

The social and private costs of retail payment instruments: a European perspective

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I. Motivation and scope



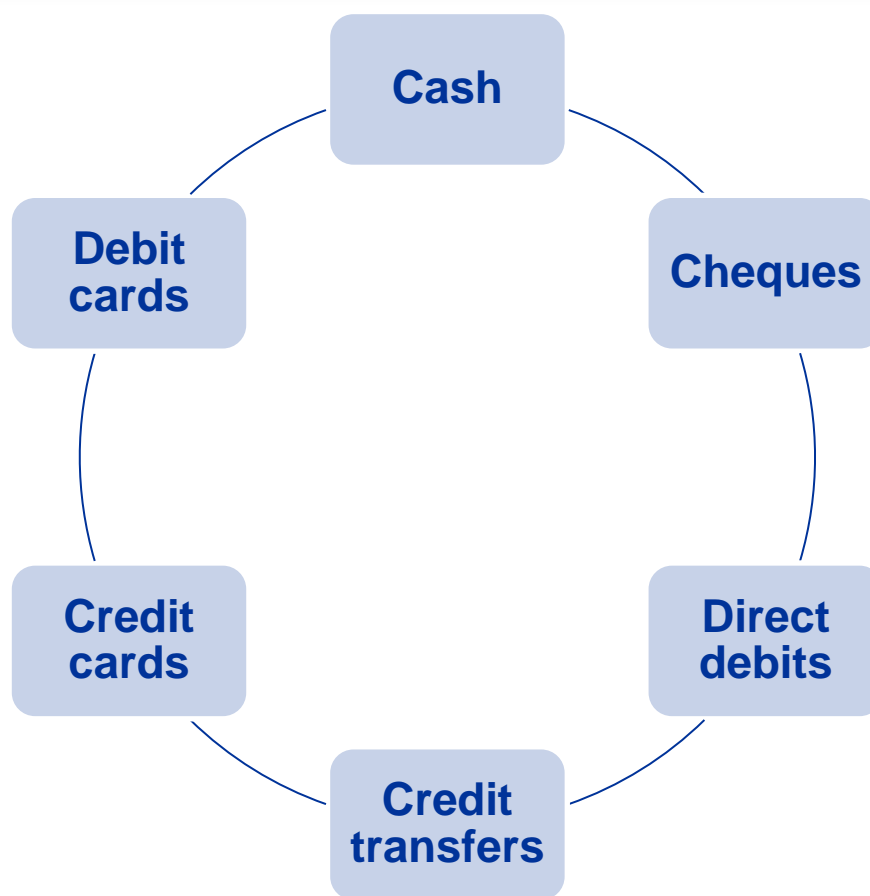
- **Need for harmonised European approach**
- **About facts & figures – not about payment policies!**
- **Social and private costs for different stakeholders**
- **Cross-country comparisons**

I. Motivation and scope

Review of related literature

- Little information on the costs of payment instruments, although costs can be significant
 - Some central bank cost studies available...
 - *...but different degrees of depth, methodology and results*
- **Clarity on the costs of different payment instruments is in everybody's interest**

II. Organisation and conduct of the study



- Most frequently used payment instruments
- Instruments that account for at least 5% of payments volume per country
- All transactions below €50,000

II. Organisation and conduct of the study

Payment chain participants

Central
banks

Banks
& Infra-
structures

Retailers &
Companies

Cash-in-
transit
companies

Consumers
(not included)

II. The concept of private and social costs

Private costs

- Incurred by the individual participants in the payment chain
- Internal costs + External costs

Social costs

- Sum of the internal costs incurred by all participants in the payment chain to be able to carry out POS and remote payments
- Aggregate costs to society

II. Organisation and conduct of the study

ECB in cooperation with 13 central banks



II. Organisation and conduct of the study

Representativeness

- 40% market share of EU 27 [volume]
- 46% of cash and 30% of non-cash payments
- Extrapolation to EU27 Member States
- At least one country per payment market cluster

Robustness

- Individually:
 - Bilateral meetings and written consultations with NCBs
 - Data consistent with ECB's SDW
- Cross-country:
 - Costs are comparable across participants
 - Results fit into the context of the existing research

III. Key findings: Social costs calculation (% of GDP)

	Private costs	Fees paid	Social costs = Private costs - Fees paid	% of total social cost	Social costs / Private costs
CENTRAL BANKS					
Cash	0.025%	0.000%	0.024%	3%	100%
- Fees paid for outsourcing cash services		0.000%			
- Fees paid to cash in transit companies		0.000%			
BANKS AND INFRASTRUCTURES					
Cash	0.193%	0.002%	0.191%		99%
Cheques	0.021%	-	0.021%		100%
Cards	0.158%	0.001%	0.157%		99%
- Debit cards	0.076%	0.001%	0.076%		99%
- Credit cards	0.081%	0.000%	0.081%		100%
Direct debits	0.051%	-	0.051%		100%
Credit transfers	0.070%	-	0.070%		100%
Total	0.493%	0.003%	0.490%	51%	99%
CASH IN TRANSIT COMPANIES					
Cash	0.008%	0.001%	0.008%	1%	93%
RETAILERS					
Cash	0.345%	0.075%	0.270%		78%
Cheques	0.016%	0.004%	0.012%		76%
Cards	0.099%	0.048%	0.050%		51%
- Debit cards	0.038%	0.014%	0.023%		62%
- Credit cards	0.023%	0.014%	0.009%		40%
- Combined cards	0.004%	0.000%	0.004%		100%
- Not split	0.034%	0.020%	0.013%		40%
Direct debits	0.053%	0.011%	0.042%		80%
Credit transfers	0.073%	0.010%	0.064%		87%
Total	0.587%	0.148%	0.439%	46%	75%
Overall	1.113%	0.152%	0.961%	100%	86%

III. Key findings

1. The social costs of retail payments are substantial

- 0.96 % GDP or €45 billion -13 sample countries
- 1 % GDP or €130 billion - EU27

2. Distribution of social costs:

- Banks and infrastructures: 51%
- Retailers and companies: 46%
- Central banks: 3%
- Cash-in-transit companies: 1%

3. The private costs for retailers are higher than banks' costs

- Due to higher external costs

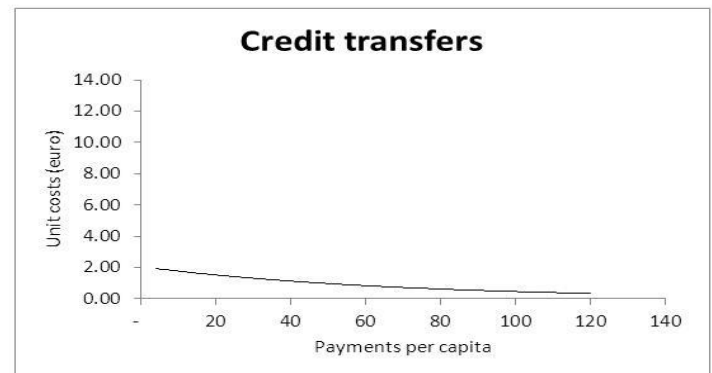
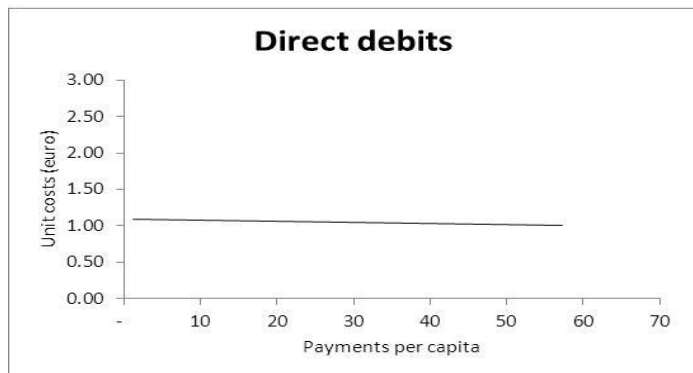
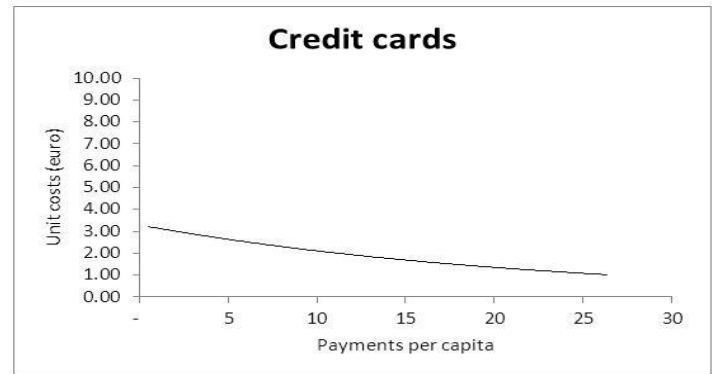
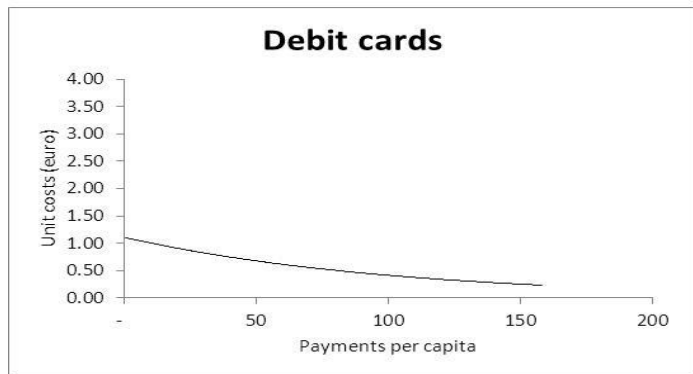
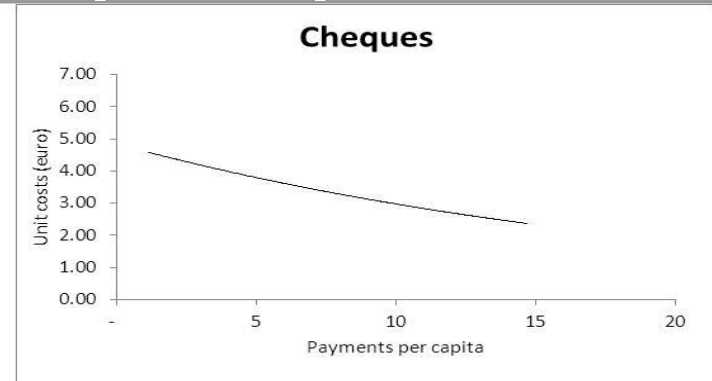
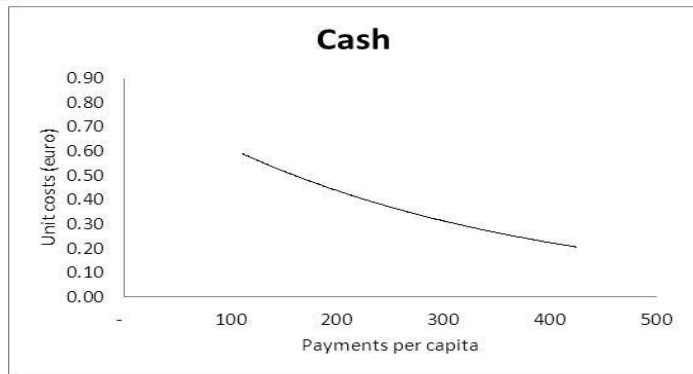
III. Key findings

- 4. The costs of cash to GDP are nearly half of total social costs**
 - Due to the relatively high usage of cash
- 5. Cash payments show lowest unit costs of €0.42 (on average)**
 - Followed by debit cards €0.70
 - ...but social costs per €1 of sale (debit) card payments (€0.017) score lower than cash (€0.023)
- 6. In a cross-country comparison, cash does not always yield the lowest unit costs**
 - In one-third of the countries, the costs for debit card transactions are lower than those for cash transactions

III. Social cost analysis: Social costs per stakeholder and payment instrument

	<u>Central bank</u>	<u>Banks and infrastructures</u>	<u>Cash in transit companies</u>	<u>Retailers</u>	<u>Total</u>
Cash	0.02%	0.19%	0.01%	0.27%	0.49%
Cheques	-	0.02%	-	0.01%	0.03%
Cards	-	0.16%	-	0.05%	0.21%
- Debit cards	-	0.08%	-	0.02%	0.10%
- Credit cards	-	0.08%	-	0.01%	0.09%
- Combined cards	-	-	-	0.02%	0.02%
Direct Debits	-	0.05%	-	0.04%	0.09%
Credit transfers	-	0.07%	-	0.06%	0.13%
Total	0.02%	0.49%	0.01%	0.44%	0.96%

III. Social cost analysis: Unit costs vs. Payments per capita



III. Key findings

- 7. There are economies of scale in retail payment services**
- 8. The retail payment industry is characterised by a relatively high proportion of indirect costs**
 - For non-cash payment instruments in particular
 - Re-confirms the use of Activity-Based Costing
- 9. Household surveys**
 - Recent national level data suggests that the social costs of retail payments to households are about **0.2 % of GDP**

III. Household survey

Social costs of households per payment instrument

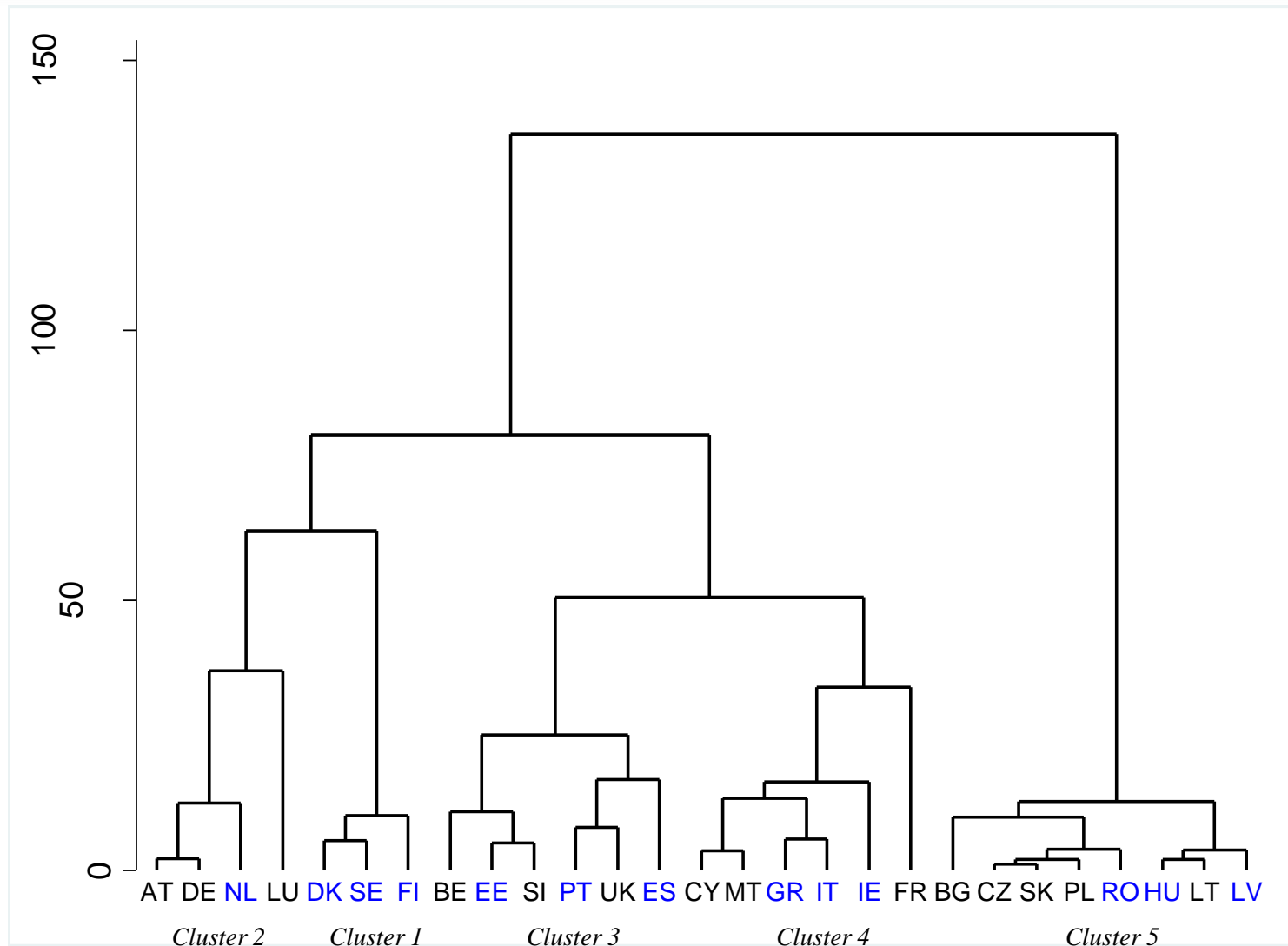
	Denmark		Hungary	
	<u>Million euro</u>	<u>% of GDP</u>	<u>Million euro</u>	<u>% of GDP</u>
Cash	184.04	0.082%	71.20	0.078%
Debit cards	100.63	0.045%	6.39	0.007%
Credit cards	2.85	0.001%	1.07	0.001%
Direct debits	12.40	0.006%	3.39	0.004%
Credit transfers	223.75	0.100%	82.37	0.090%
Total	523.66	0.234%	164.42	0.180%

III. Key findings

10. Five clusters of European retail payment markets

- **EU27 Member State have unique retail payment markets and feature their own market characteristics**
- **However, some payment markets appear to be similar to each other with respect to**
 - **Costs of payment instruments**
 - **Market development**
 - **Payment behaviours**

III. Key findings



Note: Countries in blue participate in the study.

III. Key findings

	<i>Cluster 1</i> DK Denmark SE Sweden FI Finland	<i>Cluster 2</i> AT Austria DE Germany NL Netherlands LU Luxembourg	<i>Cluster 3</i> BE Belgium EE Estonia SI Slovenia PT Portugal UK United Kingdom ES Spain	<i>Cluster 4</i> CY Cyprus MT Malta GR Greece IT Italy IE Ireland FR France	<i>Cluster 5</i> BG Bulgaria CZ Czech Republic SK Slovakia PL Poland RO Romania HU Hungary LT Lithuania LV Latvia
Social costs to GDP (%)	0.80%	0.92%	1.11%	1.20%	1.01%
Average card transaction (euro)	38	58	41	75	38
Cash payments per capita	154	358	266	306	270
Cheque payments per capita	1	0	6	23	0
Card payments per capita	171	64	83	59	17
Direct debit payments per capita	25	77	31	16	5
Credit transfers per capita	98	102	55	24	35
Cards per capita	1.5	1.6	1.8	1.4	0.9
POS terminals per million inhabitants	25,072	14,034	20,628	25,643	7,722
ATMs per million inhabitants	480	868	1,156	766	484
GDP per capita (euro)	34,782	42,904	20,526	24,380	8,620
Number of countries	3	4	6	6	8

IV. Conclusions

- **The first comprehensive, cross-country analysis of aggregated costs of making payments**
 - **ECB Occasional Paper No 137 – now available**
 - **National reports by respective NCBs**
- **Retail payments matter for the European society**
- **Useful tool to benchmark cost (in-)efficiencies**
- **Aims to start a policy debate on the results and the future of the European markets for payment services**

IV. Conclusions

➤ Media response:

*“[...] No doubt, the ECB has done an excellent job and the figures presented are highly interesting. They can serve as a kind of **benchmark for other estimates**. In addition to cost-estimates, the study also **provides some volumetric data** – such as the volume and value of cash payments in the EU - that has been missing, so far. So, on the whole, the ECB is providing **interesting and relevant information on the payment market.**”*

Source: PaySys Consultancy 01.11.2012

Thank you!

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