

Energy Subsidy Reform: Lessons and Implications

Benedict Clements
Fiscal Affairs Department
International Monetary Fund
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Energy Subsidy Reform

Lessons and Implications



EDITORS
Benedict Clements, David Coady, Stefania Fabrizio,
Sanjeev Gupta, Trevor Alleyne, and Carlo Sdrulevich

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Motivation

- ☐ **An important issue because of their impact on budgets, economic growth, climate change, and income distribution**
- ☐ **Subsidies are an issue in practically every country in the world**
- ☐ **Energy subsidies have proven difficult to reform**

Plan of presentation

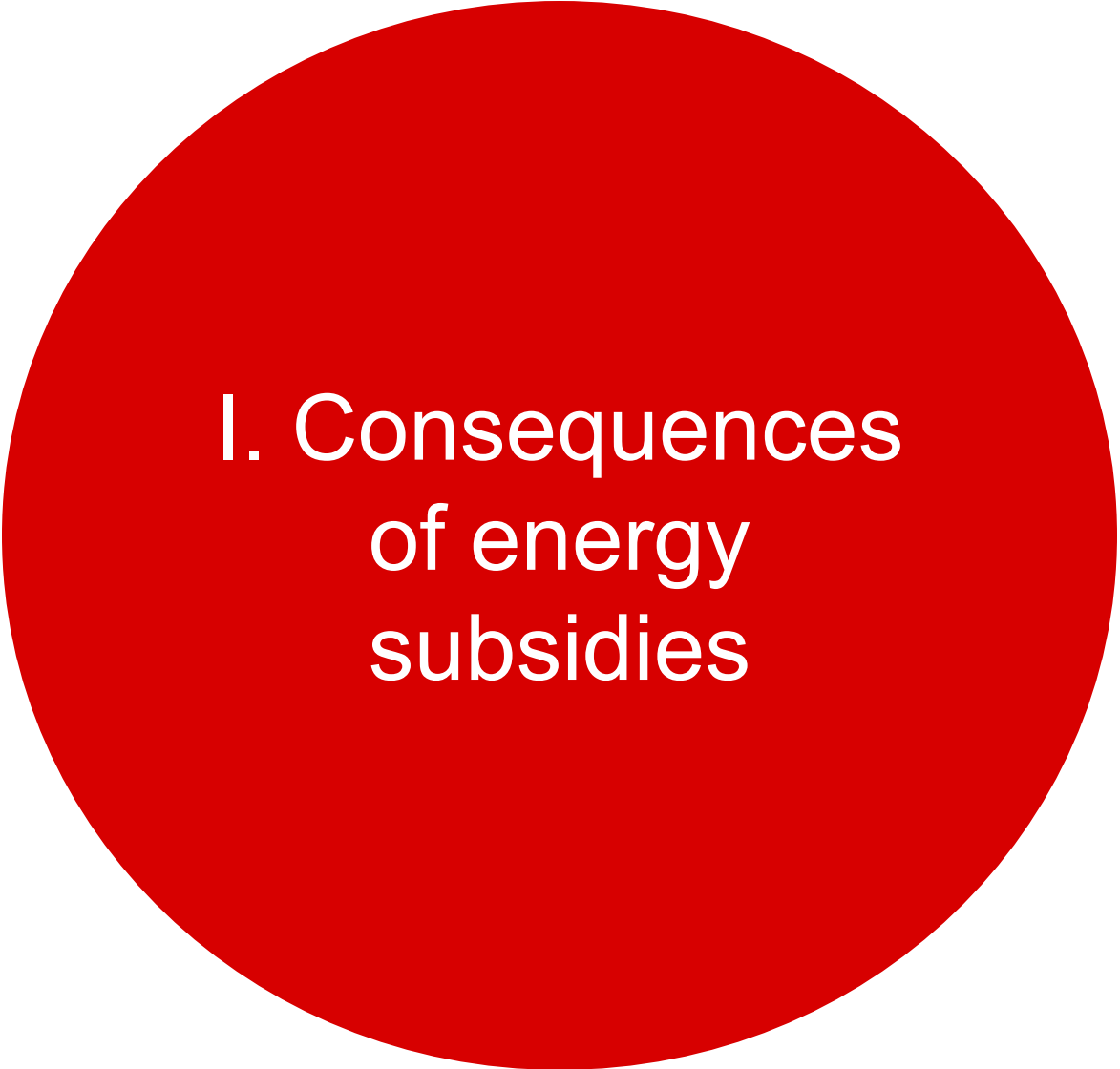
I. Consequences of energy subsidies

II. Magnitude of subsidies by region and product

- ☐ covers 176 countries
- ☐ covers subsidies for petroleum products, electricity, natural gas, and coal

☐ **“How to do” subsidy reform**

- ☐ case studies undertaken for 19 countries



I. Consequences of energy subsidies

Consequences of energy subsidies go well beyond fiscal costs

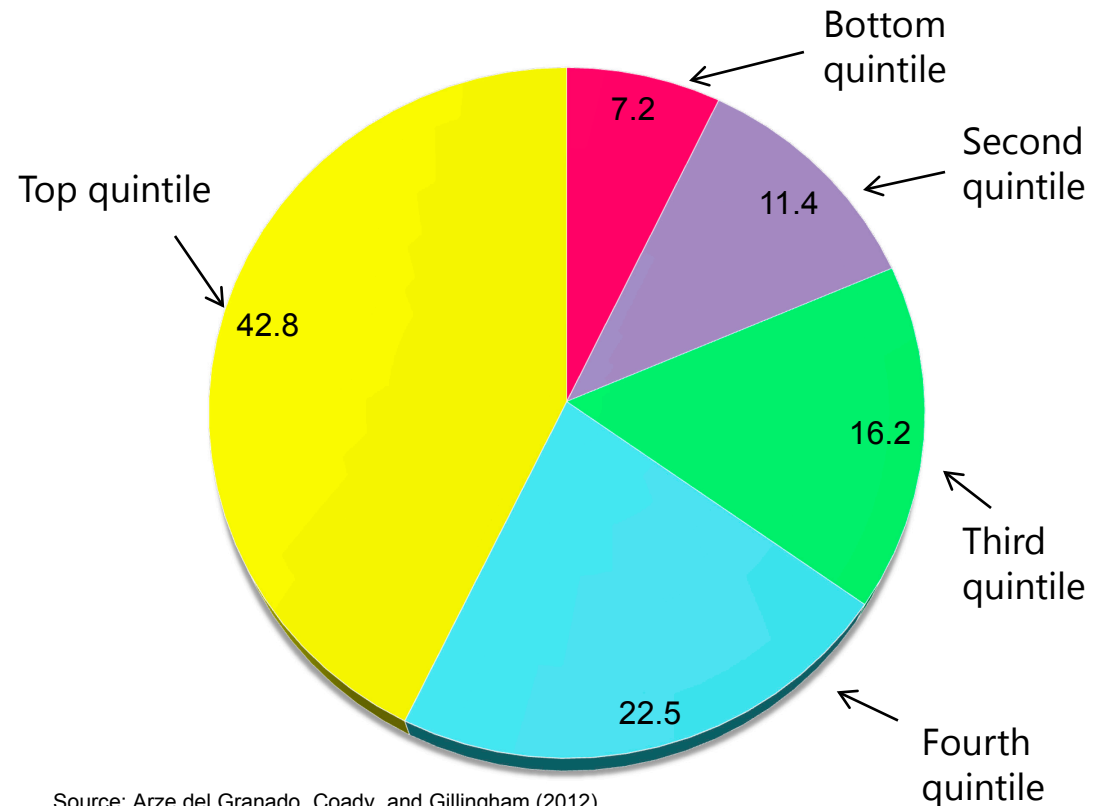


- ☐ **Aggravate budget deficits, not only through direct spending but also through forgone revenues if energy taxes are set below efficient levels**
- ☐ **Depress growth**
 - ☐ make investments in the energy sector unattractive
 - ☐ crowd-out critical growth-enhancing public spending
 - ☐ over-allocate resources to energy intensive sectors
- ☐ **By increasing energy consumption, exert pressure on the balance of payments of net energy importing countries**
- ☐ **Intensify climate change by pushing energy consumption**
- ☐ **Widen the gap between the rich and poor**

How energy subsidies increase inequality

Distribution of Petroleum Product Subsidies by Income Group

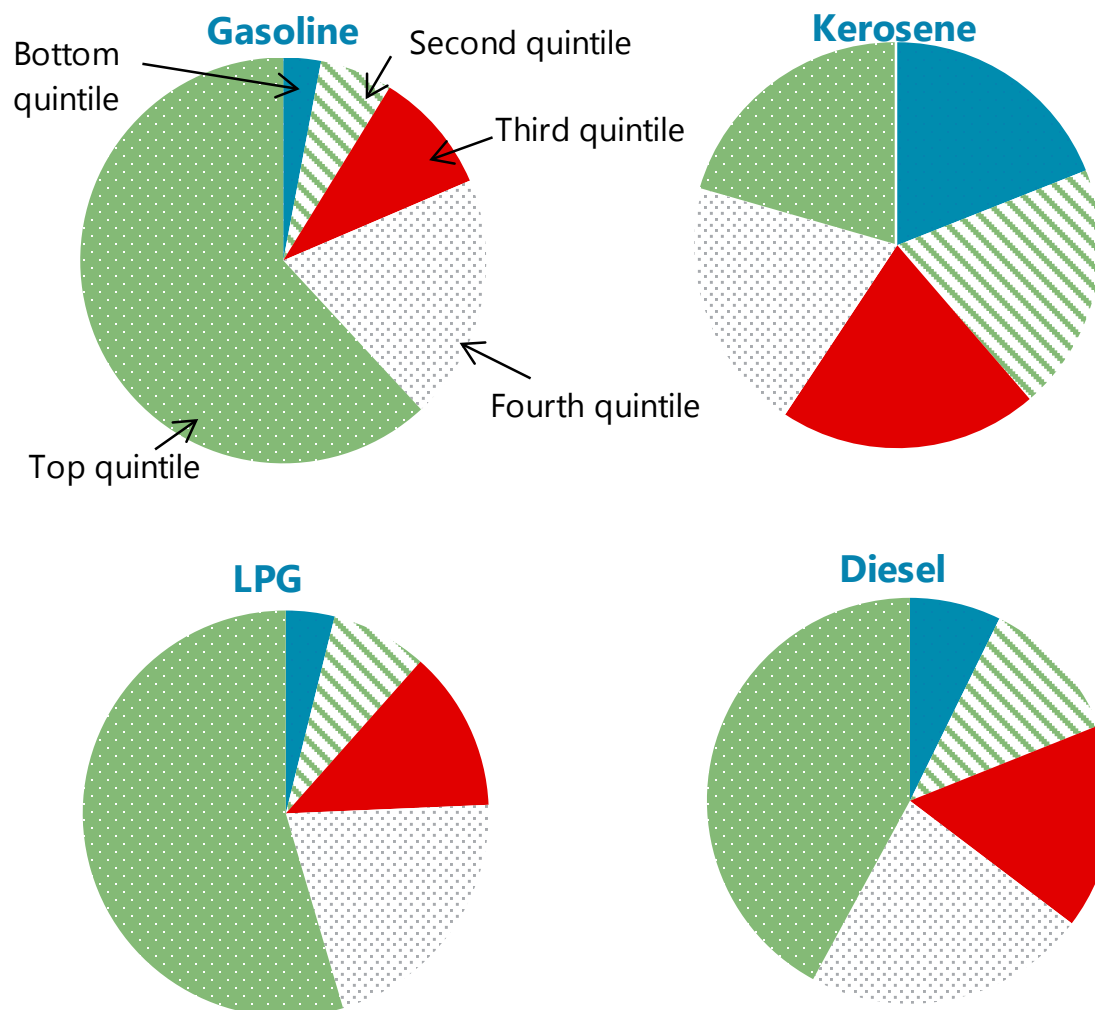
(In percent of total petroleum product subsidies)



Source: Arze del Granado, Coady, and Gillingham (2012)

- **Energy subsidies benefit the wealthiest, who consume much more energy than the poor**
- **The richest 20% get more than 40% of the benefits from energy subsidies (6 times the share of the bottom 20%)**

Distribution of petroleum product subsidies by income groups





II. Magnitude of subsidies by region and product

Measuring consumer subsidies

- ❑ **Pretax subsidies** exist when energy consumers pay a price below the supply cost of energy, including transportation and distribution costs
- ❑ **Tax subsidies** arise if energy taxes are too low: energy should be taxed the same way as any other consumer product, plus additional taxes to account for the adverse effects of energy consumption not captured in the pretax price—that is, externalities)
- ❑ **Posttax subsidies** equal pre-tax + tax subsidies

Data sources

❑ Pretax subsidies

- ❑ IEA *World Energy Outlook 2012* for 39 countries for electricity, natural gas, and coal
- ❑ OECD: producer subsidies for coal for 16 countries; **for book estimates, now include producer subsidies for natural gas for 9 countries, and for petroleum products for 12 countries**
- ❑ World Bank and IMF staff estimates for 36 countries in electricity
- ❑ IMF staff estimates for petroleum products (gasoline, diesel, kerosene) for 176 countries

❑ Posttax subsidies

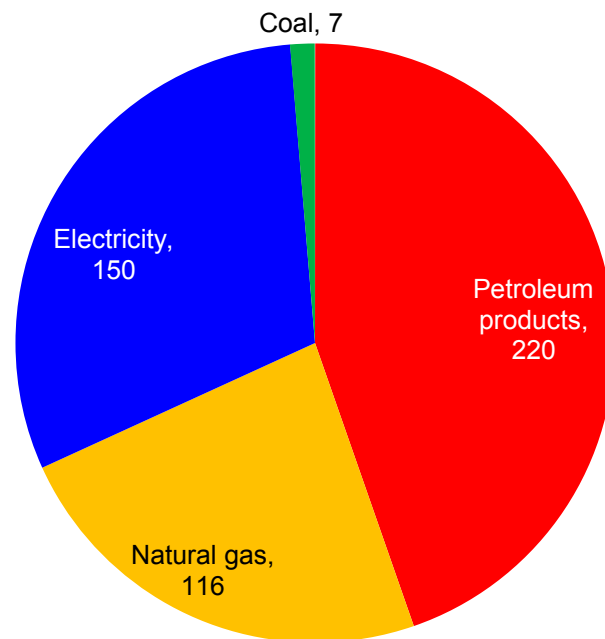
- ❑ IMF staff estimates based on pretax subsidies and adjustments for revenue considerations and externalities

Petroleum and electricity dominate pretax subsidies, while coal subsidies are negligible



- Pretax

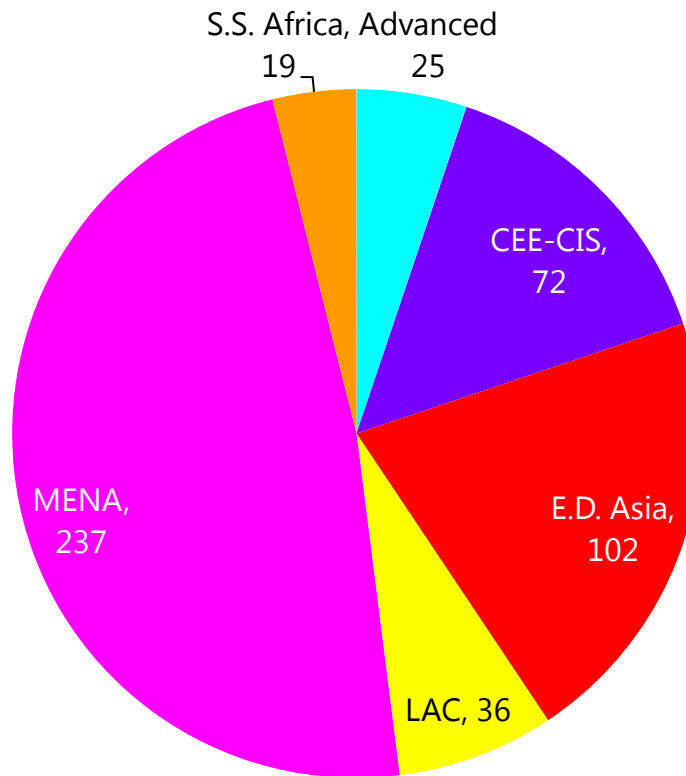
\$492 billion (0.7% GDP, 2.1% revenues)



Nearly half of pretax subsidies are from MENA region



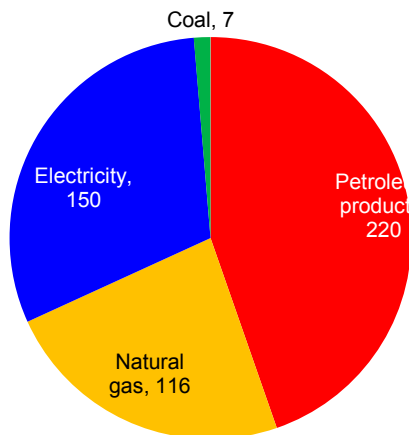
• Pretax
\$492 billion (0.7% GDP, 2.1% revenues)



Posttax subsidies are four times larger than pre-tax subsidies, with about a third from coal

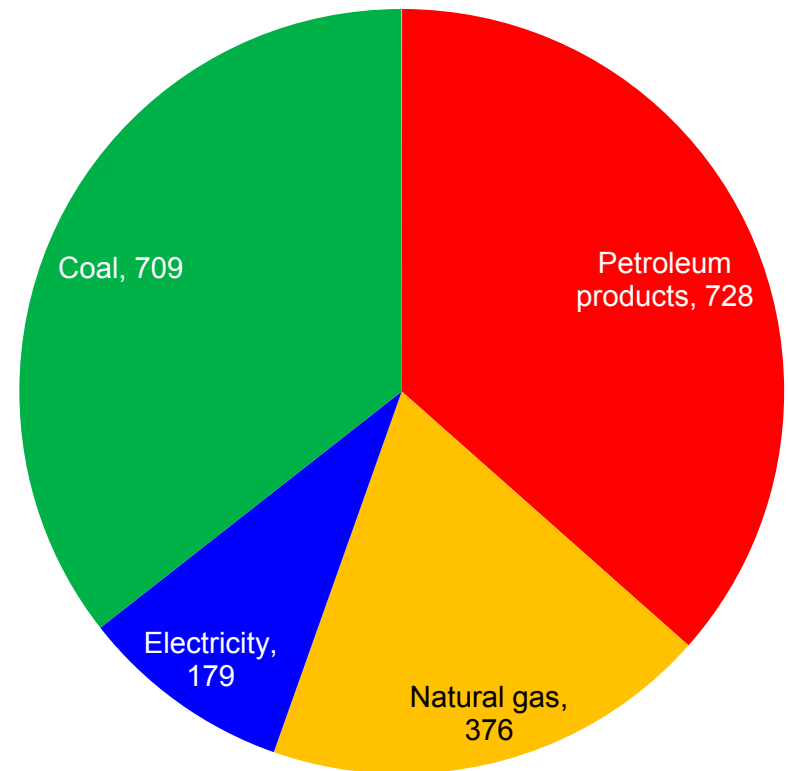
• Pretax

\$492 billion (0.7% GDP, 2.1% revenues)



• Posttax

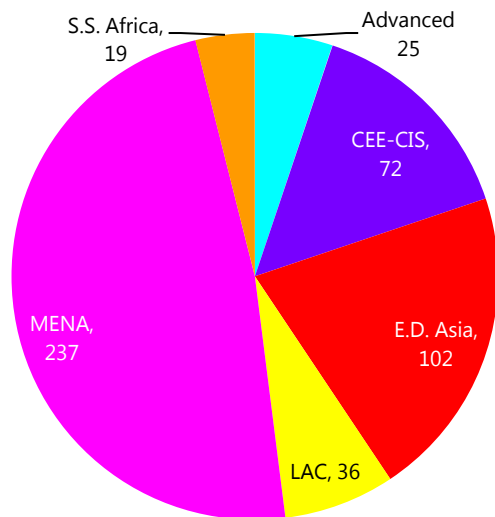
\$2 trillion (2.9% GDP, 8.7% revenues)



Advanced economies account for 40 percent of tax subsidies

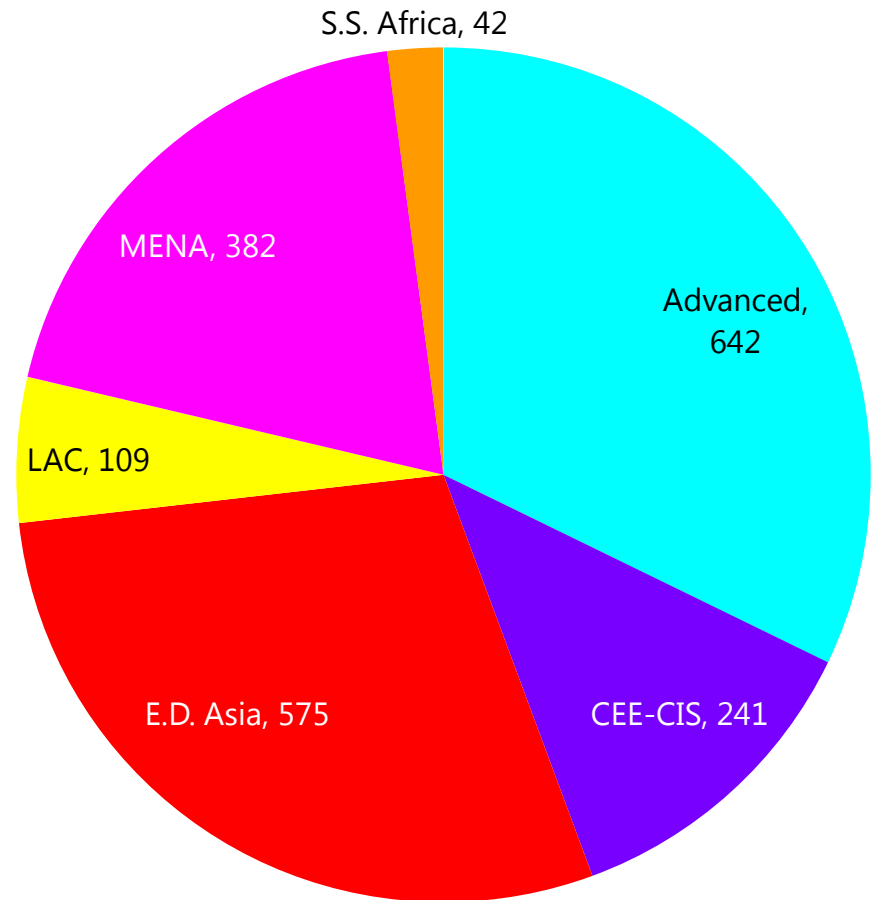
• Pretax

\$492 billion (0.7% GDP, 2.1% revenues)

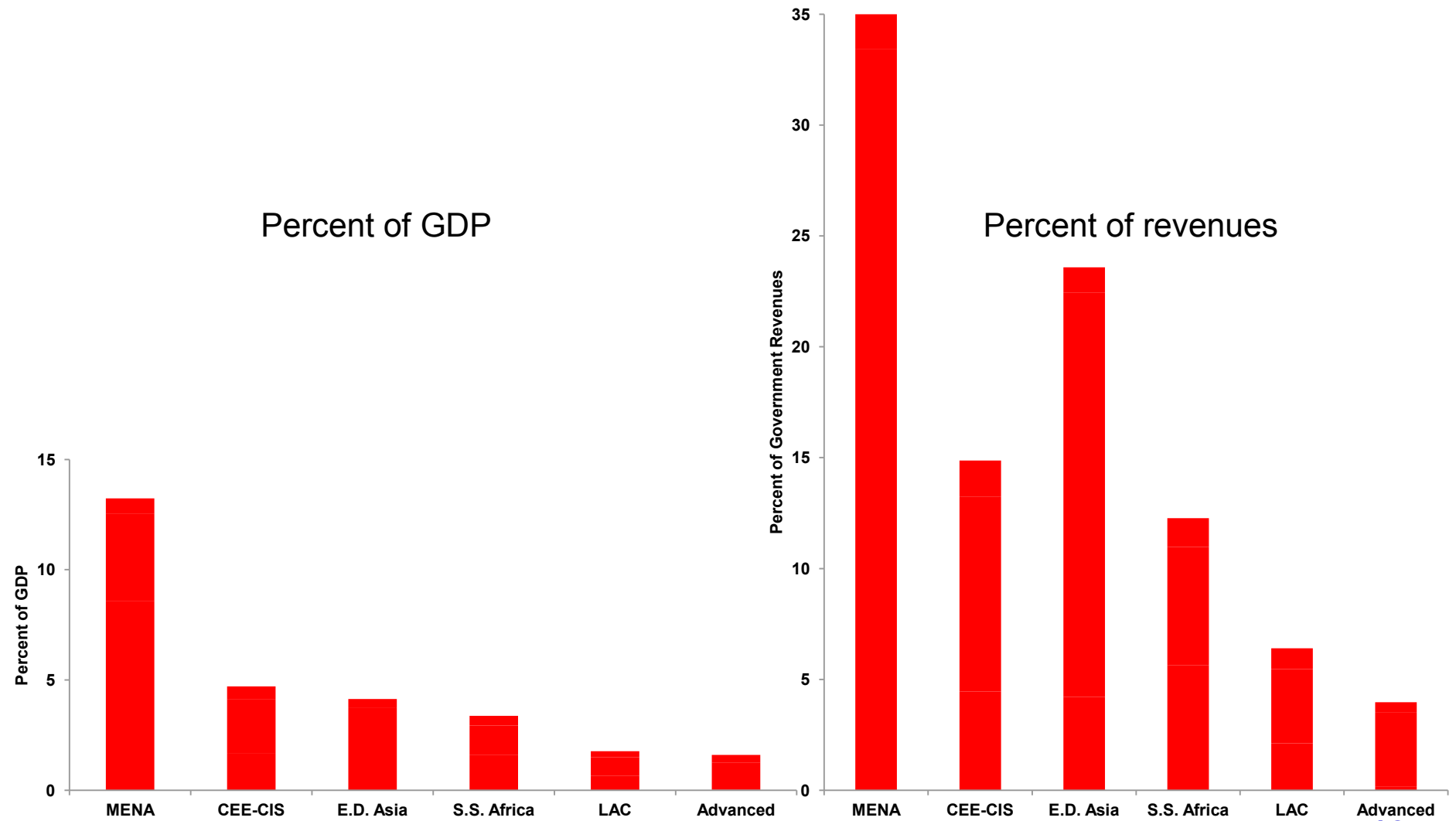


• Posttax

\$2.0 trillion (2.9% GDP, 8.7% revenues)

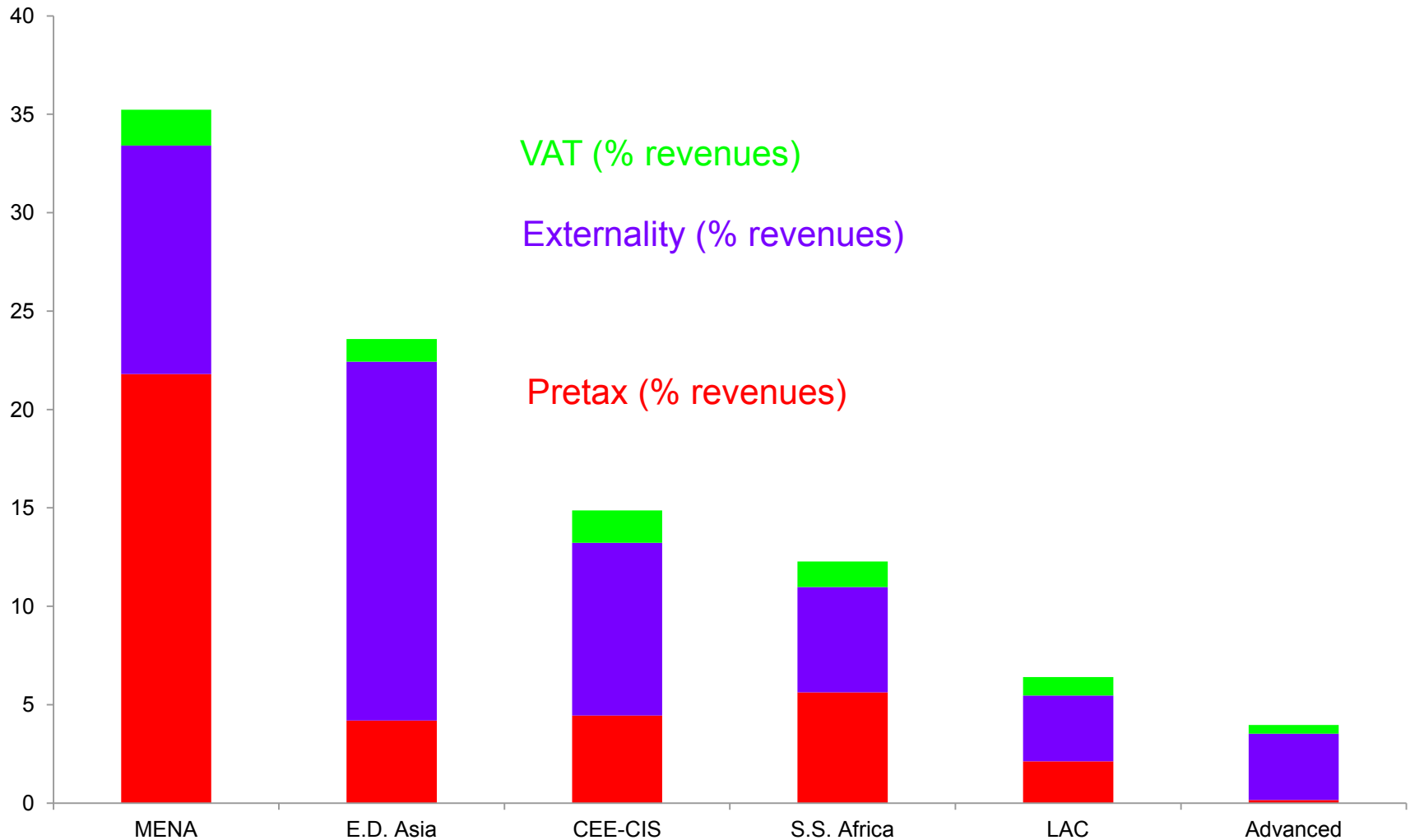


Posttax subsidies as a share of GDP and government revenues are much higher in MENA



Sources: IEA *World Energy Outlook 2012*; OECD; World Bank; and IMF staff estimates.

Under-pricing for externalities accounts for a large share of posttax subsidies across all regions





III. “How to do” subsidy reform

“How to do” subsidy reform

- ❑ Identify ingredients for successful subsidy reform from 22 country case studies**
 - ❑ 14 on fuel, 7 on electricity, and 1 on coal
 - ❑ broad regional coverage (7 from SSA, 2 from E.D. Asia, 3 from MENA, 4 from LAC, and 3 from CEE-CIS)
 - ❑ 28 reform episodes (12 successful, 11 partially successful, and 5 unsuccessful)
 - ❑ Supplemented by lessons from FAD technical assistance (19 reports in the past 5 years) on energy subsidies and work by other institutions

Six key reform ingredients

(i) A comprehensive reform plan

- ☐ clear long-term objectives
- ☐ assessment of the impact of reforms
- ☐ consultation with stakeholders

(ii) A far-reaching communications strategy

- ☐ inform the public of the size of subsidies and benefits of reform
- ☐ strengthen transparency in reporting subsidies

Six key reform ingredients

(iii) Appropriately phased and sequenced price increases

- ☐ permit households and enterprises time to adjust and governments to build social safety nets
- ☐ sequence increases differently across products

(iv) Improvements in the efficiency of state-owned enterprises (SOEs) to reduce their fiscal burden

- ☐ improve information on their costs, set performance targets and incentives, and introduce competition where appropriate
- ☐ improve collection of energy bills

Six key reform ingredients

(v) Targeted mitigating measures to protect the poor

- ☐ targeted cash transfers are preferred
- ☐ when cash transfers are not feasible, other programs can be expanded as administrative capacity is developed
- ☐ SOE restructuring may also require targeted measures (e.g., job training)

(vi) Depoliticize price setting

- ☐ implement automatic price mechanism (with price smoothing)
- ☐ establish an autonomous body to oversee price setting

Thanks!

Energy Subsidy Reform: Lessons and Implications is available online at:

<http://www.elibrary.imf.org/view/IMF071/20361-9781475558111/20361-9781475558111/20361-9781475558111.xml?rskey=gcVHa8&result=2&q=energy%20subsidy%20reform>