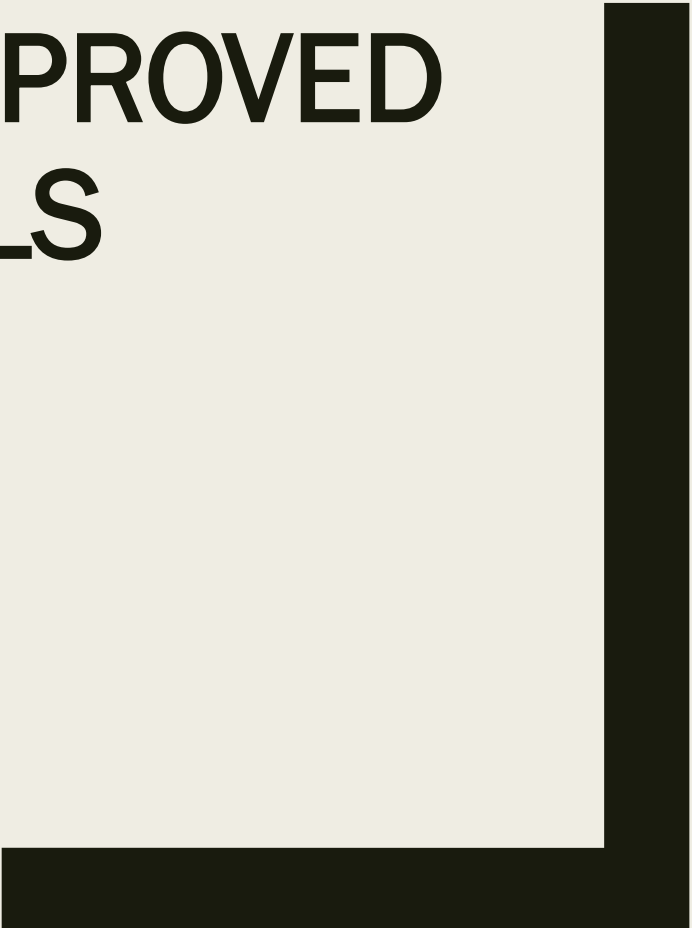




# THE ECONOMICS OF IMPROVED CHILEAN SCHOOLS

**Eric Hanushek**  
Stanford University

*June 2019*



# UN Sustainable Development Goals



Development = Growth




Growth = Skills



# Conclusions

1. Development = growth

*- Recent focus on fiscal and political issues  
cannot neglect future*

 *Growth = skills*

2. Value of school improvement is enormous

3. Improvement is possible

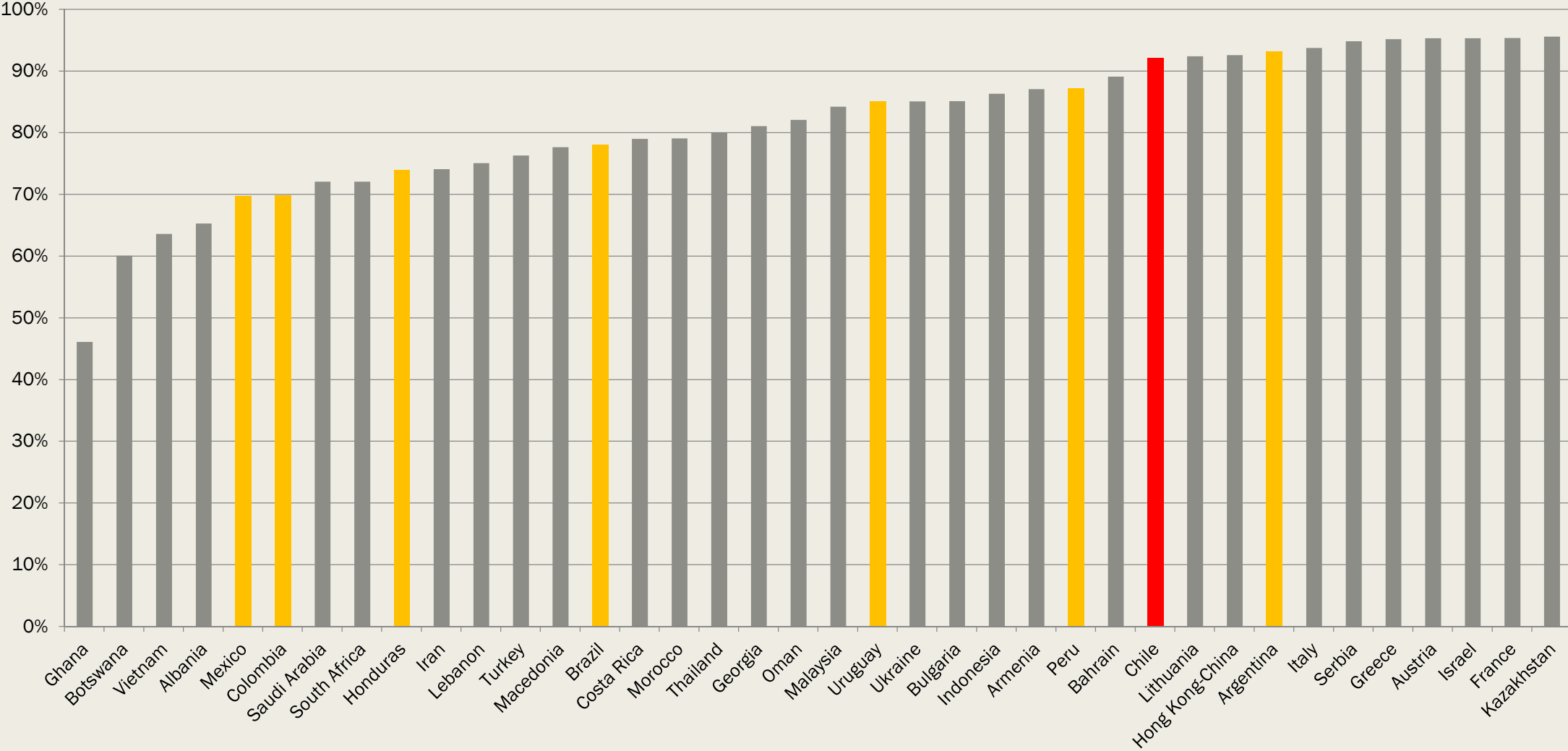
4. Improvement requires continued  
commitment

# KNOWLEDGE CAPITAL

Education and the Economics of Growth



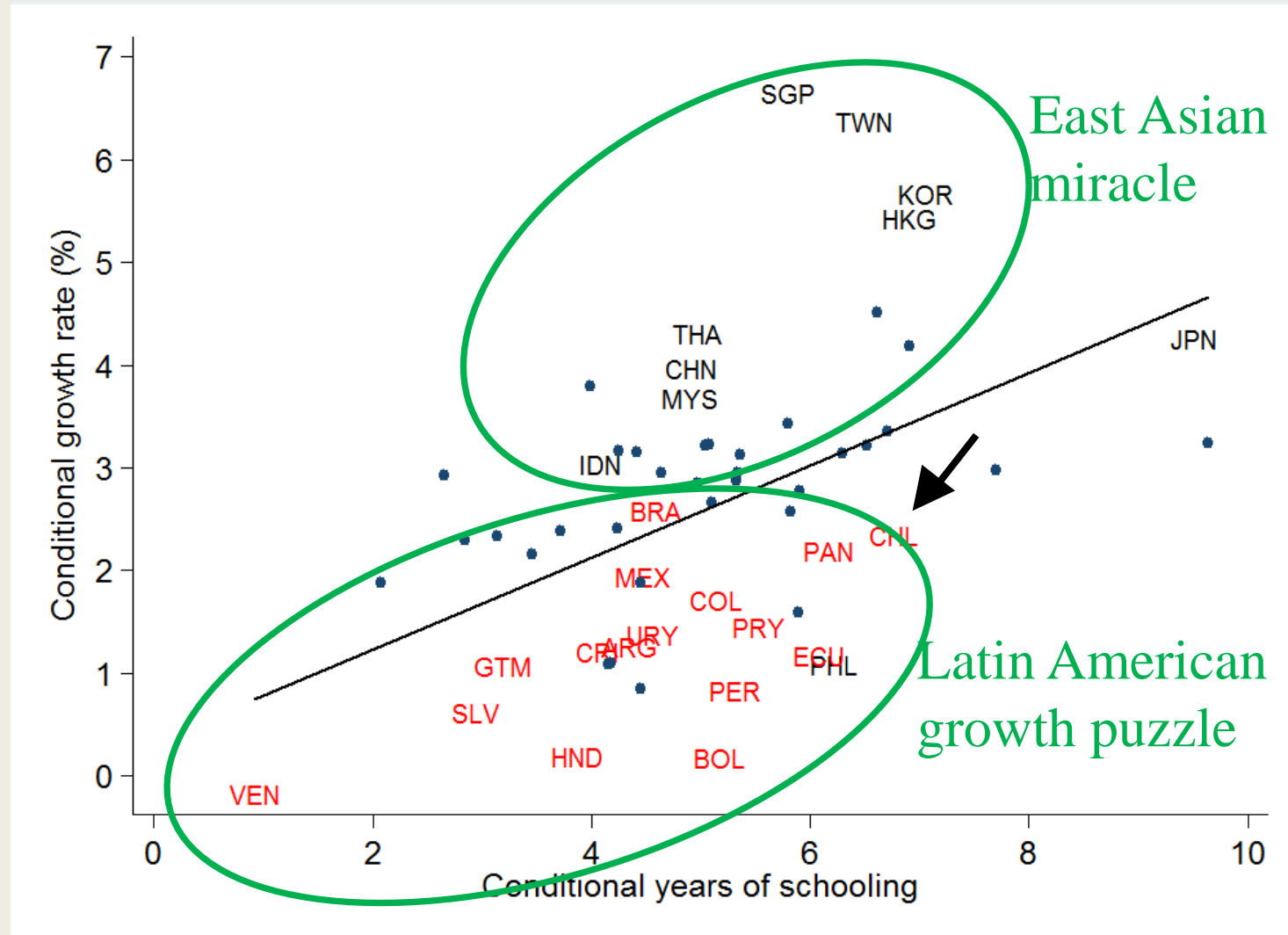
# Secondary School Enrollment Rates, 2012



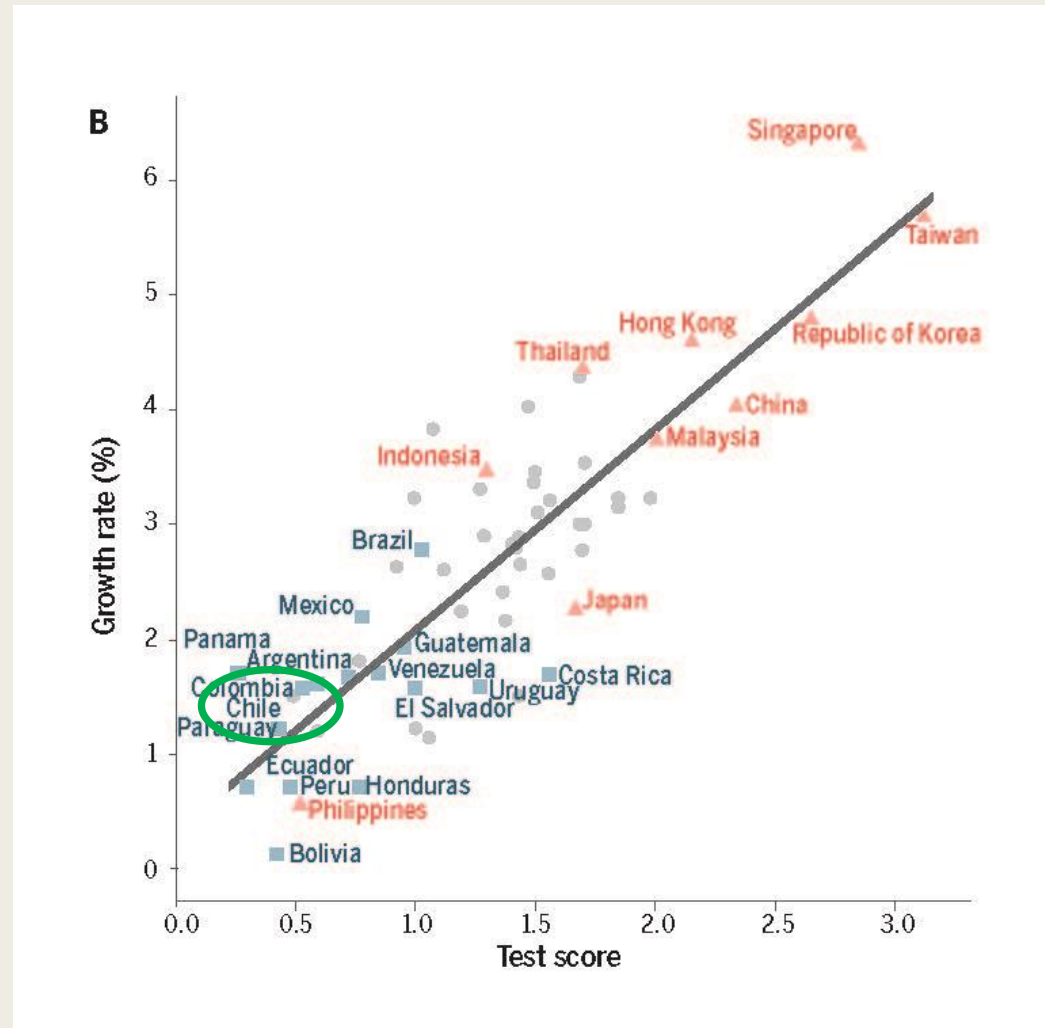




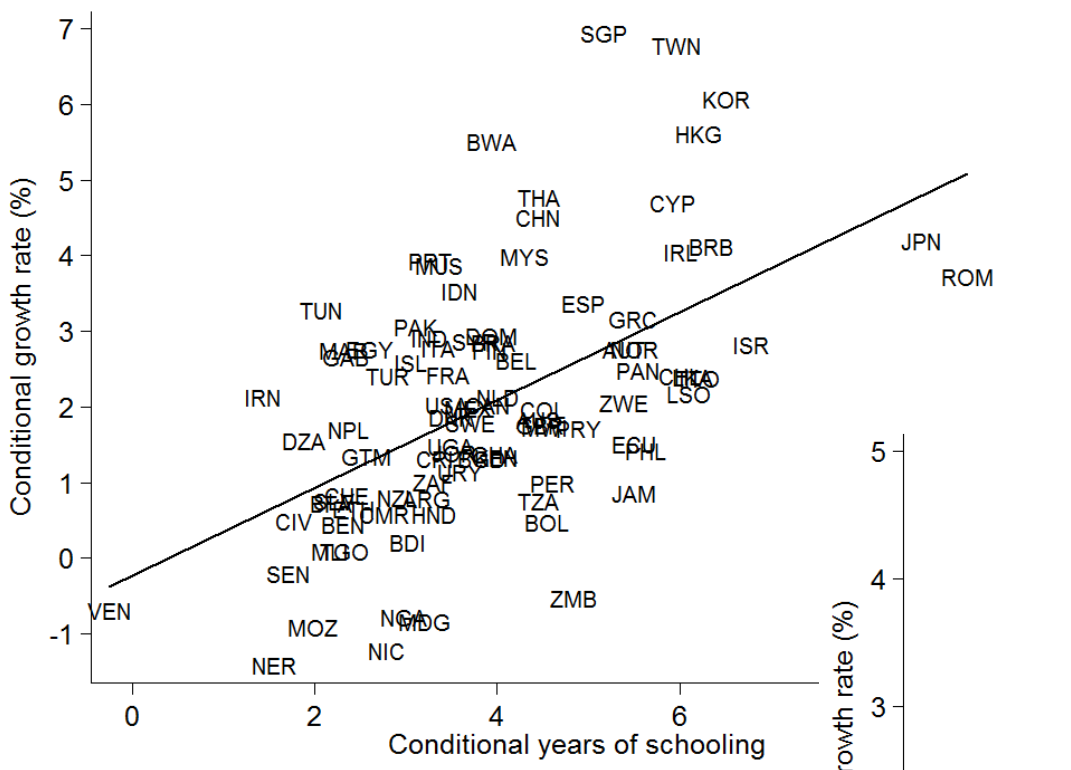
# 1. Two Puzzles: East Asia and Latin America



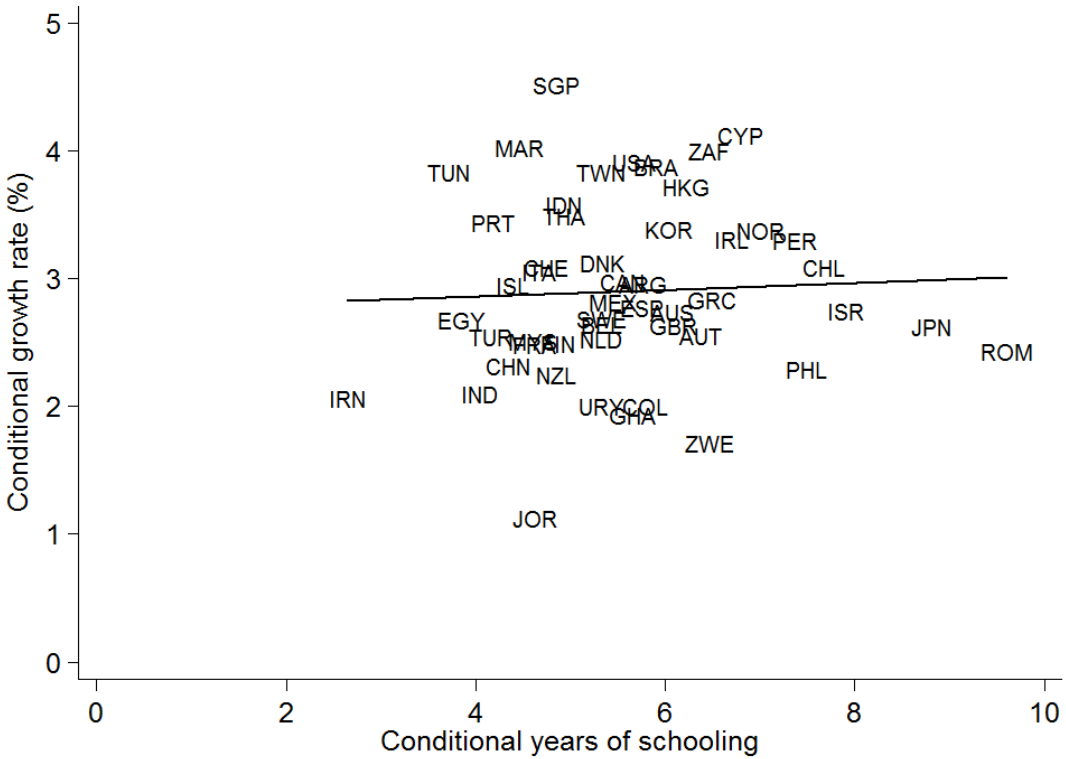
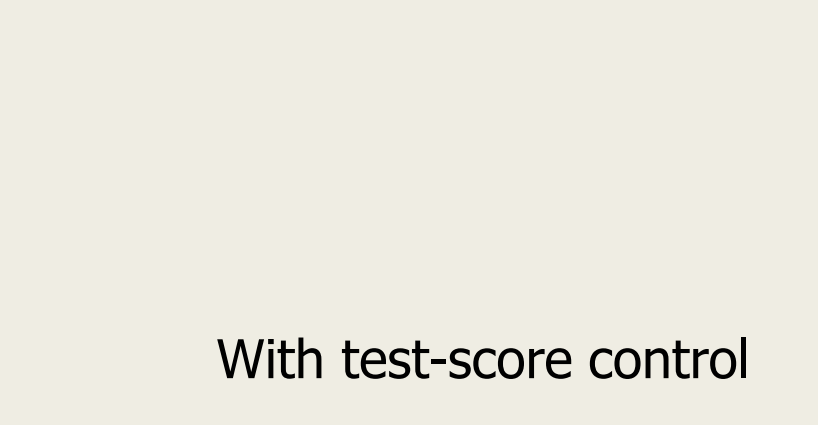
# Knowledge Capital and Economic Growth, 1960-2000



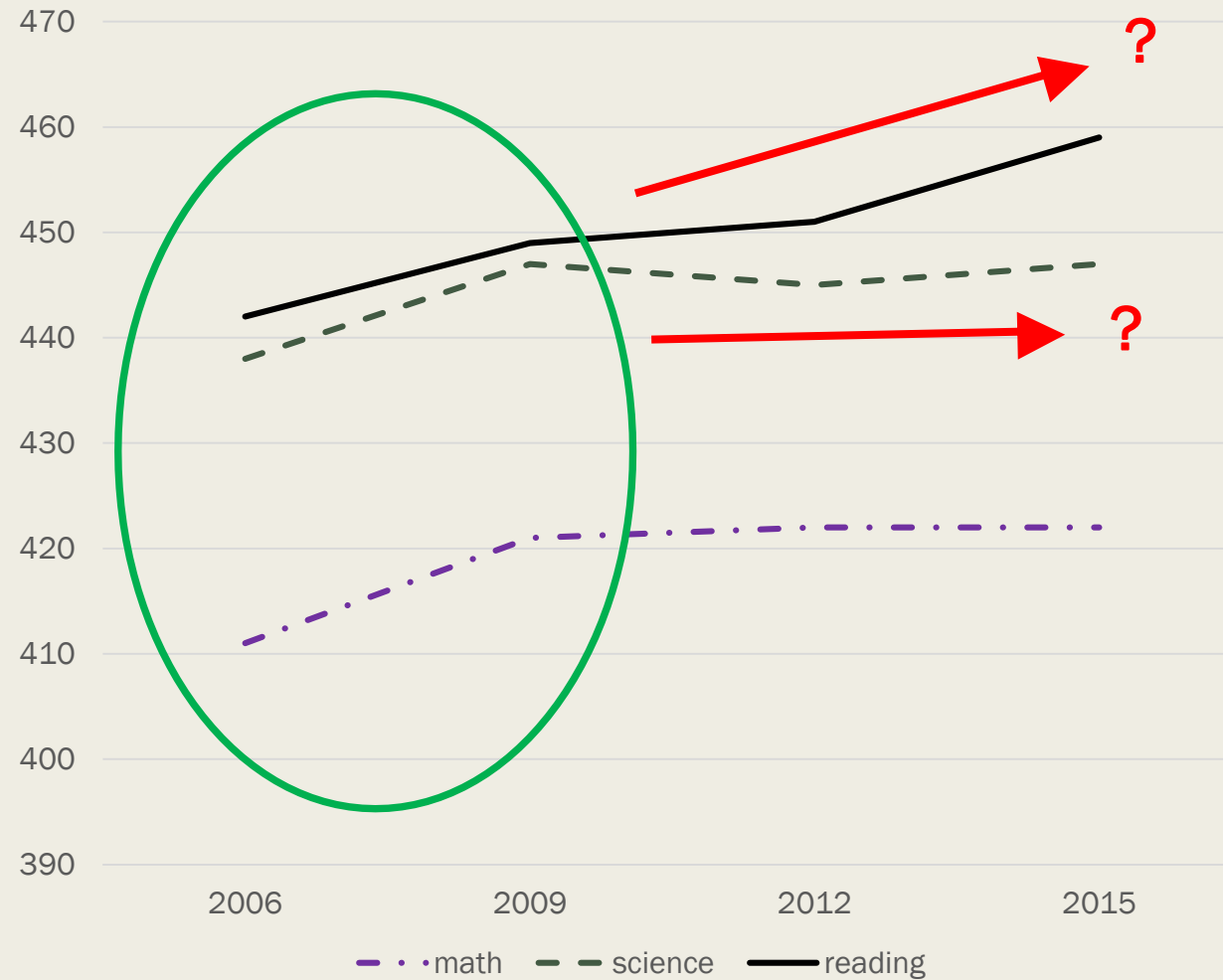
# Years of Schooling and Economic Growth



Without test-score control



# PISA in Chile

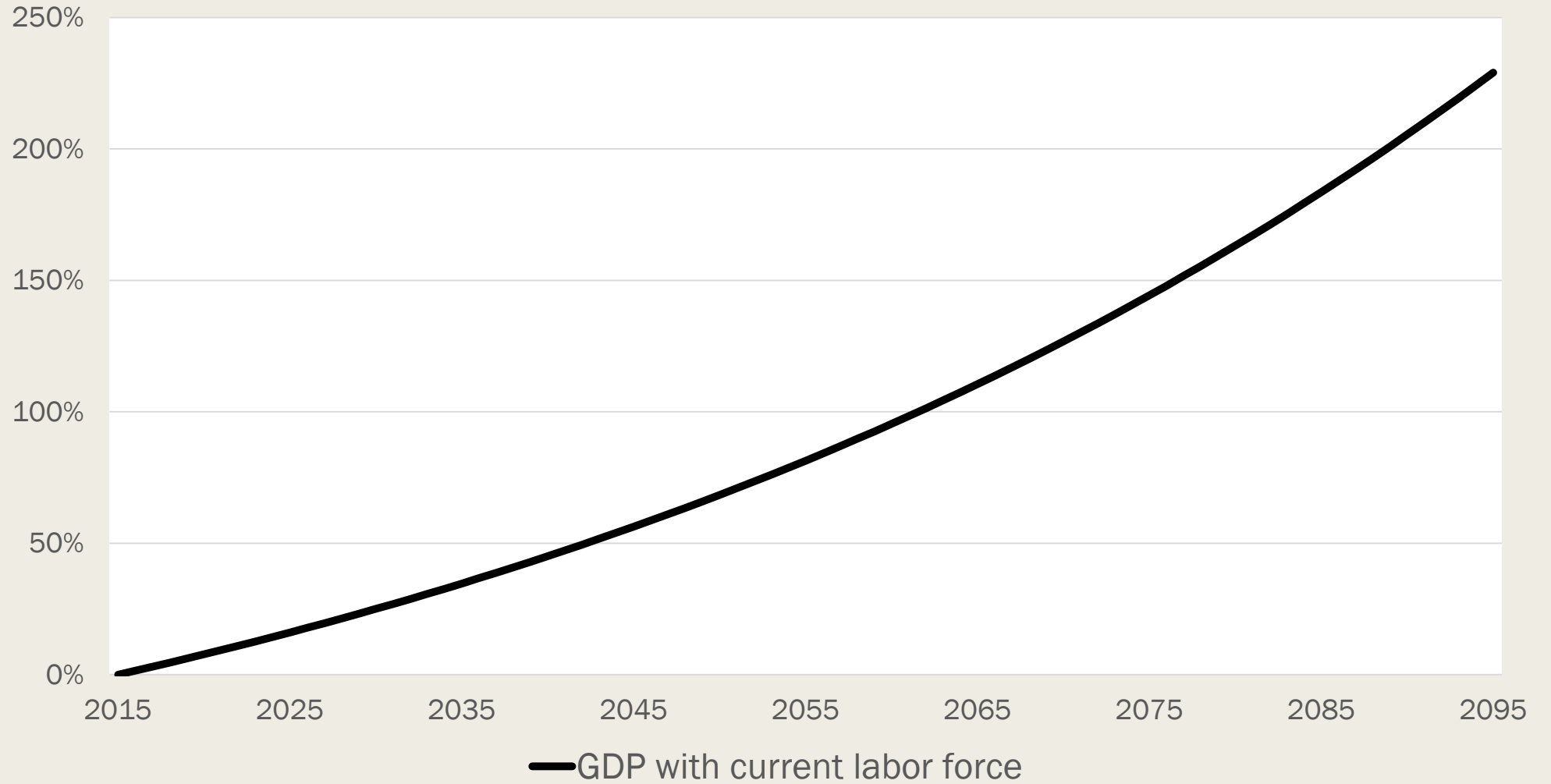


6.

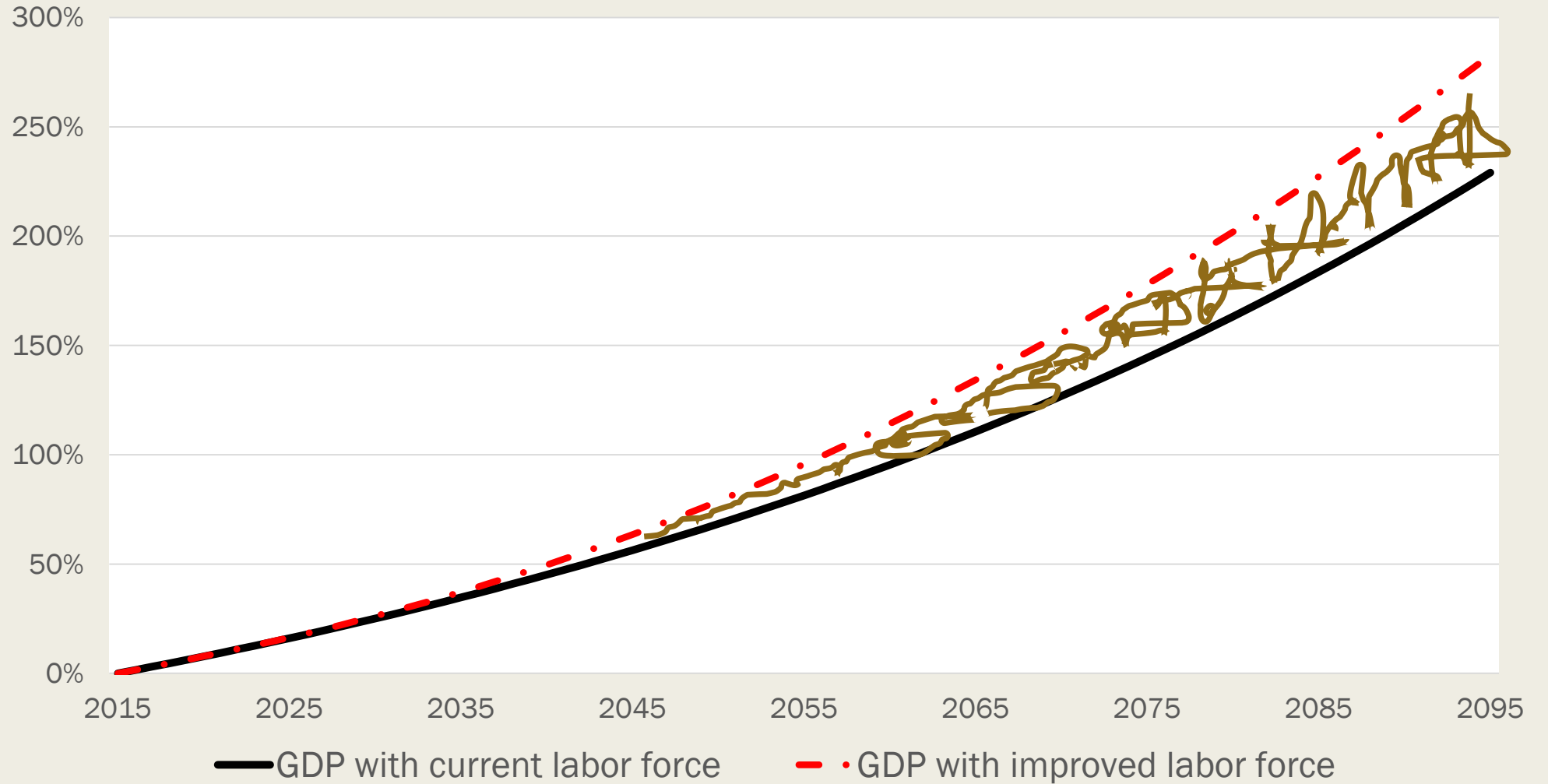
# THE ECONOMIC VALUE OF EDUCATIONAL REFORM



# Gains from Added Growth



# Gains from Added Growth



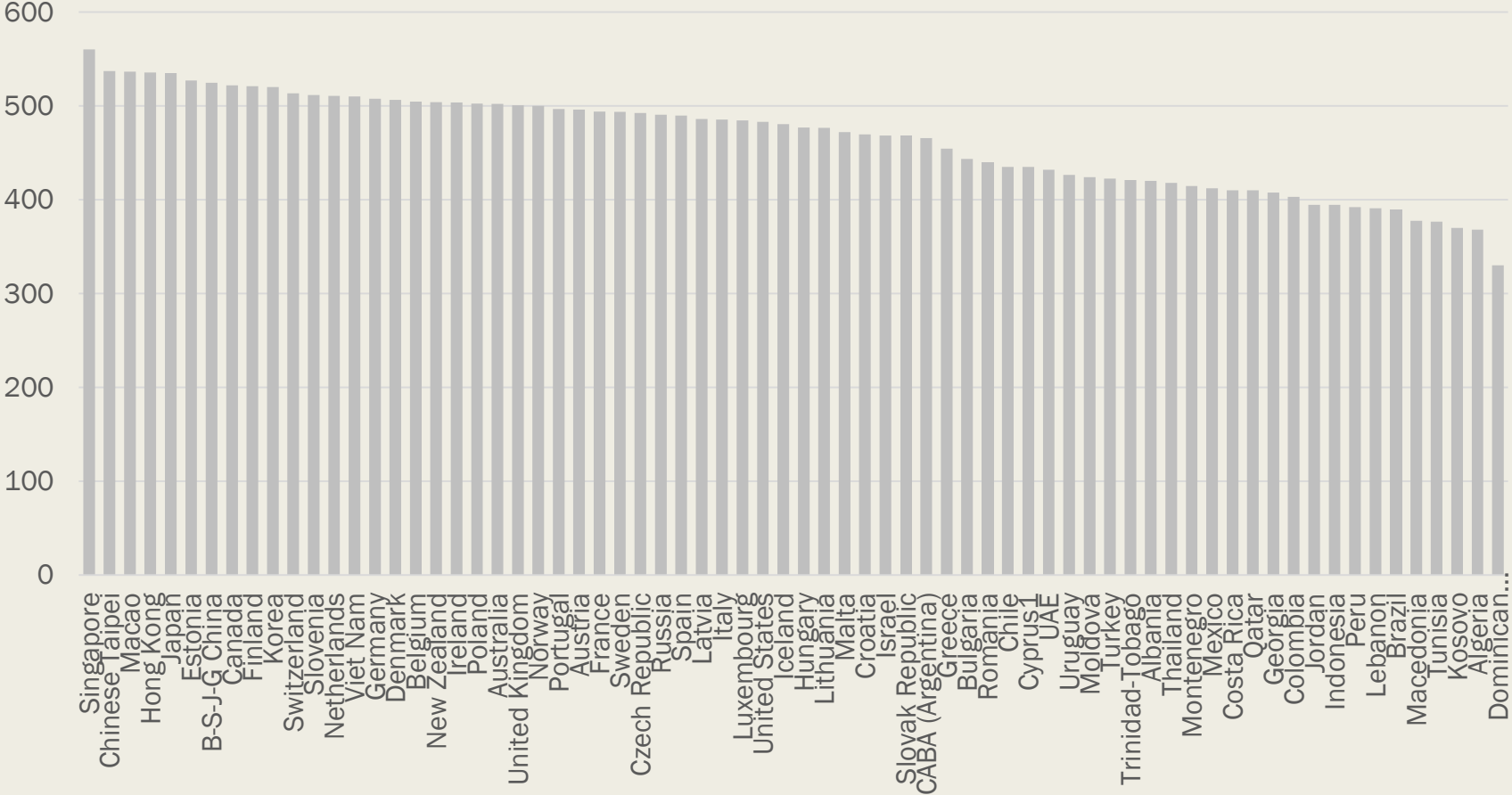
# Value of Improvement for Chile

- Two projections

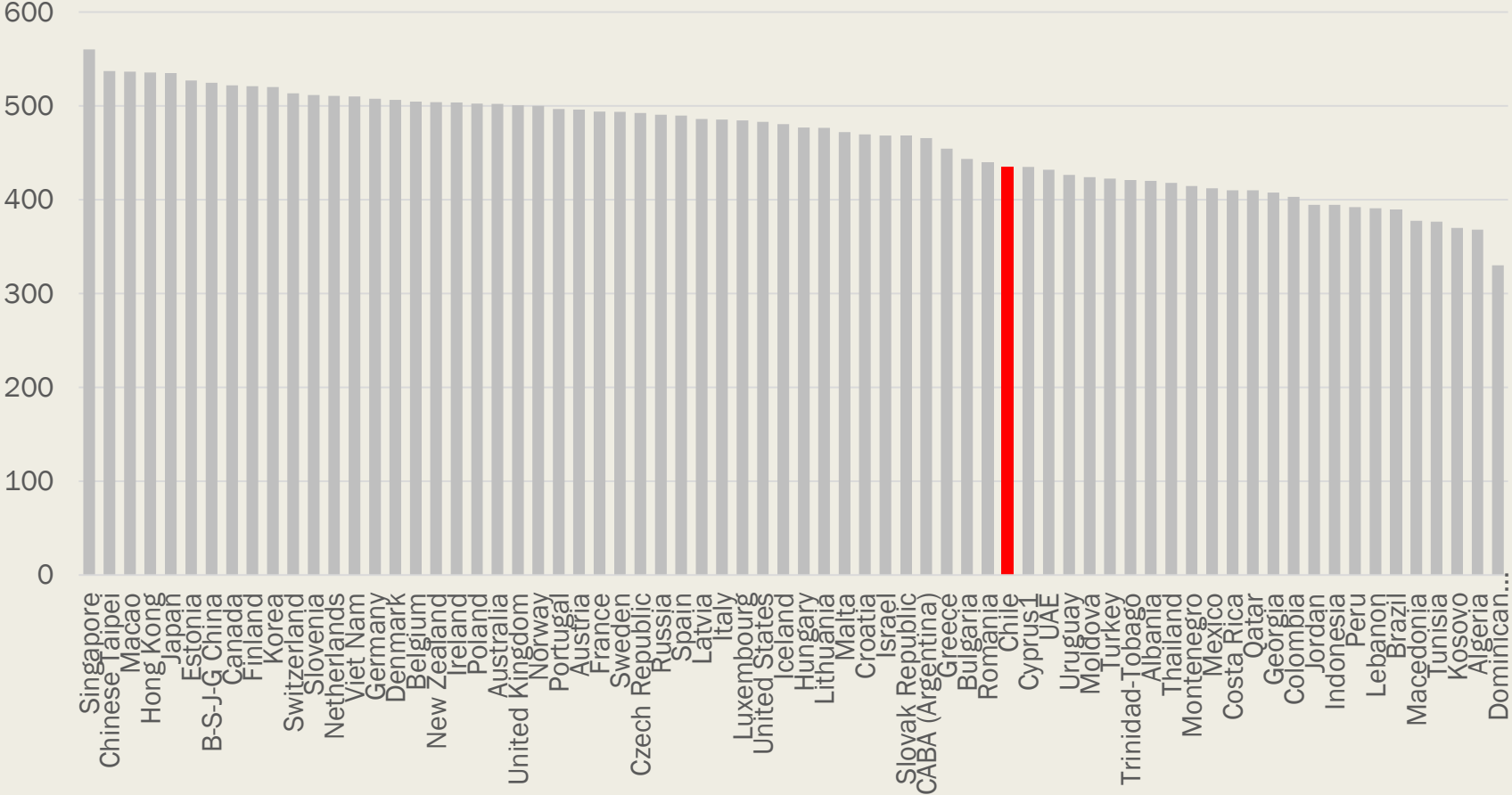
1. *Passing Greek school quality (current students)*
2. *Universal Basic Skills*



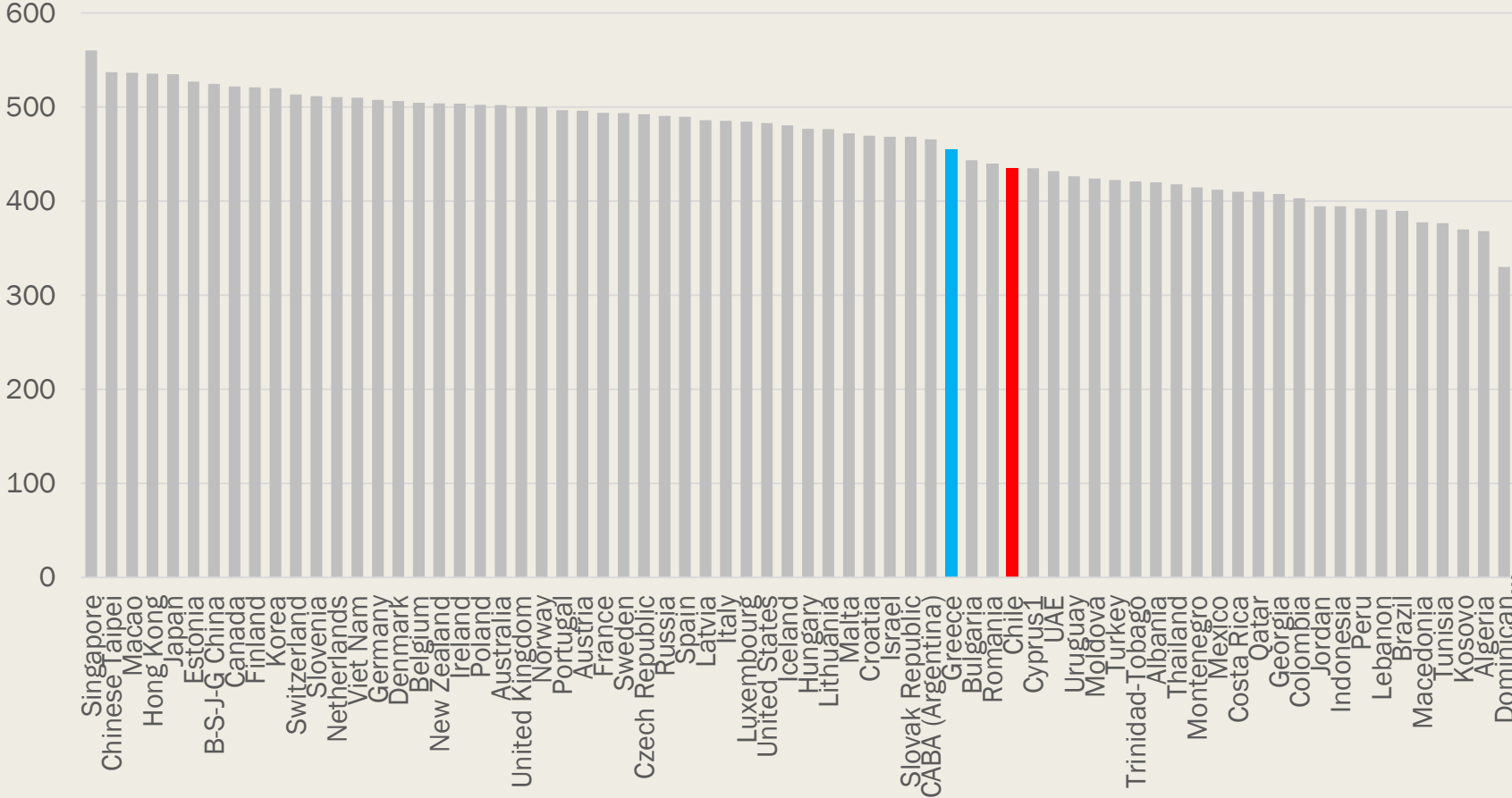
# PISA 2015 -- Math + Science



# PISA 2015 -- Math + Science

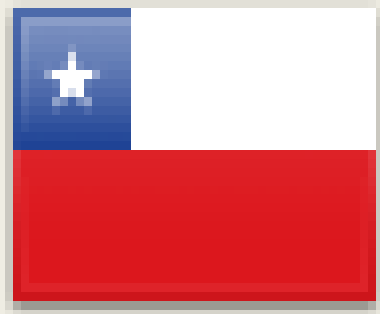


# PISA 2015 -- Math + Science



# Value of Improvement – 1

- Chile moves past quality level of Greece



- Present value of **310% of GDP [USD 1 341 billion]**
- Average **6.6% higher GDP/pop**
- **13% higher paychecks** for all workers every year

# Value of Improvement - 2

## Universal Basic Skills

- Enrollment rate: 92%
- Below 420 (Level 2): 45%
  
- Enrollment rate: 100%
- Below 420 (Level 2): 0%

# Universal Basic Skills

% Added GDP

20

15

10

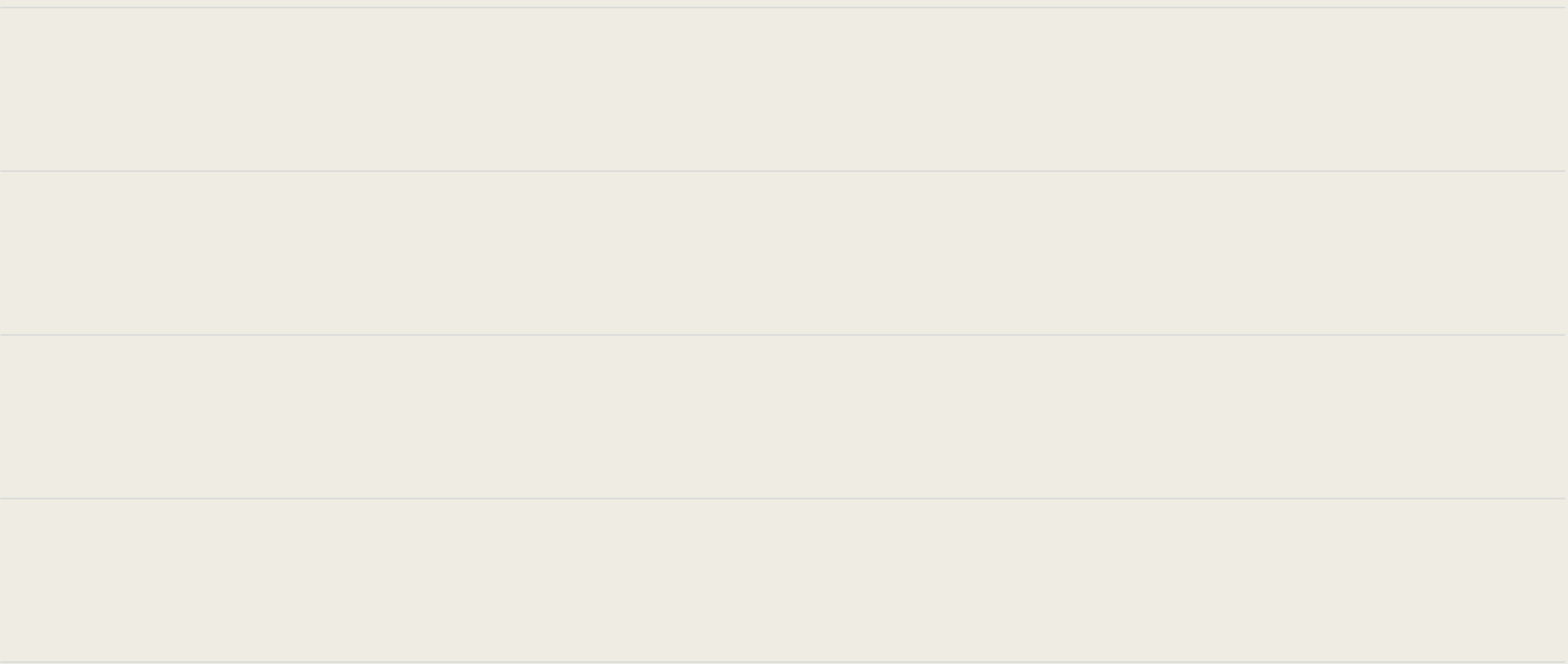
5

0

Full Access, Current Quality

Basic Skills, Current Access

Universal Basic Skills



# Universal Basic Skills

% Added GDP

10

5

0

Full Access, Current Quality

Basic Skills, Current Access

Universal Basic Skills



# Universal Basic Skills

% Added GDP

10

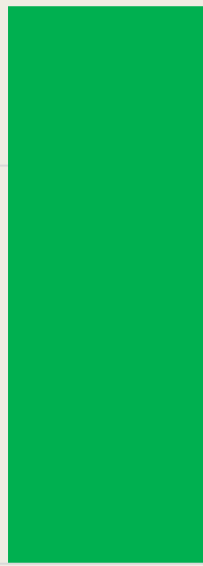
5

0

Full Access, Current Quality

Basic Skills, Current Access

Universal Basic Skills





# Universal Basic Skills

% Added GDP

10

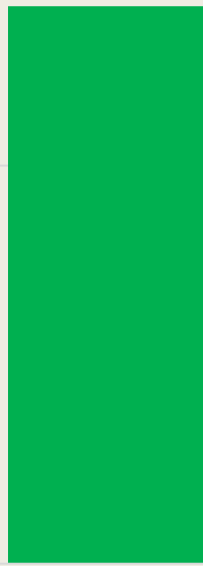
5

0

Full Access, Current Quality

Basic Skills, Current Access

Universal Basic Skills

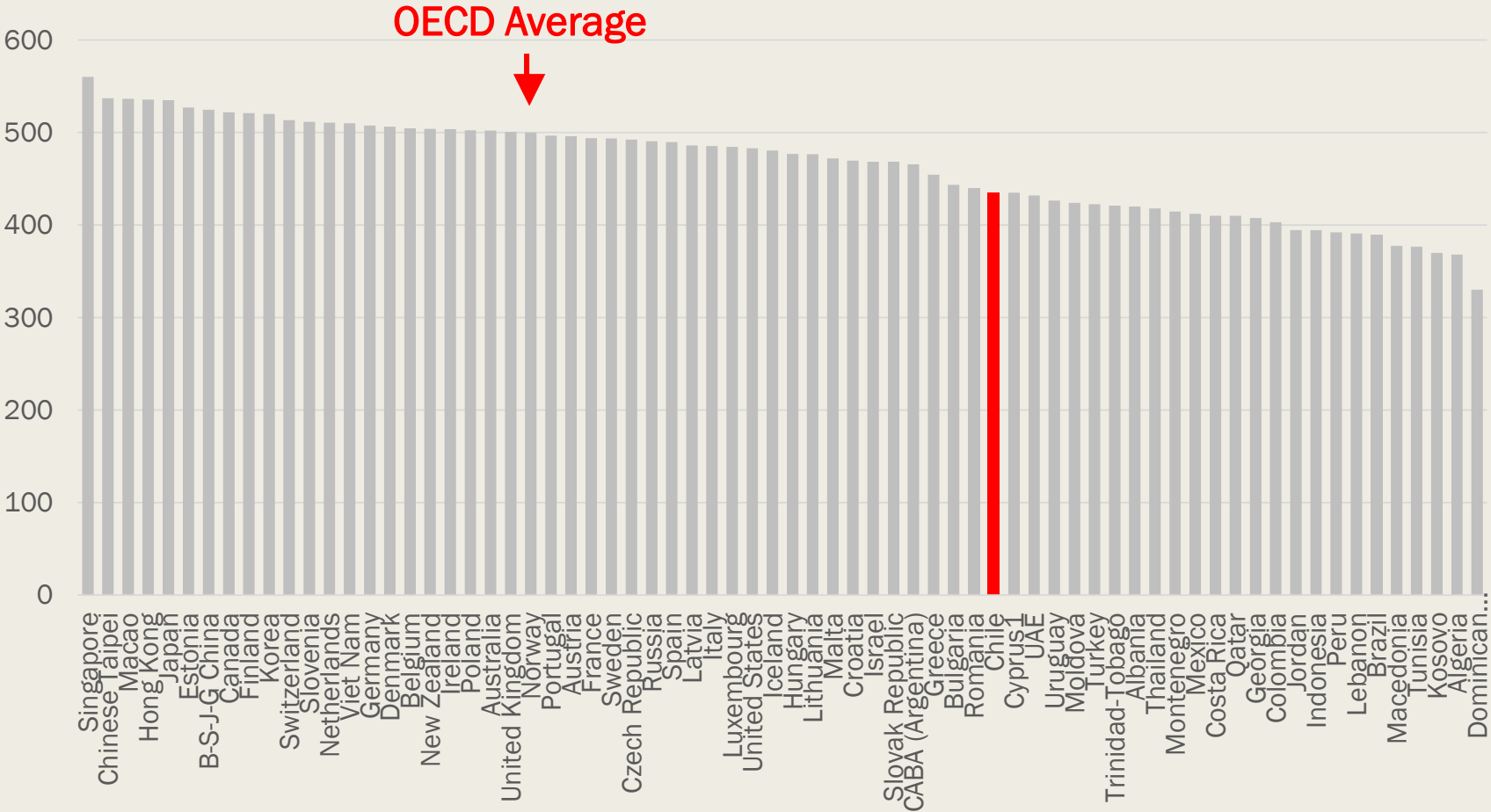


# Value of Improvement - 2

## Universal Basic Skills

- Enrollment rate: 78%
  - Below 420 (Level 2): 64%
- 
- Present value of **393% of GDP [USD 1 698 billion]**
  - Average **8.4% higher GDP/pop**
  - **17% higher paychecks** for all workers every year

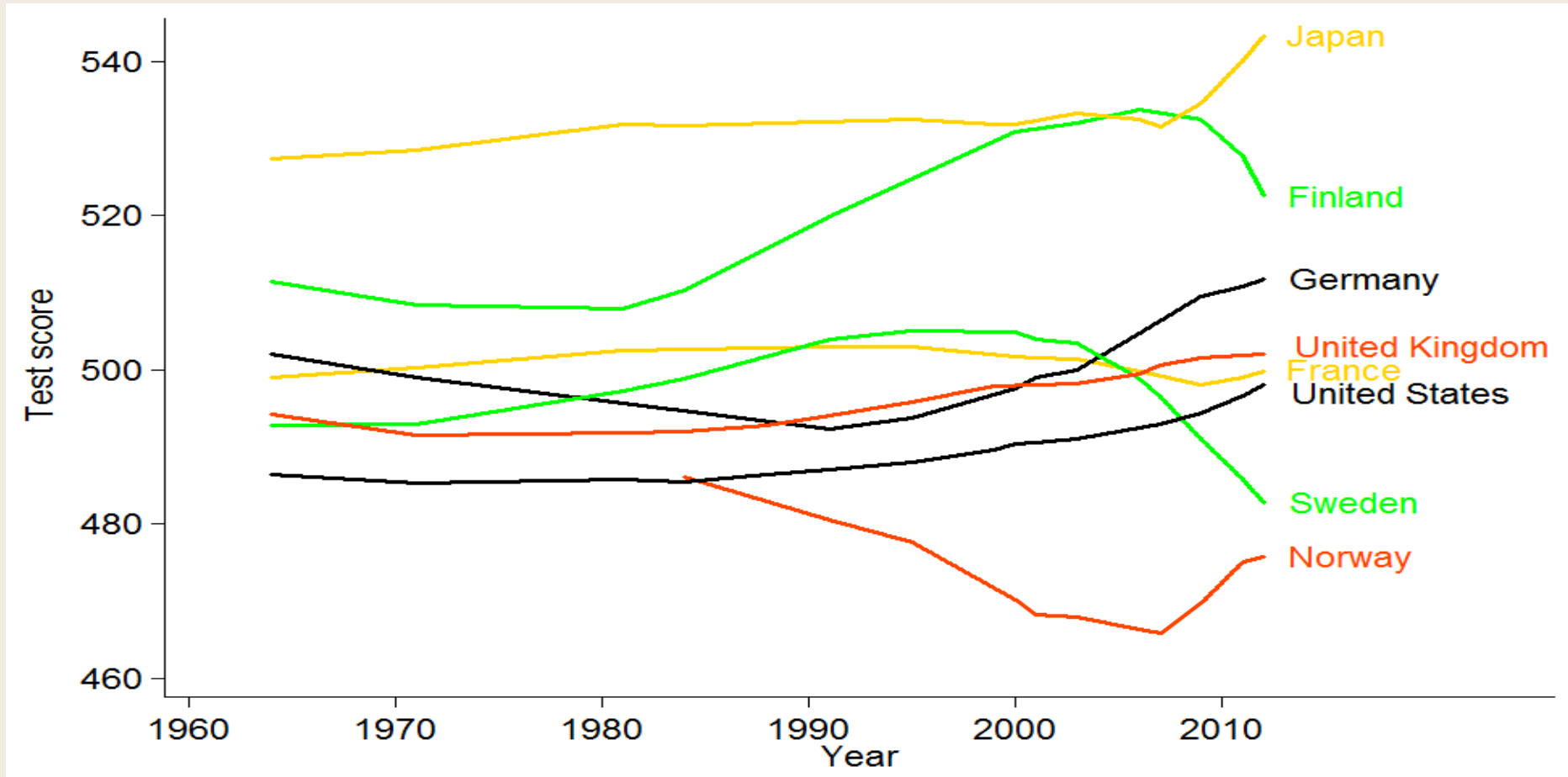
# PISA 2015 -- Math + Science



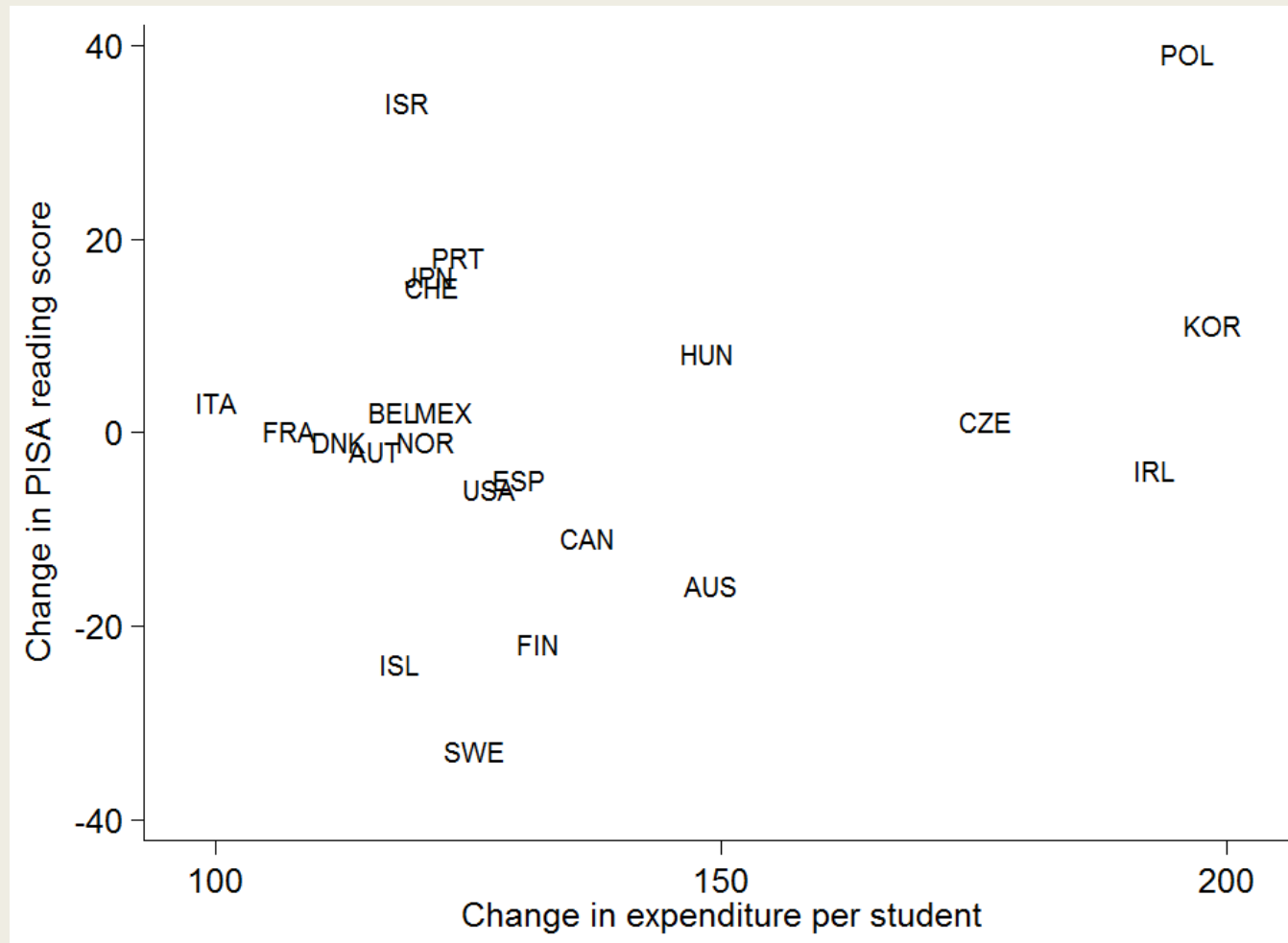
# IMPROVING KNOWLEDGE CAPITAL



# Long-Run Test Score Trends in Selected Countries, 1964-2012



# Changes in Educational Spending and in Achievement across Countries

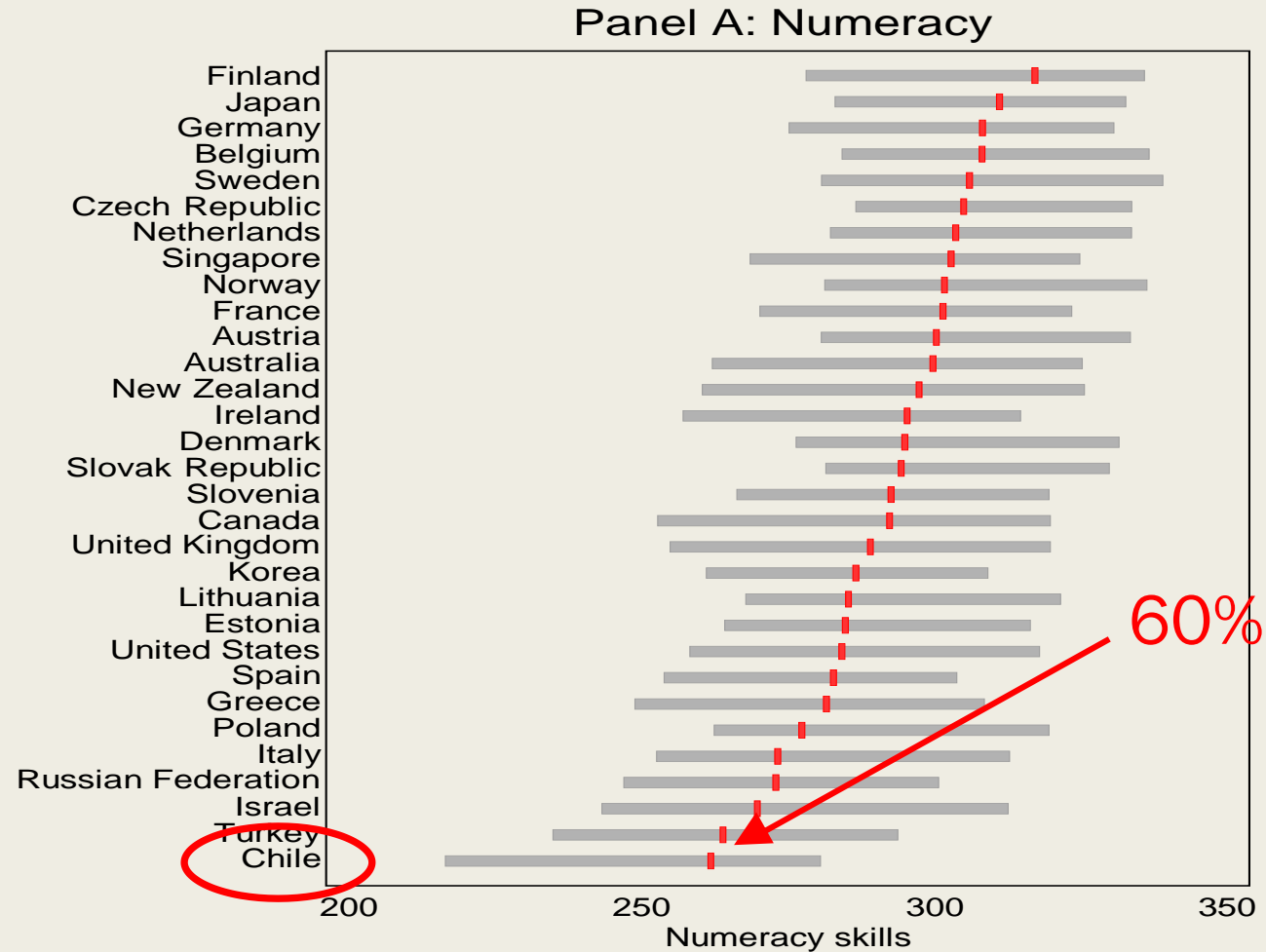


# What Can Be Done?

1. Improve teacher quality
2. Improve teacher quality
3. Improve teacher quality

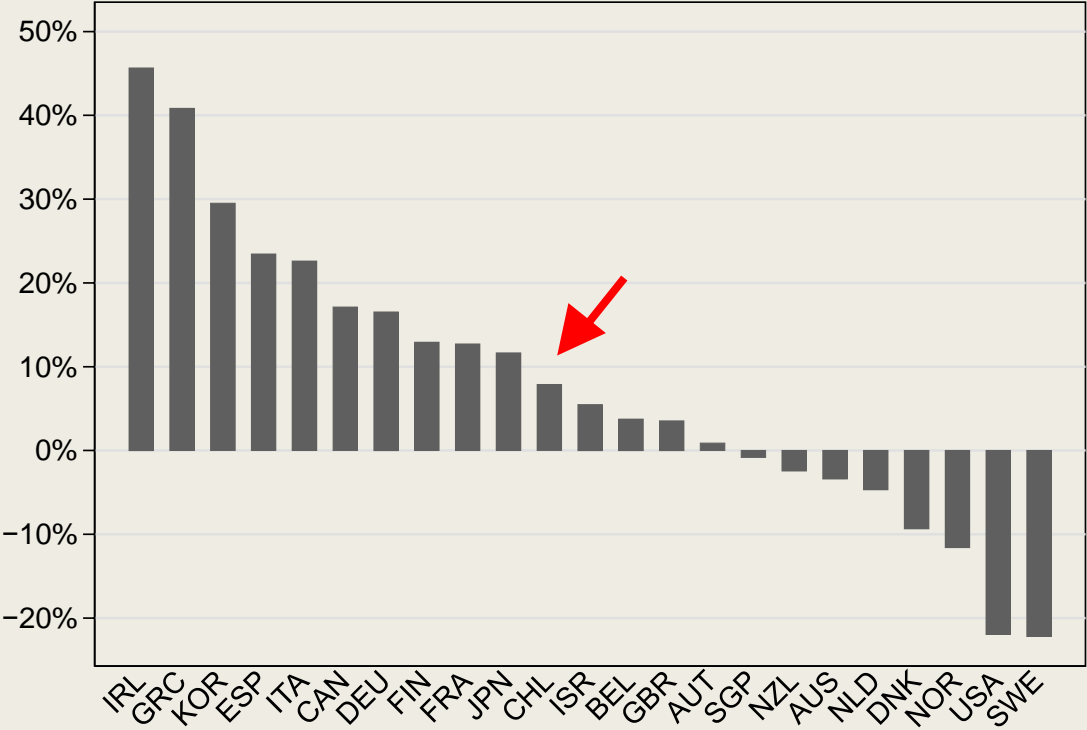
\*and administrator quality

# The Challenge: Teachers and College Grads





# Teacher Wage Premiums around the World



# 4. INSTITUTIONS

Accountability

Local decision making

Direct rewards

Competition

# International Evidence

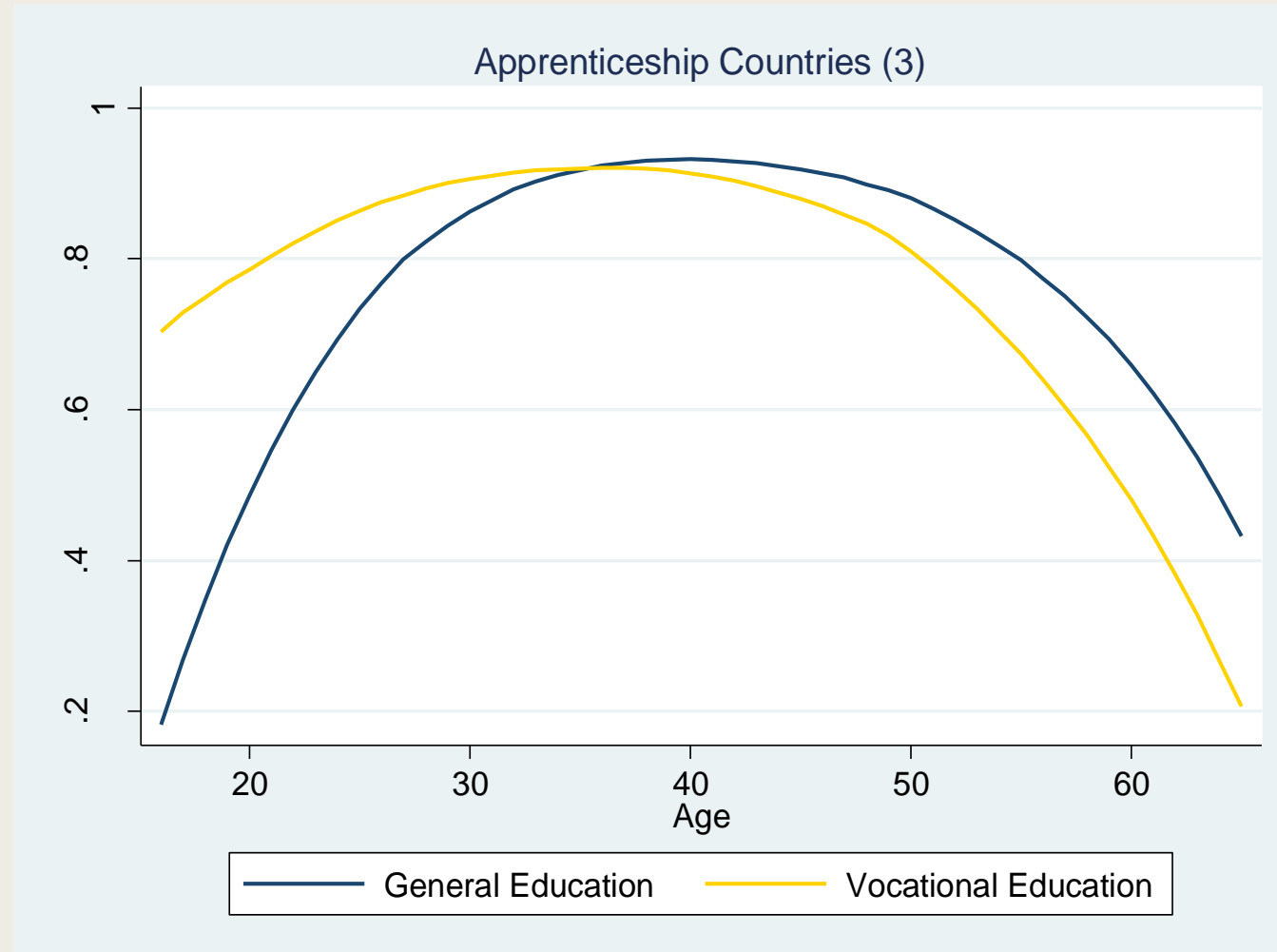
## ■ Institutions and incentives

- *Testing*
- *Accountability*
- *Autonomy*
- *Direct rewards*
- *Competition/choice*

# Does growth mean more inequality?

- Early Childhood
- Tracking
- General v. Vocational


# Employment over Life-Cycle



# Conclusions

1. Development = growth

*- Recent focus on fiscal and political issues  
cannot neglect future*

 *Growth = skills*

2. Value of school improvement is enormous

3. Improvement is possible

4. Improvement requires continued  
commitment

# THANK YOU!

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<http://Hanushek.Stanford.edu>