WHAT CAN WE LEARN FROM CHINESE MACROECONOMIC DATA?

YUEQING JIA TARA SINCLAIR

Presented by : Tara Sinclair

Department of Economics and IIEP

The George Washington University

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Can we learn anything from looking at the official Chinese data?

- According to the Penn World Tables 6, there are "*winds of falsification*" that surround the Chinese macroeconomic data.
  - Should we ignore the official data?
  - Are there better data available?
  - Can we do any empirical research on China?

Key Points of this Talk

- Chinese macroeconomic data are not as bad as we think.
- US macroeconomic data are not as good as we think.
- If we take our analysis with a grain of salt, we can learn important things about both countries by looking carefully at the official data.

Questions about the Quality of Chinese Macroeconomic Data

- Reported economic growth **too high**?
  - "Winds of falsification" (PWT 6)
    - Higher real GDP growth means lower inflation for the same nominal growth rate.
    - The lower the official rate of inflation, the smaller the wage increases.
  - Comparison with energy and transportation consumption data (Rawski).
  - Overstated in crises?

Questions about the Quality of Chinese Macroeconomic Data

- Reported economic growth **too low**?
  - Understatement of consumption?
    - Particularly for cross-country comparison: state owned enterprises provide housing and health care as intermediate goods to employees rather than final goods.
  - Understatement of services?
  - Disagreement between provincial and national numbers?

At the end of the day…

- The accuracy of the Chinese macroeconomic data has been investigated possibly more than any other country's macroeconomic data.
  - These investigations have led to improvements in the official data.
- The official data are used by Chinese policymakers.
- And, developed country data is far from perfect…

A Comparison: US Macroeconomic Data

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- "The Bureau emphasized that the … advance estimate … is based on source data that are incomplete or subject to further revision by the source agency"
  - Croushore (2009) finds that the mean absolute revision in the growth rate of GDP has been around one percentage point.

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GROSS DOMESTIC PRODUCT: SECOND QUARTER 2008			
	Advance	Preliminary	Final
	(Percent change from preceding quarter)		
Real GDP.....	1.9		

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- July, 2010 – revised to 0.6

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- July, 2009 – revised to 1.5
- July, 2010 – revised to 0.6
- July, 2011 – revised to 1.3

And it's not just that the errors are big…

- Researchers regularly find bias in US macroeconomic data releases.
  - Evidence of some form of bias in all 10 underlying components of the initial releases of US GDP (Sinclair and Stekler, 2011).
  - Evidence of bias in PCE inflation measures (Croushore, 2008).
    - Initial estimates of inflation are generally too low.

What about the Quick Publication Times?

- “One reason to be suspicious of GDP figures is that China is always one of the first countries to report them, usually only two weeks after the end of each quarter. Most developed economies take between four and six weeks to produce them.”
    - *The Economist*, 2008
- But, until 1988 the US statistical authorities released a preliminary estimate of US real GNP just 15 days after the end of the quarter.

Conclusion on the Data Quality

- Both China and the US have macroeconomic data that are far from perfect.
  - Especially in the time frame necessary for policymakers to act.

But…

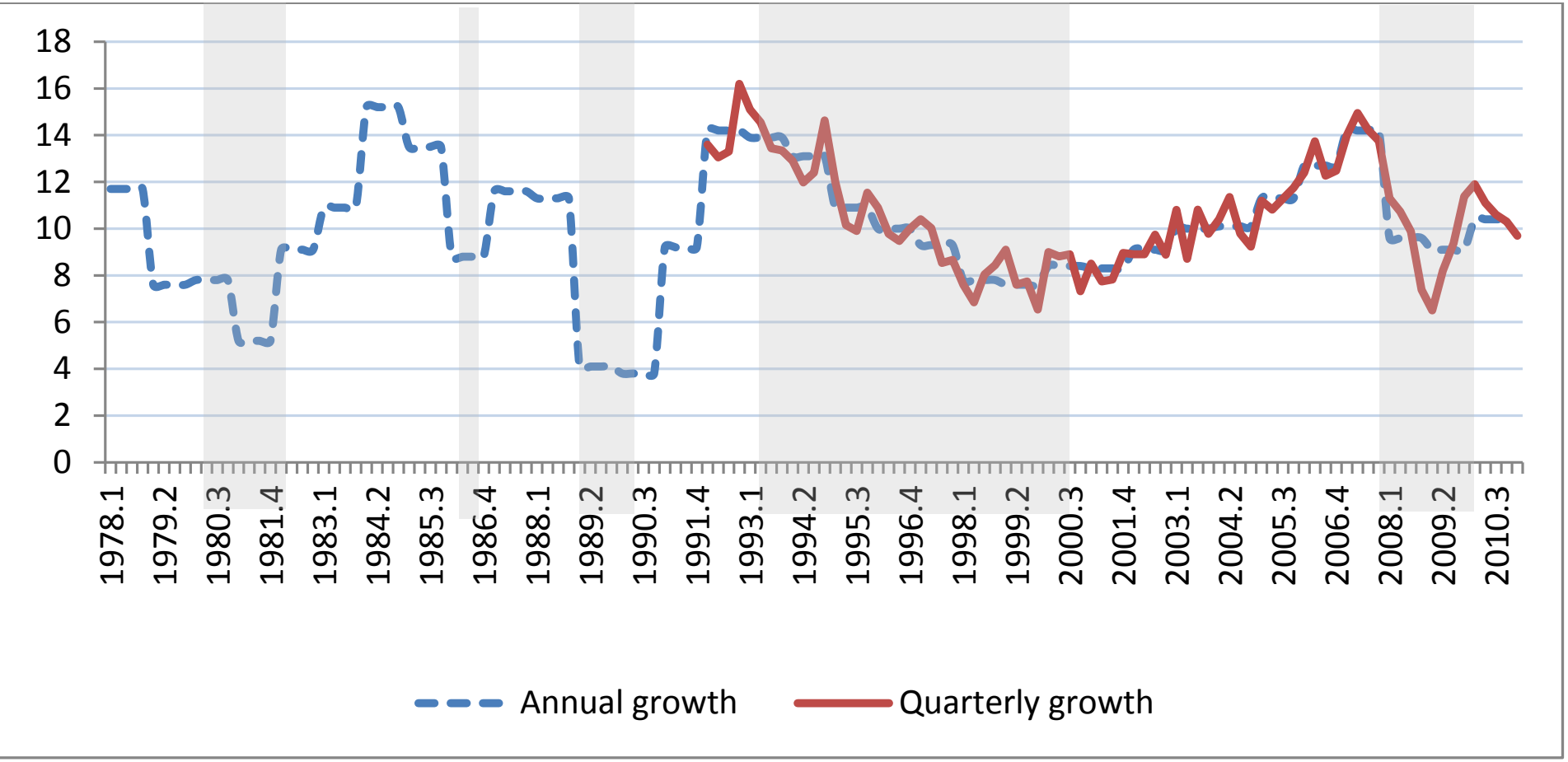
- We have nothing better.
  - The problems are not unique for China and alternative data resources have not proved to be more precise (Holz 2006, Chow 2006).

Does this mean we're trapped in an xkcd comic?

No…

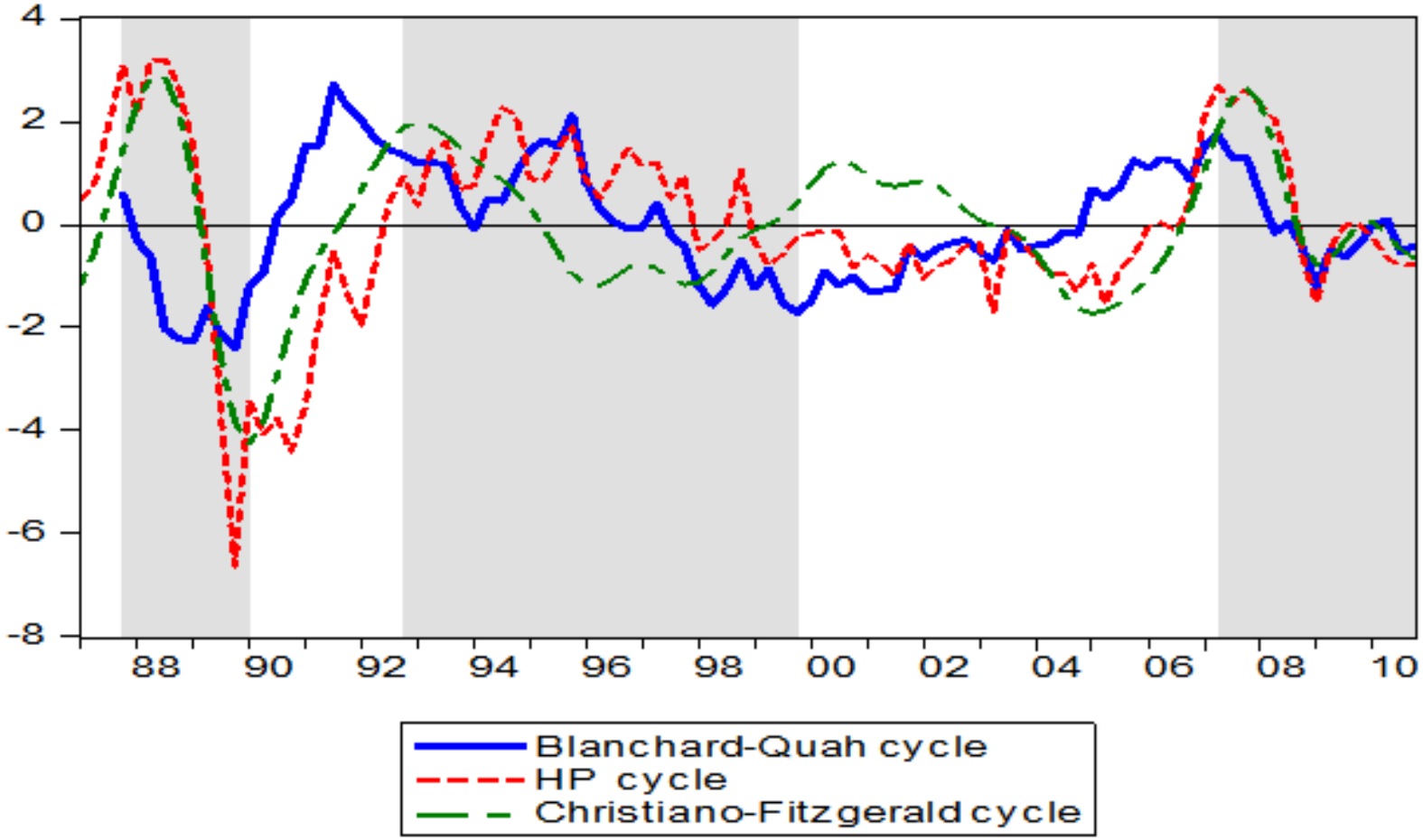
- The official data can serve as “a reliable guide” to the level and growth pattern of GDP, even though the margins of error are “certainly larger than that of the most developed countries” (OECD 2006).
- “It is better to look at the data we have than at no data at all.”

China's official real GDP growth rates (most recently revised data)



Note: the shaded areas are "slowdown eras"

Where is China Now in its Business Cycle?



What about the role of international factors for China?

- All foreign variables are insignificant for China's macroeconomic fluctuations based on a Global VAR.
  - This result is consistent with unobserved components models estimated with various other international data.
  - It appears that domestic factors are what drive China's macroeconomy.

What to Watch For

- Most likely, China will not keep itself insulated from global shocks forever.
- We need to continue to monitor the data to capture their evolving role in the global economy.
- Ignoring their data is not an option.
- Trying to get better data for both the US and China is a worthwhile pursuit.

A Final Thought

- “understanding the macroeconomics of China is too important to wait until the ‘high-quality data’ are available”
  - (Curtis and Mark, 2010).