

# General Framework of Payments and Securities Settlement Systems



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Payments and Securities Settlement Systems

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# The bull of Paulus Potter (1647)



# Agenda

- Definitions & Objectives
- Roles of Central Banks in Payment Systems
- Financial Crisis
- Global Dependencies
- Financial Integration
- Discussion Points



# Role of Central Banks



IT'S ALL ABOUT

**FINANCIAL STABILITY and  
CONFIDENCE**

# Mission of the Central Bank



De Nederlandsche Bank:

Safeguarding the stability of the financial system and the institutions that are part of it, by

- Contributing to the monetary policy of the Eurosystem
- Supervising the financial soundness and integrity of financial institutions
- Promoting the smooth functioning of the payment system

# Payment Systems Policy

## Main Goal

- to promote reliable, efficient and secure payment and securities settlement systems
- Other Goals: central bank specific
  - Crime prevention
  - Effective competition
  - Consumer protection
  - Reachability & Accessibility
  - Research and statistics (knowledge centre)

# Organisation of DNB

- Executive Board
- Divisions
- Departments
- 1650 people
  
- Cash and Payments Systems Division
- Payments Systems Policy Department
- Payments and Securities Department
- Oversight Department
- Cash Policy Department

# How to Achieve Policy Objectives?

- OPERATIONS
- OVERSIGHT
- CATALYST





# Operational role of a Central Bank

- Issuance and distribution of cash
- Operator large value payment system
- Settlement services retail transactions
- Cash settlement securities transactions
- Clearing services retail payments
- Operator securities settlement system
- Other securities related services
- Public sector payments

# Oversight

- ‘A central bank activity focused on the safety and efficiency of payment and securities settlement systems, in particular to reduce systemic risk’.



# Catalyst

- There is a case for intervention, but not necessarily via regulation or operations
- ‘Guide’ the market, by promoting initiatives and cooperation
- Between stakeholders
- Between other public authorities
  - Government
  - Competition authorities

# Importance of Payment Systems

Payment systems ...

... facilitate the exchange of goods and services

... are necessary to conduct monetary policy

... can be transmission channels of  
'disturbances' (financial crises)

# Payment System (1)

- Funds Transfer System: a formal arrangement based on a private contract or legislation, with multiple membership, common rules and standardised arrangements, for the transmission, clearing, netting and/or settlement of monetary obligations arising between its members.

Source:ECB



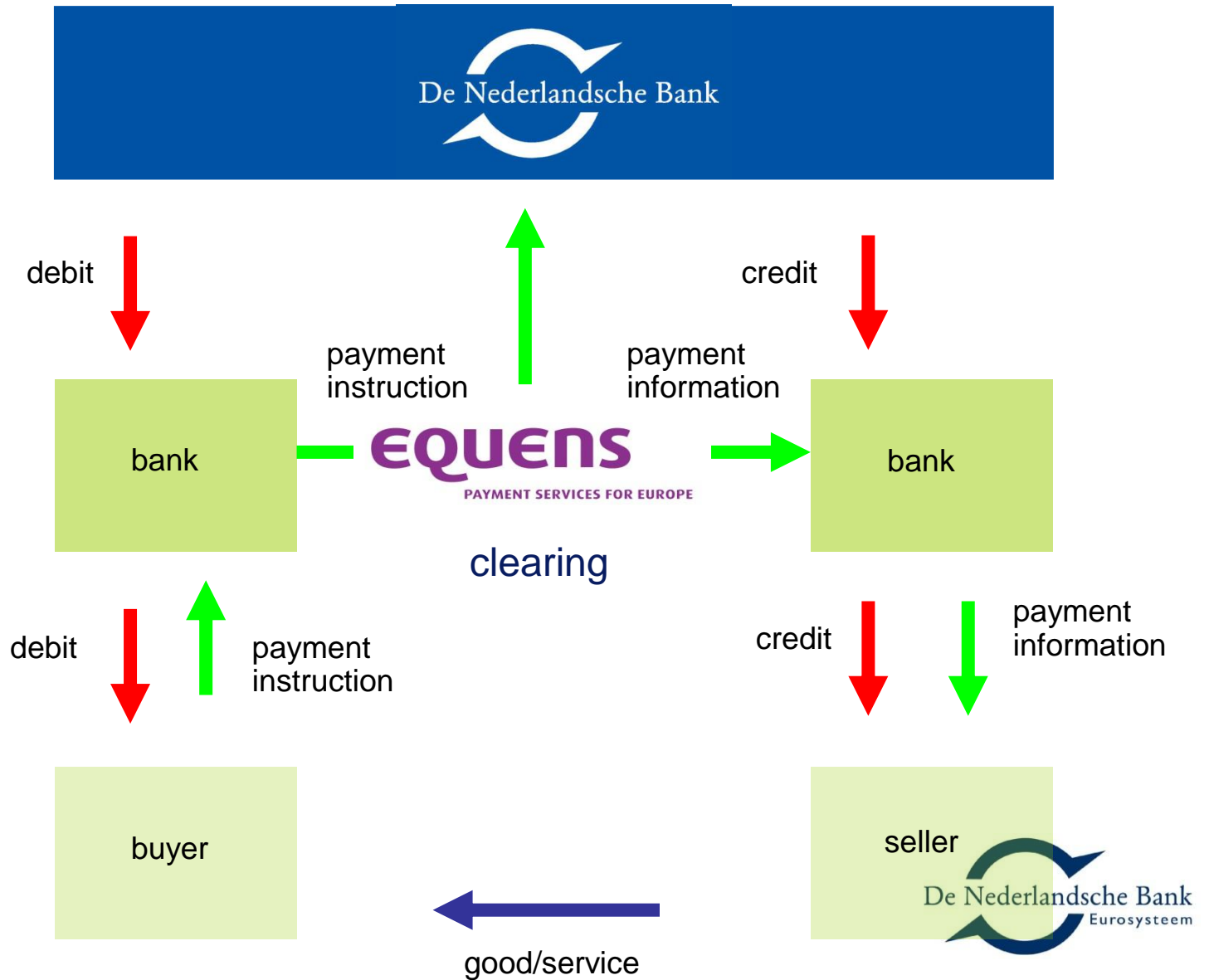
# Payment System (2)

- The set of instruments, banking procedures and interbank funds transfer systems which facilitate the circulation of money in a country or currency area.

Source: ECB



# Payment Chain



# Retail versus wholesale payments

Low value



Large value

High volume



Low volume

Consumers and  
businesses



Financial institutions

Time less important



Time critical

Low systemic risk



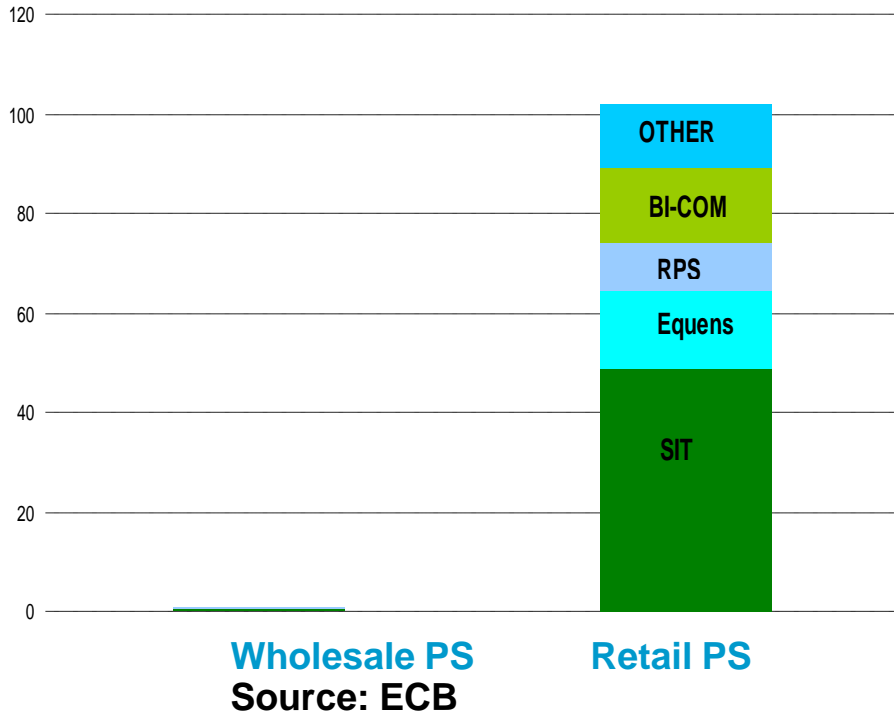
High systemic risk



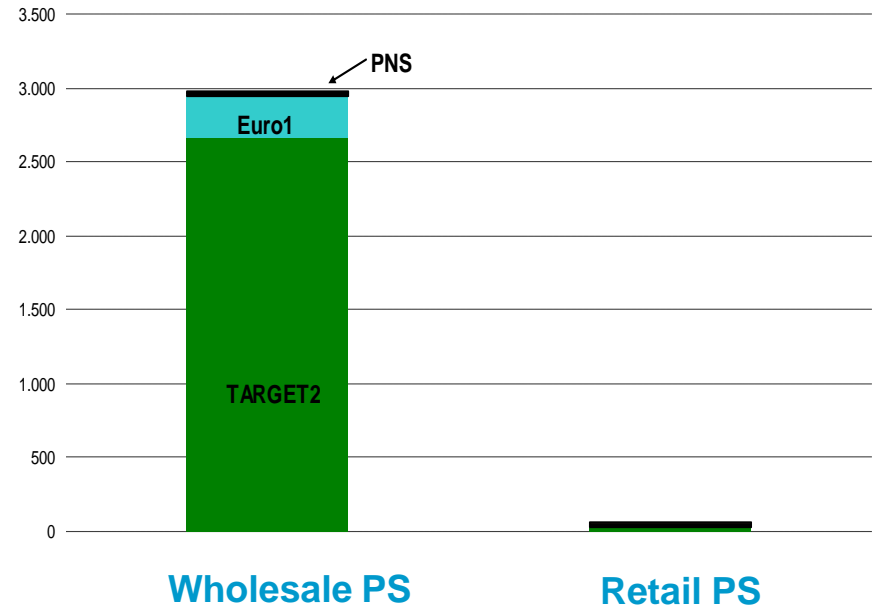
# Payments Pyramid - Eurosystem

**Wholesale: 0,6% in terms of number.....**

Average daily number of transactions (millions)

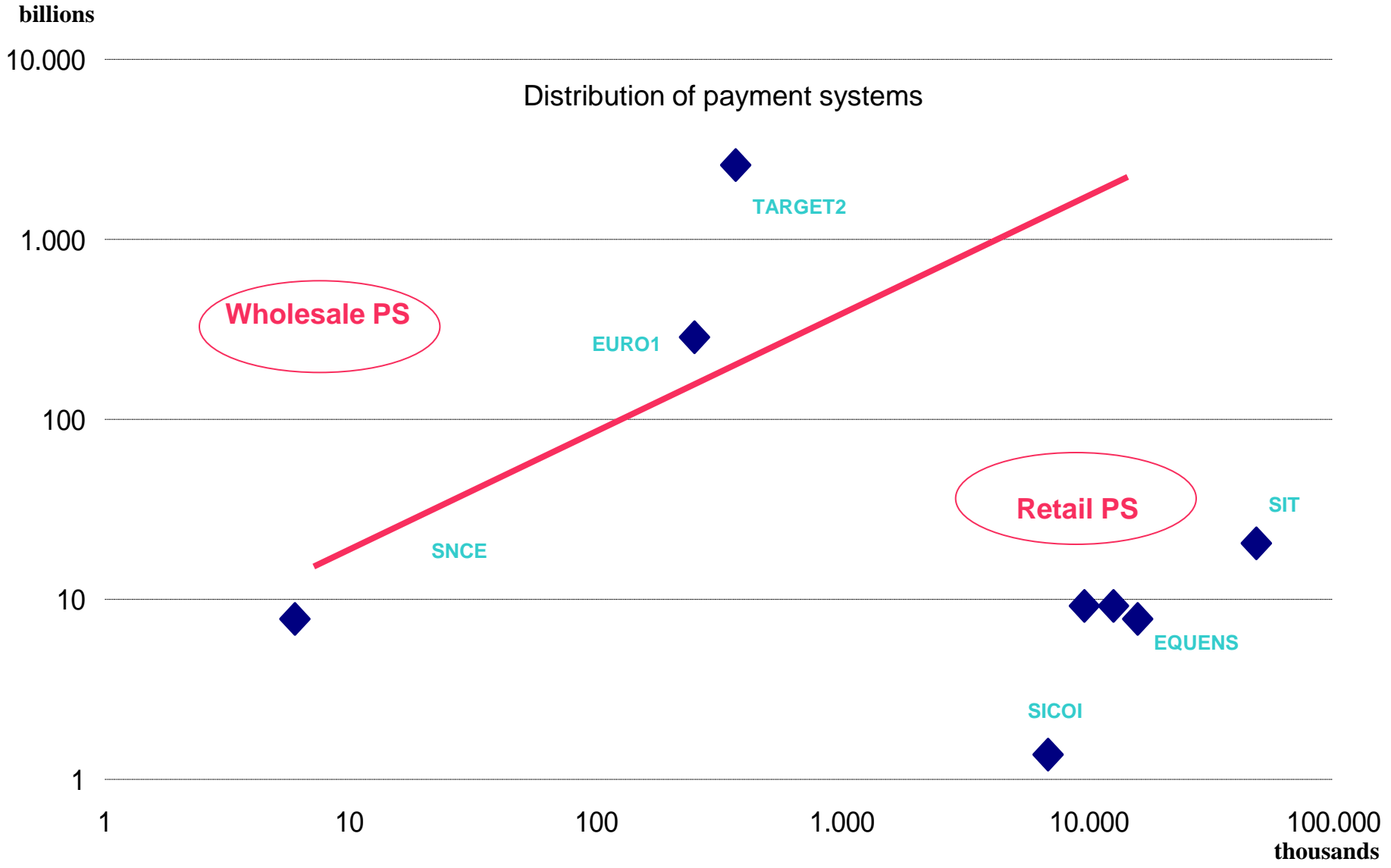


Average daily value of transactions (EUR billions)



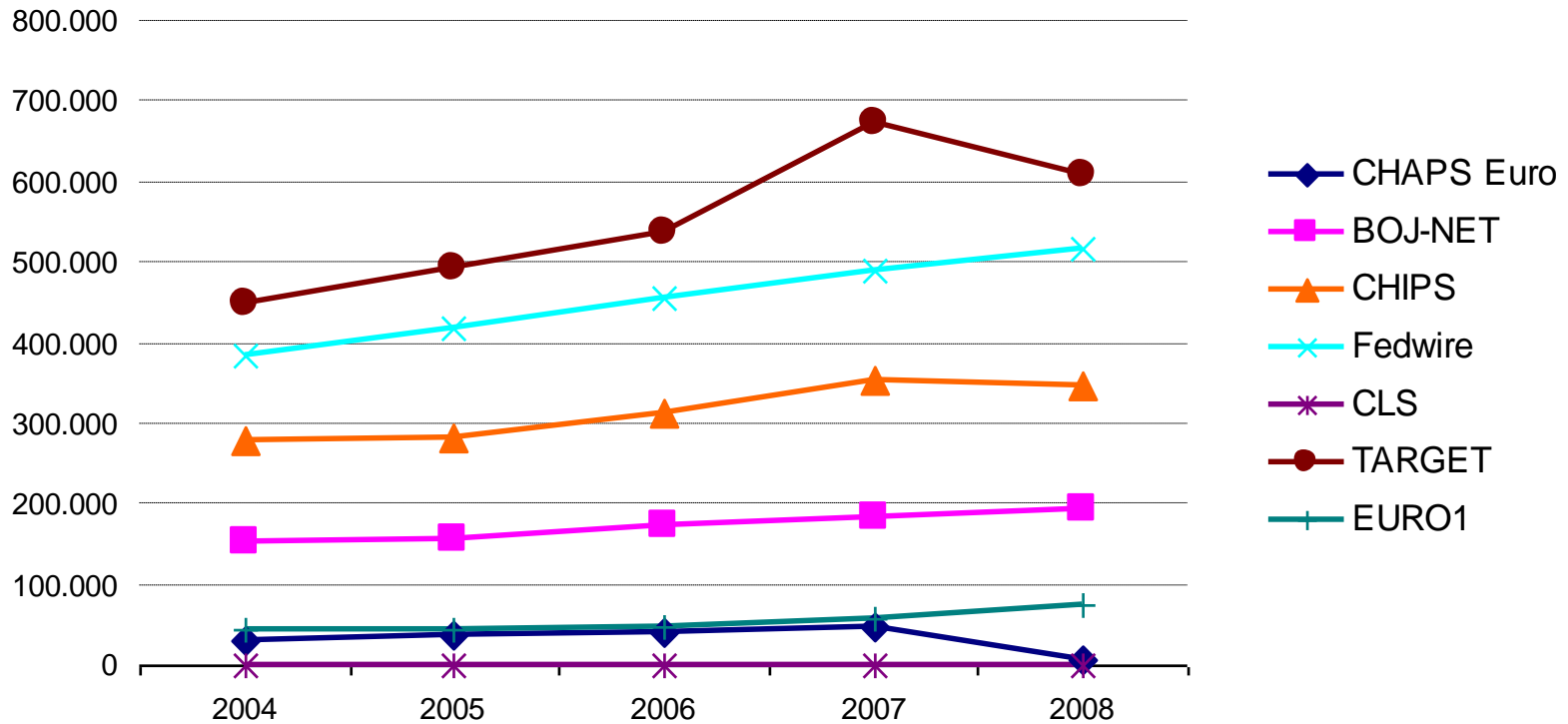
**.....but 97,7% in terms of value**

# Payments Pyramid - Eurosystem



# Large Value Payment Systems

International comparison- Value of transactions (EUR Billions)



Bron: BIS

# Wholesale Payments

- DNS: Deferred Net Settlement (netting)
  - Multilateral, usually at the end of the day
- RTGS: Real Time Gross Settlement
  - continuous (real-time) settlement of funds transfers individually on an order-by-order basis
- Hybrid Systems

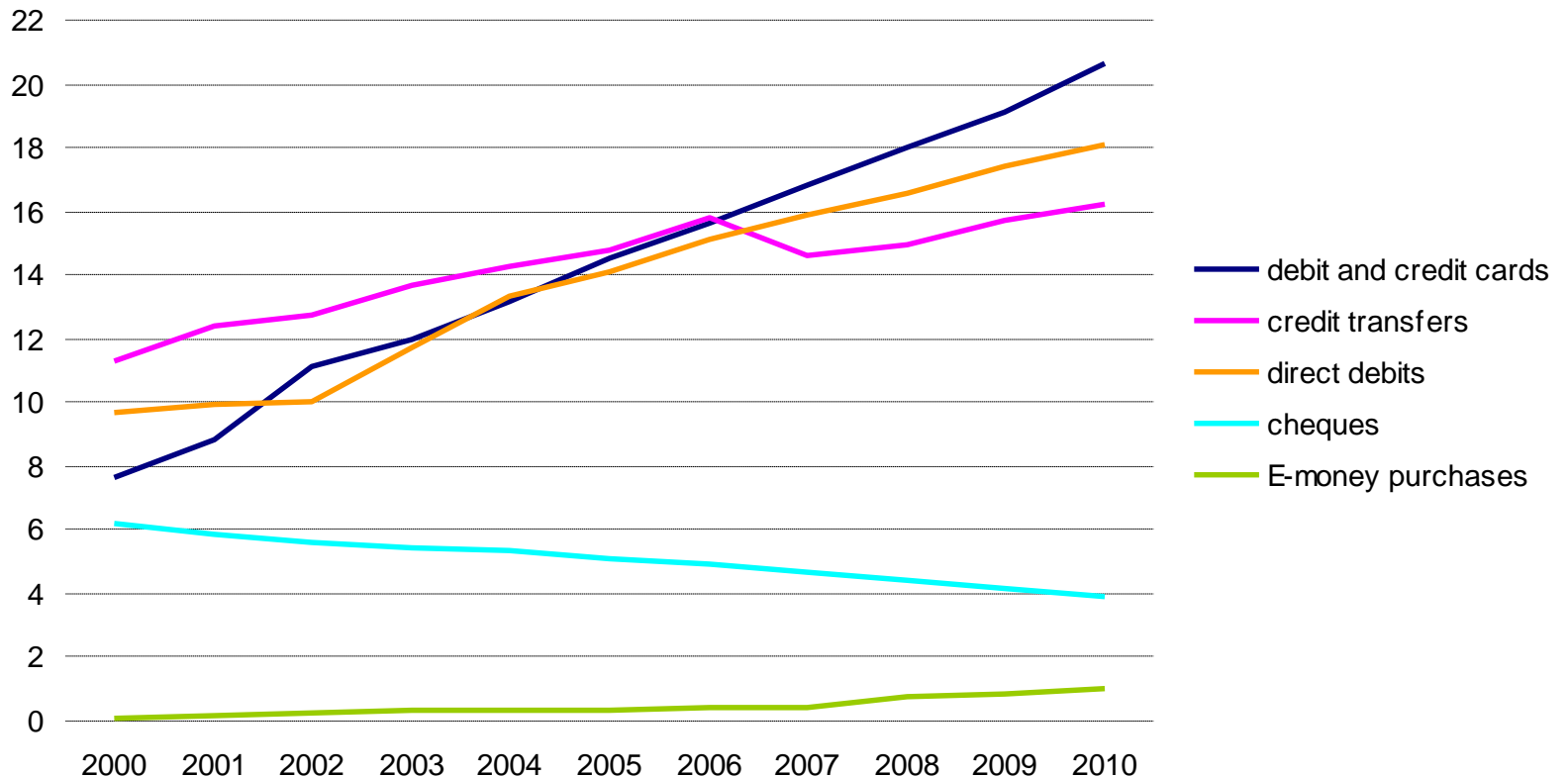
# Wholesale Payments

## TRENDS/ISSUES

- Liquidity management
  - Real time settlement → higher demands on liquidity management
  - TARGET2: range of tools to control, monitor and manage liquidity
- Operational resilience and business continuity management as a result of global interdependencies.

# Trends in Retail Payments in the EU

Payment transactions in the euro area (billions)



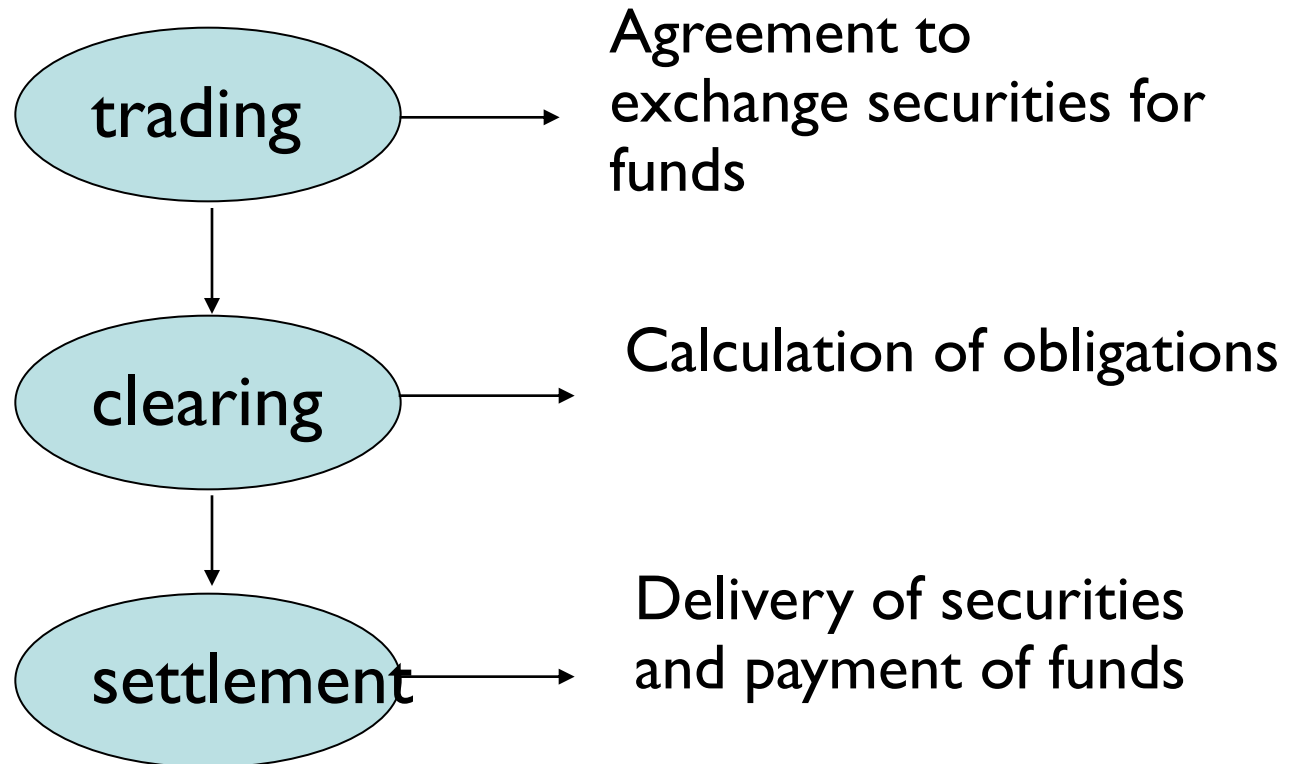
Source: ECB

# Issues in Retail Payments



- Efficiency
- Security
- More Electronification and less paper based: Internet banking and card payments
- Innovations: products and markets
- Political influence, legislation and standards
- Business models –interchange fees

# Securities Chain

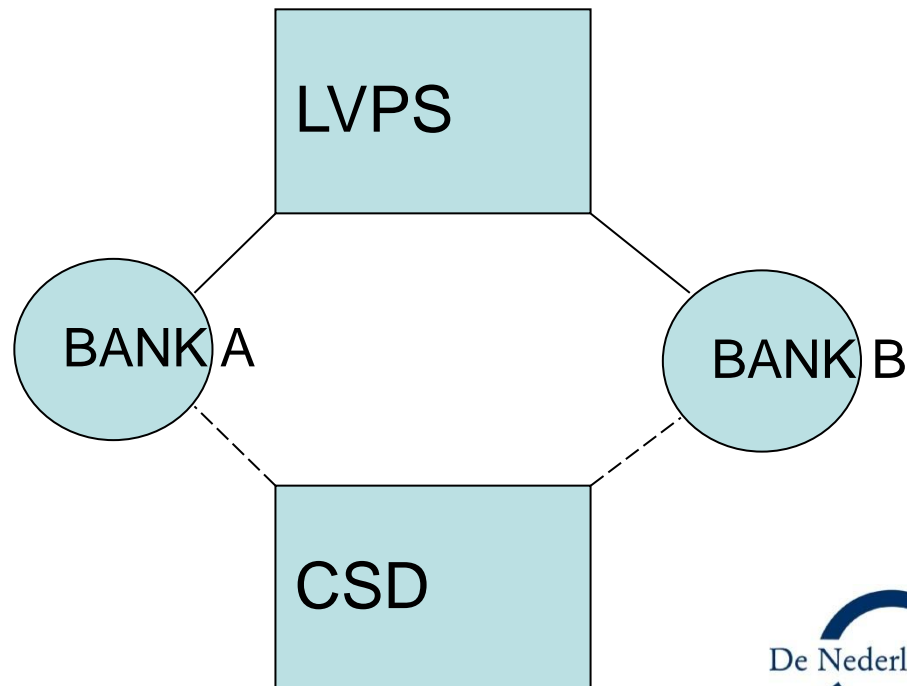




# Securities Settlement Systems

A system which allows the transfer of securities, either free of payment (FOP) or against payment (delivery versus payment)

Source: ECB



# Securities Settlement Systems

## Trends/Issues

- Settlement risks (DVP)
- Securities Legislation: MiFID etc.
- Multiple platforms
- Cross border links (global interdependencies)
- Settlement of derivatives: role for CCPs

# The Economist

OCTOBER 4TH-10TH 2008

www.economist.com

Our guide to America's election

Europe's Schadenfreude

Music on your phone

Reassessing China

Somalia's pirates

## World on the edge



INSIDE THIS WEEK: A 14-PAGE SPECIAL REPORT ON GLOBALISATION

# The Economist

SEPTEMBER 20TH-26TH 2008

www.economist.com

Who killed New Labour?

The war in Pakistan's tribal areas

America's unending culture wars

How to save fish

The last typewriter-repair man

## What next?



# Financial Crisis

Key words: EXCESSIVE OPTIMISM  
EXCESSIVE RISK APPETITE

## ASPECTS

- Relative Stability (the great moderation, Bernanke)
- Search for Yield
- Easing Criteria for Credit (subprime, alt-a etc)
- Innovations (originate-to-distribute model, monoliners etc)

# FINANCIAL CRISIS



**15 september 2008**

## Lehman Brothers †

**Trigger of severe loss of confidence,  
wave of contagion**

# FINANCIAL CRISIS

- **Crisis Management**
  - **Provision Liquidity**
  - **Nationalizations**
  - **Savings Guarantee**
  - **Capital Injections & Debt Guarantees**
  - **Interest rates ↓**

**In order to  
UNDERPIN CONFIDENCE**

- **PSSS functioned quite well**



# FINANCIAL CRISIS

## What's Next?

- Credit crunch
  - Stock Markets
  - Banking Sector
  - Insurance sector
  - House prices
  - Pension funds
- World recession
  - Protection
  - Greece/country risks
  - Euro?



# Recommendations of Financial Stability Forum

- Improve Risk Management
- Enlarge Transparency
- Further Cooperation between Public Authorities
- Reform supervision
- Improve Crisis Management



# Payments and Securities Infrastructure

**WEB OF GLOBAL INTERDEPENDENCIES  
(LVPSs, CCPs, CSDs, Banks)**

**WITH TIGHT DEADLINES  
(RTGS, DVP, PVP)**

Key words

Technological developments

Globalization

Consolidation in financial sector

Source: BIS, The Interdependencies of payment and settlement  
systems 2008



# CPSS REPORT ON INTERDEPENDENCIES

**Figure 6: Profile of Institutions' Activities and Access Choices, 2006**  
(by country, with number of financial institutions\* in parentheses)

<b>Very Significant International Settlement Activity</b>			CH (1) FR (1) JP (1) US (1)	DE (1) NL (1) UK (1) US (1)
<b>Significant International Settlement Activity</b>	CH (1) NL (1)	IT (1)	FR (2) JP (1)	UK (1)
<b>Moderate International Settlement Activity</b>	BE (2) IT (2) JP (1) NL (1) SG (1) US (3)	CA (5) DE (2) FR (1) SE (3) UK (1)	DE (1) JP (1) UK (1)	
	<b>Primary reliance on correspondents and custodians beyond home currency; direct participation in CLS and one or more ICSDs</b>	<b>Mixed Approach: Significant self-clearing in multiple currency zones, but moderate levels of direct participation</b>		<b>Significant self-clearing in most CPSS currencies, and beyond</b>
		<b>Domestic, plus one or two of: EUR, USD, or YEN</b>	<b>Domestic, plus more than three CPSS currencies</b>	

\* At the highest holding company level

# Financial European integration – why?

- Euro Area: 17 National Markets
- Limitations on Competition
- Diseconomies of Scale
- Inefficiencies with reference to cross-border flows of money, securities and collateral



# Financial European integration – how?

1. Institutional arrangements
2. Financial markets
3. Infrastructures → payment and securities settlement systems

## Infrastructures

- Essential for Financial Stability
- Central Banks Play Key Role

# Discussion points



- What are recent changes in your country with respect to payments and securities settlement systems?
- How does your central bank fill in the different roles in PSSS?