IPSO
Strategy
Conference

Payment Service Developments – The Finnish Experience

Bank of Finland
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12 December 2006

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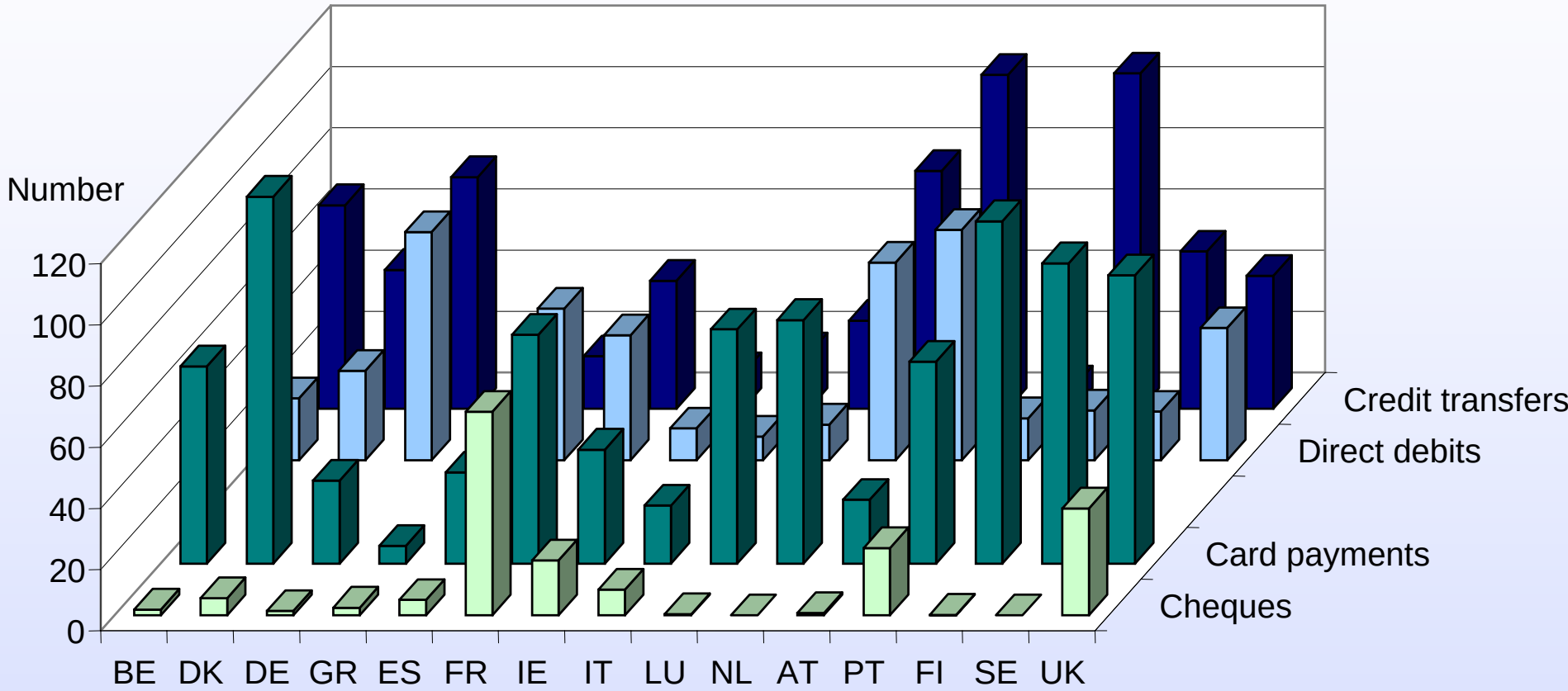
Number of cashless payments per inhabitant in EU15 countries, 2004

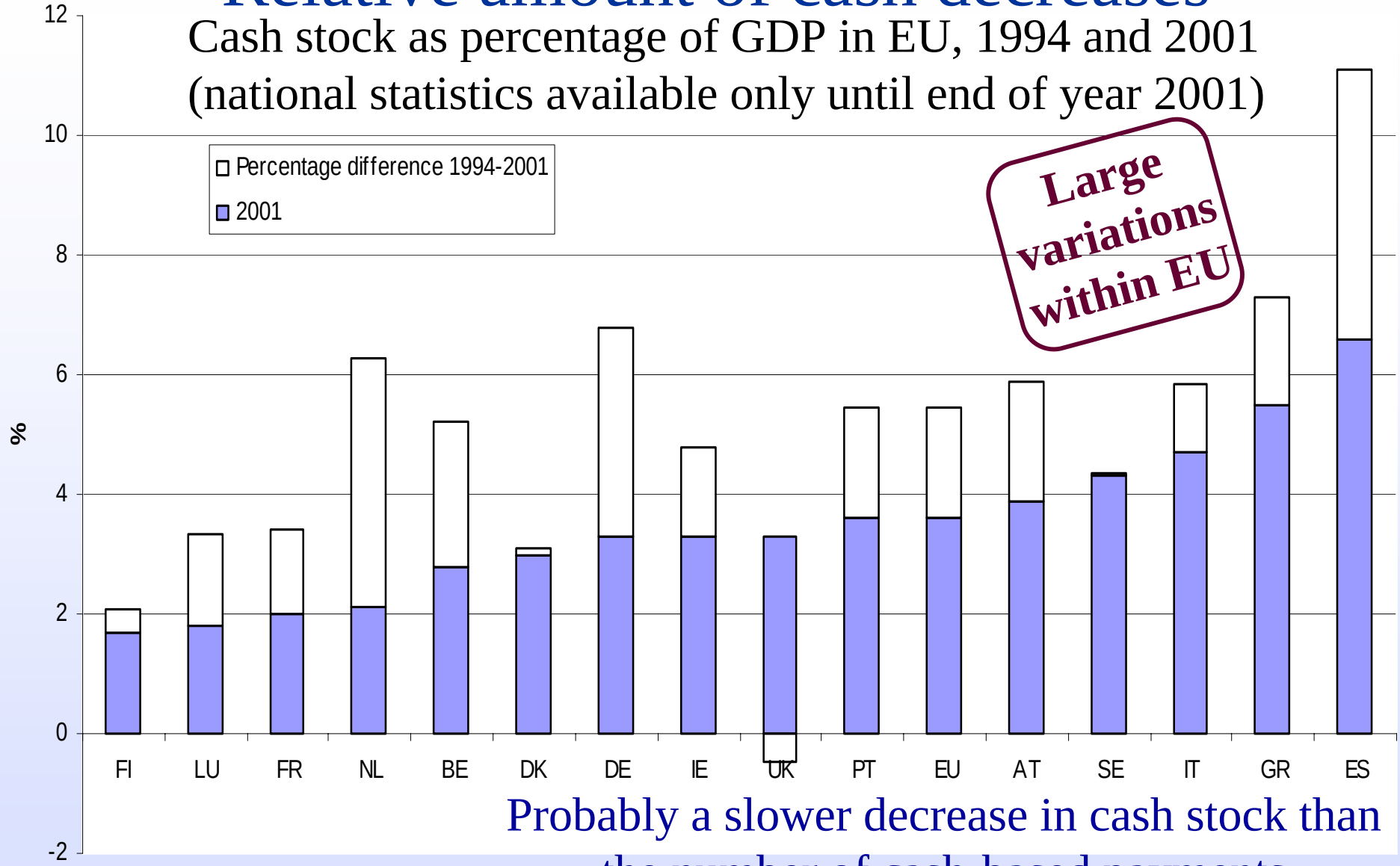


Large differences in national payment habits in Europe

Data source: ECB Blue Books.

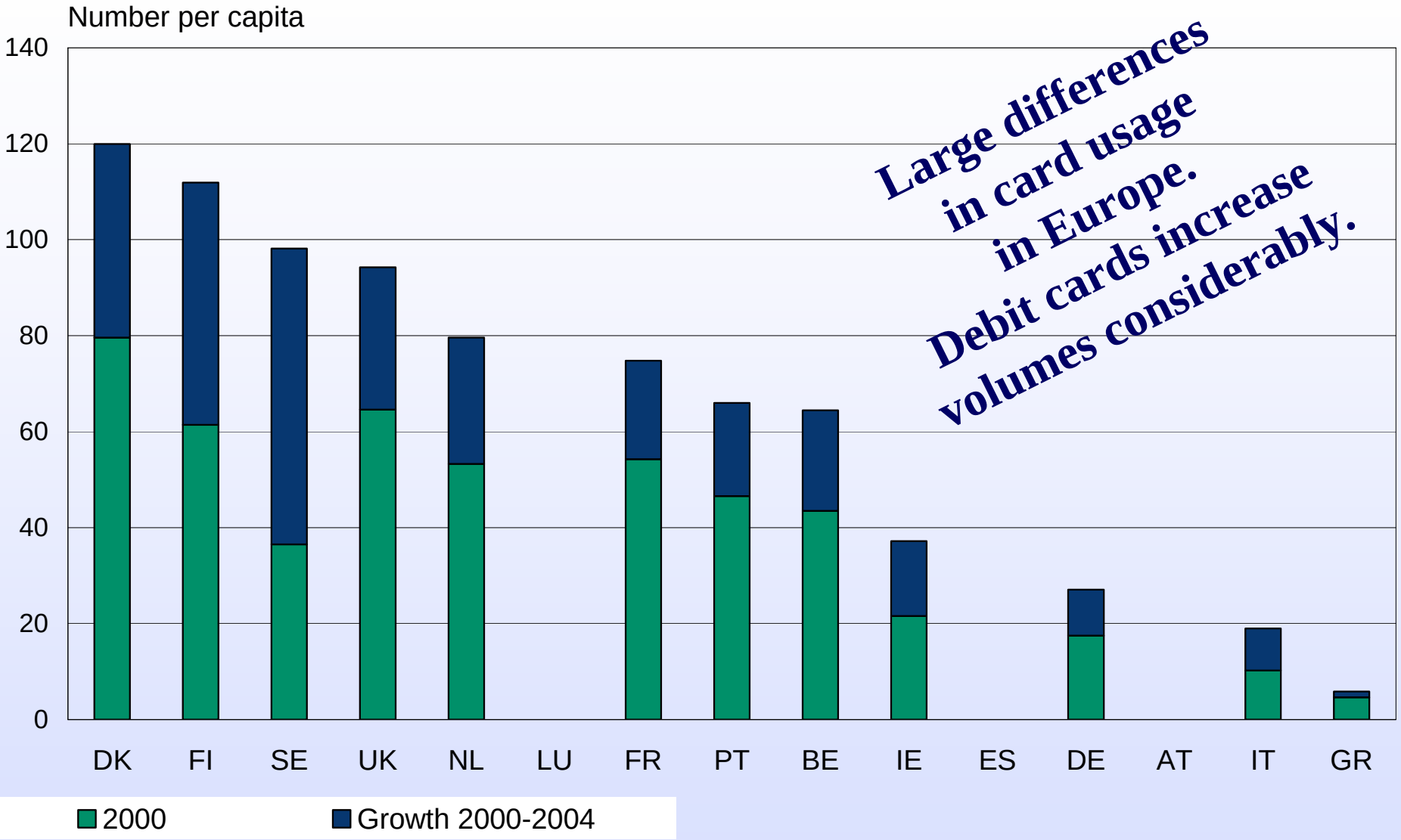
Relative amount of cash decreases

Cash stock as percentage of GDP in EU, 1994 and 2001
(national statistics available only until end of year 2001)



Probably a slower decrease in cash stock than the number of cash-based payments

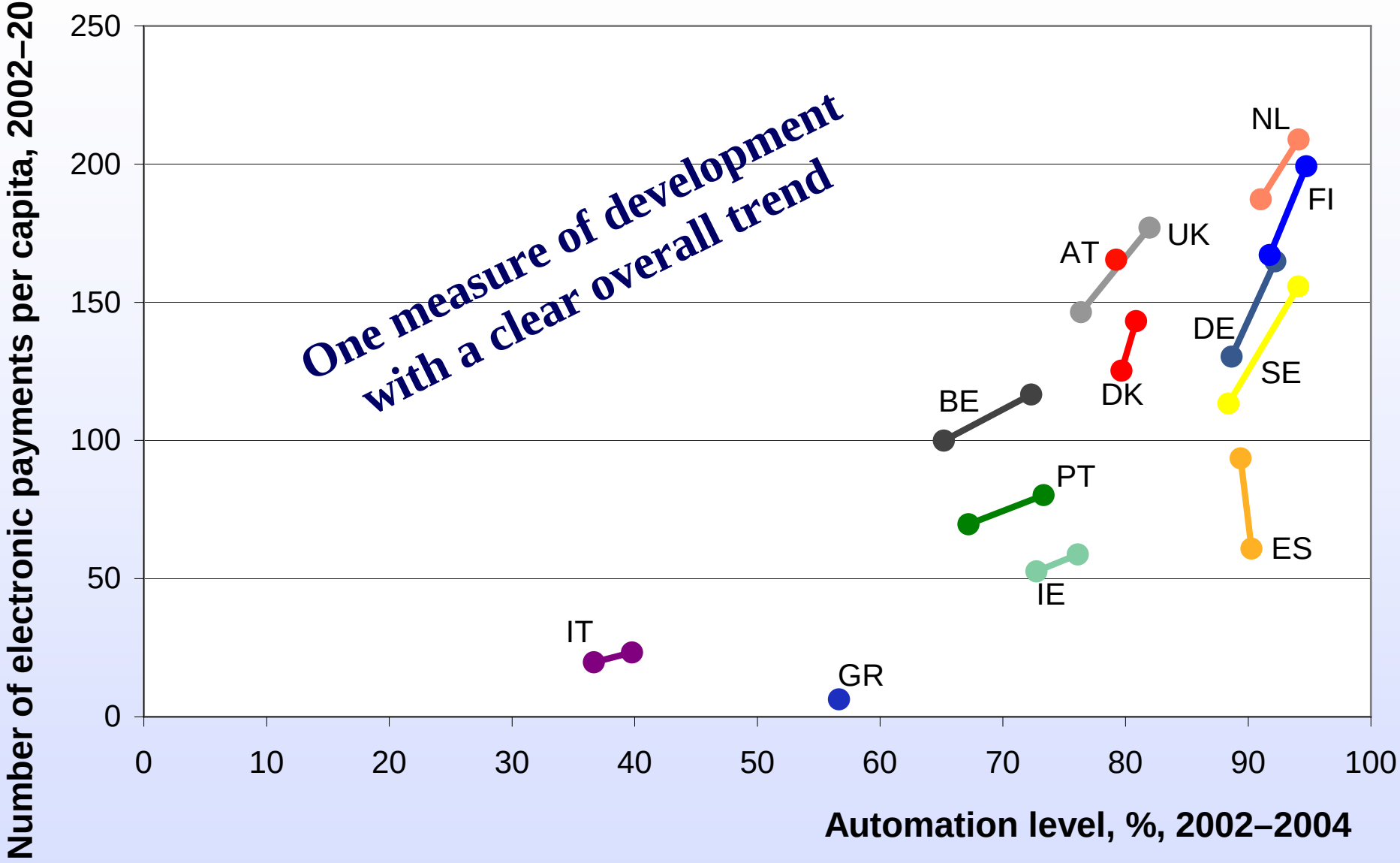
Number of card payments per capita



Note! Some statistics methodology differences

Source: ECB's Blue Book, March 2006.

ePayment developments per capita and automation level



Source: European Central Bank, Bank of Finland.

Payment developments

- Reduced transportation costs/tariffs
  - Problem: Cross-subsidisation hides costs
- Increased delivery speed
  - Problem: Slow delivery increases banks' float income
- Improved security
  - Problem: Continuous race against e-criminality
- Enhanced user interface efficiency
  - Problem: Non-standardised solutions hinder mobility
- Versatile user integration support
  - Problem: Standardisation may slow down developments

Lack of competition and incorrect incentives delay payment system developments

Finnish experiences and lessons

1. Customer tariff incentives facilitate change
2. Standardisation creates critical mass
3. New services require joint marketing/support
4. Authorities need to lift regulatory barriers
5. Customer-to-bank integration creates user benefits
6. E-invoicing is the next big cost-saving feature

Key requirement: Increase and maintain competition with sufficient stability in the system

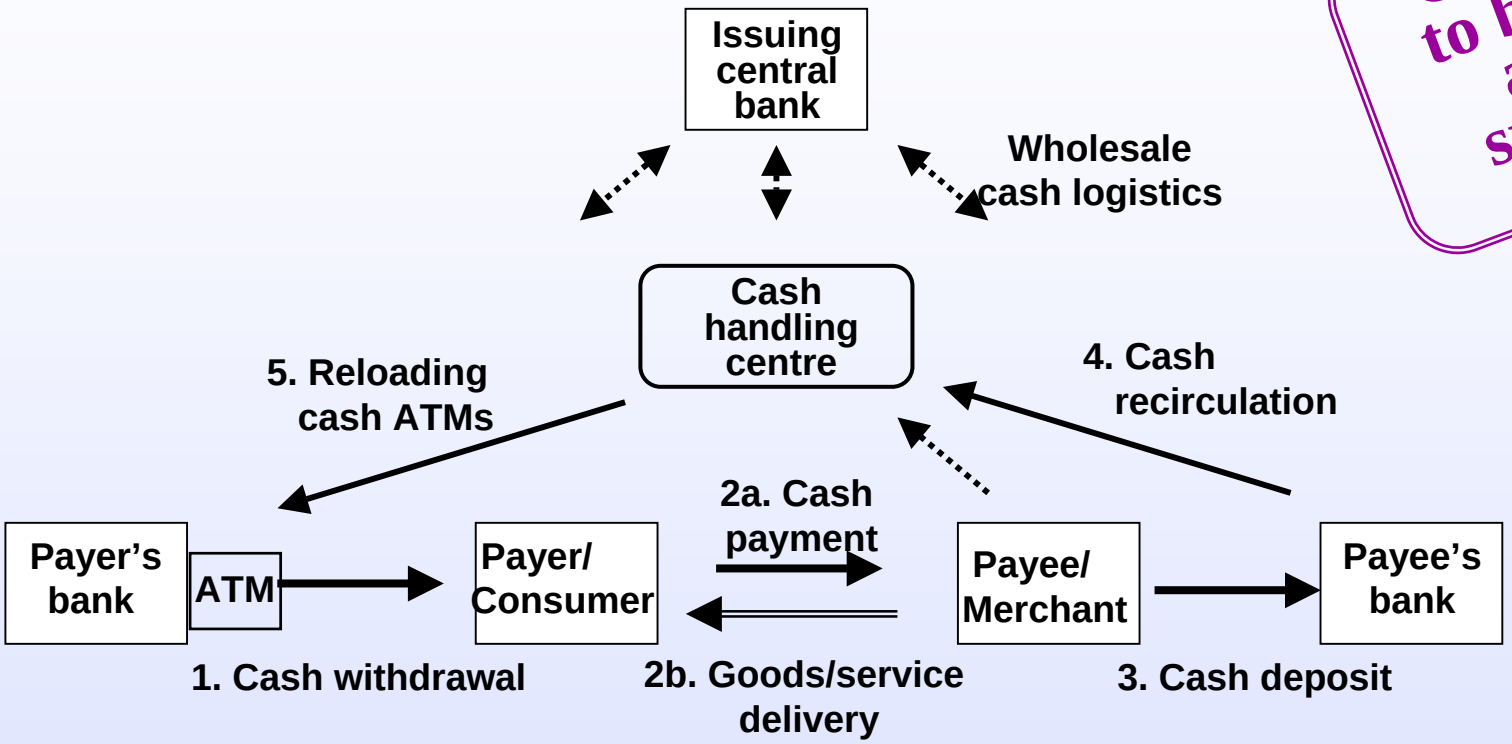
1. Transparent pricing lessons

- Private cheques replaced by debit cards in 3-4 years when cheque forms were priced at about 10 cents/cheque
- Debit cards replace credit cards and cash, when merchant fees (and payer fees) are based on costs
- Customers move faster to e-banking when teller service is priced according to costs
- Public authorities also move to electronic format when budget resources can be saved

Customers will select services according to own needs.
Cash will only be used for small payments
(and unfortunately for grey and black payments)

Expensive one-time usage of cash

Cash needs to be priced and not subsidised



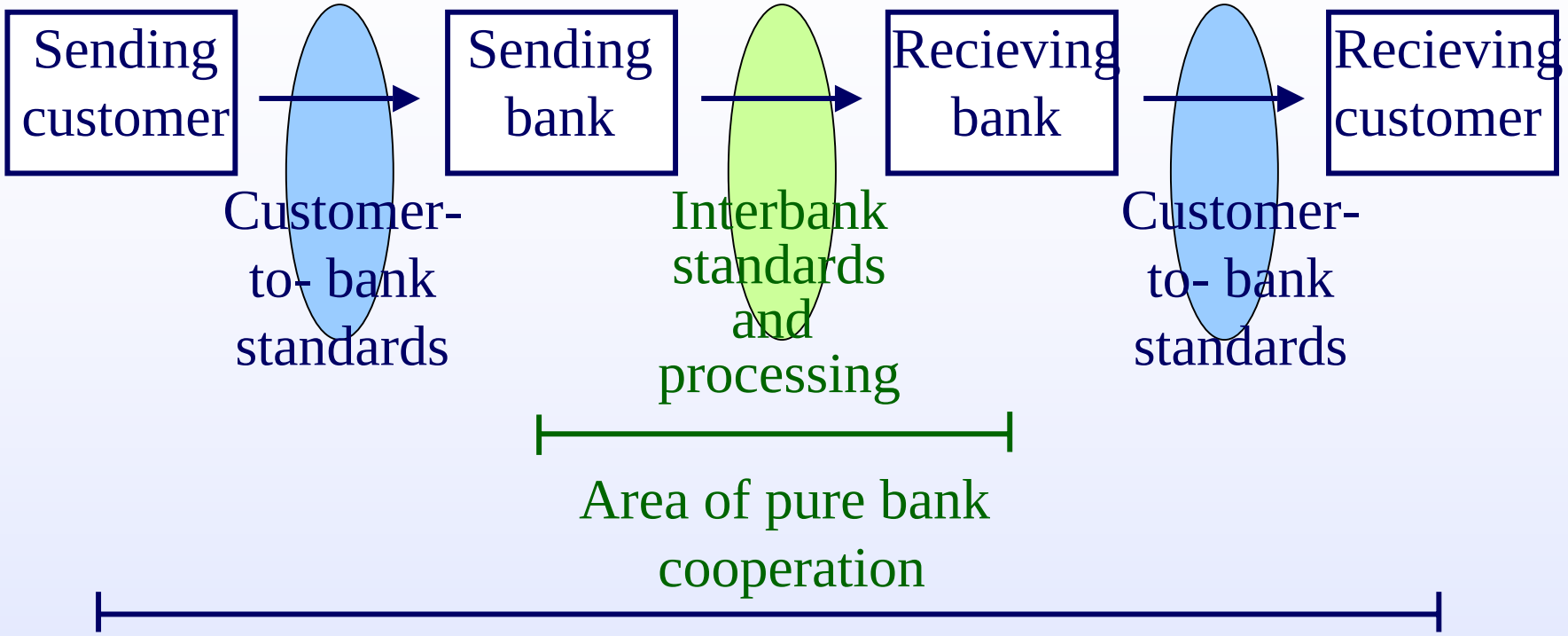
Withdrawing cash in supermarket ATMs for payment to cashier is expensive compared to direct card payment to cashier!!

2. Standardization lessons

- Credit transfers need standards for salaries, pensions, social benefits etc
- Credit transfers need standards for invoice payments including structured standardised remittance information
- EFTPOS terminals need to be standardised
- Bank-provided standardised direct debit mandate handling will increase payer and payee interest
- Standards create supply of software and services for users
- Standards will need to be updated over the years
- Standardisation body required (Finnish Bankers' Association)

Standardisation creates the basis for critical mass. Messy or non-standards only create costs for all parties.

Payment transportation service



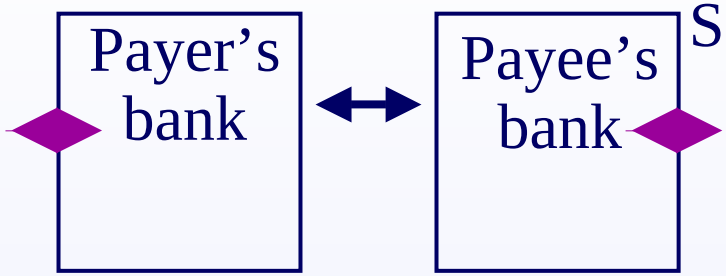
Content of interbank standards should depend on customer standards established via customer involvement (and not the other way around)

Necessary customer-to-bank payment standards

Payer

Sending
- credit transfers
- sending direct debit mandates
- accepting e-invoices

Receiving
- e-invoices
- direct debits
- card payment info
- statements of accounts



Payee

Sending
- e-invoices
- direct debits
- card payments

Receiving
- payment notifications
  - credit transfers
  - direct debits
  - card payments
- direct debit mandates
- statements of accounts

Common standards facilitate direct reuse of same data within payer's and payee's systems.
Common e-standards are the basis for efficiency.

Invoices with standardised giros is the common way of paper presentment

Invoice part

- - - - - - - - - - - - - - - - - - - -

Adjoining giro

AKE

Debetsedel för fordonsskatt 1(2)

Mottagare
Leinonen Harry Leo

Jukolabranten 4 B 7
02180 ESBO

70

Datum
09.10.2006

Registertecken
BBU-969

Fordonets märke
TOYOTA

Tillverkningsnummer
JT1WOAL2500207786

Skatteskyldig
Harry Leo Leinonen

Kundkod för direktdebitering
010076642

Referens
1212310969628110

Servicekod för direktdebitering
010317159

Fordonsslag	Fordonsgrupp	Ibruktagningsår	Drivkraft	Totalmassa	Axelant
Personbil		1986	Bensin	1450 kg	2

Fordonsskatten för tiden 08.10.2006 - 07.10.2007, delbetalning 1/1 för skatteperioden 08.10.2006 - 07.10.2007.

Fordonsskatt	grundskattedel för 365 dagar 0,260 euro/dag	94,900 euro
Debiteras totalt		94,90 euro

Dröjsmålsräntan år 2006 är 9,50 % dock alltid minst 3,00 euro.

Välj antal betalningsposter genom att senast på förfallodagen betala den summa som motsvarar antalet poster. Ni får en skattsedel för varje betalningspost.

5582

Delbetalningar	Betalas förfallodag 1	Delbetalning 2	Delbetalning 3	Delbetalning 4	Skatteperiod totalt
i 1 rat	94,90 euro				94,90 euro
i 2 rater	50,58 euro	50,32 euro			100,90 euro
i 4 rater	26,66 euro	26,66 euro	26,66 euro	26,92 euro	106,90 euro

Tillägg för betalningssätt är 3 euro per delbetalning, när skatten betalas i fler delar än en. Delbetalningarna i tabellen inkluderar tillägg för betalningssätt.

Fordonsförvaltningscentralen, Beskattning, PB 120, 00101 Helsingfors - Skatterådgivning 0100 7821 (Ina/msa) varje dag kl. 8-20 - Fax (09) 6185 3604 - verotus@ake.fi - www.ake.fi

Saajan tilinumero / Mottagarens kontonummer: Nordea 166030-116676
Sampo 800017-70928183
OKO 500001-2378954

Saaja / Mottagare: Ajoneuvohallintokeskus
Fordonsförvaltningscentralen

Maksaja / Betalare: Leinonen Harry Leo

Jukolabranten 4 B 7
02180 ESBO

Allekirjoitus / Underskrift

Tililtä / Från konto nr

TILISIIRTO GIRERING

Maksu välitetään saajalle vain Suomessa Kotimaan maksujenvälityksen yleisten ehtojen mukaisesti ja vain maksajan ilmoittaman tilinumeron perusteella.
Betalningen förmedlas till mottagare endast i Finland enligt Allmänna villkor för inrikes betalningsförmedling och endast till det kontonummer betalaren angivit.

Registertecken: BBU-969
Kundkod för direktdebitering: 010076642

Välj summa enligt det antal betalningsposter ni vill ha.

i 1 rat	94,90 euro
i 2 rater	50,58 euro
i 4 rater	26,66 euro

Viitenro / Ref.nr: 1 21231 09696 28110

Eräpäivä / Förf.dag: 20.11.2006

Euro: 94,90

Jnm. 12-10

PANKKI
BANKEN

Finnish Paper Payment Instruction

Receiver's account numbers

Receiver

Reference/reconciling number with check digit

Sum to be paid

Fordonsförvaltningscentralen, Beskattning, PB 120, 00101 Helsingfors - Skatterådgivning 0100 7821 (0,08 e/min+lna) varje dag kl. 8-20 - Fax (09) 6185 3604 - verotus@ake.fi - www.ake.fi

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Allekirjoitus Underskrift	
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Registertecken
BBU-969

Välj summa enligt det antal betalningsposter ni vill ha.

i 1 rat	94,90 euro
i 2 rater	50,58 euro
i 4 rater	26,66 euro

Viitenro Ref.nr	1 21231 09695 28113	
Eräpäivä Förf.dag	21.11.2005	Euro

Snm. 20.10

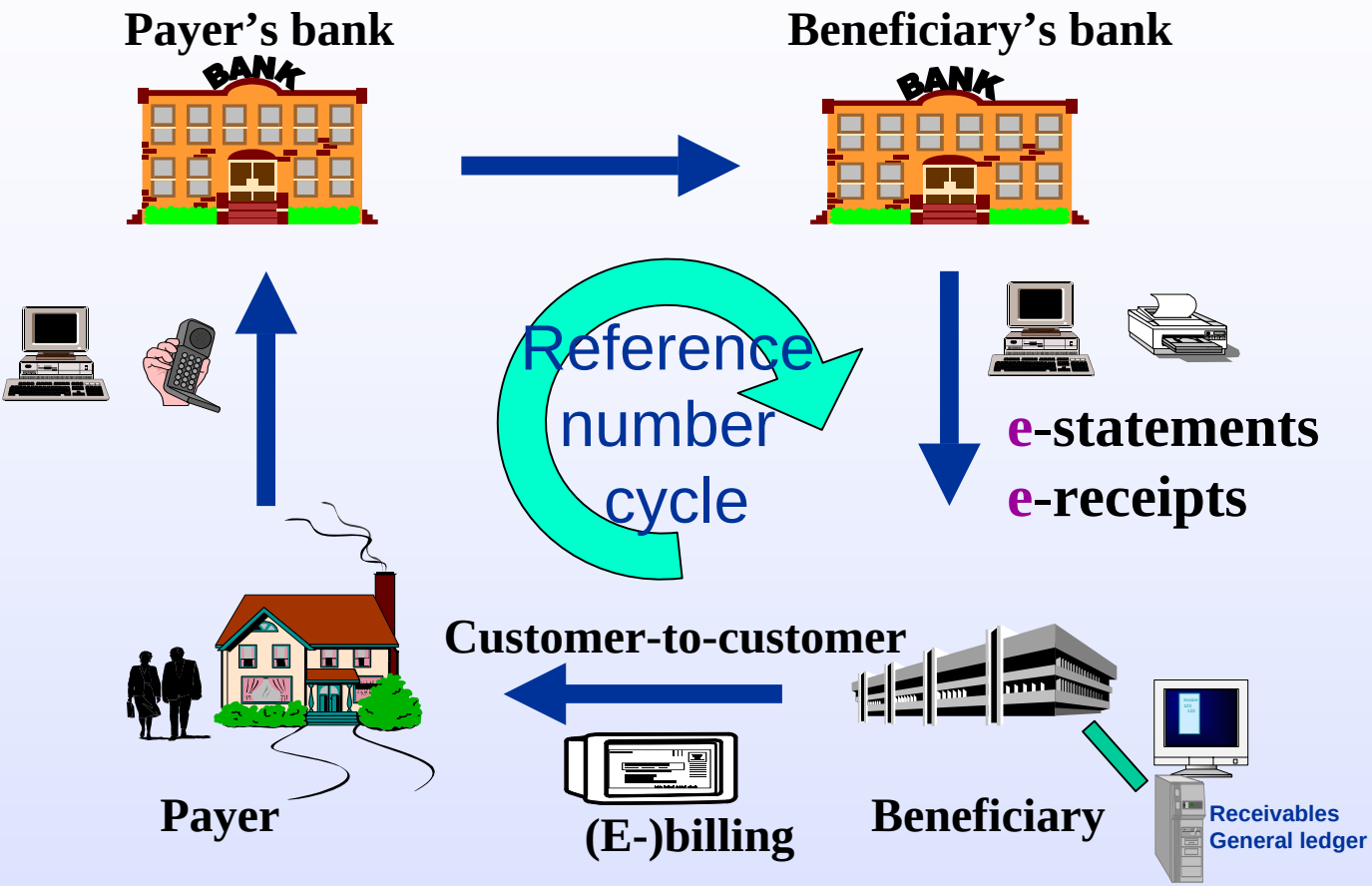
PANKKI
BANKEN

Payer

Bar code for scanning containing rec. account, reference, due data and sum

Due date

Structured payment reference = key to receiver integration



The reference number is given by the beneficiary and it follows the payment back to the beneficiary for automated update of receivables.

Reference numbers are required by most invoicers

3. New services require joint support (all banks and other stakeholders)

- New services need marketing and customer education
- ICT based services require ICT vendor support and interest
- Documentation and descriptions need to be available
- Clear customer benefits are necessary
- The snowball effect starts when the marketing is sufficiently credible
- Long-term high-level bank management attention & devotion

Changing customer habits is a long-term project

4. Removing regulatory barriers

- Possibility to truncate cheques (in 1972)
- Possibility to archive data in electronic form only
- Possibility to use electronic bank statements as part of accounting registers (general ledger)
- Tax authorities accept electronic statements and invoices
- Acceptance of banks e-identification solutions for both banks' services and public services
- Requirement for clear pricing information
- Pricing central bank cash services
- Allowing limited payment services for merchants/TELCOs

Regulatory barriers can hinder developments by supporting old service forms and forbidding/hampering new forms in different ways

5. Customer interfaces

- Direct payment of salaries, pensions and benefits to accounts as the basis for change undertaking in 1960s
- Standardised paper forms and envelopes for invoice payments in 1960s (Compare with the IPI International Payment Instruction)
- Magnetic tape interfaces for corporate customers in 1970s
- Network interfaces in 1980s and the big internet/web-boom in 1990s for all customers
- Merchant EFTPOS-interfaces
- Automatic reconciling services (references)
- Standardised accounting interface and codes
- Standardised e-invoicing interfaces

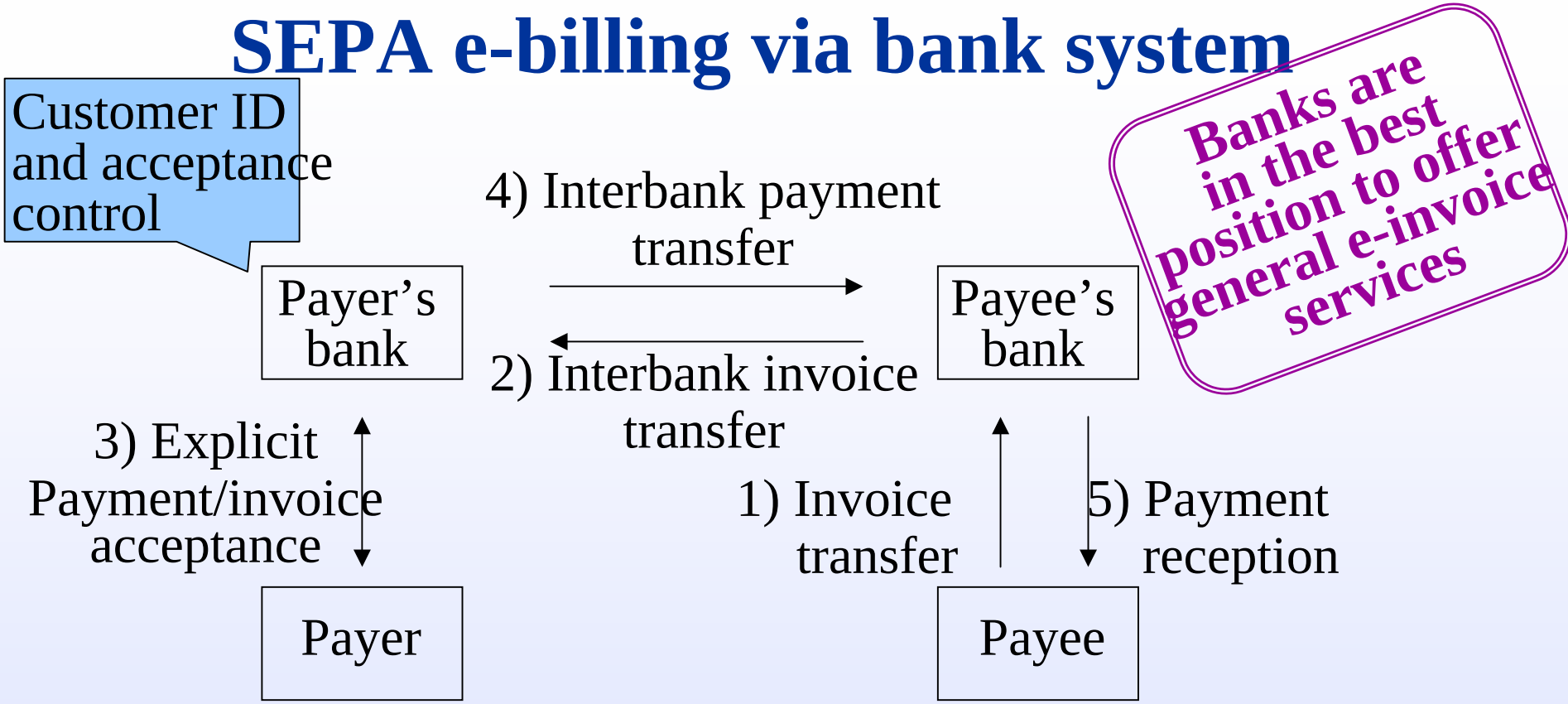
Customer greatly value automatic integration

6. E-invoicing lessons

- Constant linking of complete invoicing data and payment instruction
- Same common standard for all payment types to reach end-to-end straight-through-processing
- Same e-data reused (without any intermediary manual paper processes)
- Software investments can be shared
- Savings per invoice EUR 10–30. (Total benefits in EU area over EUR 100 billion, with 55 billion non-cash payments

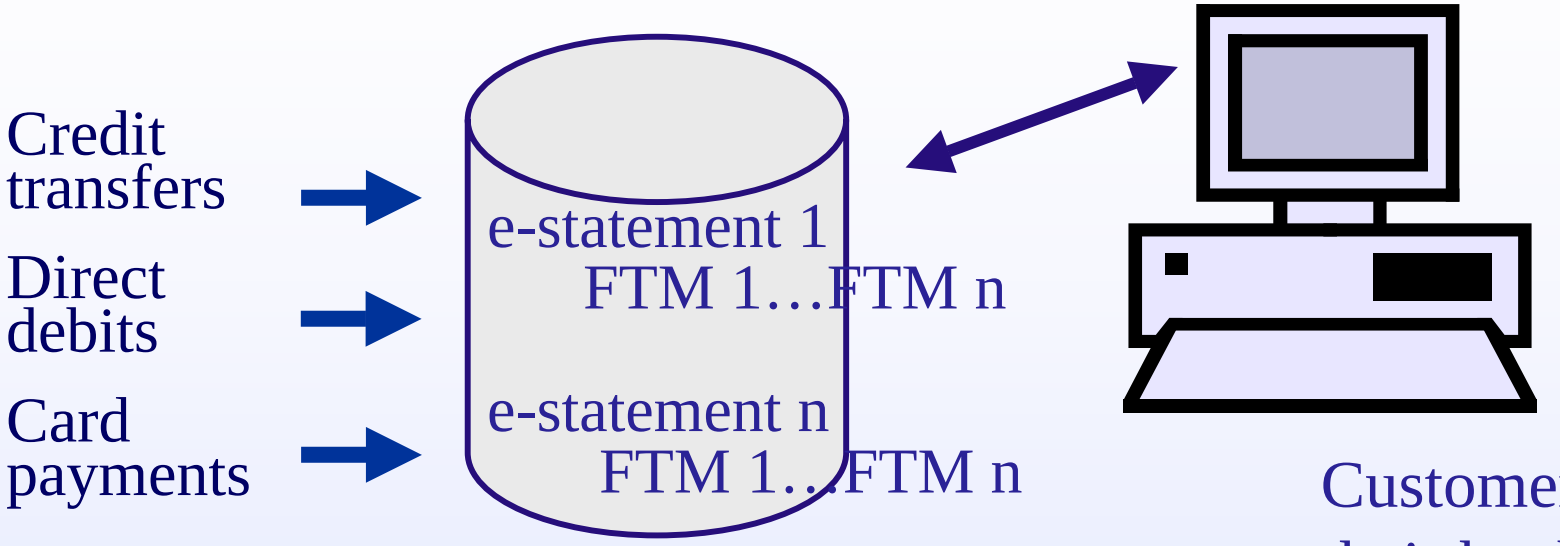
e-Invoicing offers the greatest single cost-saving potential in the payments industry (the costs of modern technology is low, compare with the cost of sending emails!)

SEPA e-billing via bank system



e-Invoices transferred via banks from payee to payer for explicit acceptance as part of payment service . Routing based on payer and payee IBANs.

E-account statements = e-invoice archives



An electronic statement of the account consists of individual FTMs plus totals

Customers view their bank accounts as they view their email accounts

Easy browsing for invoicing information from banks' systems or customers' copies of e-statements.

The SEPA process will probably be lengthy and general efficiency will increase slowly

Rapid implementation and efficiency increases will require national implementation efforts and focus on modern additional optional services

It seems easier to muster and master coordinated payment service improvement projects in small countries with limited stake holders and where scarce resources needed to be economised