A Discussion of “Monitoring And The Acceptability of Bank Money,”
by Regis Breton

Cyril Monnet

University of Bern and Study Center Gerzensee

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A Crisis Narrative

- Global savings glut increased demand for US safe assets
- ... matched by supply of possibly safe ABS through rise in Originate-to-distribute bank model
- ... rated as safe by rating agencies
- ... and considered as such by Wall Street
- ... increased banks’ incentives to take on risk
- ... until... collapse...
A Crisis Narrative

- ... no more shadow banking, and other dark pools.
- Transparency!
- Holmstrom (2012) Why did no one in Wall Street ask questions?
- Answer: Because ABS/securitization are structured that way (Dang, Holmstrom, Gorton, 2012)
Regis, Why did no one ask questions?

- Because it is a bank’s job to supply liquid assets, i.e. assets that agents can trade quickly without having to worry about insider’s information.

- Leave this to the market and you’ll have to worry about insider’s information.

- Structure the bank’s contract correctly and you won’t have to worry about insider’s information.

- Regis’ caveat: Allow banks to securitize and it’ll be back with a vengeance.

- Increase transparency, and you’ll have to worry about liquidity. “What matters for liquidity is not the amount of information society has about assets, but the distribution of that information.”
The Environment

- 3 periods: $t = 0, 1, 2$

- 2 groups of risk neutral agents: Early and late boomers.

- Late boomers born at $t = 1$,
  - endowed with $e_1 \gg y$, and storage,
  - $v(c_1, c_2) = c_2$.

- Early boomers born at $t = 0$,
  - endowed with $e_0 = 1$, storage and a LT technology,
  - $u(c_1, c_2) = \lambda (\rho c_1 + c_2) + (1 - \lambda)(c_1 + c_2)$ with $\rho > 1$.
  - Liquidity shock is private information.
The Long-Term Technology

\[ t = 0 \quad \rightarrow \quad t = 1 \quad \rightarrow \quad t = 2 \]

Monitoring

-1

No monitoring

\[ y \]

1 - \( \pi_H \)

1 - \( \pi_L \)

\( \pi_H y > 1 + c \)

\( \pi_L y < 1 \)
Source of Private Information

1. Monitoring
2. Liquidity shock
3. Signal (good or bad projects)
Two Benchmarks

- **First best** (no private info)
  - Early boomers invest and monitor
  - Impatient with good projects sell to late boomers for $y$
  - All other agents hold

- **Autarky**
  - Either:
    - Early boomers invest, monitor, and hold to maturity
  - Or:
    - Use storage and consume early if patient
    - good option relative to LT investment if $\rho \gg 1$
Two arrangements

- Markets
- Financial intermediaries
Market

- Markets do poorly if relatively few good projects would be sold.

- Precisely, cannot do better than autarky if
  \[ \rho \frac{\lambda \pi_H y}{\lambda + (1 - \lambda)(1 - \pi_H)} < y \]
  i.e. keeping a good project better than selling for liq. reason

- Suppose the market is active. Who sells?
  - Impatient with good or bad projects (\(\lambda\))
  - Patient with bad projects (\((1 - \lambda)(1 - \pi_H)\))

- Number of good projects sold: \(\lambda \pi_H\). So price of a project is
  \[ \frac{\lambda \pi_H y}{\lambda + (1 - \lambda)(1 - \pi_H)} \]

- There is no screening possible.
Delegation

- A bank deals with $N$ projects and promise $R$ at $t = 2$
- The bank monitors each of the $N$ projects
- Depositors have no info: Sell their certif of dep. for $\pi_H R$
- The bank cannot sell its portfolio (there is no securitization)
- Bank should monitor: $R$ can’t be too high
- Bank achieves payoff $V^{**} \in (V^{aut}, V^{FB})$. 
Comments

- Very clear and neat paper.
- Ahead of the curve by (easily) 8 years.
- The value of dynamic contracts.
- Optimal level of opacity.
- Other.
Dynamic contracts

- A dynamic contract looks like:
  - If project succeeds, then can sell again next period.
  - If project fails, then lose market license.

- Reputation does a lot in this case.

- OTD model based on reputation and retention (graph).

- Here, there is no securitization as the bank cannot sell.
Originate to distribute

Figure: Source: Board and Santos (2012)
Optimal level of opacity

- Regis does not take a stance on the optimal level of opacity.
- Allocating resources to impatient is good.
- Monitoring is useful.
- Full transparency: Unlucky impatient won’t consume
- Same with bank with aggregate shock
Optimal level of opacity

- Regulators/other view fraud as a side product of opacity
- Right approach: Design contract to ensure the bank “monitors”
- Still, may be worth “unbundling” screening and monitoring activities
- Which activities require more transparency?
- We want to ensure “good practice”, but should not be informed about the result
Unbundling

- Pay a screening cost $-c_s$ to pick $\pi_H$-project
- Pay a monitoring cost $-c_m$ to make sure the project succeeds
- Monitoring introduces a moral hazard problem: Will the bank monitor?
- Market solution: Equilibrium with screening, but no monitoring?
- Suppose market price is $q$ (and $q \leq p_H y$). Investors do not monitor if
  \[ \frac{c_m}{1 - \lambda} \geq (1 - p_H)q \]
- Some screening if
  \[ (p_H - p_L)y \geq \frac{c_s}{1 - \lambda} \]
- Screening is a mixed equilibrium (otherwise, free-ride on everybody else’s screening)
- Can a bank do better?
Other Comments

- Banks useful if

\[ \rho \frac{\lambda \pi_H y}{\lambda + (1 - \lambda)(1 - \pi_H)} < y \]

i.e. \( \lambda \) and/or \( \rho \) small: when liquidity is less valued.

- In other words, a market can implement the first best when the liquidity needs are severe (\( \lambda \rho \) is high).

- Banking analysis is complicated by the fact that the banker is selected from early boomers, and can have a liquidity shock: needs to be compensated for this.

- Set \( \pi_L = 0? \) (\( \pi_L \) is only needed to give a bank the incentive to monitor).
Conclusion

- Is opacity a goal or a side effect of banking activities?
  - Breton (2007) claims it is a goal.
  - Diamond (1984) claims it is a side effect.
- Policy conclusions depend on which side you take.
Screening

- Suppose market price is \( q \) do I want to monitor?
- Monitor if payoff is higher,

\[
-c_m + \lambda \rho q + (1 - \lambda)[\tilde{\rho} y + (1 - \tilde{\rho}) q] \geq \lambda \rho q + (1 - \lambda) \left[ \max\{\tilde{\rho} y; q\} \right]
\]

or

\[
\tilde{\rho} y + (1 - \tilde{\rho}) q - \max\{\tilde{\rho} y; q\} \geq \frac{c_m}{1 - \lambda}
\]

- screening equilibrium implies \( \tilde{\rho} = p_H \) and \( p_H y > q \) then monitor iff

\[
(1 - p_H) q \geq \frac{c_m}{1 - \lambda}
\]

- screening mixed-equilibrium implies for bad projects: \( \tilde{\rho} = p_L \) and \( p_L y < q \) then monitor iff

\[
p_L (y - q) \geq \frac{c_m}{1 - \lambda}
\]