

## Discussion:

# Papanikolaou and Sun (2021) “The impact of traditional and modern media on financial stability”

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# Research question and Sample

## ■ Research question

### ■ Main question: What is the relationship between media and financial stability?

#### ■ Distinguish media between:

##### ■ Traditional media (TV, radio and Newspaper)

##### ■ Modern media (internet)

#### ■ Distinguish financial stability into:

##### ■ Banking stability

##### ■ Financial market stability

### ■ Heterogenous effect: How different type of media affect financial stability?

## ■ Sample:

### ■ Panel data of OECD countries from 2005 to 2016

# Empirical Strategy

## ■ Empirical models:

### 1. OLS regression:

$$Y = \alpha + \beta_0 OWN_{jt} + \beta_1 TCONC_{jt} + \beta_2 MCONC_{jt} + \beta_4 TC_{jt} + \beta_5 INTERNET_{jt} + \beta_6 RADIO_{jt} + \beta_7 NEWS_{jt} + \gamma_1 K_{1,jt} + \gamma_2 K_{2,jt} + \theta_1 D_{jt} + \epsilon_{jt} \quad (1)$$

where  $Y$  changes according to the hp tested

- Banking Stability: Z-score
- Financial Market Stability: Stock Volatility

### 2. 2SLS model

### 3. GMM model

# Main Results

1. Media affect both banking and financial stability
2. Heterogenous effect according to the type of outlet
  - Banking stability:
    - +: newspaper, internet
    - -: TV, radio
  - Financial stability:
    - +: tv, newspaper
    - -: radio, internet
3. Media concept (i.e. media freedom, ownership and concentration play an important role in affecting both banking and financial stability

# Ideal Experiment vs Reality

- Ideal experiment to study the causal effect of media on banking and financial stability
  - Take a set of countries and exogenously provide them with a different “quantity of media”
- In reality this is impossible so we need to think something that could be feasible

# Your experiment

- Tricky to answer this question in a cross-country regression:
  - Endogeneity problem:
    - Reverse causality: banking stability and financial stability also affect the development of media
    - Omitted variable: factors not included in the regression that are affecting the result (e.g. Is it media affecting financial stability or political institutions, level of development of infrastructures, education of people, income of people, ...)
  - There are potentially different ways to improve these analysis

# Staggered exogenous introduction of a specific media outlet

- Focus around the years of the introduction of a specific media outlet:
  - Staggered introduction of high-speed internet across different countries
    - Durante, Campante and Sobbrío, 2018 on political participation
    - D'Andrea and Limodio (2019) on the impact on financial technology and banking in Africa.
  - Staggered introduction of newspapers
    - Gentzkow, Shapiro, and Sinkinson (2011) on on political participation, party vote shares, and electoral competitiveness
- This strategy allows to reduce many of the concerns about endogeneity (e.g. reverse causality and omitted variable bias)

# Include additional controls

- Include country and time fixed effects:
  - Country fixed effects  $\phi_i$ : control for factors constant over time and country specific
  - Time fixed effects  $\eta_t$ : control for factors common across countries and time-varying (e.g. macroeconomic conditions)
- From equation (1) above:

$$Y = \alpha + \beta_0 OWN_{jt} + \beta_1 TCONC_{jt} + \beta_2 MCONC_{jt} + \beta_4 TC_{jt} + \beta_5 INTERNET_{jt} + \beta_6 RADIO_{jt} + \beta_7 NEWS_{jt} + \gamma_1 K_{1,jt} + \gamma_2 K_{2,jt} + \theta_1 D_{jt} + \phi_i + \eta_t + \epsilon_{jt} \quad (2)$$

# Comment: Introduction

- Introduction is a bit disorganized
  - Difficult to follow the logic
    - It provides a lot of information that may not be necessary
  - One little paragraph about your research question
  - No information about results, empirical strategy, potential mechanism, and potential contribution of the paper
    - I would focus more on these parts than providing an overview of the literature (which is already covered in a different section, e.g. “Related literature”)

## Comment: 2SLS and GMM and

- It may be useful to provide additional information on these models
  
- For instance for the 2SLS:
  - 1 What is the first stage?
  - 2 Which variable  $Z$  do you use that is exogenous to  $Y$  but correlated to  $X$ ?
  - 3 Include the results of the first stage and the  $F$  statistic is important to make sure that the instrument is strong (i.e. there is no weak instrument problem)
  
- There is no information in the tables and in the paper on how authors are computing standard errors
  - Robust standard errors?
  - Clustered standard errors by country-year?
  - Important to provide this information to have your results more credible