



# **The Quality of Growth and Real Income: *Labor Productivity Matters!***

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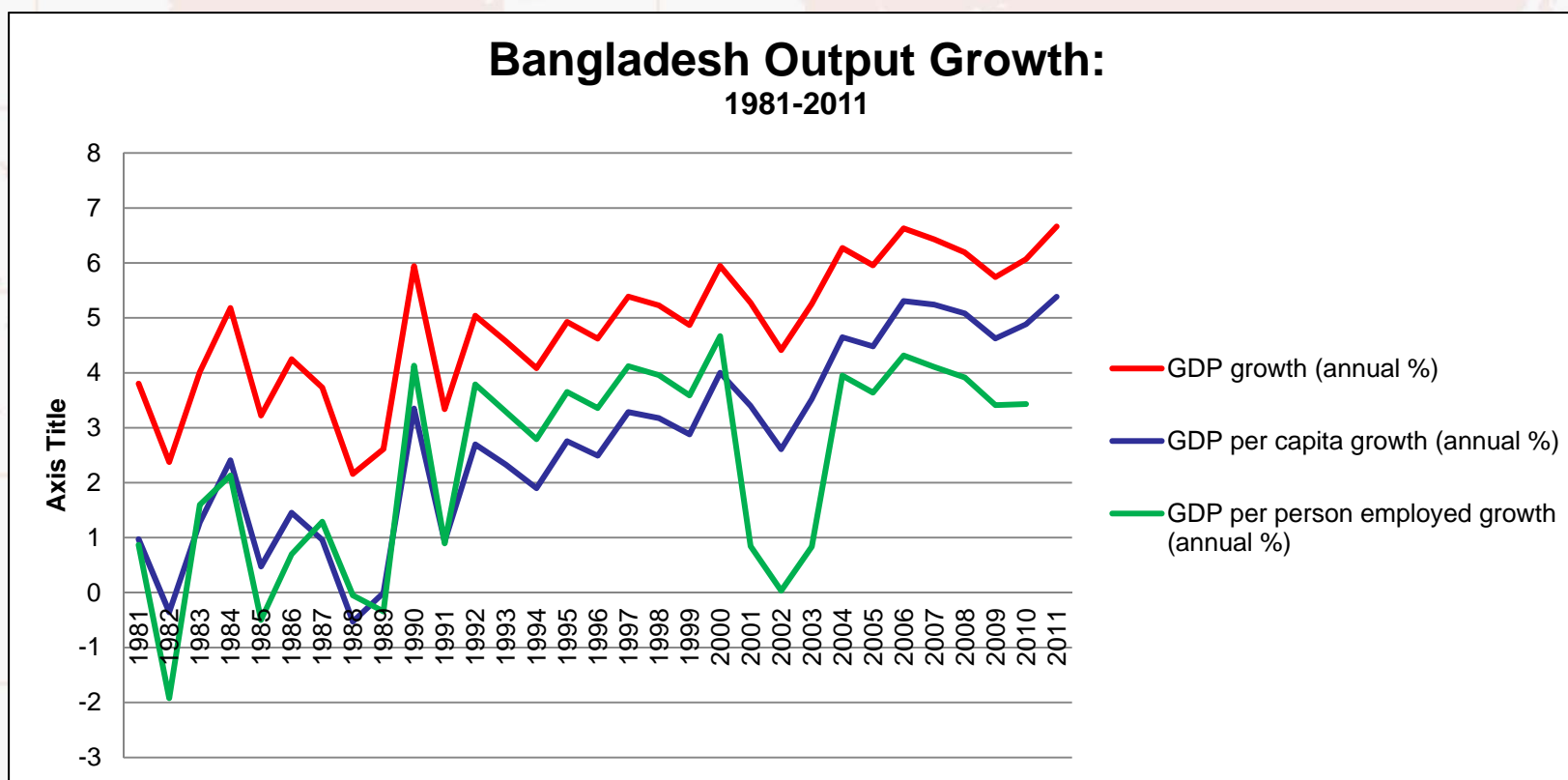


# Growth Performance

- After a slow start during the 1970s, Bangladesh's GDP grew at an average of 4.8% during the last three decades
- The growth rate is modest, especially when compared with that of the East Asian Miracle economies
- During the same period, GDP per capita grew by average 2.76% while GDP per person employed grew by 2.35%
- GDP per capita of China, Vietnam and India grew by 8.95%, 5.1% and 4.28% respectively
- In 1981, output per person employed was \$ 1977 for Bangladesh and \$ 1701 for China
- China's output per person employed increased 7.4 fold between 1981 and 2010 while it was barely 2 fold increase for Bangladesh
- What did China and Vietnam do differently?



# Growth Performance

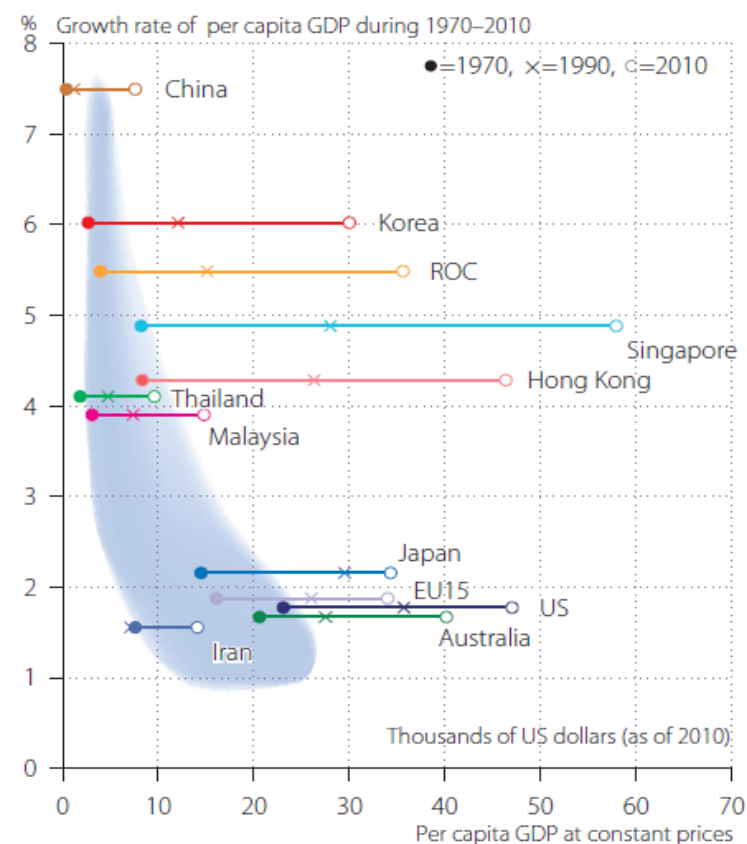
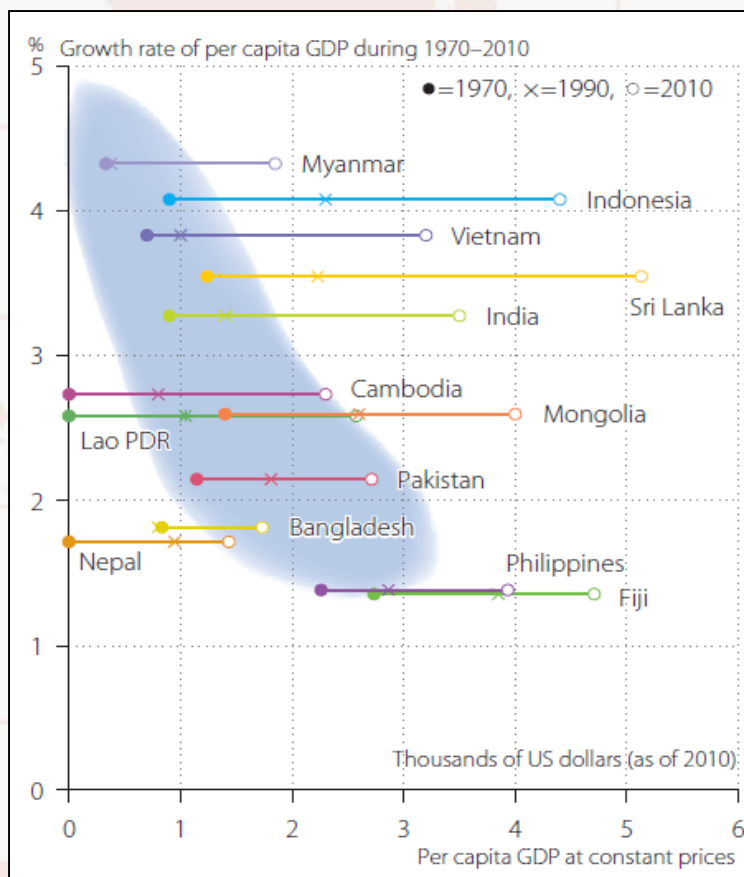


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# Growth Performance

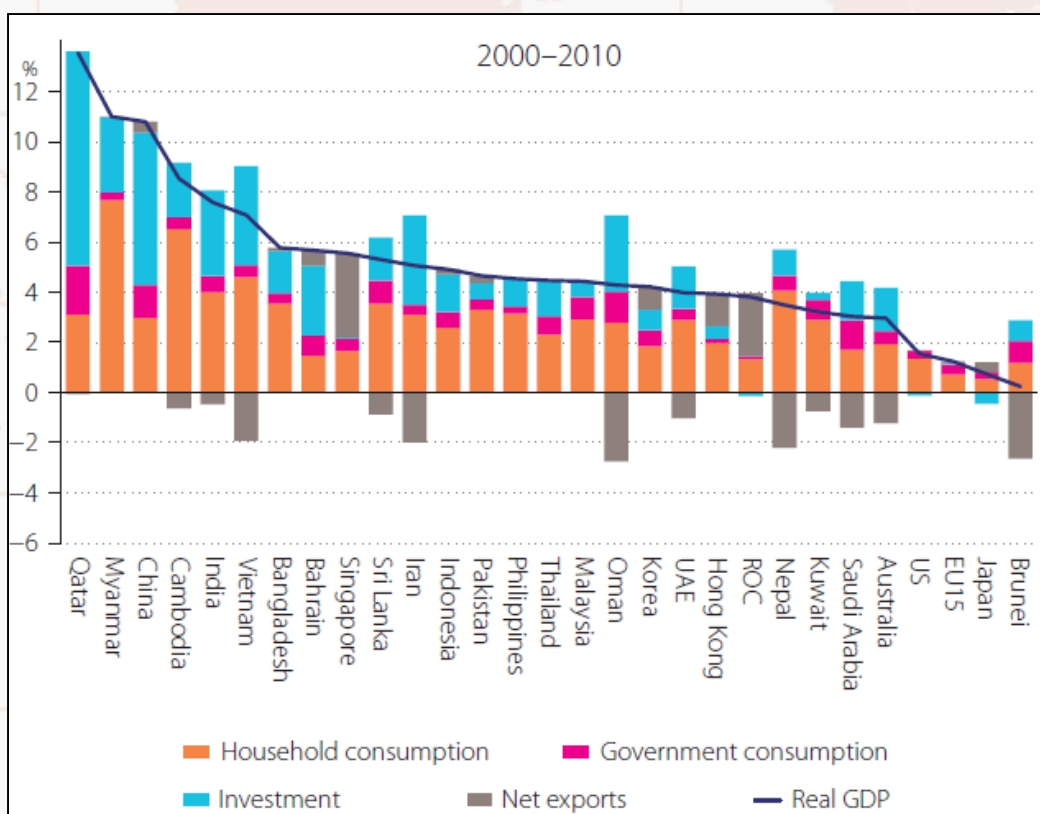


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# Consumption-led Growth?



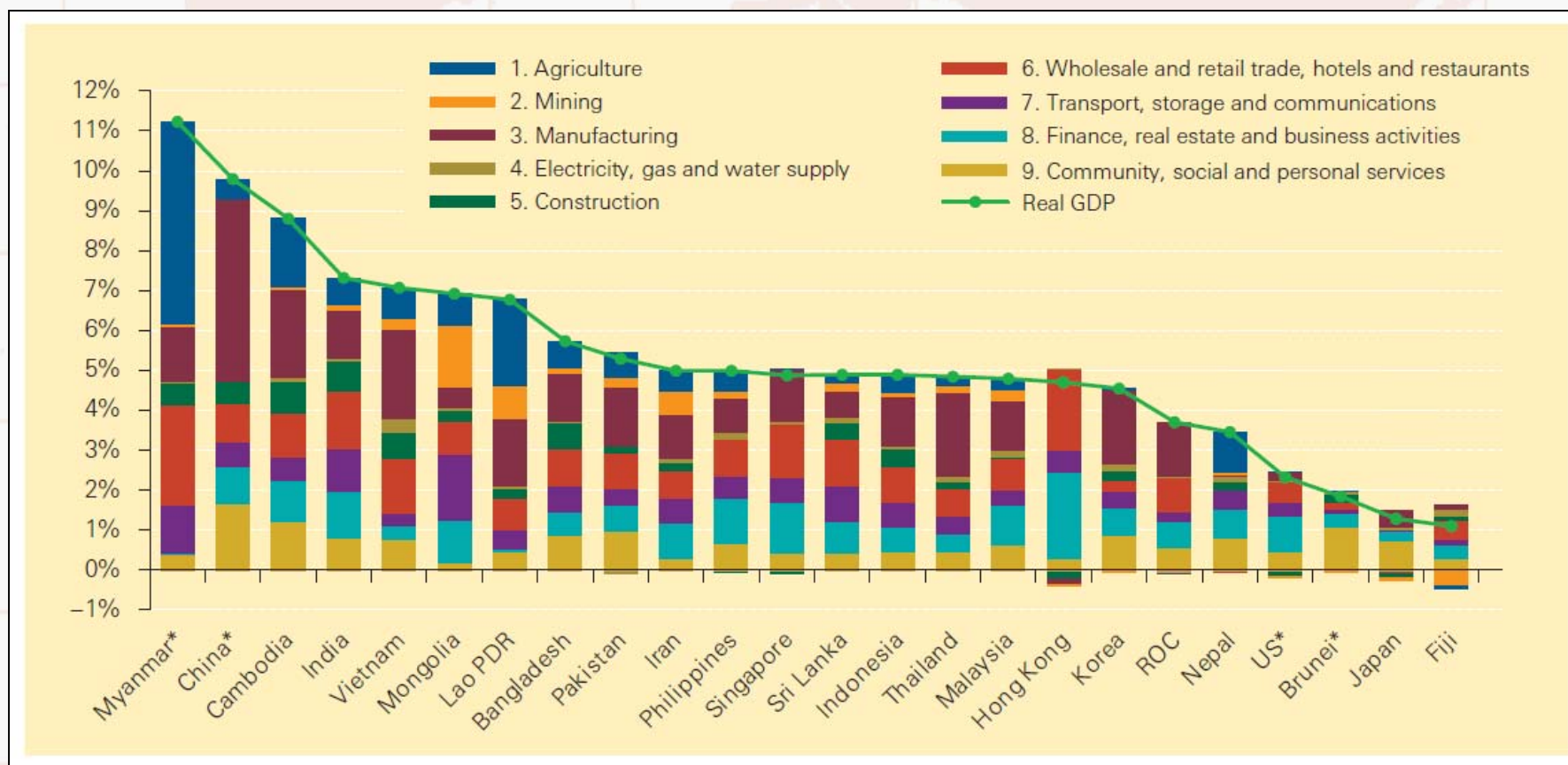
Source: APO 2012

- More than 2/3 of Bangladesh's growth came from household consumption
- For China, half of its growth came from investments
- Similar stories for India and Vietnam
- China and Vietnam significantly reduced share of household consumption to boost investment
- Bangladesh relied on sectors that are less capital intensive (low end manufacturing)





# Sectoral Sources of Economic Growth: 2000-2007

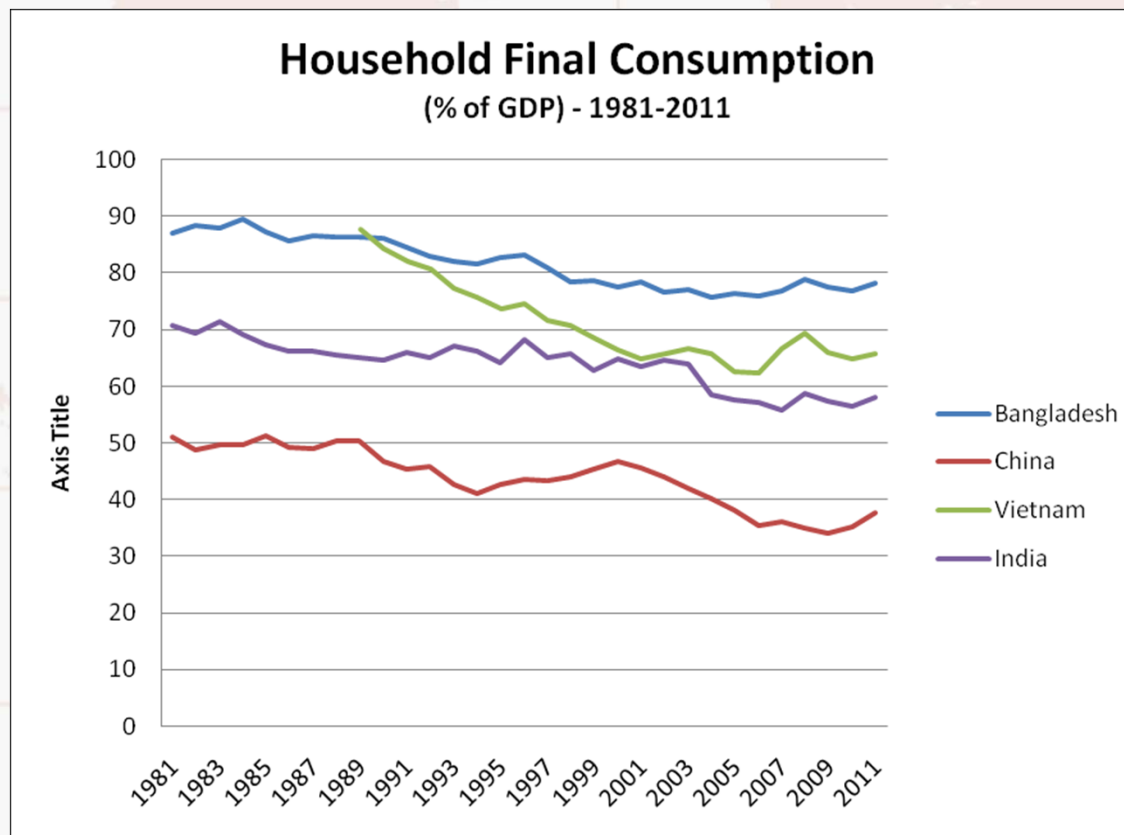


Source: APO 2010

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# Consumption-led Growth?



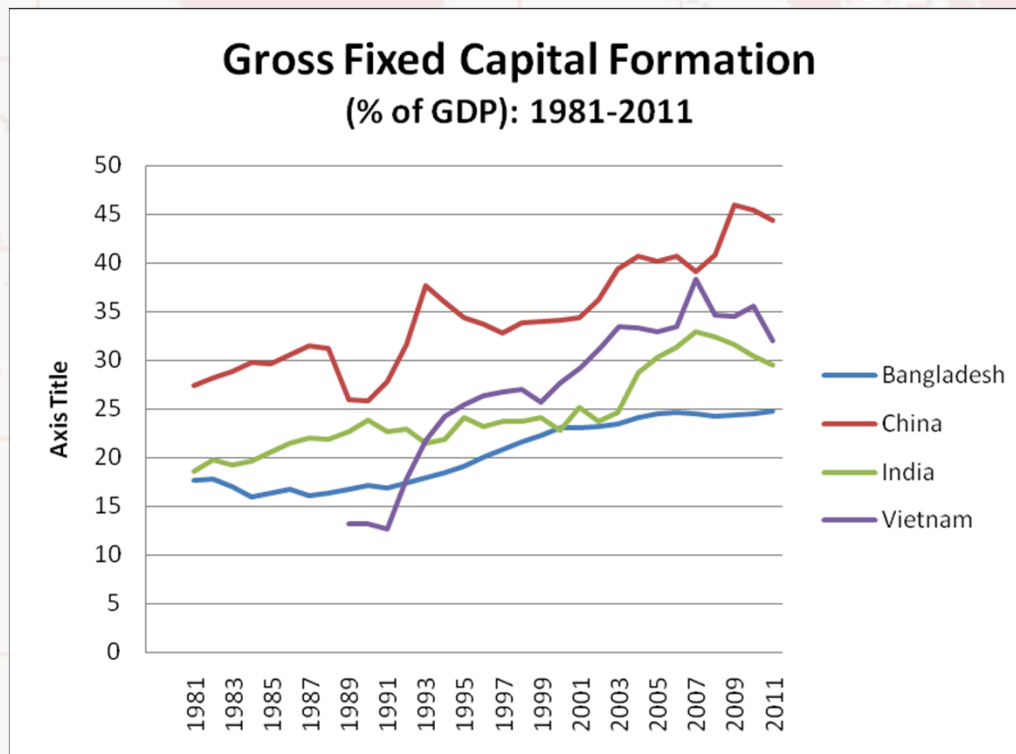
- Persistently high share of household consumption restricted growth in domestic savings and gross fixed capital formation in Bangladesh

Source: WDI 2012

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# Gross Fixed Capital Formation



Source: WDI 2012

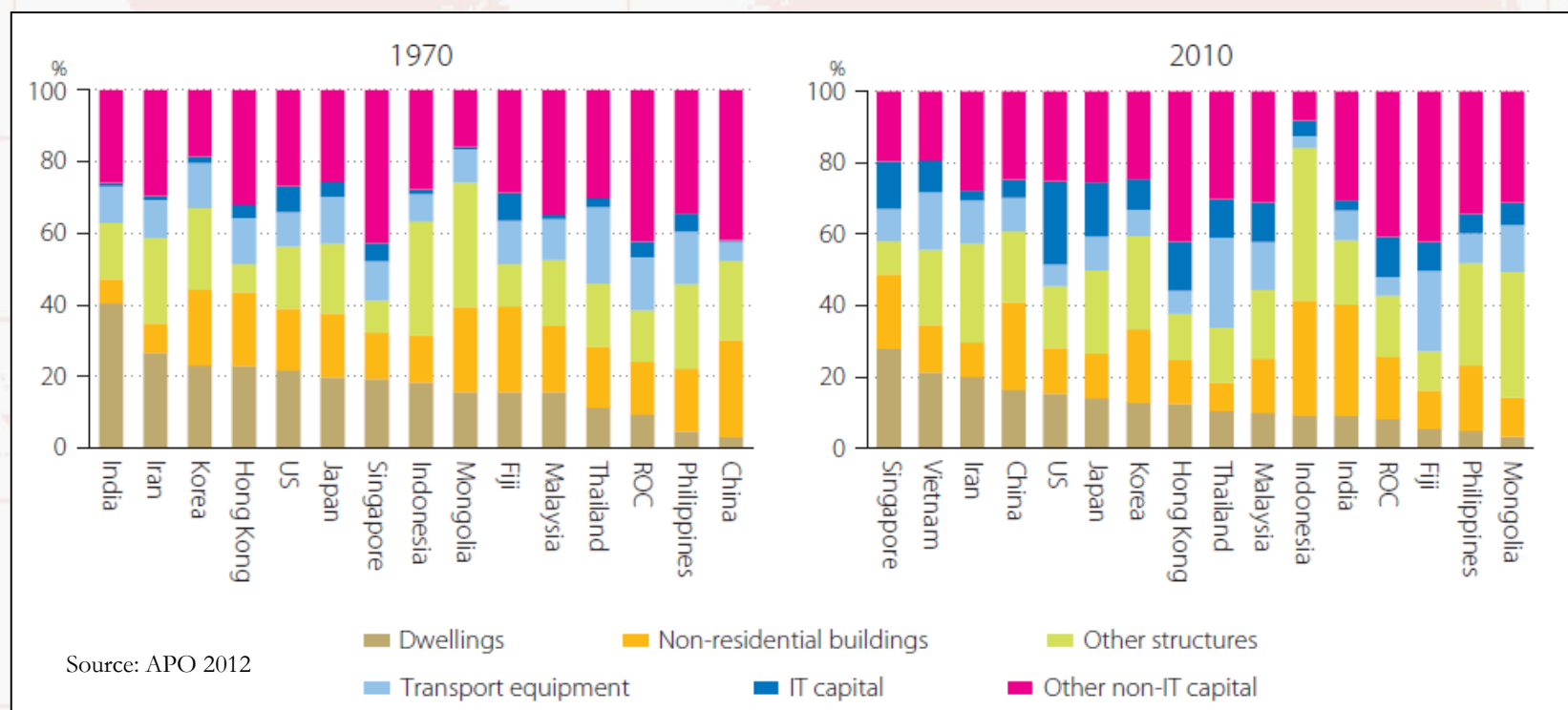
- Gross fixed capital formation is a critical determinant of economic growth through capital deepening and improved labor productivity
- Aggregate level of GFCF does not tell the full story – there is a need to prioritize productive investments to boost labor productivity

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# Fixed Capital Formation



- Though disaggregate data is unavailable, it is likely that private dwellings account for a large share of GFCF in Bangladesh

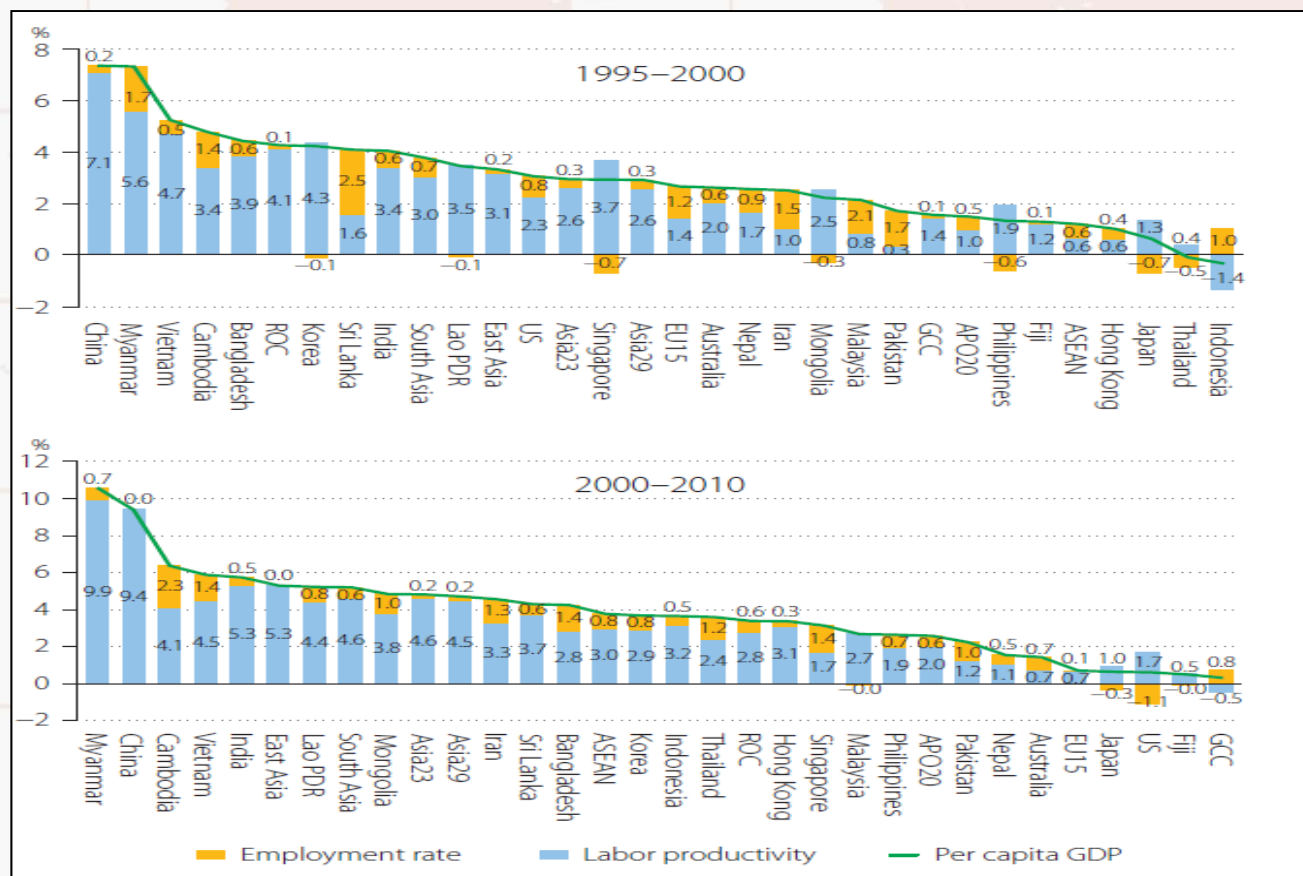


# Growth and Employment Elasticity

- Employment elasticity of GDP growth sharply declined during early 2000 – from .48 during 1995-1999 to .06 during 2000-2003 (ILO, 2005) though it remained high in relatively non-skill intensive/less productive sectors (agriculture, RMG etc)
- Employment elasticity measures are inadequate – does not say anything about the actual extent of job creation, the effect of demographic change or the quality of job
- High employment elasticity of growth in more productive sectors of the economy is likely to have positive real income effect but high employment elasticity in low productive sectors of the economy may lead to negative real income growth
- Not employment growth but rather productivity growth is the critical determinant for growth in per capita income



# Labor Productivity as Key Determinant of Growth in Per Capita Income



- Labor productivity growth is key to growth in per capita income
- Increase in labor productivity accounted for 87% of per capita GDP growth in 1995-2000 compared to only 67% during 2000-2010



## Labor Productivity as Key Determinant of Growth in Per Capita Income: 1970-2010

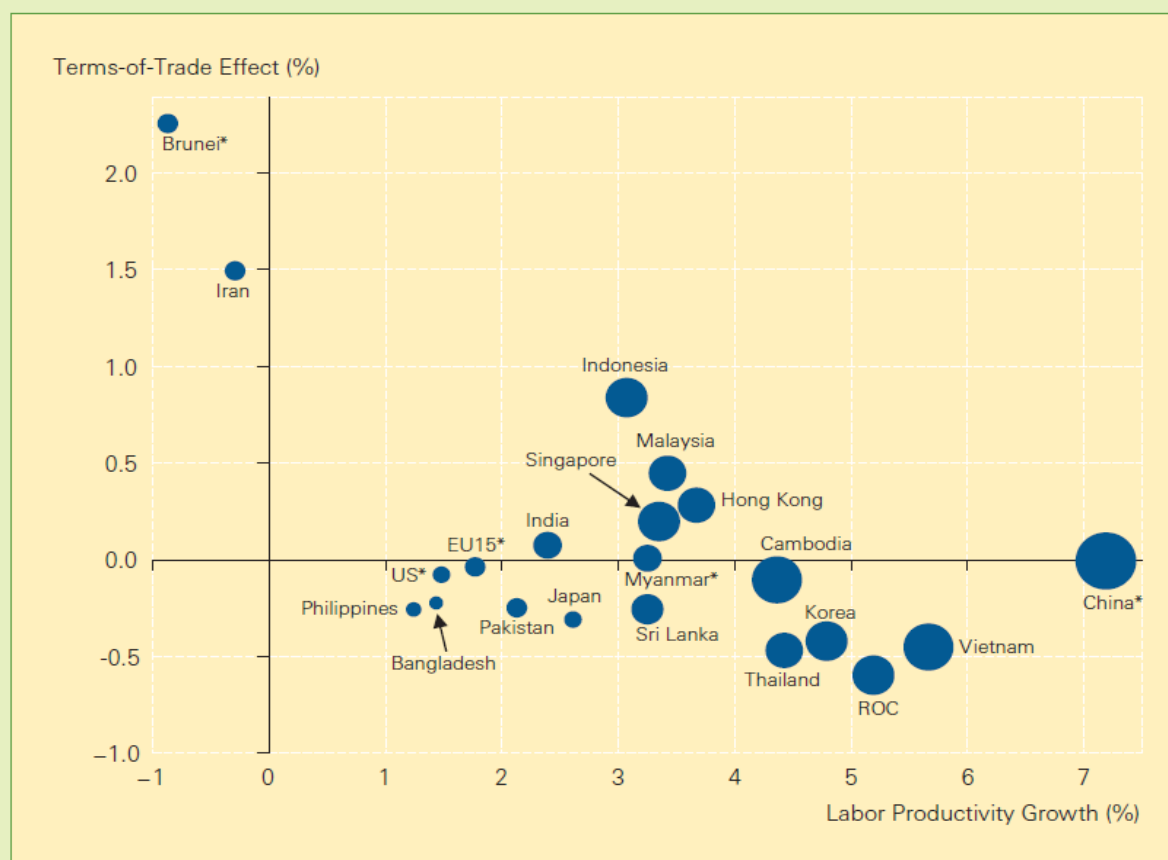
|                 | Per Capita Real Income |                    |                |                     |                 |                                |
|-----------------|------------------------|--------------------|----------------|---------------------|-----------------|--------------------------------|
|                 |                        | Labor Productivity | Terms of Trade | Output Price Effect | Employment Rate | Net Primary Income from Abroad |
| East Asia       |                        |                    |                |                     |                 |                                |
| China*          | 7.61                   | 7.19               | 0.00           | 0.02                | 0.53            | -0.14                          |
| ROC             | 5.29                   | 5.20               | -0.60          | -0.38               | 1.00            | 0.08                           |
| Hong Kong       | 4.68                   | 3.66               | 0.29           | 0.01                | 0.63            | 0.10                           |
| Japan           | 1.95                   | 2.61               | -0.30          | -0.36               | -0.09           | 0.09                           |
| Korea           | 5.17                   | 4.79               | -0.41          | -0.47               | 1.28            | -0.03                          |
| South East Asia |                        |                    |                |                     |                 |                                |
| Brunei*         | 2.33                   | -0.87              | 2.27           | 0.06                | 0.87            | n.a.                           |
| Cambodia        | 6.36                   | 4.37               | -0.10          | -0.02               | 2.11            | 0.00                           |
| Indonesia       | 4.83                   | 3.06               | 0.84           | 0.29                | 0.71            | -0.06                          |
| Malaysia        | 4.49                   | 3.41               | 0.45           | -0.05               | 0.69            | -0.02                          |
| Myanmar*        | 3.14                   | 3.23               | 0.01           | -0.50               | 0.40            | 0.00                           |
| Philippines     | 1.66                   | 1.24               | -0.25          | -0.17               | 0.57            | 0.28                           |
| Singapore       | 5.04                   | 3.34               | 0.20           | 0.25                | 1.46            | -0.23                          |
| Thailand        | 4.20                   | 4.43               | -0.46          | -0.35               | 0.67            | -0.09                          |
| Vietnam         | 6.50                   | 5.68               | -0.45          | 0.14                | 0.91            | 0.22                           |
| South Asia      |                        |                    |                |                     |                 |                                |
| Bangladesh      | 1.25                   | 1.42               | -0.22          | -0.36               | 0.20            | 0.20                           |
| India           | 3.32                   | 2.39               | 0.07           | 0.18                | 0.68            | 0.00                           |
| Pakistan        | 2.15                   | 2.12               | -0.24          | 0.22                | 0.00            | 0.05                           |
| Sri Lanka       | 3.76                   | 3.25               | -0.25          | 0.26                | 0.51            | 0.00                           |

Source: APO 2010

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## Labor Productivity as Key Determinant of Growth in Per Capita Income



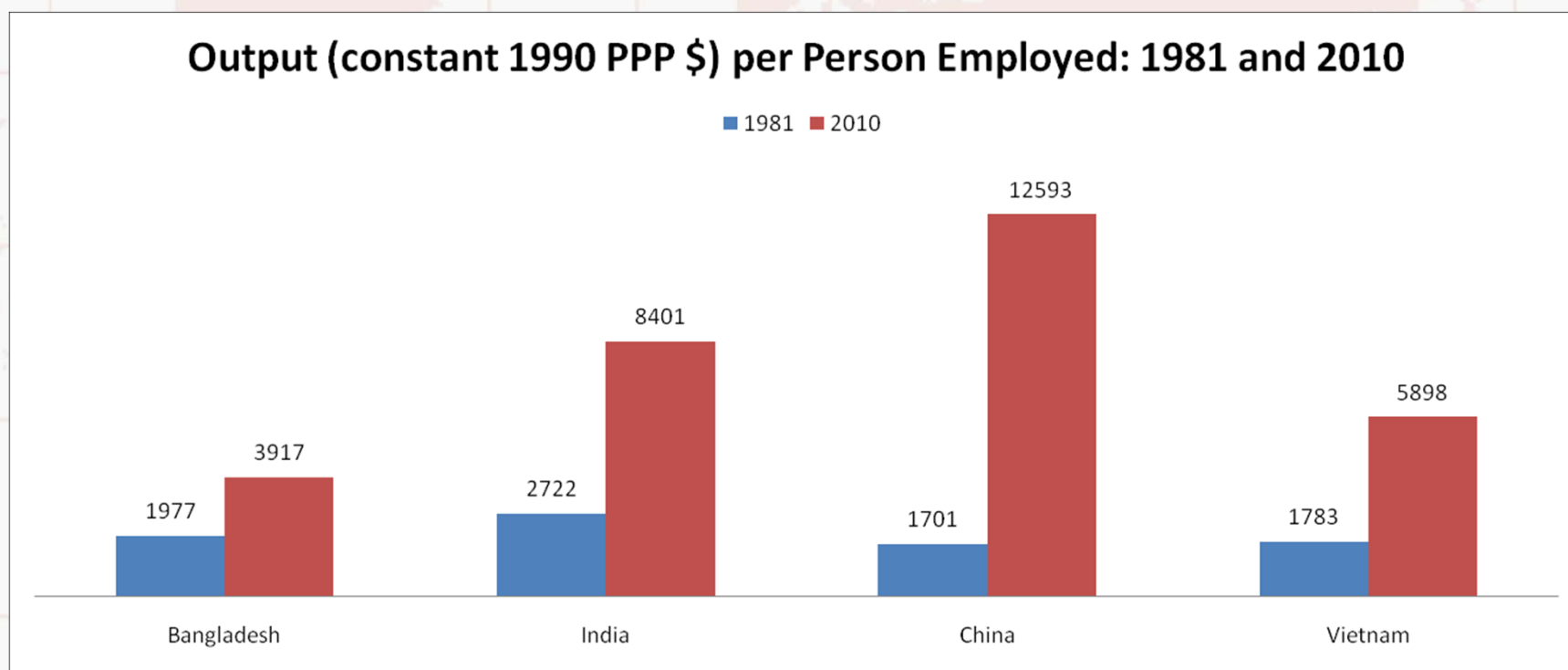
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# Labor Productivity: Has Bangladesh Missed an Opportunity?



Source: WDI 2012

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# Labor Productivity

|            | GDP Per Hour (constant 2005 PPP \$) |            |            |            |            |
|------------|-------------------------------------|------------|------------|------------|------------|
|            | 1990                                | 1995       | 2000       | 2006       | 2010       |
| Bangladesh | <b>1.1</b>                          | <b>1.1</b> | <b>1.4</b> | <b>1.4</b> | <b>1.8</b> |
| India      | 1.6                                 | 1.6        | 1.8        | 2.4        | 3.8        |
| Pakistan   | 2.8                                 | 3.1        | 3.2        | 3.6        | 3.9        |
| China      | 0.9                                 | 1.3        | 1.8        | 3          | 5.6        |
| Vietnam    | 1.2                                 | 1.2        | 1.4        | 1.9        | 2.8        |
| Cambodia   |                                     | 0.8        | 0.8        | 1.1        | 1.4        |
| Indonesia  | 2.3                                 | 3          | 2.8        | 3.5        | 3.6        |
| Sri Lanka  | 2.8                                 |            | 4.9        |            | 6.7        |

Source: APO 2012

- Bangladesh's labor productivity level stagnated during the past two decades, largely due to lack of investments in capital (capital labor ratio) and skills enhancement



# Labor Productivity Growth

| Growth Rate of GDP per Hour Worked (%) |           |           |           |           |
|--|-----------|-----------|-----------|-----------|
|  | 1990-1995 | 1995-2000 | 2000-2005 | 2005-2010 |
| Bangladesh                             | 2.5       | 4.2       | -0.4      | 2.9       |
| India                                  | 3         | 2.2       | 4.4       | 7.4       |
| Pakistan                               | 3         | 0.7       | 2.2       | 0.6       |
| China                                  | 10.6      | 7.1       | 8.1       | 10.2      |
| Vietnam                                | 4.3       | 3.3       | 5.1       | 3.2       |
| Cambodia                               | 5.5       | 1.7       | 4         | 4.2       |
| Indonesia                              | 5.9       | -1.6      | 3.7       | 0.2       |
| Sri Lanka                              | 9         | 2.2       | 0.8       | 5.4       |

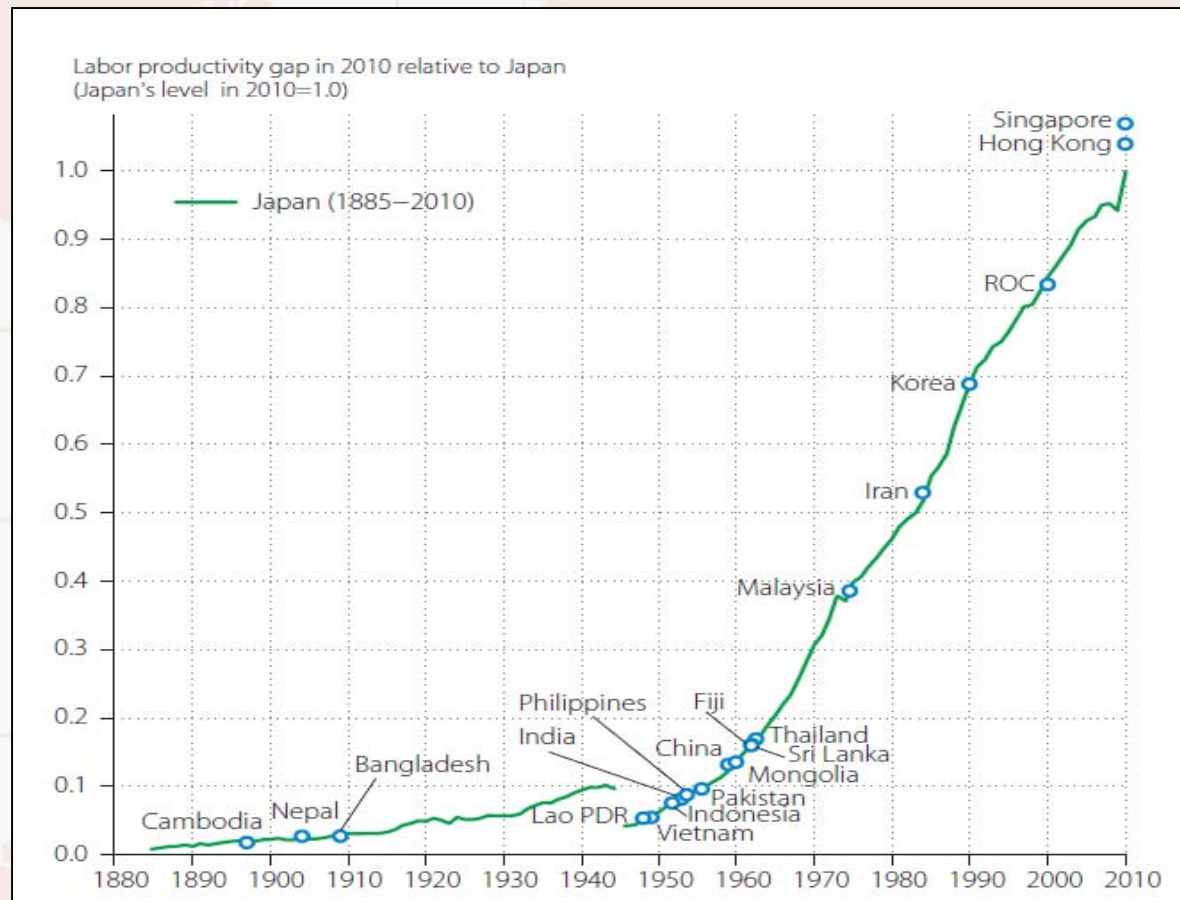
|                           | Agriculture | Manufacturing | Construction | Wholesale and retail trade | Finance, Real Estate and Business services | Community and social services |
|---------------------------|-------------|---------------|--------------|----------------------------|--|-------------------------------|
| Bangladesh                | 1.4         | 1.9           | 3.8          | 2.5                        | -8.4                                       | 4.2                           |
| (rank among 21 countries) | 16          | 16            | 4            | 9                          | 19   | 6                             |
| India                     | 2.2         | 0.5           | 8            | 6.2                        | 7  | 3                             |
| China                     | 6.4         | 6.4           | 5.2          | 6.4                        | 7.4  | 7.8                           |
| Vietnam                   | 4.1         | 3.9           | -0.7         | 3.7                        | 10.3                                       | -0.3                          |
| Cambodia                  | 3.7         | 3.6           | -6.7         | -4.7                       | 0.7  | -2.1                          |

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# Labor Productivity Gap

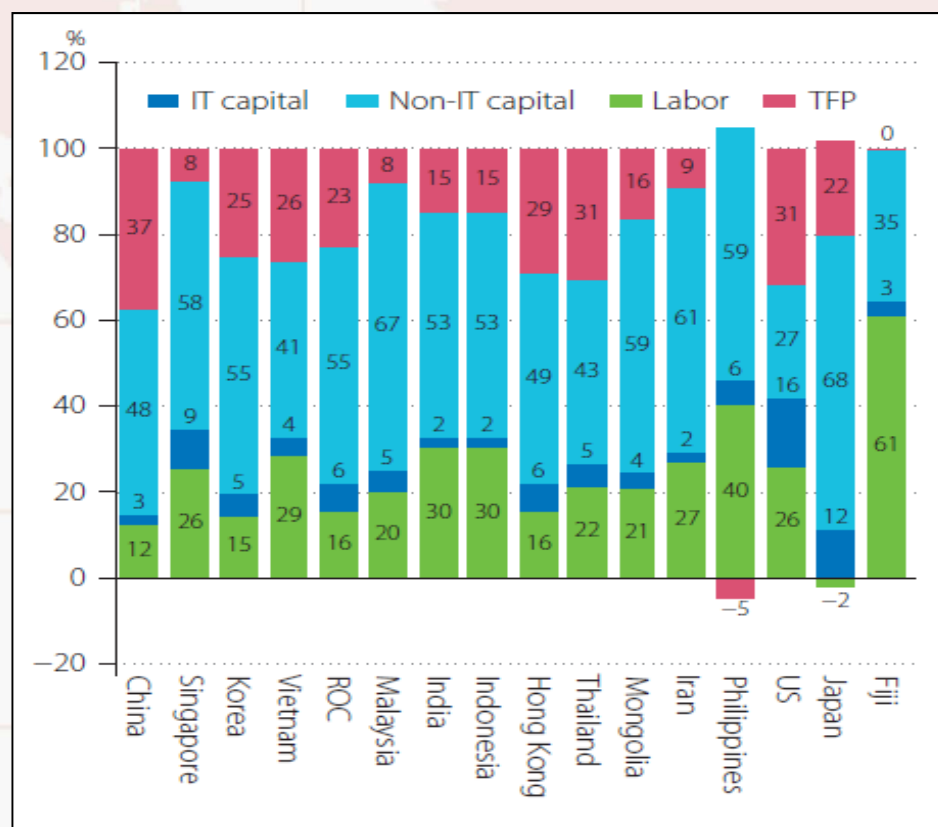


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# Determinants of Labor Productivity



Source: APO 2012

IT capital      Non-IT capital      Labor      TFP      Output

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# Capital Deepening and Total Factor Productivity

- Low labor productivity may be a function of low levels of skills and efforts or it can be a function of low capital intensity in the production process
- Total factor productivity (TFP) is a better measure as it estimates the GDP per unit of combined inputs of labor and capital
- Countries that registered significant improvements in labor productivity managed to do so through high contribution of TFP
- There is no credible measure of TFP available for Bangladesh but it is likely to be low given the predominance of labor intensive production processes
- Relatively low level of productivity growth in finance is perhaps an indicator of relative inefficiency in capital allocation and perhaps relatively low TFP
- Incentives and management structure of firms and labor relations can be critical determinants of TFP
- Bangladesh needs to design and adopt macro and micro level interventions to boost capital formation and TFP



# Macro and Micro Policies to Boost Labor Productivity

- Monetary policy instruments (asset based reserve requirements, priority sector lending, interest rate caps, partial guarantees etc) to reduce the cost of capital and ease credit constraints to accelerate capital deepening
  - Reduce interest rate spread which is very high compared to spreads in SEA/East Asia
  - Increase availability of credit to sectors that create employment and entrepreneurship
- Moderate inflation and competitive exchange rate
- Diversification of savings instruments (GDP indexed or inflation indexed bonds) to reduce the consumption biases of the economy and increase savings and investments
- Mandatory provident fund for private sector employees with government contribution
- Partial sterilization of remittances through open market operations to reduce consumption, increase savings and maintain a competitive exchange rate



# Macro and Micro Policies to Boost Labor Productivity

- Fiscal incentives for investments in productive capital and disincentives (penalties) for investments in non-productive capital (e.g. real estate investments, financial assets held for speculative gains)
- Broad based industrial policy to reduce excessive sectoral concentration in production and promote sectors that are incrementally more capital and skills intensive
- Tax incentives (e.g. tax credit) to discourage dividend payout (including repatriation) and encourage reinvestment of profits
- Large scale national fund (co-financed with private sector contributions) to finance vocational training and skills enhancement of workers in priority sectors that target higher levels of capital intensity
- Incentivize investments that enhance labor productivity
- Improved corporate governance – risk and profit sharing schemes for employees and employers
- Reduced segmentation of labor market and improved labor mobility
- Timely, fair and transparent resolution of labor disputes and incentives for employers who set higher standards