China's economy is in trouble. How bad is it?

Group Project
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Presentation outline

• Motivation – why is Chinese economy in trouble?
• Modelling approach
• Impact of GDP shock and policy simulation
• Conclusion
Reasons of potential financial crisis in China

• Long years of prosperity and large capital accumulation

• But, rumors about potential financial crisis in China:
  • Growth based on unsustainable levels of investments and low consumption –led growth (VOX.com, Sep 2013: China’s economic slowdown – 11 things you need to know)
  • Real estate bubble (Forbes Sep, 2015: The real ticking time bomb is China's economy)
  • Misreporting GDP figures (CNN, Aug 2015: China's economy is in trouble. How bad is it?)
Is Chinese economy in trouble?

• Long years of prosperity and large capital accumulation

• But, rumors about potential financial crisis in China:
  • Growth based on unsustainable levels of investments and low consumption –led growth (VOX.com, Sep 2013: China’s economic slowdown – 11 things you need to know)
  • Real estate bubble (Forbes Sep, 2015: The real ticking time bomb is China's economy)
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Modelling approach

• Simulate the effect of financial crisis via lowering potentially overvalued GDP growth rates

• Baseline scenario: Chinese GDP growth rates according World Bank and SSP2 Projections

• GDP shocks:
  • **PL1**: “Optimistic variant”: shock TFP to reproduce GDP growth of 5% p.a.
  • **PL2**: “Pessimistic variant”: shock TFP to reproduce GDP growth of 2% p.a.

• Policy shock:
  • **PL3**: PL1 + Boost economy via reducing taxes on capital income
  • **PL4**: PL2 + Boost economy via reducing taxes on capital income
Assumptions - GDP projections with Chinese crisis

China's GDP evolution

Source: World Bank (2001-2014), SSP2 and own predictions
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• Impact of GDP shock on Chinese economy and the world
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Effect of crisis on China (year-on-year differences)

Note: PL1 = GDP shock (optimistic) PL2: GDP shock with policy PL3: GDP shock (pessimistic) PL4: GDP shock with policy
Decomposition of GDP

Decomposition of expenditure side of GDP (Pessimistic scenario)
Effect of crisis on China (year-on-year differences)

CHN qcgd

CHN qk

CHN qxwreg

CHN rorge

Note: PL1 = GDP shock (optimistic) PL2: GDP shock with policy PL3: GDP shock (pessimistic) PL4: GDP shock with policy
Effects on payments and income from trust (year-on-year differences)

*Firms payments to global trust*

*Households income from global trust*

**Note:** PL1 = GDP shock (optimistic) PL2: GDP shock with policy PL3: GDP shock (pessimistic) PL4: GDP shock with policy
Effect of Chinese crisis on other regions (cumulative differences)

Note: In the **short run**, GDP of NAmerica and WEurope goes up, but in the **long run**, all regions are worse-off !!!
Cumulative Effect on global GDP: up to 4.5% lower relative to baseline

Note: PL1 = GDP shock (optimistic) PL2: GDP shock with policy PL3: GDP shock (pessimistic) PL4: GDP shock with policy
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Conclusion

• Chinese economic crisis might result in large fluctuations of investments
• In the long run, the impact on all other countries is negative
• Other Asian countries will be hit more than other countries
• Tax relief policy is not very effective in offsetting the negative results
Xie xie😊
Thank you