Fundamental Analysis
By
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BSE

The edge is efficiency

BHARATIYA VIDYA BHAVAN'S

S. P. Jain Institute of Management & Research

SPJIMR

What is Fundamental Analysis?

- Macro Economic Analysis
- Industry Analysis
- Company Analysis

Macro Economic Analysis

Money Supply (M3)

- Components of Money Supply:
  - Currency with public
  - Demand deposits
  - Time deposits

Sources of Money Supply

- Net bank credit to government
- Net bank credit to commercial sector
- Net foreign exchange assets of the banking sector

Sources of Money Supply..contd

- Credit by Scheduled Commercial Banks (SCB)
- SCB credit by economic activity/occupation
- Occupation is classified as:
  - Agriculture
  - Industry
  - Transport operators
  - Professional and other services
  - Personal loans
  - Trade finance
  - Miscellaneous

Sources of Money Supply..contd

- Credit to Industrial Sector
  - Its share of the total credit: 50% in 1990's
  - The share remains at around same level, though however, larger amounts are also raised from the capital market between 2000 and 2006.
  - Current fiscal year {2006-07} credit offtake growth at 30% against a deposit growth rate of 18% resulting an increase in rate of ineterest

Central government expenditure

- Central Government Expenditure (CGE)
- Share of revenue expenditure in total expenditure:
  - 1980's – remained in the range of 63-66%
  - 2000-01 – it reached a high of 84.5%
  - Currently hovering between 80 and 82%
- Interest, subsidies and defense constitute the major portion of revenue expenditure
  - Currently ranges between 60 and 64%

Central Govt. Expenditure..contd

- CGE is also classified as plan and non-plan expenditure
- Non-plan expenditure – major heads:
  - Interest payments
  - Subsidies – food, fertilizers, kerosene and LPG
  - Defense
  - Grants to states and union territories
- These account for about 80% of total non-plan expenditure

Sectoral real growth rates in GDP
(at 1999-2000 prices)

Item	% change over previous year					
	2000-01	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**
Agriculture & Allied	0.0	6.2	-6.9	10.0	**0.7**	**2.3**
Industry	6.3	2.7	7.0	7.6	**8.6**	**9.0**
Mining and quarrying	2.5	1.8	8.7	5.3	5.8	1.0
Manufacturing	7.7	2.5	6.8	7.1	8.1	9.4
Electricity, gas and water supply	2.0	1.7	4.8	4.8	4.3	5.4
Construction	6.1	4.0	7.7	**10.9**	**12.5**	**12.1**
Services	5.6	7.1	7.3	8.2	9.9	9.8
Trade, hotels, transport and communication	7.1	9.2	9.1	**12.0**	**10.6**	**11.1**
Financial services	4.1	7.3	8.0	**4.5**	**9.2**	**9.5**
Community, social and personal services	4.7	3.9	3.8	5.4	9.2	7.9
Total GDP at factor cost	4.4	5.8	3.8	**8.5**	**7.5**	**8.1**

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INDUSTRY	6.3	2.7	7	7.6	8.6	9	10
Mining & Quarrying	2.5	1.8	8.7	5.3	5.8	1	4.5
Manufacturing	7.7	2.5	6.8	7.1	8.1	9.4	11.3
Electricity Gas & Water Supply	2	1.7	4.8	4.8	4.3	5.4	7.7
Construction	6.1	4	7.7	10.9	12.5	12.1	9.4
Services	5.6	7.1	7.3	8.2	9.9	9.8	11.2
Trade Hotel Transport communication	7.1	9.2	9.1	12	10.6	11.1	13
Financial Services	4.1	7.3	8	4.5	9.2	9.5	11.1
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Total GDP at factor Cost	4.4	5.8	3.8	8.5	7.5	8.1	9.2

Industry analysis

- Ask few important questions about the industry we are considering:-
- Is Industry growing? To find out whether industry is in its early stages of growth or has reached maturity
- To find out, we need to understand the process of “Industry Evolution”

Industry Analysis… cont.

- Dynamic Process of Industry Evolution :

  1. Long-run changes in industry growth rate:-

  - Demographics
  - Trends in needs
  - Change in relative position of substitute products
  - Change in the position of complimentary products
  - Penetration of particular customer groups – new users
  - Product evolution

Industry Analysis….. Cont.

2. Changes in buyer segments served:-

   - Learning by buyers
   - Reduction of uncertainty
   - Diffusion of proprietary knowledge

Industry Analysis….. Cont.

3. Accumulation of Experience:-
   - Reduction in unit manufacturing costs
   - Distribution of proprietary technology

4. Expansion or Contraction in Scale:-
   - Rapid expansion of unit and sales
   - Largest firm gaining market share

Industry Analysis…..cont.

5. Marketing Innovation:-
   - Breakthroughs in marketing themes
   - Breakthroughs in product distribution

6. Process Innovation:-
   - Innovation in manufacturing which can change the economies of scale.

Industry Analysis…..cont.

7. Structural changes in adjacent industries:-

- Changes in the structure of suppliers
- Changes in the structure of buying industries

Industry Analysis ……cont.

8. Government Policy Change:-

- Deregulation
- Trade barriers/quotas
- Guidelines on product safety
- Guidelines on environment quality

Industry Analysis….cont.

9. Ease of Entry and Exit:-

- New entry of dominant firm
- Impact on industry concentration

Industry Analysis.. ..cont.

B. How important are labour costs?

C. What is the pricing structure of the industry?

D. How easily can a new competition come on the scene?

E. Is the industry cyclical?

{does it fluctuate with the business cycle?}

F. What is the overall outlook for the industry?

ONWARDS SLIDE SOURCE

Shri Rakesh JhunJhunwala

(RARE ENTERPRISES)

INDIA ON A STRONG GROWTH TRAJECTORY

"A moment comes, which comes but rarely in history, when we step out from the old to the new, when an age ends and when the soul of a nation, long suppressed, finds utterance."

Growth enablers	Growth solidifiers & accelerators	Growth and Indian stock markets

" India has a dynamism that has never been seen before"

- Economist, Oct 2005

GROWTH ENABLERS

GROWTH ENABLERS

CULTURAL

Tolerance
Educational base
Skilled People
Savings Oriented

POLITICAL

Democratic
Secular
Populous
Welfare
Consensus
Judicial System

DEMOGRAPHICS

Young working population
54% of population <25 years old
Vast domestic market
Top 4 Middle class in the world

ECONOMICS

Entrepreneurial class well developed

Resilience (no boom-bust cycles)

GEO-POLITICAL

Sub-continent
Vast natural resources
Nuclear power
Amongst largest economies
Irrelevance of Geographies

INDIA ON A STRONG GROWTH TRAJECTORY

Growth enablers	Growth solidifiers & accelerators	Growth and Indian stock markets

GROWTH SOLIDIFIERS AND ACCELERATORS

1. A democratic growth process rather than an imposed one; a biological evolution
2. Resurrection of a dormant and vigorous entrepreneurial gene. India has rediscovered its confidence and can do spirit
3. Strong improvement in India’s macroeconomic indicators, combined with a robust banking system
4. Strong improvement in corporate performance, powered through productivity gains
5. On-going reforms to have a multiplier effect
6. Examples

INDIA ON A STRONG GROWTH TRAJECTORY

Growth enablers	Growth solidifiers & accelerators	Growth and Indian stock markets

INDIA HAS ALL INGREDIENTS THAT MARKETS VALUE

- **Efficient capital allocation**

- **Sustained Earnings expansion driven by growth and productivity**
  - **8%+ Real GDP growth + 4%+ Inflation = 12%+ Nominal GDP growth**
  - **Corporates to grow faster than Unorganised sector**
  - **Operating and Financial Leverage to kick-in**
  - **Hence, Corporate earnings to grow at 18%+**

- **Favourable framework for equity investing**
  - **Rising savings, yet low equity ownership – Significant potential**
  - **Corporate Governance**
  - **Transparency**
  - **Effective Regulation**
  - **Electronic Trading**
  - **Dematerialisation**
  - **Tax Paradise for equity investing under the STT regime**

- **De-risked model. Good balance between domestic consumption and global outsourcing opportunities**

WHAT COULD GO WRONG

- **Slowdown in US economic growth**

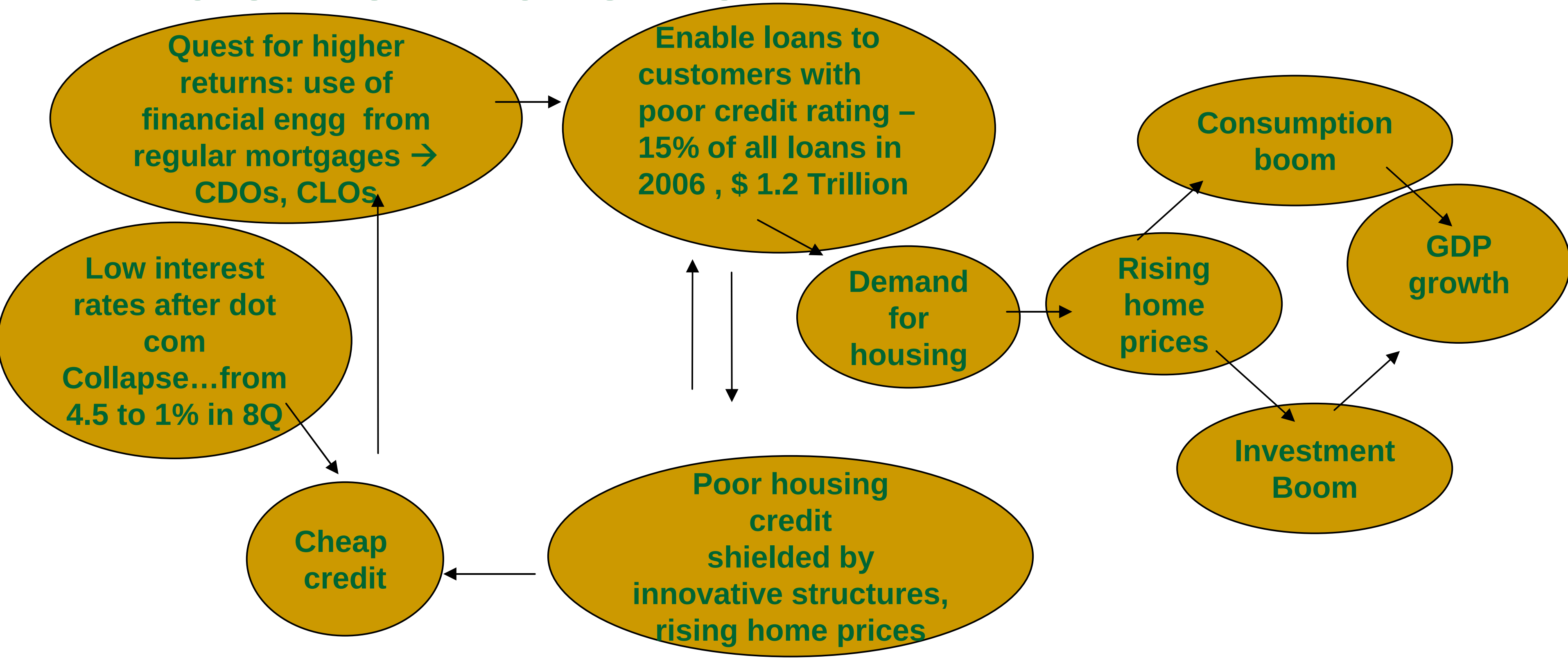
- **Global economy tanks**
  - **Possible**
  - **Will have some adverse implications for India in the short-run**
  - **But will have favourable asset allocation outcome in the long-run**
- **Politicians mess up**
  - **However, decreasing influence in causing damage**

- **India loses relative competitiveness**
  - **Unlikely**

- **Real interest rates go up significantly**
  - **Unlikely**

India's growth and it's equity returns can be delayed, not denied.

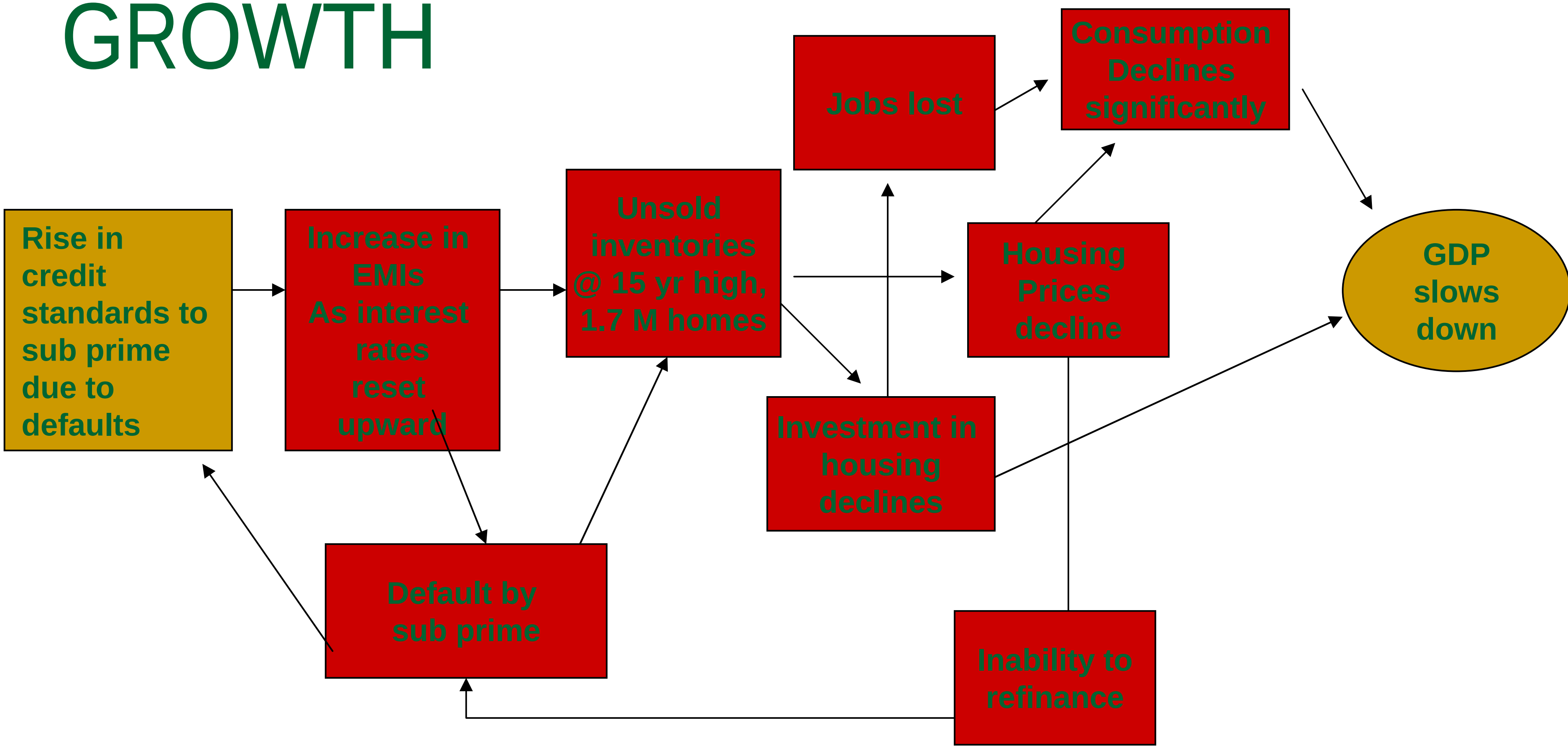
US: CHEAP CREDIT FUELS ECONOMIC GROWTH



Low interest rates led to US Economy Debt surging to 340% of GDP from 280% of GDP in 2000 and 175% in 1980 … thereby fueling an extra ordinary consumption and investment boom

Source: UBS

US: VICIOUS CYCLE OF GDP GROWTH



US Residential Consumption and Investment accounts for 20% of World GDP and 60% of US GDP

CONCLUSIONS: WE ARE IN A TOUGH PERIOD FOR EQUITIES

US Economy has to slow down

Aftermath of a 25 Yr bull market in the US will not be easy

Any onset of increased investor caution elevates risk premiums and, as a consequence, lowers asset values and promotes the liquidation of the debt that supported higher asset prices. This is the reason that <u>history has not dealt kindly with the aftermath of protracted periods of low risk premiums.</u>

— Alan Greenspan, 26 August 2005

WORLD ECONOMY IMPLICATIONS

WORLD SLOWDOWN

- Turmoil in debt markets
- Rising oil prices
- Rising interest rates
- Slowdown in overstretched US
- China slowdown?
- Global currency realignment

→

INDIA +

- **Oil and other commodity prices to weaken**
- **Interest rates to soften**
- **Domestic consumption story**
- **Low external reliance**
- **India – the beneficiary**

HOWEVER, THE NEXT FEW MONTHS WILL BE TOUGH

India may benefit…but after an intermittent transition period.

INDIA UTILIZES CAPITAL MORE EFFICIENTLY

	China	India
Avg. GDP Growth rate	**10.3%**	**7.8%**
Domestic Investment as % of GDP	**39%**	**30%**
FDI as % of GDP	**4%**	**0.8%**
Total Investment as % of GDP	**43%**	**30.8%**
Incremental capital output ratio	**4.2**	**3.95**

GROWTH DESPITE CYNICISM

"India is the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legend, and the great grandmother of tradition. Our most valuable and most instructive materials in the history of man are treasured up in India".

Mark Twain

"Despite this; the skepticism of most Indians, who have inherited from the British a talent for cultivated cynicism, is most surprising"

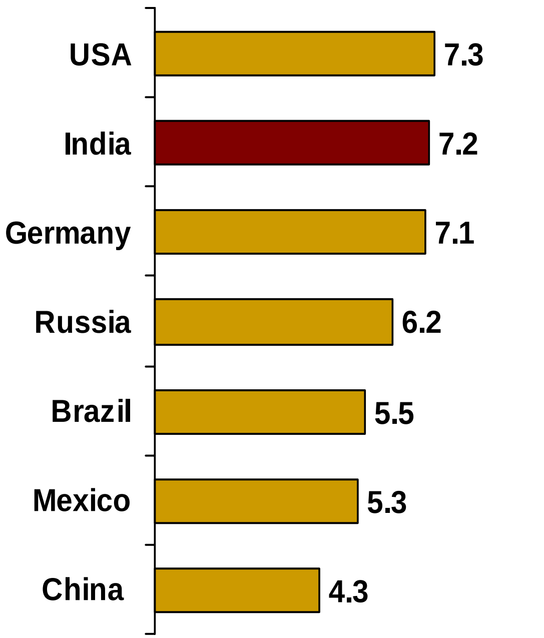
Chris Wood, CLSA

Growth enablers	Growth solidifiers & accelerators	9 -11 % future growth a reality	Growth and Indian stock markets

INDIA's PEOPLE - ITS STRONGEST ASSET

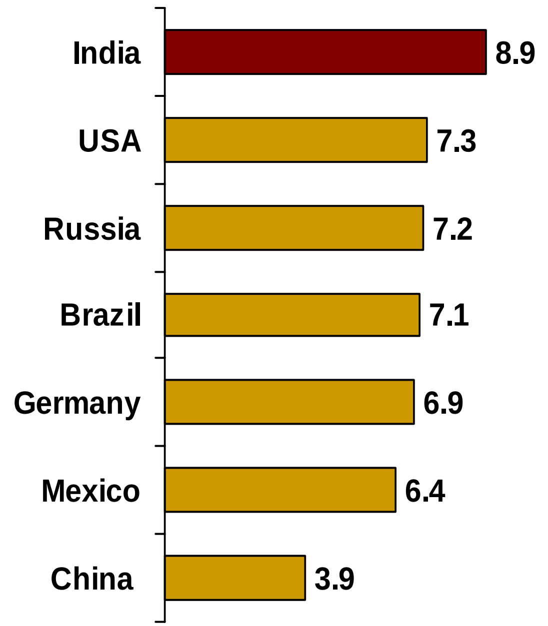
A large pool of skilled people...

Availability of skilled labour, 2003



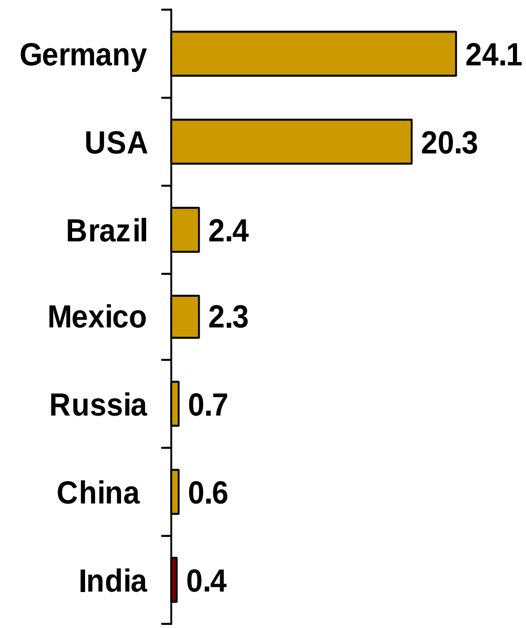
...with high end qualifications...

Availability of qualified engineers, 2003



...and extremely cost efficient

Total compensation for manufacturing workers, 2002



Note: Survey results: 1=low; 10 = high
Source: IMD world competitiveness Yearbook 2003

INDIA's PEOPLE - ITS STRONGEST ASSET

"This is the century of skill sets" – Peter Drucker

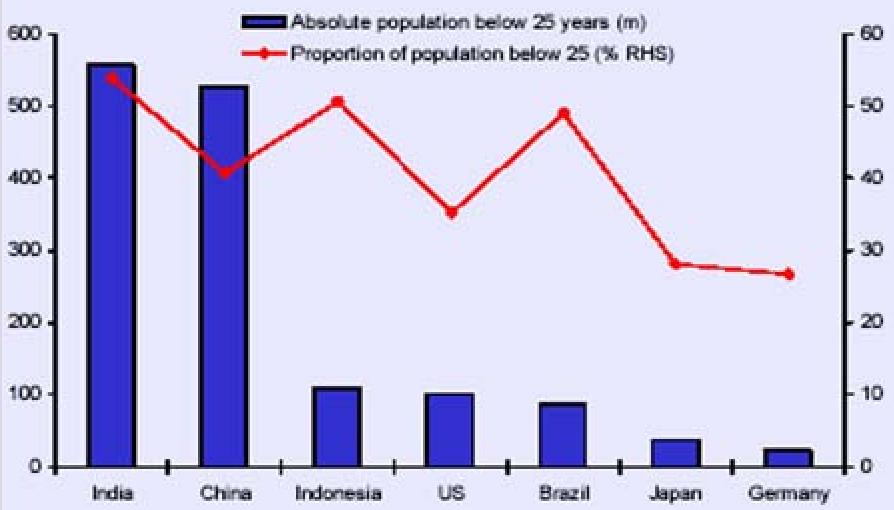
- **There are 3.22 Million Indians in America.**
- **38% of Doctors in America are Indians.**
- **12% of Scientists in America are Indians.**
- **36% of NASA employees are Indians.**
- **34% of MICROSOFT employees are Indians.**
- **28% of IBM employees are Indians.**
- **17% of INTEL employees are Indians.**
- **13% of XEROX employees are Indians**

"23% of the Global workforce addition over the next five years will be from India"

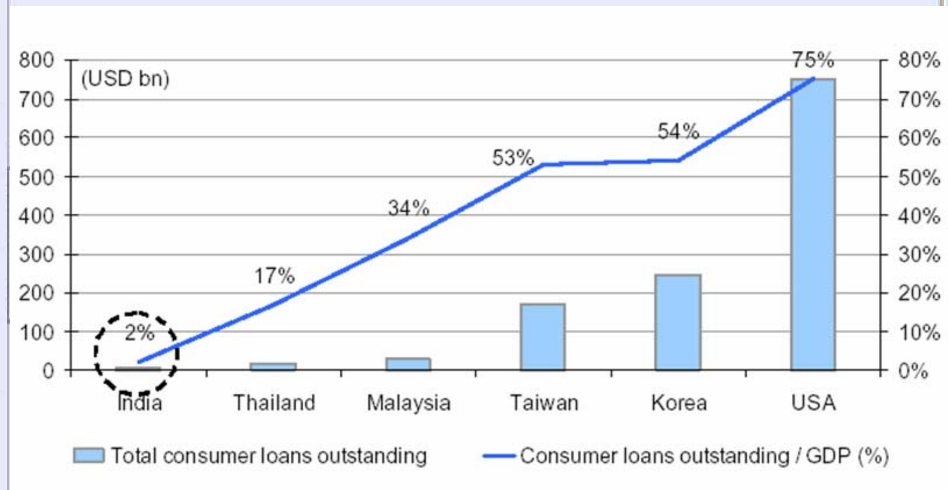
- Economist

FAVOURABLE DEMOGRAPHICS WILL AID

Today's youth ...	...will drive tomorrow's boom



Source : www.childrendatabank.org



Source : Statistical outline of India

CONSUMPTION: EXPANDING MIDDLE CLASS

India To Have 4th Largest Number Of House Holds Earning > US $5000

Number of households with income >US $5,000 p.a.

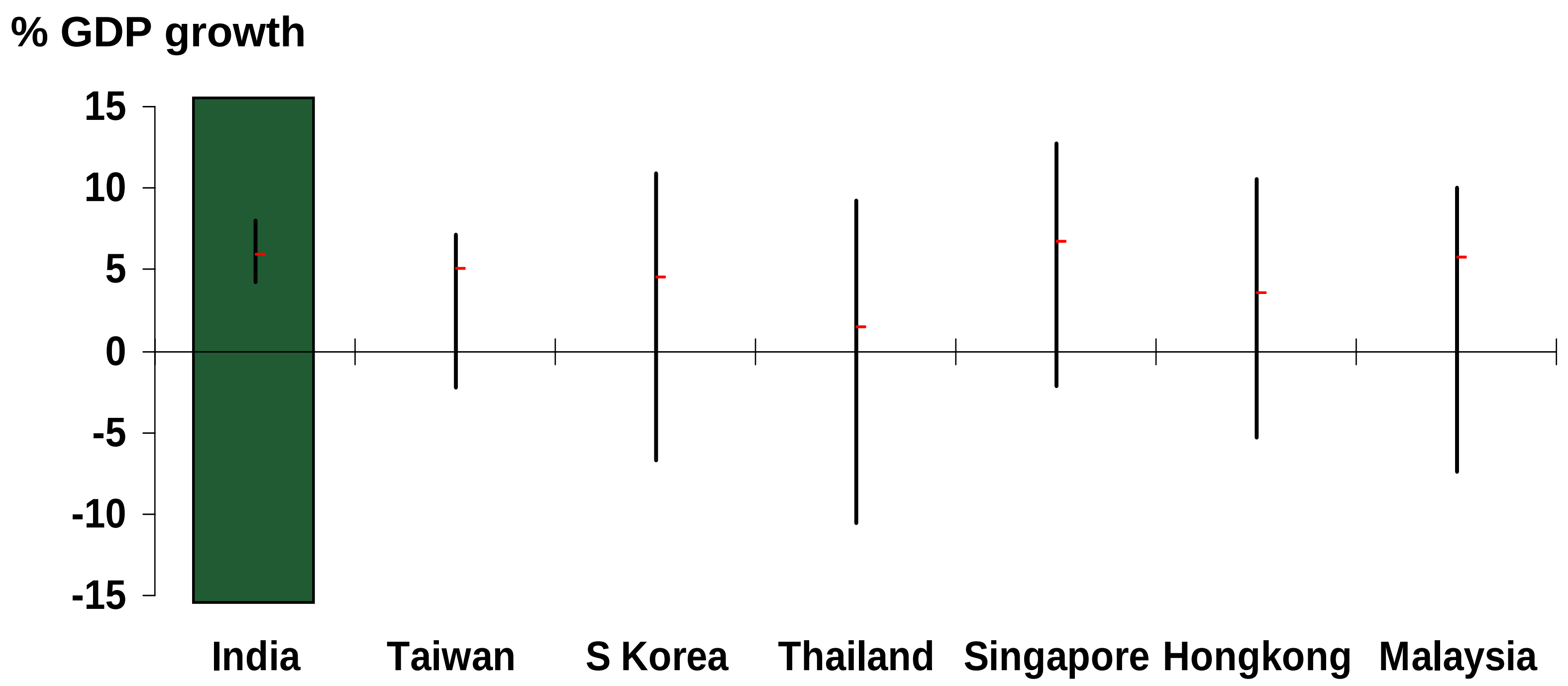
1994	2004	2008
U.S.	U.S.	U.S.
Japan	Japan	China
Germany	Germany	Japan
UK	UK	India
France	France	Germany
Italy	Italy	Russia
Brazil	China	Brazil
Mexico	Russia	UK
Korea	Brazil	France
Spain	Mexico	Italy

Source: EIU Country Data

INDIA: ECONOMIC RESILIENCE

Least Volatile Economic Growth

Maximum-Minimum GDP Growth Rate (1993-2005)



Source: EIU; World Bank; IMF; Literature review

IMPORTANCE OF A DEMOCRATIC GROWTH PROCESS

Importance of a democratic growth process

- **Allows dissent and debate of multiple views. Over time the best views prevail and allow capital to be used in a fair and just manner. Without dissent, there is crony capitalism.**
- **Creates a culture, civic society more conducive to technology development**
- **Enables innovation & productivity driven growth which is more stable as it is built on competencies and skills**

Non democratic societies can have a period of fast growth, but can never achieve long periods of stable , sustainable growth

- **Never have the opportunity to build the right cultures, enrich civil society, develop quality education, or promote the rule of law and globally competitive business**

Democracy makes for populism, pandering and delays. But it also makes for long-term stability

- Fareed Zakaria, Newsweek

INDIA's GROWTH – A BIOLOGICAL EVOLUTION

Change has come about by a due process of churn of opinions and counter-opinions.

- **Change has not been thrust down India's throat.**
- **A Free Press has enabled and encouraged public debate.**

India has gone through its experimentation with socialism, pseudo-capitalism, to reluctant capitalism and is on its way to unabashed capitalism

Change has sustained

- **Inspite of multiple coalition parties of different ideologies having access to power for varying periods of time**
- **None of India's economic metrics are 'controlled' or unsustainable**

"India will never be a tiger; it is an elephant that has begun to lumber. But what the elephant loses in speed, it makes up in stamina"

- Gurcharan Das, author of India Unbound

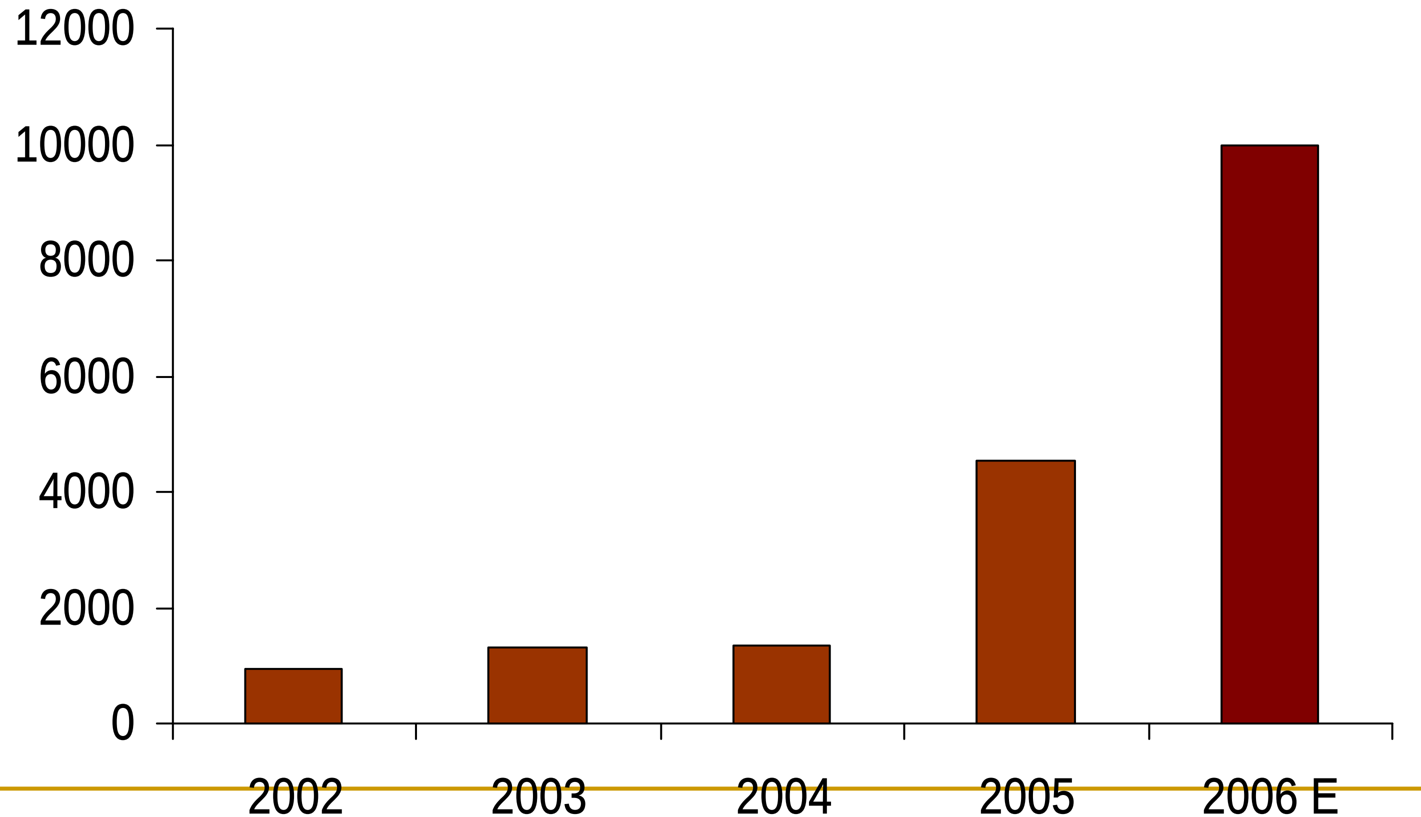
GLOBAL OPINION LEADERS RECOGNIZE THE CHANGE

- **What is happening today is the birth of India as an independent society … colorful, open, vibrant and, above all, ready for change. India is diverging from its past, but also from most other countries in Asia. It is not a quiet, controlled, quasi-authoritarian country that is slowly opening up according to plans. It is a noisy democracy that has finally empowered its people economically. India's growth is messy, chaotic and largely unplanned. It is not top-down but bottom-up. It is happening not because of the government, but largely despite it.**
  - **Fareed Zakaria, Newsweek**

- **An economic litmus test is not whether a country can attract a lot of FDI but whether it has a business environment that nurtures entrepreneurship, supports healthy competition and is relatively free of heavy-handed political intervention. In this regard, India has done a better job than China**
  - **Yasheng Huang, MIT**

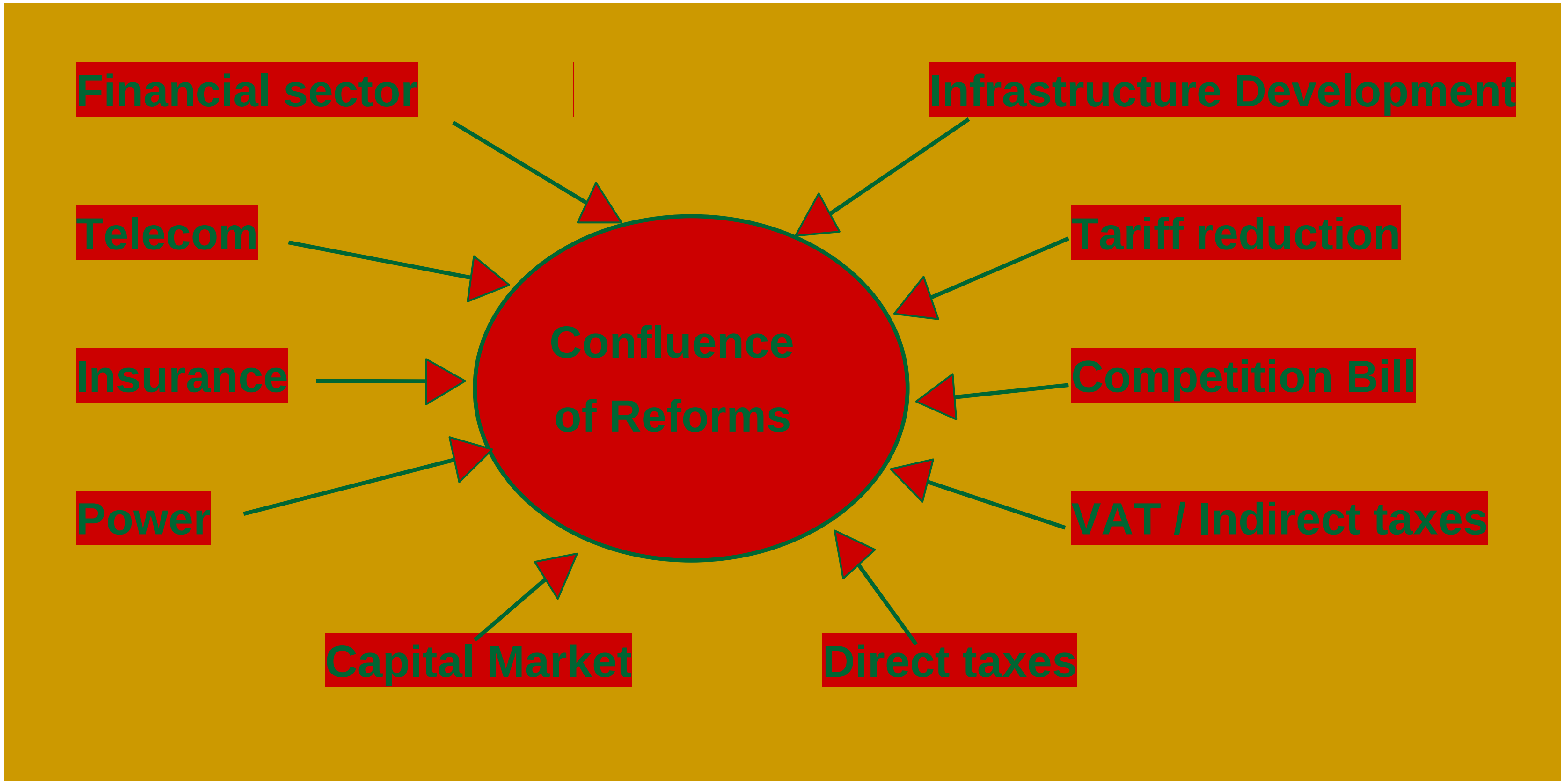
CONFIDENCE: INDIA INC. GOING GLOBAL

Overseas Acquisitions by India Inc ($ US Million)



Source: Literature Review

REFORMS TO HAVE A MULTIPLIER EFFECT



IMPRESSIVE TRANSFORMATION

DuPont Analysis for India's Top 200 Companies

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Aggregate for 200 companies													
Net Margin	6.6%	9.2%	9.5%	7.7%	8.2%	7.1%	6.3%	6.9%	6.7%	9.2%	10.5%	11.2%	10.1%
Asset Turn	0.94	0.90	0.92	0.92	0.87	0.91	1.07	1.20	1.20	1.20	1.24	1.36	1.34
ROA	6.2%	8.3%	8.7%	7.1%	7.1%	6.5%	6.8%	8.3%	8.1%	11.1%	13.1%	15.2%	13.5%
Leverage	2.15	1.90	1.85	1.91	1.88	1.80	1.73	1.68	1.68	1.55	1.50	1.44	1.45
ROE	13.3%	15.8%	16.1%	13.5%	13.4%	11.7%	11.7%	13.9%	13.5%	17.2%	19.6%	21.9%	19.6%
Aggregate Ex-Energy													
Net Margin	8.0%	10.9%	11.5%	9.2%	9.1%	7.8%	7.4%	8.8%	7.7%	9.6%	12.0%	13.7%	12.9%
Asset Turn	0.76	0.77	0.79	0.78	0.75	0.75	0.83	0.88	0.93	0.91	0.98	1.06	1.04
ROA	6.1%	8.3%	9.1%	7.2%	6.8%	5.8%	6.1%	7.7%	7.2%	8.8%	11.8%	14.5%	13.4%
Leverage	2.16	1.93	1.88	1.93	1.92	1.87	1.76	1.70	1.70	1.60	1.52	1.46	1.43
ROE	13.1%	16.1%	17.2%	13.8%	13.1%	10.9%	10.7%	13.2%	12.2%	14.0%	17.9%	21.2%	19.2%

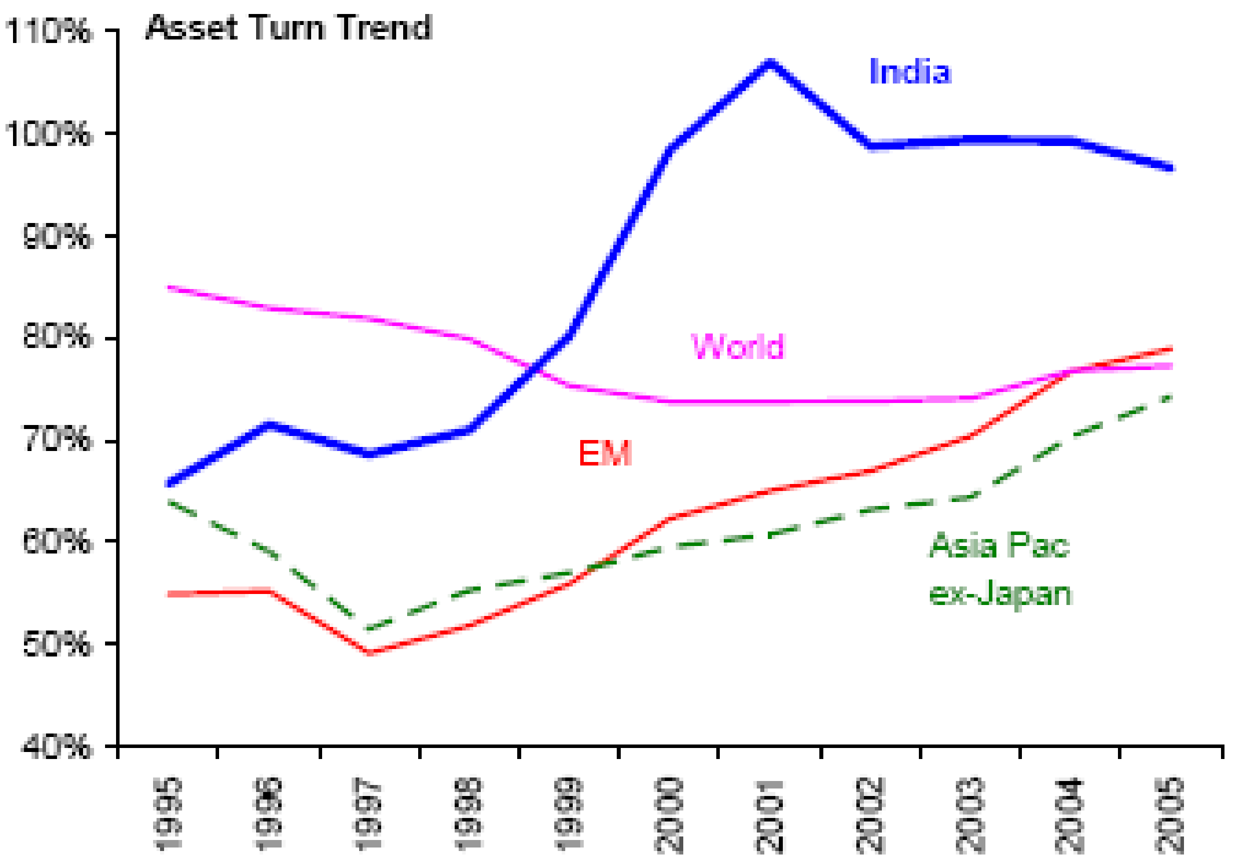
Source: Company data, Morgan Stanley Research

The sustained improvement in RoE and the growth in profits has come despite significantly lower tariff protection, lower inflation and deferred tax accounting.

Indian skills and Indian enterprise have now got a global level playing field, and a much superior platform than India Inc. has ever had before.

PRODUCTIVITY IMPROVEMENTS: ASSET TURNS

Asset Turn at the Helm of India's ROE Performance



Source: Factset, MSCI, Morgan Stanley Research

SAVINGS EXPLOSION AHEAD

Rs. Bn	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
Re/$	44	44	44	44	44	44	44	44
Savings $ bn	206	241	281	328	383	445	518	602
Equity $ bn	5	8	12	18	24	33	44	57
HH Savings $ bn	175	202	232	268	308	355	408	470

EXAMPLES OF TRANSFORMATION

1. **Deficit to surplus economy**
2. **Airlines industry**
3. **Mobile phones**
4. **Increases in tax to GDP ratio**
5. **Emergence of first generation entrepreneurs. Largest endowments by first generation entrepreneurs**
6. **Changing attitudes – wealth/profit no longer a dirty word**

FUND FLOW FOR EQUITY MARKETS

Savings Composition

USD Bn	1994	1995	2004	2005	2006	2007	2008	2009	2010	2011
GDP	**274**	**323**	**601**	**694**	**798**	**904**	**1,026**	**1,163**	**1,319**	**1,496**
Gross domestic savings	62	80	174	202	235	271	315	365	425	494
Savings to GDP %	22.5%	24.8%	28.9%	29.1%	29.5%	30.0%	30.7%	31.4%	32.2%	33.0%
Financial savings	35	46	83	97	133	156	184	216	253	299
- % of GDP	12.8%	14.4%	13.8%	14.0%	16.7%	17.3%	17.9%	18.6%	19.2%	20.0%
Savings in Equity/Deb/MF	**4.7**	**5.5**	**0.1**	**1.1**	**6.5**	**5.9**	**11.8**	**21.2**	**34.0**	**44.9**
- % of Financial Savings	**13.5%**	**11.9%**	**0.1%**	**1.1%**	**4.9%**	**3.8%**	**6.4%**	**9.8%**	**13.4%**	**15.0%**

Fund flow for market

USD Bn	1994	1995	2004	2005	2006	2007	2008	2009	2010	2011
Sources of funds										
Domestic savings	4.7	5.5	0.1	1.1	6.6	5.9	11.8	21.2	34.0	44.9
FII investment	3.6	3.8	11.4	8.9	12.5	8.0	10.0	13.0	16.0	20.0
Total	**8.3**	**9.4**	**11.5**	**10.0**	**19.0**	**13.9**	**21.8**	**34.2**	**50.0**	**64.9**
Uses of funds										
Domestic equity issues	3.2	5.5	4.8	6.5	7.1	6.5	7.5	10.5	14.8	20.7
Secondary market	5.1	3.8	6.7	3.5	11.9	7.4	14.3	23.7	35.2	44.2
Total	**8.3**	**9.4**	**11.5**	**10.0**	**19.0**	**13.9**	**21.8**	**34.2**	**50.0**	**64.9**

Q & A

THANK YOU