Macroeconomics of the Great Influenza Pandemic, 1918-1920

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Research questions

- What is the impact of the Great Influenza Pandemic on economic growth, inflation and asset returns?
- What can we learn from the Spanish flu pandemic about the potential impact of covid-19 pandemic?

Contribution of the paper

From a policy maker / central bank's perspective this paper is important:

- Covid-19 is an unknown situation
- As policy makers we have argued that this is an unusual situation, that it is not in our historical data
  - What are its effects? How long do they last?
  - How do we include the pandemic shock in our models for forecasting purposes, key to IT schemes?
  - The effect on growth is central to determining key variables for the conduct of monetary policy such as potential gdp and the neutral real interest rate
  - Effects on growth and interest rates, and duration of the shock, are also key for fiscal policy

From a researcher perspective:

- A great contribution of this paper and a long-term research agenda is the data on flu-related and world war I death rates and the expansion of national accounts for 42 countries

Discussion

On the shock identification

- Death rates are unlikely to be exogenous shocks, especially after the first year. They are endogenous to policy actions (lockdowns, border closures, govt. budget reallocation), people's reaction and also economic performance.
- Suggestion 1: address and sign the possible bias coming from reverse causality
- Suggestion 2: find a time varying instrument that accurately predicts the spread of the disease and is orthogonal to the economic growth outcomes (Nevo and Rosen (2012) method for imperfect instruments could be useful in case there are doubts about the exclusion restriction)
- Suggestion 3: check whether the problems outlined in Aggregate Implications of Regional Business Cycles (Beraja et al (2019)) about making inferences about aggregate elasticities using regional variation apply here

Discussion

On shock effects

- The Spanish flu shock looks small (impact on growth rate of 6%, killing 2.1% of population): GDP growth in 2020 was -3,6% and -4,5% per capita, it takes into account China which accounts for about 18% of GDP and that it grew about 2,3% with 4 million deaths
    - Suggestion: address measurement error or missing some controls?
- With large shocks you expect to have large rebound effects, especially on growth rates. To some extent some of the regression results may be picking this up. Is this the effect of the flu or the war, or is there still some mechanical effect?

Discussion

On shock effects

- Differences in economic growth and asset returns from war and pandemic: effects on gdp and consumption growth look different. How do they match effects on asset returns?
  - Suggestion 1: Explore possible mechanisms for differences between flu and war channels to explain for example why flu would have persistent effects on returns and war wouldn't
  - Suggestion 2: Explain how impact on growth rates (temporary) do not translate into effects on asset prices (permanent). Why the flu would not have persistent effects on gdp and consumption growth but it would on asset returns?

Discussion

On general focus of paper

- Timing may be off: as we get to learn more about covid-19, it is less relevant the external validity of the Spanish flu
- Suggestion: exploit historical data and your great database to describe and understand the differences between the covid-19 pandemic and the Spanish flu pandemic for macro variables