Economic Implications of Improved Schooling

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Conclusions

• U.S. scores on international assessments portend bleak future
  - Not a few bad states
  - Not a difficult to educate population

• Very different futures for United States

• Current recession costs dwarfed by schooling crisis

• Easy to ignore, hard to recover
Cognitive Skills and Economic Growth

coef = 1.980, se = 0.217, t = 9.12
Years of Schooling and Economic Growth

With quality control

Without quality control

coef = 0.58144999, se = 0.06536607, t = 6.1

coef = 0.0264058, se = 0.07839797, t = 0.34
Projections of Value of Improved Schooling

- Assume future looks like past
- Improve schools over 20 years
- Calculate added GDP based on history
- Discount future over lifetime of somebody born today
Growth Projections

• Scenario 1
  - Achievement improves by 25 points (1/4 s.d.)
Growth Projections

- Scenario 1
  - Achievement improves by 25 points (1/4 s.d.)
    - PV = 288% of current GDP
    - $44 trillion for United States
• **Scenario 1**
  - Achievement improves by 25 points (1/4 s.d.)

• **Scenario 2**
  - U.S. achieves at level of Finland
    - PV = 737% of current GDP in United States
    - **$112 trillion for United States**
Growth Projections

• Scenario 1
  - Achievement improves by 25 points (1/4 s.d.)

• Scenario 2
  - U.S. achieves at level of Finland

• Scenario 3
  - All students to 400 points (basic skills) [19% in U.S.]
    - PV = 567% of current GDP in United States
    - $86 trillion for United States
• 32% proficient in U.S. (NAEP standard)
  - 32\textsuperscript{nd} out of 65 countries
Math League Tables -- 2009

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• Massachusetts significantly outperformed by 6

• Minnesota significantly outperformed by 11
California competes with . . .
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  - 32\textsuperscript{nd} out of 65 countries

• Massachusetts significantly outperformed by 6

• Minnesota significantly outperformed by 11

• California significantly outperformed by 36
Observations

• Not U.S. having especially difficult to educate

• White students
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- White students
  - 42% proficient; 17th in comparison to all in other countries

- College educated parents
Students in US with College Educated Parent vs All Internationally
Observations

• Not U.S. having especially difficult to educate

• White students
  - 42% proficient; 17th in comparison to all in other countries

• College educated parents
  - 44% proficient; 16th in comparison to all in other countries
“First in the World by 2000”

Success by 2000

Success by 2010

Total K-12 spending

percent additions to GDP

year


10-year reform
20-year reform
Total U.S. K-12 spending
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