



# The Impact of Financial Development on Growth in the Middle East and North Africa (MENA)

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# The Impact of Financial Development on Growth in MENA

- I. Introduction – Dual Motivation
- II. Results – Depth and Quality of Banking
- III. Possible Causes
- IV. Conclusions



# I. Introduction

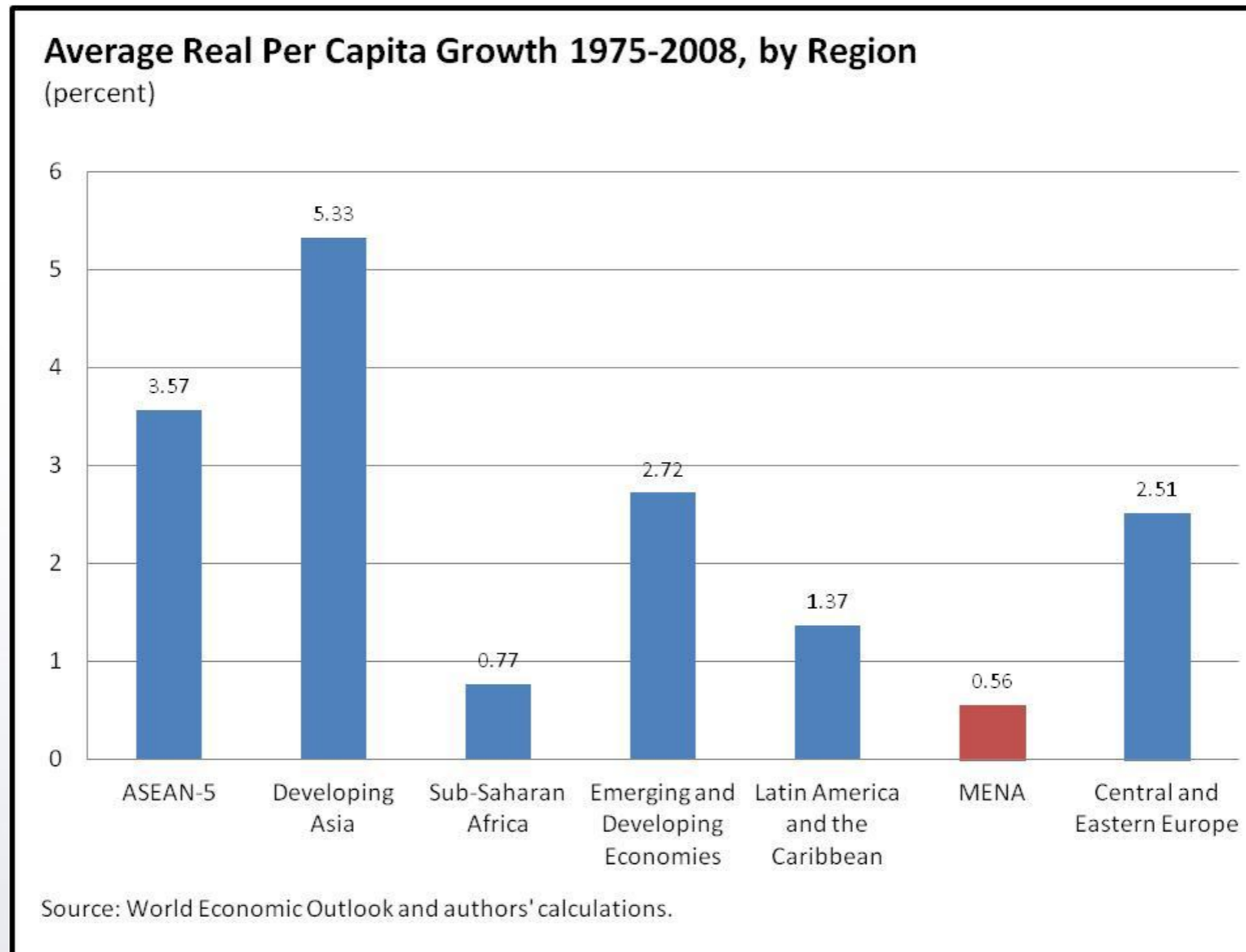
## Dual Motivation for this Study:

- Inadequate growth performance of the MENA region
- Region has highest levels of unemployment, youth unemployment and among the educated



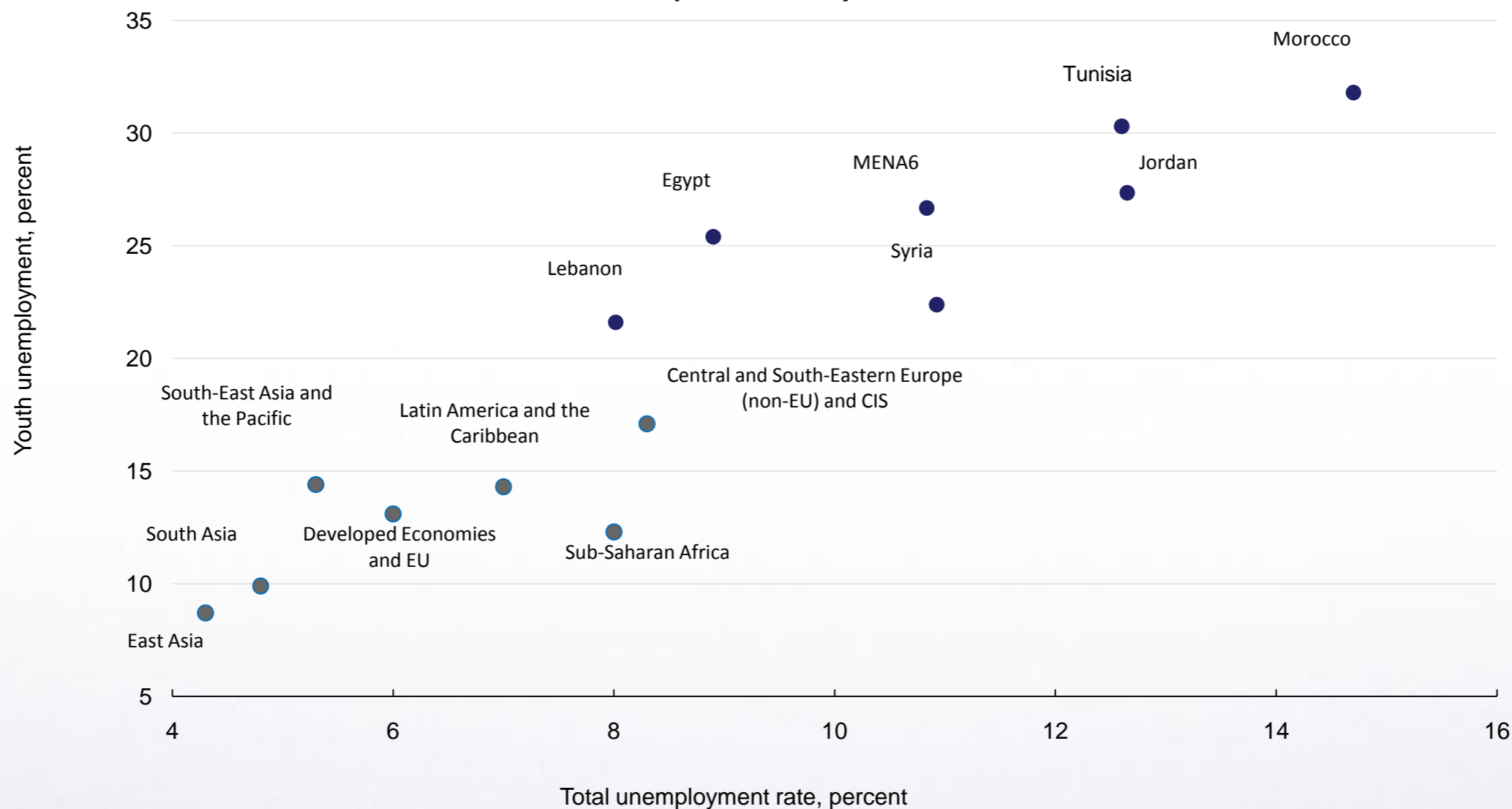
# I. Introduction

- **Motivation 1:** Inadequate growth performance of the MENA region:





# Unemployment Rates by Region<sup>1,2</sup> (2008<sup>3</sup>)



Sources: International Labor Organization; national authorities; IMF, *World Economic Outlook*; and IMF staff estimates.

<sup>1</sup>MENA6 countries are Egypt, Jordan, Lebanon, Morocco, Syria, and Tunisia.

<sup>2</sup>Total and youth unemployment rates for Morocco reflect data from Urban Labor Force Survey.

<sup>3</sup>Or most recent earlier year for which data are available.



# I. Introduction

Previous studies:

- **Hakura (2004)**: lower growth over 1980-2000 due to large governments (GCC), poor institutional quality (non-GCC), and political instability.
- **Guillaume & Rasmussen (2010)**: lower growth in oil importers 1990-2008 due to lack of openness, low ease of doing business, high government consumption.
- **Bhattacharya & Wolde (2010)**: lower growth over 1995-2008 due to labor skill shortages, **poor access to finance (survey)**, and electricity constraints.
- **Abu-Bader & Abu-Qarn (2008)**: evidence of weak links from finance to growth in 6 MENA countries.



# I. Introduction

- **Motivation 2:** Finance and growth literature, beginning with King and Levine (1993) shows a robust causal relationship between financial depth ( $FD$ ) and economic growth ( $y$ ):

$$\dot{y}_{it} = \beta_0 + \beta_1 FD_{it} + \beta_2 X_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

- Standard result:  $\beta_1 > 0$ , using different methods: Cross section, Time Series, Dynamic Panels.
- However, does  $\beta_1$  differ across regions or types of countries (in particular, oil exporters vs. others)?



# I. Introduction

**Summarizing, our main question is:**

Is there a financial sector component to low growth in MENA, and if so,

- is it insufficient financial depth ( $FD$  too low)?

and/or

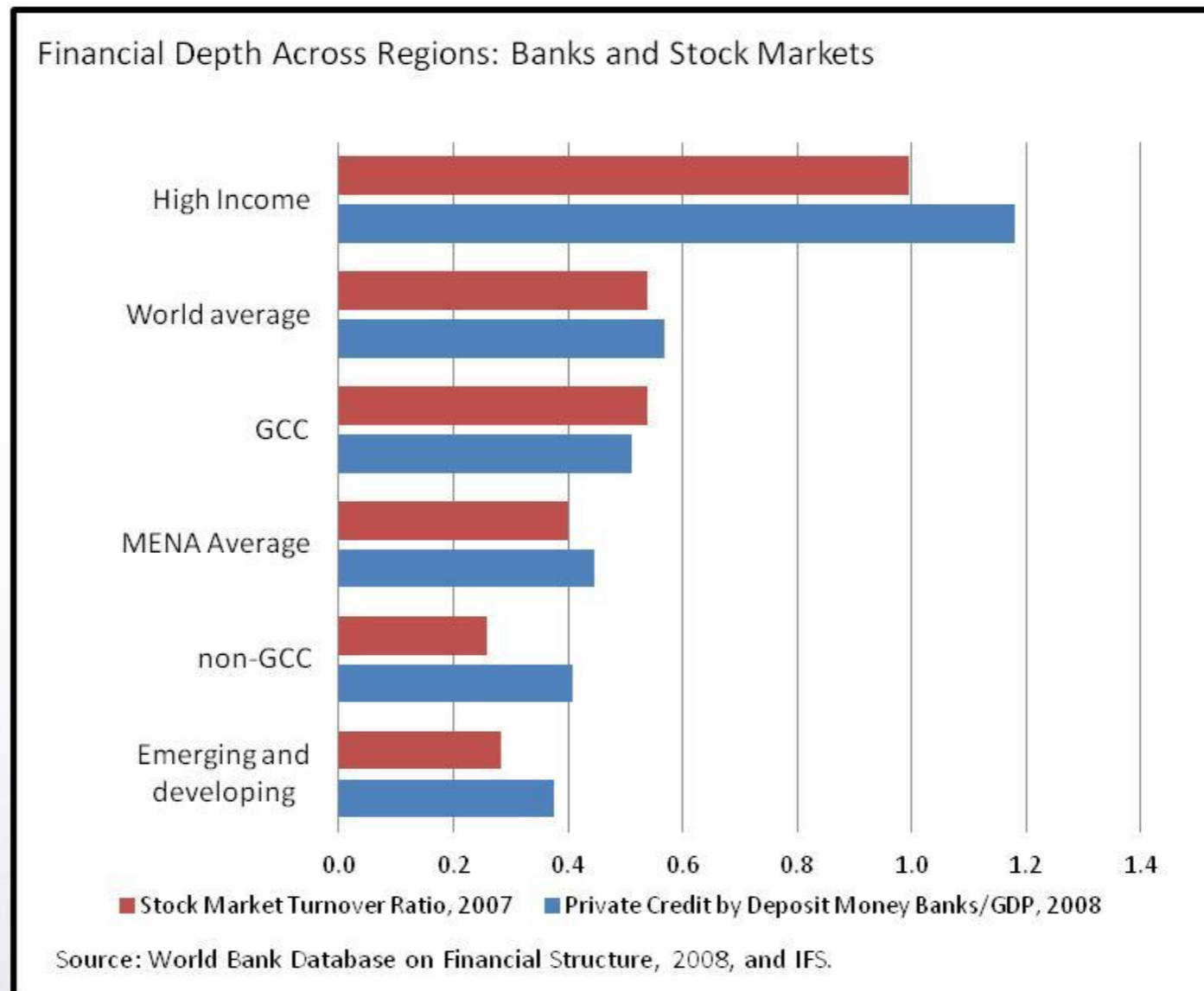
- is it insufficient growth impact of existing depth ( $\beta_1$  low), ie., a “*quality gap*”?





## II. Results- Depth

- First, depth does not seem to be the issue **at the aggregate level:**

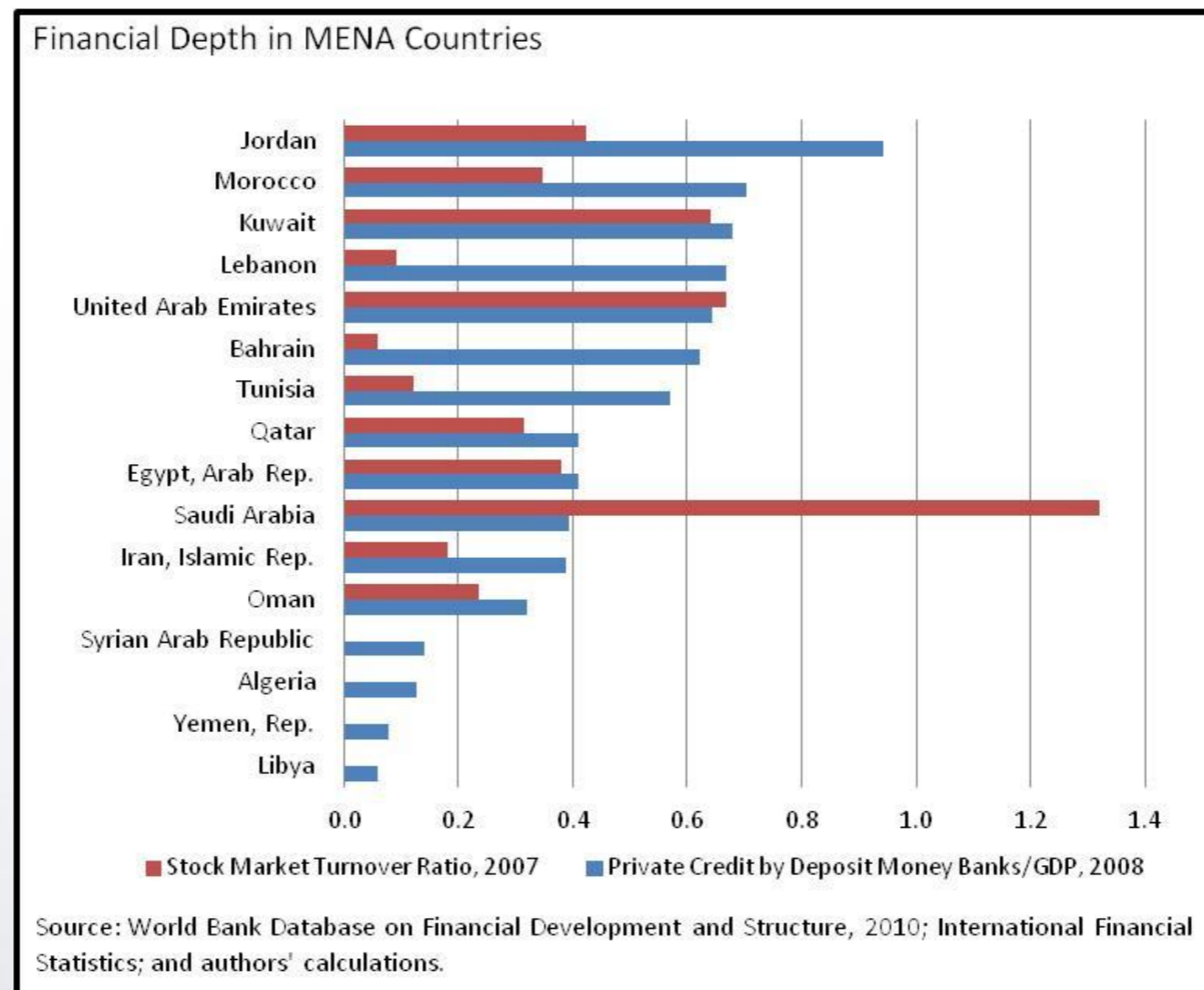




## II. Results- Depth

However, several issues:

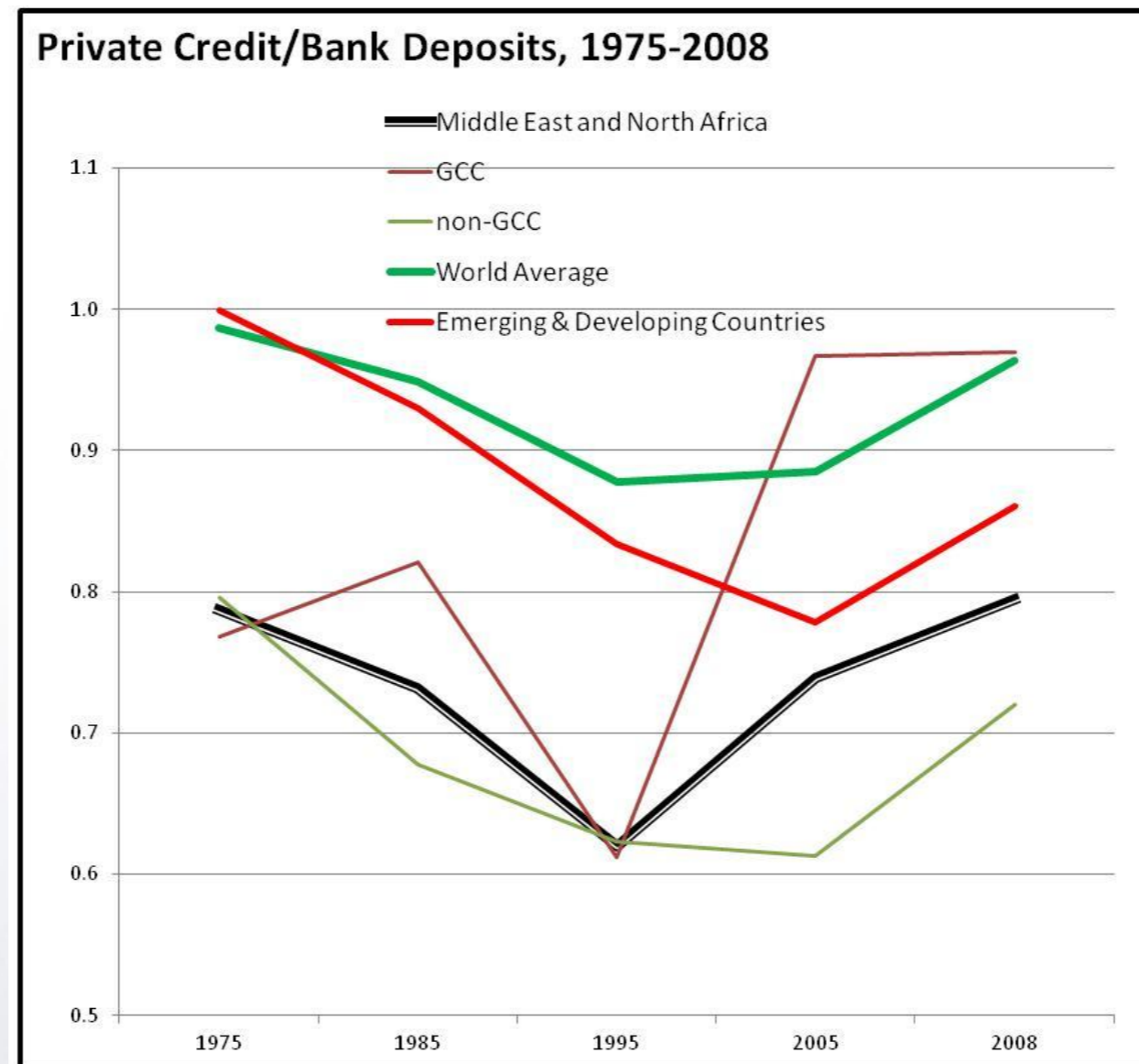
- Heterogeneity within MENA





## II. Results- Depth

- Given high levels of deposits, MENA bank intermediation (credit) should be much higher, particularly in non-GCC:





## II. Results - Quality

We undertake growth regressions, a la Beck and Levine (2004):

- Sample of 140 countries, including 14 MENA (GCC and non-GCC); 1975-2005, using five-year averages to smooth out cyclical variations.
- Dynamic panel GMM estimation (Arellano & Bover, 1995), with cross-section OLS as a robustness check.
- Dependent variable: per capita real GDP growth, per capita real non-oil GDP growth.
- **FD**: Use private credit-GDP for banking, turnover ratio for stock market development, other measures as robustness checks.
- **X** (controls): Initial GDPPC, Education, FDI,  $C_g$ , Terms of Trade.



## II. Results - Quality

Two types of heterogeneity incorporated:

- By region:

$$\beta_{10}FD_{it} + \beta_{11}FD_{it} \cdot REGION_i$$

- Oil exporters vs the rest:

- ❖ Oil exporter dummy:

$$\beta_{10}FD_{it} + \beta_{11}FD_{it} \cdot OilX_i$$

- ❖ Degree of oil dependence (oil real GDP/total real GDP)

$$\beta_{10}FD_{it} + \beta_{11}FD_{it} \cdot Oildep_i$$



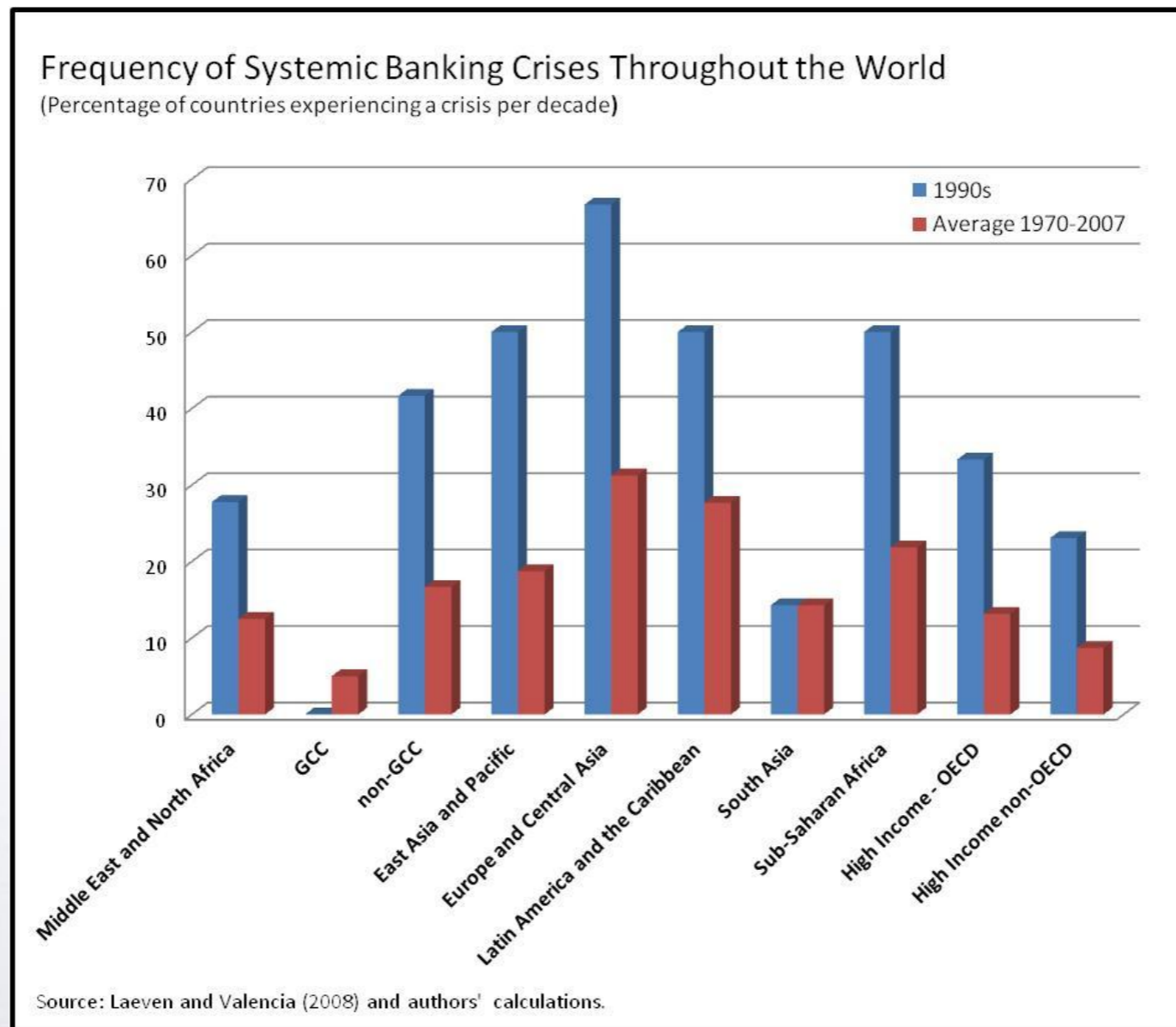
## II. Results - Quality

- There is a **regional** and **oil** effect: **bank credit** has a smaller impact on growth
- However, no such effects for stock market depth
- The link between finance and growth weakens as the time period is expanded beyond the 1960-89 time period originally studied by King & Levine
- This may be linked to occurrence of financial crises



## II. Results - Quality

For MENA, this adjustment is relevant, as the region has been relatively immune to financial crises: finance-growth link restored



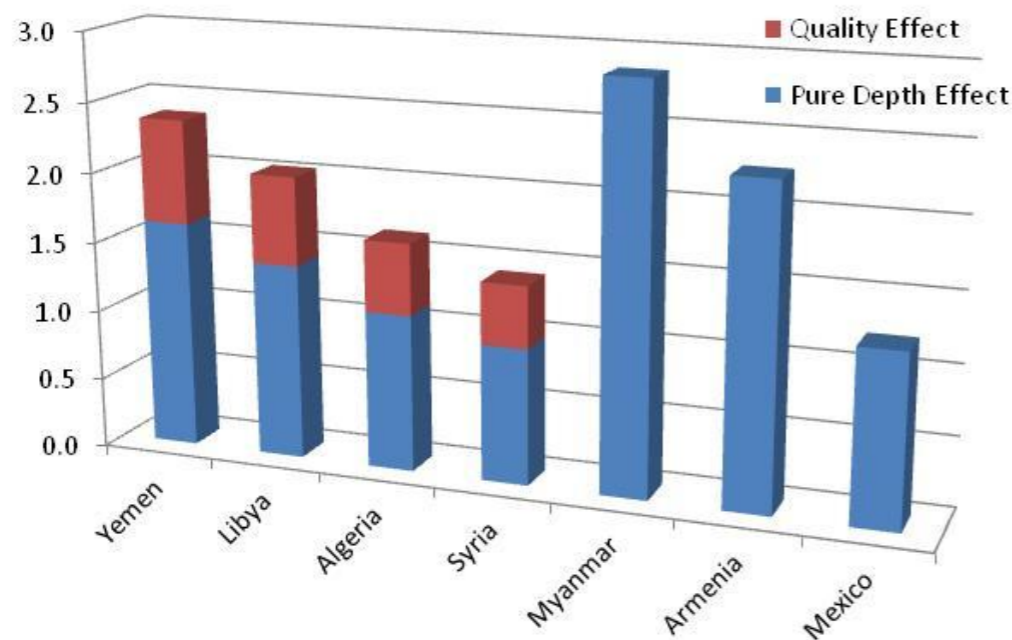


## II. Results – How Large?

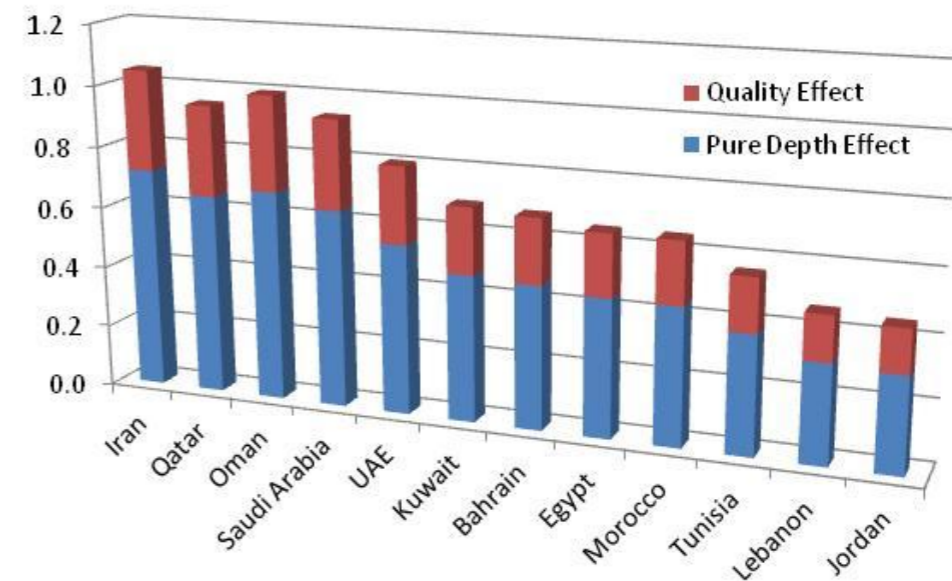
Quantifying the depth/quality effects of banking depth:

- **Conservatively**, the growth benefits of banking depth in MENA are  $\frac{1}{3}$  lower than in other regions (coefficient of 0.011 vs 0.016).

**Low Banking Depth Countries**  
Growth Impact of Raising Credit-GDP to Emerging Country Average  
(Average annual percentage points, per capita real GDP)



**Mid-to-High Banking Depth Countries**  
Growth Impact of Increasing Credit-GDP by 25 Percentage Points  
(Average annual percentage points, per capita real GDP)







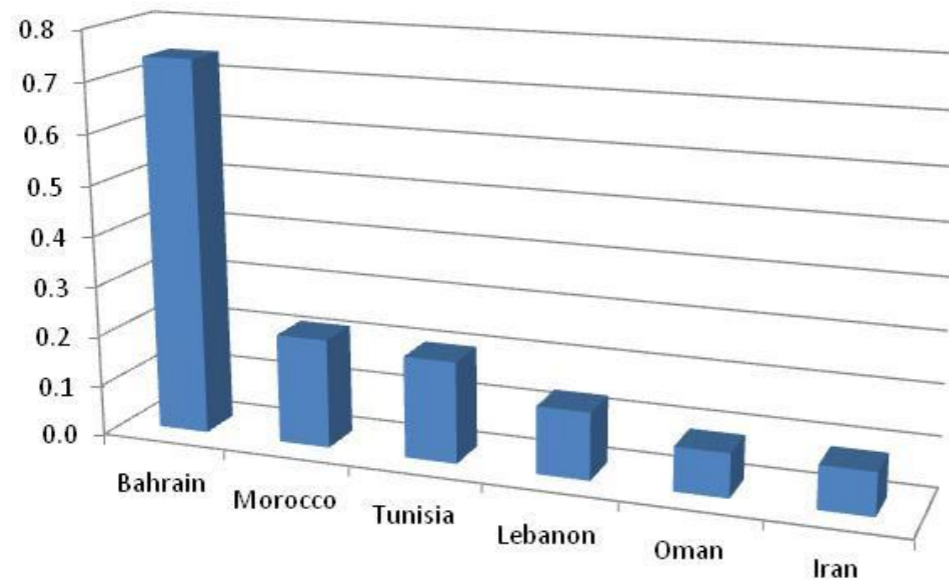
## II. Results – How Large?

Quantifying the depth effects of stock market development:

- Sizable potential benefits from further stock market development.

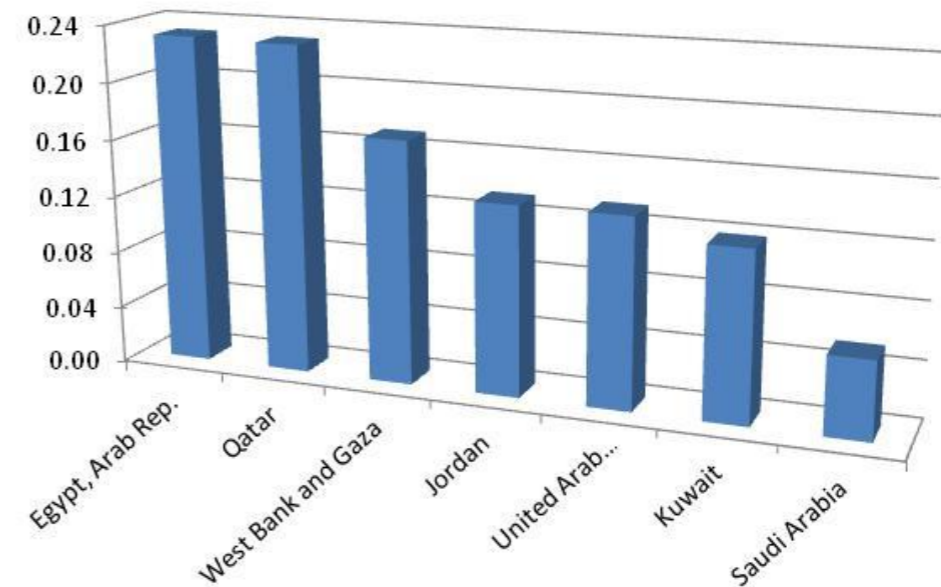
### Low Stock Market Depth Countries

Growth Impact of Raising Turnover to Emerging Country Average  
(Average annual percentage points, per capita real GDP)



### Mid-to-High Stock Market Depth Countries

Growth Impact of Increasing Turnover by 25 Percentage Points  
(Average annual percentage points, per capita real GDP)

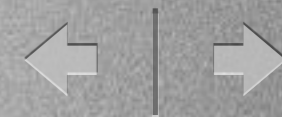




## III. Possible Causes for Lack of Quality

Results on quality are consistent with recent work (World Bank Flagship Report on Finance in MENAS) analyzing the output of MENA financial systems:

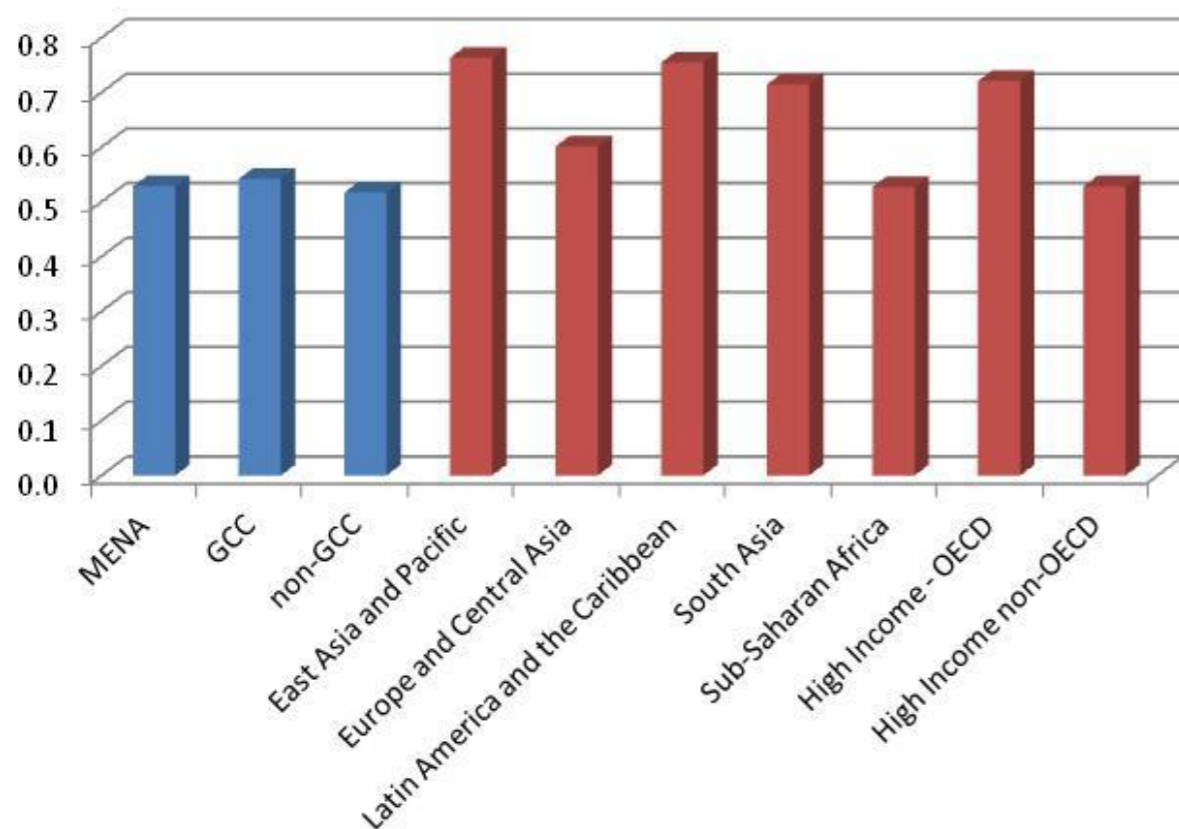
- Despite relatively large size, MENA financial systems have fallen short in providing access
  - ❖ To credit, especially to small and medium-size enterprises
  - ❖ To households, in terms of deposits and other banking services
- Loan concentration also tends to be very high, possible prevalence of connected and/or name lending



### III. Possible Causes for Lack of Quality

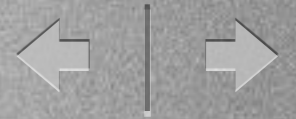
One possible cause: **lack of banking competition**, as shown by Anzoategui, Martínez Pería, and Rocha (2010).

Degree of Competition: Average H-Statistic estimated over 2002-08  
Scale: 1 = perfect competition, Positive, but < 1, Monopolistic Competition



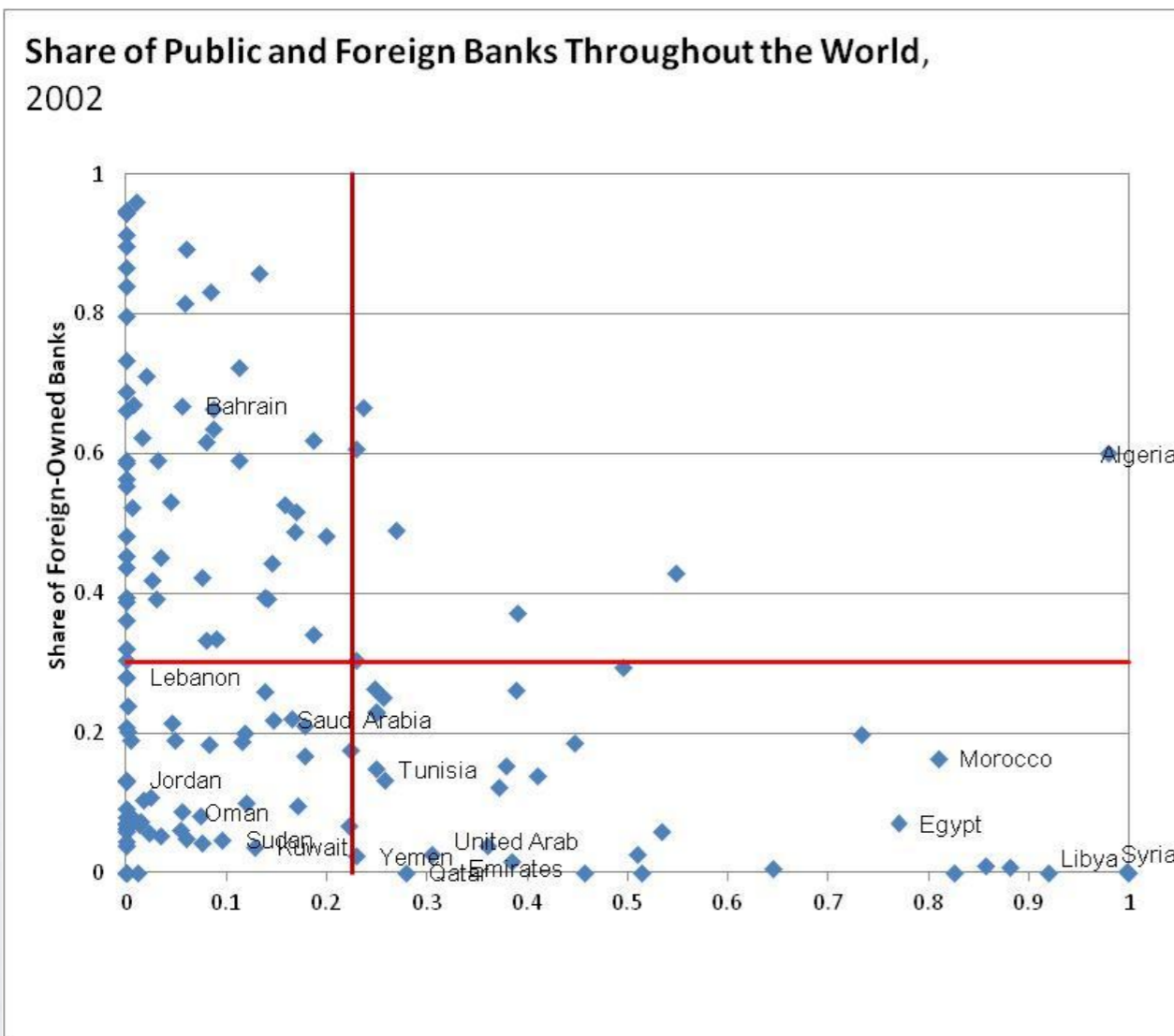
Source: Anzoategui, Martínez Pería, and Rocha (2010) and authors' calculations.

- When estimated region-wide, MENA significantly less competitive than other regions (exc SSA).
- 2<sup>nd</sup> stage regressions showed that lack of competition is linked to:
  - ❖ poor credit information
  - ❖ constraints to entry
  - ❖ lack of alternatives to bank finance

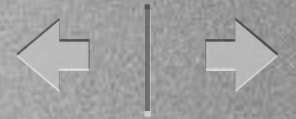


### III. Possible Causes for Lack of Quality

A second (related) possible cause: **bank ownership**, often high state participation, low foreign penetration (although heterogeneity).

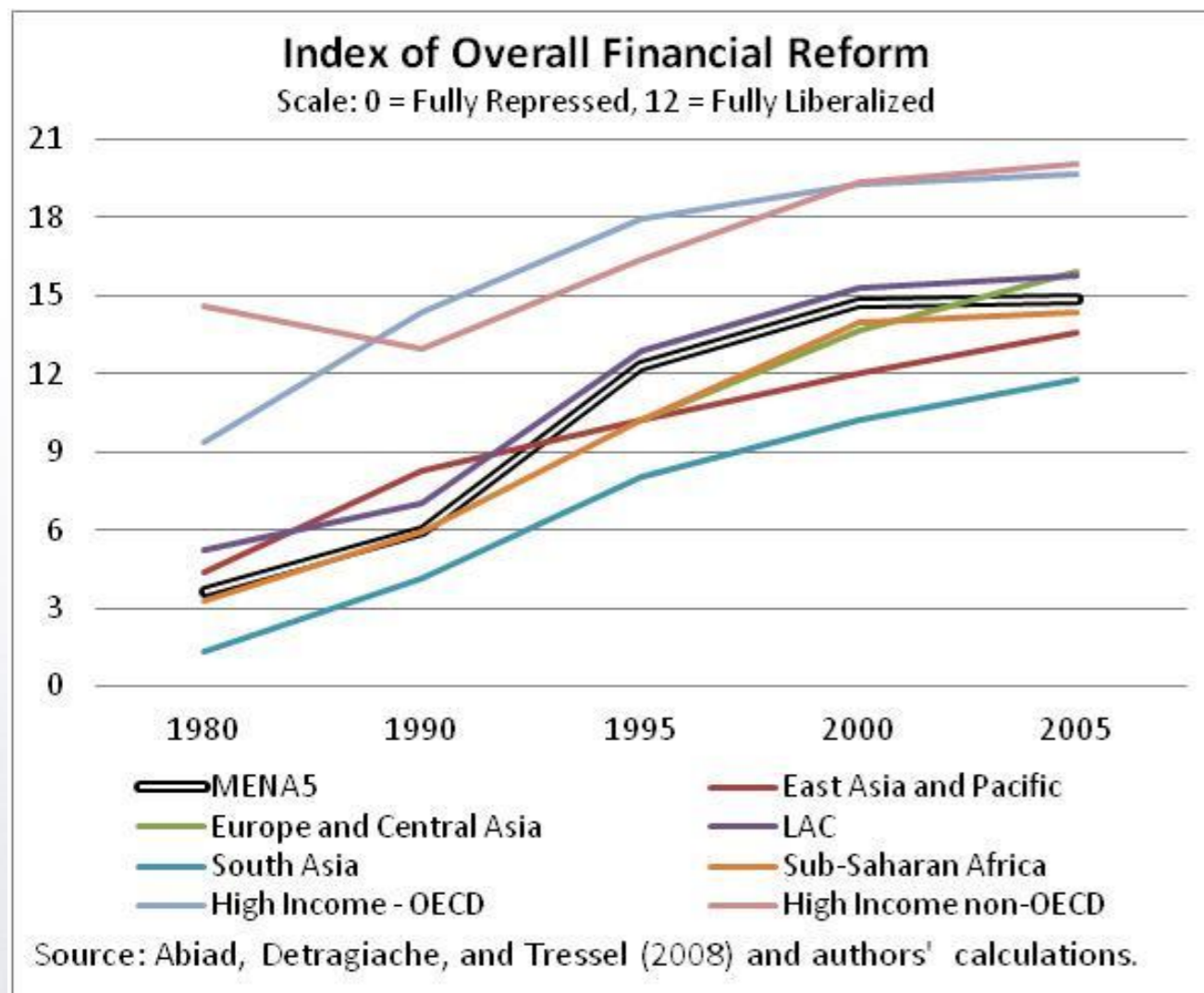


- State ownership has been associated with low depth worldwide...
- ...while foreign penetration is associated with greater efficiency, competition.
- Korner & Schnabel (2010): growth is not necessarily adversely affected by state bank participation, but is so when coupled with:
  - ❖ low financial depth
  - ❖ weak institutions



### III. Possible Causes for Lack of Quality

A third issue: **status of financial reform**, difficult to measure, but information available for five MENA countries (ALG, EGY, JOR, MAR, and TUN)



Using Abiad, Detragiache & Tressel (2008):

- Overall intermediate level compared to other regions, but...
- ...overtaken by Europe and Central Asia in 2005...
- ...lowest progress in reform 2000-05
- Weakest areas: capital account openness and privatization



## IV. Conclusions

- We find that, on average, financial depth (banks and markets) in MENA is comparable to that of other regions. However,
  - ❖ Insufficient depth in some countries
  - ❖ Banking depth (credit) not as high as it should be, given ability to attract deposits, particularly in non-GCC
- A “quality gap” is evident; for given banking depth
  - ❖ Growth benefits of financial depth are significantly smaller vs other regions
  - ❖ Consistent with other findings on lack of access to financial services
  - ❖ Banking competition is also weaker



## IV. Conclusions

- Policy should aim to
  - ❖ To encourage financial depth where most lacking
  - ❖ To improve quality of banking depth
- In the following areas:
  - ❖ Legal rights of creditors, macroeconomic stability
  - ❖ Continuing to progress on financial reform
  - ❖ Credit information environment and relaxing entry restrictions
  - ❖ Reassessing the role of state banks
  - ❖ Development of domestic debt markets