PAYMENTS FRAUD STATISTICS

Richard J. Sullivan
Economic Research
Federal Reserve Bank of Kansas City

Presentation to the

Conference on the Role of Government In Payments Risk and Fraud

Federal Reserve Bank of Atlanta November 17, 2011

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.

Payment Fraud Statistics

- Agenda
 - UK case study
 - Availability of fraud loss rates worldwide
 - U.S. payment fraud data
- Effective risk management requires measurement of performance

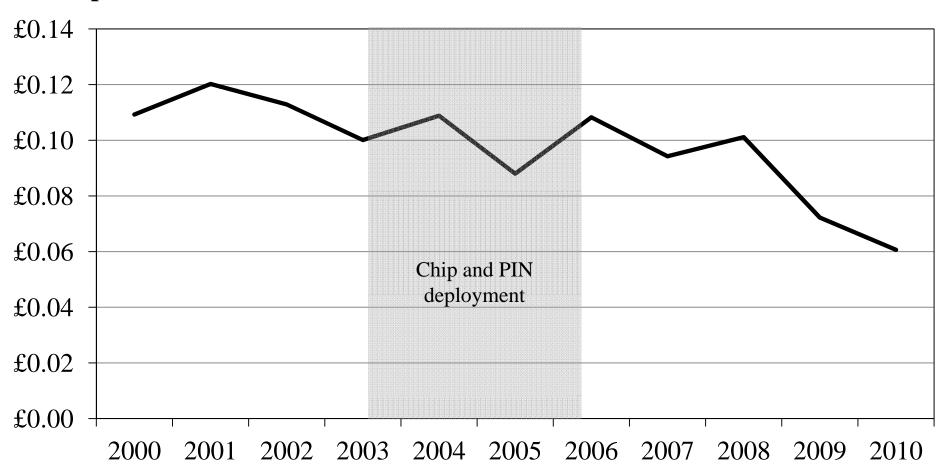
UK Case Study

- Experience with Chip-and-PIN
- Fraud loss guideposts
 - Can be of dubious value at times
 - Can usefully guide fraud reduction strategies

Fraud Loss Rate

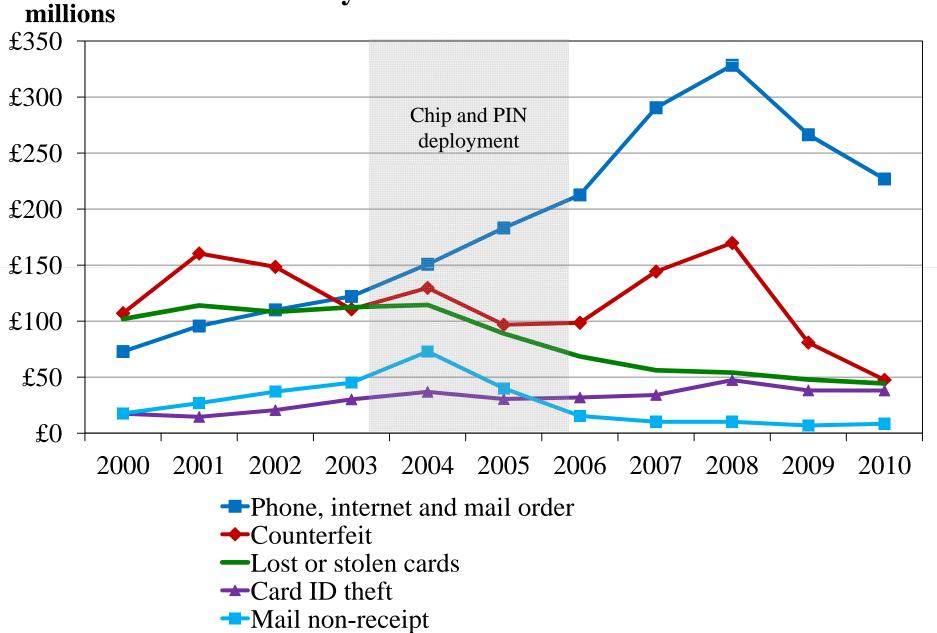
UK-Issued Payment Cards

Loss per £100



Includes ATM fraud losses.

UK Payment Card Fraud Losses



International Fraud Statistics

- Typically covers cards, sometimes checks
- Domestically issued cards
- Domestic and foreign transactions
- Gross actual losses, probably for all parties
- Annual statistics (semi-annual in Australia)
- Usually report fraud by categories (counterfeit, CNP, lost/stolen, etc.)
- Australia and France provide some details on method

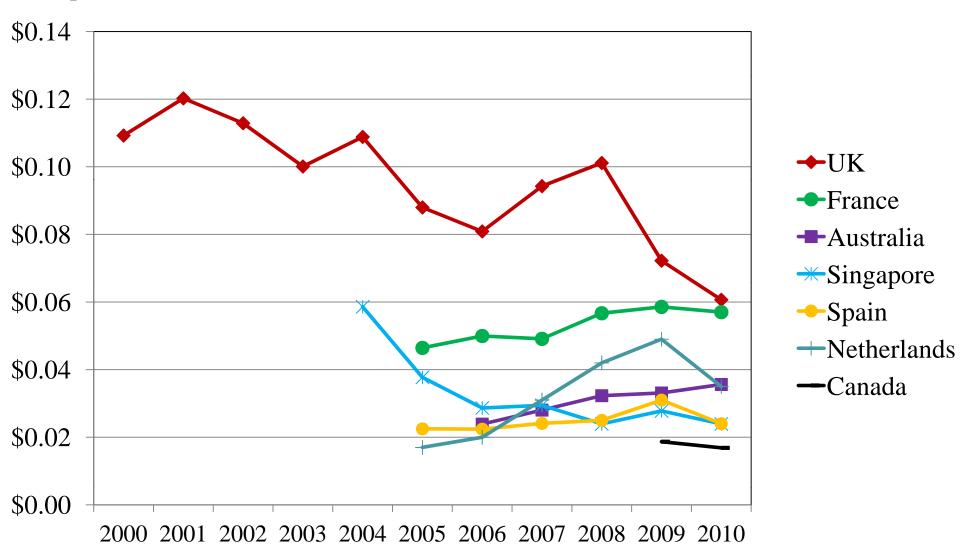
International Fraud Statistics

- Lead organization typically industry group (issuers, processors)
 - Exceptions: central banks in France and Singapore
- Participants include financial institutions, payment networks, payment card brands, payment processors and networks, merchants

Fraud Losses Per Value of Transactions

Domestically Issued Debit and Credit Cards

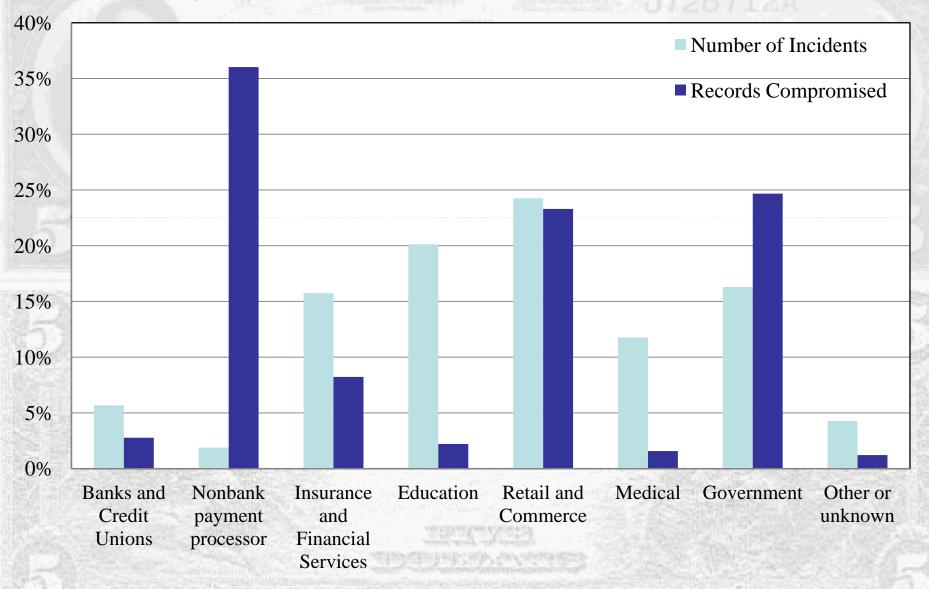




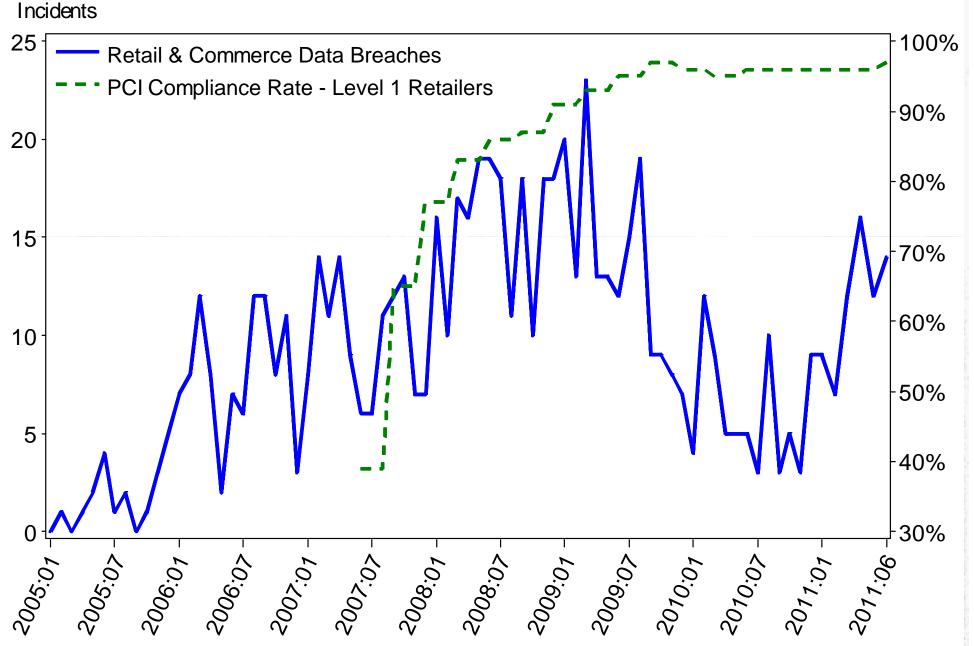
U.S. Fraud Statistics

- Payment Fraud Production
 - 1. Obtain payment instrument and/or account numbers
 - 2.Impersonate account holder
 - 3. Fool the payment approval process
 - 4. Obtain goods or money
 - -possibly transform proceeds into untraceable liquid assets

Share of Incidents and Records Exposed by Sector Publicly Announced Data Breaches, U.S., Jan 2005 to Dec 2010



PCI Compliance Rates and the Number of Publicly Disclosed Data Breach Incidents Among Retail & Commerce Firms



Check Fraud Statistics

- ABA: banks lost \$1.024 billion on attempts valued at \$11.365 billion (2009)
 - 91% of attempts (by value) were prevented
- AFP: 93% of organizations were targets of check fraud
 - -86% of these avoided financial loss

Some Sources of U.S. Payment Fraud Statistics

Source	Coverage	Time period	Payment instruments
Association of	Medium to large	Annually since	Checks, consumer debit and
Financial	corporations	2005	credit cards, corporate
Professionals			purchasing cards, automated
			clearinghouse payments, wire
			payments
American Bankers	Small to large	Periodically	Checks and debit cards
Association	banks	since 1991	
CyberSource	Online merchants	Annually since 2000	Primarily debit and credit cards
Javelin Strategy &	Consumers	Annually since	Checks, debit and credit cards
Research		2004	
PULSE EFT	Debit card	Periodically	Debit cards
Association	issuers	since 2005	

Notes: all of these sources use surveys to collect data. PULSE EFT Association sponsors the survey of debit card issuers, which has been conducted by various consulting firms.

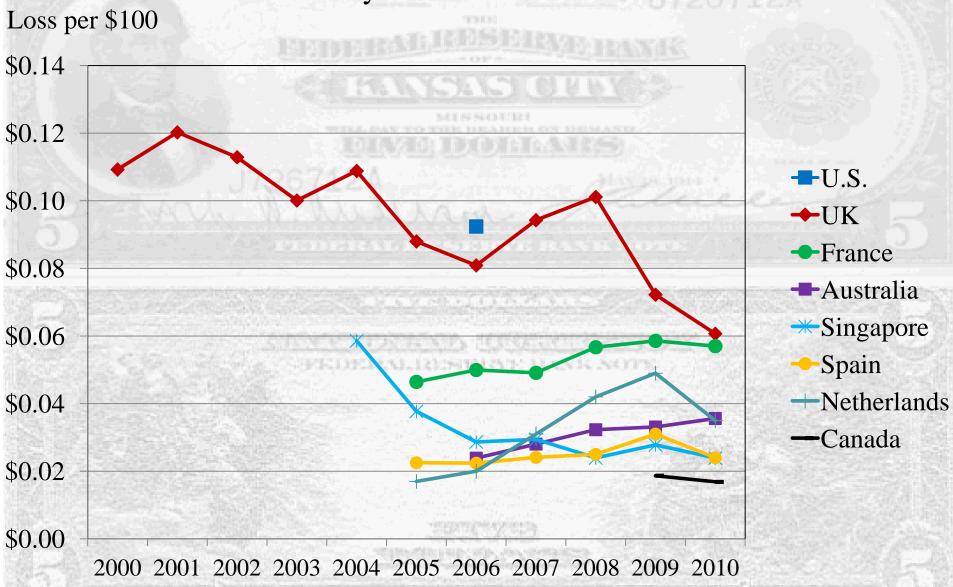
Estimate of Actual Losses

Fraud Losses on Debit and Credit Card Payments in the United States, 2006					
Card issuers	billions	Share of total loss			
PIN debit	\$0.028				
Signature debit	\$0.337				
Credit cards	\$1.240				
ATM withdrawals	\$0.397				
Total issuer losses	\$2.002	59%			
Merchants					
POS	\$0.828				
Internet, mail order, and telephone	\$0.568				
Total merchant losses	\$1.396	41%			
Total losses	\$3.398				

Notes: includes issuer and merchant losses on credit, debit, and ATM transactions. Source: Adapted from: Richard J. Sullivan "The Changing Nature of U.S. Card Payment Fraud: Industry and Public Policy Options," Federal Reserve Bank of Kansas City *Economic Review*, Second Quarter 2010.

Fraud Losses Per Value of Transactions

Domestically Issued Debit and Credit Cards



Payment Fraud Statistics

- Effective risk management requires measurement of performance
 - Provides guideposts on outcomes of risk management efforts
 - Provides guidance for risk management strategies
 - Useful to industry participants as well as policymakers
 - Can be useful vehicle for public education

PAYMENTS FRAUD STATISTICS

Conference on the Role of Government In Payments Risk and Fraud

Federal Reserve Bank of Atlanta November 17, 2011

Richard J. Sullivan
Economic Research
Federal Reserve Bank of Kansas City
1 Memorial Drive
Kansas City, MO 64198

Rick.J.Sullivan@kc.frb.org 816-881-2372