

# The Supervisory Framework Surrounding Nonbank Participation in the U.S. Retail Payments System

Richard J. Sullivan  
Payments System Research  
Federal Reserve Bank of Kansas City

## BITS Payments Team Presentation

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The views expressed in this presentation are those of the author and do not necessarily reflect those of the Federal Reserve Bank of Kansas City or of the Federal Reserve System.

# 2003 Nonbank Study

Bradford, Davies, and Weiner

- Findings
  - Nonbanks are pervasive
  - Nonbank business relationships with other participants are complex and intertwined
  - Nonbanks are rarely directly involved in settlement activities
  - Both nonbanks and banks are increasingly susceptible to operational risk

# Steady stream of stories about errors and disruptions to the payment system

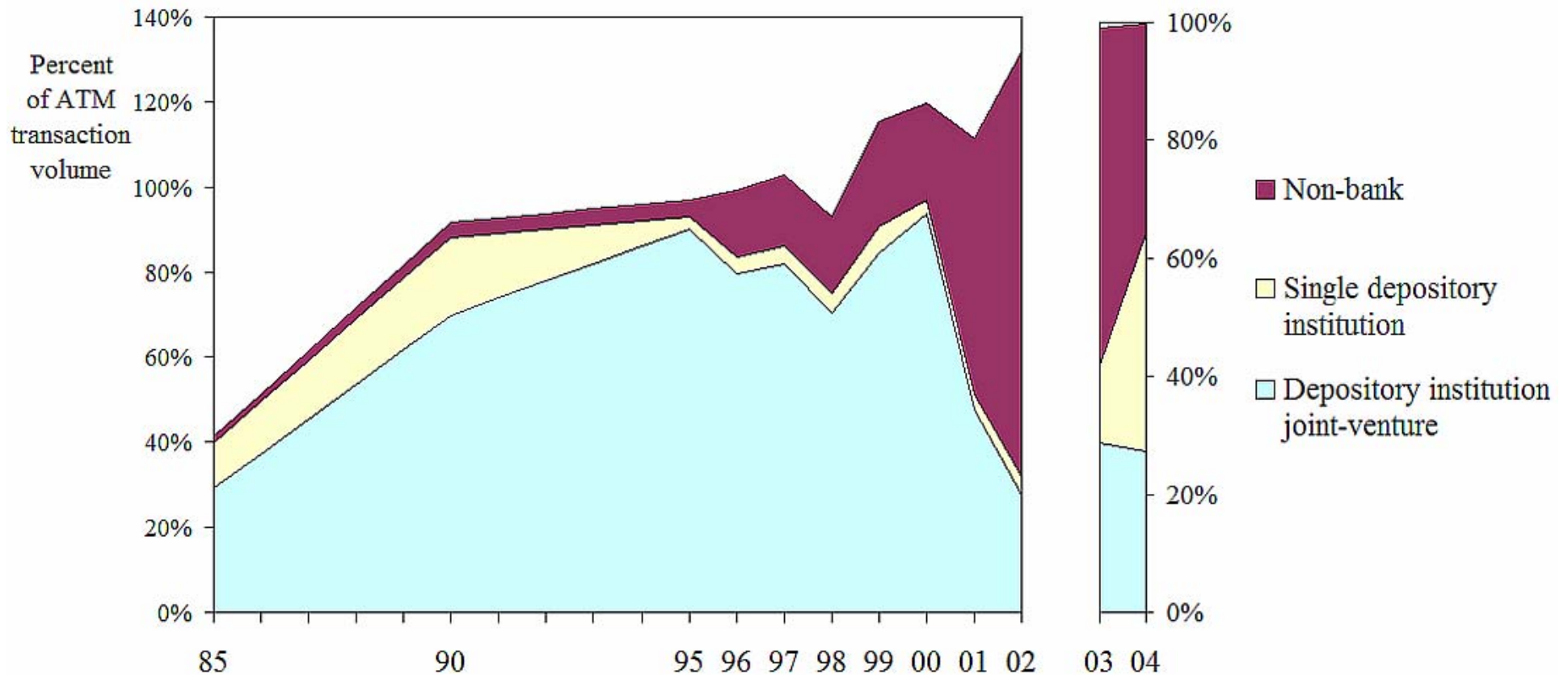
- “Theft Linked to Bank Accounts” (*KC Star* 5-25-05)
- “TSYS, Processor of Bank Information, Fights Thousands of Hackers” (*Columbus Ledger-Enquirer* 6-22-05)
- “Phishing Blows By Skimming As Top Fraud Choice” (*ATM&Debit News* 6-23-05)
- “Phishers Hack eBay” (*Techworld.com* 8-1-05)
- “Study: More Operational Losses” (at large, internationally active banks) (*AmBkr* 5-24-05)

# “The Supervisory Framework Surrounding Nonbank Participation in the U.S. Retail Payments System: An Overview” (Sullivan working paper)

- Increase in nonbank payment providers tied to an increase in electronic payments
- Risks associated with each may compound one another
- Supervision program over providers of technology services to banks includes major payment processors
- Four elements in payments system risk policy can address information asymmetries, externalities, and coordination problems in payment networks
- Control of payment system risk should place emphasis on the interrelationships between participants in the payments system
- We need more information before recommending any major policy changes

# Share of Transaction Volume by Ownership of ATM Network

## Top 20 Regional Networks



# Trends in U.S. Noncash Payments

					Compound Annual Growth	
		1995	2000	2003	1995 to 2000	2000 to 2003
Check	Volume (billions)	49.5	41.9	36.6	-3.3%	-4.5%
	Share of Total	77.1%	57.8%	45.3%		
Electronic	Volume (billions)	14.7	30.5	44.3	14.6%	12.4%
	Share of Total	22.9%	42.2%	54.7%		
Total	Volume (billions)	64.2	72.4	80.9		

Electronic payments include debit card, credit card, and ACH.

# Economic Perspective

- Change in underlying technology often leads to changes in industrial structure
- Characteristics of network markets
  - Requires coordination among participants
  - Information asymmetries
  - Externalities

# New or More Prominent Risks

- Nonbanks: operational risks
  - Outsourcing
  - Legal
- Electronic payments
  - Open access
  - Rapid, large batch processing
  - Viruses, worms, trojan horses, DoS attacks
  - Advanced technology
- Compounding effects
  - New, unfamiliar access points to payments
  - Wider range of risk profiles of payments participants
  - Conflicts of interest

# Supervision of Nonbank Payment Providers

- Nonbank payment providers are one example of technology service providers (TSPs) of financial institutions
- TSP supervision
  - Conducted jointly among federal agencies
  - Two programs: regional and national
  - National program
    - Multi-district Data Processing Servicer (MDPS)

# Business Lines Offered by Supervised Technology Service Providers

Business Line	Bank affiliation status					
	All TSPs		Nonbank		Bank affiliated	
	N	Percent	N	Percent	N	Percent
Core processing	68	54.6%	37	44.6%	31	73.8%
Any payments-related business line	87	69.6%	55	66.3%	32	76.2%
Other business line	21	16.0%	19	22.9%	2	4.8%
Total number of TSPs	125		83		42	

# Techniques that Help Control Payments System Risk

- Improve market process
  - Licensing and technical standards
  - Appropriate legal interrelationships and disclosure
- Supervision and regulation
  - Capital standards
  - Examination

# Is the Market Process Sufficient to Control Risk in Retail Payments?

- Policy statements typically place heavy responsibility for controlling risk in payments on individual participants
  - Relies on market incentives
- But does the increased use of electronic payment networks imply that market forces and individual incentives are sufficient to control risk in retail payments?
  - Bank of England: retail payments now exposed to “system-wide” risk

# Information Deficiencies

- Source, extent, and severity of disruptions to payments
- Legal structure among payment participants
- Effectiveness of information sharing
- Ability of TSP supervision program to identify key nonbank payment providers

## • Privacy Rights Clearinghouse

- List of data breaches Feb. 15, 2005 to present
- <http://www.privacyrights.org/ar/ChronDataBreaches.htm>

	Location of Data Breach					Total
	Financial institutions	Nonbank payments processors	Schools	Commerce	Other	
Number of Incidents	8 (13%)	3 (5%)	29 (46%)	6 (10%)	17 (27%)	63
Individuals Exposed (millions)	6.02 (12%)	40.17 (80%)	1.23 (2%)	1.68 (3%)	1.36m (3%)	50.48
Individuals Exposed w/o CardSystems (millions)	6.02 (58%)	0.17 (2%)	1.23 (12%)	1.68 (16%)	1.36 (13%)	10.47

Source: author's calculations based on list of breaches compiled by Privacy Rights Clearinghouse.

# Questions? Comments?

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Richard J. Sullivan

Payments System Research

925 Grand Boulevard

Kansas City, MO 64198

816-881-2372

[Rick.J.Sullivan@kc.frb.org](mailto:Rick.J.Sullivan@kc.frb.org)

<http://www.kansascityfed.org/FRFS/PSR/PSR-WorkingPapers.htm>