Managing Emerging Technology Risk

Federal Deposit Insurance Corporation

New York Regional Office

May 16, 2012

Managing Emerging Technology Risk

- Regulatory guidance and best practices for managing risks pertaining to:
  - payment systems,
  - social media sites,
  - mobile banking, and
  - virtualization/cloud computing

- Security and data integrity challenges in safeguarding customer information

Payment Systems

Non-Cash Payment Systems in the US:

- Check Clearing Systems
- Automated Clearing House (ACH) Systems
- Card-based Credit/Debit (e.g., Amex, Discover, MasterCard, Visa, etc.)
- Prepaid/Stored Value Card Programs
- Electronic Funds Transfer Networks (e.g., Star, Cirrus, Pulse, etc.)
- Person-to-Person or P2P (e.g., PayPal, etc.)

Payment Systems

Payments risk covers all FDIC supervisory disciplines:

- Safety & Soundness
- Compliance/Consumer Protection
- Bank Secrecy Act / Anti-Money Laundering
- Technology/Operations

Corporate Account Takeover

Corporate accounts are targeted because of the large balances **and** the ACH credits that are generated have expedited funds availability.

Corporate Account Takeover

Methods used to obtain valid online banking credentials include:

- Keylogging malware – records legitimate user's keystrokes and sends to perpetrator
- E-mail phishing – tricks legitimate user to send credentials or enter them at a web site

Security and Data Integrity Challenges

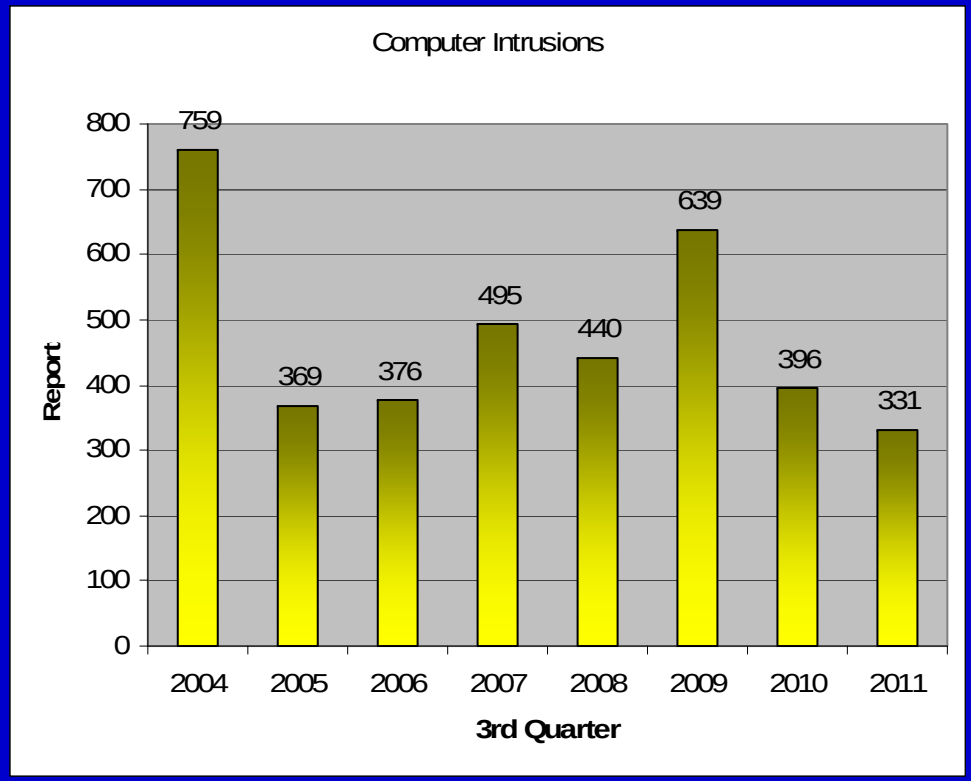
Despite generally strong controls and practices by financial institutions, methods for stealing personal data and committing fraud are continuously evolving.

Cyber Fraud and Financial Crime Reports

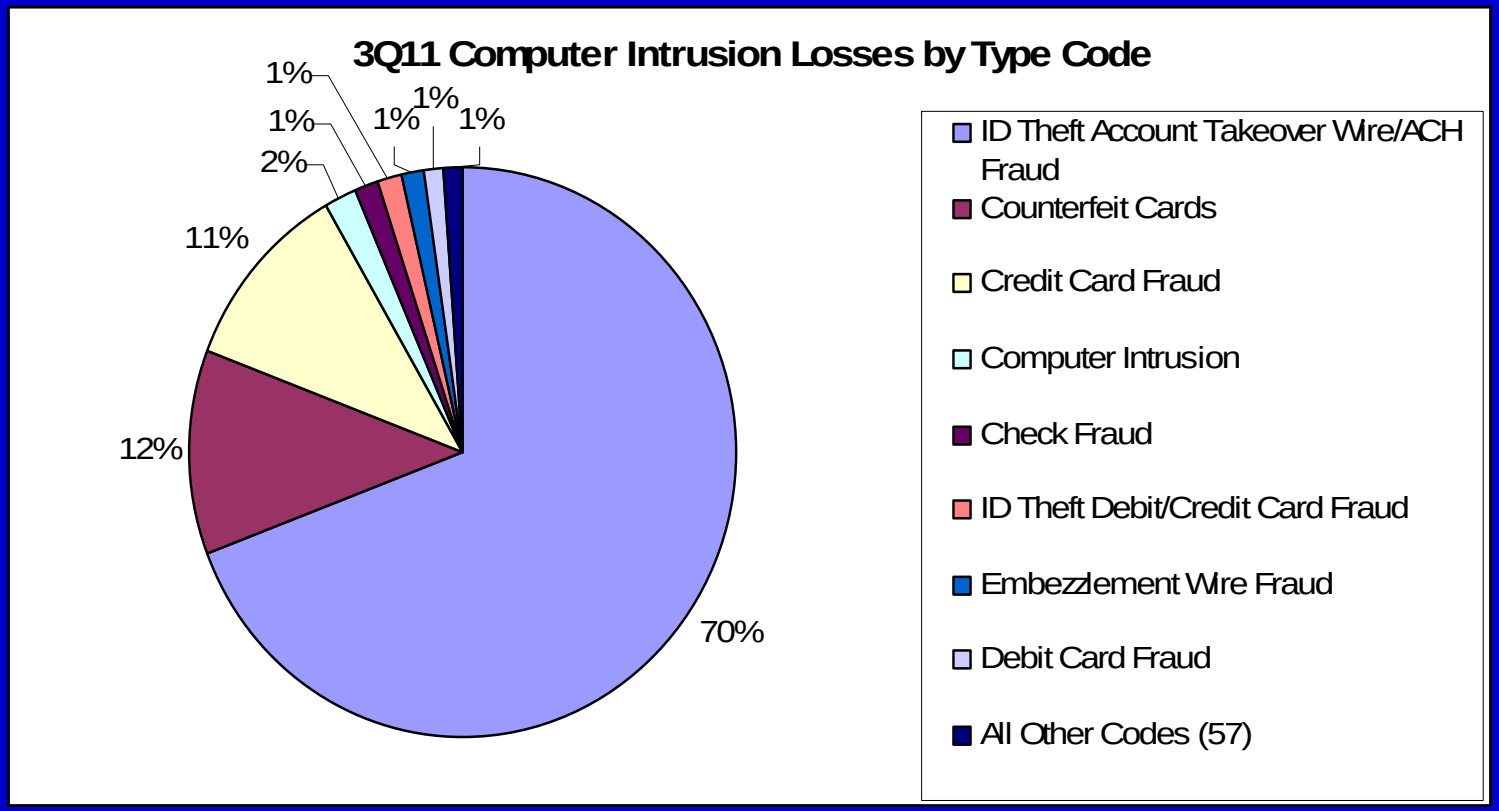
FDIC Division of Risk Management Supervision

Technology Supervision Branch
Cyber Fraud and Financial Crimes Section

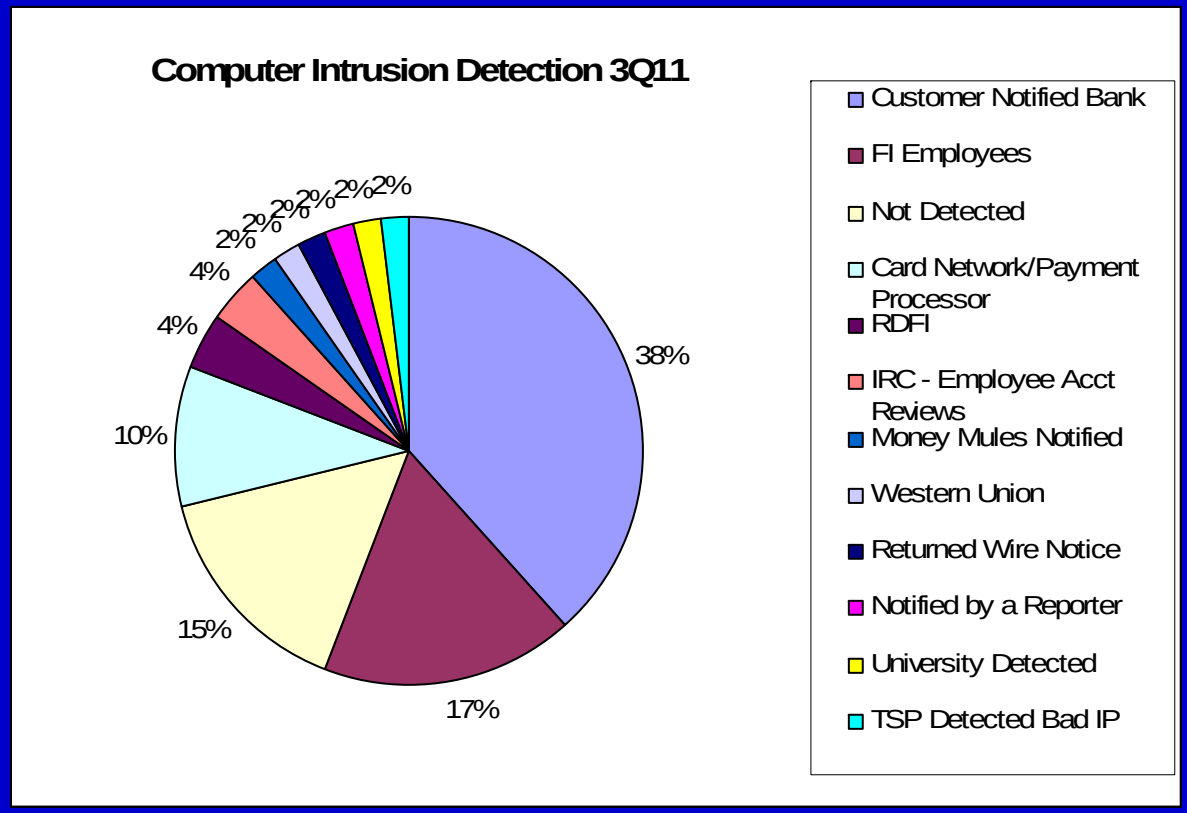
Computer Intrusions
3rd Quarter 2011



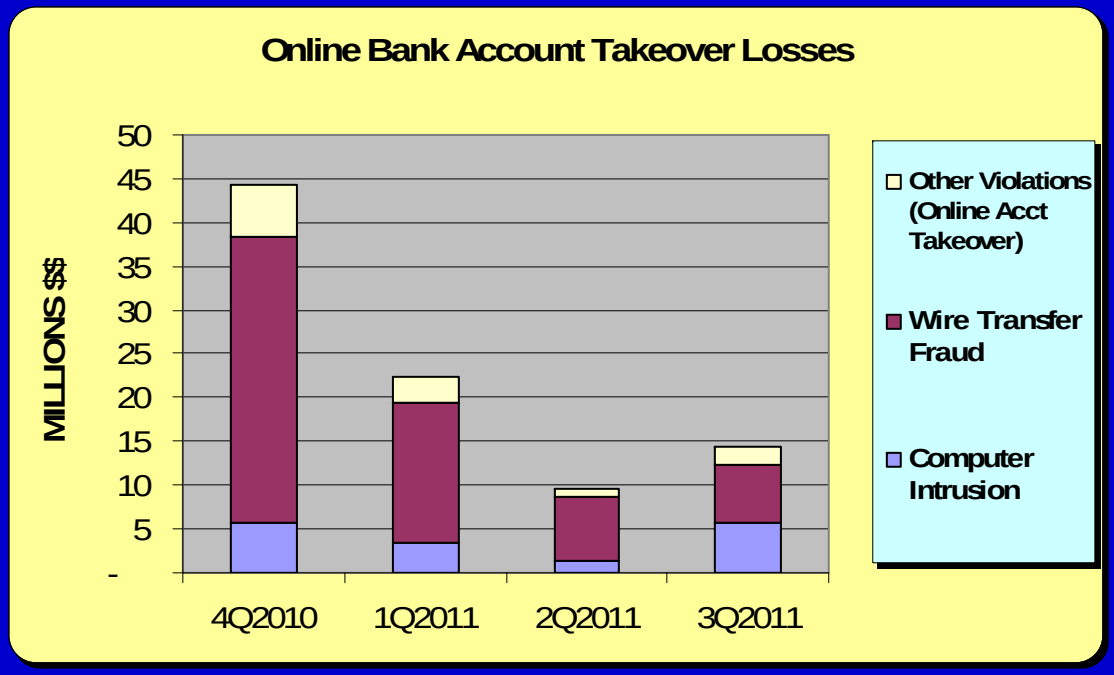
Computer Intrusion Losses by Type Code 3rd Quarter 2011



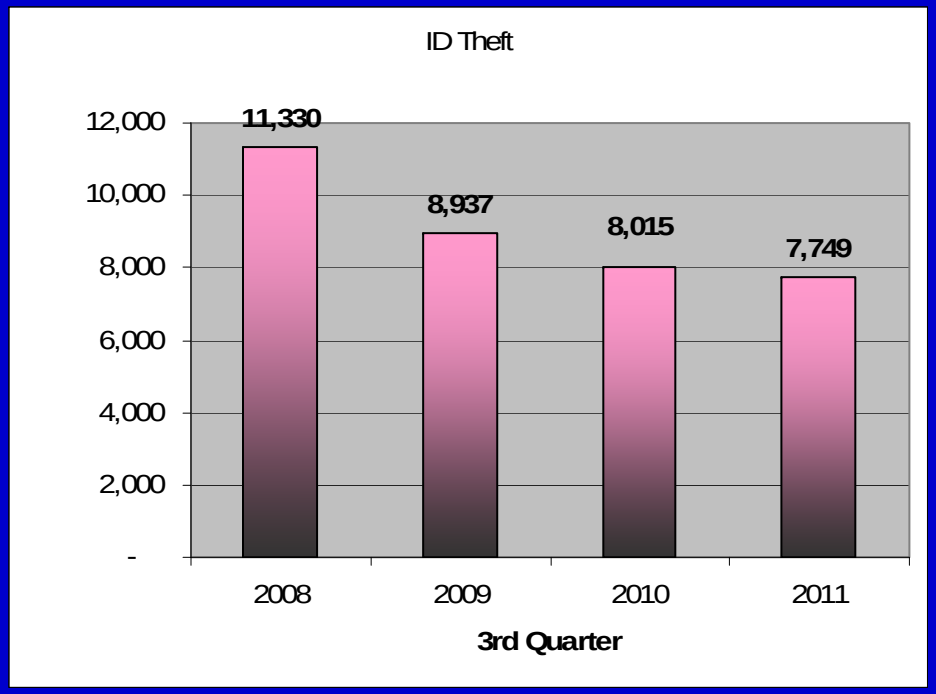
Computer intrusion detection rates
3rd Quarter 2011



Online bank account takeovers 3rd Quarter 2011

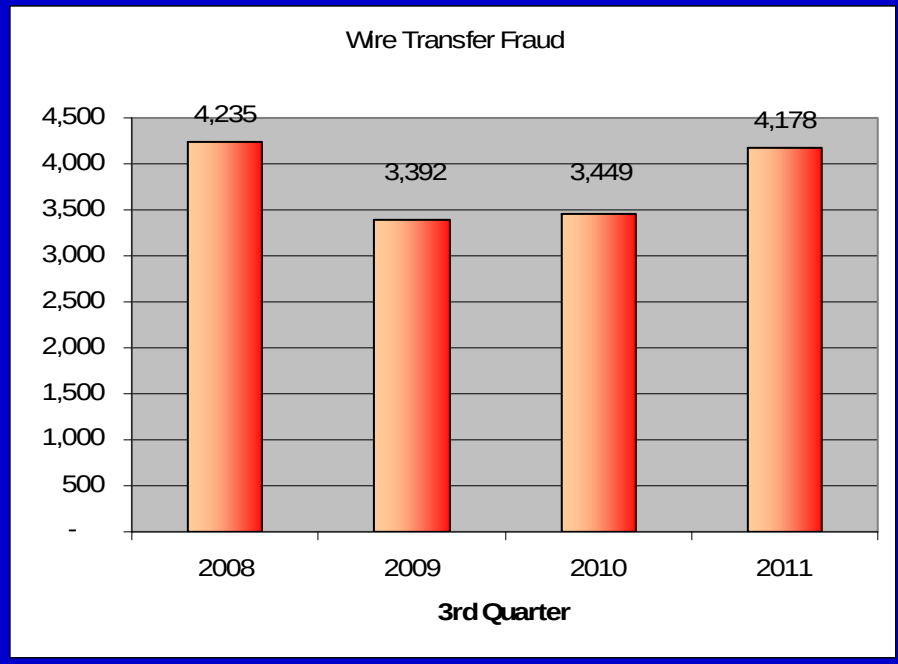


ID Theft reports
3rd Quarter 2011

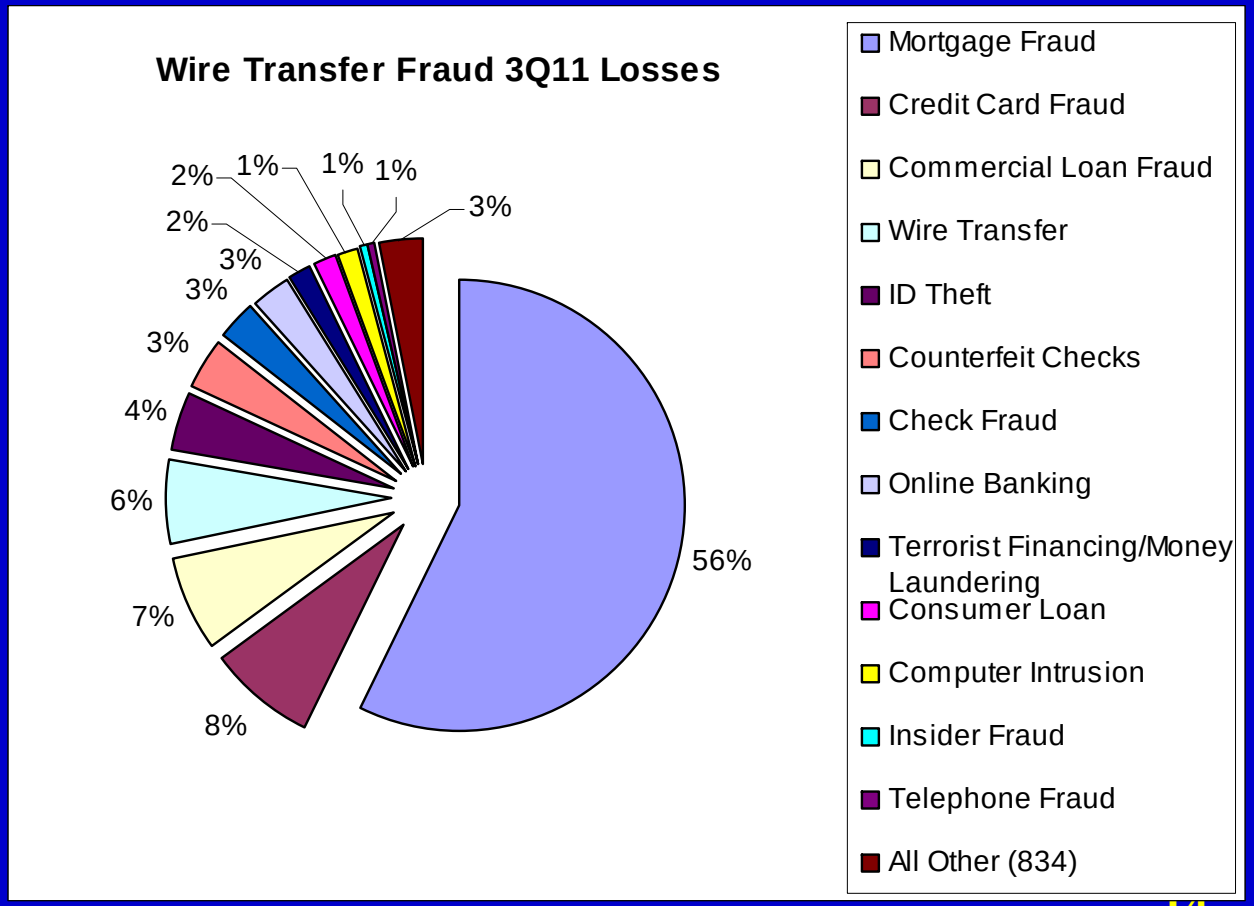


Wire transfer fraud reports

3rd Quarter 2011

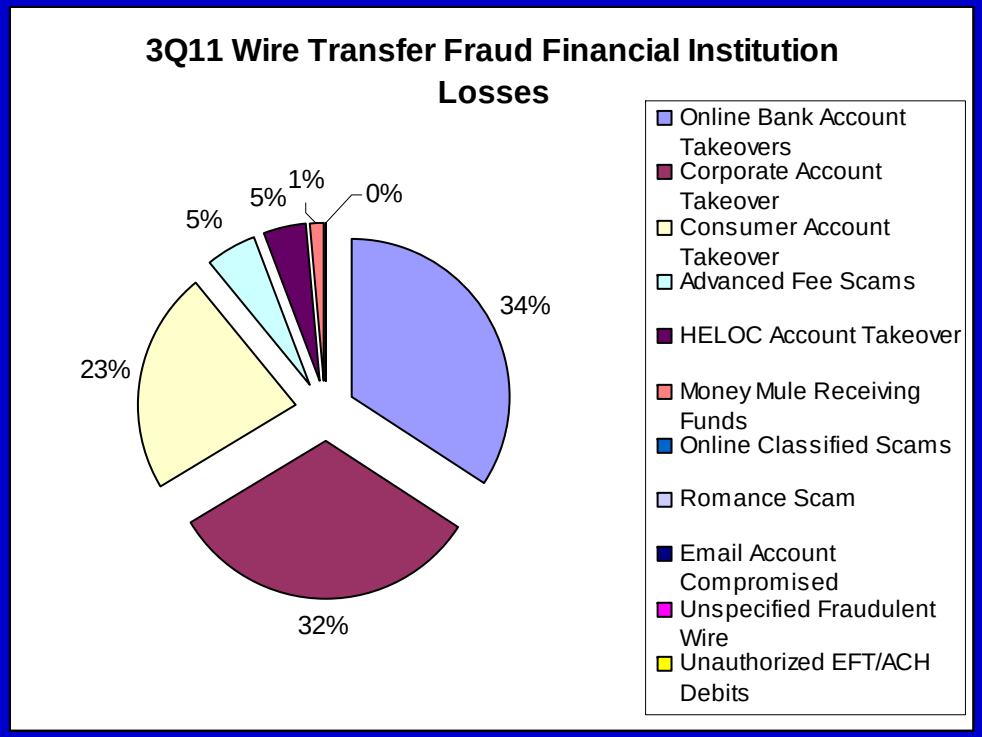


Wire Transfer Fraud Losses
3rd Quarter 2011



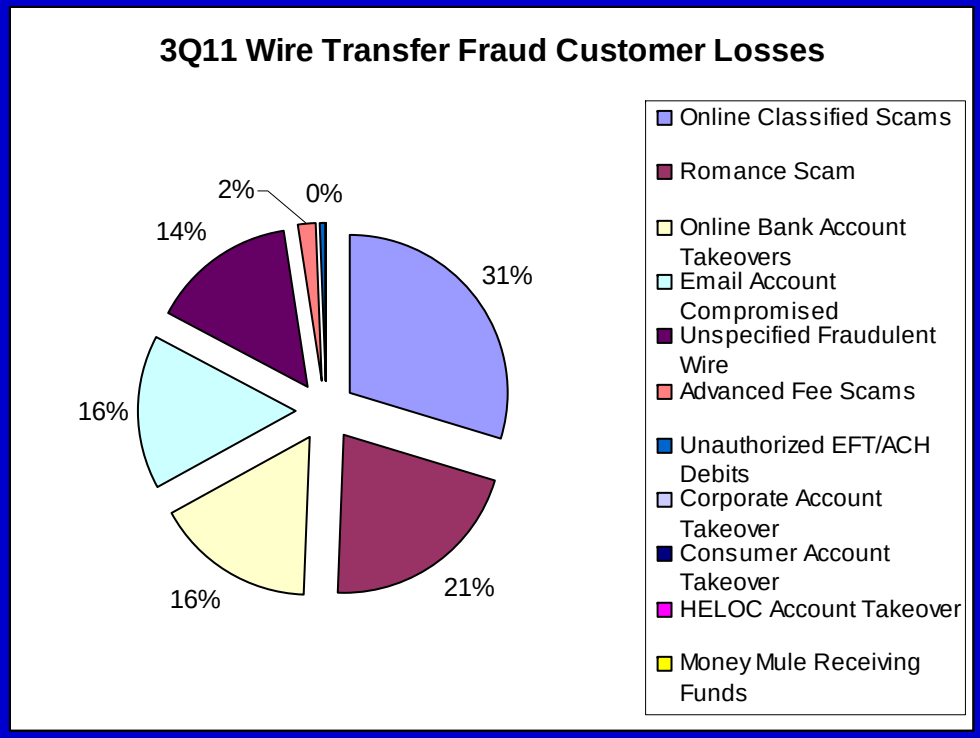
Wire Transfer Fraud Financial Institution Losses

3rd Quarter 2011

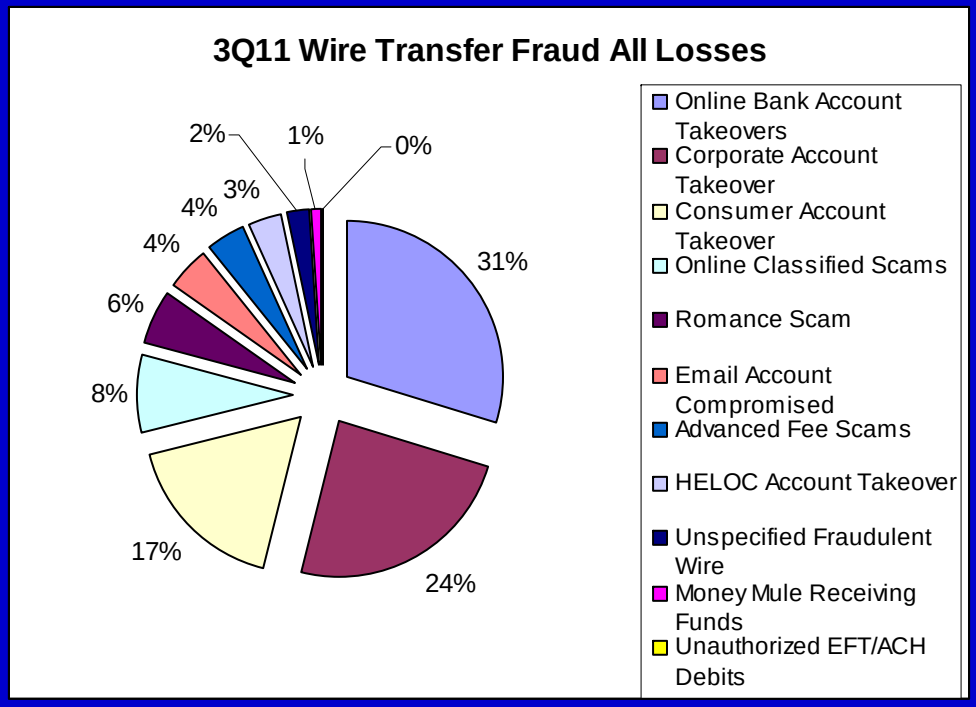


Wire Transfer Fraud Customer Losses

3rd Quarter 2011

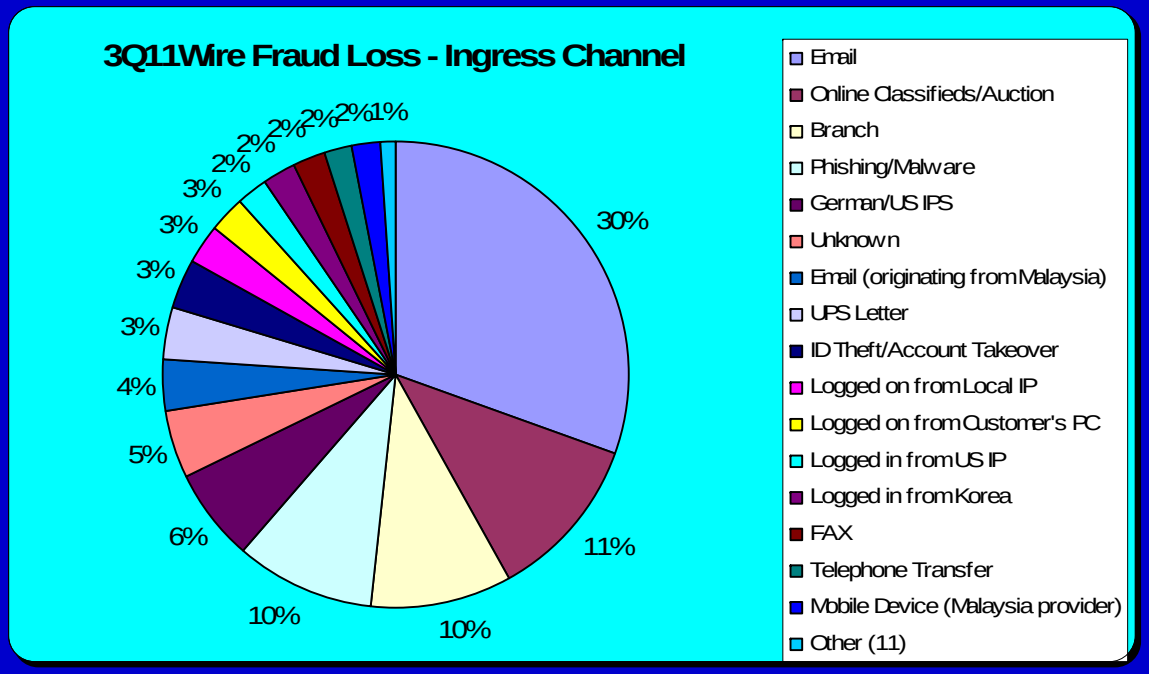


Wire Transfer Fraud
All Losses
3rd Quarter 2011



Wire Fraud Loss- Ingress Channel

3rd Quarter 2011



Debit Card Fraud

- Volume
- Means of Exploitation

Risk Mitigation Practices/Controls

- Utilize multi-factor authentication
- Install and regularly update firewalls, malware/spyware protection, and commercial anti-virus software
- Initiate payments under dual control

Risk Mitigation Practices/Controls

- Limit administrative rights on workstations
- Encourage corporate clients to reconcile their bank accounts daily
- Use AML/BSA Acct Monitoring Tools
- Customer (Public) Awareness and Education and Employee Training

Information Technology (IT) Examinations

IT examinations address a wide range of data security issues such as:

- Information security programs and compliance with Gramm-Leach-Bliley Act, Sect. 501(b) requirements;
- Business continuity planning and physical security;
- IT audit coverage and independent review of controls;
- IT security strategies and policies and personnel controls

Primary Supervisory Examination Issues

Primary supervisory examination issues continue in the areas of :

- Gramm-Leach-Bliley Act (GLBA) compliance
- Vendor Management programs
- Business Continuity/Disaster Recovery planning
- IT Audit Coverage
- Network/access controls

Mobile Device Fraud

- Fraudulent Wire Transfer
- Exploitation Methods
- Risk Assessment

Social Media Sites

- Security Risks
- Reputation Risk
- Corporate Governance
- Resources

Cloud Services

- Risk Assessment Issues
  - Governance
  - Strategic Considerations
  - Policies
  - Topology
  - Controls
  - Contracts/Agreements
  - Audit

Examination/Financial Institution Guidance

FFIEC Guidance on Risk Management of Remote Deposit Capture (FIL-4-2009)

Identity Theft Red Flags, Address Discrepancies, and Change of Address Regulations Examination Procedures (FIL-105-2008)

FFIEC Retail Payment Systems Handbook (FIL-6-2010)

FFIEC Guidance: Authentication in an Internet Banking Environment (FIL-103-2005)

Payment Processor Relationships-Revised Guidance (FIL-3-2012)

FDIC Supervisory Insights Journal (Quarterly)

Examination/Financial Institution Guidance (Continued)

FFIEC Supplement to Authentication in an Internet Banking Environment (FIL-50-2011)

Special Alert SA-147-2009: *Fraudulent Electronic Funds Transfers* (August 2009)

Guidance for Managing Third-Party Risk (FIL-44-2008)

National Institute of Standards & Technology (NIST)

Trade Associations (ABA, BITS)

PCI Security Standards Council

US CERT

Thank you!

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