On the Evolution of Alternative Payments Systems

Stephen Quinn (Texas Christian University)

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Why History?

"History does not repeat itself,
but it does rhyme."

-attributed to Mark Twain.

History Suggests

State intervention is a key factor in payments system evolution.

- State-supplied money creates a payments system anchor.
- Regulations orient the direction of payments system innovation.

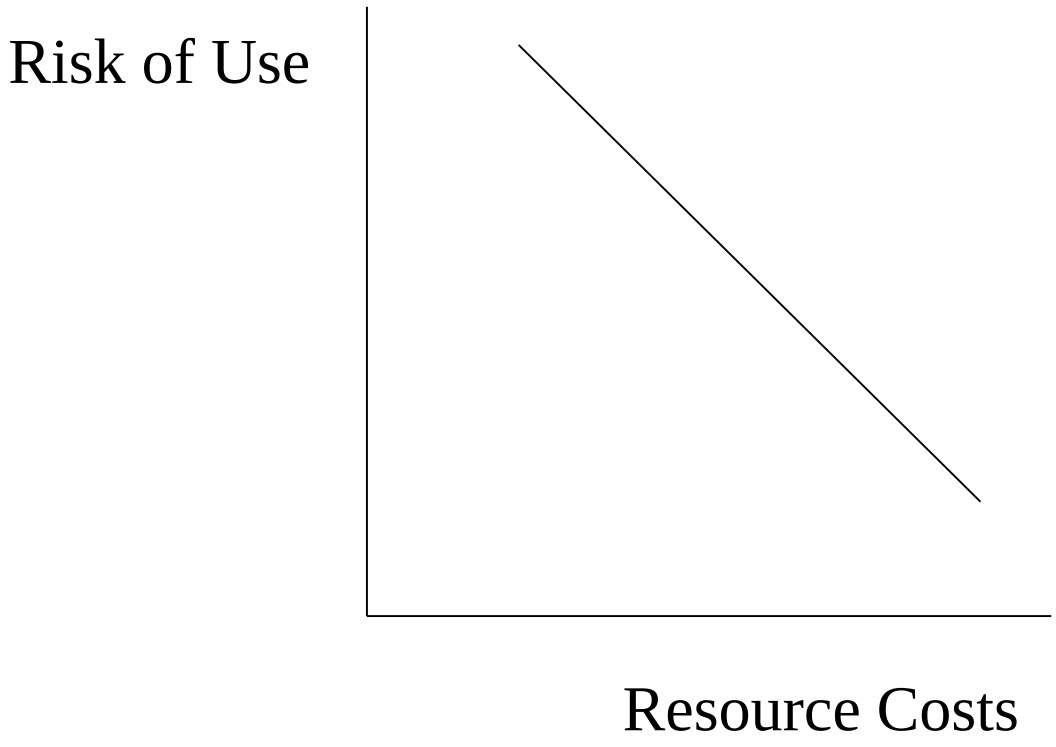
The evolving system sets the environment for future innovations.

Outline

1. Analytical Framework
2. Venice
3. Amsterdam
4. New York

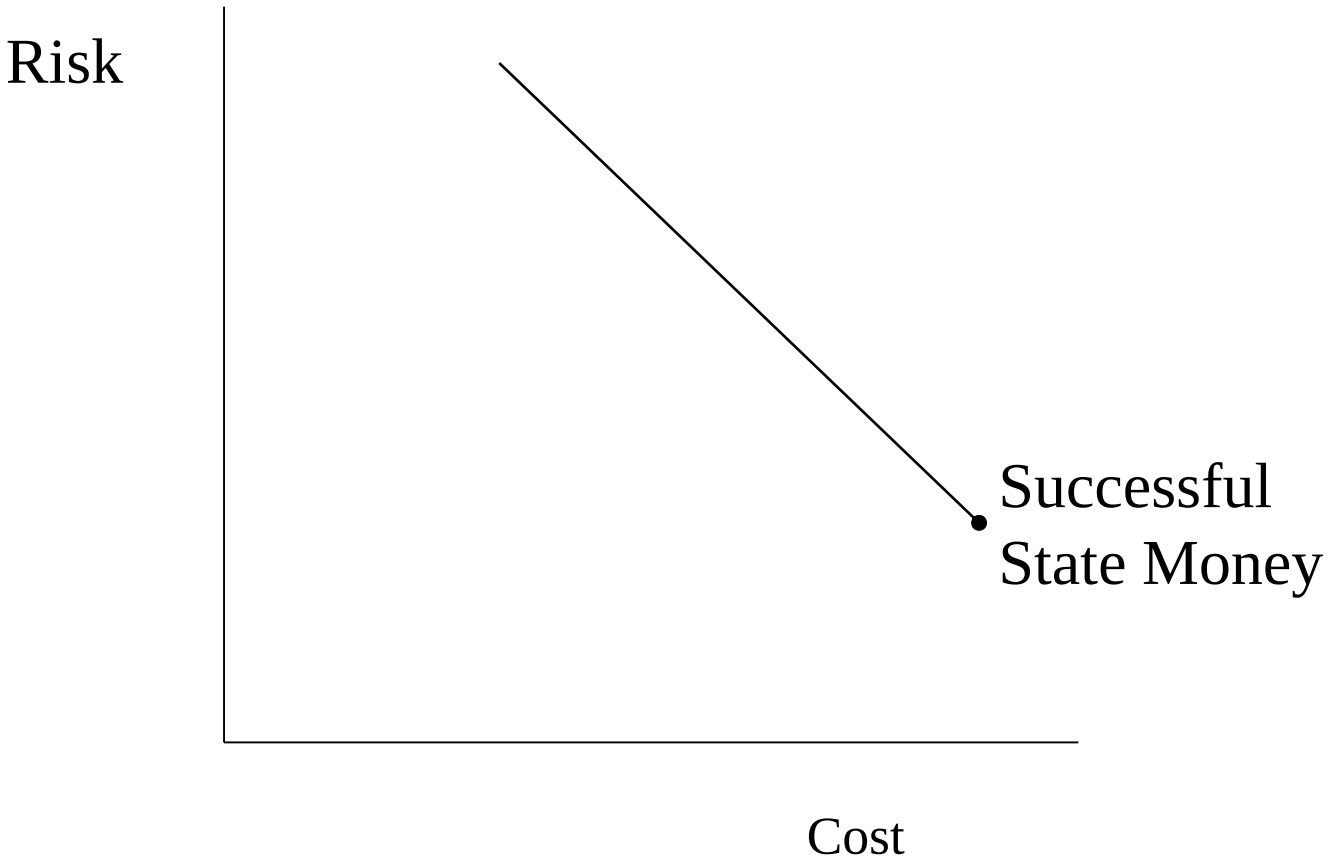
1. Analytical Framework

Payments System Frontier

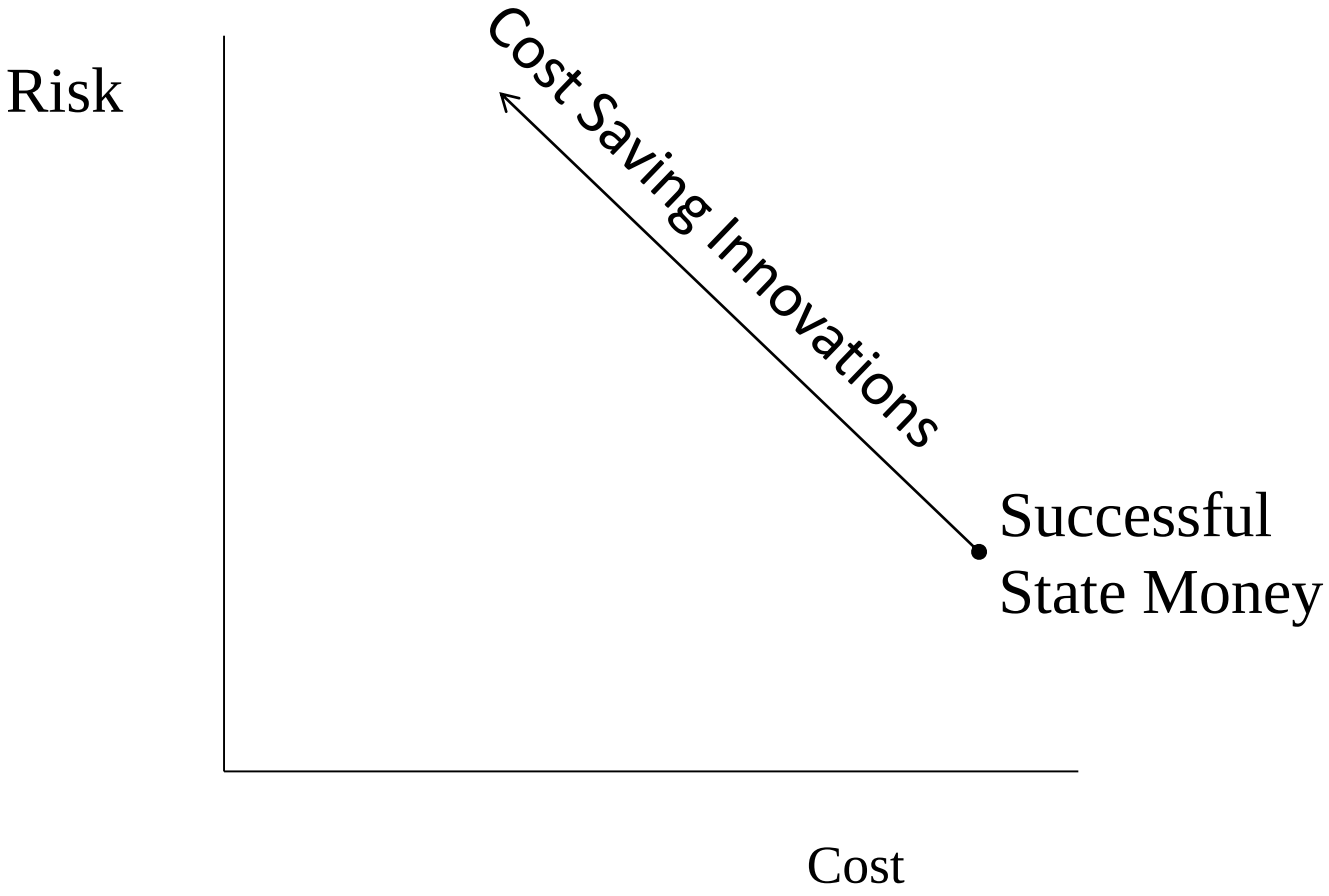


Source: Adaptation of Berger, Hancock and Marquardt (1996: 700)

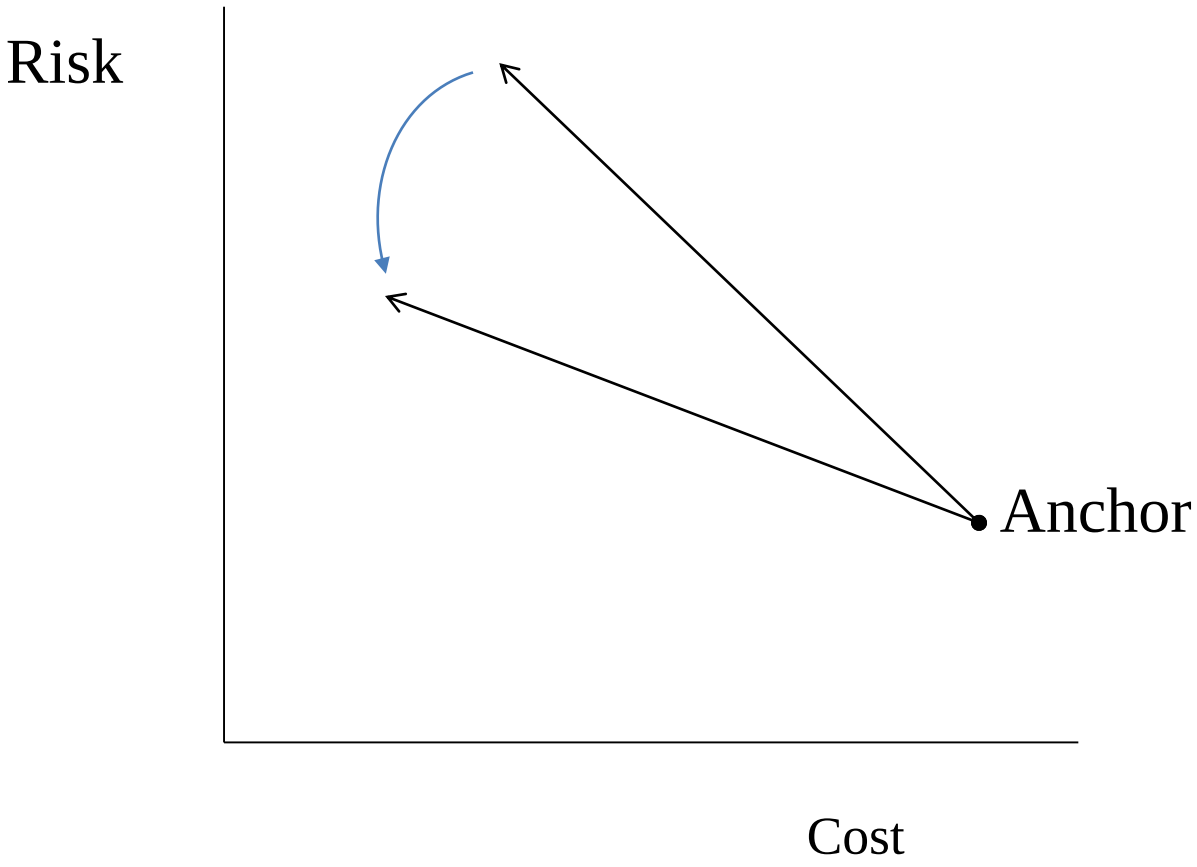
Anchor



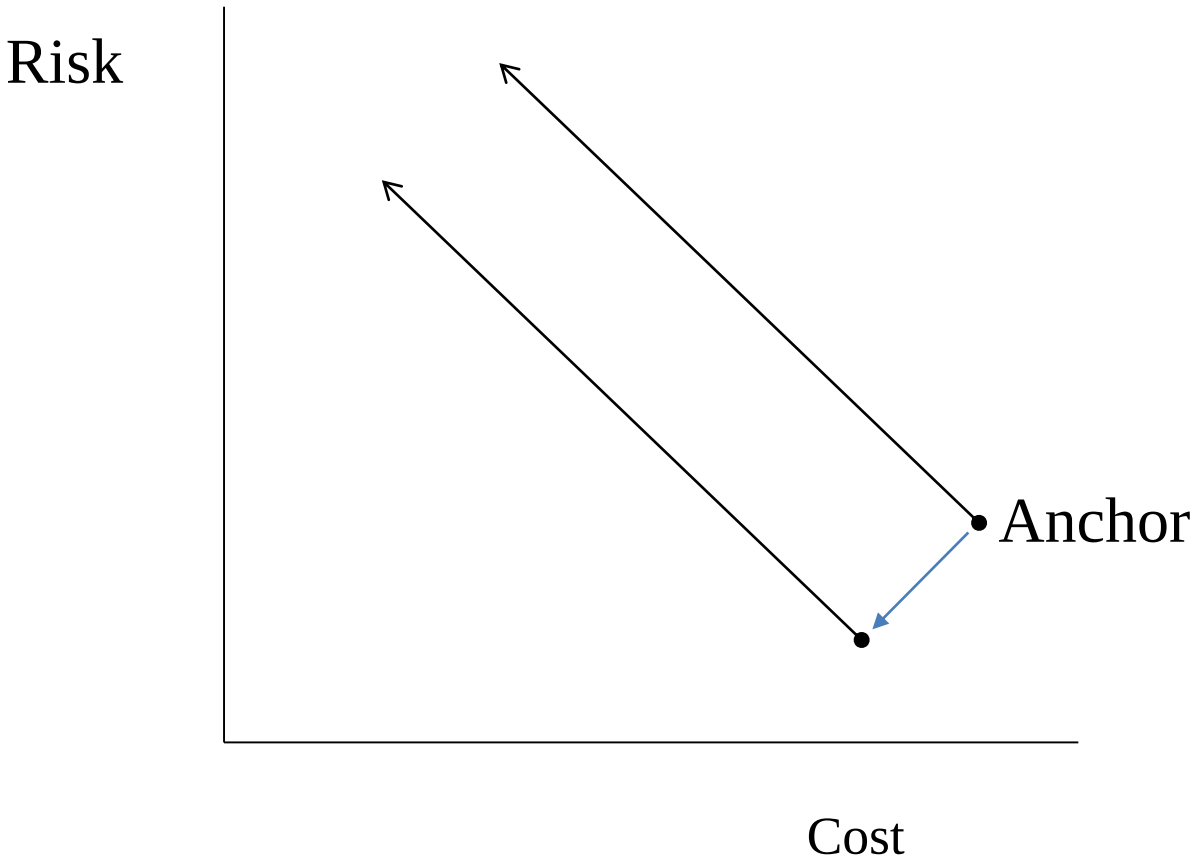
Innovation



Pivot



Shift



Complications

- Economic development
- Regulation
- Politics
- Systemic Risk

2. Pivot

Venice circa 1500

Renaissance Venice

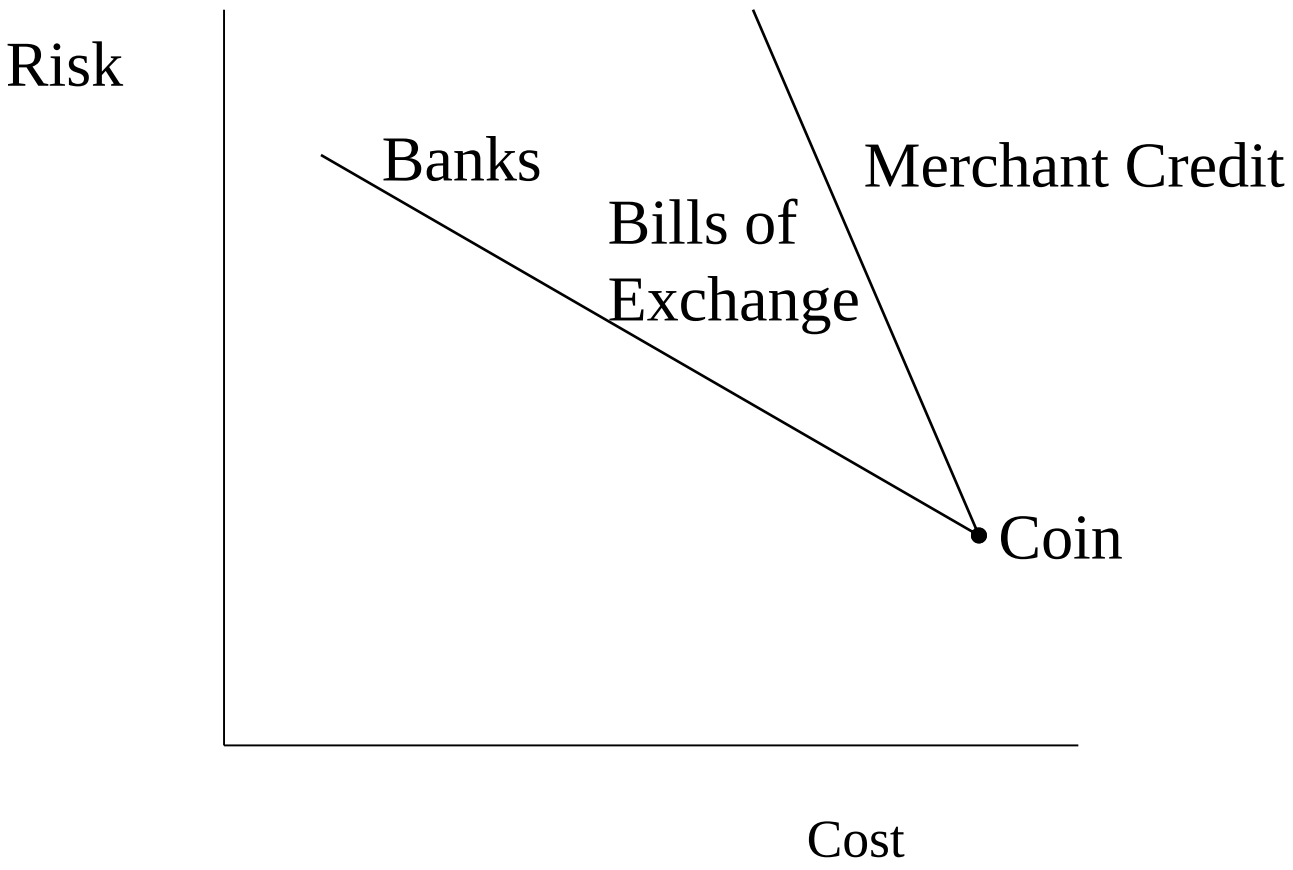
Anchor medium of exchange: coins

Alternative payment: Merchant credit

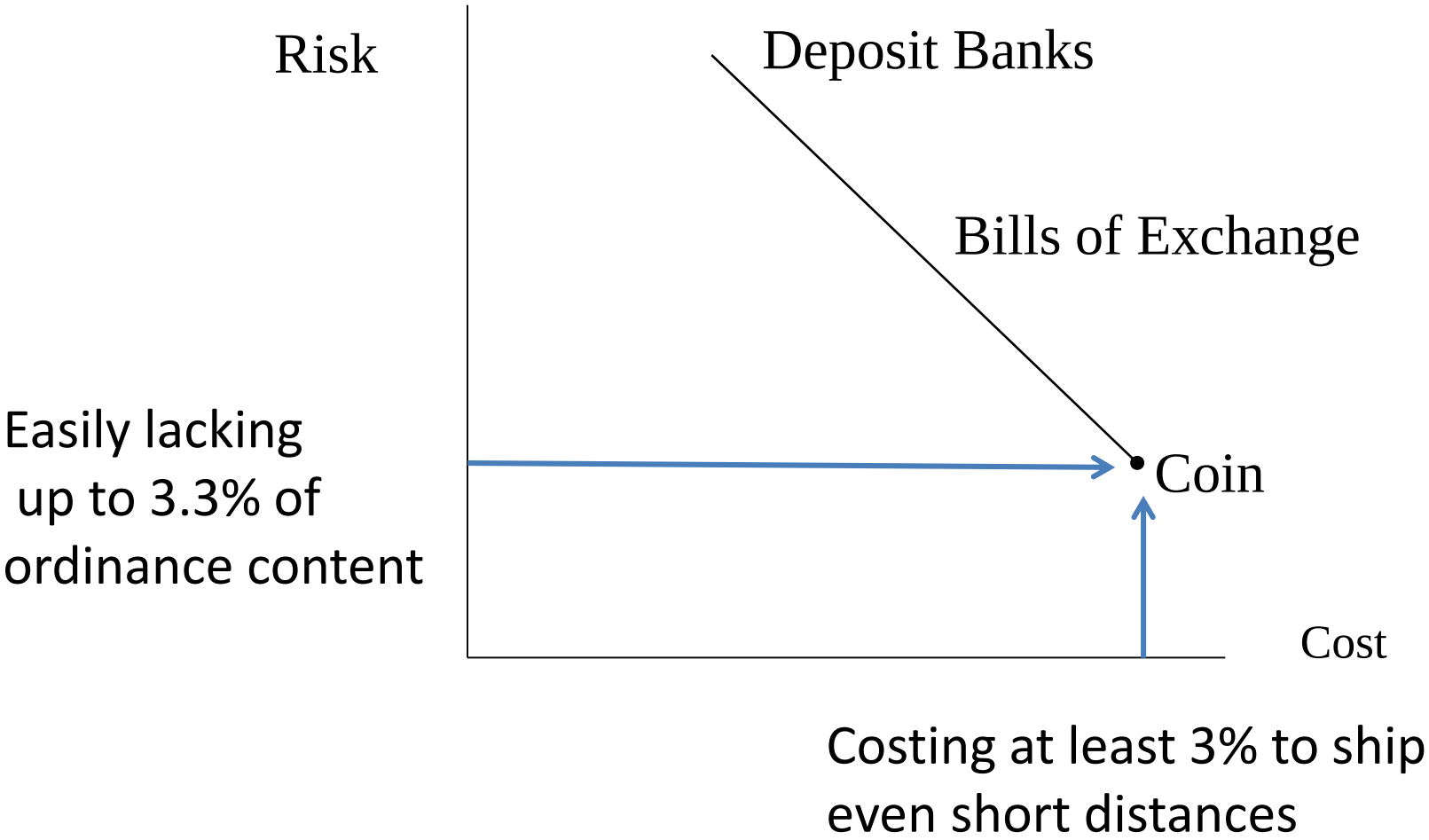
Innovations:

1. Deposit banks (domestic payments)
2. Bills of exchange (foreign payments)

Innovation



Paper-Coin Payment System



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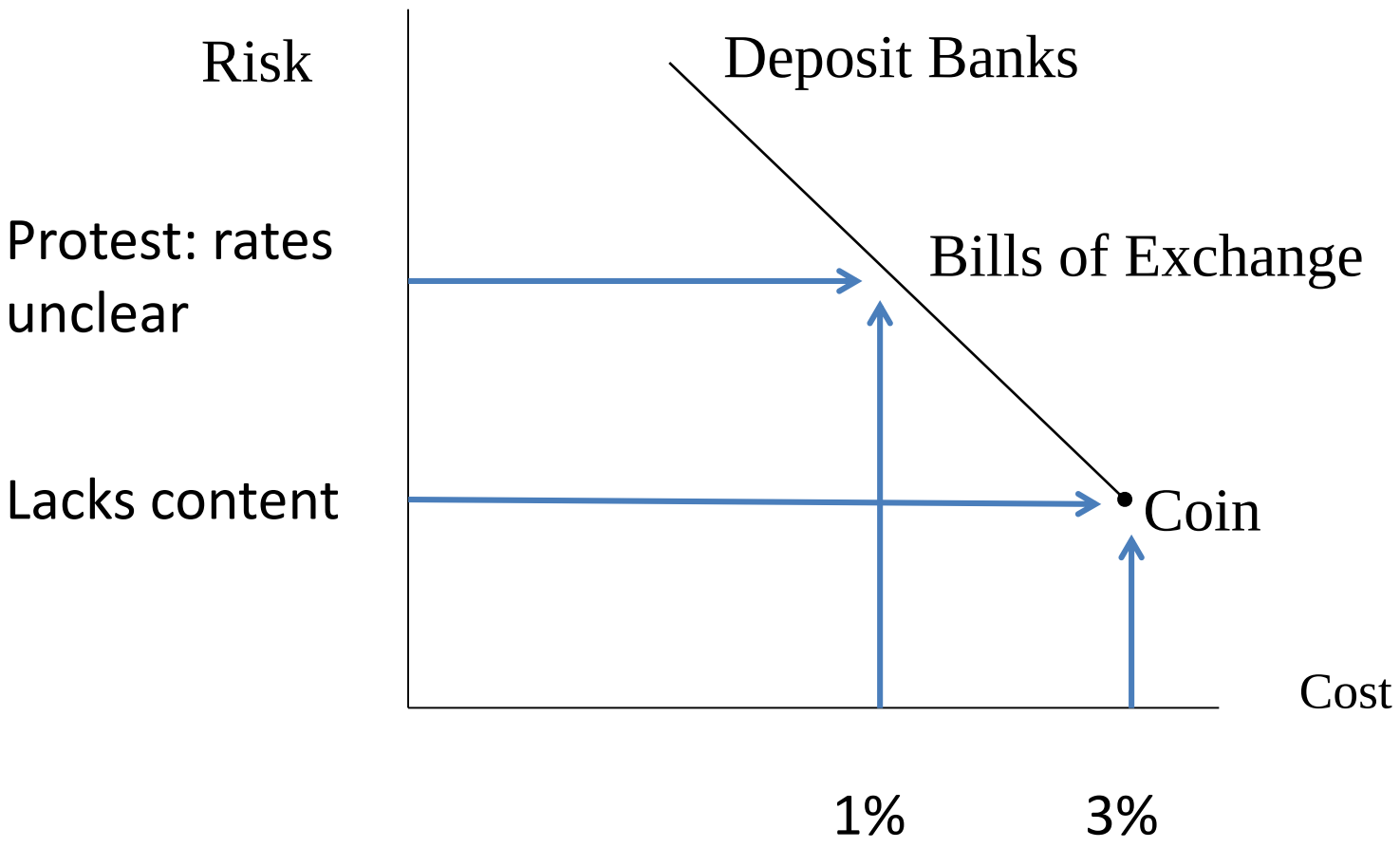


Pivot Innovation

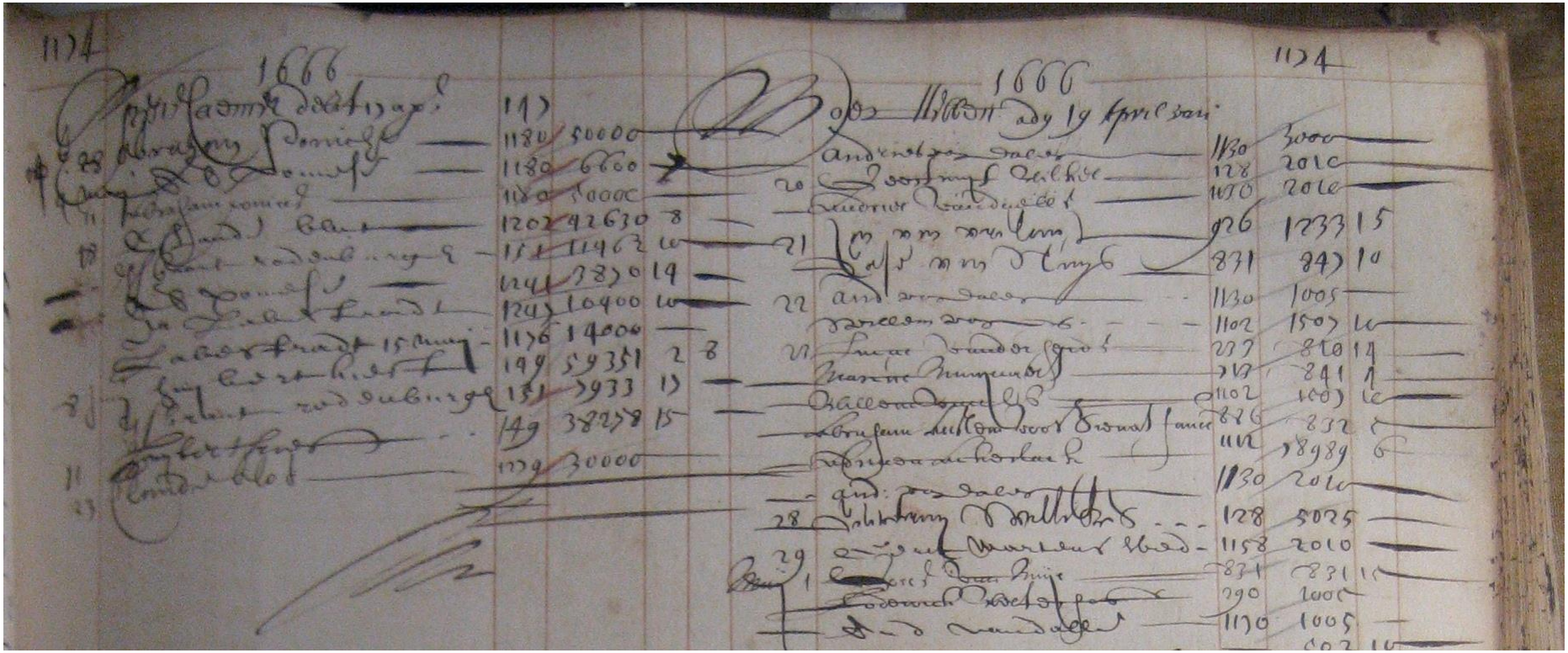
- Private sector
- Incremental network building
- Rule of law
- Regulatory lag

3. Shift

Amsterdam circa 1700

Bank of Amsterdam

Bank of Amsterdam Money

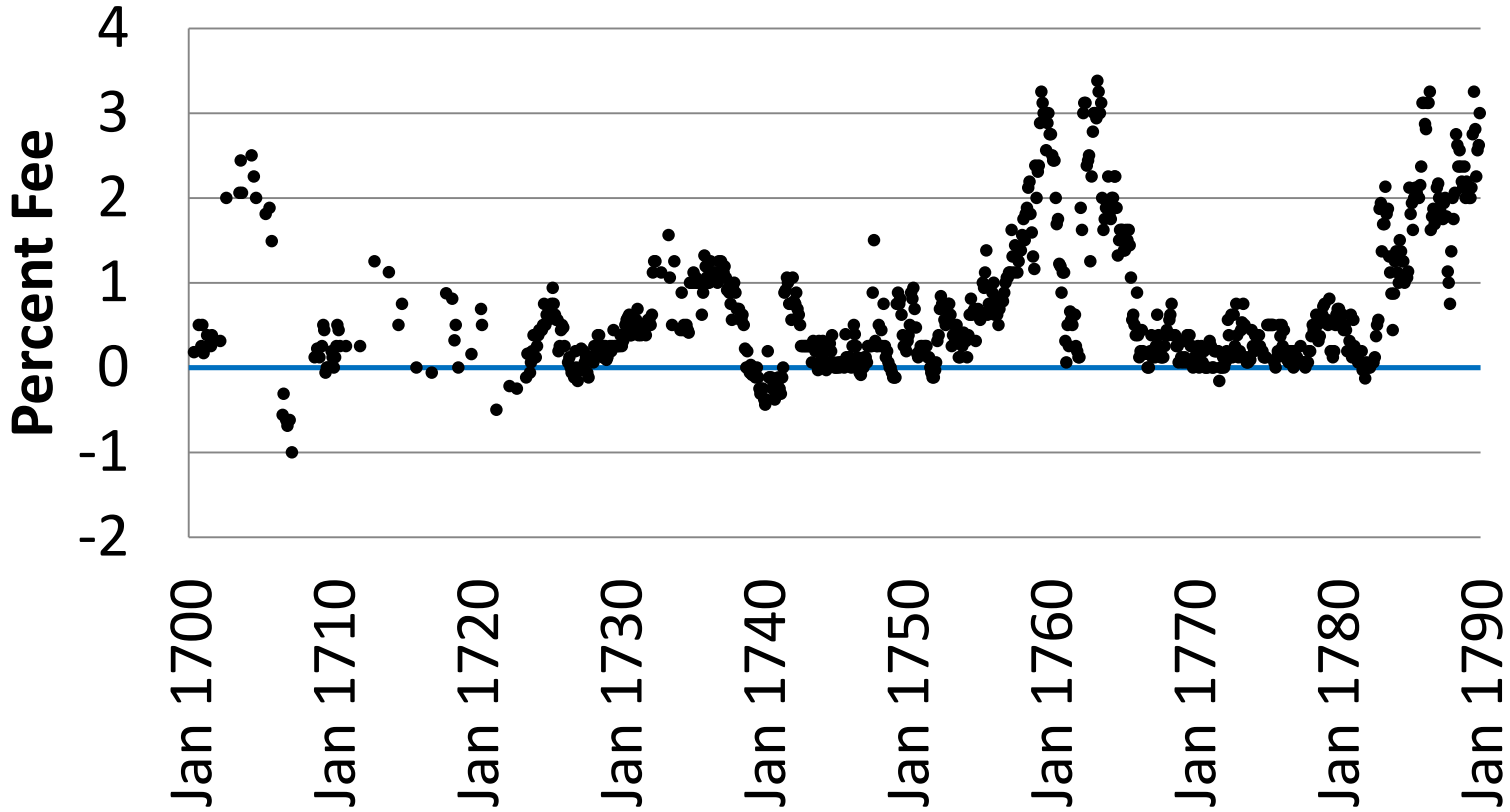


Paper Anchor

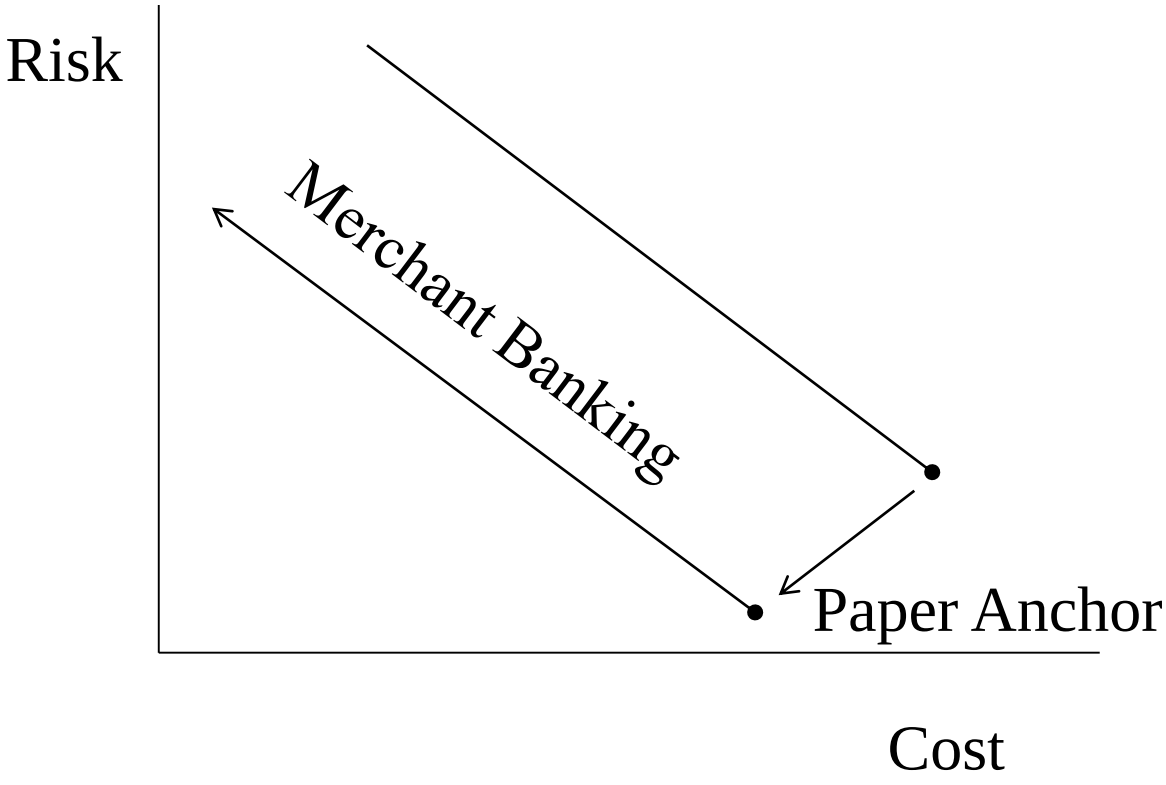
Lower Costs: People able to avoid coins without the risks associated with private intermediaries.

Risk Remained: The value of Bank of Amsterdam money varied. Credibility relied on the City of Amsterdam.

Secondary Market Fee to Sell Bank of Amsterdam Money



Amsterdam circa 1750



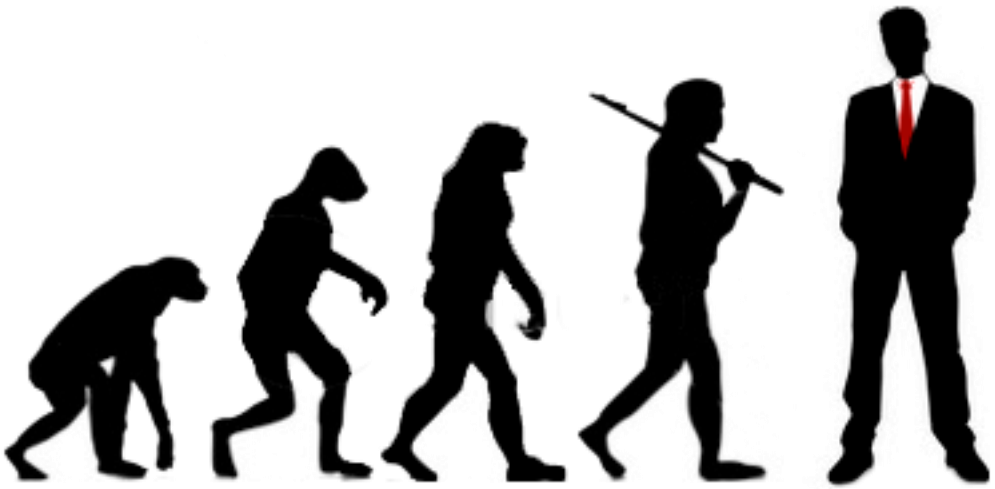
Shift Innovation

Innovation in payments system anchor can spark rapid innovation.

4. Regulation

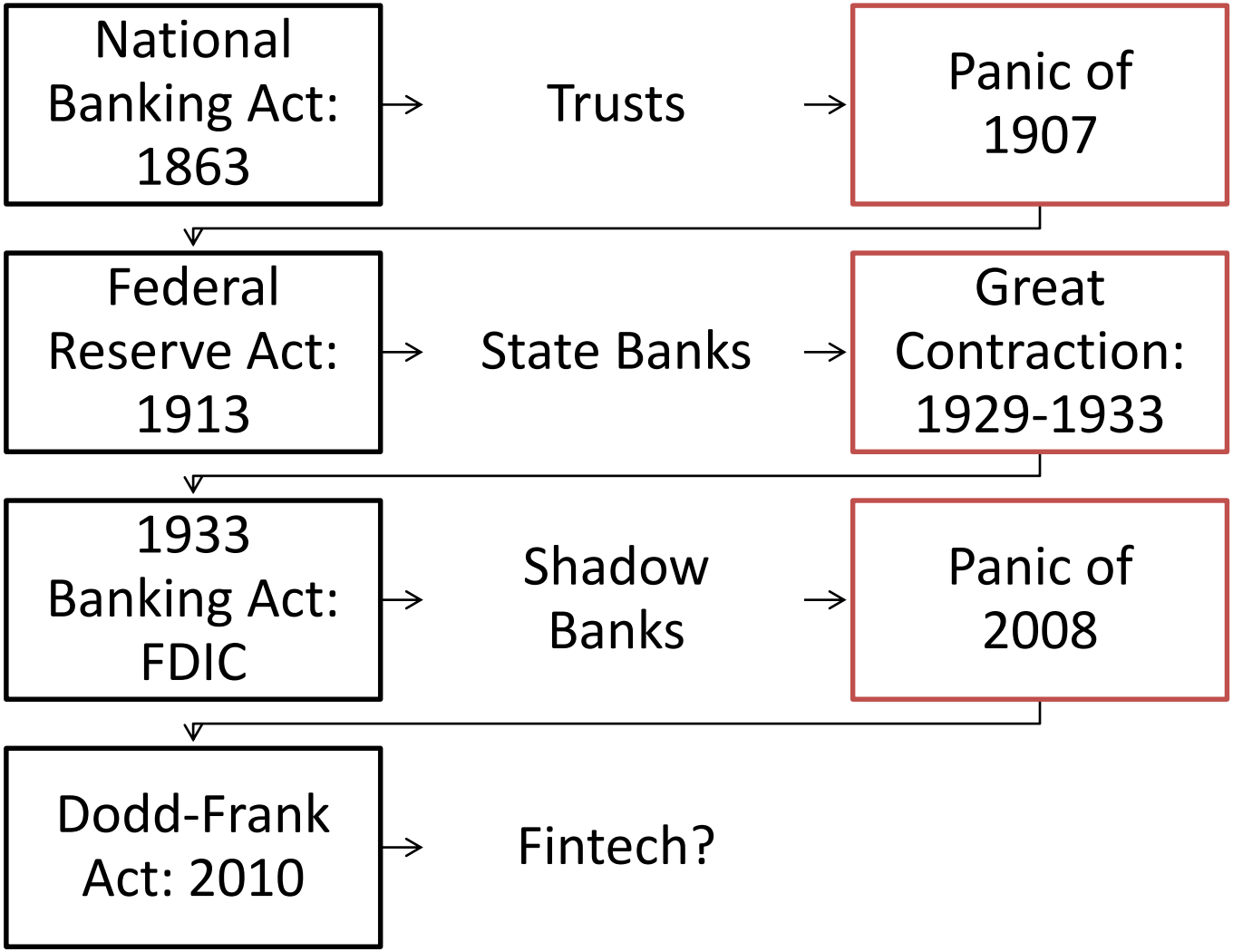
Modern U.S.

Evolution



Evolution

U.S. Regulatory Cycle



Conclusions

When the environment allows, payment system innovation is the incremental building of networks (Venice).

New anchors can cause punctuated evolution (Amsterdam).

Regulation can cause innovation in avoidance (New York).

Thank you.