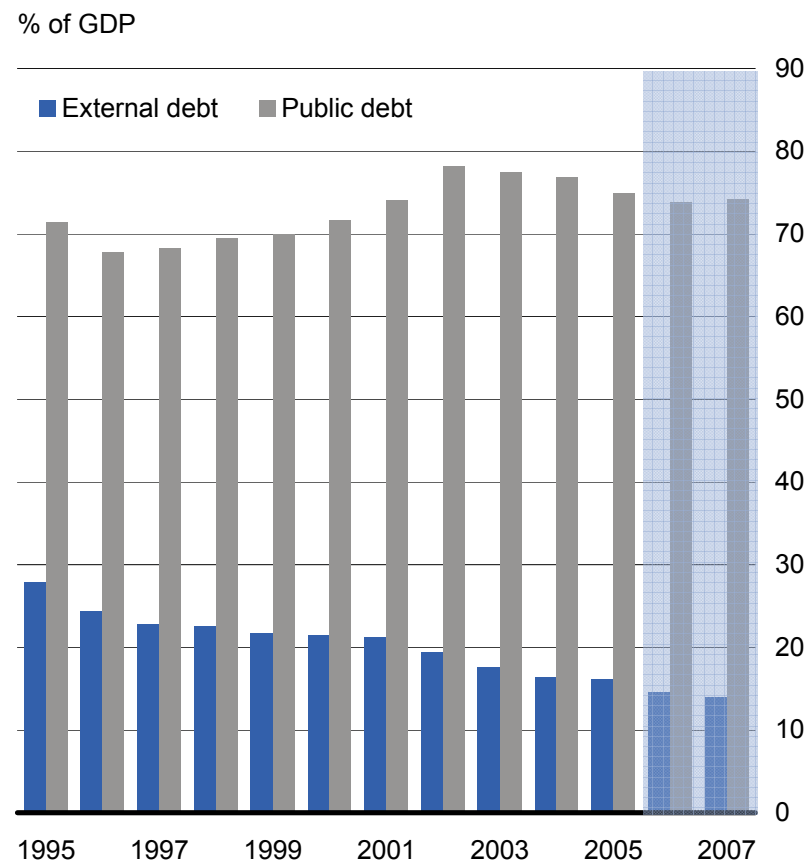




Twin deficits and still relatively high public (internal) debt need to be monitored



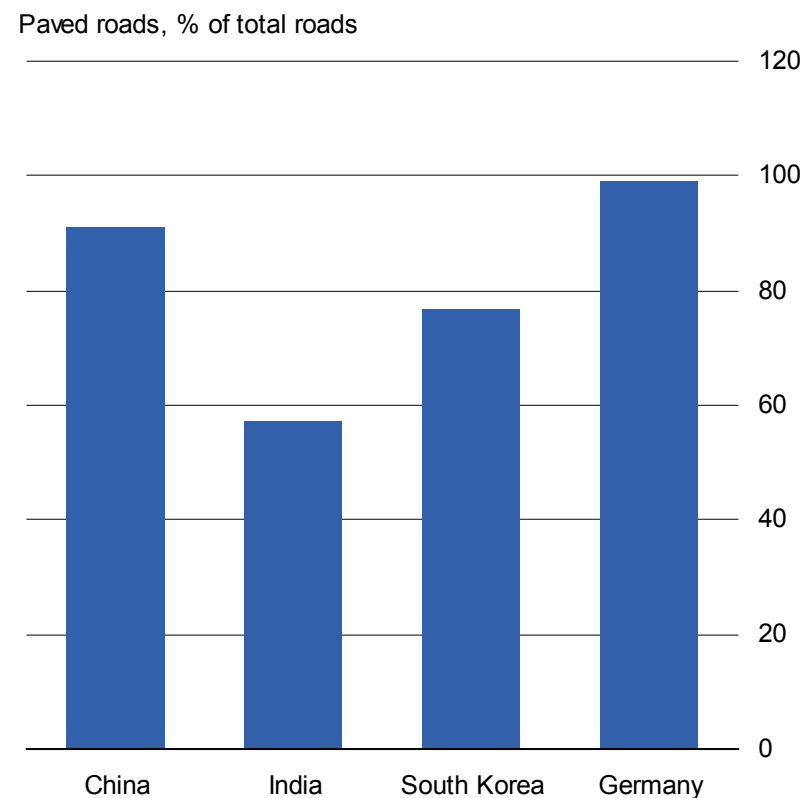
Source: DB Research



Source: DB Research

Huge investment needs, especially in infrastructure

- Foreign direct investment (FDI) has been low (flows are 0.8% of GDP, 9% of what China gets)
- FDI is needed in infrastructure:
 - USD 75 bn in the power sector
 - USD 25 bn in telecommunications
 - USD 50 bn in airports, seaports and roads
- Huge investments are also needed on the agricultural sector.
 - The agricultural sector still relies on the vagaries of the monsoon.
 - While the sector's contribution to GDP is only 23%, it still employs 60% of the population.

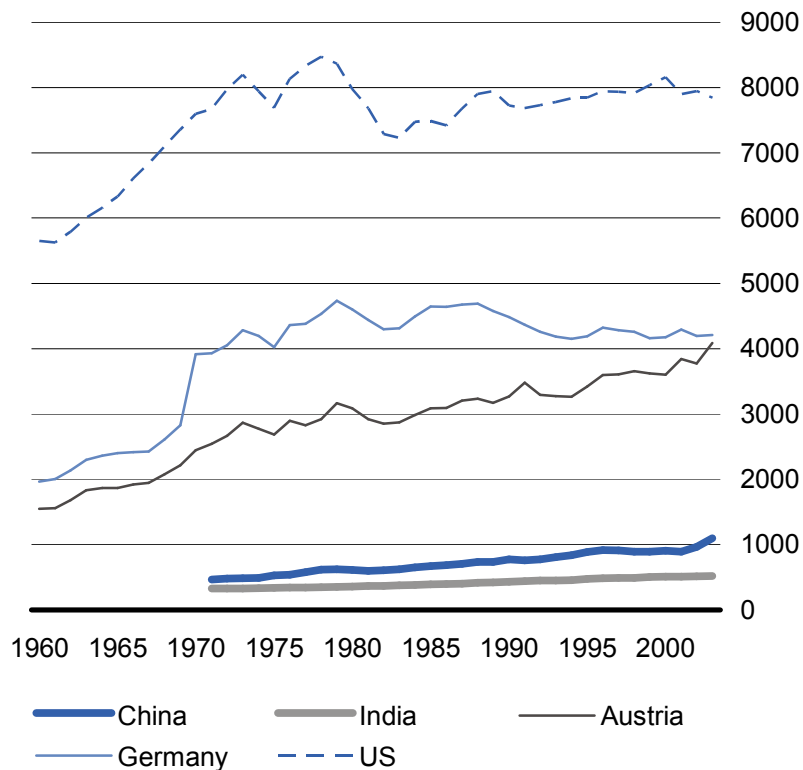


Source: World Bank (latest available data)



More energy imports will be needed as per capita consumption and efficiency are still low

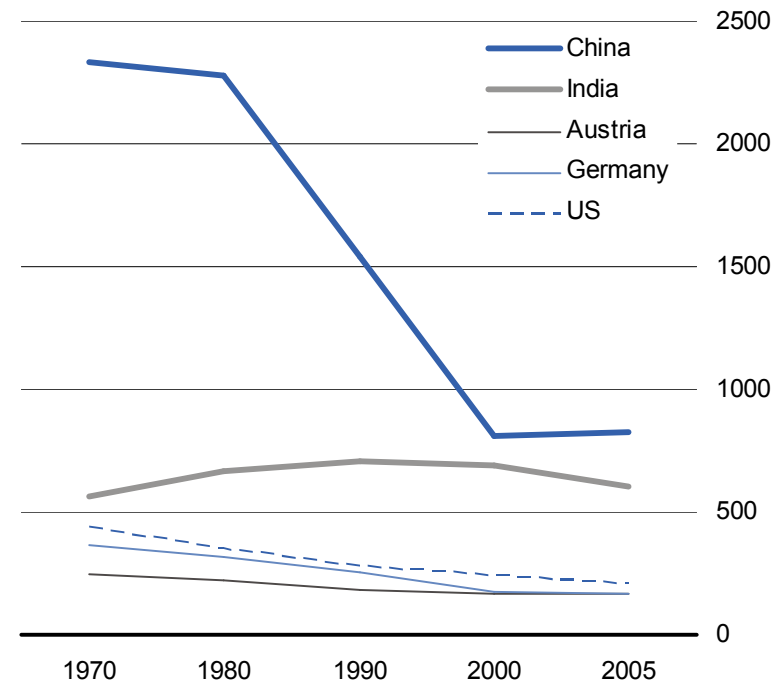
Energy use still low
in kg oil equivalent per capita



Source: WDI

Energy efficiency needs to be improved

Primary energy demand per GDP, in tonnes of oil equivalent per GDP in million USD at 2000 prices



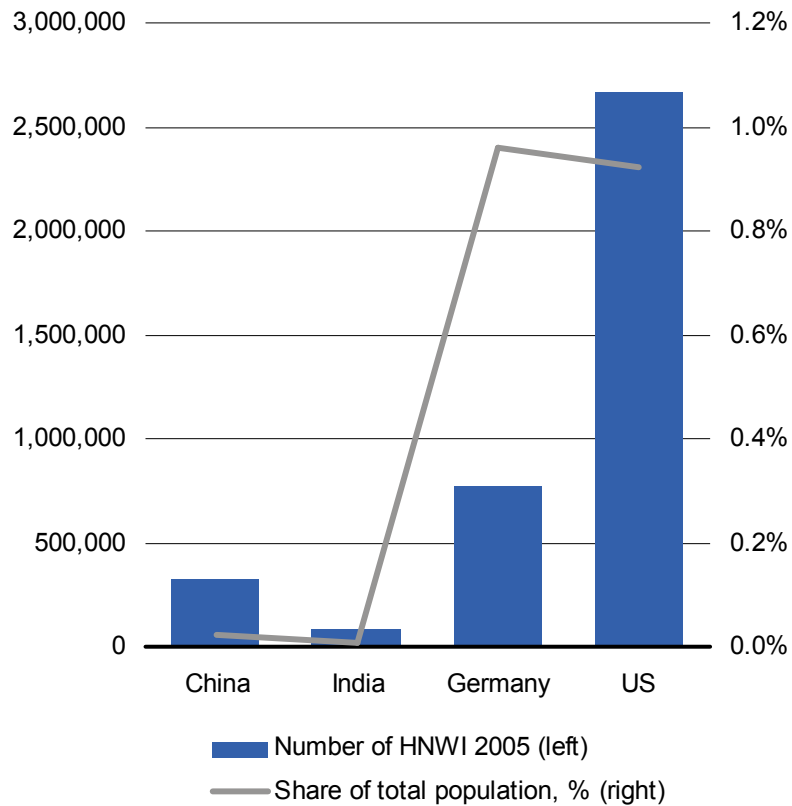
Source: WMMD

Fuel imports: 30% of total imports, 70% of overall need are met by imports



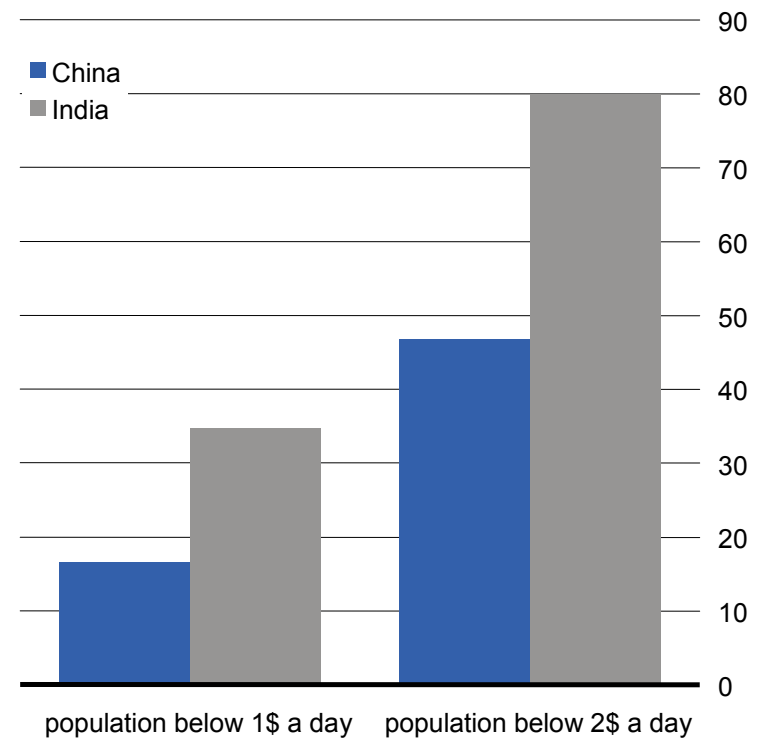


Despite rising living standards, poverty is still widespread



Source: Capgemini/Merrill Lynch World Wealth report

Population below international poverty line, %*

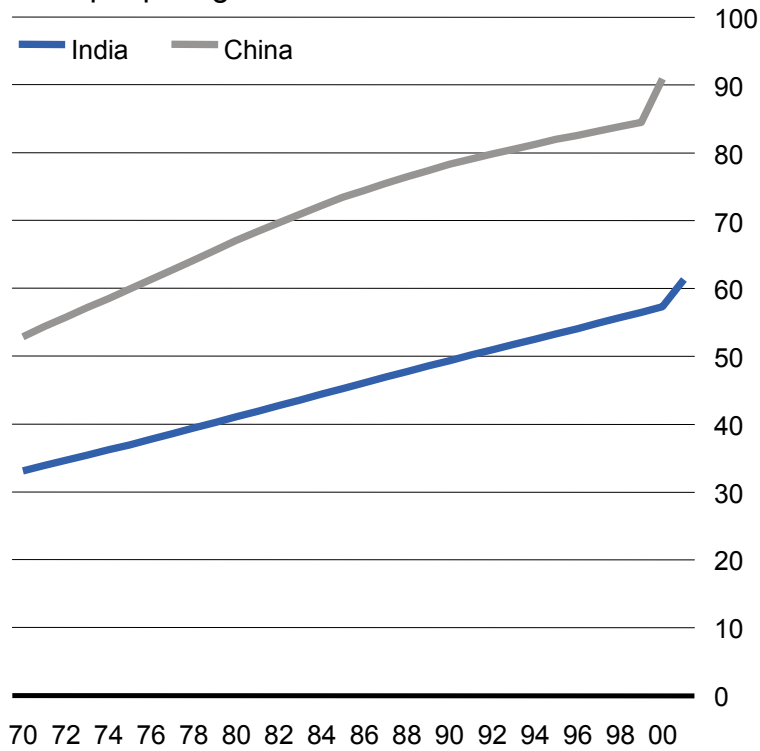


*10% is more than 100 m people in China and India. Source: WDI



Access to education needs to be improved

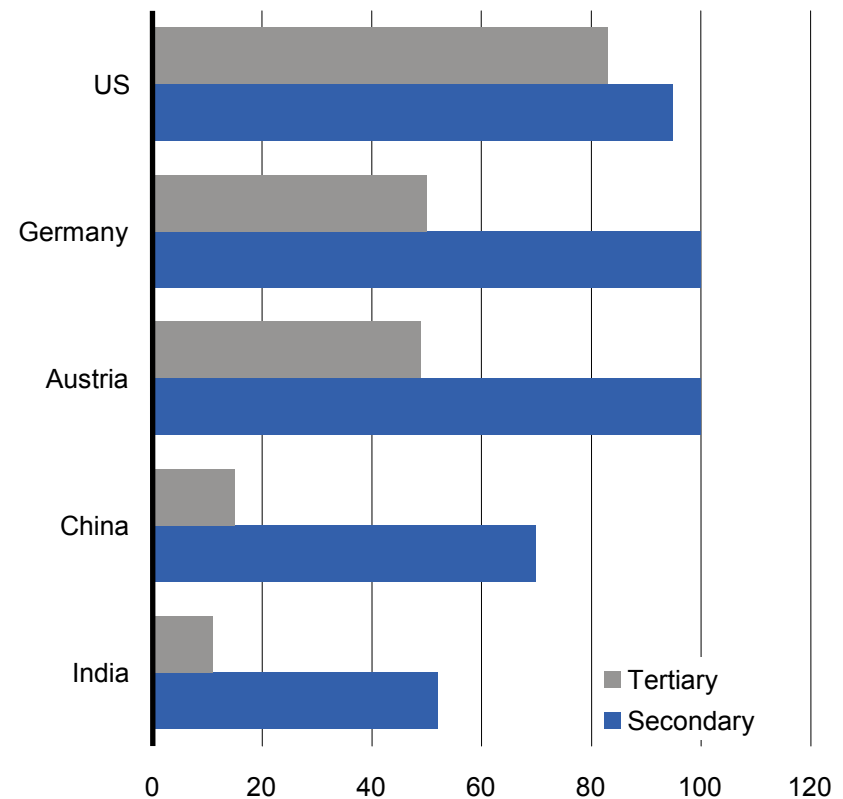
Adult literacy rate,
% of people age 15 and above



Source: WDI

India: Today's literacy rate still below 70%;
drop-out rate: 30%

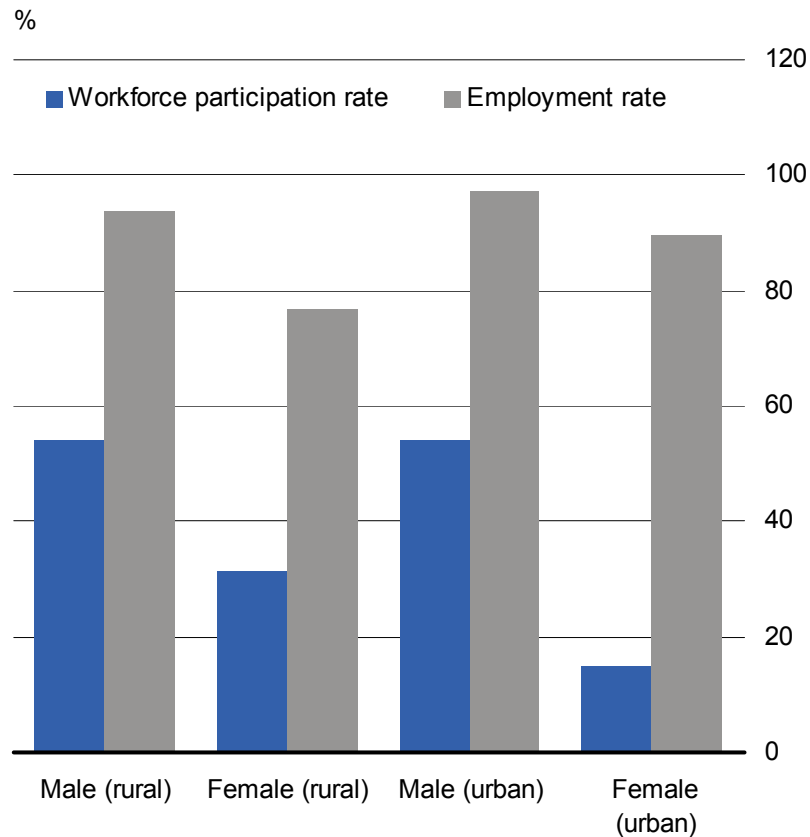
Gross enrolment ratio, % of age group



Source: WDI

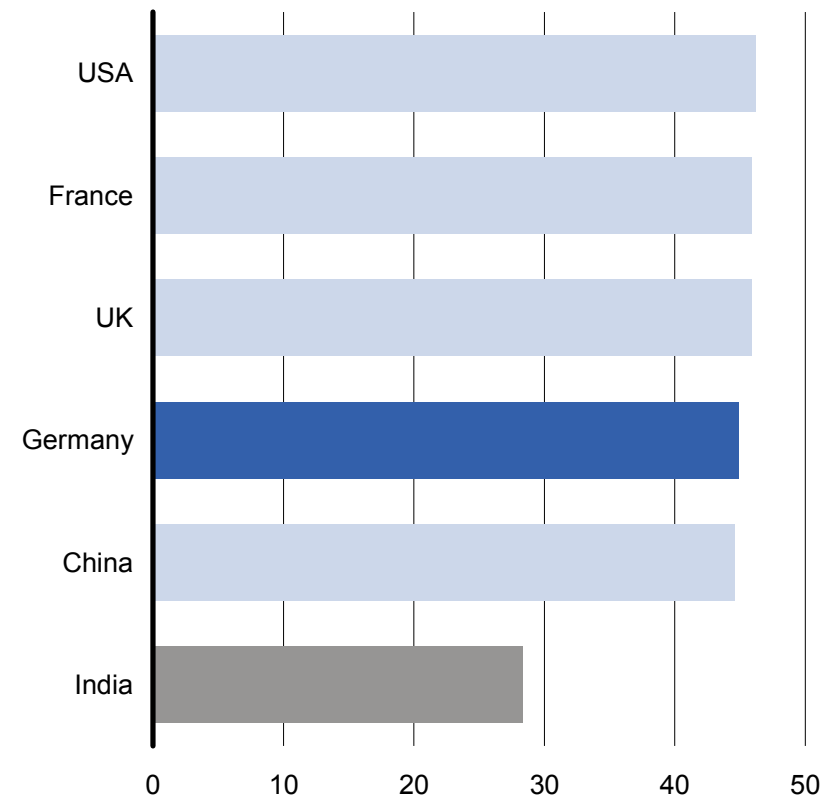


Labour market: Low workforce participation, especially the case of women



Source: CEC

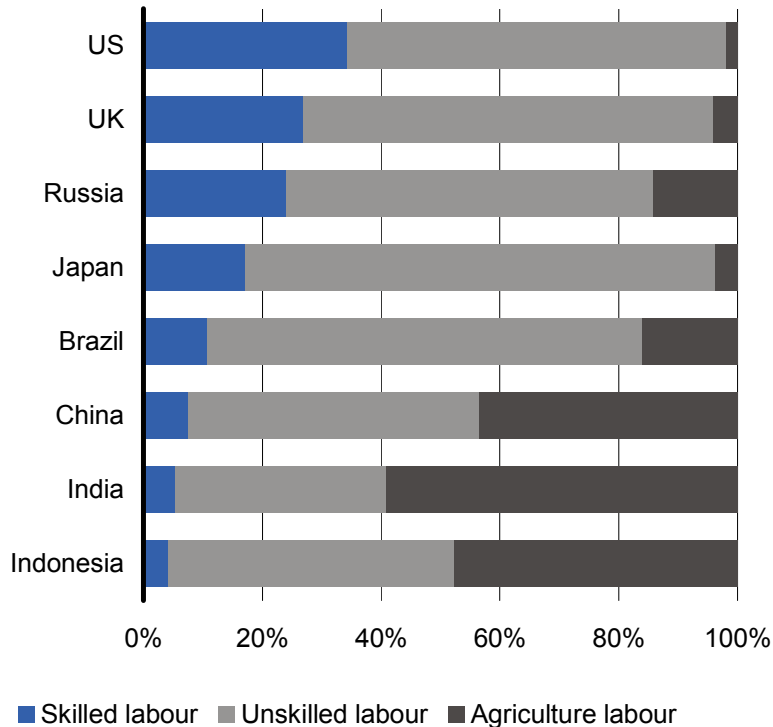
Female labour participation rate, 2004



Source: WDI

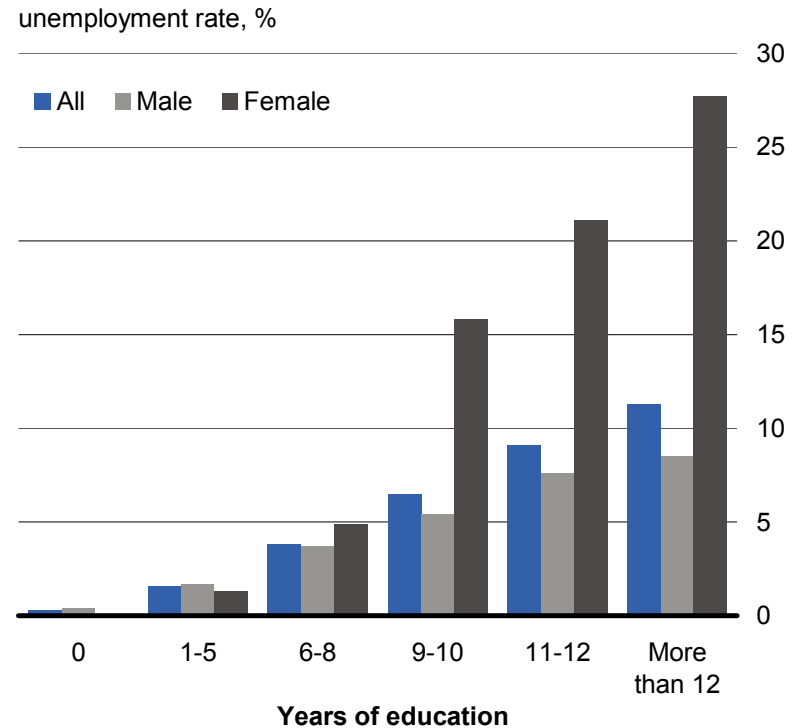
Qualifications are unevenly distributed and do not always fit

Skill distribution of labour force
% of labour force



Source: Icrier, Agarwal (2006)

India: Rate of unemployment increases with years of education



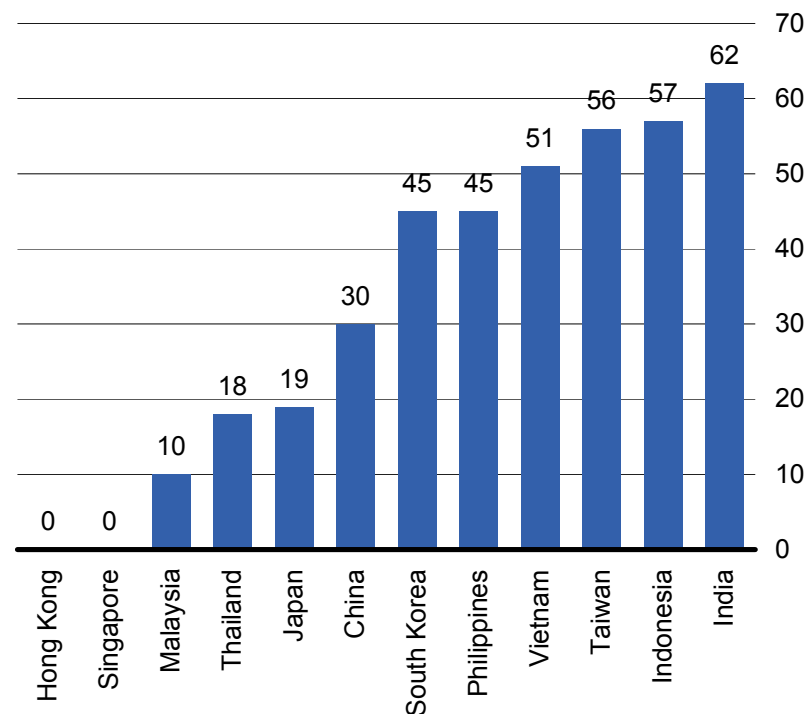
Source: Icrier, Agarwal (2006)

Questions about employability – more labour market reforms needed

- Approximately 3 m university graduates per year
- Pool of university graduates: 22 m (2003)
- Only 25% of engineering graduates and 10-15% of other university graduates are suitable for work in the IT sector
 - Possible labour deficit (IT sector): 500,000 in 2010
 - Turnover rate: 40%, wage inflation
- Unemployment rate of university graduates: 17.2%
 - Possibly up to 40% of all university graduates are not productively employed
- Foreign investors are concerned about too rigid labour market regulations

India's labour market is Asia's most inflexible

score 0 - 100, with 0 being the least rigid system possible, 100 being the most rigid



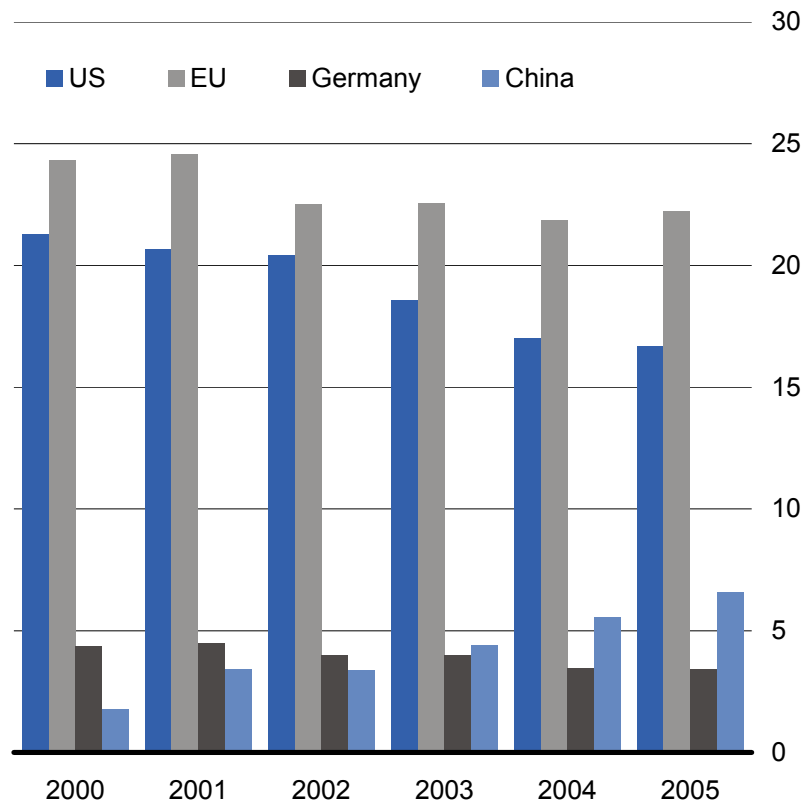
Sources: PERC, World Bank





Increasing dependence on the US (although the EU is the largest trading partner)

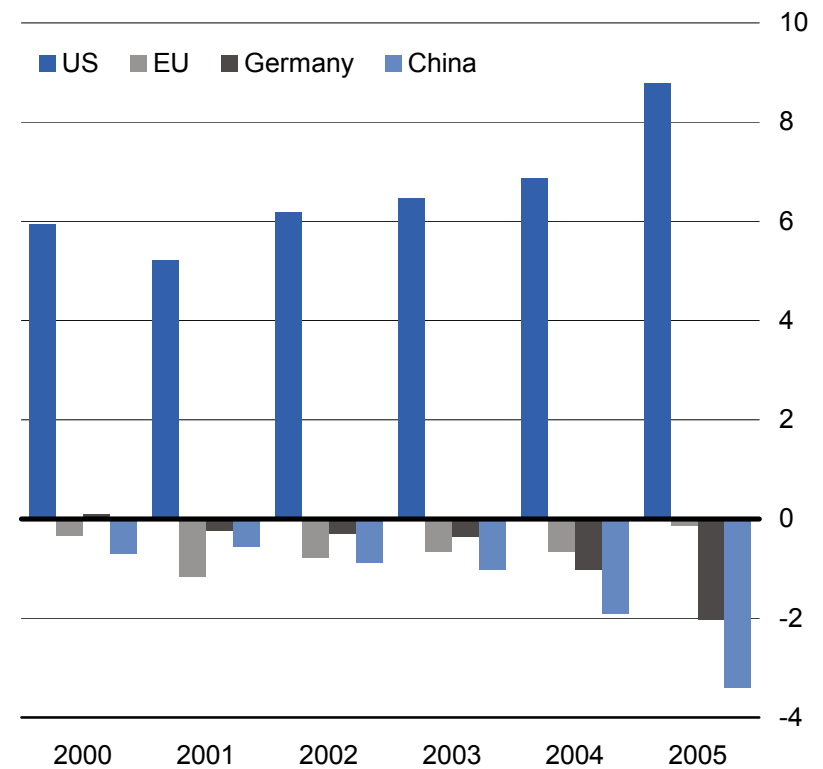
Export share, % of total



Source: IMF Direction of Trade Statistics

Indian bilateral trade balances

USD bn



Source: IMF Direction of Trade Statistics

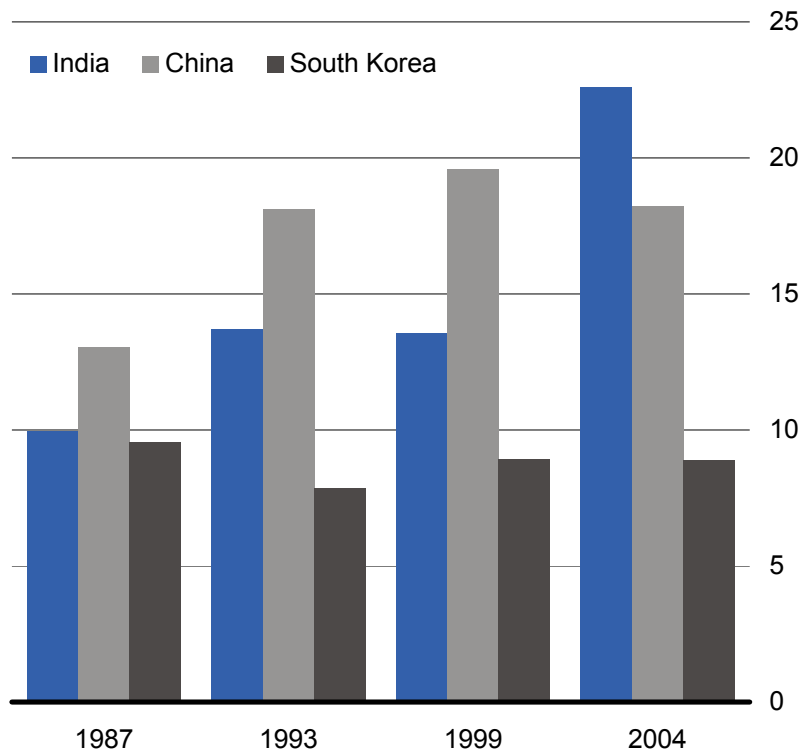




Brain drain to the US

Foreign graduate student enrollment in the US

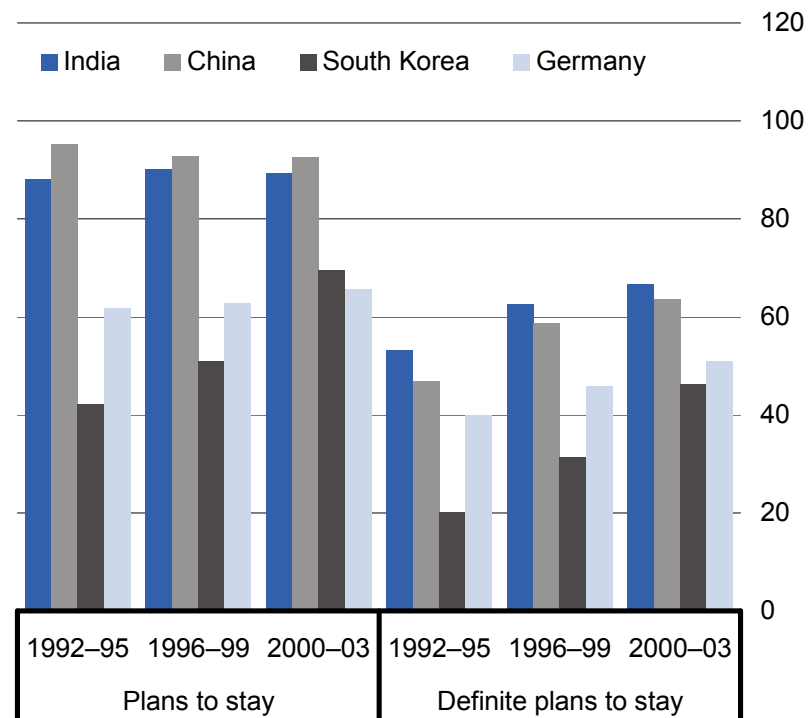
% of all locations



Source: Science and Engineering Indicators 2006

Plans of foreign recipients of US S&E doctorates to stay in the United States

% of foreign S&E doctorate recipients



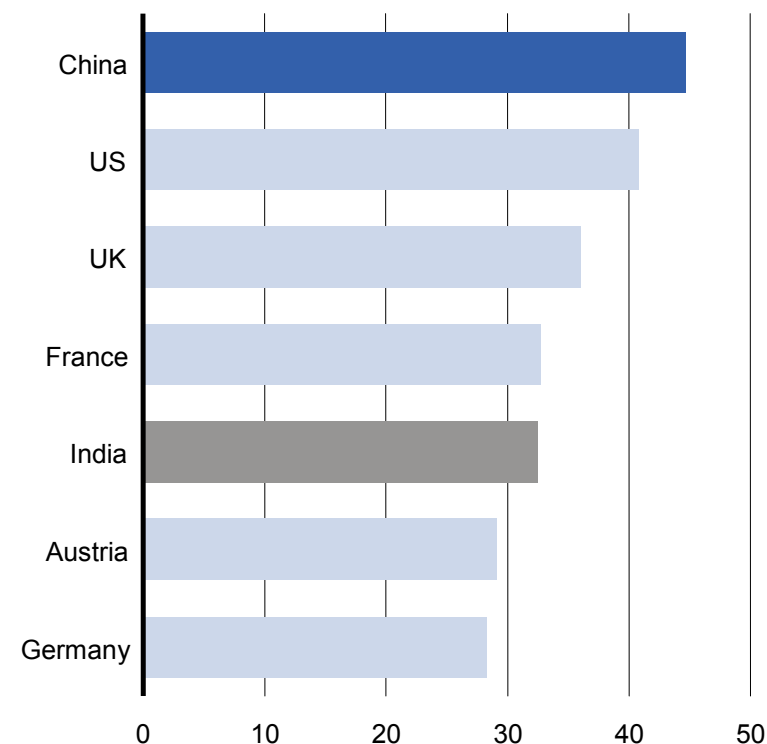
Source: Science and Engineering Indicators 2006



Other risks

- Fractious politics (19-party coalition gov't)
- Tight fiscal position
- Banking sector vulnerable to rising interest rates (gov't bond holdings)
- High dependence on energy imports
- Investor sentiment (portfolio inflows)
- Protectionism
- Kashmir conflict
- Religious and Maoist violence
- With widening income disparity, risk of social tensions
- Infrastructure bottlenecks
- Rising (land and) labour costs
- Water shortage, environmental degradation?

Gini index: Inequality of income distribution



Source: WDI





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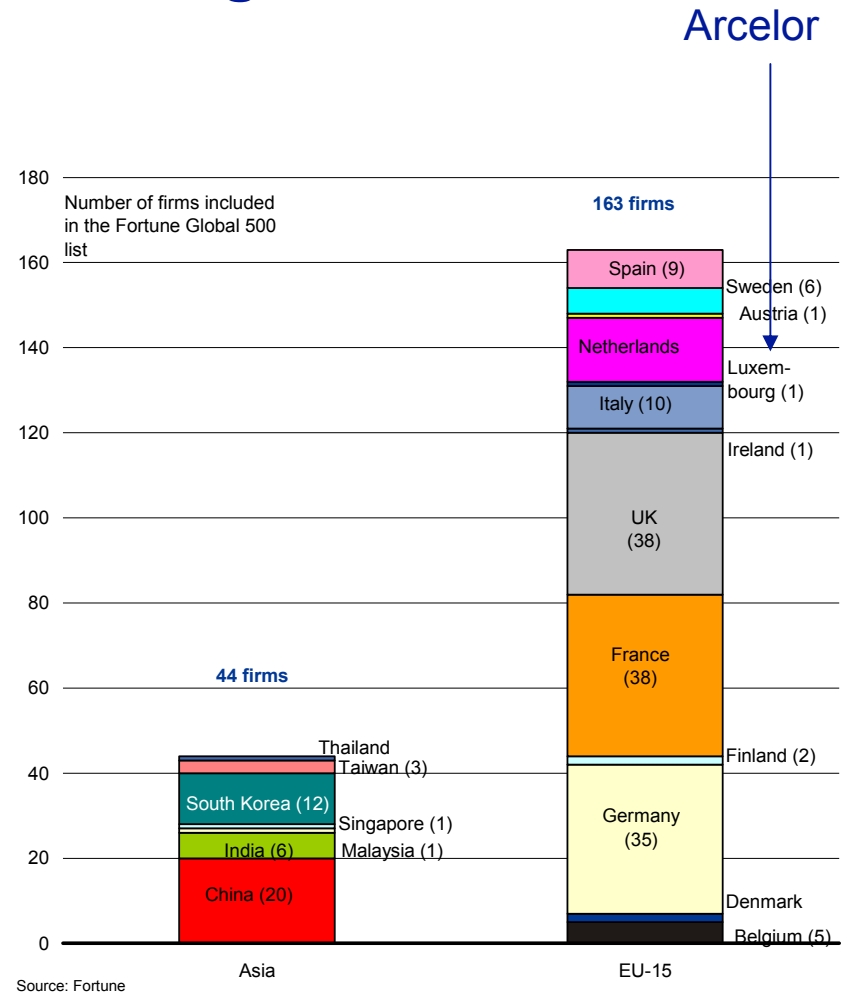
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Conclusion and outlook



Despite the challenges, India *is* rising

- India's growth momentum based on many favourable factors
- But many challenges still need to be overcome
- Some of its global champions are already entering the world stage
- Names to remember
 - Infosys, Wipro (IT-sector)
 - Dr Reddy's, Ranbaxy (pharmaceuticals)
 - Bharti (telco)
 - Mahindra (automotives)
 - Reliance, Tata, Aditya Birla Group (diversified conglomerates)
 - ...





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