



Bank of Israel

A Comparison of the Tariffs of
Retail Banking in Israel and in
Thirteen Countries

Final Report

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Van Dijk Management Consultants

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ACRONYMS USED

ATM:	Automated Teller Machine
BIS	Bank of International Settlements
BoI:	Bank of Israel
CPSS:	Committee on Payment and Settlement Systems
ECB:	European Central Bank
FIs:	Financial Institutions
GDP:	Gross Domestic Product
OTC:	Over-The-Counter
POS:	Point-of-Sale
PPP	Purchasing Power Parities
USD	United States Dollar
AT	Austria
BE	Belgium
CA	Canada
DK	Denmark
FR	France
DE	Germany
IE	Ireland
IL	Israel
IT	Italy
NL	The Netherlands
PT	Portugal
SE	Sweden
UK	United Kingdom
USA	United States of America

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Van Dijk Management Consultants (Brussels – Belgium) conducted this study. The team included Dominique Spaey, Tine Debusschere, Violette Van Dyck and François Lejeune. They are solely responsible for the views expressed, which do not necessarily reflect those of the Bank of Israel.

This report benefited from various contributions, in particular from the team of Bank of Israel. We wish to thank them all for their time and the information and guidance they provided.

EXECUTIVE SUMMARY

Objectives and scope

The outputs of this assignment are:

- A comparison of the tariffs of retail banking in Israel and in 13 European and North American countries, taking account of the respective usage intensities and including a breakdown of fees in different categories;
- A measure of price dispersion within these countries;
- A representative database of usages, prices and tariffs for using the services linked to a current bank account in these 14 countries (database developed in Excel and annexed to this report);
- The diverse guidelines used;
- The present report.

This executive summary presents the following:

- The findings with regard to inter-country comparisons, breakdown of charges and price dispersion;
- The applied methodology;
- Conclusions and recommendations.

Findings

Inter-country comparison

Israel is among the three cheapest countries, with Belgium and the Netherlands, both when the prices of a current account are expressed in US Dollars or in Purchasing Power Parities.

Breakdown of charges

The breakdown of charges for Israel presents a very unique profile compared to all other countries of the sample, with charges being mostly related to means of payment (e.g. debit and credit cards), followed by exceptional charges (i.e. unauthorized overdrafts, insufficient account funds, blocking and replacement of debit and credit cards and cheque bouncing).

Not any account in Israel offers credit interests on account balance while debit interest rates are in the average values of the sample.

Overall, no correlation has been found between the levels of debit interest rates and the rates of the national monetary policies.

Dispersion of prices

The dispersion of account prices in Israel is in the average and overall, no correlation has been found between the levels of prices and the coefficients of price dispersion.

Methodology

Selection of countries

The selection of countries was made in coordination with BoI. The aim was to have a sample offering a good representativeness with relatively more expensive countries (DE, DK, FR, IT, UK, SE) and relatively cheaper ones (AT, BE, IE, NL, PT). It also includes four countries (AT, BE, IE, NL) where price dispersion is rather limited suggesting a higher degree of price competition.

Selection of financial institutions

The selection aimed at obtaining, in the countries concerned, a sample corresponding to the three to six largest financial institutions that offer retail banking services to private customers. These financial institutions cover between 36 and 92% of the market estimated in terms of customer deposits and short term funding. A total of 58 financial institutions were selected for the data collection and comparison.

Accounts selected

In view of the objectives of the study, the following criteria for collecting data were applied:

- The focus was on retail services for residential clients ('private'). No business offers (i.e. for 'professional clients') were collected;
- Data to be collected focus on the average consumer, in order to address the largest share of the population. This excludes promotional offers and offers to specific age or professional categories. Exception to this were the students and young people accounts representing an important category of accounts, for which data were also collected;
- The accounts selected had to allow for both cash utilization and payment transactions.

Information was collected for different types of accounts corresponding to the criteria presented above i.e. current accounts, electronic accounts, packages and young people/student accounts¹.

Fees considered

The fees considered were all fees related to using the above-mentioned accounts. They included in particular the following:

- Basic annual charges which include package fees and account maintenance charges;
- Account management charges which include charges related to the management of the account such as the opening and closing fees, the debit interest rate on authorized overdrafts, the access cost and maintenance fees of phone banking and internet banking as well as account movements charges;
- Means of payment related charges: this includes services for debit cards, delayed debit or credit cards, credit transfers, standing orders, direct debits and checks. For each of these services, different costs are considered (e.g. costs of issuance, maintenance, withdrawals from ATM, setup, cancellation, modification and direct use of these services). Charges linked with means of payment exclude those made over-the-counter;

¹ All accounts and packages offer electronic banking facilities. Electronic accounts usually offer lower tariffs and do not allow access to operations in bank branches except at high prices.

- Exceptional charges: this category includes all the charges that are incumbent upon specific/exceptional situations and are not related on a daily use of a service i.e. unauthorized overdrafts, insufficient account funds, blocking and replacement of debit and credit cards and cheque bouncing;
- OTC charges: withdrawals, deposits, credit transfers, standing orders and direct debits made over-the-counter.

User profiles

User profiles are defined as the intensity of usage of the services, i.e. the numbers of operations per banked individual per year.

The comparison of the prices was based on the average user profiles (one per country), as defined in the 2009 reference study² i.e. a profile corresponding to the entire population of current account holders and reflecting how a random individual from the relevant population behaves. Adaptations of the 2009 usage data were made whenever updated data were available, e.g. data from the Blue Book and Red Book databases (see below) related to usages in 2010. Data on the average user profile of the Israeli consumer has been collected by Bank of Israel according to guidelines reflecting the original 2009 data collection. For the average user profiles of the consumers in Canada and the United States, additional research was carried out also in line with the original 2009 data collection.

Pricing the profiles

The parameters used in the price calculations included all tariffs collected that represent a cost for the consumer and correspond to transactions actually operated. Examples are the costs of account statements, cash withdrawals, renewal of debit card, issuing a credit transfer, etc. All parameters represent a charge with the exception of (credit) interest paid on accounts, which is considered revenue thereby reducing the total cost of the account.

Priced profiles were derived from an automated process matching the collected prices with the relevant items of the usage profiles, i.e. for each service, multiplying a price by a quantity to obtain a total price.

From the priced profiles at bank level (one per account considered), national averages were calculated taking into account bank market shares based on customer deposits and short term funding.

Conclusions and recommendations

The value of the present exercise is related to its robustness in particular in terms of market coverage, update of the usage data from the 2009 study whenever possible, benchmark including 14 countries and use of purchasing power parities allowing withdrawing the impact of different price levels across countries.

² Study commissioned by the European Commission Directorate General Health and Consumers and entitled 'Data collection for prices of current accounts provided to consumers' (see http://ec.europa.eu/consumers/rights/docs/study_bank_fees_en.pdf)

However the exercise has also some limits. Like in the 2009 study, a majority of data concerning the usage intensities are best proxies rather than official statistics. Also, not all data on tariffs do appear on the banks web sites and obtaining such data sometimes requires mystery shopping like actions.

The comparison of the costs of having an account in Israel and in the thirteen other countries revealed that Israel is one of the three cheapest countries of the sample while remaining costlier than BE and the NL. Israel also presents a unique profile regarding the breakdown of charges, none other country sharing such profile: two thirds of the charges relate to means of payments and one fifth relate to exceptional charges. Like in CA, FR and the NL, no Israeli bank offers credit interest on account balance. Regarding debit interest rates on overdrafts and the coefficient of price dispersion, Israel is in the average values of the countries reviewed.

In the comparisons carried out, remarkable differences appear across countries in terms of usage rates (i.e. number and value of transactions) and pricing across countries. Diversity is also illustrated by the different profiles of countries revealed by the breakdown of charges.

Price dispersion between banks within countries was analysed on the basis of priced profiles. Price dispersion varies from country to country, being notably a function of the diversity and differentiation of offers, the diversity of offering institutions and the extent of price competition in each country.

Analysis of the dispersion of priced profiles allowed distinguishing between countries with an indication of a stronger versus weaker price-based competition between financial institutions.

Based on the study carried out, two recommendations emerge:

- A data collection on prices of having an account is an exercise which could be repeated if one wishes to develop a price monitoring over time;
- Exchanges with the retail financial sector could be an opportunity to validate the data over usage intensities and/or to obtain or calculate more refined ones.

1. INTRODUCTION

This report outlines the activities performed, the key findings of the study, the methodology applied and conclusions and recommendations.

1.1. OBJECTIVES AND SCOPE OF THE STUDY

The study aimed at providing Bank of Israel with a comparison of the tariffs of retail banking in Israel and in thirteen European and North American countries, using a methodology as much as possible similar to the one implemented in the 2009 study carried out for the Directorate General Health and Consumers of the European Commission.³

The outputs of the present study are:

- A comparison of the tariffs of retail banking in Israel and in thirteen European and North American countries, taking account of the respective usage intensities and including a breakdown of fees in different categories;
- A measure of price dispersion within these countries;
- A representative database of usages, prices and tariffs for using the services linked to a current bank account in these fourteen countries;
- The diverse guidelines used;
- The present report.

1.2. TASKS UNDERTAKEN

Four major tasks were undertaken over the period August-December 2012:

- Setting-up representative profiles of usage of the services in Israel, Canada and the United States and updating data on usage profiles in other countries previously included in the 2009 study for the European Commission;
- Collecting data on tariffs in the fourteen countries;
- Comparing prices between Israel and the other countries (levels and breakdown of charges) and analysing price dispersion within countries;
- Preparing the final report of the study and related deliverables.

1.3. STRUCTURE OF THE REPORT

The report is structured as follows:

2. Findings;
3. Methodology;
4. Conclusions and recommendations.

In annex, we provide the following pieces of information:

- The tables with figures of the graphs (Annex 1);
- The data collection guidelines (Annex 2);
- The assumptions and data used for the profiles (Annex 3);

³ Van Dijk Management Consultants, Data collection for prices of current accounts provided to consumers, 2009.

- The guidelines for the use/adaptation of the database and calculation model (Annex 4);
- The database developed in Excel (as a separate file) (Annex 5).

2. FINDINGS

The findings presented hereafter relate to inter-country comparisons of the overall level of charges and of the breakdown of these charges, as well as to the dispersion of priced profiles within countries. These findings are based on the methodology described in section 3 of the present report.

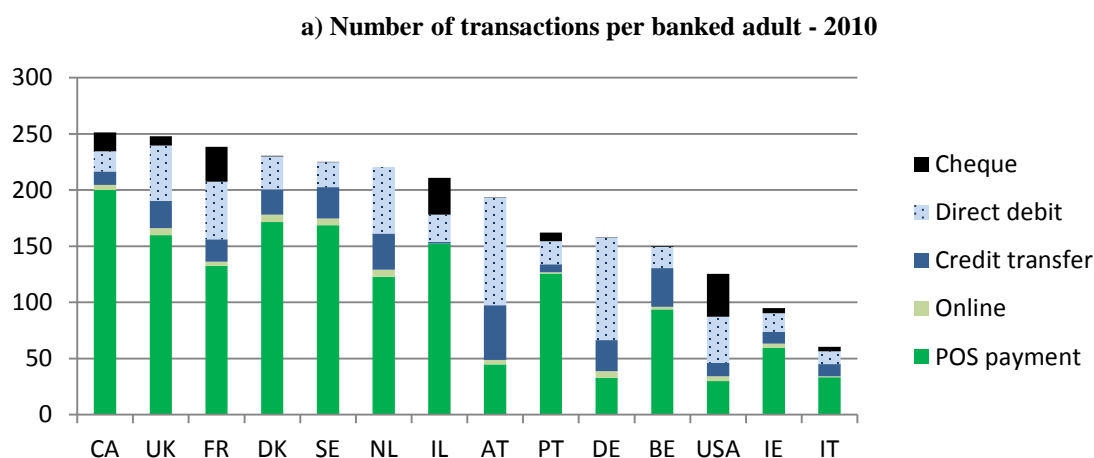
2.1. BACKGROUND

To set up the scene for the analysis of the priced profiles, we present below an inter-country comparison of the intensity of usage of the main payment services and terminal transactions in 2010.

The first diagram allows drawing conclusions on the relative popularity of each payment-related service across countries.

The second diagram provides the ratio of the total value of transactions to GDP, once again for each particular service. This comparison provides a more complete understanding of the importance in value of a particular service in payments transactions.

Graph 1 – Comparison of payment-related transactions

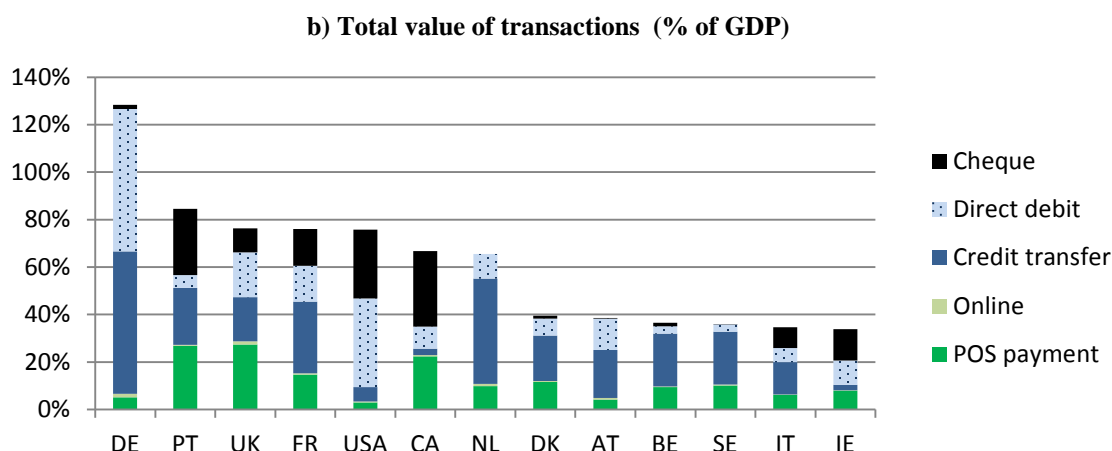


(sources: European Central Bank, 'Blue Book – Payment and Securities Settlement Systems in the European Union', Statistical Data Warehouse; Red Book Data', Statistics on payment, clearing and settlement systems in the CPSS countries)

The above graph depicts a ranking of countries according to the total number of transactions per capita across all payment services and terminal transactions.

CA, UK, FR, DK, SE, NL and IL are the countries with more than 200 transactions per banked adult per year.

Overall, the predominant forms of payment transactions (in volume) are POS payments, followed by direct debits and credit transfers. Cheques are quite used in part of the countries (FR, USA, CA and IL) while in nine countries they are not or nearly not used (DK, SE, NL, AT, PT, DE, BE, IE, IT). Online payments represent a marginal share.



(sources: European Central Bank, 'Blue Book – Payment and Securities Settlement Systems in the European Union', Statistical Data Warehouse; Red Book Data', Statistics on payment, clearing and settlement systems in the CPSS countries)

Besides DE whose data present an outstanding unexplained character, we identify a first group of countries where the total values of household transactions amount to between 60 and 80% of the GDP: PT, UK, FR, USA, CA and the NL.

Another group presents values of household transactions amounting to between 35 and 40% of the GDP: these are mostly smaller countries (DK, AT, BE, SE and IE) plus IT.

IL is not present in this graph since only part of the data related to this country is available.

2.2. COMPARISON OF CURRENT ACCOUNT PRICES (IN \$ AND PPP)

The graphs on the following pages present an inter-country comparison of the values of the priced profiles, i.e. they compare the total annual costs incurred by account holders using the country-specific usage rates and tariffs. The values presented are weighted⁴ average figures per country and they are expressed in USD (1st graph) and in PPP (2^d graph).

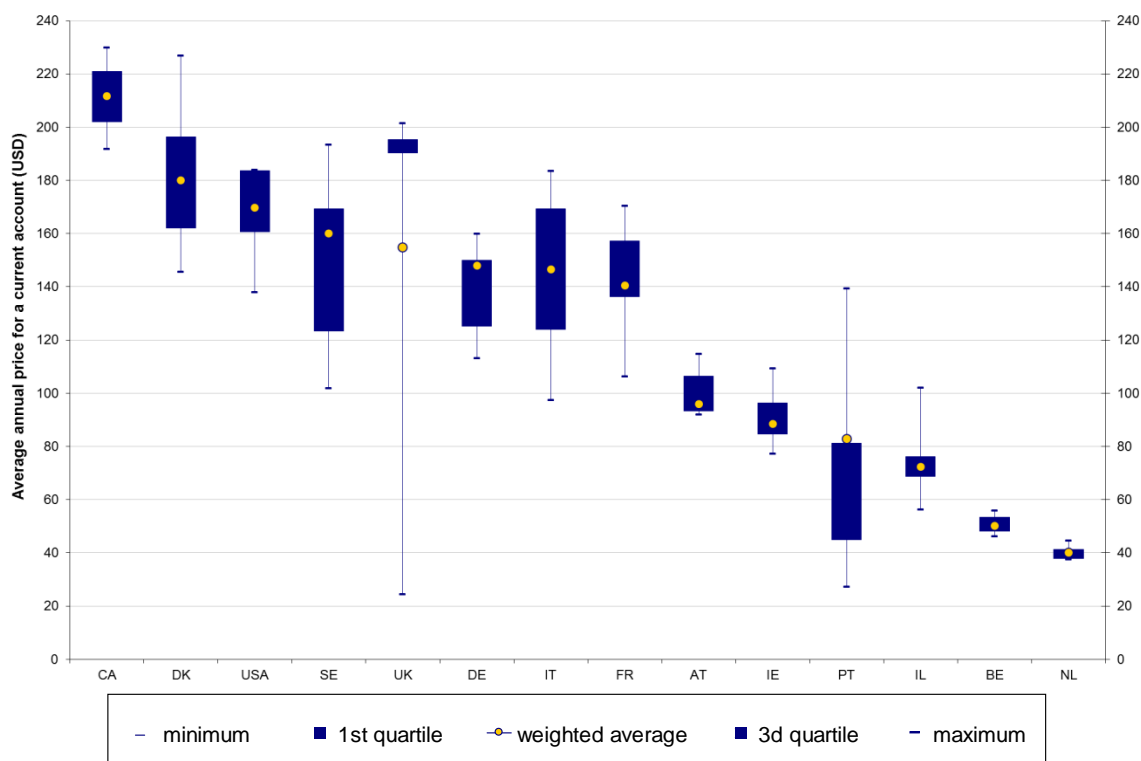
The “box-and-whisker” diagrams below depict the following information:

- The top and bottom points marked by a dash (“-”) correspond to maximum and minimum priced profiles;
- The solid-coloured box gives the range of observations within the first and third quartiles;

⁴ I.e. average figures per country are weighted by the Financial Institutions' market shares.

The yellow dot gives the sample average weighted by each bank's share in customer deposits and short term funding⁵.

Graph 2 – Comparison of current account prices in USD⁶



The average prices range from \$211 in Canada to \$40 in the Netherlands. The overall price spreading (i.e. the difference between the highest and the lowest price calculated) is between \$230 in Canada and \$24 in the United Kingdom.

North American and Scandinavian countries (Canada, Denmark, the United States and Sweden) are ranked as the most expensive countries for running a personal current account. While the United States and the two European countries have quite similar average prices, Canada shows a significantly higher price.

While a majority of British banks charge similar prices to those prevailing in these four countries, Barclays Bank (which is the largest British bank in terms of total customer deposits) offers current accounts with very low charges (e.g. there are no maintenance fees on the accounts and the cards and payment services are free of charge). This brings the UKs' weighted average down.

The cost of having a current account remains around \$140 for the median countries that are three large European countries (i.e. Germany, Italy and France). The distribution is skewed towards high

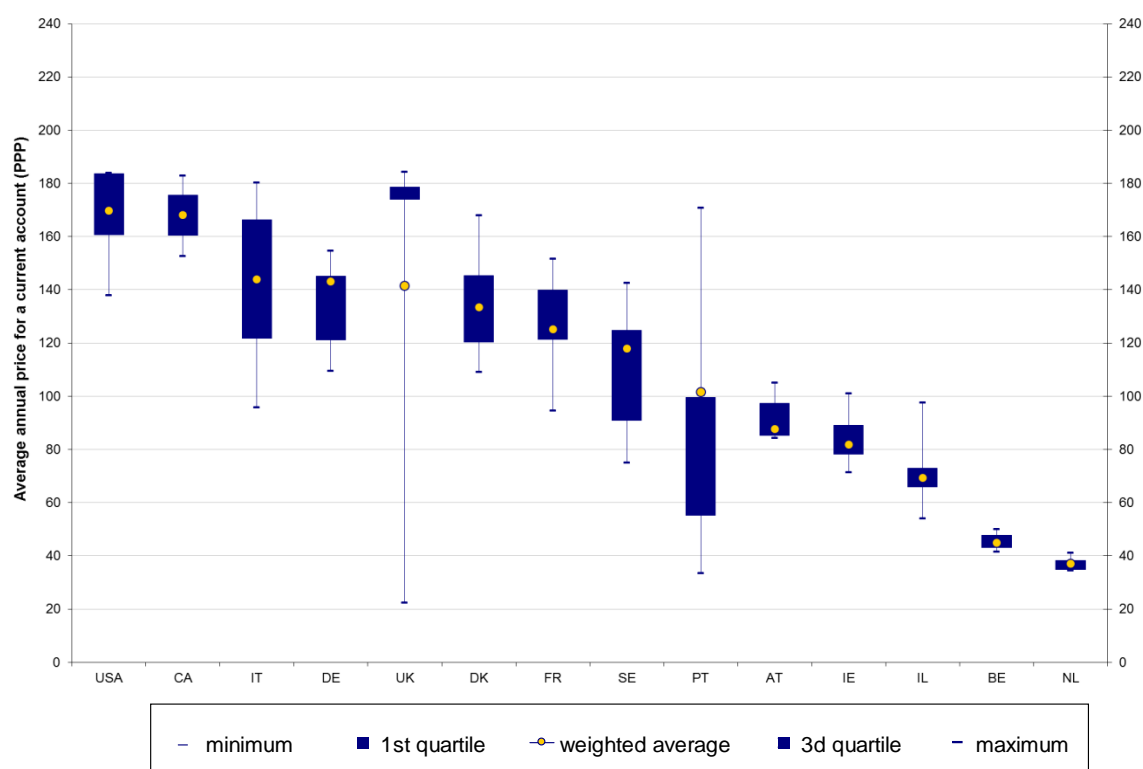
⁵ On the graphs presented, the average is never located at equal distance from the 1st and 3^d quartile, due to the fact that the weighted average is used. Countries where the weighted average is above (below) the box (representing the 1st and 3d quartile) reveal that prices applied by banks with a larger market share are higher (lower).

⁶ Exchange rates of September 2012 for all countries except Israel (rates of October 2012).

prices in Germany (due to high accounts' costs of Deutsche Bank which represents more than 50% of the German market) and it is driven downward in France by Crédit Agricole.

A significant gap of prices can be observed between France and Austria whose weighted average cost is a little bit lower than \$100. Ireland presents a priced profile similar to Austria. Moving further down, the costs differences among the top four cheapest countries are not marginal. For example, the average cost of a current account in the Netherlands is half the average cost in Portugal (\$80). Israel is ranked as the third less expensive country with an average account's cost around \$72. Belgium is the second cheapest country with a cost of about \$50.

Graph 3 – Comparison of current account prices in USD/PPP⁷



In all but one country, weighted averages expressed in USD Purchasing Power Parity are lower than averages expressed in USD. Indeed, except Portugal, all countries have a purchasing power lower than the United States taken as the reference country⁸. Three countries (Canada, Denmark and Sweden) have a relatively low purchasing power: this heavily drives prices down in these countries. On the contrary, prices are higher in Portugal. The average price spreading is smaller than previously, ranging from \$170 in the United States to \$37 in the Netherlands which remains the cheapest country. The overall price difference is also narrower: with a minimum of \$22 and a maximum of \$184 both in the United Kingdom.

The graph reveals four groups of countries.

The first group gathers the USA and Canada with prices around \$170.

⁷ Source: OECD, National Annual Accounts, PPP and exchange rates, last update of 10 September 2012.

⁸ US weighted averages expressed either in USD or in PPP are obviously equal.

A second group gathers six countries (Italy, Germany, the United Kingdom, Denmark, France and Sweden) with prices ranging between \$140 and \$120.

A third group gathers Portugal, Austria, Ireland and Israel with prices between \$100 and \$70.

Belgium and the Netherlands have the cheapest prices which amount to about \$40.

Overall, in USD and in PPP, Israel is one of the three cheapest countries.

The following two tables compare country per country the yearly charges of the four types of accounts for the same (average) usage data⁹: current accounts, e-accounts, packages and young people accounts. The first table presents the data in USD, the second one in PPP.

Table 1 – Yearly charges of the four types of accounts (USD)

Country	Total yearly charges (in USD)			
	Current accounts	E-accounts	Packages	Young accounts
Austria	123	-	151	29
Belgium	75	32	63	15
Canada	229	-	281	124
Denmark	208	151	196	145
France	116	-	172	134
Germany	173	105	211	76
Ireland	103	-	154	45
Italy	150	256	181	121
The Netherlands	38	46	57	17
Portugal	85	-	132	61
Sweden	152	-	232	127
United Kingdom	137	-	319	77
United States	102	97	326	113
Israel	103	-	-	42

⁹ Usage data are a necessary component of the comparison since it avoids comparing ‘baskets’ including different sets of services.

Table 2 – Yearly charges of the four types of accounts (PPP)

Country	Total yearly charges (in PPP)			
	Current accounts	E-accounts	Packages	Young accounts
Austria	112	-	138	27
Belgium	68	29	56	13
Canada	182	-	224	99
Denmark	154	112	145	108
France	104	-	153	119
Germany	168	101	204	74
Ireland	96	-	142	42
Italy	148	251	178	119
The Netherlands	35	42	53	16
Portugal	104	-	162	74
Sweden	112	-	171	93
United Kingdom	125	-	291	71
United States	102	97	326	113
Israel	99	-	-	40

The results in USD and in PPP are very close to each other:

- In ten countries, packages are on average the most expensive type of account (AT, CA, FR, DE, IE, NL, PT, SE, UK and USA). This would be less the case when considering usage data corresponding to active or very active users who would benefit from not paying additional fees for their high number of operations;
- Current accounts are usually the second most expensive accounts followed by e-accounts and young people accounts. This last category is the least expensive one in all countries but France and the USA. In Italy e-account is the most expensive one due to the very high fees applied to OTC operations for this account.

A detailed comparison of packages and current accounts, account per account, confirms the above and allows classifying the countries (except Israel¹⁰) in categories as follows:

- Countries where packages are always more expensive: CA, FR, DE, IE, NL, PT, UK and USA;
- Countries where packages are often more expensive: AT;
- Countries where packages are more expensive in half the cases: IT and SE;
- Countries where packages are often cheaper: BE and DK.

¹⁰ No packages are offered in Israel.

2.3. BREAKDOWN OF FEES (IN PPP)

In order to analyse the relative importance of the different service charges in the total charges linked to an account, average distributions of charges per country were calculated and plotted in graphs. The fees were expressed in PPP to reflect the ‘real costs’ in the frame of an inter-country comparison.

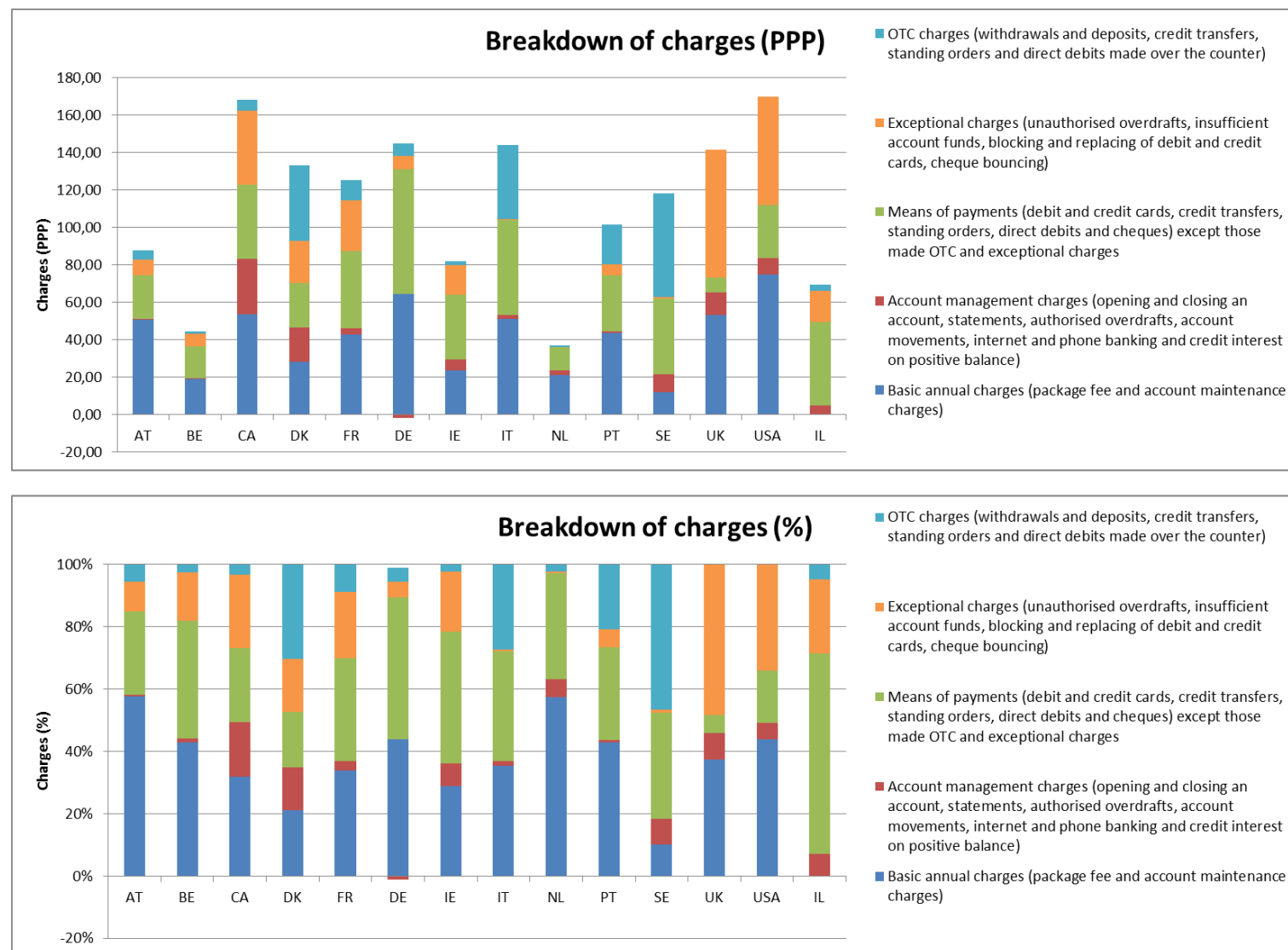
The following categories of charges were considered:

- Basic annual charges: this category of fees is due on a monthly or annual basis. It cannot be linked to any specific services. In other words, it is the charge a consumer has to pay in order to have a current account. This category includes package fees and account maintenance charges;
- Account management charges: this category includes charges related to the management of the account such as the opening and closing fees, the debit interest rate on authorized overdrafts, the access cost and maintenance fees of phone banking and internet banking as well as account movements charges;
- Means of payment related charges: it covers all expenses needed in order to be able to make payments. This includes services for debit cards, delayed debit or credit cards, credit transfers, standing orders, direct debits and checks. For each of these services, different costs are considered (e.g. costs of issuance, maintenance, withdrawals from ATM, setup, cancellation, modification and direct use of these services). Charges linked with means of payment exclude those made over-the-counter;
- Exceptional charges: this category includes all the charges that are incumbent upon specific/exceptional situations and are not related on a daily use of a service i.e. unauthorized overdrafts, insufficient account funds, blocking and replacement of debit and credit cards and cheque bouncing;
- OTC charges: withdrawals, deposits, credit transfers, standing orders and direct debits made over-the-counter.

The following graphs represent the breakdown of charges in PPP across all countries included in the study. This breakdown has been built on weighted¹¹ average costs. An analysis of each category is presented below.

¹¹ I.e. weighted by the market shares of the financial institutions.

Graph 4 – Breakdown of charges (PPP)



Overall, three categories of charges predominate: basic annual charges, charges related to means of payments and exceptional charges.

2.3.1 BASIC ANNUAL CHARGES

In a majority of countries (8 out of the 14), basic annual charges constitute the largest share of the cost of a current account. These countries are Austria, Belgium, Canada, France, Italy, the Netherlands, Portugal and the United States. Basic annual charges account in those countries for approximately 40% of the total charges, reaching about 58% in Austria and the Netherlands and 32% in Canada. In France and Italy the charges related to means of payment share the status of main charge with the basic annual charges.

In Germany and the UK, these charges account also for more or less 40% of the current accounts' cost but without representing the largest share of cost. The proportion of basic annual charges is also the second highest charge in Ireland (with value of a bit less than 30%).

In the Scandinavian countries, basic annual charges are quite low, around 20% for Denmark and 10% for Sweden, while they are nil in Israel.

2.3.2 ACCOUNT MANAGEMENT CHARGES

In all countries, account management charges represent a minor share of the charges. Again, these shares differ quite importantly from one country to another. While they account respectively for 17% and 13% of the total charges of a bank account in Canada and Denmark, these charges are almost inexistent in Austria, Belgium, Italy and Portugal (less than 1%) or they are even negative in Germany (-1%)¹². In other countries among which Israel, account management charges represent between 2.6% and 8.6% of the total charge of a personal bank account.

These figures have to be interpreted in relation with data on credit interest rates and debit rates on authorized overdrafts (see section 2.4): Canada and Denmark have debit interest rates on authorized overdrafts above average while credit interest rates on account's balance are quite low in Denmark and inexistent in Canada. This drives account management charges up. In Austria, the opposite can be observed. Debit interest rates are below the average and a credit interest rate on account's balance is systematically offered to consumers. Of course, other explanatory factors play also a role in the levels of the account management charges.

2.3.3 CHARGES RELATED TO MEANS OF PAYMENT

With basic annual charges, means of payment are another important category of current account charges. In eleven out of the fourteen countries studied, charges related to means of payment account for at least one quarter of the total charges. Charges related to means of

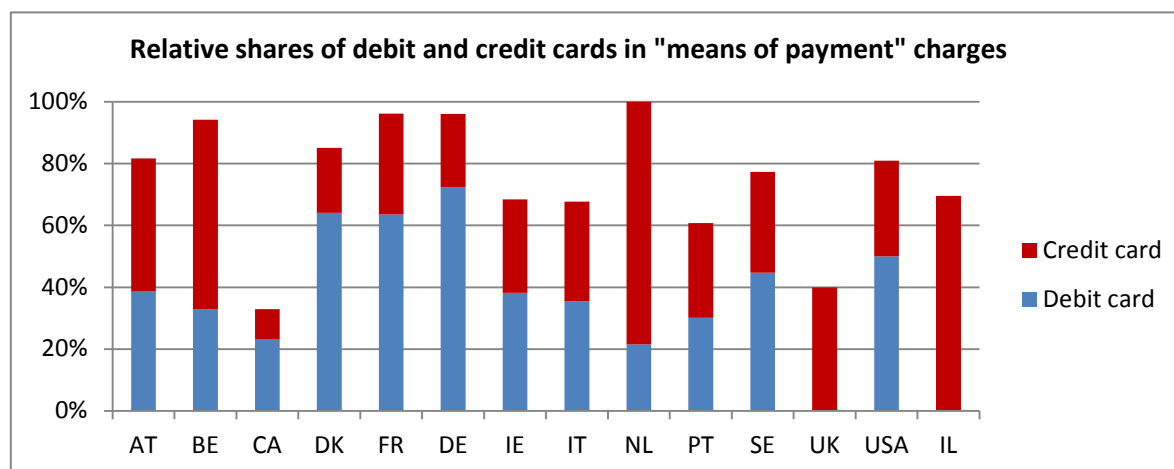
¹² This negative value is due to credit interests.

payment range from 24% to 37% of the total charges in eight countries. Furthermore, in Germany, Ireland and Israel, these charges represent respectively 47%, 42% and 64% of the total charges for running an account and they are the largest category of fees in these countries. In Israel, this is partly explained by the large share of credit cards in payment means.

In Denmark and the US, charges related to means of payment account for about 17.5%. There is only one country where these charges do not represent an important category of fees: this is the UK where they represent about 6% of the total charges.

The following graph presents the shares of credit and debit cards in the means of payment charges.

Graph 5 - Shares of credit and debit cards in the means of payment charges



In most countries, the charges related to debit and credit cards represent over 60% of the means of payment charges. In some countries debit cards predominate over credit cards while there is an opposite situation in other countries. In Israel only credit cards are used.

In two countries, cards represent a minor part of the charges related to means of payment:

- In Canada, such charges are equally distributed over debit and credit cards, credit transfers and direct debits;
- In the UK, 60% of the charges related to means of payment originate from the use of cheques and these charges are pulled upward by two banks¹³ having higher charges than the other British banks.

The interests paid on credit cards are not included in the charges related to the cards due to the unavailability of reliable data on these interests.

¹³ These banks are the Royal Bank of Scotland and the National Westminster Bank.

2.3.4 EXCEPTIONAL CHARGES

Exceptional charges range from 0.3% (in Italy) to 48.5% (in the UK) of the total accounts charges. For the largest group of countries (Belgium, Canada, Denmark, France, Ireland and Israel), the proportion is comprised between 15% and 24%. These charges take less importance in Austria, Germany, and Portugal (from 5% to 9%) while they are lower than 1% in the Netherlands and in Sweden.

Finally, exceptional charges are predominant in the UK and the US: they represent 34% of US total charges and are the largest category of fees in the UK where they represent 46% of the total.

2.3.5 OTC CHARGES

In most countries (ten out of the fourteen), charges related to services made over-the-counter are not important (up to 9% of the total charges) or inexistent (in the United Kingdom and in the United States). However, in Denmark, Italy and Portugal, these charges are more prevalent: in Portugal, they account for 18% of the total charges while this proportion reaches about 28% in the two other countries. Finally, in Sweden, it is the largest category of charges. Indeed, in this country, OTC charges represent 45% of total charges for having an account. This is mostly due to the costs of two over-the-counter operations i.e. making a withdrawal and sending an off-us credit transfer.

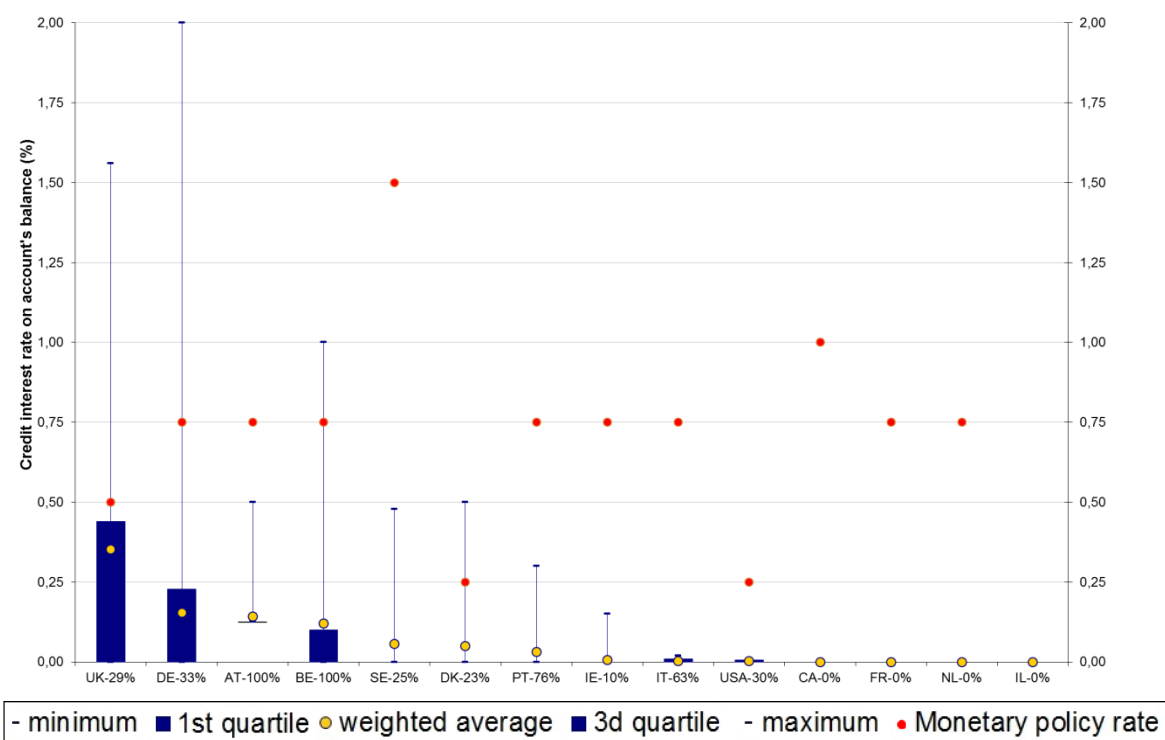
Overall, the graphs related to the breakdown of charges are a perfect illustration of the diversity of the countries' pricing models.

2.4. CREDIT INTEREST RATES ON CURRENT/ CHECKING ACCOUNTS AND DEBIT INTEREST RATES ON AUTHORISED AND UNAUTHORISED OVERDRAFTS

2.4.1 CREDIT INTEREST RATES ON CURRENT/CHECKING ACCOUNTS

The situation of the credit interest rates on current accounts is depicted by the graph and table below. In the graph, the ratios next to each country represent the percentages of accounts which offer a credit interest rate on account's balance. In the following graphs, the monetary policy rates have been inserted for information purposes.

Graph 6 – Credit interest rates on current accounts



Because credit interest rates offered in many countries are available in different intervals, it has been decided to set up a unique measure of credit interest rates for each country: for each account collected¹⁴, the consumer's income perceived as credit interest on positive balance has been divided by the average balance. The national rates presented in this graph are weighted by the market share of each financial institution.

The graph reveals that credit interest rates are usually quite low even in countries where a majority of accounts offer it. In six countries (Germany, Austria, Belgium, Sweden, Denmark and Portugal), this rate ranges from 0.03% to 0.15%. The rather high weighted average rate in Germany is mainly explained by the rates offered on two young accounts (1% and 2% of the average balance of the accounts).

Even if only five out of the seventeen British accounts offer a credit interest rate, the United Kingdom has the highest rate. On four accounts, rates offered range between 0.5% and 1.5% for average balances lower than £1,000 and reach 2% for balances comprised between £1,000 and £3,000¹⁵. Finally, in Ireland, Italy and the United States, the weighted average rate is lower than 0.01%.

The next table summarises the offer of credit interests in the fourteen countries.

¹⁴ Accounts that do not have a credit interest rate have also been included in this calculation.

¹⁵ Average account's balance in the UK equals £1,835 in 2010.

Table 3 – Offer of credit interests in 14 countries

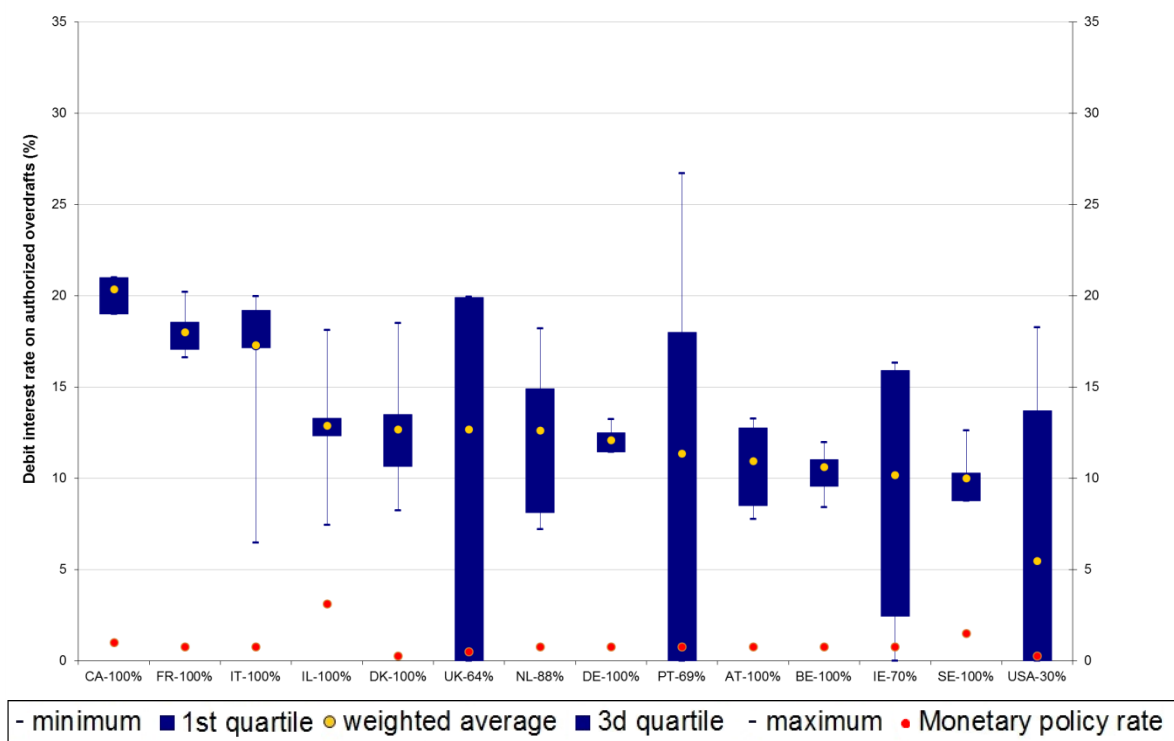
Not any account offers credit interests	A minority of accounts (figures in %) offers credit interests	A majority of accounts (figures in %) offers credit interests
CA	DK (23%)	AT (100%)
FR	DE (33%)	BE (100%)
IL	IE (10%)	IT (63%)
NL	SE (25%)	PT (66%)
	UK (29%)	
	USA (30%) ¹⁶	

The largest group of countries gathers those where a minority of accounts offers credit interests.

2.4.2 DEBIT INTEREST RATES ON AUTHORIZED OVERDRAFTS

As illustrated by the graph below, debit interest rates on authorized overdrafts are much more frequent than credit interest rates.

Graph 7 – Debit interest rates on authorised overdrafts



Many countries have debit rates close to each other: 10 countries have an average rate included in an interval of 10% to 12.9%. Three countries (Canada, France and Italy) show a higher average rate ranging between 17.3% and 20.3%. The United States which have the lowest percentage of accounts with such a debit interest rate have also the lowest average rate (about 5.5%).

¹⁶ In the United States, all banks reviewed offer credit interests but only on package accounts.

The next table summarises the situation of the debit interest rates on authorized overdrafts in the fourteen countries.

Table 4 – Application of debit interest rates on authorised overdrafts

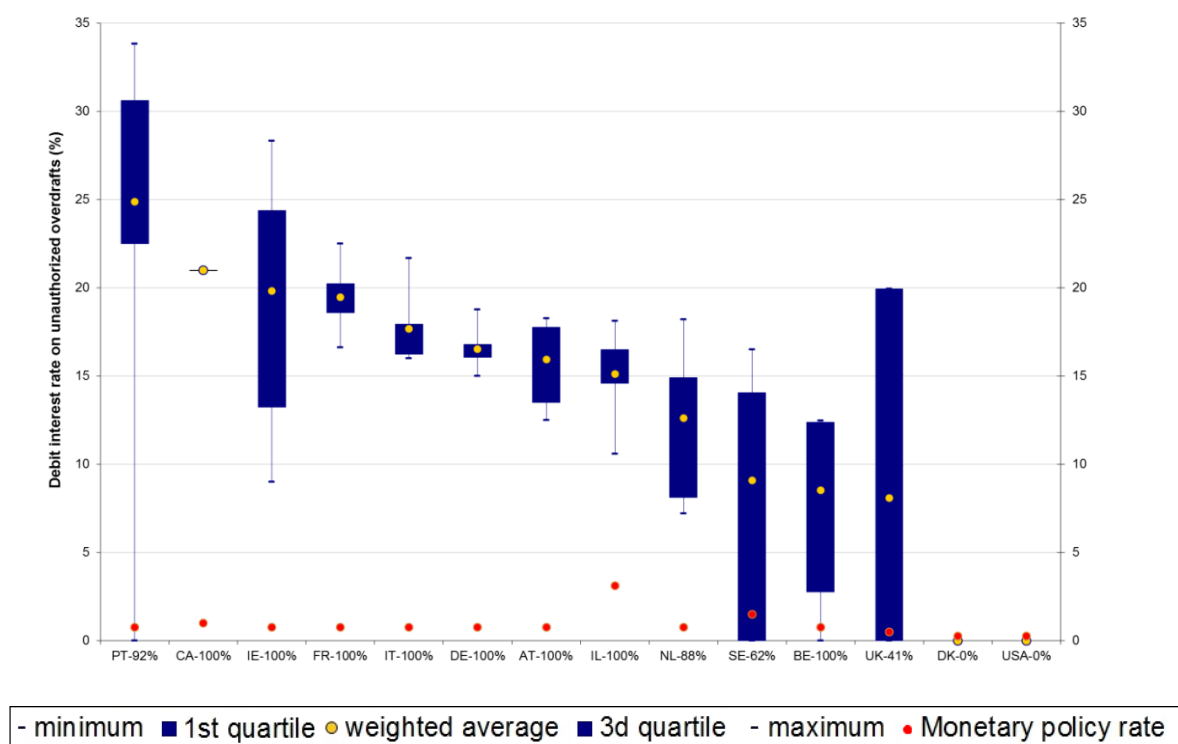
Debit rates always apply	Debit rates sometimes apply	Specific rules for young accounts
AT BE CA DE DK FR (information missing for 1 bank) IL IT (information missing for 1 bank) SE	NL (for eight accounts) USA (for 1 bank)	IE (authorized overdrafts are free up to a certain limit for 2 accounts on 4) PT (overdrafts not authorized for 3 young accounts on 5) UK (authorized overdrafts are free for 4 accounts on 6 but they are subject to application and approval. For the 2 remaining accounts, similar approach than in IE)

In order to understand the rationale of the differences between national debit interest rates, a correlation analysis between the monetary policy rate of each country and the average debit interest rates charged by banks on authorized overdrafts has been realized. It appears that the correlation between both categories of rates is rather low since the correlation coefficient amounts to 0.12.

2.4.3 DEBIT INTEREST RATES ON UNAUTHORIZED OVERDRAFTS

As illustrated by the graph below, debit interest rates on unauthorized overdrafts are frequent and rather differentiated across countries.

Graph 8 – Debit interest rates on unauthorised overdrafts



The average debit interest rate on unauthorized overdrafts in a majority of countries (7) ranges from 15% to 21%. In three other countries (Sweden, Belgium and the United Kingdom), the average values are close to each other (around 8.5%). The Netherlands stand between both groups with an average interest rate close to 12.5%. Finally, Portugal shows the highest average debit interest rate (close to 25%).

The next table summarises the situation of the debit interest rates on unauthorized overdrafts in the fourteen countries.

Table 5 – Application of debit interest rates on unauthorised overdrafts

Debit rates always apply	Debit rates apply frequently or less frequently	Other
AT	NL (88%)	DK (no information available)
BE	PT (92%)	USA (application of a fee instead of an interest rate)
CA	SE (62%)	
DE	UK (41%) ¹⁷	
FR		
IE		
IL		
IT		

2.5. DISPERSION ANALYSIS

The degree of dispersion of the priced profiles between the country's financial institutions was calculated as the coefficient of variation i.e. the ratio between the standard deviation and the average.

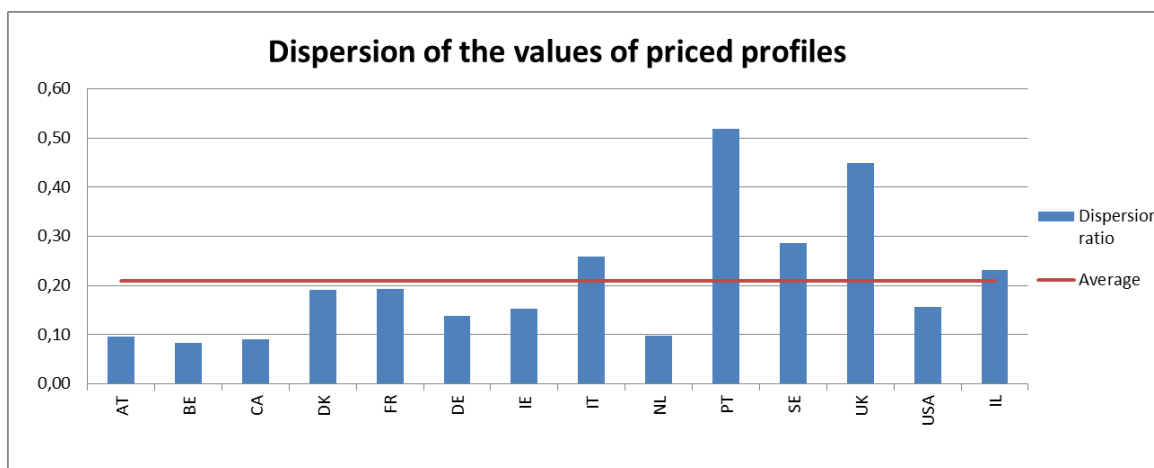
Dispersion analysis addresses the degree of dispersion of the priced profiles of a country's financial institutions. A low dispersion ratio means that the offers of the financial institutions are close to each other in terms of the price of a current account. This usually suggests a relatively higher degree of price competition between institutions. A high dispersion ratio is an indicator of price differentiation and often of a relatively lower degree of price competition between institutions¹⁸.

The following graph shows the degree of dispersion within the different countries. The average dispersion ratio is represented by the red line. Overall, compared to the 2009 study, the country dispersion ratios tend to be lower.

¹⁷ Four banks in the UK charge customers on unauthorized overdrafts but they do not allow students to be in the red.

¹⁸ A higher degree of price competition does however not necessarily mean a lower price, and a lower degree of price competition does not necessarily mean a higher price. This is evidenced by a low correlation coefficient between the two parameters (0.18) and reflects that the price levels are influenced by other factors as well.

Graph 9 – Dispersion of the values of priced profiles



Four countries present a significantly larger dispersion than average: Italy, Portugal, Sweden and the United Kingdom.

Seven countries present a significantly smaller than average dispersion: Austria, Belgium, Canada, Germany, Ireland, the Netherlands and the United States.

Three countries have a dispersion ratio close to the average: Denmark, France and Israel.

The review of the dispersion provided the following evidence: the correlation between price levels and dispersion is rather low (coefficient of 0.18 as mentioned in footnote 17). This is confirmed by the fact that high-priced countries do not necessarily have an important degree of dispersion among banks: five out of the seven most expensive countries (Canada, Denmark, France, Germany and the US) have a dispersion coefficient smaller or close to the average one.

However, a relation between price levels and dispersion can be observed among the less expensive countries: four out of the five less expensive countries (Austria, Belgium, Ireland and the Netherlands) have also a dispersion rate below the average.

Nevertheless, we should keep in mind that the average dispersion is biased upwards by Portugal and the UK which have a really high degree of dispersion. In Portugal, this high value is due to the high basic annual charges of the second largest bank of the country. In the United Kingdom, this is due to the low prices practised by the largest bank.

3. METHODOLOGY

This section presents the methodology of the exercise according to the following order: the data collection, the usage profiles, their pricing and the data analysis.

3.1. DATA COLLECTION

3.1.1 SELECTION OF FINANCIAL INSTITUTIONS

The selection aimed at obtaining, in the countries concerned, a sample corresponding to the three to six largest financial institutions that offer retail banking services to private customers. These financial institutions cover between 36 and 92% of the market estimated in terms of customer deposits and short term funding. A total of 58 financial institutions were selected for the data collection and comparison.

Once the data collection started, it appeared that some banks selected were not suited to the exercise, e.g. because they were not offering common retail accounts (e.g. holding company, investment bank, etc.). These banks were therefore substituted by suitable ones¹⁹.

The finalised table of banks selected is presented below.

Table 6 – Financial institutions selected per country and their cumulated market share

Country	Banks selected (largest ones in most countries)	Number of banks	Estimated share of market coverage ²⁰
AT	Erste Group Bank, Unicredit Bank Austria, Wiener Spar- und Kreditinstitut (<i>part of Volksbanken Verbund</i>), Raiffeisen Landesbanken of the regions of Niederösterreich-Wien, Steiermar and Oberösterreich	6	39
BE	BNP Paribas Fortis, KBC, ING, Belfius (former Dexia)	4	77
CA	Royal Bank of Canada, Toronto Dominion Bank, Bank of Nova Scotia	3	58
DE	Deutsche Bank, Commerzbank, Baden-Württembergische Bank, HypoVereinsbank (<i>part of Unicredit Bank AG</i>)	4	39

¹⁹ In DK, data collection concerned 4 banks instead of 5 since their market coverage reached 81%. In the other countries the number of banks remained unchanged.

²⁰ Data come from the Bankscope database. The market shares reflect the concentration figures calculated by Bankscope based on deposits & short term funding. Banks concerned are 'active' i.e. not in bankruptcy, liquidation or dissolved. Concentration concerns banks categorized as 'commercial, savings and/or cooperative'. Two exceptions are PT and SE where the selection based on this category was missing some large commercial banks (Nordea in SE, Santander and BPI in PT) which actually operate in the country. For the countries with more than 500 banks (DE, IT, USA), the market shares of the selected banks were calculated on the 500 largest banks since the database only calculates concentration for a sample of maximum 500 banks.

Country	Banks selected (largest ones in most countries)	Number of banks	Estimated share of market coverage ²⁰
DK	Danske Bank, Nykredit Realkredit, Nordea Bank Danmark, Nyske Bank	4	81
FR	BNP Paribas, Crédit Agricole SA, Société Générale, Crédit Mutuel	4	50
IE	Bank of Ireland, Allied Irish Bank, Irish Life and Permanent plc, Ulster Bank	4	73
IL	Bank Leumi Le Israel BM, Bank Hapoalim BM, Israel Discount Bank LTD, Mizrahi Tefahot Bank LTD, First International Bank of Israel	5	92
IT	Unicredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Banco Popolare	4	51
NL	ING Bank, Rabobank, ABN Amro	3	86
PT	Caixa Geral de Depositos, Millennium bcp-Banco Comercial Português, Banco Espírito Santo, Banco Santander Totta, Banco BPI	5	58
SE	Nordea Bank, Svenska Handelsbanken, Skandinaviska Enskilda Banken	3	72
UK	Barclays Bank, Royal Bank of Scotland, Lloyds TSB Bank, HSBC Bank, Bank of Scotland, National Westminster Bank	6	74
USA	Bank of America, Citigroup, Wells Fargo & Company ²¹	3	36
Total		58	

3.1.2 ACCOUNTS SELECTED

In view of the objectives of the study, the following criteria for collecting data on accounts were applied:

- The focus is on retail services for residential clients ('private'). No business offers ('professional') were collected;
- Data collected focus on the average consumer, in order to address the largest share of the population. This excludes promotional offers and offers to specific age or professional categories with the exception of students and young people accounts, which were also part of the collection due to their popularity;
- The accounts selected allow for both cash utilization and payment transactions.

Information was collected for different types of accounts corresponding to the criteria presented above i.e. current accounts, electronic accounts, packages and young people/student accounts²².

The following table gives the number of banks per country for which each of these account types were available.

²¹ Since tariffs of banks vary according to areas, for these banks tariffs were collected for the 8 or 9 states of the North East, of which the state of New York.

²² All accounts and packages offer electronic banking facilities. Electronic accounts usually offer lower tariffs and do not allow access to operations in branches except at high prices.

Table 7 – Number of FIs and of different types of accounts offered

Number of FIs offering different types of accounts	Total # banks in sample	Current account	Electronic account	Package	Young people and student account	Total # accounts in sample
Austria	6	6	0	4	6	16
Belgium	4	4	1	5 ²³	4	14
Canada	3	3	0	3	3	9
Denmark	4	4	1	4	4	13
France	4	4	0	4	4	12
Germany	4	4	0	3	4	11
Ireland	4	4	0	2	4	10
Israel	5	5	0	0	5	10
Italy	4	4	1	2	4	11
Netherlands	3	2	1	3	3	9
Portugal	5	5	0	3	5	13
Sweden	3	3	0	2	3	8
United Kingdom	6	6	0	5	6	17
United States of America	3	3	1	3	3	10
TOTAL # banks	58	57	5	43	58	163

‘Standard’ current accounts are the most frequent ones, together with young people and student accounts. They were available in nearly all banks. It was observed that one bank in the NL was only offering packages of services.

Electronic accounts are rather rare and were available in five banks only. When no electronic account is available, the account holder can usually access electronic banking, including ATM, phone, internet and/or mobile banking, usually for free or for a low fee.

Packages are widespread and are offered in forty three banks. They include at least one service in addition to the current account, such as free transactions, cards or the use of electronic channels. Some packages only include a few services, while others offer a whole range of services. In Israel, no packages are offered.

All banks reviewed offer student, graduate or young people accounts. Most of the time, these accounts are offered at a lower price than standard current accounts. Banks usually offer a discount or offer some services for free, especially those related to account and/or debit card maintenance. This was, for example, observed in Germany and in Italy among other countries.

²³ Tariffs of two packages from one bank were collected.

3.1.3 FEES CONSIDERED

The fees considered are all those related to using a current account. They include in particular the operations linked to the account itself (e.g. opening), to debit cards, to delayed debit or credit cards, to credit transfers including standing orders, to direct debit orders and to cheques.

The services related to using an account include, in particular, distance banking services as well as overdraft facilities, which significantly affect the price of accounts in particular in countries like the UK and Canada for overdrafts and Sweden for distance banking services.

3.1.4 DATA COLLECTION GUIDELINES

An important step in the data collection exercise was the development of data collection guidelines that ensured homogeneous searches across countries and FIs. The data collection guidelines which were used are presented in Annex 2: firstly, there are guidelines for the collection of tariff data in all countries and secondly, guidelines regarding the collection of usage intensities data in Israel are presented.

3.1.5 DATA COLLECTION

All data for the fourteen countries covered in this study were collected over the period September - October 2012.

Most data were found on the web sites of the FIs. However, in some cases it was necessary to contact the FIs directly or require further information from bank branches. This was done e.g. in order to obtain information on fees related to cheques in countries where they are rarely used (e.g. in AT and NL) and in countries where chequebooks are ordered through external companies (i.e. in CA and USA). Some information on interest rates related to overdraft facilities was also missing in some cases (some banks in DE, AT, USA, DK, NL, DE and BE): customers are usually asked to contact the local bank office in order to apply for the service. Most missing elements have been completed but, in some rare cases, no reliable information could be found and therefore no fee was registered.

Situations where no reliable information could be found have been treated in the following way : where at least one bank provided information on prices for a specific service, the average of collected prices has been applied to other banks/accounts, unless a bank specified that this specific service was not available. This is motivated by the fact that FIs have an incentive to advertise services which are free of charge. Therefore, in case of no information, we assumed that the service was charged.

3.2. USAGE PROFILES

We have considered one consumer profile per country. For the European countries, the profile is based on usage rates calculated in the 2009 study i.e. the domestic average usage rates. These domestic usage rates are based on a variety of country-specific and international data sources to identify average (entire population) usage frequencies for each service or transaction associated with a current account. When data were based on the 'Blue Book' (see further), they were updated with the most recent publication referring to usage for the year 2010. For Israel, Canada and the United States, usage rates were calculated according to the same approach as the one implemented in the 2009 study (for more details see Annex 3: Assumptions and data used for the profiles).

The usage rates display significant variance across countries. The diverse usage patterns are most likely a natural outcome of country price patterns. So in principle in one country demand for a particular service is lower than in another country when its price is relatively higher.²⁴ In turn, price differences may be an outcome of the supply characteristics, such as the infrastructure, and of the banks' market power.

An inter-country comparison based on domestic profiles has advantages and disadvantages: it takes account of the adjustments of consumers to domestic price levels; but as a consequence it is not a pure price comparison since domestic usage rates are also taken into account.

To build the usage profiles in each country a variety of resources were used. The total number and value of transactions for key transactions such as card payments, non-card payments, withdrawals and deposits were obtained from the European Central Bank's Payment and securities settlement systems information (the "Blue Book" database)²⁵ and from the Bank of International Settlements (the "Red Book" database)²⁶.

A summary of the Blue Book and Red Book transactions that were used in this study is as follows:²⁷

- Card payments: payment transactions performed with debit or credit cards at a terminal or via other payment channels. Payments using delayed debit cards²⁸ are included in the category of credit card payments. E-money transactions²⁹ (see below) are excluded. Card payments cover point of sale (POS) transactions, which are initiated through a POS terminal³⁰ using a card with debit, credit or delayed-debit functions. Non-POS payments include online and phone payments;
- Credit transfers: paper-based or non-paper-based (i.e. electronic) payment orders initiated by the payer to transfer funds to the beneficiary;
- Direct debits: an authorised debit of funds from the payer's bank account initiated by the beneficiary;
- Cheques: a written order of payment requiring one party to pay a specified sum on demand to another party;
- Cash withdrawals: automated Teller Machine (ATM) cash withdrawals using a card with cash function and over-the-counter withdrawals. Cash advances at point of sale (POS) terminals are included, unless they take place along with a payment transaction that is considered as a POS transaction (see below);

²⁴ In some cases, there may be other, non-price factors at work: a less developed infrastructure or a lack of interest in electronic services could lead to lower usage of specific services.

²⁵ While the 2009 study was based on the 2007 "Blue Book Data", this study took into account the 2010 "Blue Book data". Cf. European Central Bank, 'Blue Book – Payment and Securities Settlement Systems in the European Union', Statistical Data Warehouse; available at: <http://sdw.ecb.europa.eu/reports.do?node=100000849>

²⁶ 'Red Book Data', Statistics on payment, clearing and settlement systems in the CPSS countries, Figures for 2010, January 2012, available on http://www.bis.org/list/cpss/tid_57/index.htm.

²⁷ The definitions are in line with ECB (2007), Detailed Reporting Requirements for General and Payments Data, November.

²⁸ A card with a delayed debit function enables the holder to have the purchases charged to an account and not directly debited from the card-holder's account. Unlike a credit card, the card holder is obliged contractually to settle the account in full at the end of a pre-specified period.

²⁹ As specified in Directive 2000/46/EC, electronic money (or "E-money" for short) is monetary value that can be stored on an electronic device, which is issued upon the receipt of funds not less than the issued amount and accepted by undertakings other than the issuer.

³⁰ A POS terminal is a device which allows the use of payment cards at a physical point of sale.

- Cash deposits: ATM and OTC cash deposits using a card with cash function.

Although the above list covers a large share of transactions that are associated with a current account, it is nevertheless incomplete. First, the Blue Book and Red Book databases do not provide a breakdown according to sectors (i.e. households, corporate, government, etc.). This means that we only had information on aggregate numbers and values of transactions but did not know which ones are initiated by households, which is the sector on which we focus on. Second, there was no information on the intensity of usage. Third, the Blue Book and Red Book databases did not cover all the data on transactions associated with a current account such as the number of debit cards per banked adult.

Annex 3 details the way these obstacles were overcome.

3.3. PRICING THE PROFILES

The parameters that enter into the price calculations are all tariffs collected which represent a cost for the consumer and correspond to operations actually used. Examples are the costs of account statements, cash withdrawals, renewal of debit card, issuing a credit transfer, etc. All parameters represent a charge with the exception of interests paid on accounts which are a revenue reducing the total cost of the account.

Priced profiles were derived from an automated process matching the sets of prices with the profiles developed, i.e. for each service multiplying a price by a quantity to obtain a total cost or priced profile per account considered. The different priced profiles per account were then weighted (each 50% in case of two accounts per bank, 33% in case of three, or 25 % in case of four, etc.) to obtain a single priced profile per bank.

From these priced profiles at bank level, national averages were calculated taking into account bank market shares based on customer deposits and short term funding.

Priced profiles expressed in currencies other than US dollars (except for Israel, see below) were converted in US dollars using the average of the US Federal Reserve exchange rates of September 2012 corresponding to the timing of the data collection and quality control. For Israel, shekels have been converted using the Bank of Israel average exchange rate of October 2012 corresponding to the timing of the data collection and quality control in this country.

Priced profiles were also expressed in USD Purchasing Power Parities (PPP). Data published by the OECD was used in order to convert prices in PPP. These data is expressed in USD and is calculated for the year 2011 (most recent data).

3.4. DATA ANALYSIS

The data analysis covered the following topics:

- Background information on the numbers and values of transactions in the fourteen countries;
- Comparison of current account prices in USD and PPP;
- Breakdown of fees across five main categories (see above section 2.3);
- Credit interest rates on account balances and debit interest rates on authorised and unauthorised overdrafts;
- Dispersion analysis.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1. VALUE AND LIMITS OF THE PRESENT EXERCISE

The value of the exercise is related to its robustness.

First the largest market players in each country have been covered by the data collection and in eleven countries these players represent at least 50% of the market estimated in terms of customer deposits and short term funding.

The usage data from the 2009 study have been updated whenever this was possible within the context of the present study depending on e.g. the availability of recent data.

Data for Israel have been compared to those of thirteen other countries what represents a solid benchmark.

Finally, to compare the costs of having a current account, purchasing power parities allowed withdrawing the impact of different price levels across countries.

However the exercise also has some limits.

The setting up of usage profiles for Canada, Israel and the United States confirmed the general lack of consistent data which had already been experienced with the 2009 study. This suggests that for all countries a majority of the usage intensities are best proxies rather than official statistics. In particular this calls for initiating a process of data and information exchanges with the sector in order to improve the figures obtained or calculated so far.

Also all data on tariffs do not appear on the banks web sites and obtaining such data sometimes requires mystery shopping like actions.

4.2. ISRAEL AND THE 13 OTHER COUNTRIES

The comparison of the costs of having an account in Israel and in the thirteen other countries revealed the following:

- Israel is one of the three cheapest countries of the sample but it remains costlier than BE and the NL;
- Israel presents a unique profile regarding the breakdown of charges, no other country sharing such profile: two thirds of the charges relate to means of payments and one fifth relates to exceptional charges;
- Like in CA, FR and the NL, no Israeli bank offers credit interest on account balance;
- Like in a majority of countries (AT, BE, DE, DK, FR, NL, PT, UK), debit interest rates on authorized overdrafts amount to between 10 and 15%;
- In Israel, debit interest rates on unauthorized overdrafts amount to 15% i.e. the average value of the sample;
- The coefficient of price dispersion in Israel is also close to the average value of the sample.

4.3. DIVERSITY ACROSS COUNTRIES

Our comparisons show remarkable differences in terms of usage rates (i.e. number and value of transactions) and pricing across countries. This leads to a range of annual prices for a current account from \$22 to \$184 (expressed in USD/PPP). Median total charges for a current account are situated around \$120 (expressed in USD/PPP). Diversity is also illustrated by the different profiles of countries revealed by the breakdown of charges:

- Basic annual charges represent the first category of costs in eight countries but are inexistent in Israel;
- Account management charges are negative in Germany and account for 18% of the total charges in Canada;
- Charges related to means of payment predominate in three countries (reaching 64% of the total cost of having an account in Israel) and range between 17% and 37% for all other countries (with the exception of the UK whose percentage is 6%);
- Exceptional charges are nil in Italy but are the first category of fees in the UK;
- While OTC charges account for more than 20% of the total charges in four countries (being the most important category in Denmark and Sweden), they are lower than 10% in all other countries and are even inexistent in two countries.

4.4. PRICE DISPERSION

Price dispersion between banks within countries was analysed on the basis of priced profiles. Price dispersion varies from country to country, being notably a function of the diversity and differentiation of offers, the diversity of offering institutions and the extent of price competition in each country.

Analysis of the dispersion of priced profiles allowed distinguishing between countries with an indication of a stronger versus weaker price-based competition between financial institutions.

4.5. RECOMMENDATIONS

Based on the study carried out, two recommendations emerge:

- A data collection on prices of having an account is an exercise which could be repeated if one wishes to develop a price monitoring over time;
- Exchanges with the retail financial sector could be an opportunity to validate the data over usage intensities and/or to obtain or calculate refined ones.

Annex 1: Tables with figures of the graphs

This annex includes tables with all the figures used to create the graphs presented in this report. The tables are named similarly to the corresponding graphs.

Table A1.1.a) Number of transactions per banked adult – 2010 (Graph 1.a)

a) Number of transactions per banked adult - 2010						
Country code	POS payment	Online	Credit transfer	Direct debit	Cheque	Total
CA	200.18	4.33	12.18	17.84	16.77	251.30
UK	159.80	6.38	24.08	49.43	8.15	247.84
FR	132.50	3.88	19.94	51.04	31.24	238.60
DK	171.68	6.37	22.54	29.37	0.74	230.70
SE	168.79	5.87	28.04	22.29	0.02	225.01
NL	122.73	6.35	32.16	59.50	0.00	220.73
AT	44.78	3.91	48.76	96.14	0.15	193.74
PT	125.81	0.95	7.12	20.72	7.46	162.06
DE	32.70	6.05	27.56	91.59	0.34	158.24
BE	93.78	2.30	34.48	18.93	0.37	149.86
USA	29.97	4.33	12.02	40.81	38.39	125.53
IE	59.50	3.84	10.56	16.44	4.63	94.96
IT	33.24	1.07	10.62	11.52	4.09	60.54
IL	0.0000	0.0000	1.5649	23.9766	32.8614	58.4

Table A1.1.b) Total value of transactions (% of GDP) (Graph 1.b)

b) Total value of transactions (% of GDP)						
Country code	POS payment	Online	Credit transfer	Direct debit	Cheque	Total
DE	0.05	0.01	0.60	0.60	0.02	1.28
PT	0.27	0.00	0.24	0.05	0.28	0.85
UK	0.27	0.01	0.19	0.19	0.10	0.76
FR	0.15	0.01	0.30	0.15	0.16	0.76
USA	0.03	0.00	0.06	0.37	0.29	0.76
CA	0.22	0.01	0.03	0.09	0.32	0.67
NL	0.10	0.01	0.44	0.10	0.00	0.66
DK	0.12	0.00	0.19	0.07	0.01	0.40
AT	0.04	0.01	0.20	0.13	0.00	0.39
BE	0.09	0.00	0.22	0.03	0.01	0.37
SE	0.10	0.00	0.22	0.03	0.00	0.36
IT	0.06	0.00	0.14	0.06	0.09	0.35
IE	0.08	0.00	0.02	0.10	0.13	0.34

Table A1.2. Comparison of current account prices in USD (Graph 2)

Comparison of current account prices in USD					
Country Code	1st quartile	min	weighted average	max	3d quartile
CA	201.98	191.77	211.58	229.85	221.02
DK	162.17	145.48	180.02	226.89	196.44
USA	160.69	137.92	169.82	183.95	183.70
SE	123.45	101.81	160.10	193.39	169.24
UK	190.31	24.31	154.80	201.38	195.31
DE	125.16	113.11	147.94	159.76	149.93
IT	123.94	97.39	146.52	183.51	169.27
FR	137.34	106.19	140.73	170.28	157.25
AT	93.21	91.98	95.88	114.64	106.42
IE	84.60	77.20	88.39	109.25	96.38
PT	44.99	27.20	82.78	139.24	81.13
IL	68.71	56.30	72.39	101.95	76.11
BE	48.19	46.20	50.10	55.79	53.36
NL	37.78	37.37	40.04	44.51	41.35

Table A1.3. Comparison of current account prices in PPP (Graph 3)

Comparison of current account prices in PPP					
Country Code	1st quartile	min	weighted average	max	3d quartile
USA	160.69	137.92	169.82	183.95	183.70
CA	160.65	152.53	168.28	182.81	175.79
IT	121.76	95.67	143.94	180.28	166.29
DE	121.11	109.46	143.17	154.60	145.08
UK	174.07	22.23	141.59	184.19	178.64
DK	119.98	107.63	133.19	167.86	145.33
FR	122.24	94.51	125.25	151.55	139.96
SE	90.98	75.04	117.99	142.53	124.73
PT	55.16	33.34	101.49	170.72	99.47
AT	85.31	84.19	87.75	104.92	97.39
IE	78.26	71.41	81.76	101.06	89.15
IL	65.81	53.92	69.33	97.64	72.89
BE	43.14	41.36	44.85	49.94	47.77
NL	34.90	34.53	37.00	41.13	38.20

Table A1.4. Breakdown of charges (PPP) (Graph 4)

Breakdown of charges (PPP)						
Country code	Basic annual charges (package fee and account maintenance charges)	Account management charges (opening and closing an account, statements, authorised overdrafts, account movements, internet and phone banking and credit interest on positive balance)	Means of payments (debit and credit cards, credit transfers, standing orders, direct debits and cheques) except those made OTC and exceptional charges	Exceptional charges (unauthorised overdrafts, insufficient account funds, blocking and replacing of debit and credit cards, cheque bouncing)	OTC charges (withdrawals and deposits, credit transfers, standing orders and direct debits made over the counter)	Total charges
AT	50.53	0.59	23.38	8.28	4.98	87.75
BE	18.98	0.60	16.73	6.83	1.14	44.28
CA	53.68	29.51	39.76	39.56	5.77	168.28
DK	28.22	18.30	23.61	22.78	40.27	133.19
FR	42.59	3.53	41.32	26.83	10.98	125.25
DE	64.47	-1.72	66.74	7.16	6.51	143.17
IE	23.58	5.96	34.61	15.61	2.00	81.76
IT	51.07	1.90	51.06	0.47	39.43	143.94
NL	21.26	2.12	12.56	0.21	0.84	37.00
PT	43.60	0.74	30.07	5.86	21.22	101.49
SE	12.03	9.54	40.24	1.13	55.05	117.99
UK	52.95	12.20	7.83	68.61	0.00	141.59
USA	74.66	8.93	28.31	57.93	0.00	169.82
IL	0.00	4.93	44.62	16.42	3.36	69.33

Table A1.5. Shares of debit and credit cards in the means of payment charges (Graph 5)

Shares of debit and credit cards in the means of payment charges				
Country code	Country	Debit card	Credit card	Total
AT	Austria	38.59%	43.11%	81.70%
BE	Belgium	32.81%	61.46%	94.27%
CA	Canada	23.10%	9.80%	32.89%
DK	Denmark	64.10%	21.01%	85.10%
FR	France	63.62%	32.58%	96.20%
DE	Germany	72.33%	23.81%	96.14%
IE	Ireland	38.16%	30.31%	68.47%
IT	Italy	35.50%	32.21%	67.71%
NL	The Netherlands	21.53%	78.47%	100.00%
PT	Portugal	30.09%	30.71%	60.80%
SE	Sweden	44.73%	32.58%	77.31%
UK	United Kingdom	0.00%	39.95%	39.95%
USA	United States of America	49.99%	30.96%	80.94%
IL	Israel	0.00%	69.59%	69.59%

Table A1.6. Credit interest rates on current accounts (%) (Graph 6)

Credit interest rate on current account (%)						
Country code	1st quartile	min	average	max	3d quartile	Monetary policy rate
UK-29%	0,00	0,00	0,35	1,56	0,44	0,50
DE-33%	0,00	0,00	0,15	2,00	0,23	0,75
AT-100%	0,13	0,13	0,14	0,50	0,13	0,75
BE-100%	0,00	0,00	0,12	1,00	0,10	0,75
SE-25%	0,00	0,00	0,06	0,48	0,00	1,50
DK-23%	0,00	0,00	0,05	0,50	0,00	0,25
PT-76%	0,00	0,00	0,03	0,30	0,00	0,75
IE-10%	0,00	0,00	0,01	0,15	0,00	0,75
IT-63%	0,00	0,00	0,00	0,02	0,01	0,75
USA-30%	0,00	0,00	0,00	0,01	0,01	0,25
CA-0%	0,00	0,00	0,00	0,00	0,00	1,00
FR-0%	0,00	0,00	0,00	0,00	0,00	0,75
NL-0%	0,00	0,00	0,00	0,00	0,00	0,75
IL-0%	0,00	0,00	0,00	0,00	0,00	3,10

The % associated to the country codes refers to the number of accounts offering credit interests.

Table A1.7. Debit interest rates on authorized overdrafts (%) (Graph 7)

Debit interest rate on authorized overdrafts (%)						
Country code	1st quartile	min	average	max	3d quartile	Monetary policy rate
CA-100%	19,00	19,00	20,33	21,00	21,00	1,00
FR-100%	17,04	16,60	18,00	20,20	18,55	0,75
IT-100%	17,14	6,46	17,29	19,95	19,18	0,75
IL-100%	12,30	7,43	12,87	18,10	13,27	3,10
DK-100%	10,65	8,24	12,68	18,50	13,50	0,25
UK-64%	0,00	0,00	12,67	19,94	19,90	0,50
NL-88%	8,10	7,20	12,61	18,20	14,90	0,75
DE-100%	11,44	11,44	12,09	13,24	12,50	0,75
PT-69%	0,00	0,00	11,34	26,70	18,00	0,75
AT-100%	8,50	7,75	10,94	13,25	12,75	0,75
BE-100%	9,55	8,41	10,61	11,96	11,02	0,75
IE-70%	2,43	0,00	10,16	16,30	15,90	0,75
SE-100%	8,77	8,77	10,00	12,61	10,28	1,50
USA-30%	0,00	0,00	5,48	18,25	13,69	0,25

The % associated to the country codes refers to the number of accounts applying debit interests.

Table A1.8. Debit interest rates on unauthorized overdrafts (%) (Graph 8)

Debit interest rate on unauthorized overdrafts (%)						
Country code	1st quartile	min	average	max	3d quartile	Monetary policy rate
PT-92%	22,50	0,00	24,86	33,80	30,61	0,75
CA-100%	21,00	21,00	21,00	21,00	21,00	1,00
IE-100%	13,23	9,00	19,82	28,30	24,37	0,75
FR-100%	18,58	16,60	19,45	22,50	20,21	0,75
IT-100%	16,21	16,00	17,68	21,67	17,95	0,75
DE-100%	16,05	15,00	16,53	18,74	16,77	0,75
AT-100%	13,50	12,50	15,93	18,25	17,75	0,75
IL-100%	14,58	10,59	15,11	18,10	16,50	3,10
NL-88%	8,10	7,20	12,61	18,20	14,90	0,75
SE-62%	0,00	0,00	9,09	16,50	14,06	1,50
BE-100%	2,75	0,00	8,52	12,45	12,38	0,75
UK-41%	0,00	0,00	8,09	19,94	19,93	0,50
DK-0%	0,00	0,00	0,00	0,00	0,00	0,25
USA-0%	0,00	0,00	0,00	0,00	0,00	0,25

The % associated to the country codes refers to the number of accounts applying debit interests.

Table A1.9. Dispersion of the values of priced profiles (Graph 9)

Dispersion of the values of priced profiles		
Country	Country code	Dispersion ratio
Austria	AT	0.10
Belgium	BE	0.08
Canada	CA	0.09
Denmark	DK	0.19
France	FR	0.19
Germany	DE	0.14
Ireland	IE	0.15
Italy	IT	0.26
the Netherlands	NL	0.10
Portugal	PT	0.52
Sweden	SE	0.29
United Kingdom	UK	0.45
United States of America	USA	0.16
Israel	IL	0.23
Average	Average	0.21

Annex 2: Data collection guidelines

Two guidelines are presented hereafter:

- The price collection guidelines which were used for all countries;
- The guidelines for collecting data on the user profile of Israel.

PRICES OF CURRENT ACCOUNTS

GUIDELINES FOR COLLECTING DATA FROM FINANCIAL INSTITUTIONS (FIS)

Document Control

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Prepared by	François Lejeune
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1. Context and objectives of the data collection

Van Dijk Management Consultants has been mandated to collect and analyse retail banking tariffs applicable from August to October 2012 for a representative sample of financial institutions (FIs) in 14 different countries.

The study aims at providing the client with a comparison of the tariffs of retail banking in the identified countries (see below). Therefore, one of the tasks is to collect data on prices that consumers pay for having and using a bank account.

The data collection covers 11 EU Member States and 3 other countries (Canada, USA and Israel) for a total of 59 FIs. It focuses on fees charged for the usage of a current account, including payment transactions (credit transfers and standing orders, direct debits, cheques, point-of-sale³¹ (POS) payments), cards and some exceptional operations, initiated through various channels.

The data collection addresses publicly available information, i.e. information available on FIs websites or leaflets, or through customer services.

2. Scope of current account offers to be collected

In view of the objectives above, the following criteria for selecting data apply:

- The focus is on retail services for residential clients ('private'). No business offers ('professional') should be collected.
- Data to be selected focus on the average consumer, in order to address the largest share of population. This excludes promotional offers and offers to specific age or professional categories. Exception to this is the students and young people accounts (over 18 years old), which should also be collected.
- The accounts selected should allow for both cash utilization and payment transactions.

Therefore, data on the following types of accounts need to be collected (four accounts per FI):

- current accounts;
- e-accounts: electronic accounts manageable mainly through electronic channels;
- young people (over 18 years old) or student accounts;
- packages: bundles including a current or e-account as well as a range of other banking services.

All types of account should be covered. If a selection must be operated among several accounts of each type, the selection process should be discussed with the VDMC support team (François Lejeune and Violette Van Dyck). Concerning the package, you should select the simplest one that allows customer to have a credit card. Finally, the credit card selected should be the most common in the country. Cards (debit and credit) selected should allow withdrawals and payments.

³¹ A point of sale payment is a payment made in a shop.

In case of doubt about the identification and the selection of accounts (e.g. if a financial institution does not offer one or more types of account), please take advice from Mr. François Lejeune or Ms. Violette Van Dyck whose contact information is given at the end of these guidelines.

Prices collection is done on an annual basis. All the recurring charges should be insert in the database as annual charges

E.g. if a customer pays 5€ per month for the maintenance of his/her account, you should insert in the database “12*5€”.

Please, do not consider special pricing based on the concerned amount (Except in Portugal for the maintenance fees that are based on average balance of the account). E.g., the fee for sending a credit transfer is 1€ if transferred amount is lower than 1.000€ and is free of charge if amount is higher than 1.000€

Finally, we consider that a customer will keep his/her bank account during 10 years. If a discount has to be taken into account, please share this discount along the lifespan of the account.

E.g., the maintenance fee is 50€ per year but is offered the first year. You should then insert “(50€/9)/10” in the database.

3. Steps to follow when collecting data

The purpose of these guidelines is to support the data collection. However, they may evolve after feedback from first data collectors and according to findings in the course of the collection.

Data have to be collected on a country basis. The list of FIs to be reviewed is provided in a separate document.

In the course of the collection, please take care of the following:

- You should first start by selecting the accounts (according to the criterion explained above) and ask a consultant to confirm your selection.
- Collect tariffs on each FI's website. If tariffs are not accessible or not available on the website or are incomplete, send an email or call the FI³². In order to contact FIs, a phone will be made available to you: call the FI and ask for written information by email. Please use the email address that is provided and not your personal email: louiza.gachard@gmail.com; password: bvdmc2012bvdmc.
- Insert all tariff characteristics in the Excel sheet “Bank account data collection 2012”. Use 1 line per current account.

Make sure you respect the following rules:

1. Collect prices in local currency (LC);
2. Make sure VAT is included;
3. Some information can be found in small appendixes or subsections. Do not neglect them.

³² Any contact with an FI should be taken as if you were a consumer according to a “mystery shopping” approach. Do not mention you are searching information in the context of a study.

Comments related to specific data can be inserted as a comment in the box itself (in the Excel cell using the Excel functionality “insert a comment”). Use the column “comments” for any relevant details related to additional information on an account.

Do not modify cells or protection on cells!
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- In order to be able to document the tariffs collected, all information collected needs to be saved in written format (either from website or email) and saved under Word or PDF format in a folder specifically foreseen for each FI. Please give an appropriate name (in English) to the file, describing its content.

N.B.: To save a document or webpage using CutePDF Writer, select ‘print document’ and specify ‘CutePDF Writer’ as printer. You will be asked to name the pdf.

- The following format should be applied to name a PDF document: ‘FI_type of service’. FI should be written in abbreviation; the abbreviations to be used will be provided together with the list of FIs. For example, a document containing information on credit cards for Belfius bank in Belgium will be written: ‘BELF_credit card’. When more than one document refers to a same service, add a number to the filename: ‘_1’.
- The easiest way is to start with information on the (basic) current account, then complete tariffs for other current accounts (e-account and young or student account) and for a specific package. Enter this information in the attached Excel file ‘Bank account data collection’. Do not leave white lines and enter all information concerning a product (i.e. bank account) on one line only. Do not enter information that is not verified. If a service is free, you should insert ‘0’ and you should leave the cell empty if no information concerning the cell is available.
- When different tariffs exist for only one service (one cell in the database), you should make the arithmetic average of the tariffs except if the customer has the possibility to have this service for free. We consider then that the service is free. This is only the case for services which depend on customer’s will.

E.g. if a customers get monthly statement for free over-the-counter but has to pay for receiving them at home, you should consider that this service is free. But if there exists a different tariff for modification of standing order on-us or off-us, you should make the arithmetic average.

- The proper understanding of the present guidelines and their respect throughout the data collection imply that their reading goes in parallel with searching on the FI’s website according to an iterative process. It is mostly probable that you will have to frequently refer back to the present document during the data collection and that searching on the FI’s website will illustrate and enlighten the sometimes at-first-sight abstract instructions of the guidelines. In case some elements remain unclear, do not hesitate to ask for support from François Lejeune or Violette Van Dyck whose contact data are provided at the end of these guidelines.

The following section details the information to be collected.

4. How to enter the information in the database

The database in which to enter the collected data is accessible in the Excel file “Bank Account Data Collection 2012”. There is only one sheet in this file, called “tariffs”.

The database is organized by current account. It means that you should collect all tariff information per current account. One line should correspond to one current account. This means that four lines should be completed per FI except when a FI does not offer the four types of account referred to in section 2 above.

Two color codes are used in order to organize the database:

- 1° The first code concerns column headings: each color represents a category of service provided to customers for which a tariff should be collected. An exception to this is dark blue which is dedicated to general information. These categories are:
 - a) Account or package charges (mallow)
 - b) Debit card (yellow)
 - c) Credit card (orange)
 - d) Credit transfer charges (blue)
 - e) Direct debit charges (red)
 - f) Cheque charges (green)
- 2° The second code of color concerns columns. It is a remind about the format of information that should be inserted. This second code is used from the fourth line and the following ones. The format of information are:
 - a) Dropdown list (corresponding columns are in pale yellow): answers are predefined in a list. To select an answer, you have to first select the box and then click on the arrow on the right side. A list of options will appear, from which you can select one by clicking on it.
 - b) General (corresponding columns are in pale blue): these boxes allow for free entries. They are mainly meant to enter the name of an account or to insert comments.

- c) Amount (corresponding columns are in white): you should insert an amount of money that has to be paid by the customer to get access to the related service. This amount should be in local currency and VAT included. These cells allow only numbers and formulas.

E.g. if a customer has to pay a monthly fee for the package, you are asked to introduce in the database the corresponding annual fee. Then, it is asked to introduce the formula (i.e. monthly fee x 12) rather than the total annual charges.

Please note that a minimal fee may be charged for a particular service. You should then insert this minimal charge in the database. Some charges may also be limited with a maximal fee to be paid by customers. A space is provided in the database for all services to insert this information.

E.g. if a customer wants to make a transfer towards another country, his/her bank may apply a fee which is a percentage of the amount transferred but the customer has to pay a minimal charge. The transfer's fee is 5% of the amount transferred with a minimal charge of 5€. If a customer makes a transfer of 50€, he/she would pay 5€ because $50€ \times 5\% = 2,5€$ which is less than the minimal charge of 5€.

Please **do not add currency** symbol or abbreviation.

- d) % (corresponding columns are in pale green): it refers to a rate. You just have to enter the number corresponding to the percentage.

E.g. if you want to introduce 1,3% in the database, you should write "1,3".

- e) Balance boundary (corresponding columns are in white): in some banks, credit interest received by customers depends on the balance of the account. You should then insert here an amount (like point 'c').

E.g. if the balance of your account is less than 1.000€, the interest rate is 1%. But if your account balance is higher than 1.000€ you receive an interest rate of 1,25%. The value to be inserted is 1.000€ for the first balance boundary. Please, insert "unlimited" for unlimited boundaries (here, for the second balance boundary).

- f) Number (corresponding columns are in pale red): this format is used to insert the number of a particular service that is included with the account.

E.g. with a specific account, customers get 2 credit cards for free. Then, you should insert "2" in the box.

The following pages describe the different categories of services provided with a current account for which data on tariffs need to be collected. The order of presentation of the services is the same as the one of the database reflected under 1° above. For each category, general definitions and explanations are given, and a table completes this information: the first column lists the services in the category for which information has to be collected, the second column defines each service, while the next columns characterize it. A '-' sign in the table indicates that the characterisation is not relevant for the service. An extract of the database is also provided.

4.1. General information

Account:

This cell automatically replicates the name of the account (or package) introduced further in the database. DO NOT WRITE ANYTHING IN THIS CELL.

Country:

For each current account the name of the country has to be indicated (select from dropdown list).

Financial Institution:

For each current account the name of the FI has to be indicated (select from dropdown list – this list is limited to banks of the country selected the step before. If you do not select a country, you get access to the whole list of banks).

Name of the account / package:

The specific complete name of each personal current account has to be collected in domestic language.

Name of the debit card:

The specific complete name of the debit card associated to the current account has to be collected in domestic language. Please keep in mind that you should only collect information for the basic debit card offered (one type of debit card per account).

Name of the delayed or credit card:

The specific complete name of the delayed or credit card associated to the current account has to be collected in domestic language. If no credit card is available, you should insert “NA”. Please keep in mind that you should only collect information for the most basic delayed or credit card offered (one type of delayed or credit card per account).

4.2. Account charges

An account is a financial service allowing keeping money at a financial institution and to which cards can be linked and from which payment transactions can be made. It can be called current account, deposit account, etc. Some accounts, called electronic or internet accounts, are meant solely for use through automated teller machines (ATMs) and internet banking.

An account can be managed through different channels. A manual transaction is handled manually by someone at the financial institution before it can be processed electronically: the transaction can be ordered either **over the counter** or on a **paper-based** form (credit transfers, cheques). An electronic transaction can be initiated without intervention of cash or of an employee of the FI: this can be done either through a **payment terminal or ATM**, through **point-of-sale terminals (POS)**, **online** with cards or through internet banking, through **telephone banking**, and in some countries through **mobile** phones. An ATM allows withdrawing and depositing cash on the account, sometimes also viewing account details and managing account transactions, e.g. initiating credit transfers, paying bills, etc. POS payments allow paying by card at a payment terminal situated e.g. in a shop. Internet banking allows the account holder access to his/her account using a personal computer and an electronic communication link to the institution's computer centre, and allows managing his/her account through the internet, e.g. view account details, initiate credit transfers, pay bills, etc. Telephone banking allows the account holder to initiate transactions over the phone with or without assistance of an employee of the FI. Mobile banking (or M-banking) allows using mobile devices such as mobile phones for performing balance checks, account transactions, payments, etc. These transactions are done either using mobile internet (i.e. internet banking) or through **SMS** messages.

An account transaction results in a change of the balance on the account: a **credit transaction** (or credit entry) on an account will credit it, i.e. the balance on the account goes up; a **debit transaction** will debit it, i.e. the balance on the account goes down. In some countries, **transaction fees** are charged for each movement on the account. These are also called account usage fees.

An **on-us transaction** involves that the other party in the transaction is either the customer's FI itself, or a client of the same FI, while an **off-us transaction** involves the presence of a party other than the ones previously mentioned. In case of a cash withdrawal, the other party is defined as the FI to which the ATM belongs; for payment transactions, the other party is the sender/beneficiary of the payment. For example, a credit transfer involving two clients with an account at the same FI is an on-us transaction, while a cash withdrawal from an ATM belonging to a FI other than the one which issued the card is an off-us transaction.

A transaction is **domestic** when the other party in the transaction is a FI (or a client of a FI) located in the same country as the customer's FI, or in the Single Euro Payment Area (SEPA), or in the European Economic Area (EEA), while a transaction is qualified as **cross-border** when the other party is located in a different country, with a different local currency. In the scope of this study, only domestic transactions are considered.

A **package** is defined in this study as a bundle of financial services comprising an account as basic component and at least one of the services addressed in this study i.e. credit transfers, direct debits, cards, cash withdrawals, cheques.

Service provided	Package	Account opening	Account maintenance	Account statements	Credit interest on account	Authorized overdraft on account	Interest rate on authorized overdraft	Unauthorized overdraft
Further explanation of the services provided	Includes the account management and a number of other services. Any of the services listed above could be totally or partially (limited number or discounted fee) included.	Opening of the account.	Holding of the account. Also called account management. Some banks may also charge an insurance fee. If this insurance is mandatory, you should add this fee to the account maintenance fee.	Account statements detailing transactions on the account during a specific period. If a monthly statement is given for free, you should insert '0'. Furthermore, if one of the modality is free of charges, please consider this modality.	Credit interest rate according to which account is automatically credited in function of the yearly balance.	Fee and set-up fee allowing the account holder to borrow credit through its account up to a certain limit.	Interest rate debited from the account for credit borrowed in authorized overdraft.	Fee that as to be paid by the holder of a current account when payments or withdrawal are executed without sufficient available funds on the account of the holder. There is no set-up fee for unauthorized overdrafts.
Channel	-	-	-	-	-	-	-	-
On-us / off-us	-	-	-	-	-	-	-	-
Frequency³³	Recurring	One-off	Recurring	Recurring or transaction-based	Recurring	One-off	Recurring	One-off
Type of fee³⁴	Amount	Amount and/or interval	Amount	Amount	Percentage and boundaries (upper limits)	Amount and/or interval	Amount and/or interval	Amount and/or interval

³³ Frequency can be: one-off, recurring and /or transaction-based. A one-off fee is a non-recurring fee charged once for access to (or closing of) a service. A recurring fee is a fee charged monthly, quarterly, half-yearly, annually, etc. A transaction-based fee is a fee charged per unit of service provided.

³⁴ Type of fee can be an amount, a percentage or an interval fee. An amount corresponds here to a fixed fee expressed in local currency or sometimes in another currency. A percentage fee is a fee charged in percentage of e.g. the amount transferred, the balance on the account, the credit available on the card, etc. An interval fee is a fee varying according e.g. to the usage of the service or to the balance on the account, with intervals determining the final fee charged.

Service provided	Interest rate on unauthorized overdraft	Insufficient account funds	Account closing	Withdrawal from account over the counter	Deposit on account over the counter	Account movement (credit or debit transaction)	Access to internet banking	Access to phone and/or mobile banking
Further explanation of the services provided	Interest rate debited from the account for credit borrowed in unauthorized overdraft.	Cancellation of a payment order due to insufficient funds available on the account.	Closing of the account.	Transaction consisting of taking cash out of an account through an employee at the counter.	Transaction consisting of depositing cash on an account through an employee at the counter.	Transaction modifying the balance on the account, by means of a credit entry, a withdrawal or a payment transaction.	Includes subscription / registration to internet banking services, request of internet access codes, access software and access hardware, and usage of the internet banking system.	Includes subscription / registration to phone and/or mobile banking services, request of access codes/password and usage of the phone/mobile banking. It does not include telecommunication charges. Please make an average of both access charges. We do not consider alert system ³⁵ .
Channel	-	-	-	Counter	Counter	All	-	-
On-us / off-us	-	-	-	-	-	All	-	-
Frequency	Recurring	One-off	One-off	Transaction-based	Transaction-based	Transaction-based	One-off or Recurring	One-off or Recurring
Type of fee	Amount and/or interval	Amount and/or percentage	Amount	Amount and/or percentage	Amount and/or percentage	Amount and/or percentage	Amount	Amount

³⁵ E.g. the bank send to the customer a SMS with information on the account's balance.

4.3. Debit card charges

A debit card works through a direct debit system (either national system or maestro / visa electron) allowing to charge purchases and withdrawals directly (or within a short delay) and individually to an account.

The debit card usually combines both a payment function allowing for payments, e.g. POS or internet, and a withdrawal function allowing for cash withdrawals through ATMs. In some cases, it also includes an e-money function: this is a reloadable multi-purpose stored-value function which may be used for payments without necessarily involving bank accounts in the transaction, but acting as a prepaid bearer instrument.

Some debit cards are prepaid cards. They function in the same way as common debit cards, but are not linked to an account, and can therefore remain anonymous. Prepaid cards can be reloaded up to a limited amount (e.g. in Belgium, the prepaid card is called Proton). We do not take prepaid cards into account.

A variant of the debit card is the combination card, combining both a debit function and a credit function, as it associates an overdraft facility. At the moment of the cash withdrawal or payment, the cardholder chooses which function to use.

Some options linked to the debit card can be selected by the customers. Please contact Mr. François Lejeune or Ms. Violette Van Dyck for selecting options to consider in the data collection. If the option has an one-off fee, please consider the corresponding charge as an issuance fee. On the contrary, if the option has a recurring fee, consider it as a maintenance fee.

Service provided	Issuance of a debit card	Maintenance fee	Cards included	Replacement of stolen/lost debit card	Blocking debit card	Debit card withdrawal	Debit card deposit (ATM)	Debit card POS payment	Debit card online payment
Further explanation of the services provided	Includes edition / issuance of card for first use. If an activation of the card has to be made, please consider this as an issuance fee.	Holding of the card.	Number of cards included with the account or the package.	Replacement of debit card in case of loss or theft.	Blocking of debit card in case of loss or theft.	Transaction consisting of taking cash out of an account through an ATM with a debit card inducing a Debit transaction on the account.	Transaction consisting of depositing cash on an account through an ATM with a debit card inducing a Credit transaction on the account.	Payment transaction with a debit card at a terminal located in a store inducing a debit Transaction on the account.	Payment transaction operated through the internet with a debit card inducing a debit transaction On the account.
Channel	-	-	-	-	-	ATM	ATM	POS	Online
On-us / off-us	-	-	-	-	-	All	On-us	-	
Frequency	One-off or recurring	Recurring	-	One-off	One-off	Transaction-based	Transaction-based	Transaction-based	Transaction-based
Type of fee	Amount, percentage and/or interval	Amount	Number	Amount	Amount	Amount and/or percentage	Amount and/or percentage	Amount and/or percentage	Amount and/or percentage

4.4. Delayed debit or credit card charges

A delayed debit card enables the cardholder to charge an account up to an authorised limit, but with the total amount of credit being settled at the end of a specified period (with no extended credit facility offered). Please note that delayed debit cards are often mistaken for credit cards in the common language.

A credit card is associated with a credit amount and allows purchases within this credit limit. The balance is settled in full by the end of a specified period. Alternatively, it is partly settled: the remaining balance is taken as extended credit on which the cardholder must pay an interest (so-called “revolving cards”). Interest is charged on the amount of any extended credit and the holder is usually charged an annual fee.

Service provided	Issuance of a delayed debit or credit card	Maintenance fee	Cards included	Interest rate on credit card	Replacement of stolen / lost delayed debit or credit card	Blocking delayed debit or credit card	Delayed debit or credit card withdrawal (ATM)	Delayed debit or credit card POS payment	Delayed debit or credit card online payment
Further explanation of the services provided	Includes edition / issuance of card for first use. If an activation of the card has to be made, please consider this as an issuance fee.	Holding of the card.	Number of cards included with the account or the Package	Interest rate credited from the account for credit borrowed using a delayed debit or credit card.	Replacement of delayed debit or credit card in case of loss or Theft.	Blocking of delayed debit or credit card in case of loss or theft.	Transaction consisting of taking cash out of an account Through an ATM with a delayed debit or credit card.	Payment transaction with a delayed debit or credit card At a terminal located in a store.	Payment transaction operated through the internet with A delayed debit or credit card.
Channel	-	-	-	-	-	-	ATM	POS	online
On-us / off-us	-	-	-	-	-	-	All	-	-
Frequency	One-off or recurring	Recurring	-	Recurring	One-off	Transaction-based	Transaction-based	Transaction-based	Transaction-based
Type of fee	Amount, percentage and/or interval	Amount	Number	Percentage	Amount	Amount and/or percentage	Amount and/or percentage	Amount and/or percentage	Amount and/or percentage

4.5. Credit transfer charges

A credit transfer is a payment initiated by the payer. The payer sends a payment instruction to his/her FI to transfer an amount from his/her account to another one. The FI moves the funds to the receiver's FI. This can happen via several intermediaries.

A standing order is a regular credit transfer.

A transfer made over the counter is paper-based.

Service provided	Reception of credit transfer	Sending of credit transfer	Reception of standing order	Setup of standing order	Sending of standing order transaction	Modification of standing order	Closure of standing order
Further explanation of the services provided	Credit transaction into the account by means of credit transfer	Debit transaction on the account by means of a credit transfer	Credit transaction into the account by means of standing order	Setup of an order for recurring transfer of money to another account, inducing a recurring debit transaction.	Recurring debit transaction on the account by means of a standing order.	Modification of an order previously set up for recurring transfer of money to another account.	Closure of an order previously set up for recurring transfer of money to another account.
Channel	-	All	-	All	All	All	All
On-us / off-us	All	All	All	All	All	All	All
Frequency	Transaction-based	Transaction-based	Transaction-based	One-off	Transaction-based	One-off	One-off
Type of fee	Amount and/or percentage	Amount and/or percentage	Amount and/or percentage	Amount	Amount and/or percentage	Amount	Amount

4.6. Direct debit charges

A direct debit is a transfer initiated by the receiver via his/her FI, in order to transfer an amount from another account to his/her account. Direct debits are often used for recurring payments, such as for utilities. They require a pre-authorisation ("mandate") by the payer. Direct debits are also used for one-off payments. In such case, the payer authorises an individual payment.

Service provided	Setup of direct debit order	Sending of direct debit transaction	Closure of direct debit order
Further explanation of the services provided	Setup of an order for recurring transfer of money to another account, inducing a recurring debit transaction	Recurring debit transaction on the account by means of a direct debit order	Closure of an order previously set up for recurring transfer of money to another account
Channel	All	All	All
On-us / off-us	All	All	All
Frequency	One-off	Transaction-based	One-off
Type of fee	Amount	Amount and/or percentage	Amount

4.7. Cheques charges

A cheque is a written order from one party (the drawer) to another (the drawee, normally a bank), requiring the drawee to pay the indicated sum on demand to the drawer or to a third party specified by the drawer. Usage of cheques is still high in some countries (especially in France, Ireland, Portugal) but diminishing. In most euro area countries cheques are practically non-existent.

Service provided	Chequebook	Cheque drawing	Cheque lodging	Cheque bouncing
Further explanation of the services provided	Acquisition of cheques. It corresponds to the price paid in order to obtain cheques. If, acquisition has to be made per unit, please consider that customer will take 25 cheques.	Issuing cheque by completing it and giving it for payment to the beneficiary, who will cash it by handing it at a FI, inducing for the drawer a debit transaction on the account. This is the fee a customer has to pay in order to pay with a cheque.	Cashing cheque by handing it at a FI, inducing a credit transaction on the account. This is the fee a customer has to pay in order to cash a cheque.	Cancellation by the beneficiary of an issued cheque, usually for reason of insufficient funds on the account. The cheque is returned unpaid.
Channel	-	-	-	-
On-us/ off-us	-	All	All	-
Frequency	One-off	Transaction-based	Transaction-based	One-off
Type of fee	Amount	Amount and/or percentage	Amount and/or percentage	Amount and/or percentage

4.8. Comments and website

The two following sections allow for comments and information on FIs' websites.

Comments:

Insert any other relevant information or information on restrictions of access to the service, such as the obligation to receive the salary on the account, charges for dormant accounts (account was not used during a certain period of time), services not accessible with the account, etc.

Website:

Insert the link towards the webpage(s) where you have found information. It will allow to more quickly check sources of information.

5. Contact information

For questions or comments, please contact:

Mr. François Lejeune
+32 2 641 00 65
fle@bvdmc.com

Or

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PRICES OF CURRENT ACCOUNTS

GUIDELINES FOR COLLECTING DATA – USER PROFILE OF ISRAEL

Document Control

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Release	V1
Prepared by	Violette Van Dyck
Checked by	Dominique Spaey
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1. CONTEXT AND OBJECTIVES OF DATA COLLECTION

Van Dijk Management Consultants has been mandated to conduct a study that aims at providing the Bank of Israel with a comparison of the tariffs of retail banking in Israel and in thirteen European and North American countries, using as much as possible a similar methodology as the one implemented in the 2009 study carried out for the Directorate General Health and Consumers of the European Commission.³⁶

The comparison will be based on the domestic average user profiles (one per country), as defined in the 2009 reference study. Data on the average user profile³⁷ for European countries and North American countries was collected by Van Dijk Management Consultants. A detailed explanation of the methodology used is provided in the document “Assumptions and data used for the profiles”. It was agreed that data on Israeli average intensities of usage of the different retail banking services will be collected by Bank of Israel or one of its sub-contractors, based on detailed guidelines in English as well as on-line support (email, telephone) provided by Van Dijk.

This note constitutes the detailed guidelines that will support this data collection. For any question or assistance, the person of contact at Van Dijk is:

Ms. Violette Van Dyck
+32 2 641 00 51
vvd@bvdmc.com

2. GENERAL INFORMATION ON DATA TO BE COLLECTED

In general, usage data you will provide us with:

Should be related to the year 2010. If not available, choose the most recent year. If so, indicate the reference year you used;

If “amount data” is expressed in currency units, local currency (i.e. Shekel) should be used;

Data should be referenced as much as possible. Please indicate the source of information used each time you provide data (e.g. national statistics, Bank of Israel, etc.).

The following section details information that has to be collected. All data are necessary in order to construct Israeli profile. Should some of them be missing, please provide either an estimate or an assumption that could be used in order to approximate the missing data.

3. INFORMATION TO BE COLLECTED

This section presents data that need to be collected for Israël. It is composed of three sections:

- General information on population and banking market in the country;
- Usage services by households in order to estimate the proportion of use of services by households compared to other sectors of the economy;
- Data on usage intensity which aims at collecting information on the number and total amount of transactions per type of services (card payments, non-card-payments and other transactions).

³⁶ Van Dijk Management Consultants, Data collection for prices of current accounts provided to consumers, 2009.

³⁷ I.e. intensity of use of the different payment instruments.

3.1 GENERAL INFORMATION

1. How large is the adult (more than 18 years old) banked population (i.e. those with a bank account) in Israel?

--

2. What is the level of concentration of banking market in Israel? Please provide the Herfindahl-Hirschman Index (HHI) for total assets.

--

3. What is the real mean income of households in Israel (based on equivalised household disposable income, after taxes and transfers) – in national currency in constant prices³⁸?

--

3.2 USAGE OF SERVICES BY HOUSEHOLDS

Data on intensity of use of different payment instruments may be aggregate data of usage of services by different sectors of the economy. This was, for example, the case for data Van Dijk used for constructing profiles of European and North-American countries that were collected through the European Central Bank (ECB)'s Blue Book and the Bank of International Settlement (BIS)'s Red Book. This data needed to be adjusted in order to take into account figures that only concern households.

Are data you will provide going to be aggregate data for different sectors of the economy?

☐ Yes ☐ No

If yes, please collect the following data that are necessary in order to adjust the aggregate usage data you will provide further on:

4. "Total use of goods and services" in the economy at basic prices³⁹:

--

³⁸ For European and North American countries, data was collected through OECD statistics available online at the address: <http://stats.oecd.org/Index.aspx?DatasetCode=INEQUALITY#>.

³⁹ For European and North American countries, data was collected through STAN input-output tables provided by the OECD at the address: <http://stats.oecd.org/Index.aspx?QueryId=22161>

5. Household final consumption (HHFC) at basic prices⁴⁰:

--

6. Total deposits and currency held by non-financial corporations⁴¹:

--

7. Total deposits and currency held by households and NPISH⁴²:

--

3.3 DATA ON USAGE INTENSITY

Most data on usage intensity for European and North American countries was extracted from the ECB's Blue Book and BIS' Red Book. Therefore, methodology and definitions of terms related to current account services are directly extracted from these statistical sources. Relevant definitions are presented in *italic* in the following sections.

3.3.1 CARD PAYMENTS

General methodology⁴³: "Cards are counted on the issuing side. Each country reports the number of cards that have been issued in the country and not the number of cards used in the country. All valid cards are included, irrespective of when they were issued and how actively they are used. Expired or withdrawn cards are not included. Cards issued by three-party schemes, e.g. American Express or Diners, are included. Cards issued by merchants are not included in the standard categories, unless they have been issued in cooperation with a bank" (cf. ECB's Blue Book and BIS's Red Book methodology).

8. Debit card payments:

= payments made by cards with a debit function

Number of transactions:

--

⁴⁰ As for the "Total use", data for European and North American countries was extracted from the STAN input-output tables from the OECD.

⁴¹ For EU countries, data on deposits was collected through Eurostat national accounts database under the financial accounts of households.

⁴² NPISH = Non-Profit Institutions Serving Households.

⁴³ Cf. methodology used in the ECB's Blue Book and BIS's Red Book.

Total amount of transactions (in Shekel):

--

9. Credit card payments:

= Payments made by cards with a delayed debit function and a credit function.

Delayed debit card payments are treated as credit card payments for our purposes in this exercise.

“Cards with a delayed debit function= Cards enabling the holder to charge his/her account up to an authorized limit. These cards allow holders to make purchases, but do not offer extended credit, the full amount of the debt incurred having to be settled at the end of a specified period”.

“Cards with a credit function: Cards indicating that the holder has been granted a line of credit. They enable him/her to make purchases and/or draw cash up to a prearranged ceiling. The credit granted may be settled in full by the end of a specific period, or may be settled in part, with the balance taken as extended credit. Interest is charged on the amount of extended credit and the holder is sometimes charged an annual fee”.

Number of transactions:

--

Total amount of transactions (in Shekel):

--

10. Total card payments (except with e-money function⁴⁴)

= Payments made by cards with debit function + cards with a delayed debit function + cards with a credit function.

Number of transactions (this should correspond to the sum of data provided under point 8 and 9 here above):

--

11. POS (point of sale) payments:

“POS (point of sale) = This term refers to the use of payment cards at a retail location. The payment information is captured either by paper vouchers or by electronic terminals”.

Number of transactions:

--

⁴⁴ *“Cards with an e-money function= Reloadable multipurpose prepaid cards which can be used at the sites of several service providers for a wide range of purposes and which have the potential to be used on a national or an international scale, but may sometimes be restricted to a certain area”.*

Total amount of transactions (in Shekel):

12. Online - Debit card payments:

Number of transactions:

Total amount of transactions (in Shekel):

13. Online - Credit card payments:

Number of transactions:

Total amount of transactions (in Shekel):

Is data asked under points 12 and 13 here above and related to Online- Debit and credit card payments available?

☐ Yes ☐ No

If No, please provide the following data:

14. Percentage of individuals who ordered goods and services over the Internet for private use. If possible, distinguish between individuals that made online purchase: i) in the last 3 months, ii) between 3 months and a year ago and iii) more than a year ago. If data is not presented under this timeframe, please indicate clearly the period of time considered.

15. Share of payment methods (debit card versus credit card/delayed debit card) used for e-commerce transactions. Please provide any estimate from statistical or study sources.

3.3.2 NON-CARD PAYMENTS

Both on-us and off-us transactions should be taken into account.

16. Credit transfers

“Credit transfers = Payment orders or possibly sequences of payment orders made for the purpose of placing funds at the disposal of the beneficiary. Both the payment orders and the funds move from the payer’s bank to the payee’s bank, possibly via several other banks as intermediaries and/or one or more interbank funds transfer systems. Payments are counted on the payer’s side.

Credit transfers performed via ATMs with a credit transfer function are included. Credit transfers which have cash at one or both ends of the payment transaction, eg money and postal orders, are also included. Credit transfers used to settle balances of cards with a credit or a delayed debit function are included, as these are separate payments from the card holder to the card issuer. Cross-border credit transfers (sent) are included.

Cash payments into the account using a bank form are not included under credit transfers, but can be shown in a memorandum item OTC cash deposits.

In the case of standing orders and in the case of bulk or batch payment orders, each individual transaction is counted as one transaction”.

Number of transactions:

Total amount of transactions (in Shekel):

17. Direct debits

“Direct debits = Preauthorised debits, possibly recurrent, of the payer’s account by the payee. Both one-off and recurrent direct debits are included. In the case of recurrent direct debits, each individual payment is counted as one transaction. Direct debits used to settle balances of cards with a credit or delayed debit functions are included, as they are separate payments from the card holder to the card issuer. Direct debits resulting from the settlement of an individual card transaction should not be reported because of the risk of double-counting. Payments are counted on the payee’s side.

Cash payments out of the account using a bank form are not included, but may be shown under the memorandum item OTC cash withdrawals”.

Number of transactions:

Total amount of transactions (in Shekel):

18. Cheques

“Cheques = A written order from one party (the drawer) to another (the drawee, normally a bank) requiring the drawee to pay a specified sum on demand to the drawer or to a third party specified by the drawer. Cheques may be used for settling debts and withdrawing money from banks. Traveller’s cheques, promissory notes and banker’s drafts are included under cheques. Commercial bills are included if funds transfers can be made on the basis of these, without using another medium. Cash withdrawals using bank forms are not included. Cheques are counted on the payee’s side when submitted for cheque clearing. Cheques issued but not submitted for clearing are not included”.

Number of transactions:

Total amount of transactions (in Shekel):

19. E-money

“E-money payment transactions= Transactions where the holder of e-money transfers e-money value from his/her balance to the balance of the merchant. This can be done either with an e-money card or through other e-money storages”.

Number of transactions:

Total amount of transactions (in Shekel):

20. Total non-card payments

= Credit transfers + direct debits + cheques + e-money

Number of transactions (it should correspond to the sum of transactions presented under the point 16 to 19 here above):

3.3.3 OTHER TRANSACTIONS

Both on-us and off-us transactions should be taken into account.

21. ATM (automated teller machines) withdrawals

“ATM cash withdrawals = Cash withdrawals performed at ATMs using a card with a cash function.

Cash advances at POS terminals using a debit, credit or delayed debit card are not included, but are reported under POS transactions”.

For the purpose of the study, only data on domestic withdrawals using cards issued in the reporting country have to be reported.

Number of transactions:

Total amount of transactions (in Shekel):

22. Over-the-counter (OTC) withdrawals

Number of transactions:

Total amount of transactions (in Shekel):

23. ATM deposits

For the purpose of the study, only data on domestic deposits using cards issued in the reporting country have to be reported.

Number of transactions:

Total amount of transactions (in Shekel):

24. Over-the-counter (OTC) deposits

Number of transactions:

Total amount of transactions (in Shekel):

3.3.4 OTHER INFORMATION

25. Mean switching rate in past two years⁴⁵ for all services⁴⁶:

--

26. Short-term (up to 1 year) loans of households (in Shekel):

--

27. Internet banking usage: Percentage of all individuals who used internet banking in past three months. Internet banking includes electronic transactions with a bank for payment, etc. or for looking up account information:

--

⁴⁵ For European countries, data was extracted from the Flash Eurobarometer N°243, January 2009 available at http://ec.europa.eu/public_opinion/flash/fl_243_en.pdf.

⁴⁶ All services include Current bank accounts, Savings and investment products, Mortgage loans Long-term loan arrangements, Car insurance (for third party liability), Home insurance Internet services (broadband), Fixed telephone services, Mobile phone services Electricity, supply services, Gas supply services (mains and bottled).

Annex 3: Assumptions and data used for the profiles

ASSUMPTIONS AND DATA USED FOR THE PROFILES

Document Control

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1. INTRODUCTION

The present document details the way the average usage profiles were constructed for the different countries which are part of the comparison.

The profiles were built by using data and making a series of assumptions. The assumptions made are fully explained in section 3 of this document.

Several resources were used as a basis for our assumptions:

1. Detailed payment statistics provided by Austrian, Danish, Greek and Italian central banks as well as the Blue Book database of the European Central Bank (ECB) and the Red Book of the Bank for International Settlements (BIS);
2. The “**Consumer association survey**” conducted by Test-Achats (Belgium), Altroconsumo (Italy); Deco Proteste (Portugal) AND OCU (Spain) between June – August 2004;
3. UK’s Office of Fair Trading “**OFT study**”, entitled “Personal current accounts in the UK”, published on July 2008;
4. “**Oxera study**”, entitled “The price of banking”, which was published on November 2006.

A more detailed list of documents and studies used to construct profiles is presented in annex 1 of this document.

For a series of data, it was also necessary to identify the share of households in the economy as a whole. This is further explained below.

The European Central Bank (ECB)’s Blue Book and the Bank of International Settlements (BIS)’s Red Book do not distinguish between the usages of services by different sectors in the economy. For this reason, the data needs to be adjusted to arrive at representative figures for households only. Two corrections are made to eliminate the transactions conducted by non-household sectors.

First, the number of transactions conducted by banked adults has to be estimated for each country and relevant service. For each transaction type, it is assumed that one Euro held in a deposit account generates a constant number of transactions. We suppose that the number of transactions generated by households for each Euro in a deposit account is x_{num} times the number of transactions for all sectors. Factor x_{num} may vary from transaction to transaction, which allows it to account for general usage differences between these services. For example, certain payment services, such as POS transactions and ATM withdrawals, are more likely to be conducted by households. If this is the case, factor x_{num} will be greater than 1, implying that one Euro held in a deposit account generates more transactions for households. In turn, having the amount of money held in deposit accounts as an additional adjustment allows us to consider the varying use of bank-based payment systems between different countries.

The **second** task is estimating the value of transactions conducted by households. Here, it is assumed that one Euro of expenditure generates a constant amount of transactions. We again suppose that the value of transactions conducted by households is x_{amt} times the value of transactions for all sectors. As above, factor x_{amt} is identical for all countries but may nevertheless vary among different types of transaction. The assumption of relying on expenditure data is justified by the fact that one Euro of

expenditures usually gives rise to a proportional amount of payment transactions. Once again, the variability of factor x_{amt} accounts for general usage differences between services.

These two adjustments are used to discount the number and value of transactions to arrive at the relevant figures for households. The formulae are as follows:

$$share_{num} = x_{num} \cdot \frac{D_{hh}}{D_{total}} \quad (A1)$$

$$share_{amt} = x_{amt} \cdot \frac{E_{hh}}{E_{total}} \quad (A2)$$

Where D stands for deposits, E for consumption expenditures and hh is the index for households.

For most EU countries, the data on deposits (D) is provided by Eurostat under the financial accounts of households. For countries where the data is missing, we use the national statistics as substitutes. The data is from Eurostat's national accounts database. For households, the expenditures were given by "Households' final expenditures". In turn, the total expenditures of an economy, including intermediate expenditures, were given by "Total use" as a proxy for expenditures of all sectors. Data on Households' final expenditures and on total expenditures was provided by OECD statistics (STAN input-output tables).

In order to estimate x_{num} and x_{amt} , which are kept constant across countries, we rely on the payment services data provided by Bank of Italy.⁴⁷ Using this data, we solve for the two factors using equations (A1-2). These common factors are then used to generate the household shares for number and value of transactions in each country and each relevant Blue Book and Red Book transaction.

The following table summarizes our assumptions for the common factors and the corresponding shares in Italy.

⁴⁷ See the bi-annual reports of Bank of Italy (2008), [Supplements to the Statistical Bulletin: Monetary and Financial Indicators – Payment System](#).

Table 1 - Household's shares in number and value of transactions in Italy and assumptions on common usage factors (various years)

	Share in number of transactions (Share _{num})	Share in value of transactions (Share _{amt})	x_{num}	x_{amt}
	% of totals in Italy		factor**	
Debit card payments	89%*	76%*	1.1*	3.0*
Credit or delayed debit card payments	89%	76%	1.1	3.0
Credit transfers sent	32%*	3%*	0.4*	0.1*
Direct debits sent	72%	24%	0.9	0.9
Cheques drawn	48%	15%	0.6	0.6*
POS transactions	89%*	76%	1.1	3.0
ATM withdrawals	89%*	76%	1.1*	3.0
ATM deposits	50%*	31%	0.6*	1.2
OTC withdrawals	80%*	25%	1.0*	1.0
OTC deposits	48%*	25%	0.6*	1.2

Source: UN National Accounts Database, Bank of Italy (2008) and own assumptions

Notes: *Extrapolations based on own assumptions. **The constant factors are calculated by using UN data for 2005 and Bank of Italy data for 2007.

The two columns on the left correspond to the share of the number and amount of transactions conducted by households using data provided by the Bank of Italy. The use of debit cards and POS cards are naturally more common among households. In both cases, the households' share of transactions is roughly 89% of the aggregate numbers and amounts. In turn, cheques and direct debits are less used by households. In particular, the households' transactions represent about one-third of the total Euro value of direct debits and cheques. The usage rates are somewhat more varied for these transactions, with around three-quarters of all direct debit transactions and half of cheque payments conducted by the households.

The shaded columns on the right give our assumptions regarding the constant factors x_{num} and x_{amt} . For rows where Bank of Italy provides complete data, the factors are calculated by solving for equations (A1-2). In other cases, the results are matched based on assumptions on the usage of different services.

Individual corrections are also applied in certain cases where the factors were deemed unrealistic. The following assumptions were made to fill the missing elements and to correct for apparent problems.

1. It is assumed that debit card payments are similar to credit or delayed debit card payments, POS transactions and ATM withdrawals; therefore the factors are set to be equivalent for these cases. Both transactions are commonly used by households and do not constitute a convenient method of payment for corporations.
2. The use of cheque payments, OTC and ATM deposits are also expected to be similar. Both are frequently used by households and corporations alike, especially by small- and medium-sized enterprises for the deposit of receipts. However, since the expenditures of corporations by and large outweigh the expenditures of households, the households' share in total amounts should be less than their share in total numbers of transactions.

3. As already discussed above, credit transfers are anticipated to be used heavily by corporations.⁴⁸ Unfortunately, the Bank of Italy does not provide the usage breakdowns for this transaction. We therefore rely on assumed similarities between different products. One would expect that the numbers of transactions and amount per transaction (*not* aggregate amount) should be similar between direct debits and credit transfers since these two transactions are often used interchangeably.⁴⁹ The factor of 0.1 is thus chosen to arrive at comparable values for direct debits and credit transfers. The factor for number of transactions is set at 0.4, since credit transfers are deemed to be a popular means of payments, even more so than cheques, which is assigned a factor of 0.6.
4. For the factor for the number of OTC withdrawals by households, the factor is likely to be less than the ATM withdrawals, simply because smaller corporations are more likely to engage in such transactions. The deposits ratio is assumed to be a perfect estimator for this case, which means that one Euro in a deposit account gives rise to an equivalent number of transactions for households and corporations.

Several national authorities and banking federations responded to our usage questionnaires. Where the responses used a methodology that was comparable with ours, i.e. focusing only on transactions conducted by households, we adjusted our database in line with the input provided.

The remaining of the present document is structured as follows:

1. Overview of the methodology on constructing profiles;
2. Details on profiles build;
3. Additional data from Blue Book and Red Book used for constructing the profiles.

⁴⁸ Indeed, surveys conducted by the European Commission show that for around two-thirds of the corporations, credit transfers represent between 75% to 100% of payments sent and received. For more, see [European Business Test Panel \(EBTP\), European survey on SEPA, 1st and 2nd rounds, How do you Pay? How would you like to pay?](#), surveys conducted in August – September 2007 and September - October 2008.

⁴⁹ Bounie and Francois (2008) use propriety data on French households' utility bill payments and find that the size of the bill (i.e. the payment amount) is not a statistically significant estimator for the choice between using a direct debit or credit transfer. This means that the amount per transaction would be comparable for the two services for an average household. For more, see Bounie, D. and A. Francois (2008), "The Economics of Bill Payments: An Empirical Analysis", *Working Papers in Economics and Social Sciences*, No. ESS-08-04, Télécom ParisTech ENST.

2. METHODOLOGY ON CONSTRUCTING PROFILES

The following table summarizes the methodology used to obtain the usage profiles for each transaction included in the study. Section 3 details the procedures implemented to build the profiles.

Table 2 - Services concerned, data available, data needed, hypotheses needed

Services for which prices were collected	Blue & Red Book data	Consumer association survey data	OFT report data	Data sources	Assumptions
Account opening & closing				Churn data available from DG COMP inquiry ⁵⁰ .	Assume 10% for all countries except NL 5%
Account maintenance				Number of accounts data available from DG COMP inquiry.	Control for average number of accounts using DG COMP inquiry – price of account/package to be converted to an annual charge.
Account statements				-	12 statements per year; assume same for all countries and profiles
Credit interest on account				OFT study and OECD household income figures	Share of household average income as outstanding credit was calculated from OFT study for UK and applied to all countries using same factor.
Interest rate on authorised overdraft		√	√	<p>Frequency: Frequency distribution for UK users from OFT Study. Also, “going-into red” frequency for Consumer association survey for 4 countries (BE, ES, IT, PT), which does not distinguish between authorized and unauthorized transactions.</p> <p>Amount: ECB and some central banks provide aggregate outstanding overdrafts (ODs), without distinguishing between authorized and unauthorized transactions or different sectors. OFT study provides data for UK.</p> <p>Duration: UK study provides rough estimates for number of days an account remains in arranged OD</p>	<p>Frequency: In UK and NL, approximately 1/3 of all current account holders use the facility. Use consumer association study to obtain usage intensities.</p> <p>Amount: For all countries without central bank data, adjust the ECB aggregate according to short-term loans to households. Adjust central bank data to obtain authorized overdraft amounts using the OFT study as a basis. Assume that the amounts are the same for all profiles.</p> <p>Duration: OFT study leads to duration of 25 days per OD. Assume the same for all profiles and countries.</p>

⁵⁰ [http://www.europarl.europa.eu/registre/docs_autres_institutions/commission_europeenne/sec/2007/0106/COM_SEC\(2007\)0106_EN.pdf](http://www.europarl.europa.eu/registre/docs_autres_institutions/commission_europeenne/sec/2007/0106/COM_SEC(2007)0106_EN.pdf)

Services for which prices were collected	Blue & Red Book data	Consumer association survey data	OFT report data	Data sources	Assumptions
Interest rate on unauthorised overdraft		√	√	Same data sources as interest rate on authorized overdrafts	<p>Frequency: In UK, 1/4 of all current account holders use the facility once a year while others do not use it at all. Use consumer association study to obtain usage intensities.</p> <p>Amount: For all countries without central bank data, adjust the ECB aggregate according to short-term loans to households. Adjust central bank data to obtain unauthorized overdraft amounts using the OFT study as a basis. Assume that the amounts are the same for all profiles.</p> <p>Duration: OFT study leads to duration of 10 days per OD. Assume the same for all profiles and countries.</p>
Insufficient account funds			√	Annex D of OFT study provides distribution (p. 34)	UK data leads to 1 as average number of insufficient account funds per year.
Withdrawal from account over the counter (OTC)	√	√		ECB Blue Book (BB) and BIS Red Book (RB)	Number of transactions for average usage and amounts from BB and RB. Missing data is calculated by fitting values according to statistical relationship between OTC and ATM transactions.
Deposit on account OTC	√			Same data sources as OTC withdrawals	Same assumptions as OTC withdrawal; data for missing variables matched using EU15 average.
Account movement	√			ECB Blue Book and BIS Red Book	Sum of all transactions except those with credit card/overdrafts
Access to internet banking				Eurostat (2008) "Internet usage in 2008: Households and individuals" <i>Data in Focus</i> No. 46/2008.	For average usage, data directly from Eurostat report. For CA and USA, data available in 2003 and 2005 are adjusted to take into account average increase until 2008.
Access to phone banking				Capgemini (2006) <i>World Retail Banking Report 2005</i>	According to Capgemini report, for every 2 account holders that use internet banking, there is one that uses phone banking. Assume same proportion for all countries.
Debit card	√	√		Consumer association survey	Consumer association survey suggests that average users in ES have 1.2 cards. Duration is 3.5 years, as cards are typically valid 3 or 4 years.
Replacement of stolen/lost debit card				Symantec report on number of credit cards stolen in US annually in 2007-8.	The reported figures suggest that there were about 1.3 million stolen credit cards, which represents a likelihood of 0.006 stolen credit cards per banked US household. Suppose that same number of lost debit cards. Then, average users replace 0.01 card per year.

Services for which prices were collected	Blue & Red Book data	Consumer association survey data	OFT report data	Data sources	Assumptions
Blocking debit card				Same data sources as replacement of debit card	Assume that all replaced cards are first blocked
Debit card withdrawal	√	√		ECB Blue Book (BB) and BIS Red Book (RB), Consumer association survey, and Bankscope	Since BB and RB data on ATM withdrawals include all cards with cash function, subtract delayed debit/credit card usage. For on-/off-us usage, use deposit market shares to determine weights. Consider also network agreements which make distinction obsolete. Usage and values are constructed exactly as in OTC withdrawals.
Debit card deposit	√	√		Same data sources as in OTC withdrawals	Same assumptions as in OTC withdrawals
Debit card POS payment	√			ECB Blue Book (BB) and Austrian Central Bank (OeNB) surveys on POS usage	Since BB and RB data on POS payments include all cards, use share of debit card payments in all card payments as a weight. The amounts can also be calculated in a similar way. Austrian Central Bank survey provides frequencies for POS payments via debit or credit cards. Value per transaction is calculated by making appropriate adjustments for households' transactions.
Debit card online payment	√			Eurostat E-commerce statistics, national statistics in Canada, OECD study "The future of the internet economy - A statistical profile", PwC data and Turban study on channel usage	For number of transactions, use frequency data from Eurostat e-commerce statistics, national statistics and OECD study. For value of transactions, use the difference between the BB and RB data on debit card payments and POS payments. To adjust for credit/delayed debit card transactions and debit card transactions, use PwC and Turban study.
Delayed debit or credit card	√	√		Consumer association survey	Consumer association survey suggests that average users have 0,45 card. Duration is 3.5 years, as cards are typically valid 3 or 4 years.
Replacement of stolen / lost delayed debit or credit card				Same data sources as in replacement of stolen/lost debit card	Same as in replacement of stolen/lost debit card
Blocking delayed debit or credit card				Same data sources as in replacement of stolen/lost debit card	Same as in replacement of stolen/lost debit card
Delayed debit or credit card withdrawal	√			Information from uSwitch (2009) survey	uSwitch survey provides both frequency and value per transaction information for UK. An average card holder engages in less than 0,8 transaction per year with an amount of 125 euros.
Delayed debit or credit card POS payment	√			Same data sources as in debit card POS payments	Since BB and RB data on POS payments includes all cards, use share of debit card payments in all card payments as a weight. Other assumptions are as in debit card POS payments

Services for which prices were collected	Blue & Red Book data	Consumer association survey data	OFT report data	Data sources	Assumptions
Delayed debit or credit card online payment	√			Same data sources as in debit card online payments	Same as in debit card online payments.
Reception of credit transfer		√		Consumer association survey on direct billing received (salary, etc.)	Frequency distributions from Consumer association survey are available. In ES and IT, ¾ of people receive transfers. Of these, almost all receive transfers once a month. Use survey averages for other countries.
Sending of credit transfer	√			ECB Blue Book (BB) and BIS Red Book (RB) data	Use BB and RB data to distinguish between paper and non-paper based transactions. Value per transaction calculated by dividing value by the number of transactions, making appropriate adjustments for households.
Reception of standing order		√		Consumer association survey on direct billing received (salary, pension payments, etc.)	Assume all monthly transfers (received) are standing orders.
Setup, modification and closure of standing order				Oxera report on UK consumer profiles (p.87)	Setup: 0.5 for average users. Modification/closure: 1/3 of all orders are modified and 1/3 closed within a year.
Sending of standing order transaction	√			ECB Blue Book (BB), BIS Red Book (RB) and Oxera report on UK consumer profiles (p.87)	Assume that on average users send 12 standing orders per year (cf. Oxera report). This represents 20% of all credit transfers (cf. BB). Apply the discount factor (0.2) to RB and BB.
Setup & closure of direct debit order	√	√		Consumer association survey figures on direct billing (sent) and Special Eurobarometer (2012) survey figures on consumers' switching of current account	A new setup is required each time the consumer switches current account. Half of these should be setting up a new direct debit order. These numbers are multiplied by the proportion of users with direct billing. For CA and USA, no figure is provided as no charge has been identified for these services.
Sending of direct debit transaction	√	√		ECB Blue Book (BB) and BIS Red Book (RB)	Use BB and RB data. Value per transaction is calculated by dividing value by the number of transactions, making appropriate adjustments for households.
Modification & closure of direct debit order				Same data sources as in setup of direct debit order	Same assumptions as in setup of direct debit order
Chequebook	√	√		Consumer association survey	Assume chequebooks include 25 checks. Use data on cheques drawn to calculate number of chequebooks per user in one year.
Cheque drawing	√	√		ECB Blue Book (BB), BIS Red Book (RB)	Number of transactions and amounts for average usage from RB and BB.
Cheque lodging		√		Consumer association survey (2004)	Frequencies used to identify three categories of countries: low usage, high usage and regular usage.

Services for which prices were collected	Blue & Red Book data	Consumer association survey data	OFT report data	Data sources	Assumptions
Cheque bouncing		√		Italy's Central Bank and consumer association survey on "going into red"	From IT CB, data on rejected checks exist (less than 0.5 percent probability per check); consumer association data may be used for validation and making usage calculations. Assume same for all countries.

3. DETAILS ON PROFILES

3.1 OVERDRAFTS

There is relatively little information on the use of overdrafts. Nevertheless, this section makes an attempt to use whatever information is available to extract usage rates.

In what follows, assumptions regarding three distinct aspects of overdrafts are outlined. First, consumer surveys on the usage frequencies of overdrafts are utilized to generate usage rates. It is important to highlight that an account holder is considered to have an additional overdraft when his or her account goes from a positive to negative balance. Second, how long an account remains in overdraft (i.e. successive number of days the account remains in red) is addressed. This is independent of the frequency; however, it is only by putting together frequency and duration information that one can identify how intensely overdrafts are used in a country. The last part addresses the amounts of overdrafts. Once again, this amount corresponds to the amount an account goes into debit each time an overdraft occurs.

3.1.1 NUMBER OF OVERDRAFTS PER YEAR

Two sources have been used for the frequency distributions and the corresponding number of transactions: an office of Fair Trading (OFT) study and a survey by some consumer associations.

The first column of data in the table below is extracted from the OFT study and describes how often account holders with authorized overdraft facilities use this option. According to the figures, the use of overdraft is relatively rare. About two-thirds of the respondents (38%+25%) never have overdrafts. Of this amount, more than half (38%) do not have any authorized overdraft facility. Moreover, 15% of respondents are rarely in overdraft while less than a quarter of the respondents (22%) have a regular use of overdrafts.

The shaded column of the table below gives assumptions regarding the annual usage frequency. Given that the duration of an authorized overdraft was around one month, it is assumed that those who use the facility permanently or usually engage in 9 overdrafts per year on average. The other usage rates are adjusted in line with this assumption.

Table 3 - Frequency of authorized overdrafts in the UK (2006)

	Share of respondents	Overdrafts per year
Respondents with no facility	38%	0
Respondents with facility	62%	
... who use it permanently or usually	10%	9
... who use it sometimes	12%	4
... who use it rarely	15%	1
... who never use it	25%	0

Source: OFT (2008) and own calculations

Using the figures above, an average current account holder in the UK engages in 1.5 transactions per year.

The same study also provides data on how often account holders engage in unauthorized overdrafts. Table 4 shows that over three-quarters of the respondents never exceed their limits.⁵¹ Moreover, the share of account holders that exceed their limits more than once is very low (15%). Once again, the third (shaded) column of provides the assumptions regarding frequency of usage, which are mostly in line with the ranges of options provided in the questionnaire.

Table 4 - Frequency of unauthorized overdrafts in the UK (2006)

	Share of respondents	Overdrafts per year
Not exceeded limit	76%	0
Exceeded once	9%	1
Exceeded 2-3 times	7%	2.5
Exceeded 4-10 times	5%	7
Exceeded more than 10 times	3%	12

Source: OFT (2008) and own calculations

Using the figures above, we see that an average account holder engaged in only 1 unauthorized overdraft in 2006.

A survey on the use of current accounts conducted by consumer associations in Belgium, Italy, Portugal and Spain also provides information on how often account holders “go into red”, which is equivalent to an overdraft, authorized or not. The last column gives the assumption on the number of transactions per year.⁵²

According to the table below, around three-quarters of respondents never use an overdraft. This means that only active users engage in overdrafts. The results are largely in line with the UK figures detailed previously. Frequent use of overdrafts is very rare; in all countries except Belgium, no more than 5% of all respondents have more than a couple of overdrafts per year. A quick comparison of the table with the results for the UK reveals that the use of overdrafts is lower in the four countries.

⁵¹ This share remains the same whether or not respondents with an authorized facility are accounted for in the calculation of averages. Those with an authorized facility are only slightly less likely to make unauthorized overdrafts; 77% of these respondents avoid making such transactions as opposed to 73% for those without a facility.

⁵² Since the average duration of an overdraft is around 20 days, an account may go into red a maximum of 18 times per year. The gaps between different options mean that some respondents have to make approximate choices. For example, it is not entirely clear whether an individual who is in overdraft four times a year would choose the option “at least monthly” or “a couple of times a year”. It is assumed here that choices are made according to proximity of available options. This means that all respondents that used overdrafts 2 to 7 times in 2004 would choose “a couple of times a year” to describe their behaviour; those that used it more (more than 7 times or an average of 10 times) would choose “at least monthly” while the rest would choose the option “less”.

Table 5 - “Going into red” in four countries (2004)

	All	Belgium	Italy	Portugal	Spain	Overdrafts per year
	% of respondents					
Monthly or more	3.7%	6.4%	3.1%	3.7%	2.3%	12
A couple of times a year	6.5%	12.1%	5.2%	5.6%	4.4%	4.5
Less	6.9%	10.1%	4.3%	7.1%	7.1%	1
Never used in past year	82.9%	71.4%	87.3%	83.6%	86.2%	0

Source: Consumer association survey (2004) conducted by Test-Achats (Belgium), Altroconsumo (Italy); Deco Proteste (Portugal) AND OCU (Spain); own calculations

The usage intensities in the table above can be translated into average number of transactions for all users (i.e. average usage). The average number of overdrafts per year range between a high of 1.4 for Belgium to a low of 0.5 for Spain.

Table 6 - Average number of overdrafts per year

	Belgium	Italy	Portugal	Spain	UK	Weighted avg.
All respondents	1.4	0.6	0.7	0.5	2.5	1.1

Source: Consumer association survey (2004); OFT (2008); own calculations

The table above summarizes the results from the two studies identified above. The columns of data for Belgium, Italy, Portugal and Spain provide the results of the surveys conducted by consumer associations in the four countries. The results of the OFT survey for the UK, which aggregates the authorized and unauthorized overdrafts, is presented next. The last column gives the weighted averages obtained by aggregating the data from the two surveys and weighting the results by the number of observations for each country.

According to the results summarized in the table, the use of overdrafts is highly common in the UK. An average consumer engages in 2.5 overdrafts per year, which is more than twice the average for the five countries. For Italy, Portugal and Spain, the usage rates are relatively low, with an average consumer engaging in between 0.5 to 0.7 overdrafts per year and active usage of around 1.5 to 2.2 overdrafts. Belgium’s usage rates are slightly higher than the weighted average for the five countries depicted.

- (a) The data in Table 6 is used to extrapolate the average number of overdrafts per year in different countries. For the four countries on the table and included in our study (i.e. Belgium, Italy, Portugal and UK), the numbers as indicated are used. For the other 10 countries, the last column is used as a basis. To get distinct usages for authorized and unauthorized overdrafts, it is assumed that the share of authorized overdrafts in all overdrafts in UK is applicable to all other countries. The resulting overdraft usage frequencies are as depicted the table below.

Table 7 - Overdraft frequency (number of times per year)

	Belgium		Italy		Portugal		Spain		UK		Others	
	Auth.	Una.	Auth.	Una.	Auth.	Una.	Auth.	Una.	Auth.	Una.	Auth.	Una.
Average	0.8	0.5	0.4	0.2	0.4	0.3	0.3	0.2	1.5	1.0	0.7	0.4

Source: Own assumptions

The assumptions summarized above do not account for differences between countries. Additional guidance on usage rates (including qualitative information and interactions with country experts) may enable to distinguish between different groups of countries, such as:

- (i) low frequency countries like Italy, Portugal and Spain;
- (ii) average frequency countries like Belgium; and,
- (iii) high frequency countries like the UK.

With such guidance, the group averages may be applied to correct for differences between countries.

3.1.2 DURATION OF OVERDRAFTS

Limited information is available on how long an account remains in overdraft on average among the different countries. Most banks specify that an account may remain overdrawn for less than a specified number of consecutive days or months, usually three months. These restrictions put an upper limit to overdraft duration but provide no information on the average value.

Only the OFT (2006) study mentions some quantitative figures. According to the study, the total duration of authorized overdrafts was 82 days (based on data from only 5 banks) for amounts not exceeding £100 and more for greater amounts (p. 64). For unarranged overdrafts, the same duration was between 16 and 61 days, depending on the bank (p. 66). These numbers suggest an average duration of around 10 days for unauthorized transactions and 25 days for authorized transactions.⁵³

These assumptions should be interpreted with care. It is quite likely that the duration data, much like the frequency data, is quite varied across different countries. Most overdrawn consumers go into red rarely, possibly in holiday periods and subsequent to making big purchases, to pay for one-time expenditures. For these account holders, the duration would be less than a month as they would get their accounts out of debit once their monthly pay checks arrive (assuming they are employed). Other account holders who have overdrafts more frequently may use these transactions to smooth their earnings over periods with no or irregular income. For these individuals, the duration per overdraft may well exceed one month.

Since no additional data sources are available to get estimates on the overdraft durations for these account holders, the UK numbers on duration will be used as a basis for all countries. The assumptions are as depicted in the table below.

Table 8 - Overdraft duration (days per overdraft)

	Authorized	Unauthorized
All profiles	25	10

Source: Own assumptions

⁵³ Assuming that the duration periods are evenly distributed, the average duration per unarranged overdrafts would be 9.5 days, (average of 16 and 61 days divided by 4, the average number overdrafts for customers with at least one overdraft). For arranged overdrafts, assuming that an overdrawn account remained in debit for a total of 100 days and that a customer that exceeded his or her limit at least once did so an average of 4.1 times per year, the average duration per overdraft would come to 24.4 days.

3.1.3 AMOUNT PER OVERDRAFT

For the total overdrafts, only 11 central banks provide data on business volumes.⁵⁴ However, it was brought to our attention from several national bank experts that the definition of overdrafts differed from country to country and included non-household transactions.⁵⁵ More importantly, overdrafts category includes in most of the countries also loans taken as part of a credit line and in some cases for household mortgages. This meant that the overdrafts figures published for these countries were invariably including elements that were beyond the scope of a typical overdraft, which is a debit amount for a current account.

Our alternative approach was using data on outstanding short-term loans of households, which includes credit card balances and overdrafts, from Eurostat's financial accounts database or from OECD statistics on household assets. Using aggregate data provided in the OFT study, the average daily debit balance was about £390 (€533 in 2006 exchange rate) per banked household in arranged overdrafts and about £95 (€133 in 2006 exchange rate) in unarranged overdrafts. These corresponded to about 20% and 5% of the short-term loans of households, respectively. These shares were applied to all countries to obtain the two overdraft amounts in each country.

3.2 *WITHDRAWALS*

Blue Book and Red Book have data on ATM and OTC withdrawals, although no differentiation is provided for transactions using debit, credit or delayed debit cards. Instead, a breakdown for cards issued outside the country and withdrawals outside the reporting country are included. For the purposes of this exercise, only data on domestic withdrawals using cards issued in the reporting country is used.

For credit card withdrawals, the information provided by a UK consumer association (uSwitch.com), which is based on data from an opinion survey conducted by YouGov in September 2008 reveals that 16% of those with a credit card engage in 5.2 transactions per year of just under €125 per withdrawal. These lead to the following usage rate.

Table 9 - Assumptions on credit card usage

	Transactions per year	Amount per transaction (€)
Average user	0.8	125

Source: uSwitch (2009)

The assumptions above are applied identically to all countries.

⁵⁴ Data on business volumes for overdrafts is not available from the ECB for individual countries due to an agreement with national central banks.

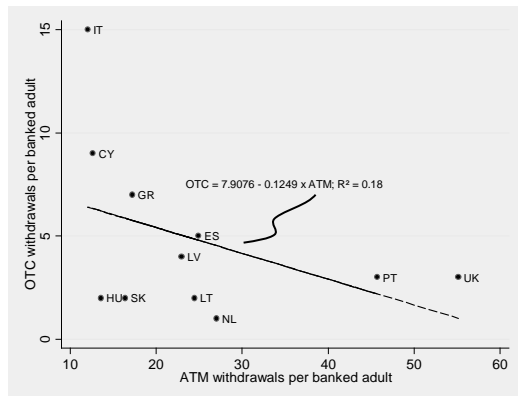
⁵⁵ We would like to thank Javier Huerga at the European Central Bank and Justyna Wijas-Jensen at the Danmarks National bank for these clarifications.

3.2.1 NUMBER OF WITHDRAWALS PER YEAR

The Blue Book and Red Book data are used to construct average number of withdrawals within the country. The credit card withdrawals shown above were subtracted from the total ATM withdrawals in order to get the debit card withdrawals.

For OTC withdrawals, the data is not complete for all countries; missing observations were completed by running a simple regression with ATM withdrawals as an explanatory variable. It is expected that the two types of transactions are substitutes. The more ATM withdrawals a banked adult conducts, the less OTC transactions he or she would be expected to conduct. An OLS⁵⁶ regression analysis confirmed this hypothesis and was used to fit the missing OTC values. The following diagram plots the scatter graph for the existing values and the fitted line using OLS regression.

Graph 1 - Relationship between number of OTC and ATM withdrawals



Source: Data obtained from ECB Blue Book; own calculations

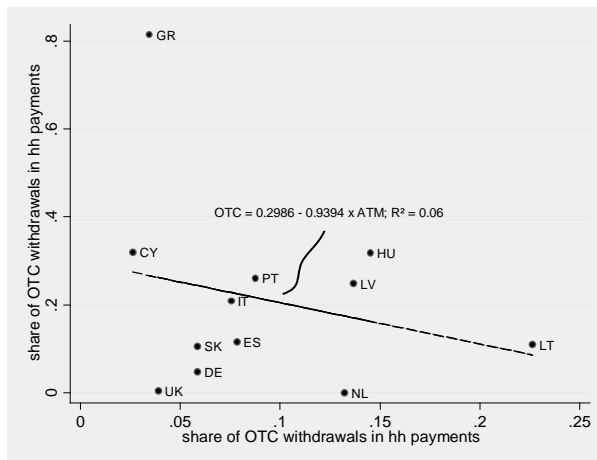
3.2.2 AMOUNT WITHDRAWN

For amounts withdrawn per transaction, the ECB provides both total amounts and the number of transactions.

For missing OTC transactions, a procedure as explained above was used to fit the missing OTC values. The greater the share of ATM transactions in total final expenditures of households, the lower the share of OTC transactions is expected to be. An OLS regression analysis confirmed this hypothesis and was used to fit the missing OTC values. The following diagram depicts the relationship between the two variables and the fitted line.

⁵⁶ Ordinary least squares

Graph 2 - Relationship between total value of OTC and ATM withdrawals



Source: Data obtained from ECB Blue Book and Eurostat; own calculations

3.2.3 ON-US/OFF-US TRANSACTIONS

It is assumed that *only* active users conduct off-us withdrawals. Among these users (a third of all customers), the choice of on-us or off-us depends on how often a customer encounters an ATM of his own institution. In order to model this access problem, we assume that the number of ATMs (and their geographical spread) is a linear function of a bank's share in the deposit market and that the ATMs are uniformly distributed out in the country. With these assumptions, a customer's probability of encountering a distributor of his or her own bank is equivalent to that bank's market share. Similarly, the share of on-us transactions in the country may be calculated as the sum of squared market shares for all banks – also equivalent to the Herfindahl-Hirschman Index (HHI) for deposits.

For off-us transactions, we assume that customers have clear preferences towards making on-us transactions. Exceptions arise only in moments of need. We assume that immediacy arises only in a third of all cases when customers encounter a distributor of another bank. Therefore, in the remaining 67% of cases customers nevertheless find distributors of their own bank. With these, the probability of making an off-us transaction for the customers of bank i is given by

$$\Pr_{i, \text{off-us}} = \frac{1}{3} \cdot (1 - \text{share}_i).$$

We additionally corrected the final figures by accounting for the availability of network sharing agreements in each country.⁵⁷

3.2.4 EXCEPTIONS

The ATM withdrawals data had to be corrected for Denmark since the Blue Book numbers did not include on-us transactions and had to be extrapolated using the on-us off-us transaction ratio discussed above.

⁵⁷ The data on network agreements are from the study on Preparing the Monitoring of the Impact of the Single Euro Payment Area (SEPA) on Consumers, commission by DG Health and Consumer Protection, Final Report submitted by the Consumer Policy Evaluation Consortium, 18 August 2008.

No data on the amount of ATM withdrawals is available for CA. Therefore, volumes from USA per banked adult are used as a proxy. Indeed, it was observed that both countries generally present a similar pattern of use of transaction services. In particular, frequency of use of ATM withdrawals is similar between both countries.

3.3 DEPOSITS

3.3.1 NUMBER OF DEPOSITS PER YEAR

Blue Book and Red Book have data on ATM and OTC deposits, with a breakdown for cards issued outside the country and deposits outside the reporting country are included. For the purposes of this exercise, only data on domestic deposits using cards issued in the reporting country is used.

The Blue Book and Red Book data are used to construct average number of deposits (i.e. average usage) within the country. As in withdrawals, these data were used as a guidance to separate between OTC and ATM deposits.

3.3.2 AMOUNT DEPOSITED

For amounts withdrawn per transaction, the ECB provides both total amounts and the number of transactions. For OTC transactions, the data is incomplete; missing observations were completed by assigning EU15 averages to countries.

3.3.3 EXCEPTIONS

Netherlands was excluded from the calculation of EU15 profiles for amount deposited per transaction since an average OTC deposit was around 2 Euros.

3.4 CREDIT TRANSFERS

3.4.1 NUMBER OF CREDIT TRANSFERS RECEIVED

For reception of credit transfers, the consumer association survey (2004) provides detailed information regarding usage frequencies for direct billing received. These transactions comprise money received for salary, pension payments, etc. Since households are less likely to engage in commercial practices, direct debits are assumed to be only a small fraction of these payments received.

Table 10 - Direct billing received in four countries (2004)

	All	Belgium	Italy	Portugal	Spain	Receipts per year
	<i>% of respondents</i>					
Daily	0.5%	0.7%	0.6%	0.0%	1.0%	120
Weekly	1.3%	3.7%	0.6%	0.2%	1.2%	35
Monthly	47.6%	44.4%	69.8%	6.9%	62.7%	12
Twice a year	1.5%	2.4%	0.8%	1.0%	2.1%	3
Less	3.5%	3.9%	0.4%	1.6%	8.5%	1
Never	45.6%	44.9%	27.8%	90.3%	24.5%	0

Source: Consumer association survey (2004); own assumptions

These figures can be used to calculate the number of transactions corresponding to an average use in the four countries. Since Blue Book and Red Book data is not available on credit transfers received, no guidance exists to control for differences of usages among countries. For all countries except the four included in the survey, the average data under “all other countries” was used. The following table summarizes the assumptions used in the study.

Table 11 - Assumptions on number of credit transfers received

	Belgium	Italy	Portugal	Spain	All other countries
Average use	7.6	9.3	1.0	9.3	6.9

Source: Own calculations based on consumer association survey (2004), ECB’s Blue Book (2008) and own assumptions

3.4.2 NUMBER OF CREDIT TRANSFERS SENT

ECB’s Blue Book and BIS’s Red Book provide data for credit transfers on the payer’s side, i.e. credit transfers sent.

3.4.3 AMOUNT SENT BY CREDIT TRANSFER AND EXCEPTIONS

For amounts per transaction, the ECB and BIS figures on total credit transfers (sent) was divided by total number credit transfers by households to obtain an amount per transaction. 2004 data was used for Czech Republic since that was the last year for which data was available.

3.4.4 ON-US/OFF-US TRANSACTIONS

The calculation method is similar to the one used for ATM withdrawals above, except for two differences. First, it is assumed that all users may conduct off-us credit transfers. Second, the point about immediacy does not arise here as customers often do not have a choice in making on-us transactions when the counterparty bank is not the same as one’s own. Therefore, the probability of making an off-us transaction off-us transaction for the customers of bank i is simply $\Pr_{i, \text{off-us}} = 1 - \text{share}_i$.

3.4.5 EXCEPTIONS

The data had to be corrected for Denmark, UK and Canada. For Denmark and Canada, the Blue Book and Red Book numbers did not include on-us transactions and had to be extrapolated using

the on-us off-us transaction ratio discussed above. For the UK, the same exclusion had to be also corrected. Additionally for the UK, the Blue Book numbers included interbank (CHAPS, LVPS and TARGET2/TARGET) transactions, which had to be excluded using additional information provided by Blue Book.

3.5 STANDING ORDERS

3.5.1 NUMBER OF STANDING ORDERS RECEIVED PER YEAR

The consumer association (2004) survey data on direct billing received (in the form of salary, pension and other social benefit payments) was used. Among these payments received, only the monthly ones were assumed to be standing order payments.

As already noted above, Table 10 summarizes the intensity of usage information from the survey. Using the same assumptions to convert the given frequencies to number of transactions per year, the following table gives the average usage for monthly payments received only.

Table 12 - Assumptions on reception of standing order

	Belgium	Italy	Portugal	Spain	All others
Average use	5.3	8.4	0.8	7.5	5.7

Source: Own calculations based on consumer association survey (2004), ECB's Blue Book (2008) and own assumptions.

These averages are used for the three countries included in the present comparison (BE, IT and PT). The average rates of the four countries are applied to all remaining countries.

3.5.2 SETUP, CLOSURE AND MODIFICATION OF STANDING ORDERS

A report by Oxera (2006) prepared for the British Bankers' Association provides assumptions on the setup of standing orders⁵⁸. According to the report, the setting up of standing orders is rare; only young professionals are active with one setup per year while others have little or no standing order activity. We assume that average users engage in 0.5 setups per year.

Standing orders are used mostly to make regular fixed payments such as monthly rent, insurance, mortgage, consumer credit payments or short-term instalment payments. A modification of the order is necessary each time the payment amount is changed. This would be necessary for indexed transactions, (i.e. inflation-indexed rent payments or variable-rate mortgages). It is assumed that any other change (i.e. modification of beneficiary details when account holder moves to another rental location) requires the closure of the current order and setting up another. A standing order is also closed automatically when the pre-set payment period terminates. Therefore, it is likely that most standing orders are either modified or closed within a year.

To our knowledge, there are no data sources that detail the use of standing orders to make different sorts of payments. With no information to rely on, we assume that a third (33%) of all standing-orders is modified and a third (33%) is closed within a year while the rest (33%) remains unchanged.

⁵⁸ The information is extracted from Oxera (2006) *The price of banking: An international comparison*, Oxford, November, page 87.

3.5.3 SENDING OF STANDING ORDERS

The Oxera report (2006) also includes the number of standing orders sent by different profiles of current account holders in the UK.⁵⁹ The report assumes that active users, i.e. young professionals, send 21 standing orders per year. In turn, a median-income family sends 12 standing orders on average. Comparing these numbers to the number of credit transfers per year (103.2 for active and 54.6 for average users) from ECB's Blue Book and BIS's Red Book statistics, we see that approximately 20% of all credit transfers are standing orders. We apply this factor (0.2) to discount the Blue Book and Red Book data on credit transfers sent to arrive at the number of standing orders sent per year.

3.6 **DIRECT DEBITS**

3.6.1 SETUP AND CLOSURE OF DIRECT DEBITS

It is assumed that direct debits are used exclusively to pay bills due to various service providers, i.e. insurance, telecommunication, electricity, gas, water providers or mortgage payments. Rent payments are not considered as direct debits since they are often initiated by the payer, which makes them treated as credit transfers.

In what follows, we assume that the usage rates are as defined in the table above based on consumer survey data. We also assume that a separate setup of a direct debit order is necessary each time a customer switches his or her utility. The following table, for which data is extracted from a recent Special Eurobarometer⁶⁰, was used as a basis for average switching rates of current accounts.

Table 13 – Switching behaviour: Percentage of individuals with a current account that selected statements that best describes whether or not they have switched or tried to switch current accounts within the last 5 years.

Country	“Have switched and it was easy”	“Have switched and it was difficult”	Total
	Percentages of individuals that selected these statements		
AT	8%	2%	10%
BE	8%	1%	9%
DE	7%	1%	8%
DK	14%	2%	16%
FR	7%	1%	8%
IE	3%	1%	4%
IT	5%	1%	6%
NL	9%	1%	10%
PT	2%	0%	2%
SE	11%	1%	12%
UK	7%	2%	9%

Source: Special Eurobarometer 373, March 2012

⁵⁹ *Ibid.* p. 87.

⁶⁰ Special Eurobarometer 373, “Retail financial services”, conducted by TNS Opinion & Social at the request of Directorate-General Internal Market and Services, European Commission, March 2012.

We use half of these figures to approximate the annual switching figures. These numbers are then multiplied by the proportion of users with direct billing. Usage data for CA, USA and ISR is not needed, as no charge has been identified for set up and closure of direct debit in these countries. It is assumed that each setup requires a closure, which implicitly assumes that the number of new users (i.e. those with no previous direct debit facility) is very low. Therefore, the closure values are set as equivalent to setup values.

3.6.2 DIRECT DEBITS SENT

The procedure is exactly the same as in credit transfers sent, both for number of transactions and the amount per transaction. The consumer association data (2004) on direct billing payments proves to be a much closer match for the Blue Book data for this specific category of transactions.

3.6.3 EXCEPTIONS

The data had to be corrected for Canada. The Red Book numbers did not include on-us transactions and had to be extrapolated using the on-us off-us transaction ratio discussed under the “Credit transfers” section.

3.7 POS PAYMENTS

3.7.1 NUMBER OF PAYMENTS PER YEAR

ECB’s Blue Book and BIS’s Red Book have data on POS payments for all cards. For point of sale (POS) payments with a debit card, the share of debit card payments in all card payments, which is directly available, is used. As for the frequencies of POS transactions, the only complete data source is provided by the Austrian Central Bank (OeNB) in its quarterly payment card survey.⁶¹ The table below depicts the results of the fall 2007 survey.

Table 14 - POS card payments in Austria (2008)

	Debit card	Credit card	POS payments per year
	% of respondents		
More often	27.2%	1.7%	100
Once a week	21.6%	4.5%	20
Once a month	12.0%	10.9%	6
Rarely	10.4%	9.5%	1
Never	28.8%	73.4%	0

Source: OeNB (2008) *Payment card survey, Q3*

Note: The figures have been corrected by considering the proportion of banked adults with cards.

The table above suggests that more than three quarters of the population (71.2%) uses debit cards while only a quarter (26.6%) uses credit cards in their POS transactions. As usual, these can be

⁶¹ For the data, see the quarterly report at http://www.oenb.at/en/img/2008-3q-oenb_payment_cards_survey_tcm16-98517.pdf.

translated into usage rates in terms of transactions using our assumptions regarding the number of POS payments per year for each frequency category.⁶²

The following table shows that credit card transactions accounted for only 9% of all POS payments, with the remainder (91%) conducted by debit cards. These ratios are quite close to the share of credit card transactions in all payments (90% in 2007 as provided by the ECB's Blue Book), which include POS payments as well as other non-POS items such as online and phone payments.

Table 15 - Number of POS payments per year in Austria (2008 data)

	Debit card	Credit card	Total
Survey average	32.3	3.3	35.7
Blue Book average*	-	-	38.3

Source: Own calculations based on OeNB (2008) Payment card survey and own assumptions

*Note: * Blue Book figure based on 2007 data.*

For the number of POS payments per year, Blue Book and Red Book provide only the total figures, which include debit card and credit (or delayed debit) card transactions. In order to distinguish between the two card platforms, we use the Blue Book data on the share of credit card and debit card transactions in all payments.⁶³ Delayed debit card payments are treated as credit card payments for our purposes in this exercise.

3.7.2 AMOUNT PER POS PAYMENT

For the amount of POS payments per transaction, the same adjustment applied to number of transactions using the ECB Blue Book and BIS Red Book data on credit vs. debit card transaction amount is used.⁶⁴

⁶² Our assumptions here differ from those relating to the consumer association survey (2004). The category corresponding to the most frequent use ("more often") provided by the Austrian survey is believed to be chosen by respondents that make less than one transaction per week. The corresponding option in the consumer association surveys ("daily") is believed to be chosen by users with more heightened use, i.e. those that make more than 3.5 transactions per week. A similar reasoning leads us to assume that the frequency of use by those who choose "once a week" in the Austrian survey is less than those that chose the option "weekly" in the consumer association surveys. The latter set of respondents might have engaged in more than one transaction per week (up to 3.5 per week) and made their choices according to proximity of available option. In turn, for the Austrian survey, those that engage in one transaction every one to two weeks would make the choice.

⁶³ For France, data on all payments is not distinguished by types of cards. It is assumed for this case that 25% of all POS payments in France are conducted by a credit and/or delayed debit card, which is the EU15 average.

⁶⁴ Once again, for the POS amounts per transaction in France, it is assumed that an average debit card POS payment per transaction is 65% (the EU15 average) of the total card payment amount per transaction.

3.7.3 EXCEPTIONS

Blue Book and Red Book data used are those related to POS transactions in reporting country for cards issued in reporting country. For CA, these data had to be adjusted, as it also included transactions conducted at terminals in other countries.

No data on POS transactions is available for the USA. Therefore, data from CA is used as a proxy. It was observed that both countries generally present a similar pattern of use of transaction services. This is particularly the case concerning the frequency of use of ATM services.

3.8 *CHEQUES*

3.8.1 CHEQUES DRAWN

ECB Blue Book and BIS Red Book have data on the total number and amounts for cheques drawn.

3.8.2 CHEQUES LODGED

The only source that provides information on cashed cheques is the consumer association survey (2004). The table below summarizes the findings.

Table 16 - Cheques cashed in four countries (2004)

	All four	Belgium	Italy	Portugal	Spain	Cheques per year
	% of respondents					
Daily	0.20%	0.14%	0.24%	0.12%	0.33%	120
Weekly	1.67%	0.59%	3.07%	1.31%	1.29%	35
Monthly	8.48%	2.62%	14.30%	8.28%	6.68%	12
Twice a year	16.80%	9.61%	30.05%	17.11%	7.70%	3
Less	12.66%	14.09%	12.44%	12.79%	11.50%	1
Never	60.20%	73.00%	39.90%	60.40%	72.50%	0

Source: Consumer associations survey (2004) conducted by Test-Achats (Belgium), Altroconsumo (Italy), Deco Proteste (Portugal) and OCU (Spain); own assumptions

The shaded column reverts to our original assumption that consumers who choose a given intensity (i.e. daily, weekly, etc.) engage in a single transaction for that period. This is simply because it is quite unlikely that a number of cheques will be received at the same time.

The frequencies and assumptions depicted in the previous table give rise to the following usage rates in the four countries. As in cheques drawn, three categories of usages are determined to make the assignments more accurate. Countries with low cheque usage (with less than 3 cheques drawn per year) are assigned Belgium's usage rate. Countries with high usage (with more than 12

cheques *drawn* per year), instead get assigned to Italy's usage rate.⁶⁵ All other countries are assigned the usage rate of Spain.

Table 17 - Assumptions on cheques lodged

	Low usage country, Belgium (< 3 drawn per year)	High usage country, Italy (> 12 drawn per year)	Regular usage country, Spain [†] (all others)
Average user	1.1	4.1	2.0

Source: Own calculations based on consumer association survey (2004) and own assumptions

3.8.3 NUMBER OF CHEQUEBOOKS PER YEAR

It is assumed that the chequebooks include 25 checks. Then, the number of cheques drawn is used to calculate the number of chequebooks each user goes through in one year.

3.8.4 CHEQUES BOUNCED

For cheques bounced, the only data source is the payment statistics provided by the Bank of Italy.

Table 18 - Rejected cheques (2007)

	Cheques lodged*	Rejected cheques	Percent rejected
Number (th.)	359,350	664	0.18%
Value (mln. Euro)	815,853	2,550	0.31%

Source: Bank of Italy (2008)

*Note: *The figures correspond to a sample of banks that reported rejected cheques and are therefore lower than the actual*

As the table makes it clear, rejections comprise a very small percentage of cheques drawn. All in all, less than 0.2% of all cheques with a valuation of about 0.3% are rejected. These discount factors were applied for all countries to arrive at the cheques bounced in total numbers and values.

3.8.5 EXCEPTIONS

As no cheques are drawn in the NL, the number of cheques lodged is also set to zero. For the UK, the Blue Book data on cheques drawn included interbank transactions, which were excluded by using the retail payment system statistics provided by Blue Book. A similar adjustment was made for USA. The data also had to be corrected for Canada. The Red Book numbers did not include on-us transactions and had to be extrapolated using the on-us/off-us transaction ratio discussed under the "Credit transfers" section.

⁶⁵ Even though Portugal had the greatest number of cheque payments per year, the number of cheques lodged in the country was not the highest; this led us to identify Italy as the "highest usage country".

3.9 ACCESS TO INTERNET AND PHONE BANKING

3.9.1 INTERNET AND PHONE BANKING USAGE

Information from Eurostat (2008) and Capgemini's (2006) was used to determine the distribution of services among different channels.⁶⁶ According to Capgemini (2006), the proportion of services conducted online has grown from 4% in 2000 to 18% in 2005 and is predicted to grow up to 28% by 2010 in major developed countries.⁶⁷ Services conducted over the phone have also grown, from 5% in 2000 to 9% in 2005 and to an expected 12% by 2010. Although it is possible that the "remote banking" services are treated as substitutes by some customers, the fact that the use of the two services has grown hand-in-hand suggests that they are treated as complements on aggregate.⁶⁸ Assuming that relative usage frequencies are similar for phone and internet banking, we may use the figures from the report to arrive at a relation between the number of customers that use phone and online banking. Using a time-trend, for every 10 customers that use online banking, there were about 5 with access to phone banking in 2007.⁶⁹ We use this relationship and online access figures available from the Eurostat study (2008) to calculate the phone access figures.⁷⁰ The results are depicted below.

Table 19 - Assumptions on internet and phone banking usage (% of customers, 2008)

Country	Internet	Phone	Country	Internet	Phone
Austria	34	16	Italy	13	6
Belgium	67	31	Netherlands	69	32
Denmark	61	29	Portugal	14	7
Germany	38	18	Sweden	65	31
France	40	19	UK	38	18
Ireland	28	13			

Source: [Eurostat, Data in Focus 46/2008 "Internet usage in 2008 Households and individuals"](#) for internet usage figures; own assumptions for phone banking

For Canada and United States, data were only available respectively in 2005 and 2003. These numbers have been adjusted to take into account increase of usage until 2008. To do so, averages

⁶⁶ For details, see Eurostat (2008) "Internet usage in 2008 Households and individuals" *Data in Focus 46/2008* and Capgemini (2006) *World Retail Banking Report*.

⁶⁷ The figures from Capgemini (2006) report are based on interviews with 41 global retail banks.

⁶⁸ Phone banking would be a substitute for customers that use it less as internet access becomes more available and secure. In turn, customers may also use the two services interchangeably, i.e. as complements. This would hold for customers who opt for phone services in areas where internet service is not available or not reliable, i.e. on the move, at work, away from personal computer, during vacation, etc.

⁶⁹ Using a linear time-trend formula, the proportion of transactions conducted online and over the phone is found as 21.5% and 10.1%, respectively. This means that for every online transaction there are 0.47 phone transactions.

⁷⁰ There are several potential sources of error in our assumptions. First, the two services may be treated as substitutes in some countries or among certain types of account holders where access to internet banking is highly popular. This would mean that phone banking would be over-estimated according to the procedure used here. Second, our calculations do not factor in the different pricing schemes that are available in different countries. In countries where one or the other service is significantly cheaper, the ratio of internet banking to phone banking may be radically different from our assumptions.

of increase of usage for countries with similar usage profiles have been used. These assumptions are summarized in the tables hereafter.

Table 20 - Assumptions on internet and phone banking usage in USA (% of customers)

Country	Internet in 2003	Internet in 2008	% increase 2003-2008	Estimation internet in 2008	Phone
Germany	21	38	81%	-	18
UK	22	38	73%	-	18
United States	18	n.a.	Average DE and UK = 77%	32	15

Table 21 - Assumptions on internet and phone banking usage in CA (% of customers)

Country	Internet in 2005	Internet in 2008	% increase 2005-2008	Estimation internet in 2008	Phone
Finland	56	72	29%	-	34
Sweden	51	65	27%	-	31
Iceland	61	68	11%	-	32
Norway	62	75	21%	-	36
Canada	58	n.a.	Average FI, SE, IC and NO = 22%	71	33

3.9.2 ONLINE PAYMENTS

For the calculation of the value of online debit and credit card payments, we use the difference between the Blue Book and Red Book data for all card payments and POS card payments to represent the total “remote payments”, which include online and phone-based payments. The Blue Book and Red Book data makes it possible to obtain this difference both for number of transactions and total payments. For Netherlands, the total card payments figure was smaller than the POS payments.⁷¹ In order to adjust this discrepancy, we use the average ratio of the value of POS payments in total card payments for the EU15 countries to get the corrected POS payment figures.

For the number of transactions, data on usage frequencies are extracted from Eurostat’s e-commerce statistics on individuals who ordered goods and services over the internet for the year of 2007. It is assumed that customers who made such purchases in the last 3 months engage in 14 transactions per year, which is the average of 24 and 4 transactions corresponding to the extreme cases of one transaction every two weeks and every 3 months. Similarly, customers who made online purchases between 3 months and a year ago are assumed to engage in 2.5 transactions per year, which is the average of the two extreme cases of one transaction per 3 months and one transaction per year. Lastly, customers who engaged in an online goods and services purchase more than a year ago are assumed to engage in one transaction every two years. These assumptions and the frequency data give rise to the usage rates shown below in the Table 22.

⁷¹ The discrepancy arises from the fact that e-money transactions (included in POS payments) are not considered as card transactions in the Blue Book. For more on this, see the detailed General Notes for ECB’s Blue Book country profiles.

Table 22 - Assumptions on online payments per year (2007)

Country	3 to 12 months			Number of transactions per banked adult per year
	< 3 months	3 to 12 months	> 12 mos	
	<i>percent of individuals who ordered goods or services over the Internet for private use</i>			
AT	26	10	3	3.9
BE	15	7	4	2.3
BG	2	1	1	0.3
CY	8	2	2	1.2
CZ	8	8	2	1.3
DE	41	11	6	6.0
DK	43	13	5	6.4
EE	6	2	3	0.9
ES	13	5	3	2.0
FI	33	15	4	5.0
FR	26	9	2	3.9
GR	5	3	1	0.8
HU	7	4	1	1.1
IE	26	7	4	3.8
IT	7	3	2	1.1
LT	4	2	1	0.6
LU	37	10	4	5.5
LV	6	5	4	1.0
MT	16	5	3	2.4
NL	43	12	5	6.3
PL	11	5	4	1.7
PT	6	4	2	1.0
RO	2	1	1	0.3
SE	39	15	7	5.9
SI	9	7	5	1.5
SK	10	6	5	1.6
UK	44	8	4	6.4
EU27	23.3	7.1	3.4	3.5
EU15	27.5	7.9	3.6	4.1
NMS12	7.3	4.0	2.6	1.1

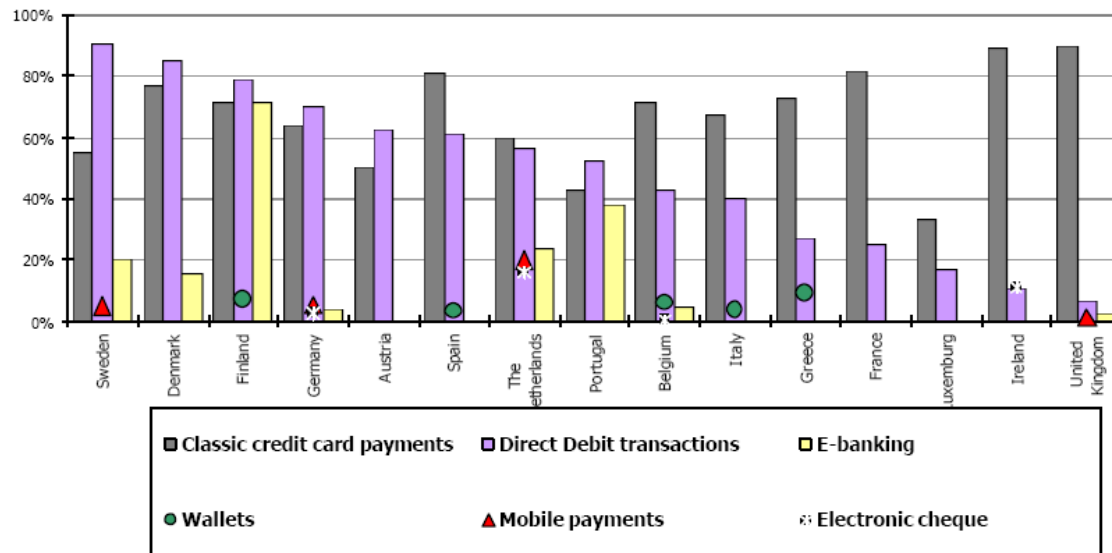
Source: Eurostat and own assumptions

For Canada, national statistics were used. For USA, data presented in an OECD study “The future of the internet economy – A statistical profile” (2011) was used.

To adjust for credit/delayed debit card transactions and debit card transactions, data on the share of payment methods most frequently proposed by e-commerce sites was used. The data, summarized by the following diagram, was extracted from a study commissioned by the DG Internal Market, European commission and undertaken by PriceWaterhouseCoopers in 2003.⁷²

⁷² [PwC \(2003\), Study on the Security of Payment Products and Systems in the 15 Member States, Final Report, June 16.](#)

Graph 3 - Payment methods most frequently proposed by e-commerce sites (2003)



Source: [PwC \(2003\), Study on the Security of Payment Products and Systems in the 15 Member States, Final Report, June 16.](#)

For CA and USA, information on data channel was extracted from a study⁷³ showing that, in North America, 90% of payments for e-commerce transactions are made through credit cards.

3.10 CREDIT INTEREST

In order to determine the average outstanding balance amount remaining as credit in a current account two sources were used. For the UK, the OFT study states that the average credit balance over the year (i.e. the sum of daily balances divided by the number of days in a year) was, in 2006, equivalent to £1,740. This figure corresponds to approximately 9,5% of the real mean equivalised household income for UK obtained from OECD. The same proportion was applied to the average household income in other countries to arrive at the average outstanding daily balance.

⁷³ Turban, E. King, D. McKay, J. Marshall, P. Lee, J & Vielhand, D. (2008). Electronic Commerce 2008: A Managerial Perspective. London: Pearson Education Ltd. p.550.

4. ADDITIONAL DATA FROM BLUE BOOK AND RED BOOK USED FOR CONSTRUCTING THE PROFILES

The two tables below provide figures on the number of transactions per banked adult and the corresponding values for the countries of the comparison. It has to be noted that data for Israël was not extracted from the Blue Book or the Red Book but was provided by the Bank of Israël.

Table 23 - Number of transactions per banked adult –in 2010

	Total	Card payments						Non-card payments					Other transactions			
	Payment transactions	Total cards payments ⁷⁴	POS payments	Debit cards	Credit cards	Online Debit cards	Online Credit cards	Total non-card payments ⁷⁵	Credit transfers	Direct debits	Cheques	E-money	ATM withdrawals	OTC withdrawals ⁷⁶	ATM deposits	OTC deposits
Austria	208,4	59,6	44,8	44,8	14,8	2,0	2,0	148,8	48,8	96,1	0,2	3,8	20,2	4,64		
Belgium	161,3	101,7	93,8	90,2	11,5	0,6	1,7	59,6	34,5	18,9	0,4	5,8	37,3	7,27		
Canada	257,9	211,2	200,2	122,5	88,7	0,4	3,9	46,8	12,2	17,8	16,8		19,4	5,51	3,7	
Germany	154,9	34,9	32,7	28,6	6,3	2,2	3,9	120,0	27,6	91,6	0,3	0,5	26,6	3,28	0,5	1,5
Denmark	263,6	210,9	171,7	196,8	14,1	1,5	4,9	52,7	22,5	29,4	0,7			0,40		
France	240,0	137,0	132,5	102,8	34,3	0,7	3,1	103,0	19,9	51,0	31,2	0,8	29,7	6,91		
Ireland	94,5	62,9	59,5	42,6	20,3	0,4	3,4	31,6	10,6	16,4	4,6		33,6	9,94		
			152,5													
Israël						0,0	0,0	58,4	1,6	24,0	32,9		27,4	2,33		1,5
Italy	65,2	36,1	33,2	22,0	14,1	0,4	0,7	29,1	10,6	11,5	4,1	2,8	17,1	14,37		
Netherlands	230,8	129,1	122,7	123,7	5,4	2,5	3,8	101,7	32,2	59,5	0,0	10,0	24,4	0,67	0,5	0,7
Portugal	162,4	126,8	125,8	104,4	22,4	0,6	0,4	35,5	7,1	20,7	7,5	0,2	49,2	2,97	1,5	4,6
Sweden	243,1	192,7	168,8	157,0	17,0	2,6	3,2	50,3	28,0	22,3	0,0		24,7	7,46	0,0	
United Kingdom	248,7	167,0	159,8	125,3	41,8	0,6	5,7	81,7	24,1	49,4	8,1		52,8	3,09		
United States	392,5	301,3	30,0	202,2	99,1	0,4	3,9	91,2	12,0	40,8	38,4			4,47		

⁷⁴ Total cards payments correspond to the sum of credit cards payments and debit cards payments.

⁷⁵ Total non-cards payments correspond to the sum of credit transfers, direct debits, cheques and e-money.

⁷⁶ As data was missing in 2010, the reference year used for OTC withdrawals is 2007.

Table 24 - Value per transaction per banked adult (in national currency) –in 2010

	Card payments						Non-card payments				Other transactions			
	Total	POS payments	Debit cards	Credit cards	Online - Debit cards	Online Credit cards	Credit transfers	Direct debits	Cheques	E-money	ATM withdrawals	OTC withdrawals ⁷⁷	ATM deposits	OTC deposits
Austria	52	42	42	84	75	75	187	62	910	6	104	500		
Belgium	45	43	40	80	52	52	275	71	1.706	3	95	436		
Canada	75	73	47	113	87	87	141	339	1.231			683		
Germany	64	61	58	91	91	91	811	522	2.063		156	496	619	1.681
Denmark	292	283	842	842	268	268	3.559	1.028	6.754			3.724		
France	45	45	39	118	61	61	613	118	200		71	1.200		
Ireland	64	66	49	96	17	17	113	310	1.432		115	1.034		
Israel							9.007	0	6.005		536	4.215		
Italy	72	78	62	87	14	14	540	215	896	56	156	410		
Netherlands	41	39	38	103	51	51	670	85	0	3	119	1	821	1.071
Portugal	48	48	49	47	79	79	761	58	841	35	71	3.453	373	1.173
Sweden	351	278	319	543	316	316	3.688	635	21.700		799	1.755	3.234	
United Kingdom	55	54	49	63	67	67	245	122	389		71	51		
United States	57	66	38	95	56	56	333	612	501			663		

⁷⁷ As data was missing in 2010, the reference year used for OTC withdrawals is 2007.

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Annex 4: Guidelines for the use/adaptation of the complete database

**A COMPARISON OF THE TARIFFS OF RETAIL BANKING IN ISRAEL AND IN THIRTEEN
COUNTRIES**

**USER GUIDELINES FOR THE USE AND ADAPTATION OF THE DATABASE AND CALCULATION
MODEL**

Document Control

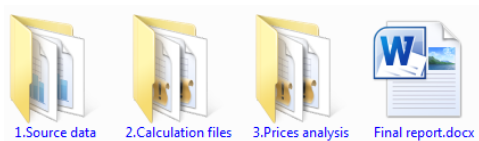
Document Title	User guidelines for the use and adaptation of the database and calculation model
Prepared by	Lejeune, François
Checked by	Dominique Spaey, Violette Van Dyck
Date	04/12/2012

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1. INTRODUCTION

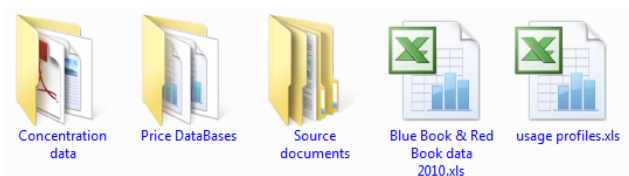
This document explains the different files available and the way to use them in order to view or update data. The following folders and documents are available:



2. DESCRIPTION OF THE FILES

This section gives an overview of the available files in each folder.

2.1. SOURCE DATA



2.1.1 CONCENTRATION DATA

The 'Concentration data' folder contains original data on FIs' total customer deposits and short term funding (source: BankScope).

2.1.2 PRICES DATABASE

The folder 'prices Databases' contains all databases (one per country) of prices as collected and listed in the collection database. It is consistent with the data collection guidelines.

2.1.3 SOURCE DOCUMENTS

The folder 'Source documents' contains all source documents of prices collected and saved under PDF or Word format. This includes documents published on the FIs websites and data on exchange rates.

Source documents are archived per country and per FI.

2.1.4 BLUE BOOK & RED BOOK DATA

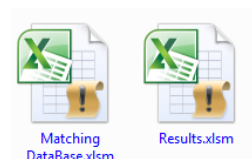
The 'Blue Book & Red Book data 2010' Excel file includes all the data extracted from the ECB Blue Book and the Red Book that are used in the setting up of the country profiles. The data were reworked in order to obtain retail averages for each banked individual.

2.1.5 USAGE PROFILES

The 'usage profiles' Excel file uses the data calculated in the 'Blue Book & Red Book data' as well as the data collected through other sources, among which consumer associations, central banks and other stakeholders

contacted. The outcome of the calculations provides a list with usage data per country and per service in terms of average annual number, duration and value (in local currencies).

2.2. CALCULATION FILES



2.2.1 MATCHING DATABASE

The ‘matching database’ Excel file contains both the pricing information and the profiles, and matches both through adapted calculations in order to derive priced profiles. From these data, weighted averages were calculated per country based on market shares in terms of customer deposits and short term funding.

The document contains the following sheets:

General information

- Country data: list of countries covered, with information on currency and number of FIs in sample.
- FIs data: list of FIs in sample per country, with information on the type of institution, market shares, and links to websites.

Profiles

- Usage data: list of usage of each service in terms of annual number, duration, and value (in local currencies) for each country. This list is manually updated from the ‘usage profiles’ Excel file.
- Profile table: table, based on the ‘Usage data’ sheet, with complete usage profiles (with values in local currency) per country.
- Profile ratios: table with on-us/off-us, manual/electronic and one-off/recurring ratios for each country.

Collected prices

- Both sheets contain complete sets of accounts’ charges. This data is manually extracted from the databases of collected prices (in the ‘Price Databases’ file).

Matching

- In the ‘Domestic average’ sheet, collected prices and usage profiles are matched in order to derive a single priced profile per account (in local currency).

Result tables

- Priced profiles: priced profiles obtained in the previous sheet are reported here in local currency and converted in US Dollars and Purchasing Power Parity.
- Dispersion – domestic: for each FI, minimum, maximum, median, average value and standard deviation are calculated.
- Detailed breakdown: : the relative importance of the different service charges in total charges linked to an account, and average distribution of charges per country were calculated. The categories included are basic annual charges, account management charges, charges related to means of payment, exceptional charges and over-the-counter charges.
- Rates calculation: for each account, credit and debit interest rates are reported in this sheet. While the debit interest rates are the collected ones, a calculation has been made to derive a single credit interest

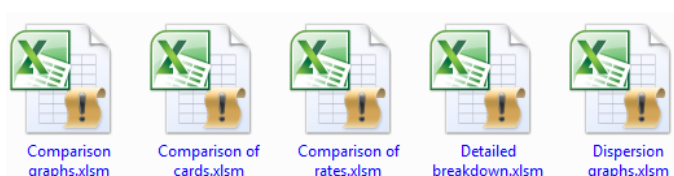
rate on account: it corresponds to the consumer's income perceived as credit interest on positive balance divided by the average balance.

- Cards calculation: for each account, debit and delayed or credit cards charges are reported. Exceptional charges (i.e. replacement and blocking) are not included. The relative importance of each type of cards in the charges related to the means of payment were calculated.

2.2.2 RESULTS

Based on the priced profiles from the “Matching DataBase”, the “Results” calculates data per country. For each country, minimum, maximum, median, unweighted and weighted (using market shares based on customer deposits and short term funding) averages and standard deviation are calculated.

2.3. **PRICES ANALYSIS**



2.3.1 COMPARISON GRAPHS

The ‘Comparison graphs’ Excel file uses the result tables from the ‘Results’ to represent graphically differences between countries.

2.3.2 COMPARISON OF CARDS

The ‘Comparison of cards’ Excel file uses the result tables from the ‘Matching database’ to graphically represent differences between countries in terms of debit and credit cards. For each country, the relative shares of each type of card in charges related to means of payment is calculated and plotted in a graph.

2.3.3 COMPARISON OF RATES

The ‘Comparison of rates’ Excel file uses the result tables from the ‘Matching database’ to graphically represent differences between countries in terms of interest rates. For each type of rate (credit interest rate and debit interest rate on overdrafts), a graph ranks countries based on the average.

The correlation between national monetary policy rates and the weighted average debit interest rates on authorized overdrafts for each country is calculated.

2.3.4 DETAILED BREAKDOWN

The “Detailed breakdown” Excel file uses the output from “Matching DataBase” to show graphically the relative importance of the different service charges in the total charges linked to an account. Weighted average distributions of charges per country were calculated and plotted in graphs. The following categories of charges were considered:

1. Basic annual charges, including package fee and account maintenance charges;
2. Account management charges, including charges for opening and closing of account, statements, authorised overdrafts, account movements, internet and phone banking and income related to credit interest on accounts in credit;

3. Means of payment charges, including debit card charges (except fees for blocking and replacing of the card), credit card charges (except fees for blocking and replacing the card), credit transfer charges (except transfers made over the counter), direct debit charges (except direct debits made over the counter) and cheques charges (except cheque bouncing charges);
4. Exceptional charges, including charges for unauthorised overdrafts and insufficient account funds, charges for blocking and replacing debit and credit cards and charges related to cheque bouncing;
5. OTC charges, including all transactions made over the counter (withdrawals and deposits, credit transfers, standing orders and direct debits).

2.3.5 DISPERSION GRAPHS

The 'Dispersion graphs' Excel file uses the result tables from the 'Results' to calculate dispersion graphs per country. Each graph represents the average priced profiles for each FI in the country, as well as the country average. The dispersion ratio is also calculated and reported in a table.

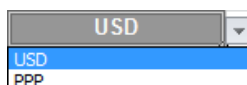
3. MODIFYING DATA IN THE FILES

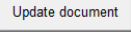
The following section explains how to modify profiles data and update the results accordingly.

3.1. MODIFICATIONS IN THE MATCHING DATABASE

3.1.1 MODIFYING THE CURRENCY

The different analyses made by the model can be expressed either in US Dollars (USD) or in Purchasing Power Parities (PPP). It is possible to change the currency used in the model. To do so, open the 'Matching database' file and go to the 'Introduction' tab (1st sheet). Through the dropdown list, it is possible to change the currency.

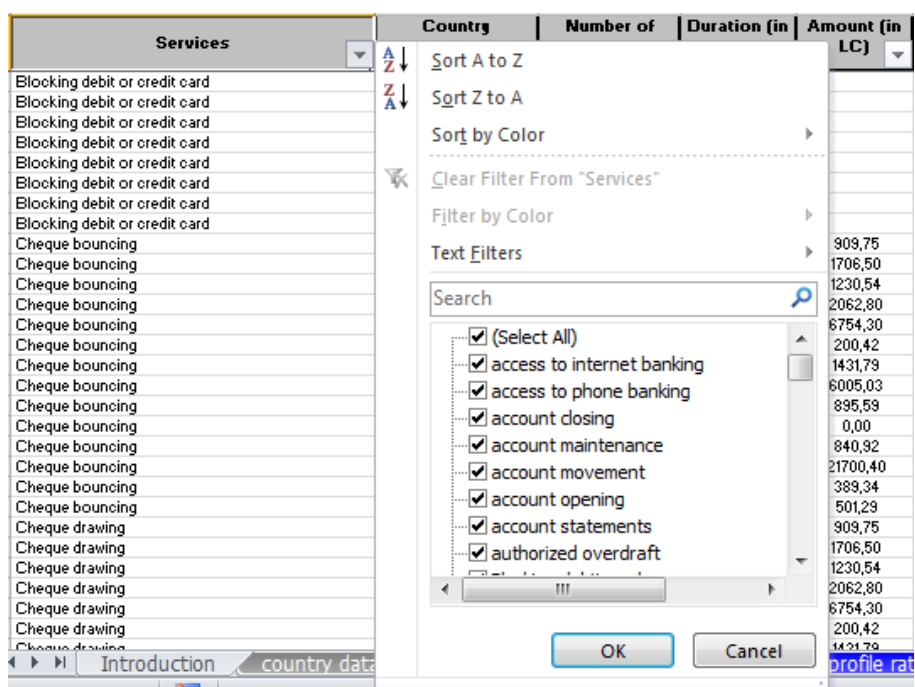


After the currency has been modified, it is necessary to update the entire document. This can be done by clicking on the  button somewhat lower on the 'Introduction' sheet. This action will calculate the priced profiles under the new currency. For an update of the country results, please refer to paragraph 3.2.

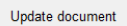
3.1.2 MODIFYING PROFILE DATA

In the event new usage data are collected, these new data can easily be inserted in the documents in order to match the prices with the updated profiles.

To do so, open the 'Matching database' file and go to the tab 'usage data'. Through the filter on top of the list, it is possible to select a service and a country.

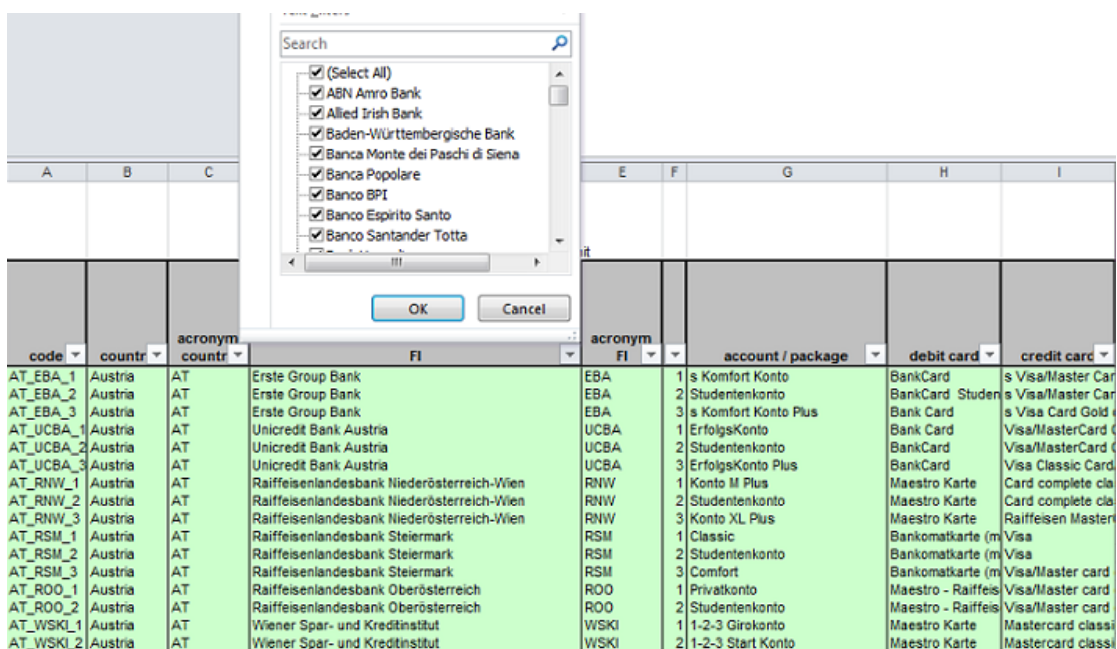


Once the right cell is selected, simply insert the new usage number, duration or amount (value in local currency). Do this for all data that need to be changed.

After all changes have been applied, it is necessary to update the entire document. This can be done by clicking on the  button on the “Introduction” tab (1st sheet) of the file. This action will calculate the new priced profiles. For an update of the country results, please refer to paragraph 3.2.

3.1.3 MODIFYING PRICES

If some pricing information needs to be modified, this can be done in the ‘Matching database’ file. Go to the ‘collected prices’ tabs.

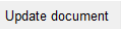


code	country	acronym	FI	account / package	debit card	credit card
AT_EBA_1	Austria	AT	Erste Group Bank	EBA 1 s Komfort Konto	BankCard	s Visa/Master Card
AT_EBA_2	Austria	AT	Erste Group Bank	EBA 2 Studentenkonto	BankCard	s Visa/Master Card
AT_EBA_3	Austria	AT	Erste Group Bank	EBA 3 s Komfort Konto Plus	Bank Card	s Visa Card Gold
AT_UCBA_1	Austria	AT	Unicredit Bank Austria	UCBA 1 ErfolgsKonto	Bank Card	Visa/MasterCard
AT_UCBA_2	Austria	AT	Unicredit Bank Austria	UCBA 2 Studentenkonto	BankCard	Visa/MasterCard
AT_UCBA_3	Austria	AT	Unicredit Bank Austria	UCBA 3 ErfolgsKonto Plus	BankCard	Visa Classic Card
AT_RNW_1	Austria	AT	Raiffeisenlandesbank Niederösterreich-Wien	RNW 1 Konto M Plus	Maestro Karte	Card complete cla
AT_RNW_2	Austria	AT	Raiffeisenlandesbank Niederösterreich-Wien	RNW 2 Studentenkonto	Maestro Karte	Card complete cla
AT_RNW_3	Austria	AT	Raiffeisenlandesbank Niederösterreich-Wien	RNW 3 Konto XL Plus	Maestro Karte	Raiffeisen Master
AT_RSM_1	Austria	AT	Raiffeisenlandesbank Steiermark	RSM 1 Classic	BankomatKarte (m	Visa/Master card
AT_RSM_2	Austria	AT	Raiffeisenlandesbank Steiermark	RSM 2 Studentenkonto	BankomatKarte (m	Visa/Master card
AT_RSM_3	Austria	AT	Raiffeisenlandesbank Steiermark	RSM 3 Comfort	BankomatKarte (m	Visa/Master card
AT_ROO_1	Austria	AT	Raiffeisenlandesbank Oberösterreich	ROO 1 Privatkonto	Maestro - Raiffeis	Visa/Master card
AT_ROO_2	Austria	AT	Raiffeisenlandesbank Oberösterreich	ROO 2 Studentenkonto	Maestro - Raiffeis	Visa/Master card
AT_WSKJ_1	Austria	AT	Wiener Spar- und Kreditinstitut	WSKI 1 1-2-3 Girokonto	Maestro Karte	Mastercard classi
AT_WSKJ_2	Austria	AT	Wiener Spar- und Kreditinstitut	WSKI 2 1-2-3 Start Konto	Maestro Karte	Mastercard classi

In order to find the set of account or package and cards to which the modification should be made, use the filter on top of the table. It is possible to select a country, an FI and/or an account.

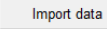
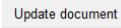
Once the correct line(s) is (are) found, it is necessary to find the column for the specific service. The first tab contains all information linked to package/account fees and cards, while the second tab contains information linked to credit transfers, direct debits and cheques. Prices might be expressed in unit, percentage, minimum fee, maximum fee, daily fee, etc. Please refer to the titles in order to modify the correct cell.

To change a cell, simply select it and insert a new number (values in local currencies). Do this for all data that need to be changed.

After all changes have been applied, it is necessary to update the entire document. This can be done by clicking on the  button on the “Introduction” tab (1st sheet) of the file. This action will calculate the new priced profiles. For an update of the country results, please refer to paragraph 3.2.

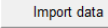
3.2. UPDATING COUNTRY RESULTS


In order to update the country results after a modification in the “Matching DataBase”, two steps are necessary.

1. Import the new priced profiles. This can be done by clicking on the  button on the “Introduction” tab (1st sheet) of the file.
2. Update the country results according to the new priced profiles. This can be done by clicking on the  button on the “Introduction” tab (1st sheet) of the file.

3.3. UPDATING PRICES ANALYSIS FILES: CHARGES BREAKDOWN

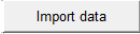
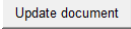
Following a modification in the “Matching DataBase” file, both the “detailed breakdown” and the “Comparison of rates” Excel files need to be updated. To do so, two steps are necessary.

1. Import the new figures. This can be done by clicking on the  button on the “Introduction” tab (1st sheet) of the file.

2. Update the country analysis according to the new data. This can be done by clicking on the  button on the “Introduction” tab (1st sheet) of the file.

3.4. UPDATING PRICES ANALYSIS FILES: RESULT ANALYSIS AND GRAPHS

Following a modification in the “Results” file, the “dispersion graphs” and the “Comparison graphs” Excel files need to be updated. To do so, two steps are necessary.

1. Import the new country results. This can be done by clicking on the  button on the “Introduction” tab (1st sheet) of the file.
2. Update the result tables and graphs according to the new data. This can be done by clicking on the  button on the “Introduction” tab (1st sheet) of the file.

Annex 5: database developed in Excel

This annex is provided as a separate file.



Bank of Israel

A Comparison of the Tariffs of
Retail Banking in Israel and in
Thirteen Countries based on Israeli
usage data

Note

21 February 2013

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Document Control

Document Title	A Comparison of the Tariffs of Retail Banking in Israel and in Thirteen Countries based on Israeli usage data
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INTRODUCTION

This note reflects the results from an exercise demanded by Bank of Israel as a complement to the study carried out between August and December 2012 and reported in the final report dated 3 January 2013.

The present exercise has consisted in applying the tariffs practiced in thirteen European countries to the Israeli usage data in order to obtain what could be called a 'pure' price comparison.

The note is structured in subsequent sections as followed:

- Methodology: the methodology and its limitations;
- Findings: the results of the comparison of the levels of prices and of the breakdown of charges;
- Conclusion: the major conclusions drawn from the exercise;
- Annex: the tables with the figures used for the graphs.

METHODOLOGY

To calculate the total charges of a personal bank account with a unique profile (the Israeli one), we have applied all other 13 countries' tariffs to all available Israeli usage data.

For usage data expressed in monetary terms (e.g. average account balance), the Israeli values (in Shekel) have been converted in the currencies of the 13 other countries, using the same exchange rates as the ones used for the report of 3 January.

The results of the analysis presented in the next sections have some limitations:

- The estimations of total charges in all countries but Israel are somewhat artificial since there is usually a negative correlation between the level of charges and the intensity of usage: e.g. in the Netherlands, charges related to cheques are really high but people pay rarely with cheques; applying tariffs to usage data which could be qualified as 'exogenous' produces some strange results;
- In Israel, some services are not used at all while they are widely used in other countries: all types of payments with debit cards as well as online payments. The comparison of personal account's charges based only on Israeli data does not take into account these components of the overall pricing in the other countries and the picture is therefore incomplete;
- Some services have not been considered in the present comparison for diverse reasons:
 - There are no Israeli usage data for access to internet and phone banking;
 - Account movements are not charged in Israel;
 - Sending of direct debits is charged in the other countries with a fixed component and a variable one; the variable component being not applied in Israel, this service has not been taken on board.

These elements contribute also to presenting an incomplete picture of the overall pricing in the other countries.

FINDINGS

1. *COMPARISON OF CURRENT ACCOUNT PRICES (IN PPP)*

The graph on the following page presents an inter-country comparison of the total annual costs incurred by account holders using the country-specific tariffs and Israeli usage rates. The values presented are weighted¹ average figures per country and they are expressed in (USD) PPP. The values were expressed in PPP to accurately reflect the ‘real costs’ in the frame of an inter-country comparison.

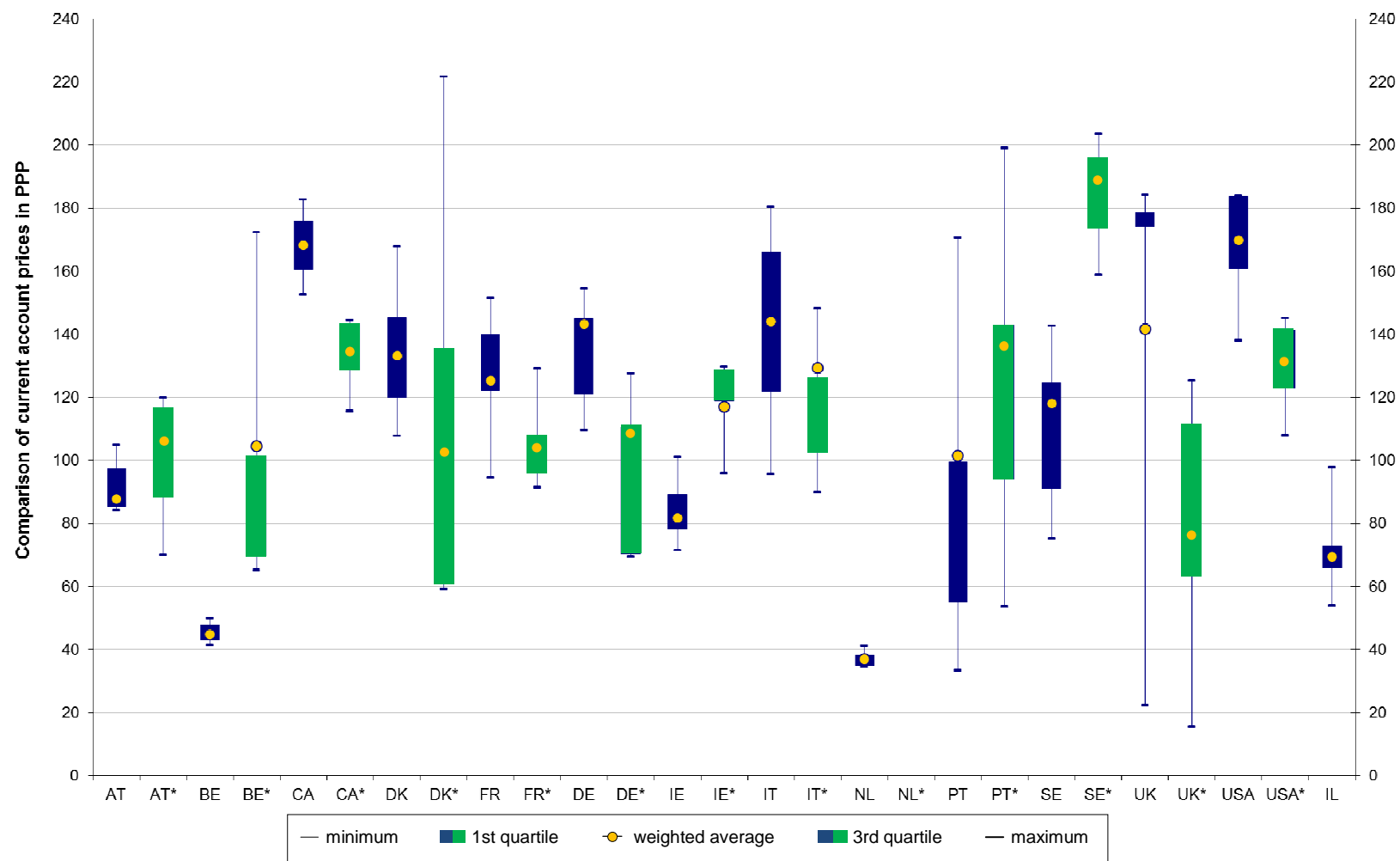
The “box-and-whisker” diagram below depicts the following information:

- For each country but Israel, the left bar (in blue) shows the results based on the national usage data (as presented in the final report of 3 January 2013) while the right bar (in green) shows the data calculated with Israeli usage data. For Israel, obviously only one bar is presented;
- The top and bottom points marked by a dash (“-”) correspond to maximum and minimum total costs;
- The solid-coloured box gives the range of observations within the first and third quartiles;
- The yellow dot gives the sample average weighted by each bank’s share in customer deposits and short term funding².

¹ I.e. average figures per country are weighted by the Financial Institutions’ market shares.

² On the graph presented, the average is never located at equal distance from the 1st and 3^d quartile, due to the fact that the weighted average is used. Countries where the weighted average is above (below) the box (representing the 1st and 3^d quartile) reveal that prices applied by banks with a larger market share are higher (lower).

Graph 1 – Comparison of current account charges in PPP³⁴



³ Source: OECD, National Annual Accounts, PPP and exchange rates, last update of 10 September 2012.

⁴ In this graph, the revised data for The Netherlands do not appear since they largely exceed the scale with a weighted average of \$678.

The first indication provided is that, with the new calculation method, Israeli charges appear as the cheapest of the 14 countries while in the original calculation the charges of The Netherlands and of Belgium were the cheapest.

Another change is that the countries with the lowest charges in the original calculation experience increasing charges, while countries with higher charges in the original calculation experience decreasing charges: these two movements bring countries' charges overall closer to each other. For ten countries (AT, BE, CA, DE, DK, FR, IE, IT, PT and USA), the charges range from \$103 in Denmark to \$136 in Portugal.

Thirdly, The Netherlands becomes the most expensive country, its charges moving from \$40 to \$678. This reveals the artificial character of the exercise.

The most Important price variations are observed in the following countries:

- In Belgium and The Netherlands, annual charges are mainly driven up by a rise of cheques charges and, to a lesser extent, by an increase of charges related to the usage of credit cards;
- In Sweden, cheques charges have also increased sharply but they are counterbalanced by a decrease of costs related to credit transfers made over-the-counter;
- The decrease in prices observed for the United Kingdom is mainly driven by a decrease of the amount of overdrafts. In addition, higher usage data related to credit interest on account, which increases the amount perceived by customers, pushes also the prices down.

2. *BREAKDOWN OF FEES (IN PPP)*

The relative importance of the different service charges in the total charges linked to an account were calculated per country and plotted in a graph.

As a reminder, the following categories of charges are considered:

- Basic annual charges: this category of fees is due on a monthly or annual basis. It cannot be linked to any specific services. In other words, it is the charge a consumer has to pay in order to have a current account. This category includes package fees and account maintenance charges;
- Account management charges: this category includes charges related to the management of the account such as the opening and closing fees, the debit interest rate on authorized overdrafts, the access cost and maintenance fees of phone banking and internet banking as well as account movements charges;
- Means of payment related charges: it covers all expenses needed in order to be able to make payments. This includes services for debit cards, delayed debit or credit cards, credit transfers, standing orders, direct debits and checks. For each of these services, different costs are considered (e.g. costs of issuance, maintenance, withdrawals from ATM, setup, cancellation, modification and direct use of these services). Charges linked with means of payment exclude those made over-the-counter;
- Exceptional charges: this category includes all the charges that are incumbent upon specific/exceptional situations and are not related on a daily use of a service i.e. unauthorized overdrafts, insufficient account funds, blocking and replacement of debit and credit cards and cheque bouncing;

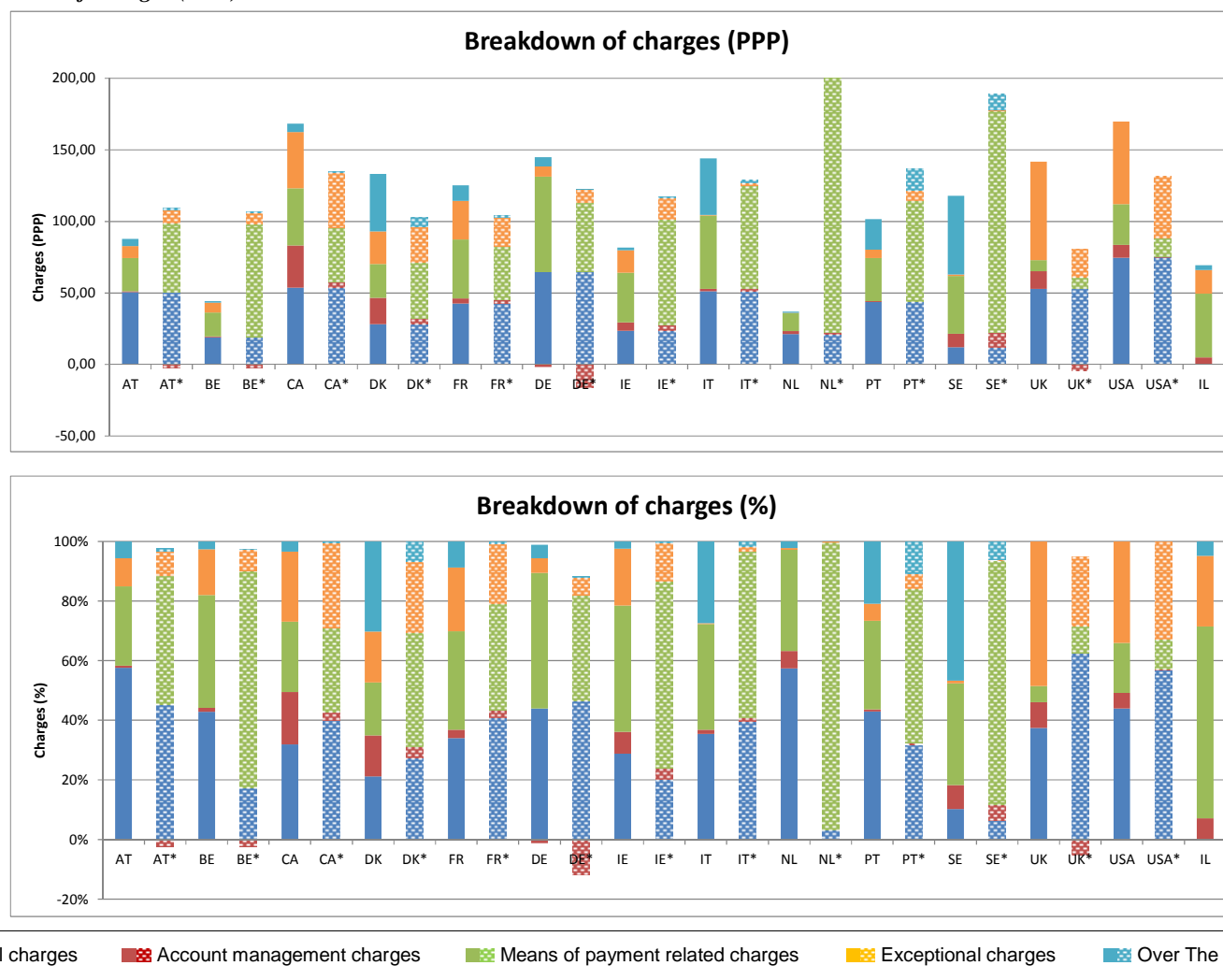
- OTC charges: withdrawals, deposits, credit transfers, standing orders and direct debits made over-the-counter.

The following graphs represent the breakdown of charges in PPP across all countries included in the study. This breakdown has been built on weighted⁵ average costs. An analysis of each category is presented below.

Two sets of data are presented for each country: the plain left bar shows the calculated results based on national usage data and the right hatched bar illustrates the results obtained with Israeli usage data.

⁵ I.e. they are weighted by the market shares of the financial institutions.

Graph 2 – Breakdown of charges (PPP)⁶



⁶ The revised data for The Netherlands exceed the scale of the graph: the total is not \$200 like it appears from the graph but \$678.

Overall, compared to the original exercise, we identify two major changes.

First, Israel profile remains quite unique with the following characteristics:

- Two thirds of its charges relate to means of payments, even if The Netherlands ‘do better’ with 95%, but the reason why has been explained above;
- No basic annual charges, while in all other countries (with the exception of Sweden), basic annual charges are the second most important category of charges.

Second, the difference of profile with the breakdown in other countries is somewhat reduced: in all countries but Germany and the USA, the share of charges related to means of payment increases, reflecting the Israeli more intensive use of means of payment.

Despite the ‘new’ usage data, three categories of charges continue to predominate: basic annual charges, charges related to means of payments and exceptional charges.

Other changes observed are summarised below per category of charges.

BASIC ANNUAL CHARGES

Compared to the original calculation, this category of charges increases its share in Canada, Denmark, France, Germany, Italy, United Kingdom and the USA. In the other countries, the share of these charges decreases.

CHARGES RELATED TO MEANS OF PAYMENT

Means of payment become, with Israeli usage data, the most important category of charges. In 8 out of the 14 countries (Belgium, Denmark, Ireland, Italy, the Netherlands, Portugal, Sweden and Israel), these charges are the most expensive ones. They are driven up by high Israeli usage intensity of some services such as cheques. In the countries mentioned above, charges related to means of payment range from 38% in Denmark to a high 96% in the Netherlands.⁷

EXCEPTIONAL CHARGES

Due to a lower use of unauthorized overdrafts in Israel, exceptional charges considerably decrease in the UK and to a lesser extent in Austria, Belgium and Ireland. In the majority of the other countries, no change is observed compared to the original calculation.

ACCOUNT MANAGEMENT CHARGES

In all countries, account management charges represent a minor share of the charges (less than 7% of the total charges). These charges are significantly lower with Israeli data. They are even negative in Austria, Belgium, Germany, Portugal and the United Kingdom due to credit interests. This is due to the fact that the average balance on an account is much

⁷ Cheques related charges are very expensive in the Netherlands (e.g. more than €20 for lodging a cheque), due to a will to drastically reduce the usage of cheques.

higher with the Israeli usage parameters. This drives up the credit interest on account and, therefore, account management charges decrease.

OTC CHARGES

Overall, charges related to operations made over-the-counter decrease in all countries and especially in Denmark, Italy, Portugal and Sweden. In those countries, OTC charges represent between 18% (in Portugal) and 45% (in Sweden) of total charges when using national usage data. This ratio falls to a maximum of 11% in Portugal when we calculate the cost of having a bank account with Israeli usage data.

CONCLUSION

The conclusions to be drawn from this exercise are as follows.

First, some figures clearly illustrate its artificial character: the best example is the 'skyscraper' level of total charges in The Netherlands which is the cheapest country when considering domestic usage data.

Second, the exercise makes appear Israel as the cheapest country of the sample while with the domestic usage data, Belgium and The Netherlands are significantly cheaper.

Third, overall the dispersion of prices across countries is reduced what can be explained by the fact that differences in usage data do not play a role anymore when only the Israeli usage data are used.

Fourth, when considering the breakdown of charges, the Israeli profile remains unique while the difference with the other countries is somewhat reduced: in all countries but Germany and the USA, the share of charges related to means of payment increases.

Annex: Tables with figures of the graphs

This annex includes tables with all the figures used to create the graphs presented in this report. The tables are named similarly to the corresponding graphs.

Table 1 Comparison of current account prices in PPP (Graph 1)

Comparison of current account prices in PPP					
Country Code	1st quartile	min	weighted average	max	3d quartile
AT	85,31	84,19	87,75	104,92	97,39
AT*	88,32	70,04	106,51	119,91	116,68
BE	43,14	41,36	44,85	49,94	47,77
BE*	69,71	65,14	104,43	172,26	101,58
CA	160,65	152,53	168,28	182,81	175,79
CA*	128,78	115,54	134,66	144,43	143,22
DK	119,98	107,63	133,19	167,86	145,33
DK*	60,81	59,18	102,99	221,63	135,43
FR	122,24	94,51	125,25	151,55	139,96
FR*	95,86	91,34	104,05	129,18	107,71
DE	121,11	109,46	143,17	154,60	145,08
DE*	70,29	69,35	109,01	127,40	110,57
IE	78,26	71,41	81,76	101,06	89,15
IE*	118,81	95,75	117,08	129,65	128,08
IT	121,76	95,67	143,94	180,28	166,29
IT*	102,46	89,84	129,25	148,03	126,33
NL	34,90	34,53	37,00	41,13	38,20
NL*	672,32	650,34	678,44	707,12	700,71
PT	55,16	33,34	101,49	170,72	99,47
PT*	93,94	53,47	136,33	198,98	142,83
SE	90,98	75,04	117,99	142,53	124,73
SE*	173,42	158,66	189,19	203,49	195,83
UK	174,07	22,23	141,59	184,19	178,64
UK*	63,67	15,32	76,18	125,29	111,45
USA	160,69	137,92	169,82	183,95	183,70
USA*	122,78	107,90	131,36	144,97	141,31
IL	65,81	53,92	69,33	97,64	72,89

Table 2 Breakdown of charges (PPP) (Graph 2)

Breakdown of charges (PPP)						
Country code	Basic annual charges (package fee and account maintenance charges)	Account management charges (opening and closing an account, statements, authorised overdrafts, account movements, internet and phone banking and credit interest on positive balance)	Means of payments (debit and credit cards, credit transfers, standing orders, direct debits and cheques) except those made OTC and exceptional charges	Exceptional charges (unauthorised overdrafts, insufficient account funds, blocking and replacing of debit and credit cards, cheque bouncing)	OTC charges (withdrawals and deposits, credit transfers, standing orders and direct debits made over the counter)	Total charges
AT	50,53	0,59	23,38	8,28	4,98	87,75
AT*	50,53	-2,56	48,50	8,76	1,29	106,51
BE	18,98	0,60	16,73	6,83	1,14	44,28
BE*	18,98	-2,77	79,29	7,73	0,26	103,48
CA	53,68	29,51	39,76	39,56	5,77	168,28
CA*	53,68	4,04	38,03	38,50	0,41	134,66
DK	28,22	18,30	23,61	22,78	40,27	133,19
DK*	28,22	3,73	39,62	24,60	6,82	102,99
FR	42,59	3,53	41,32	26,83	10,98	125,25
FR*	42,59	2,49	37,15	20,82	1,00	104,05
DE	64,47	-1,72	66,74	7,16	6,51	143,17
DE*	64,47	-16,35	48,92	8,47	0,45	105,96
IE	23,58	5,96	34,61	15,61	2,00	81,76
IE*	23,58	4,24	73,50	15,29	0,47	117,08
IT	51,07	1,90	51,06	0,47	39,43	143,94
IT*	51,07	1,66	72,09	2,26	2,17	129,25
NL	21,26	2,12	12,56	0,21	0,84	37,00
NL*	21,26	0,88	653,18	3,04	0,08	678,44
PT	43,60	0,74	30,07	5,86	21,22	101,49
PT*	43,60	0,43	70,59	6,94	14,77	136,33
SE	12,03	9,54	40,24	1,13	55,05	117,99
SE*	12,03	10,07	154,87	0,63	11,59	189,19
UK	52,95	12,20	7,83	68,61	0,00	141,59
UK*	52,95	-4,32	7,83	19,72	0,00	76,18
USA	74,66	8,93	28,31	57,93	0,00	169,82
USA*	74,66	0,47	13,25	42,99	0,00	131,36
IL	0,00	4,93	44,62	16,42	3,36	69,33