

# FINANCIAL INCLUSION – MEASURING PROGRESS AND PROGRESS IN MEASURING

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# A short look back

## **Data on Access of Poor and Low Income People to Financial Services**

*What we know and what we need to know*

Eugene R. Black Auditorium (H Building), The World Bank,  
Washington DC

Tuesday, 26 October 2004

...we have come a long way

# Why do we care?

- Financial inclusion has moved to top of policy agenda (see G20 resolutions)
- Financial inclusion targets have become important
  - *World Bank: by 2020, adults, who currently aren't part of the formal financial system, have access to a transaction account to store money, send and receive payments as the basic building block to manage their financial lives*
- If you want to influence it, you need to measure it!
- But: Goodhart's Law: when a measure becomes a target, it ceases to be a good measure
- Ten years ago: almost no data
- Huge push to get data, with quite some success, but ongoing challenges

# Overview

- Finance and the Poor – two different concepts
- Measuring financial inclusion – from proxies to granular data
- Benchmarking financial inclusion
- The role of financial innovation
- The gender dimension

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# Financial inclusion – a definition

- G20 definition: “a state in which **all people** who can use them have **access** to a suite of quality services, provided at affordable prices, in a convenient manner and with dignity to the clients”
- Exclusion due to
  - *the lack of stable and sufficiently high income flows*
  - *the lack of appropriate documentation*
  - *socio-cultural barriers*
- Basic supply-side constraints: cost and risk
- Need for financial innovation to overcome supply and demand-side constraints
  - *Tailored products, delivery channels and literacy programs*
- Formal vs. informal financial service
  - *Informal finance: often lacking in privacy and dignity; lack of protective rules; loses out on benefits of risk diversification*

# Two concepts of Finance and the Poor

- Finance and poverty alleviation
  - *Financial deepening Improves resource allocation, indirect effects through structural transformation of economy*
  - *Examples: India (Gine and Townsend, 2004); U.S. (Beck, Levine and Levkov, 2010)*
  - *Financial deepening helps entrepreneurship, helps small firms grow faster, helps create employment*
- Access to financial services
  - *Basic payments and savings services enable participation in modern market economy*
  - *Access to savings and credit services allow investment in education (and avoid child labor) and micro-enterprises*
  - *Access to credit, savings and insurance services allows consumption smoothing*
- Two different concepts: finance and poverty alleviation vs. finance for the poor
  - *Financial deepening linked to poverty alleviation through resource allocation effects (e.g. labour markets)*
  - *Access to payment can link these two!*

# Evidence on access to finance

- Important differences across different services
  - *Little evidence for transformational effect of micro-credit, need more tailored products; very limited macro-effects*
  - *Micro-savings products can have important positive effects, including for small firms – how to mainstream?*
- **Biggest bang for the buck: payment services:**
  - *More immediate needs*
  - *Easier to create trust*
  - *Less resources needed*
  - *Important for domestic and international remittance flows*
- More general question: activity-specific services (farmers, micro-entrepreneurs) or activity-neutral services (payment, savings)?



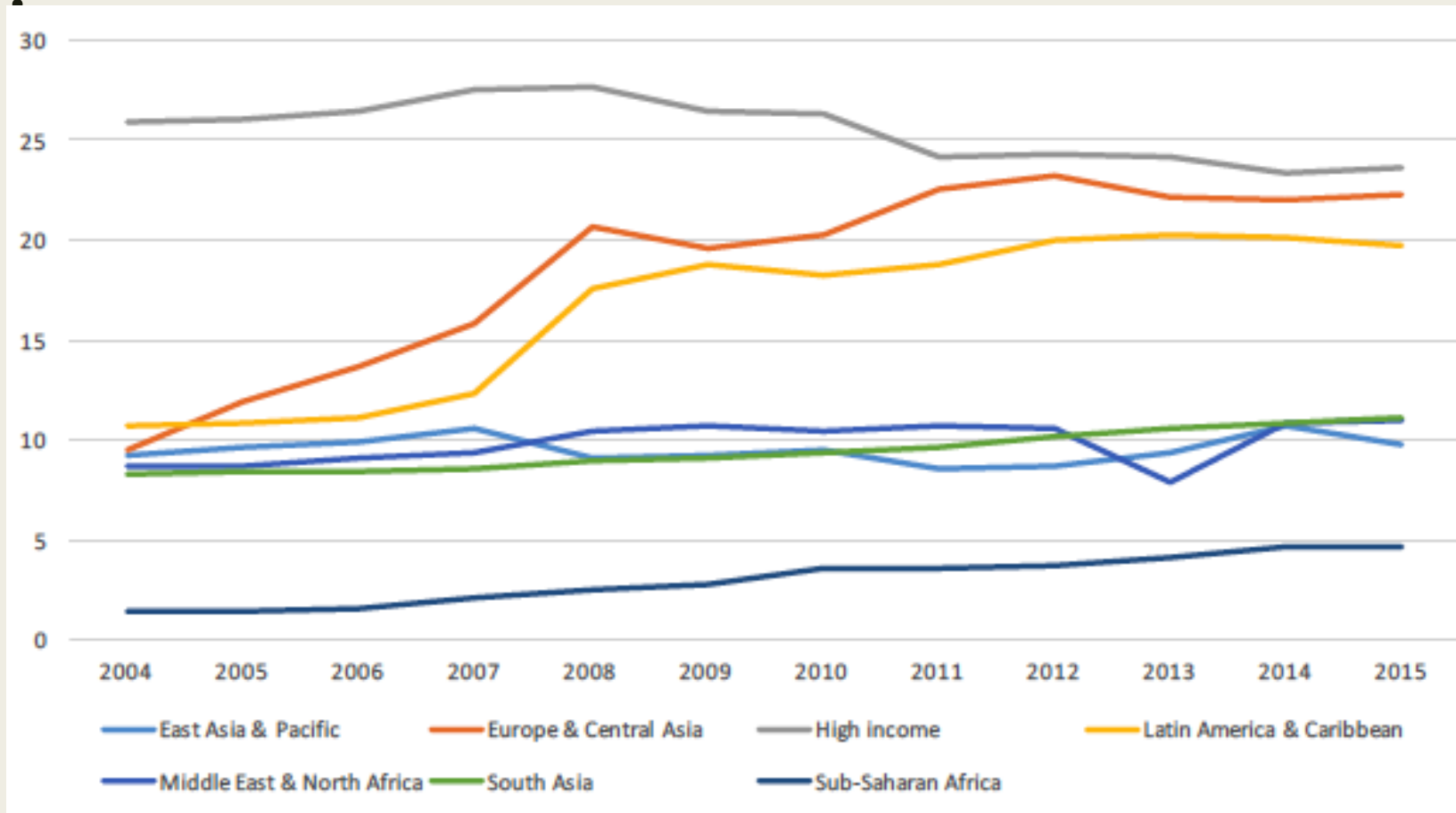
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# Measuring financial inclusion

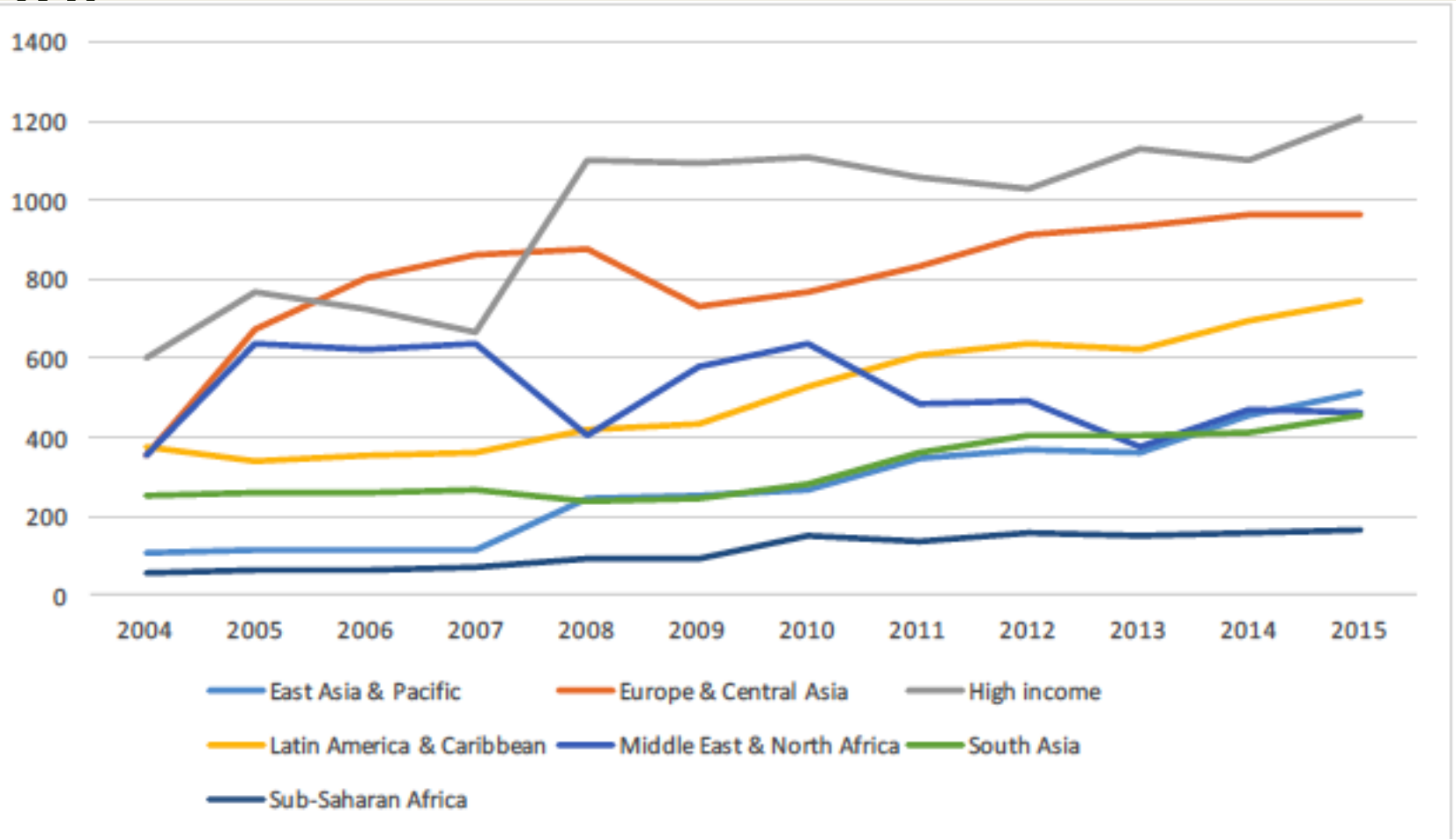
- Financial development indicators: Private Credit/GDP, Bank Deposits/GDP – no information on distribution of deposits/credit etc.
- Crude proxy data
  - *Branch/ATM penetration*
  - *Deposit/loan account penetration*
  - *Focus on traditional delivery channels and regulated entities*
  - *No direct mapping from #accounts to #account holders*
  - *Upside: easy to collect on frequent basis*
- Survey data
  - *FinAcope/FinAccess for specific countries*
  - *Global Findex*
  - *Allows not only information on account ownership, but also use, barriers and reasons for not having an account*

# Branch penetration over time and across regions



Source: Financial Access Survey, IMF and calculation by author. The graph shows the median in branches of commercial banks per 100,000 adults across the six World Bank regions and the group of high-income countries.

# Deposit account penetration over time and across regions

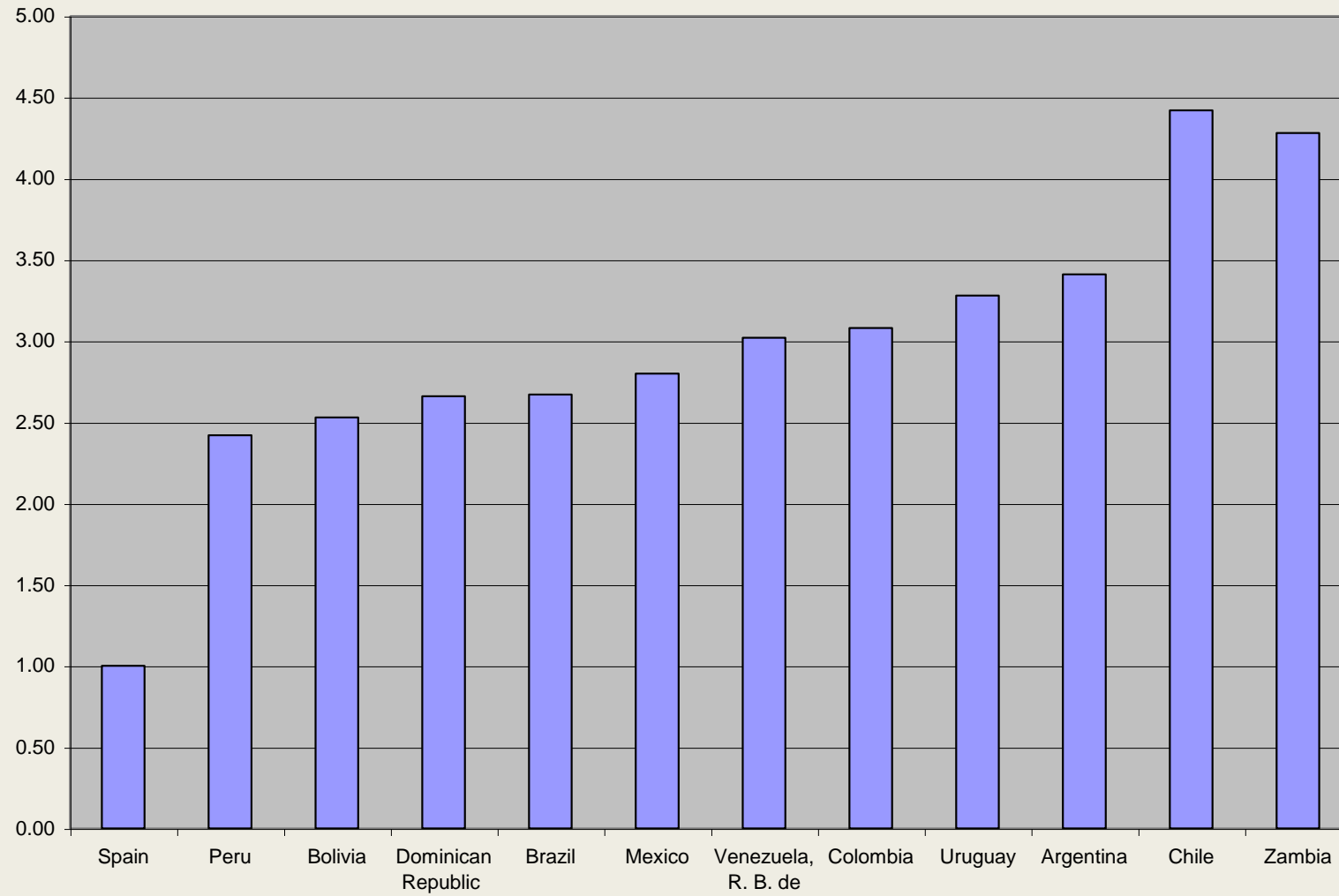


Source: Financial Access Survey, IMF and calculation by author. The graph shows the median in deposit accounts of commercial banks per 1,000 adults across the six World Bank regions and the group of high-income countries.

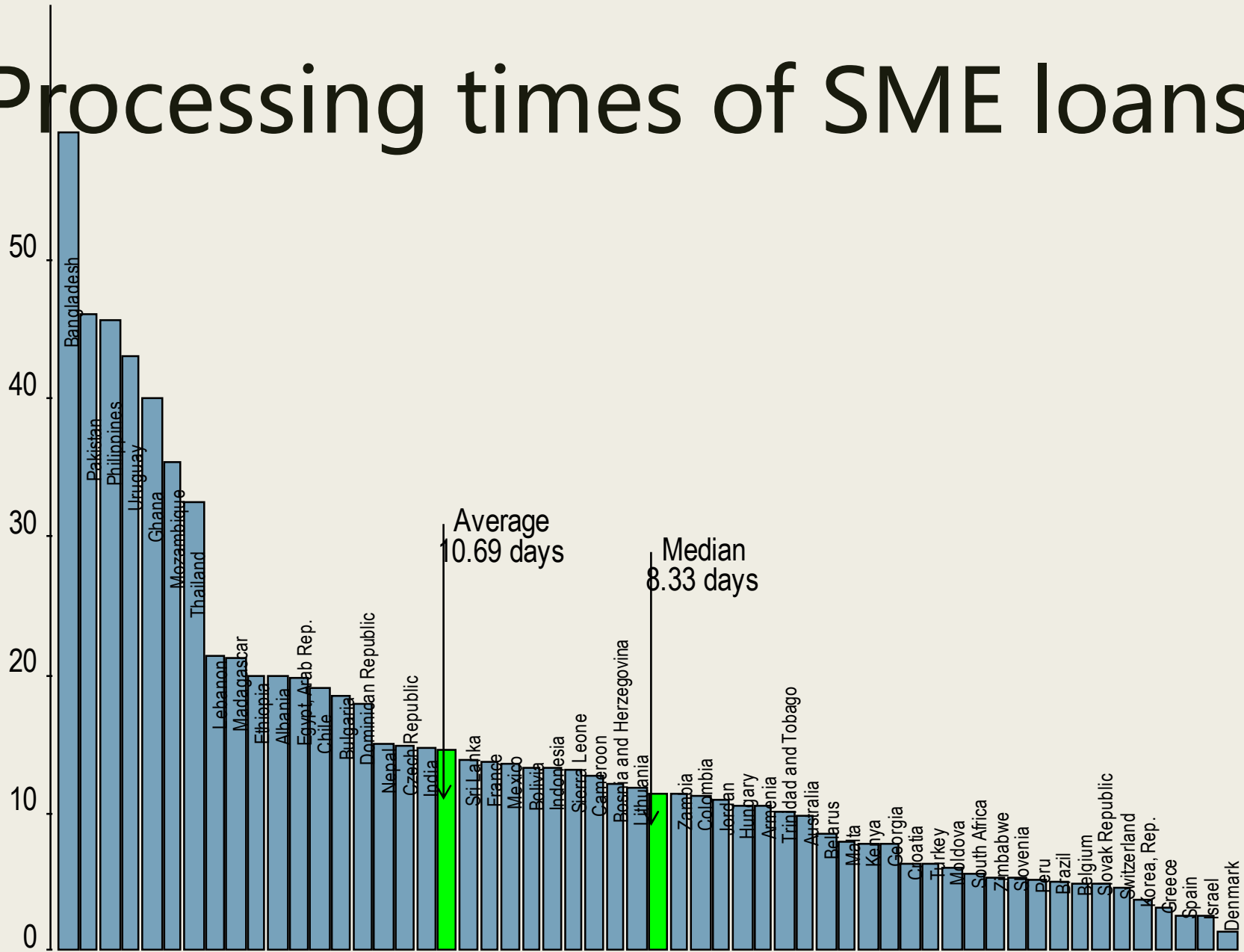
# Bank barriers to access

- Based on bank-level surveys
- Consider geographic, affordability and eligibility barriers
- Challenges:
  - *Comparability of products*
  - *High costs*
  - *Limited compliance unless through regulatory agencies*
- Beck, Demirguc-Kunt and Martinez Peria (2008, 2011)

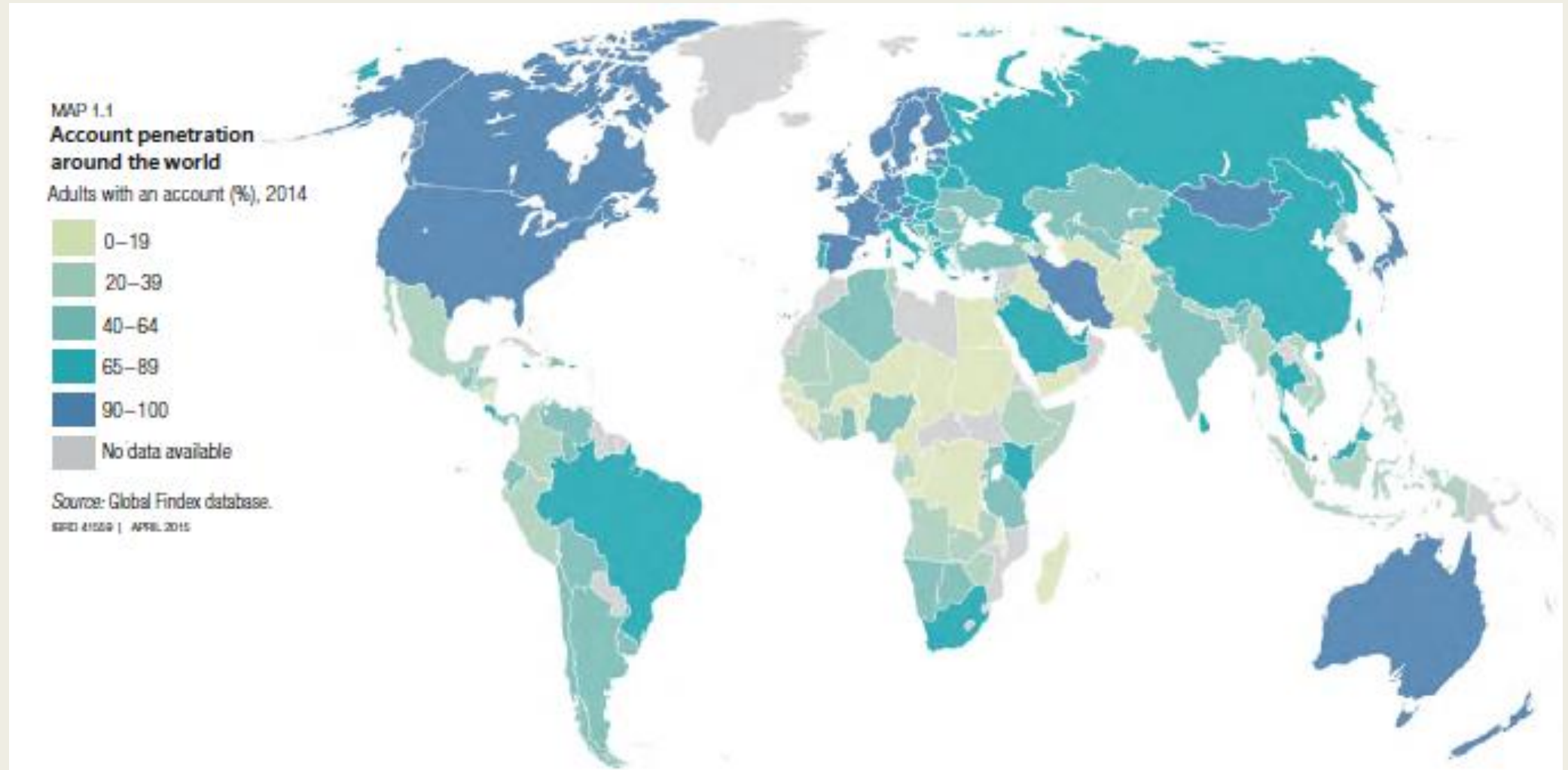
# Documentation requirements



# Processing times of SME loans

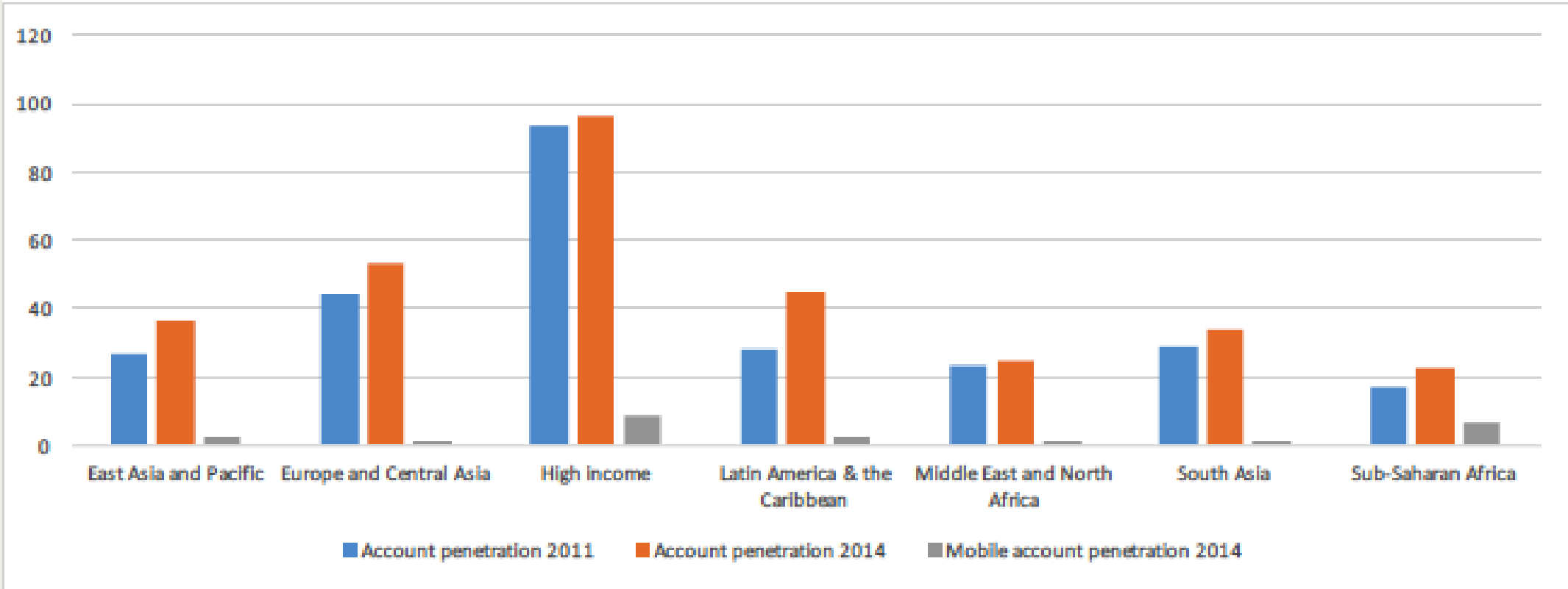


# From proxy to survey measures



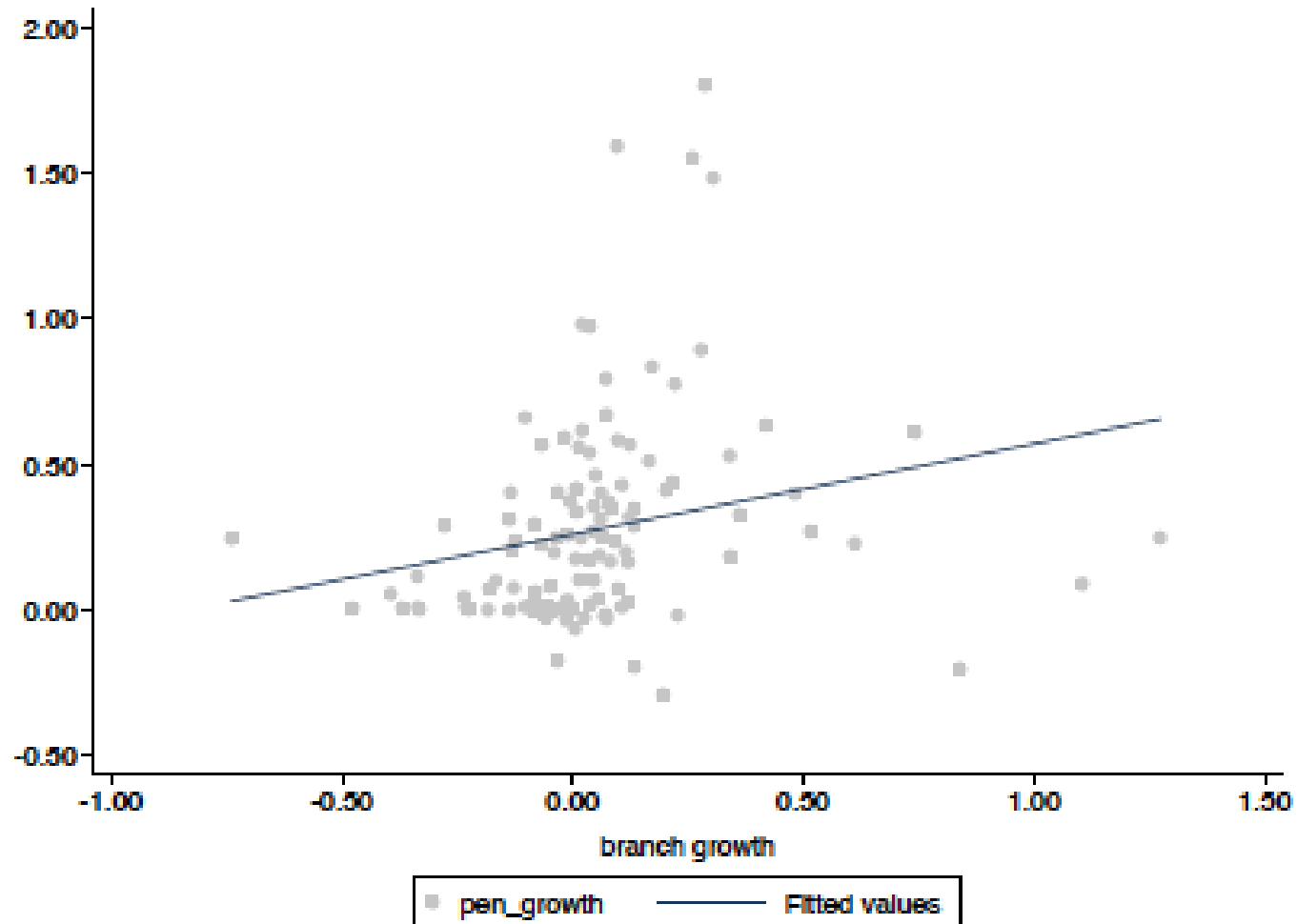


# Account penetration across

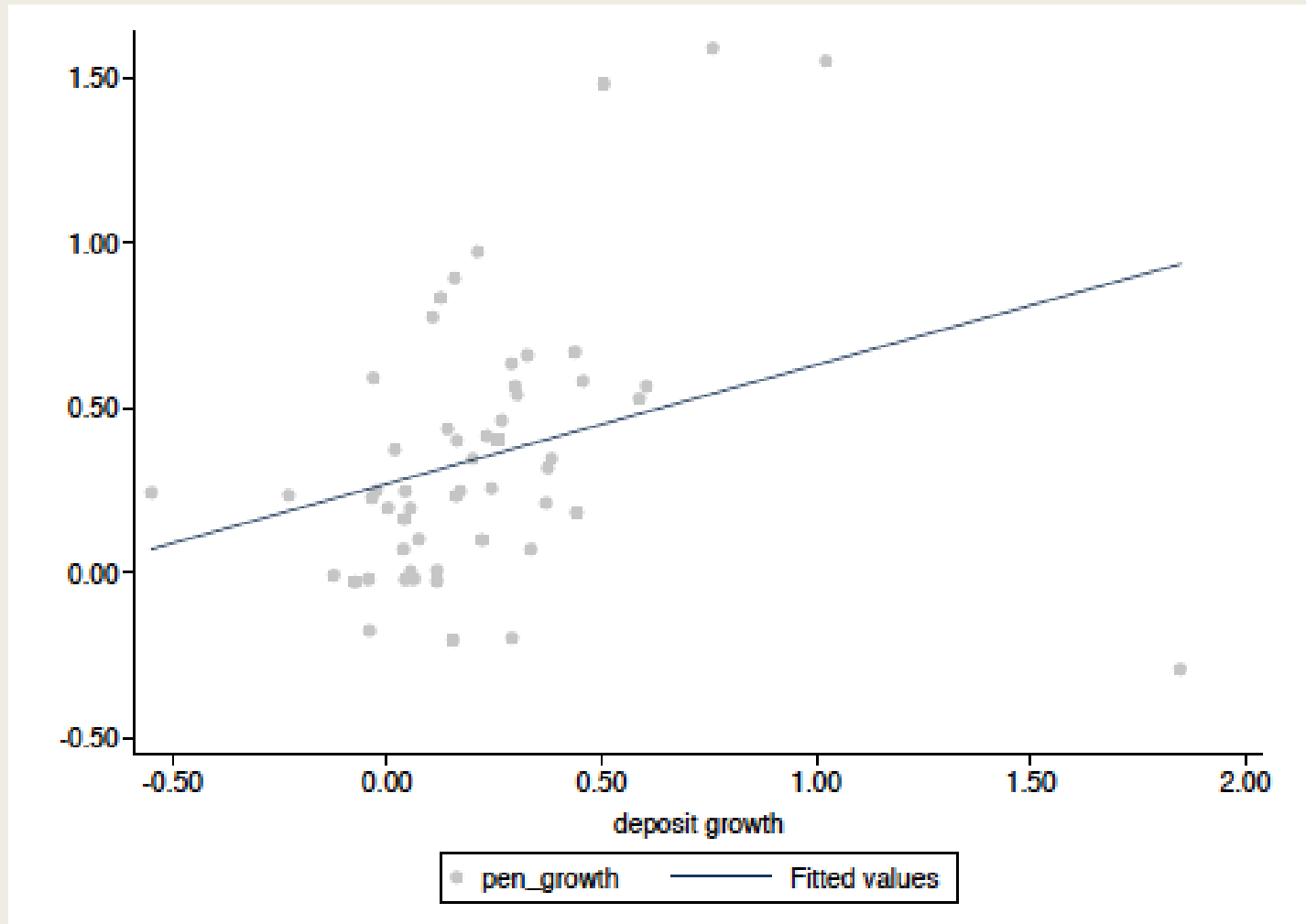


Source: Global Findex Survey, World Banks and calculation by author. The graph shows the median in account penetration across the six World Bank regions and the group of high-income countries.

# Branch penetration vs. account performance



# Deposits per capita vs. account penetration



# A few remarks on firm-level data

- Enterprise surveys on financing obstacles and actual use of external finance
  - *Problem: survey design and underlying census data*
  - *Mostly repeated cross-section, recently also panel dimension*
- Distinguish between demand and supply
  - *No loan b/c no need or discouraged?*
  - *Loan conditionality?*
- Alternative sources:
  - *Balance sheet data (e.g., Orbis) – no information on constraints*
  - *Credit registry data – no information on non-borrowers*

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# Questions to be asked?

- How far can and should countries go in facilitating financial deepening?
- How fast can we expect LICs to catch up to MICs and MICs to HICs?
- Should 100% of population have access to savings/credit services?
- Might there be levels/speeds of financial deepening and broadening too high for good of economy and society?

# Access possibility frontier – a framework

Market frictions

- Transaction costs
- Idiosyncratic and systemic risk

State variables:

- Invariant in the short-run and impose an upper limit on financial deepening
- Structural variables:
  - *Socio-economic factors (income, market size, population density, age dependency ratio, conflict)*
  - *Available technology and infrastructure*
- Policy variables:
  - *Macroeconomic management and credibility*
  - *Contractual and information frameworks*

Constrained equilibrium outcome

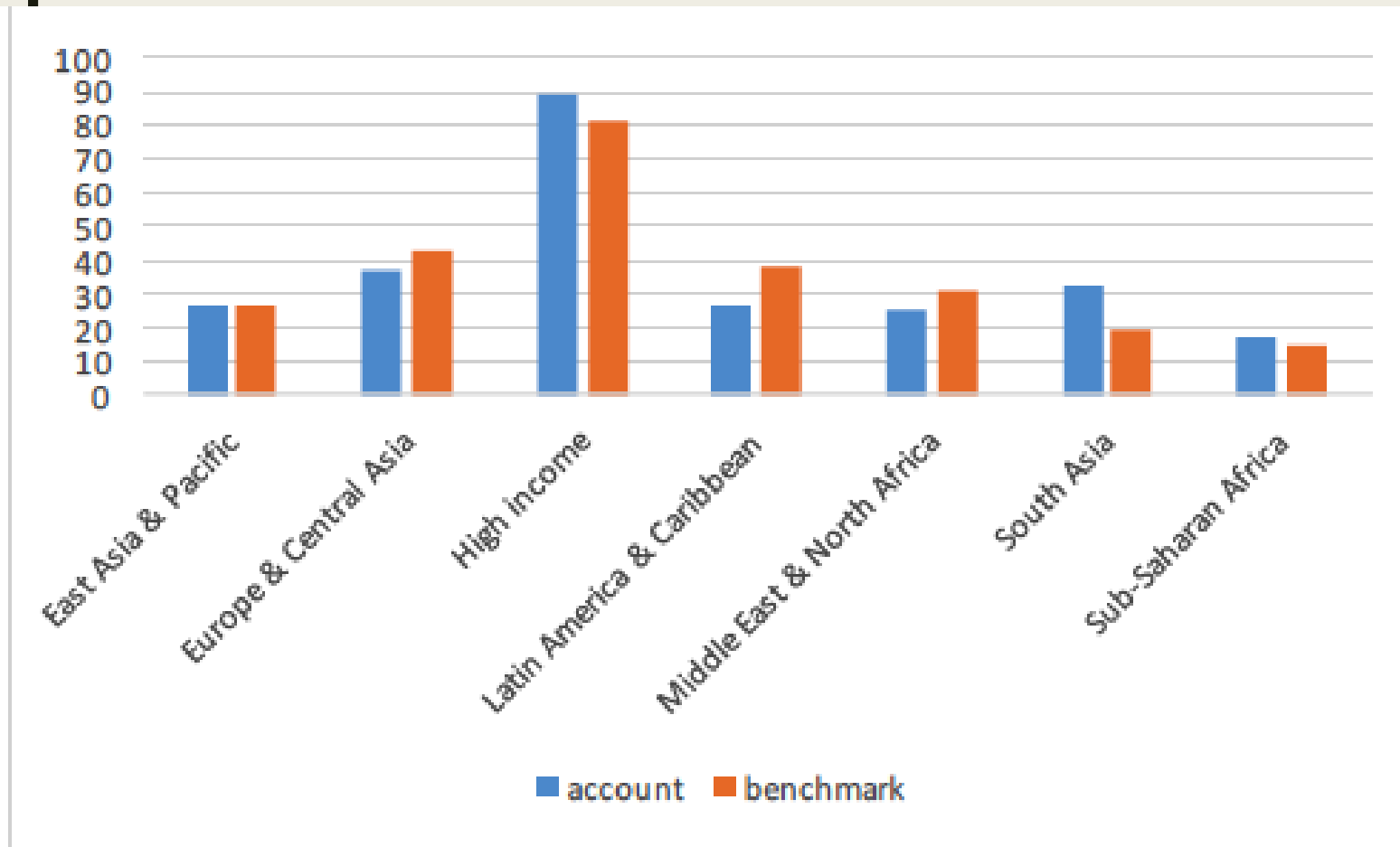
# Benchmarking model

- $FD_{i,t} = \beta X_{i,t} + \varepsilon_{i,t}$
- $X =$ 
  - log of GDP per capita and its square
  - log of population
  - population density
  - age dependency ratio
  - Offshore center dummy
  - Transition economy dummy
  - Oil-exporting country dummy

No financial sector policy variables included

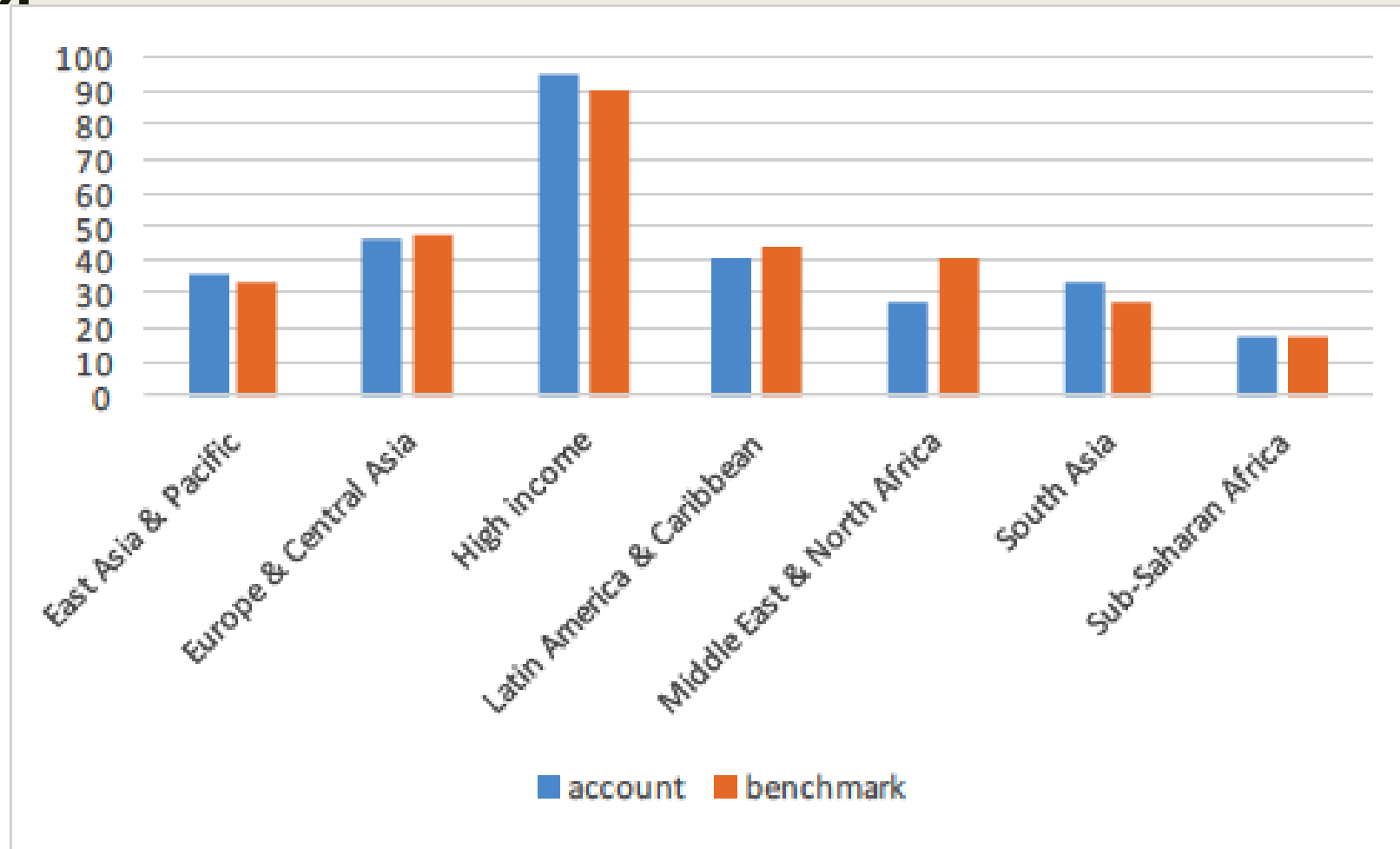


# Actual and predicted account penetration, 2011<sup>1</sup>



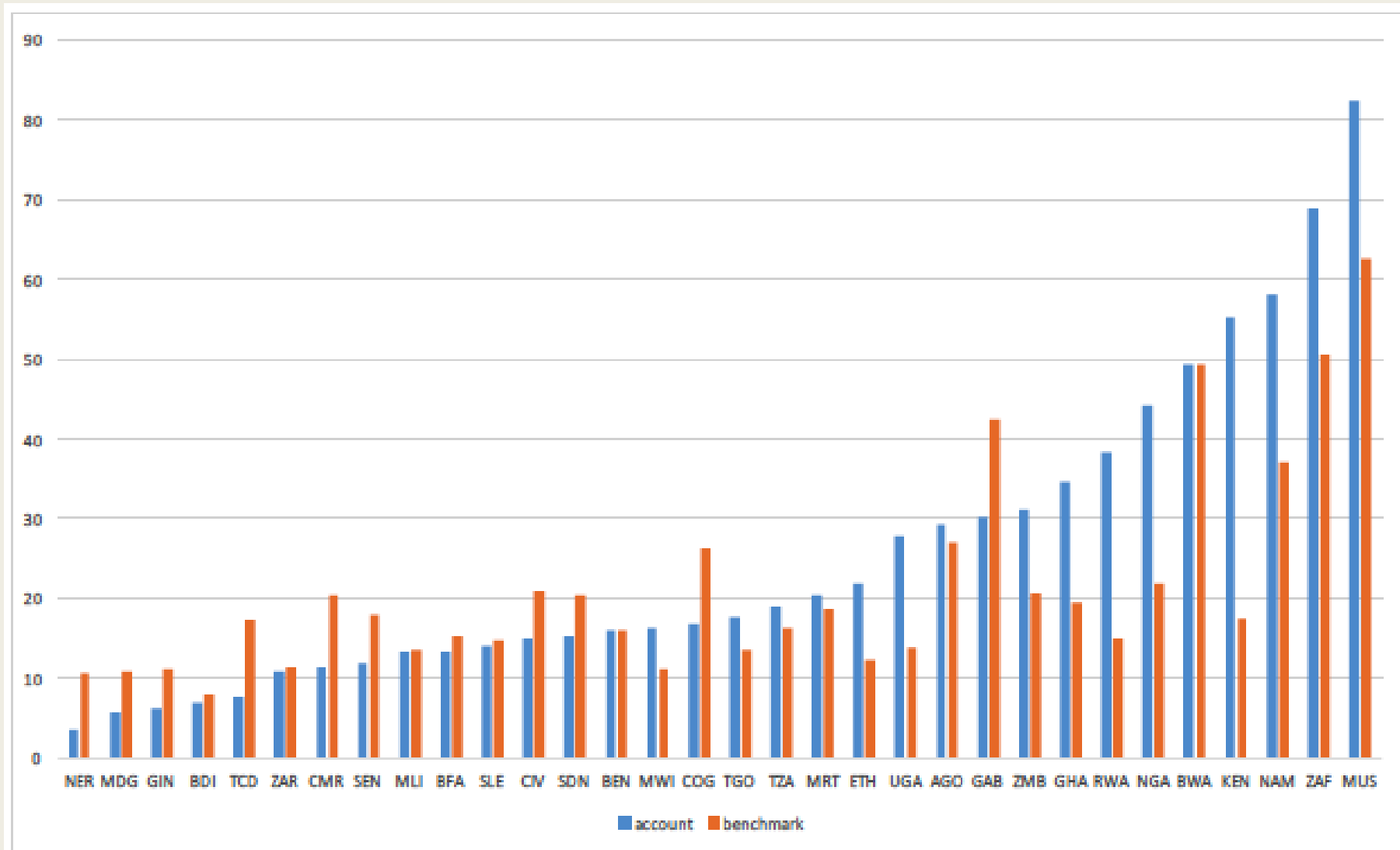
Source: Global Findex and FinStats, World Bank, and calculation by author. The graph shows the median in account penetration and the predicted median across the six World Bank regions and the group of high-income countries for 2011.

# Actual and predicted account penetration, 2014



Source: Global Findex and FinStats, World Bank, and calculation by author. The graph shows the median in account penetration and the predicted median across the six World Bank regions and the group of high-income countries for 2014.

# Actual and predicted account penetration across Africa



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# Innovation is key

- Financial innovation: new products, new delivery channels, new institutions
  - *Mobile money accounts, agency banking, rainfall insurance, micro-deposit taking institutions*
- Use of technology, big data, but also old concepts (e.g., group liability)
- Competition is key for innovation but government can play catalytic role
- Level playing field – open infrastructure to all safe and sound players
  - *Including payment system and credit registries*
- New regulatory approach to innovation
  - *Revert sequence of legislation-regulation-innovation*
- New approach to inclusion
  - *Move away from credit- or savings-led inclusion to payment-led inclusion approach*

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# The gender dimension

- Females are – unconditionally – less likely to have access to finance, though once conditioning on income, education, labor market status etc., the gender gap disappears, at least in LICs
  - *Other barriers to access (e.g., legal, cultural) and to becoming entrepreneur*
- Focus of micro-credit on women, b/c
  - *higher investment of resources in children and family – female empowerment\*
  - *Higher repayment likelihood*
  - *Trade-off: women might be less interested in enterprise growth*
- Important behavioral differences and often constraints to accessing and using financial services (including intra-household conflicts)

# The agenda going forward

- As nature of financial sector changes, data collection changes (new providers, new survey questions)
- What is aggregate effect of financial inclusion? What policies to increase financial inclusion?
  - *Moving beyond experiments to aggregate assessments*
  - *Needed: panel data; identification strategies*
- Interaction of financial inclusion with other policy areas
  - *Taxation and tax evasion*
  - *Monetary policy transmission*
- Trade-off inclusion vs. stability (mostly credit, but also operational risks in digital finance)
- Financial literacy



# Policy Conclusions

- Financial inclusion is important, but do not ignore financial deepening
  - *Structural transformation, infrastructure are critical for economic development*
- Bang for buck in financial inclusion is biggest in payment services
  - *Most immediate needs and effects*
- Challenge in data collection: as we are learning more about inclusion, surveys have to be adjusted
- Don't forget Goodhart's Law: when a measure becomes a target, it ceases to be a good measure
- Benchmarking important
- Demand-side constraints important

# THANK YOU



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