Discussion of "Financial Black-Holes: The Interaction of Financial Regulation and Bailout Guarantees" by Romain Rancière and Aaron Tornell

Luis F. Céspedes Central Bank of Chile November 2010

The paper

- Very good paper.
- It delivers two messages:
 - Bailout guarantees may be welfare improving because they alleviate credit constraints.
 - Bailout guarantees may reduce welfare if they are mixed with financial instruments with undesirable properties (given the existence of bailouts).

Welfare-improving bailout guarantees

- Suppose that in order to invest (and grow), entrepreneurs need to borrow.
- But borrowing is subject to collateral constraints.
- By relaxing the credit constraint, bailout guarantees allow the firm to invest more (in good risky technology) using standard debt contracts.
- Without the collateral constraint, this would not be good. But adding this imperfection may be welfare improving...

Welfare-improving bailout guarantees

- By giving access to financing to risky investment projects (projects that are highly productive in good states), a country exposes itself to occasional financial crises. But in the end, the country is better off.
 - Liberalized regime is better than a restrictive regime.
- Empirical part: Countries that have liberalized financially and have experienced subsequent financial crises tend to grow faster than countries that have followed a smooth path (skewness of credit growth is positively correlated with growth).

Beware of the hazards of bailout guarantees

- If entrepreneurs can finance investment by issuing catastrophic bonds (CB) (anything-goes regime), the existence of bailout guarantees gives rise to financial black holes.
- With only standard debt contracts, inferior risky investments (projects with low productivity in good states) would never be financed.
- But with CB in bad states, bailout guarantees are triggered and in good states the "inferior" entrepreneurs make a positive profit.

Beware of the hazards of bailout guarantees

- In this scenario, all entrepreneurs switch to CB to finance investment. R&T use this logic to explain the recent US housing boom-bust cycle.
- By allowing a complete set of put contracts, R&T create a case in which subprime mortgage originators finance themselves using synthetic CB. The insurer ends up being the vehicle that cashes the bailout.
- Empirical part: They provide evidence that is not inconsistent with the hypothesis that the recent US financial crisis reflects a financial black hole.

- On the empirical support for the black-hole hypothesis for the US crisis:
 - "When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing."

Chuck Prince, Citigroup Chairman, Financial Times, July 9, 2007

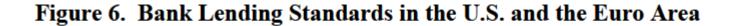
- To be consistent with the model, we should observe exclusively interest-only mortgages in that period.
- Check liabilities of mortgage originators.
- Fed liquidity injections (MBS as collateral in Term Auction Facilities) and yield curve.

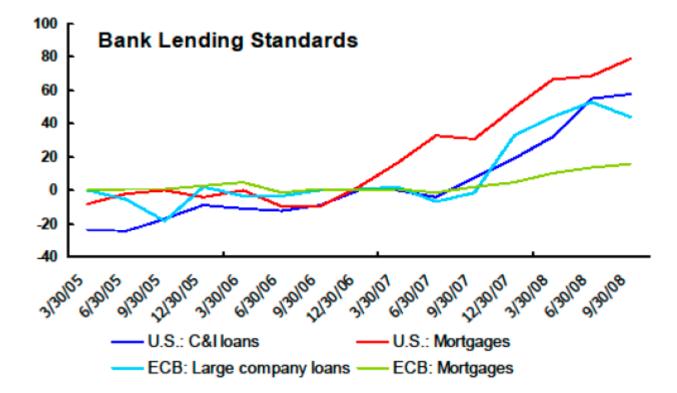
Figure 4. Contagion Across Assets, Institutions, and Countries



Heat Map: Developments in Systemic Asset Classes

Source: IMF, Global Financial Stability Report, October 2008





- Initial shock was the losses of banks and investment banks from residential mortgage securities. But those losses can hardly explain the magnitude of the financial crisis and the losses of financial institutions.
- Amplification mechanisms are key to explain the dimensions of the financial crisis (from subprime crisis to financial crisis).

- Amplification mechanisms:
 - Banks financed risky assets with short-term market borrowing (roll-over risk).
 - Leverage (underestimation of risks, regulatory holes)
 - Fire-sale externality and credit-crunch externality
- Bailout guarantees may be behind some of these mechanisms. More generally, credit booms may exacerbate externalities.
- Rationale for ex ante-intervention.

- Theoretical model's prediction is for levels. Empirical part checks growth. Check investment rates.
- On the positive relationship between skewness and growth:
 - Future productivity based on current strong fundamentals. The country feels optimistic, households start demanding more credit, asset prices increase, which relaxes credit constraints and fuels credit. Is it possible that the country will have a rapid recovery?
 - **Fiscal situation**. Countries with good fundamentals may have very healthy fiscal sectors. Maybe a better way to check for the role of bailouts.

Policy issues

- Credit growth and macroeconomic policy: In the context of the paper, should macroeconomic policy react to credit growth? Maybe it's "good" credit. What about capital inflows? Bubbles?
- R&T stress the need for adequate regulation. But regulation is always a difficult task. Is it possible to keep regulation always prepared to detect potential problems with financial innovation that tries to take advantage of bailout guarantees?

Policy issues

- Are bailout guarantees the best instruments to promote investment? (Tax policy to increase cash flows of firms, development of financial markets, development banks)
- The issue is particularly relevant because those (highly productive) investments may be subject to even higher credit constraints.
- Too little credit: A recent report by the IDB shows that, despite the financial deregulation of the 1990s, the depth of Latin American credit systems remains very low by international standards. Lack of credit is one reason why there is so much dispersion in the productivity of firms.

Policy issues

- Policy objectives: Growth and financial stability are always compatible? Who is in charge? How to coordinate?
- The crisis has open the door to a set large of policy instruments. Some of them can be interpreted (or are in fact) implicit bailout guarantees. Using R&T logic, we have to check carefully moving forward what are the incentive they make create in order to avoid a future black-hole.

Discussion of "Financial Black-Holes: The Interaction of Financial Regulation and Bailout Guarantees" by Romain Rancière and Aaron Tornell

Luis F. Céspedes Central Bank of Chile November 2010