ECIPE Study

The Compounding Effect of Tariffs on Medicines: *Estimating the Real Cost of Emerging Markets' Protectionism*

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Outline

1. Why this study?
2. Methodology
3. Major results

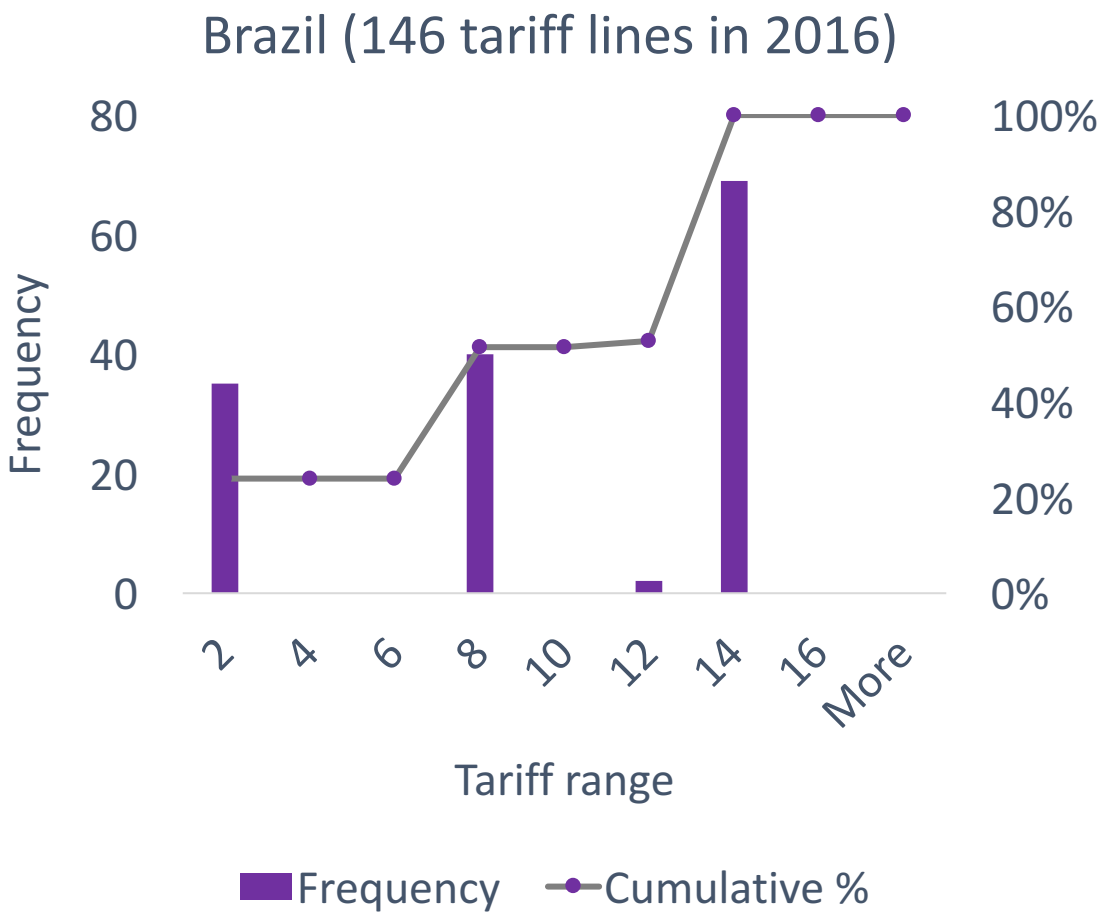
Why this study?

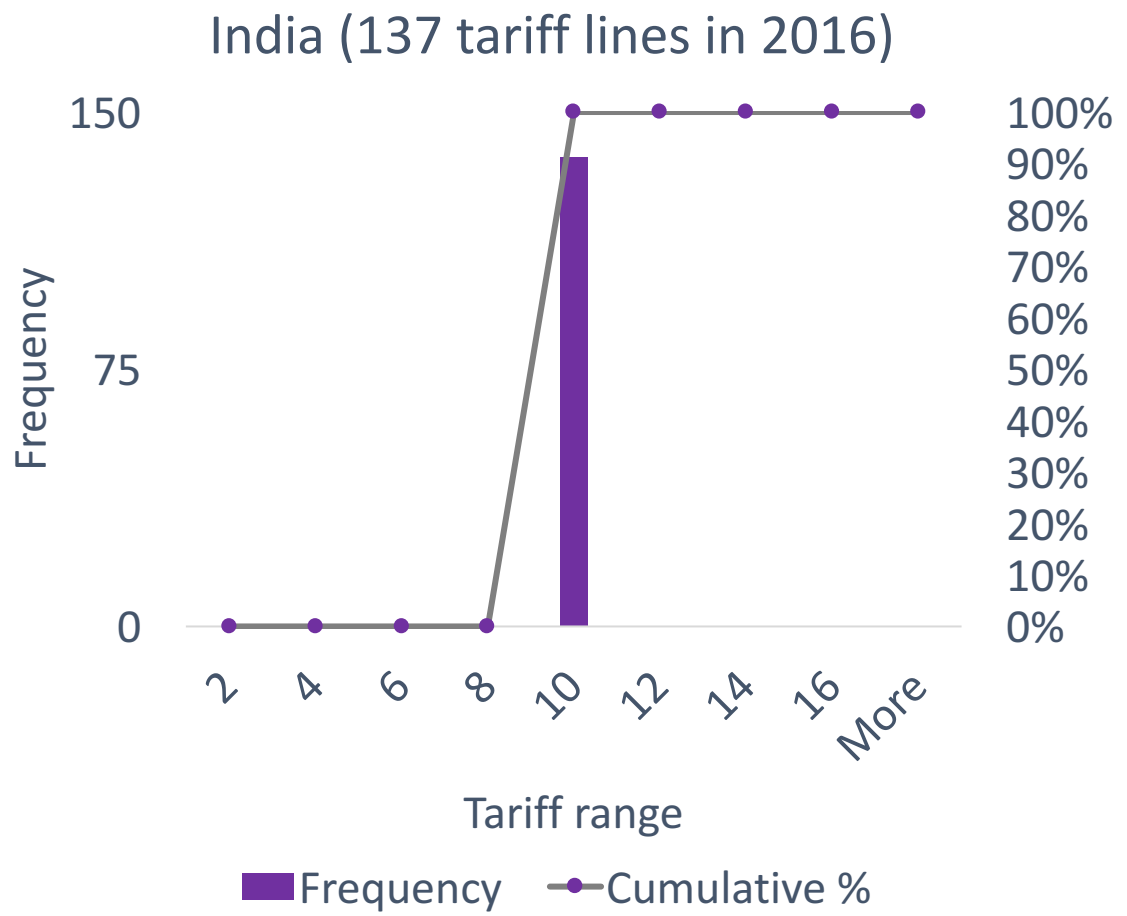
- Acces to health is a human right
- "Access to affordable medicines on a sustainable basis in developing countries" is a priority of the UN, the WHO – and the WTO
- **Access** to health and medicines is, inter alia, **a function of prices**
- **Determinants of prices:**
  - Product variety
  - (In-)efficientices in distribution chains (mark-ups of up to 90 per cent of final price; HAI analyis)
  - Competition incl. generic competition
  - Licensing requirements for distributors
  - Approval and licensing requirements for importers (NTBs)
  - **Trade facilitations inefficiencies (NTBs)**
  - **Import tariffs**

Why this study?

- **Tariffs in pharmaceuticals?**
- **Reality: many governments still inflate the price of imported medicines through import tariffs and taxes** – and are not sufficiently held accountable
- **Import tariffs** on pharmaceuticals are **still high in many low and middle income countries**, incl. BRICS-MINT countries
- Problem: **vivid public debate about "various types of market failure" and IPRs rather than government failure** – import tariffs, border facilitation inefficiecies and net government losses due to the imposition of tariffs on medicines
- **At the same time: 34 developed countries** (incl. the EU and the US) **eliminated tariffs on pharmaceuticals** as well as tariff equivalents (NTBs) – for good reasons...

Distribution of tariffs within applied tariff lines





Methodology - calculation of the compounding effect

For individual *BRICS-MINT countries*, the compounding effect (CE_i) in percentage terms is calculated as follows:

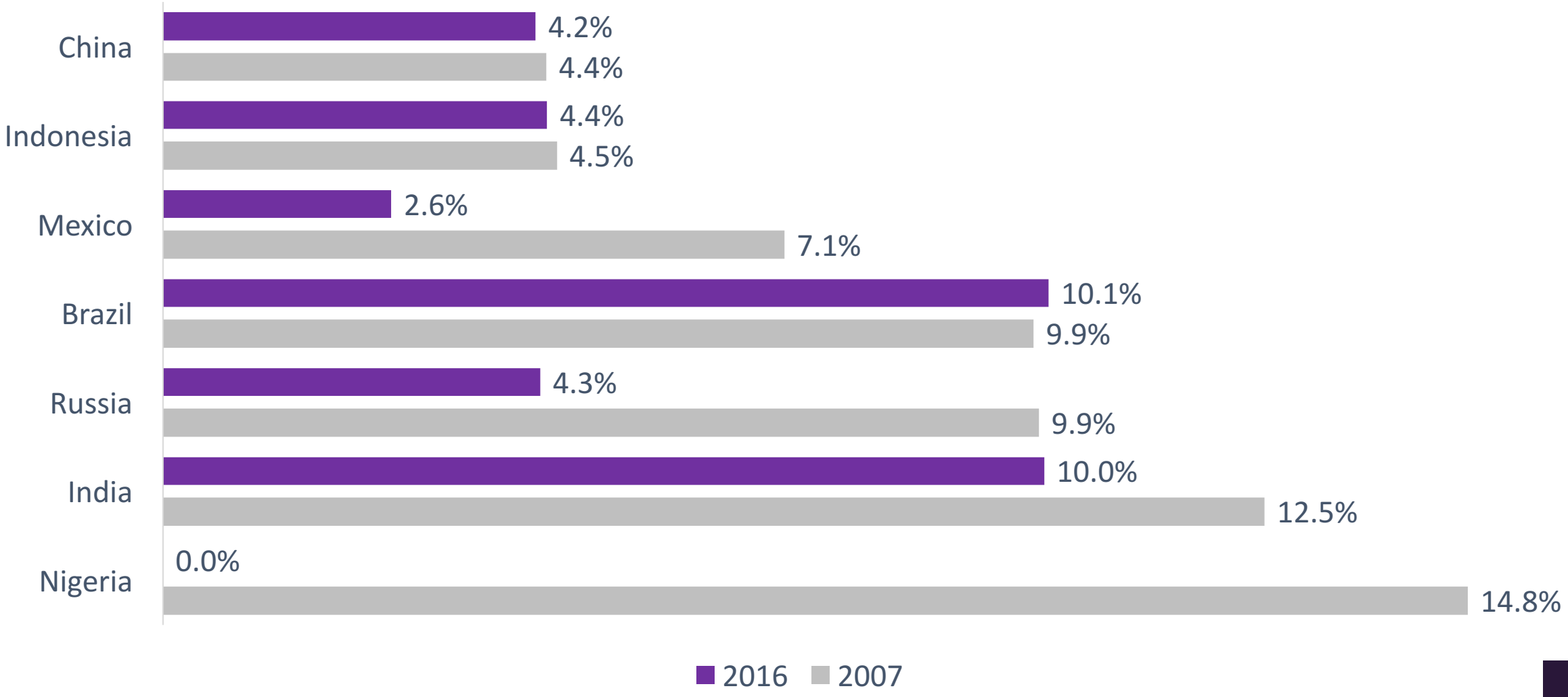
$$CE_i = 1 * (1 + p_{Border,i}) * (1 + p_{tariff,i}) * (1 + p_{MImporter,i}) * (1 + p_{MWholesale,i}) * (1 + p_{MSubWholesale,i}) * (1 + p_{MRetail,i}) * (1 + p_{Tax,i}) - 1,$$

where $p_{Border,i}$ represents costs that accrue in both the exporting and the importing country.

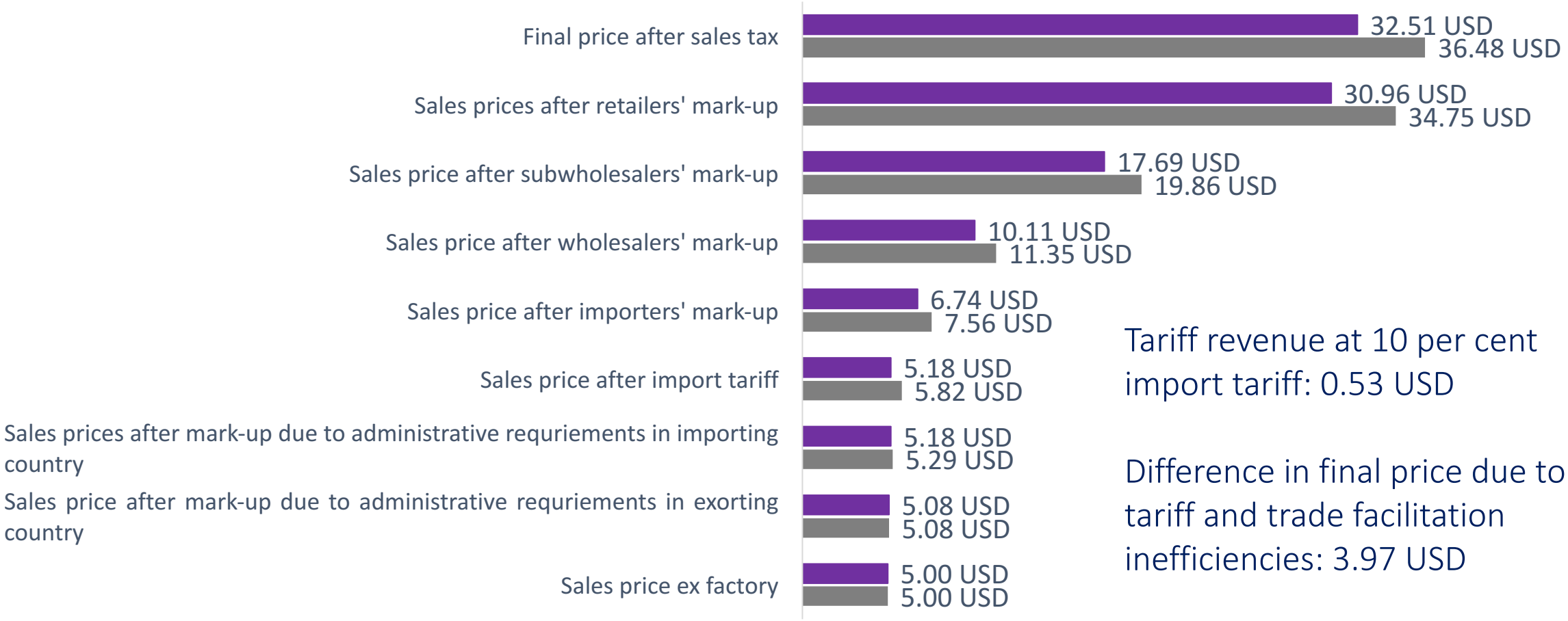
Methodology - assumptions

- Estimations are based on:
  1. Country-specific weighted average tariffs on imports of pharmaceuticals (HS 3004 category)
  2. Country-specific import volumes of pharmaceuticals in 2016
  3. Country-specific tariff equivalents for existing trade facilitation inefficiencies
  4. A range of mark-up estimates for
     a) Local importers
     b) Local wholesalers
     c) Local sub-wholesalers
     d) Local retailers (e.g., doctors, pharmacies, hospitals)
- Estimations were conducted for *low* and *high* mark-ups, as published by the Word Bank's International Finance Corporation (IFC 2017)

Methodology: weighted average tariffs (2017)



Methodology – the example of India

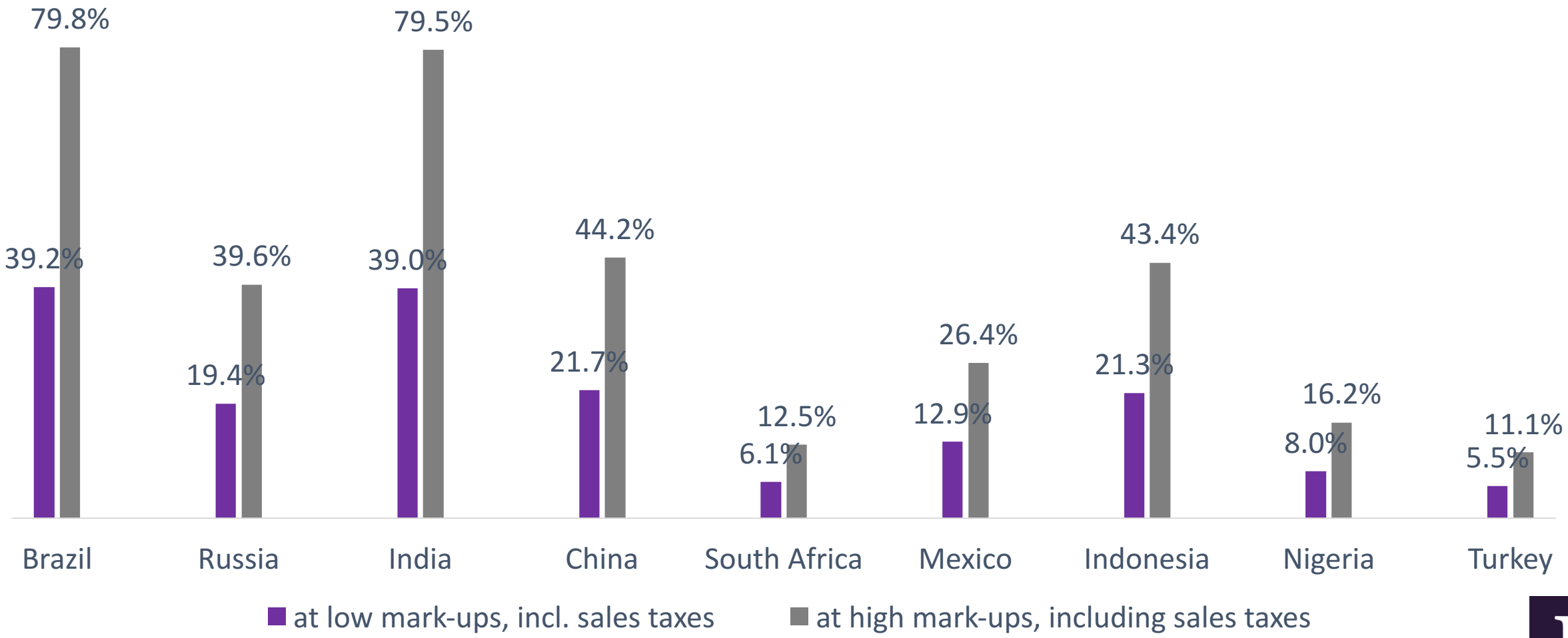


Tariff revenue at 10 per cent import tariff: 0.53 USD

Difference in final price due to tariff and trade facilitation inefficiencies: 3.97 USD

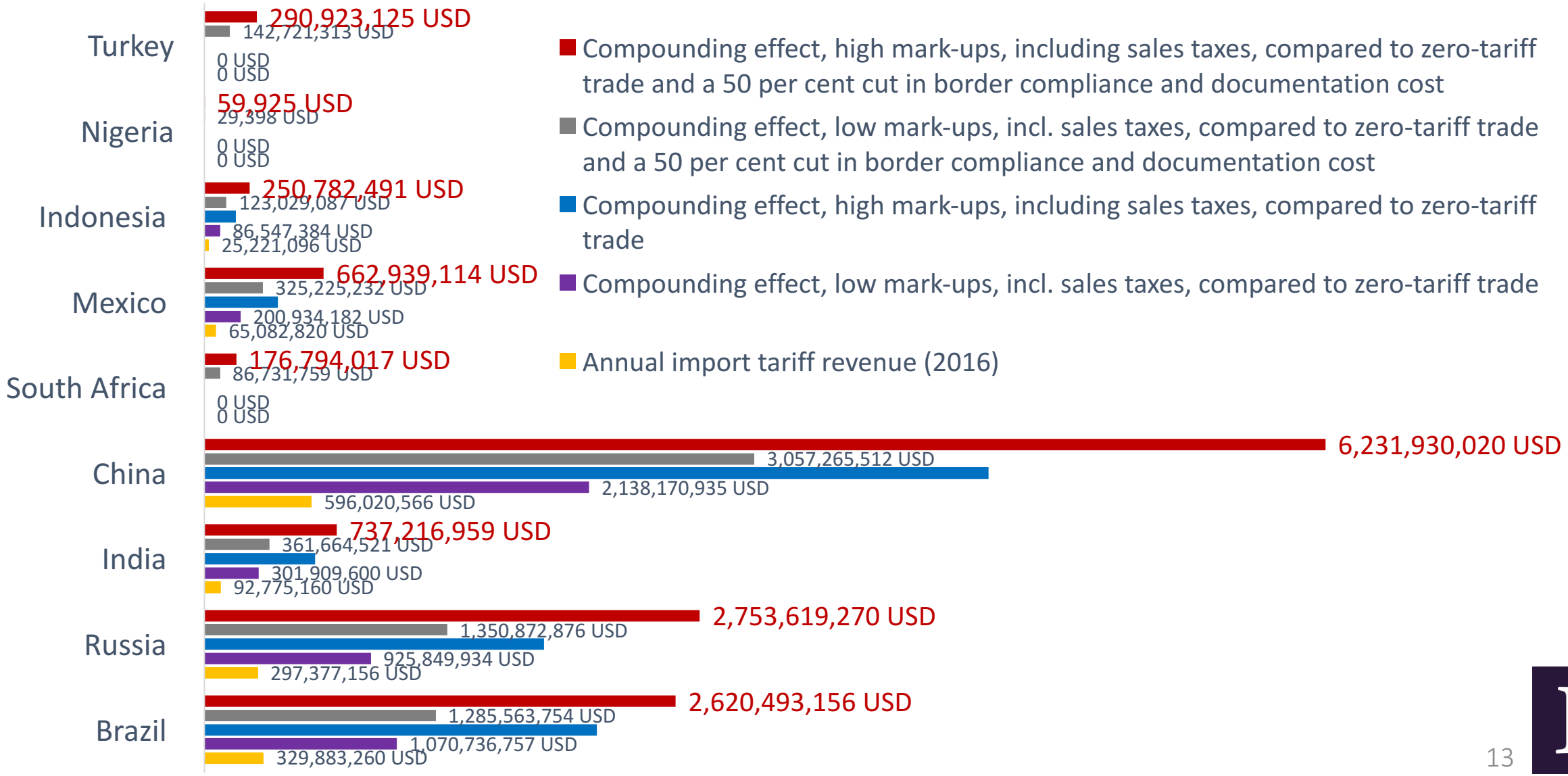
Major Findings

Effective financial burden of import tariff and border inefficiencies, in per cent of ex factory (export) value

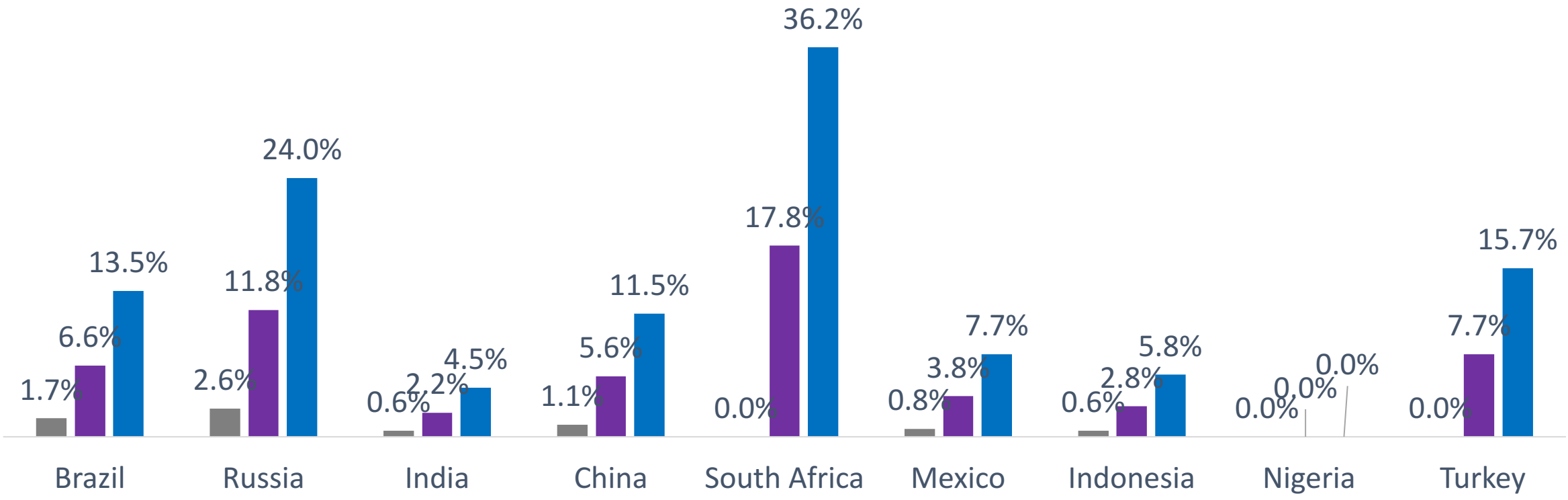


Estimated tariff-induced price impact on a range of final prices, high mark-up scenario incl. trade facilitation inefficiencies

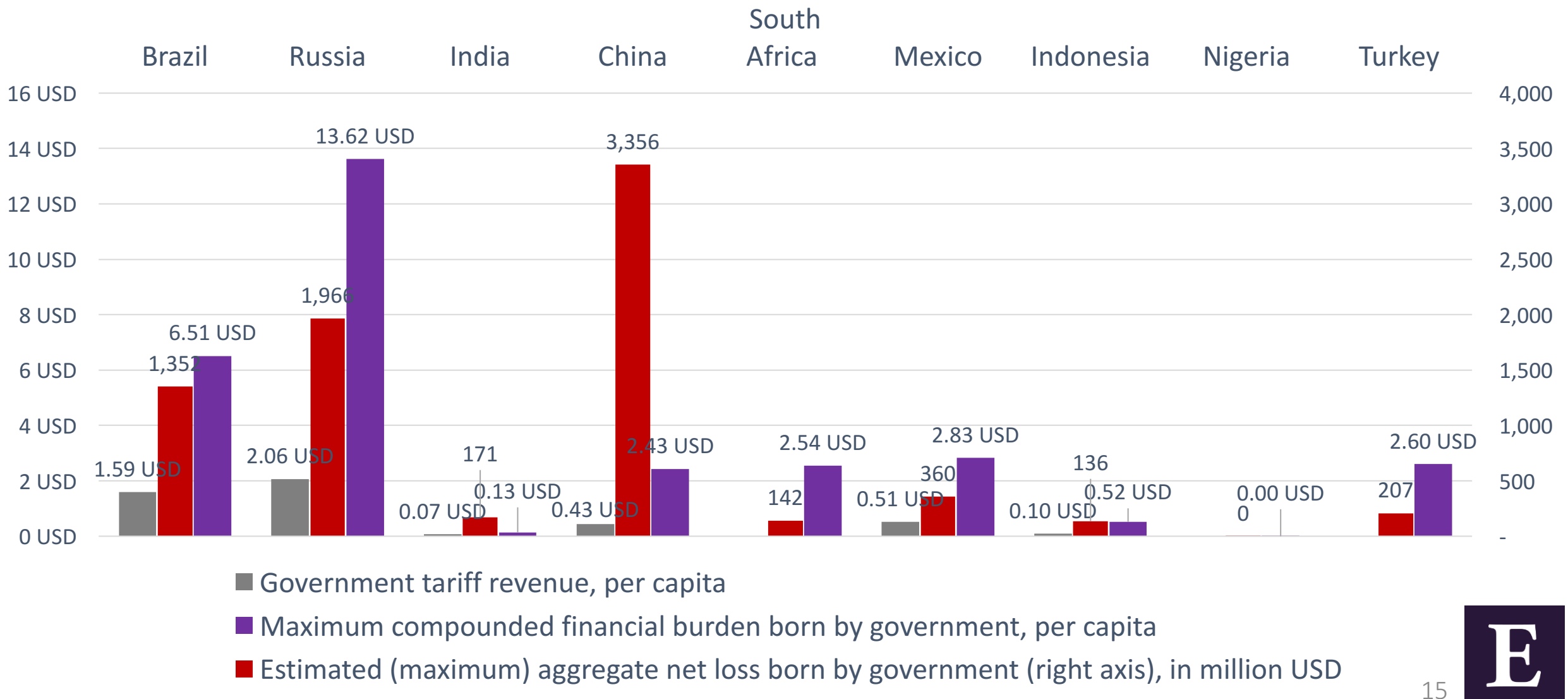
Aggregate compounding effects (CE) in USD



Effective burden of import tariff in per cent of annual out of pocket spending on medicines



Collected tariff revenues vs. compounded financial burden born by national governments due to gov. healthcare expenditure



Summary of Major Findings

- Except for South Africa, Turkey and Nigeria, **tariffs on pharmaceuticals are still high** among BRICS-MINT countries (up to 15 per cent in the case of Mexico and Indonesia)
- **Trade facilitation inefficiencies** are still high in all BRICS-MINT countries
- BRICS-MINT countries' trade in pharmaceuticals is **growing rapidly**: a larger proportion of globally marketed medicine products may be subject to high tariffs
- The total financial burden accruing to patients in the importing countries range from 6 to 11 per cent of the import value in Turkey to **39 to 80 per cent in Brazil and India**
- The estimated **aggregate savings** for patients would be **highest in China (up to 6.2bn USD), Russia (up to 2.8bn USD), Brazil (up to 2.6bn USD), and India (737mn USD)**
- As most BRICS-MINT governments directly buy, settle or reimburse patients' invoices for a bulk of medicine products, the sum of all tariff-induced premiums on final **prices for pharmaceuticals paid for by governments tends to exceed by far the tariff revenues initially collected** by customs authorities

Major Take-aways

- Contrary to other policy measures to improve access to medicines, the elimination of all tariffs on pharmaceutical imports would be **low hanging fruit**
- Eliminating tariffs would **improve government finances and increase transparency and accountability of governments of low and middle income countries**
- The results of this study are a **wake-up call** for all low and middle income governments to join the "zero for zero" pharmaceutical agreement
- Joining the "zero for zero" pharmaceutical agreement would help to significantly

1. **cut the costs of medicines** in general,
2. **reduce obscurity and absurdities in government spending** and
3. **create better conditions for the access to medicines for low-income patients** in low and middle income countries.