

# **The Cross Section of Bank Value**

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Discussant's Comments

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Chicago Financial Institutions Conference

April 5-6, 2018

Views are mine and do not necessarily represent the views of the San Francisco Fed or the Federal Reserve System

## **Overview of the paper**

This paper attempts to sort out the relative importance of three different classes of banking theories in determining the value of banking firms.

The methodology involves a two-stage estimation: (1) estimate deposit productivity and asset productivity separately; (2) compare their explanatory power for the market-to-book ratio.

Since deposit productivity has more explanatory power than asset productivity, conclude that banks are primarily special due to their unique liability structure rather than their information production.

## **Overview of my comments**

An ambitious paper: sorting out competing theories in banking.

Put this paper in the context of the bank efficiency literature.

Focus on the economic framework.

## The economic framework in estimating bank productivity

Two *separate* production functions for bank assets and liabilities.

In banking, both deposit taking and loan making are **integral** to financial intermediation.

With two separate production processes, the labor and capital costs would need to be allocated to the deposit production and loan production separately.

## Deposit Production Function:

$$F_{jt}(X_{jt}) = \beta X_{jt} + \delta_j$$

Any scale efficiency and scope efficiency will be absorbed by  $\delta_j$  which is the measure of productivity.

Dual banking system in the U.S.

Common production function over more than 20 years.

Any subsidy is counted as productivity here.

## Asset Production

Asset productivity via the profit function:

$$\pi_{jt} = \phi_j A_{jt}^\theta - i_{jt} M_t s_{jt} - r_{jt} K_{jt}$$

This profit function does not have labor cost nor physical capital cost.

Risk-adjusted revenue is measured by interest and fee income.

Fee income is a different output that is not asset based.

Accounting for risk taking.

## Measurement issues

Deposit rate = interest expense on deposits / total deposits

Composition issues

Decomposition of deposit productivity

## **Conclusions**

At the Federal Reserve, the productivity of the US economy is taken very seriously, but its estimation remains challenging.

The problem is even more daunting for the banking industry.

More research on this area is strongly encouraged.