

# NATURAL RESOURCES WEALTH AND DIVERSIFICATION

*CREATING JOBS AND SHARING PROSPERITY WIDELY*

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# WHY IMPORTANT?

## ➤ Jobs!

- Quality of specialization
- Long-term growth
- Policy response

## ➤ Sharing prosperity more widely

- Extracting optimal natural resource revenues
- Spending it adequately and effectively to create jobs and reduce poverty

# JOBS - WHY IN FOCUS IN RESOURCE-RICH COUNTRIES?

- **Employment in agriculture tends to decline** with structural transformation (technological development, low income elasticity of food & urbanization)
- **Employment absorption capacity** of natural resource sectors typically **limited**
- If Dutch Disease is prevalent, **job creation in *tradable* manufacturing, service and agriculture becomes difficult** (lack of competitiveness)
- Only good news: the spending or wealth “effect” of commodities boom typically **helps non-tradable service sectors create jobs** (restaurants, tourism, retail trade, communication services, domestic transports, etc.)
- But two questions arise:
  - Can the non-tradable service sector, which tends to blossom, offer good quality jobs? **Jobs that lift people out of poverty and vulnerability?**
  - Can poverty decline quickly when **wages are high and productivity low?**
  - **How can Dutch disease be avoided so jobs in tradable sectors can be promoted?**

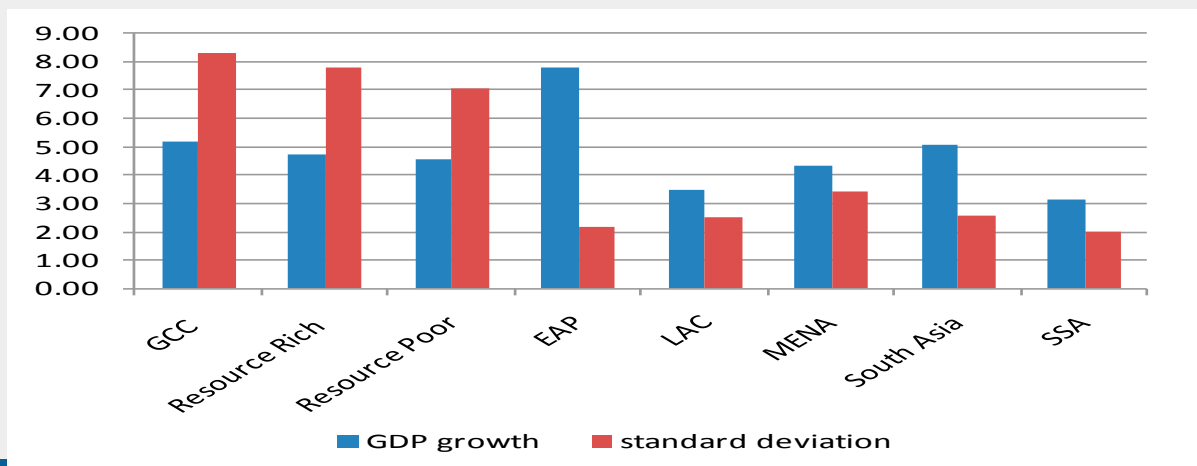


# UNDERNEATH THE JOB DEBATE, “WHAT TO SPECIALIZE ON”?

- **Traditional Dutch Disease argument** – tradable manufacturing suffers
- **New evidence:** tradable service also potential victim of Dutch Disease (Diop & De Melo 2012)
- **Debate on quality of specialization**
  - Being specialized is natural resource only, not good for obvious reasons
    - Huge literature highlighting evidence of resource curse
    - Interesting strand of the literature controlling for institutional factors
    - Recent finding by Lederman and Maloney that the resource curse is not as prevalent as alluded to (Lederman and Maloney 2012)
  - Not every can and should specialize in “high tech” goods
  - Product space literature (Tree-Monkeys) => manufacturing goods at different levels of sophistication offer positive externalities to the economy (Harvard Gang)
- **Reality:** there is no fatality in a world of free movement of capital and labor and dynamic comparative advantage. What seems to count: **good vision and good policies**

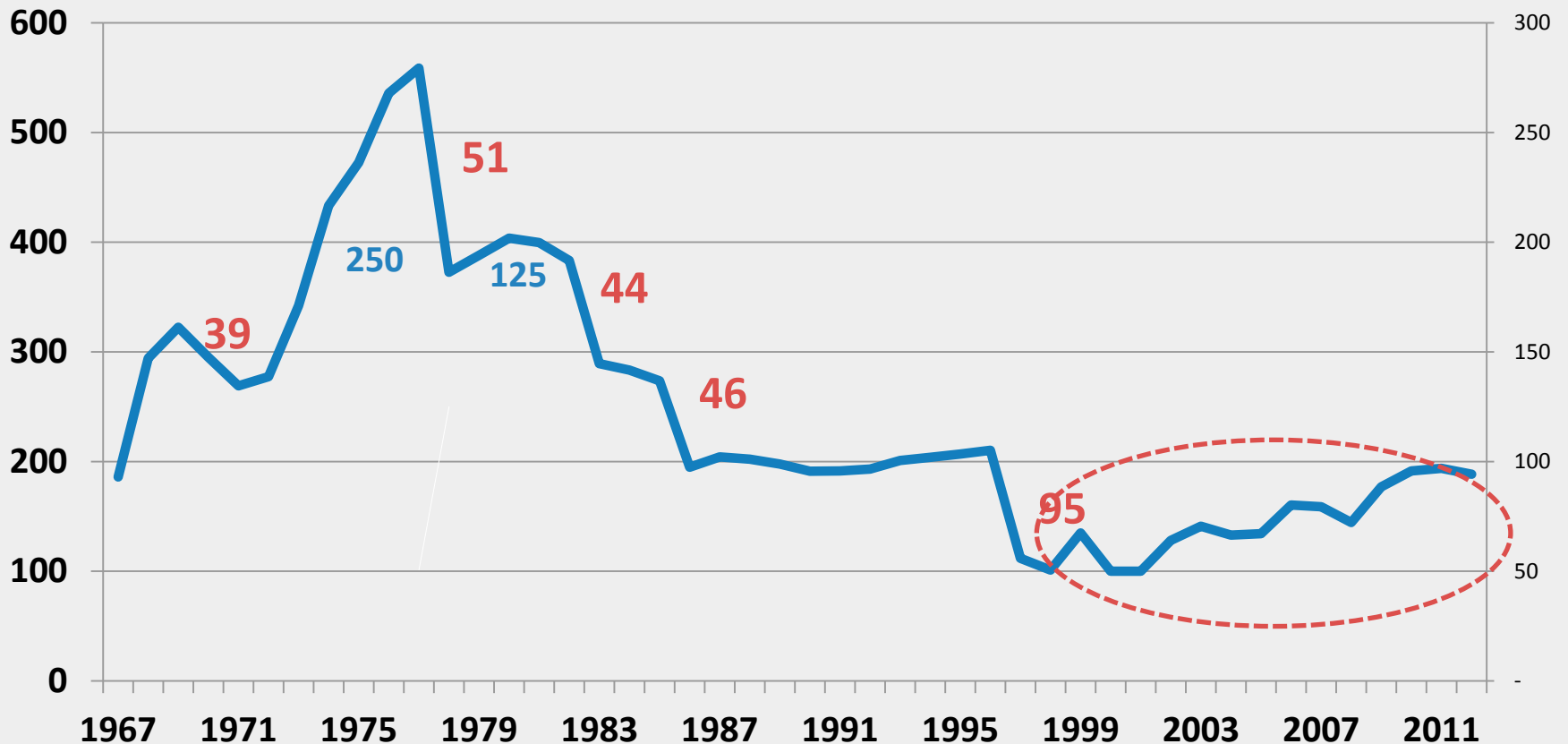
# UNDERLYING THE JOB DEBATE, LONG-TERM GROWTH

- Extreme concentration of activities (e.g. large % of NR in GDP, government revenues and exports) associated with macro volatility
- Output volatility is bad for long-term growth and diversification
- For instance, Aghion et al. (2009) find negative growth effects of terms of trade volatility, measured in 5-year periods, under fixed exchange rate regimes.
- But gov. have become generally better at managing volatility
- EAP doing much better than the rest of the world in “managing” volatility



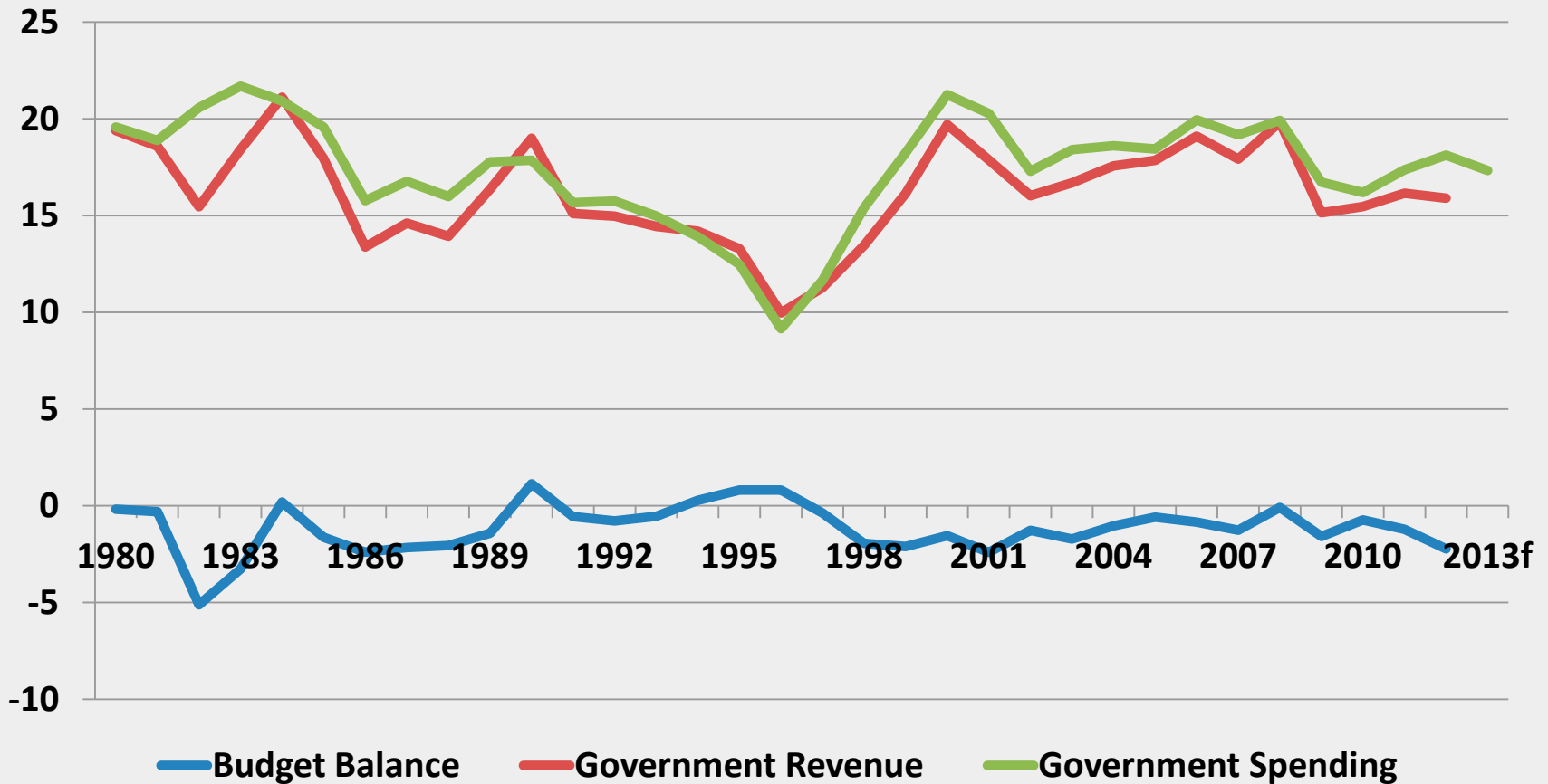
# POLICY RESPONSE (1) - AVOIDING A “DUTCH DISEASE”

- Exchange rate flexibility matters (e.g. Indonesia in 1980-1996)



# POLICY RESPONSE (2) - AVOIDING A DUTCH DISEASE

▪ Fiscal policy matters (e.g. Indonesia in 1980-2013)



## POLICY RESPONSE (3) – AVOIDING A DUTCH DISEASE

- **Labor policies (to curb the natural tendency of rise in wages)**
  - Curb pressure on wages
  - Encourage labor productivity growth (training, skills development)
  - Some countries have used import of workers as a way to reduce the pressure on wages (many countries in the Gulf, Malaysia)
- **Investment in the country's produced endowment/ capital**
  - To diversify and sustain long-term growth (and healthy job creation), countries need to invest heavily on HK, PK and IK to underpin future diversification
    - Human capital
    - Physical capital
    - Institutional capital (law and order, contract enforcement, property rights, market competition, inclusive institutions in general)



# SHARING PROSPERITY MORE WIDELY

- The impact of natural resource wealth on social outcomes is largely driven by three things:
  - **Job creation** and whether they lift people far from pov. line
  - The **contribution of natural resources to state revenues**
    - Good policies and regulations key!
    - Compliance to government regulations key!
    - Capacity to enforce them key!
  - The **quality of public spending**
    - Spending on the right things (allocative efficiency)
    - Spending on the right things right (efficiency)
    - Assess how well spending translates into desirable social outcomes

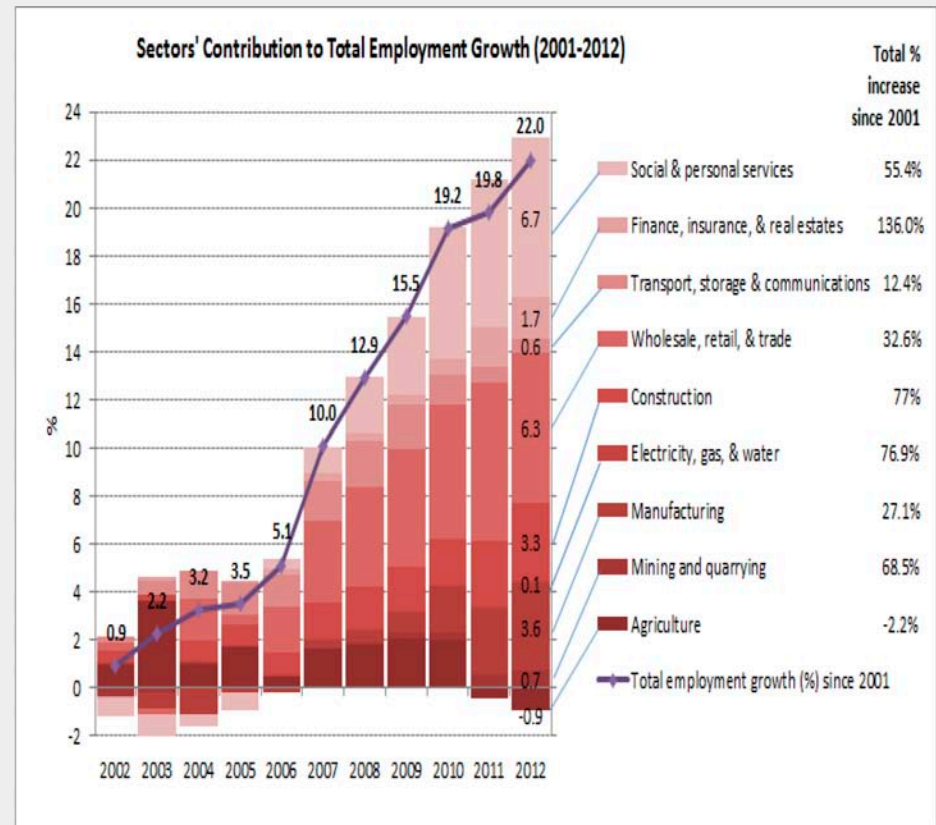


# MILLIONS OF JOB CREATED IN NON-TRADABLE SERVICE SECTOR DURING THE COMMODITIES BOOM 2003-2011

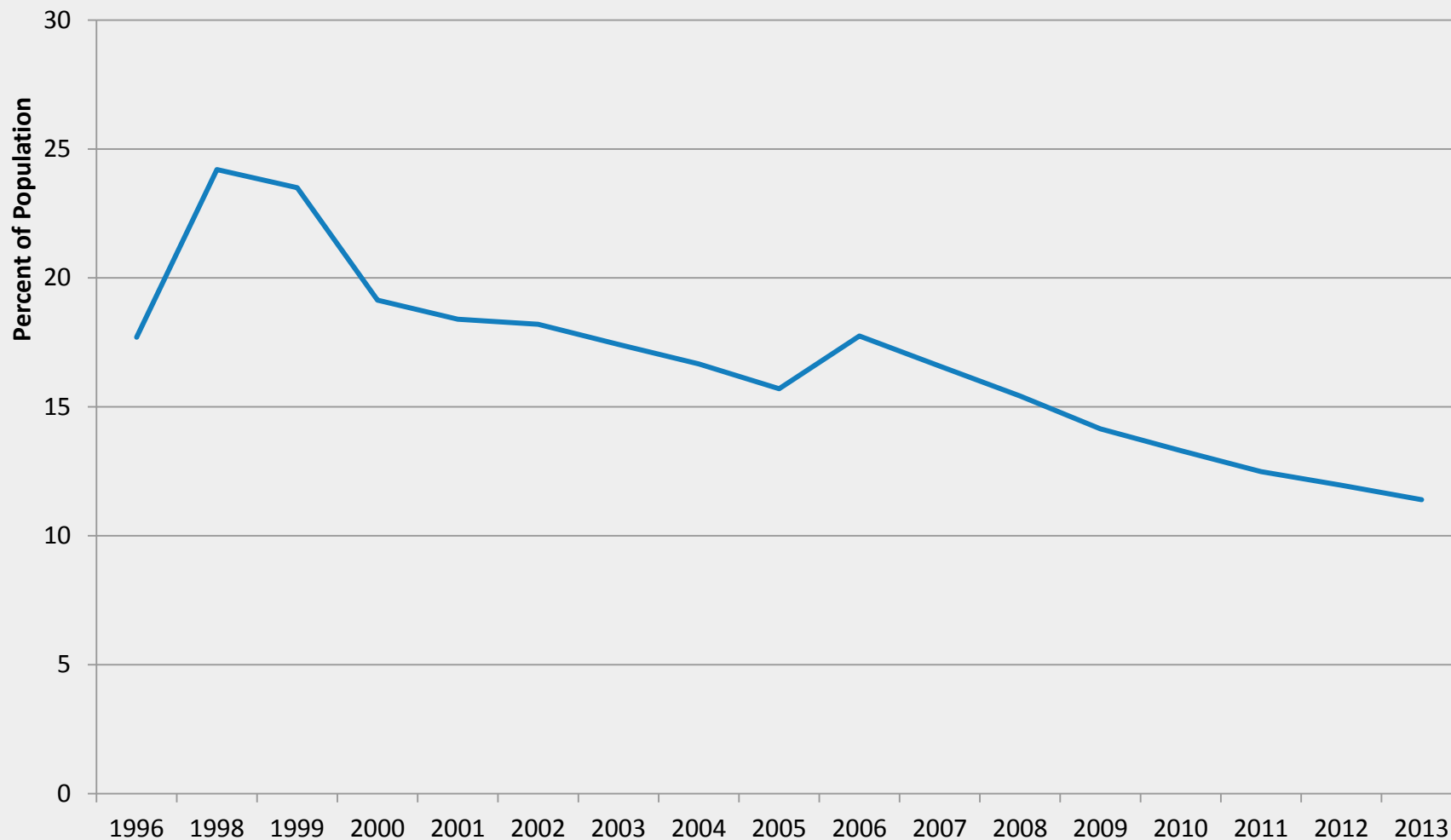
## Massive jobs created in services

- Between 2001 and 2012, a total of over 20 million new jobs were created
- 82 percent of these new jobs (16.8 million) were created in services
- The industry sector created only 4 million of new jobs
- Agriculture lost almost 1 million jobs

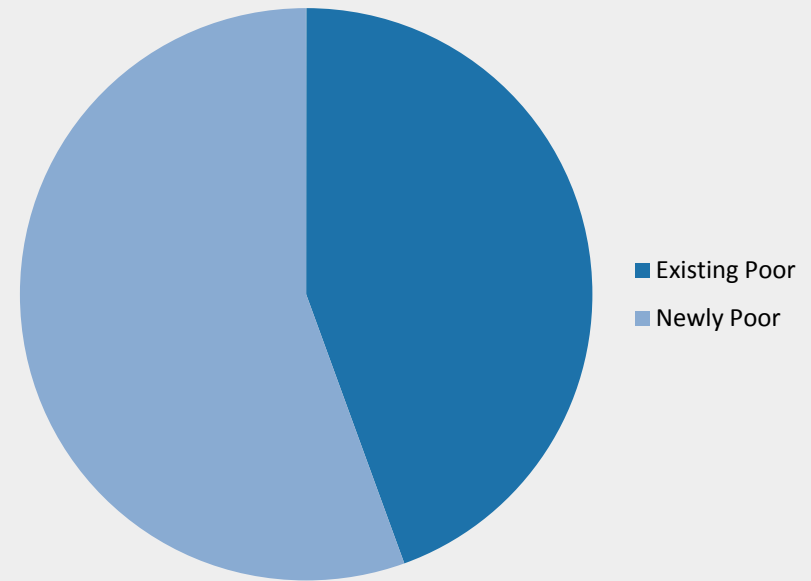
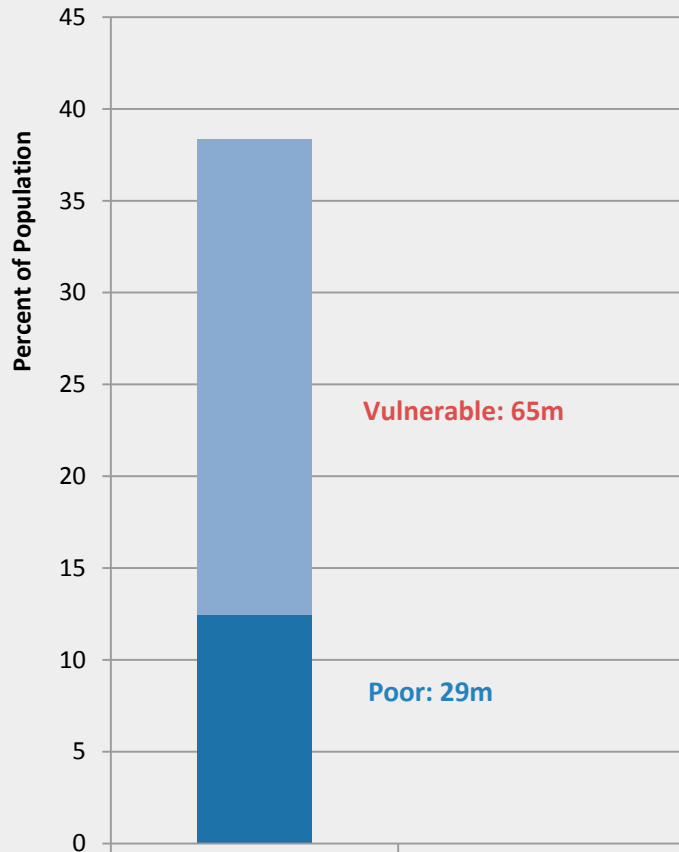
## Mostly non-tradable service



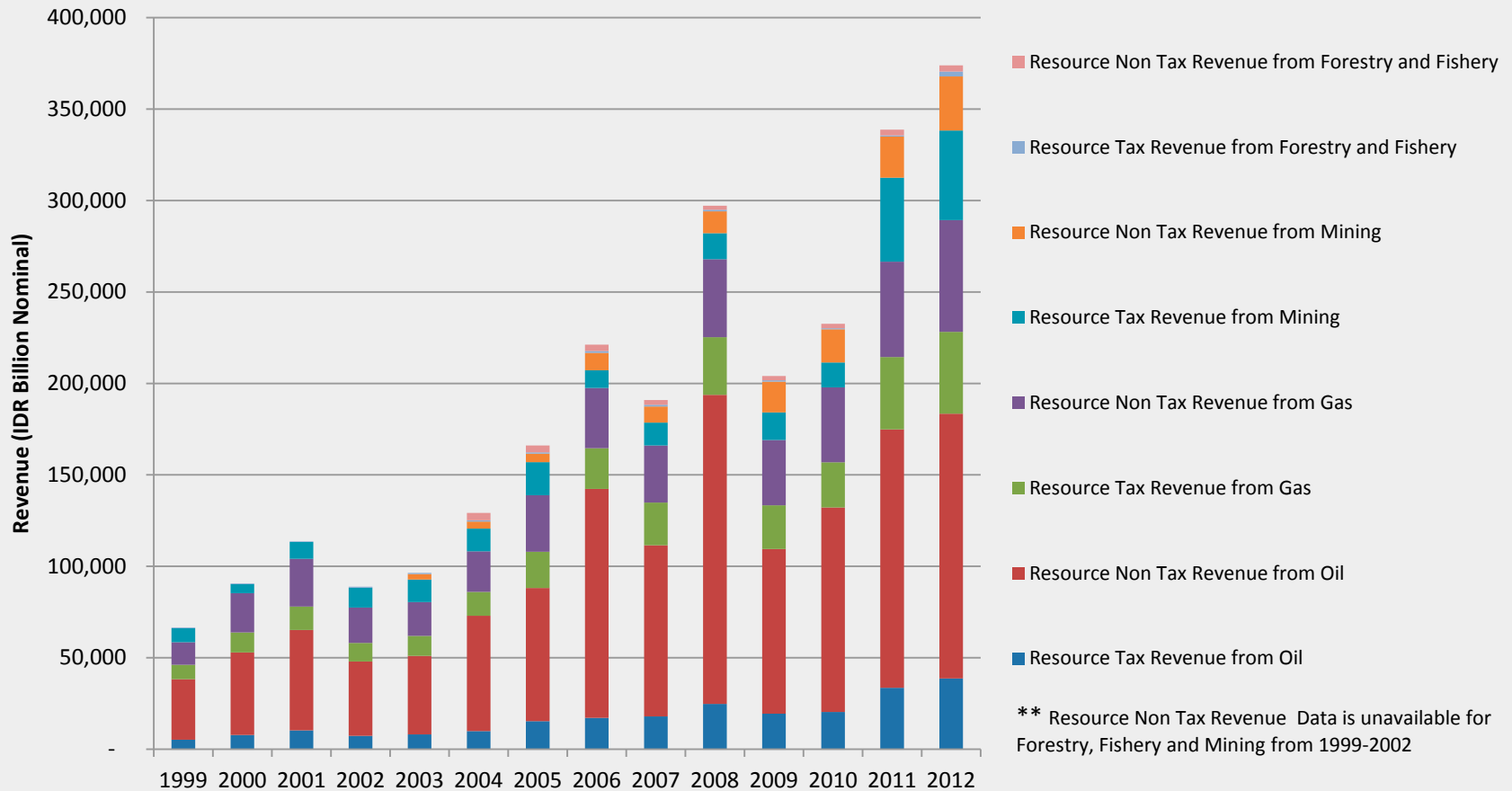
# DEFINITELY HELPING REDUCING POVERTY ALMOST BY HALF!



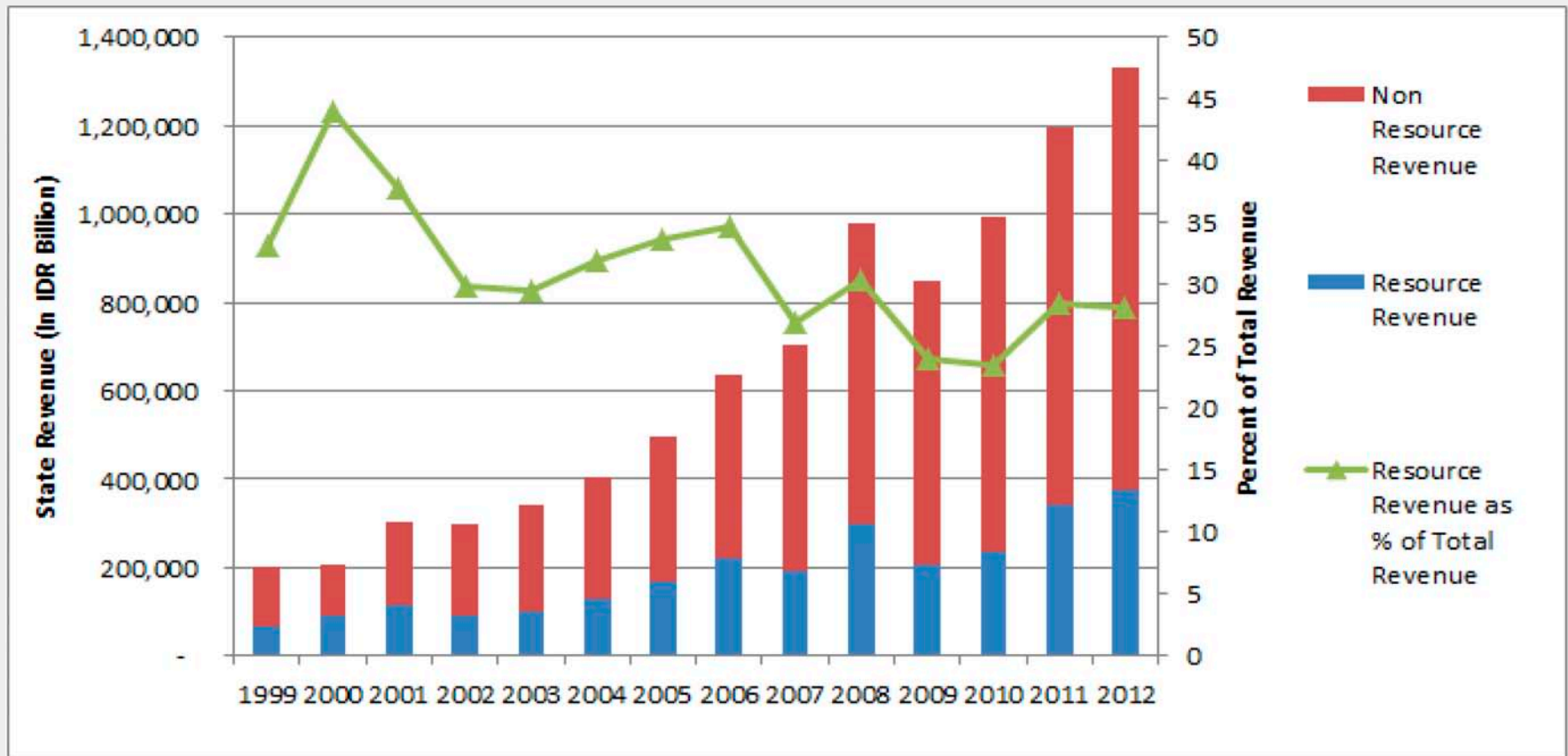
# BUT THE TYPES OF JOBS CREATED LEFT WORKERS VERY CLOSE TO THE POVERTY LINE (HIGHLY VULNERABLE)



# INDONESIA HAS DONE PRETTY WELL CAPTURING REVENUES FROM THE NR SECTOR ..



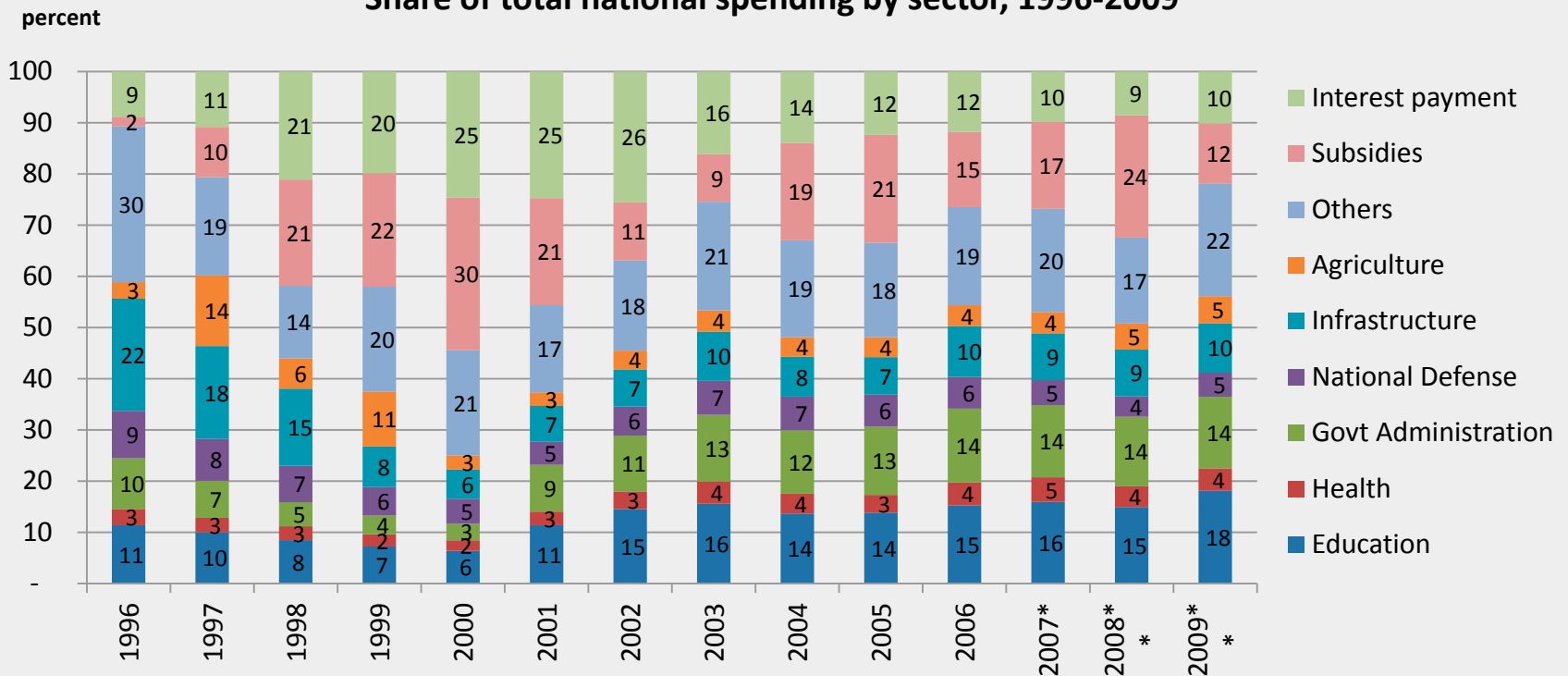
# EVEN IF NON-RESOURCE REVENUES GREW FASTER THAN REVENUES FROM THE NR SECTOR (DIV.)



# INDONESIA'S INTER-SECTORAL ALLOCATION OF SPENDING

Relative to pre-crisis (1996) the share of the budget going to **subsidies**, **education** and **govt. administration** have increased while **defense** and **infrastructure** have declined

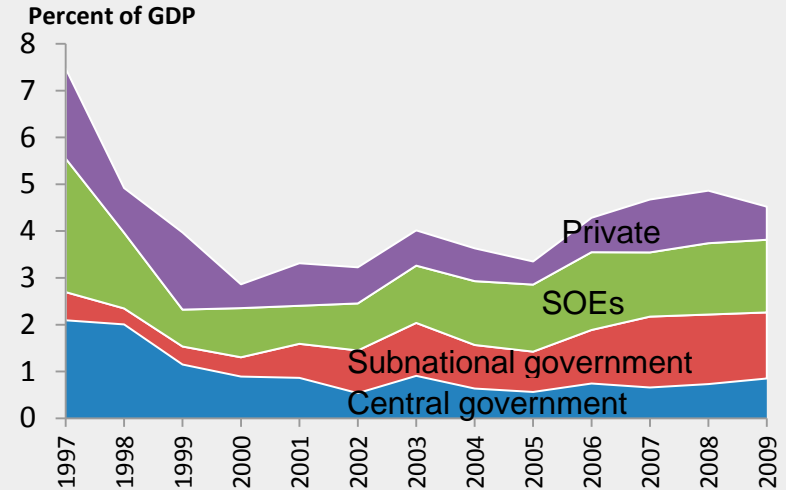
Share of total national spending by sector, 1996-2009



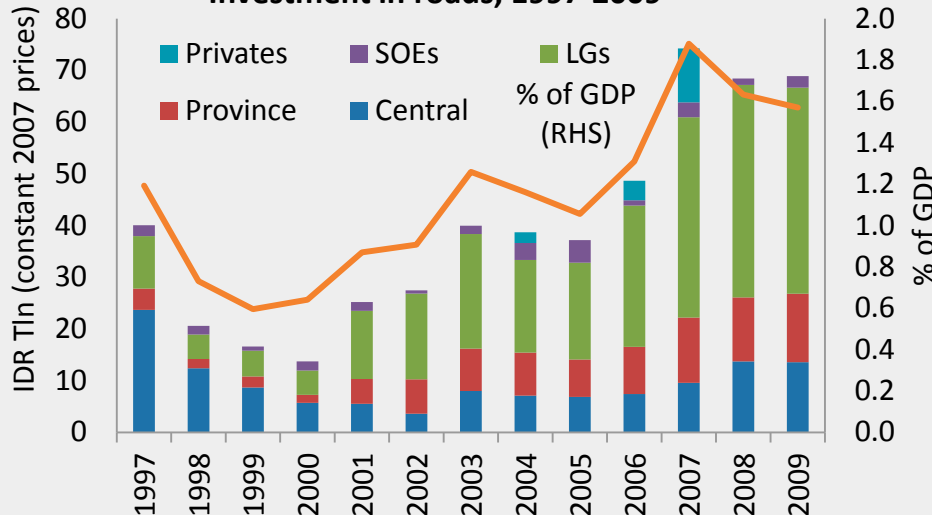
# INDONESIA: INTRA-SECTORAL ALLOCATION (INFRASTRUCTURE)

- After a sharp fall in 1997/1998 infrastructure investment has only partially recovered
- **Infrastructure investment (4% of GDP) has increased – but still lower than pre-1997 level**
- 40% of total infrastructure investment is on roads which returned to the pre-1997 financial crisis level of 1.6 % of GDP with more on LG spending

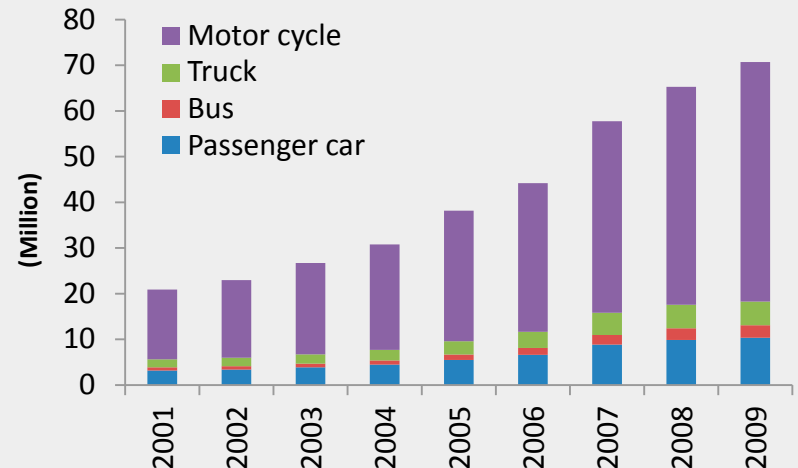
Infrastructure investment, 1997-2009



Investment in roads, 1997-2009



Number of vehicles, 2001-2009





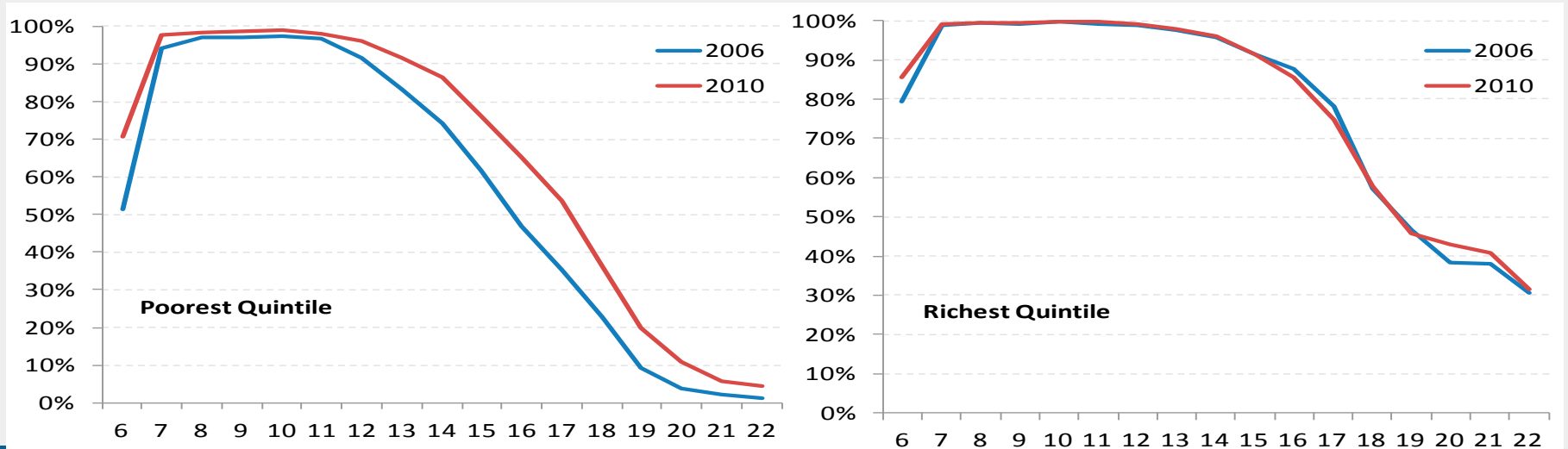
# THE LIMITED SPENDING ON INFRASTRUCTURE HAS A MATERIAL IMPACT ON COMPETITIVENESS, ESP. AGRICUL

- Competitiveness at the farm-gate level is good (relative low cost of farming)
- But when the goods arrive in urban centers, they are no longer competitive!
- It is cheaper to import oranges from China to Jakarta than to ship them from Kalimantan to Jakarta!
- It is cheaper to import beef from Australia than to purchase them from Sumbawa in East Indonesia
- Upgrading the infrastructure in ports crucial
- Enhancing competition along supply chains equally crucial



# THE GOVERNMENT EMPHASIS ON EDUCATION SPENDING IS CLEARLY IMPORTANT

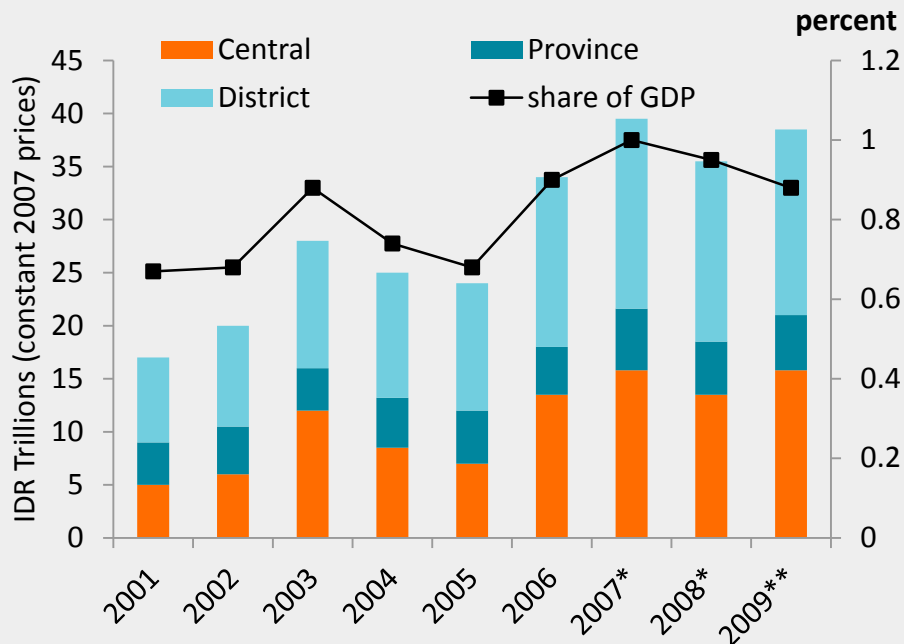
- By law, the government **should dedicate at least 20% of its budget to education**
- Share of education spending in the budget **doubled between 2001 and 2010**
- As a result, **almost all kids go to school now and schools are better equipped**
- There is **greater equity in access to education**
  - The poor are enrolling earlier and staying longer in school (% enrolled by age 6 went up from 50% to 75% and % still enrolled at age 15 increased from 60% to 75%)
- Key remaining challenge: **increasing quality**



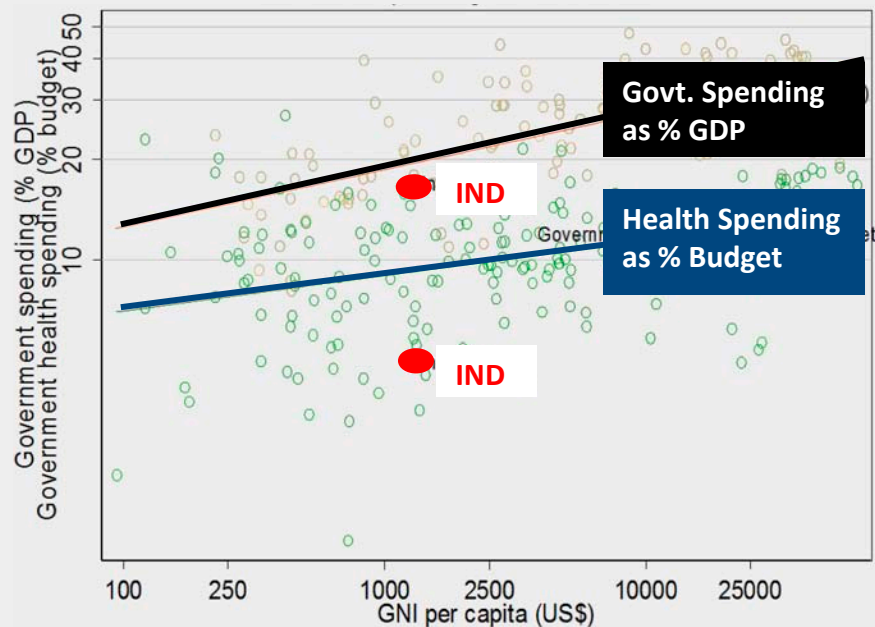
# INDONESIA: INTER-SECTORAL ALLOCATION – HEALTH

- Government health expenditures are about 1 percent of GDP
- Health spending as % of GDP has stagnated in recent years
- Indonesia's public spending on health is low compared to similar countries

Government health expenditures by level of government, 2001-09

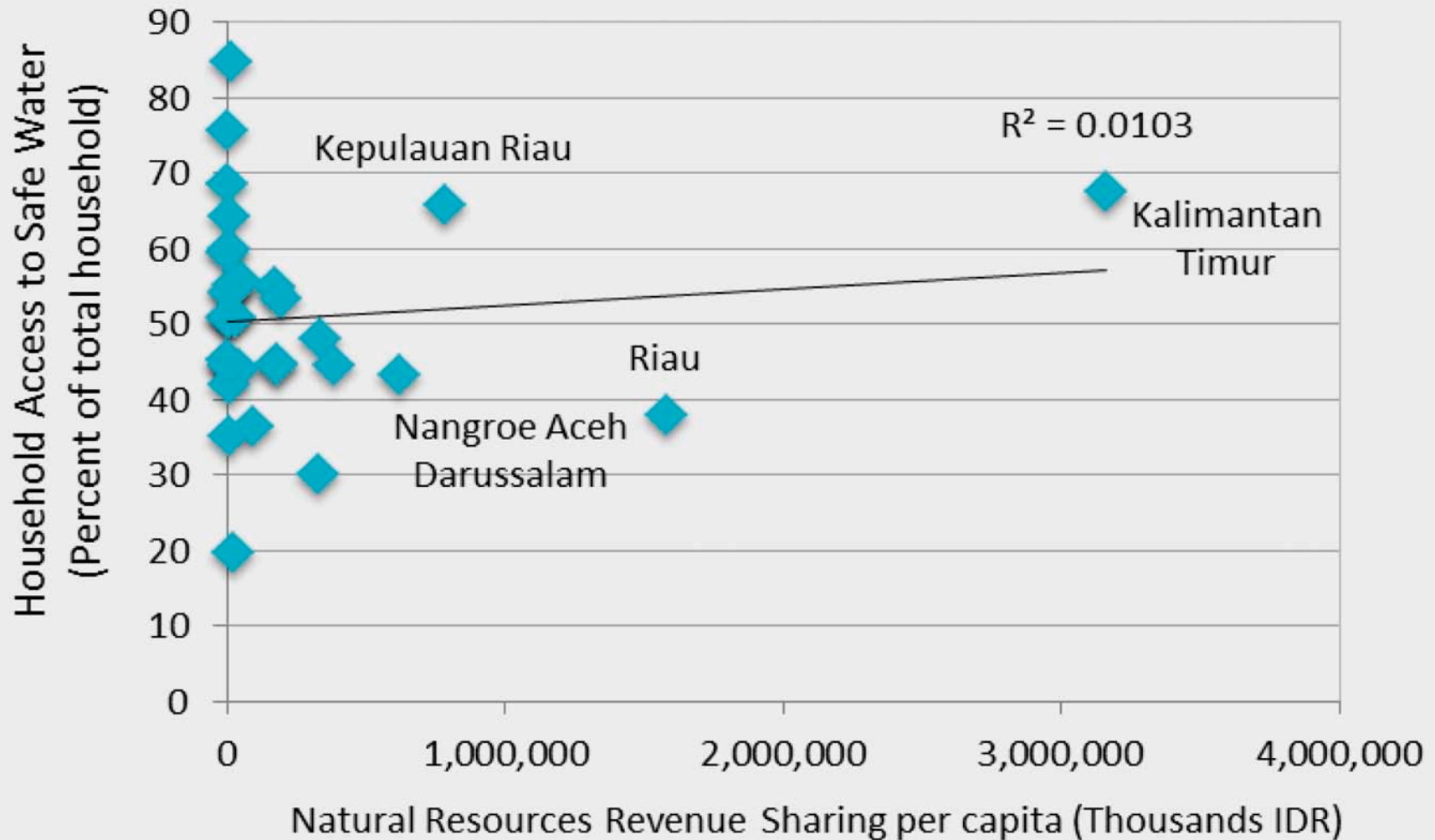


Government spending versus Income, 2004-06



Source: WDI

# IS LOCAL GOVERNMENT SPENDING EFFECTIVE? NOT REALLY!



# ENHANCING THE CAPACITY OF LOCAL GOVERNMENT TO SPEND WELL AND ACCOUNT FOR IT IS CRUCIAL

- Quality of spending is not only about money
  - It's also about enhancing budget execution
  - It's also about putting in place accountability mechanisms that force everyone to do the right thing (e.g. reining in teacher absenteeism)!