EUROPEAN CENTRAL BANK

EUROSYSTEM

2020 ECB Conference on Money Markets

"The effect of the Central Bank liquidity support during pandemics: Evidence from the 1980 influenza pandemic"

by H. Anderson, J.-W. Chang, and A. Copeland

Discussion: Alexander Popov (ECB)

This paper

- During the Spanish flu pandemic in New York State in 1918:
  - Deposits declined more in counties with higher mortality rates;
  - Securities holdings and lending declined, too;
  - Federal Reserve System member banks increased borrowing to offset deposit shortfall;
  - The effect of the pandemic on deposit outflows was short lived.

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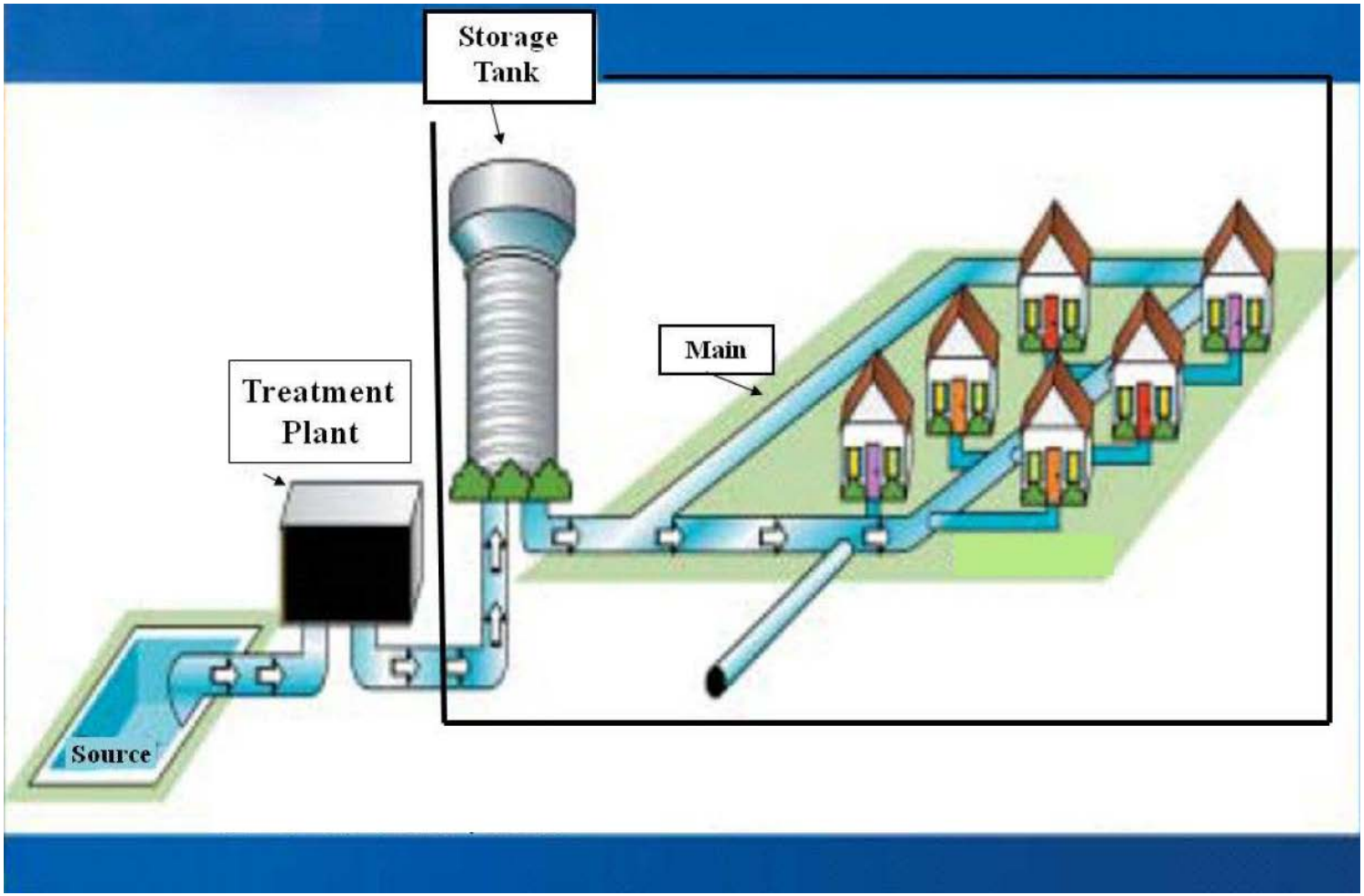
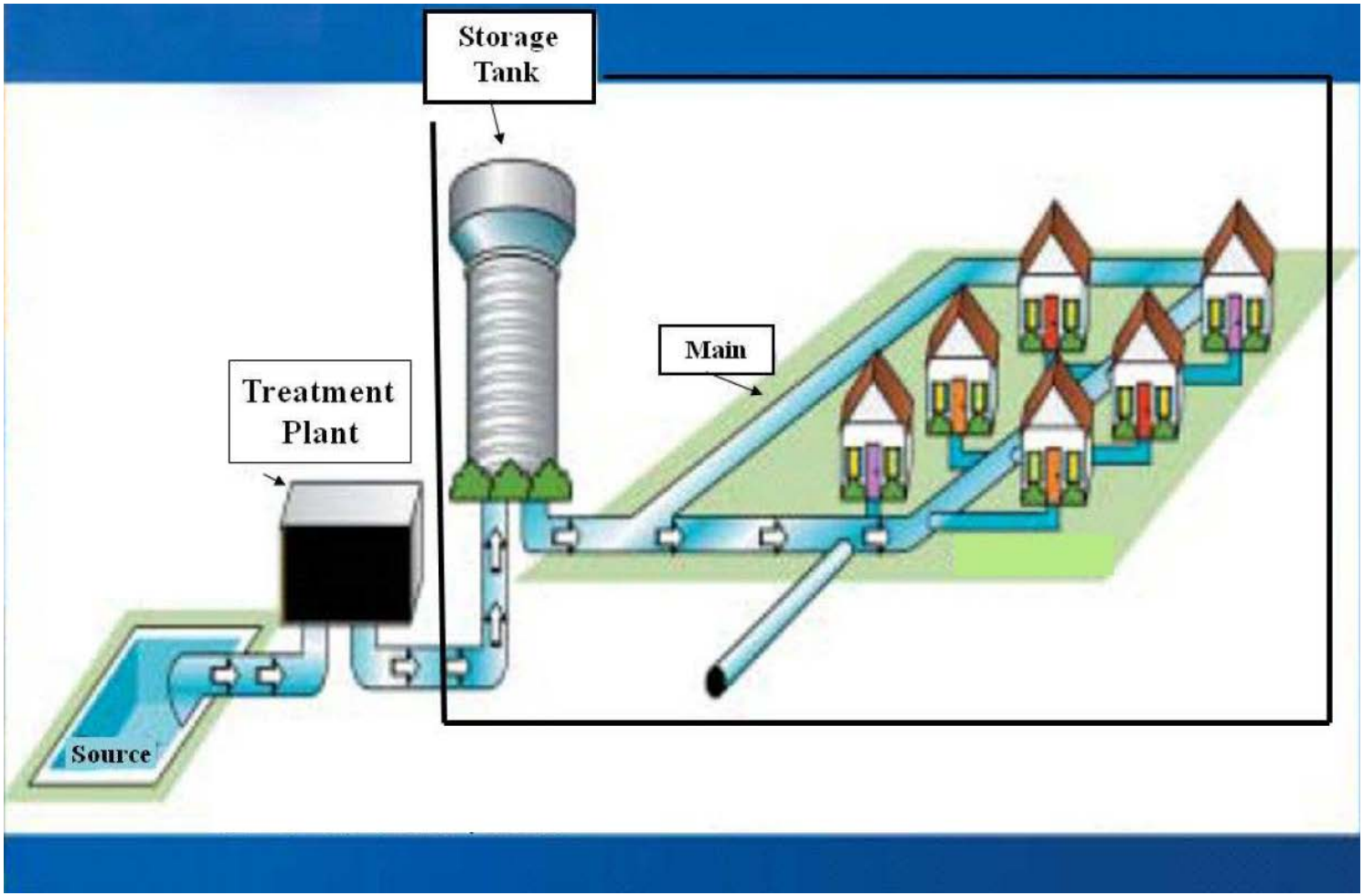
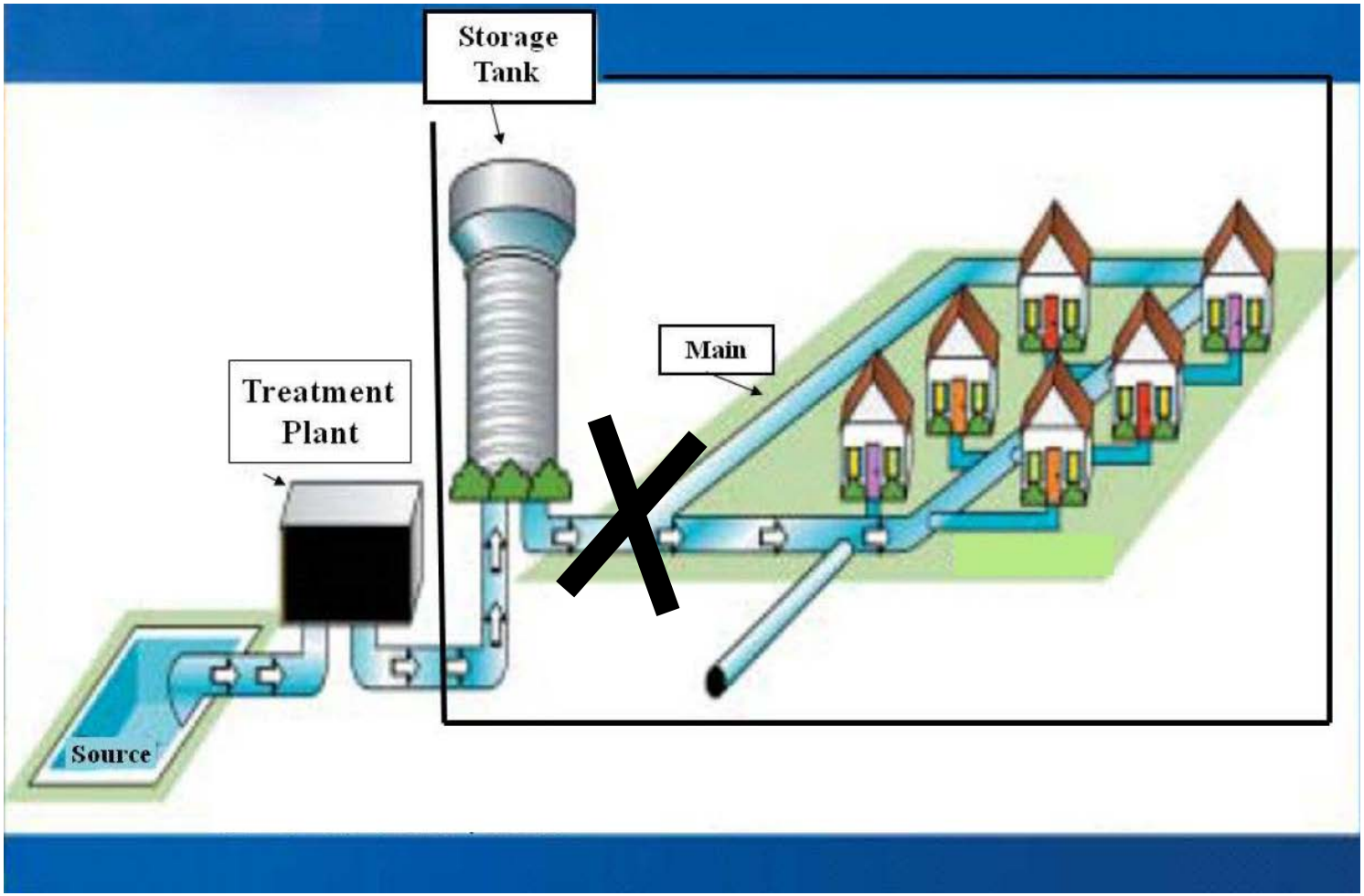
This is a water plant



This is a bank. Same, with water = money



Sometimes, water doesn't flow



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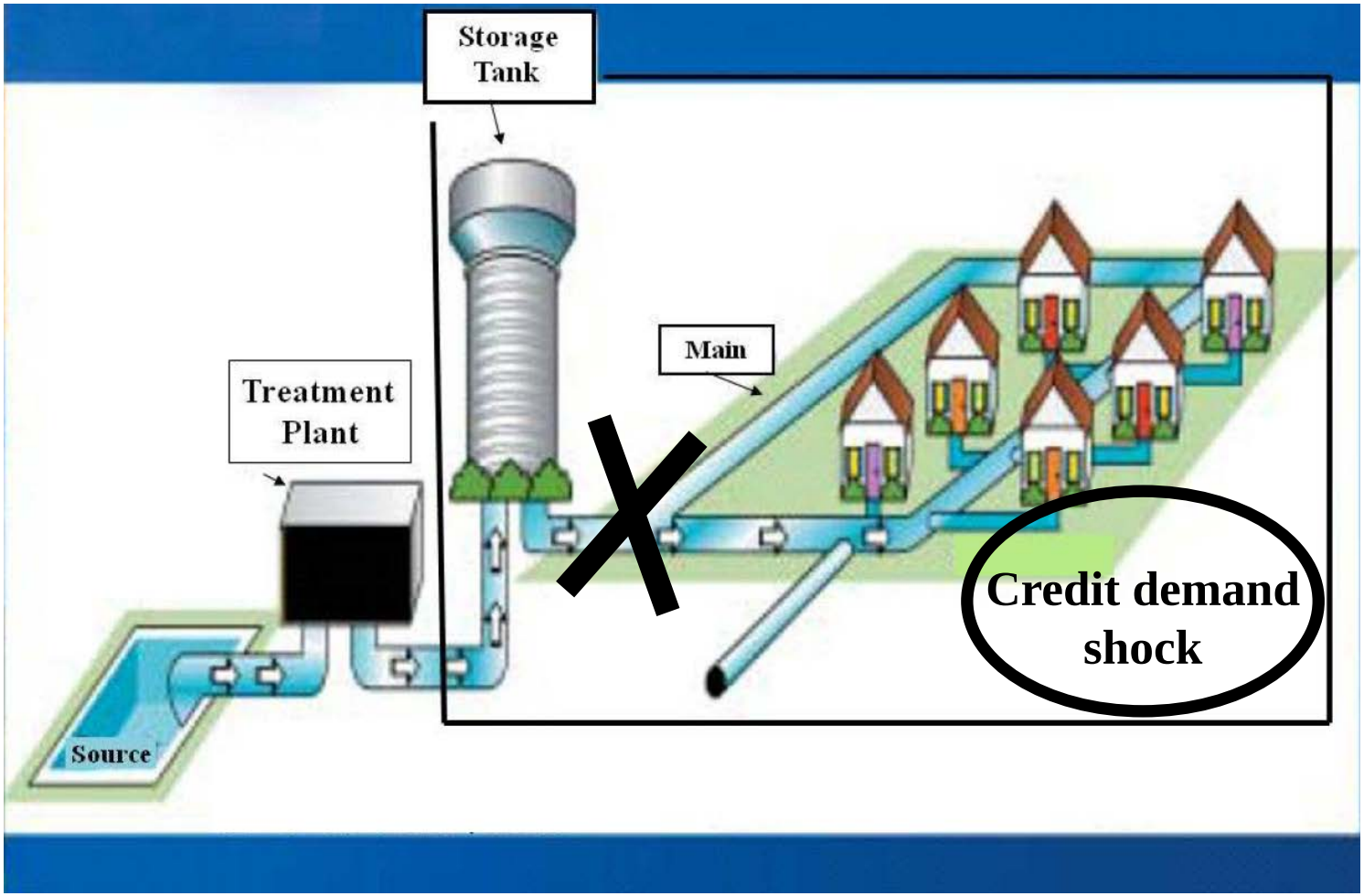

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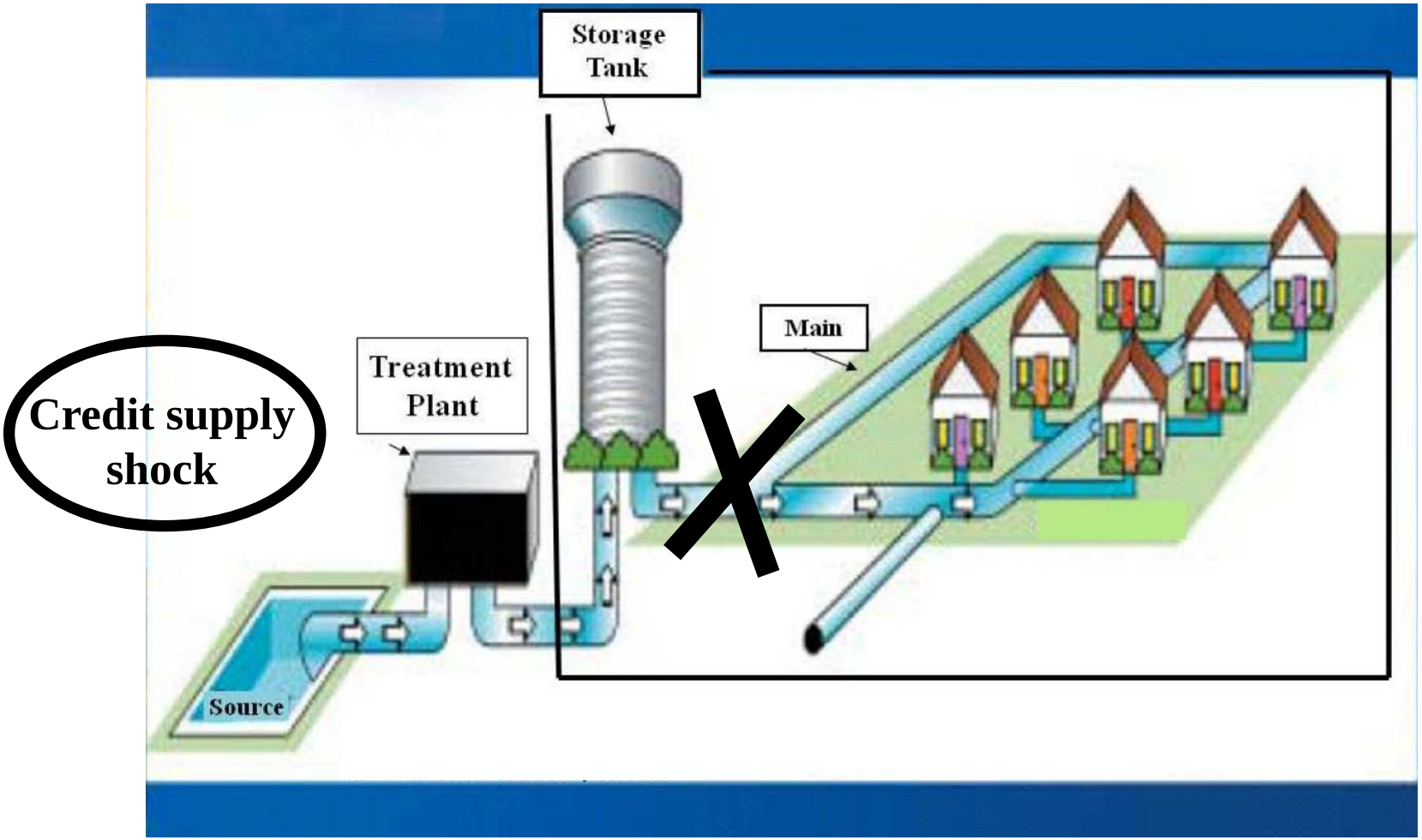

All banking research is about credit supply vs. credit demand

- Often they accompany each other
  - Identifying one of them requires holding the other constant

- E.g., identifying a credit supply shock:
  - Lending JP banks in the US after domestic real estate bust (Peek and Rosengren, *AER* 1997)
  - Collapse of $ market in Pakistan after nuclear tests (Khwaja and Mian, *AER* 2008)
  - MP shock + bank capital in Spain (Jimenez et al., *AER* 2012; *Econometrica* 2014)

- Similar approach to all kinds of shocks
  - GFC, sovereign debt crisis, recession, war…

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Spanish Flu (and Covid-19) affected everything

- Credit demand shock
  - People are dying/staying at home, economic activity collapses
- Credit supply shock
  - Deposits dry up because people fear a run, or
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- This paper: Both a negative credit demand and a negative credit supply shock took place
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- More to do on the cause of each effect

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Econometric challenge 1

- County-specific mortality rates not exogenous
  - Some people wear masks, some don't
  - Related to education, politics, population density
  - Correlated with both demand and supply

- Pertinent to evidence in Table 7
  - Deposits and loans growth higher in low-mortality counties
  - Maybe people in some counties more willing to limit the spread of the virus
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  - I.e., mortality does not drive deposits, risk awareness drives mortality and deposits

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Econometric challenge 2

- Unclear whether borrowing is related to FRS membership
- Banks borrowed more, the more their deposits declined
  - Not really because they were FRS members!
- Alternative: interact with deposit change using mortality rate as an instrument
  - For a given decline in deposits, did it help to be a FRS member?

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Pandemic	0.0665*	-0.643
	(0.0375)	(3.509)
Member x Pandemic	0.164	-17.92*
	(0.119)	(9.777)
Flu death rate	22.88	-4349.2*
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Member x Flu death rate	44.21*	-6244.9*
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Pandemic x Flu death rate	-33.72*	3184.2
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Member x Pandemic x Flu death rate	-79.19**	10456***
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Constant	3.227***	30.36
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  - Problem: you may be comparing banks in different counties
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Conclusion

- Covid-19 is a large, almost unprecedented shock
  - We need to understand how it propagates and how to alleviate it
- This paper provides insights form a similar episode (the 1918-20 Spanish flu)
  - Deposit and lending go down, although not in the long-run
  - Access to CB liquidity helps
- A bit more to make sure that we are convinced about "why"
- Thank you, and good luck!