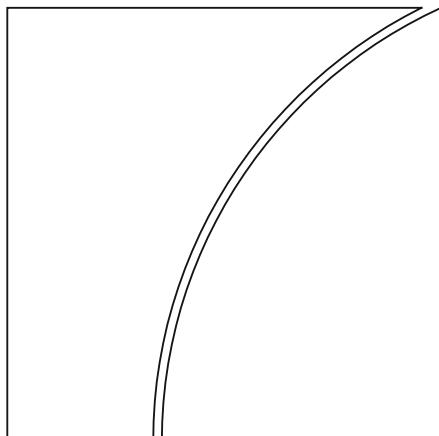


# Committee on Payments and Market Infrastructures



Methodology of the  
statistics on payments  
and financial market  
infrastructures in the  
CPMI countries  
(Red Book statistics)

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## Introduction

### 1. The BIS statistics on payments and financial market infrastructures in the CPMI countries ("Red Book" statistics)

Under the guidance of the Committee on Payments and Market Infrastructures (CPMI) and in cooperation with central banks in CPMI jurisdictions, the BIS compiles statistics on payments and financial market infrastructures. The goal of the so-called "Red Book" statistics is to describe the use of payment instruments and financial market infrastructures in the CPMI jurisdictions over time and across countries.<sup>1</sup>

The Red Book statistics comprise two sets of tables: tables dedicated to individual jurisdictions ("country tables") and tables where key data from different countries are combined ("comparative tables"). Both sets of tables have five sections which capture different aspects of the payments and post-trading industry.

The first section includes general macroeconomic statistics useful to relate the size of a country's payment industry to the size of its economic activity. It also includes figures on the stock of money that end users can use to perform payments. In particular, in this section the reader can find figures on banknotes and coins in circulation and on the narrow money supply, useful for estimating countries' cash payments.

The second section provides information on the supply and use of retail payments. It includes figures on institutions offering payment services to end users (Table 3) and on cards and terminals offered to end users to perform payments (Table 4). Tables 5 and 6 shed light on end users' demand for retail payments with information on cashless payments (part A) and on deposits/withdrawals (part B).

The last three sections are dedicated to financial market infrastructures (FMIs) and their critical service providers. They detail the number of members and some other quantitative characteristics of the financial market infrastructures, as well as their overall settlement/clearing activity. Tables 10 and 11 give information on the flows of messages that support the payment industry.

Qualitative features of card schemes, payment systems, central counterparties and clearing houses, central securities depositories and trade repositories are included in the comparative tables.

The comparative tables also have a sixth section which includes qualitative features of trade repositories.

### 2. Revisions and enhancements introduced in the Red Book statistics

In 2017 the Red Book statistics were revised and enhanced to keep up to date with changes and developments in the area of payments and FMIs.

In the previous decade, the role of non-banks and technological innovation in retail payments substantially changed the types of payment solutions on offer and the demand for cashless payments. The revised Red Book statistics shed light on the number of non-banks active in the retail payment market and their role in issuing cards and e-money.

The Red Book now also includes statistics on online and contactless payments: their volume and value, as well as the number of cards that facilitate them. Fast payments continue to develop, and the Red Book statistics will track their evolution with figures on their use by end users and the activity of payment systems that settle them.

<sup>1</sup> In the rest of this document and in the statistical tables, the term "country" is used to refer to individual CPMI jurisdictions.

Moreover, the concept of cards has been expanded to take into account technological innovation. While 10 years ago only “plastic cards” endowed with information to perform a payment were counted, nowadays cards supported by other physical devices (eg smartphones, watches, tags) or that are not necessarily associated with any physical device are also counted.

Finally, the Red Book statistics now also include qualitative information on card schemes and trade repositories located or offering services in a given country.

Not only have new trends emerged in the past decade due to technological and market innovation, but existing ones have also become obsolete. Therefore, the revised Red Book statistics, for example, no longer differentiate the value of e-money into e-money stored on card-based products and e-money stored on software- or network-based products. Also, the statistics are now focused on retail payment markets and FMIs: figures on trading platform activity have been removed. Instead, qualitative information on the connections between trading platforms and central counterparties have been added to the CCP comparative tables.

### 3. The Red Book methodology

This methodology provides users and reporting central banks with descriptions of the Red Book statistics. It describes the terms that are frequently used in the tables at the beginning of the retail payment section (A.2) and payment system section (A.3). These descriptions have the sole goal of facilitating the data collection and helping the interpretation of the content of the tables. They may therefore differ from policy definitions included in the [CPMI Glossary](#) or reports published by the CPMI.

The introductory notes in each table and the description of individual items clarify what the figures reported using those terms include and exclude.

The methodology facilitates the compilation of jurisdictional data in a consistent and comparable way. Nevertheless, payment instruments, financial market infrastructures and data collection practices vary across countries. Users are invited to interpret the Red Book statistics using the methodology as well as the footnotes included in each table.

An [outline of the new structure of the statistical tables](#) illustrates the relationship between the country tables' individual items and provides numerical examples.

So far, the methodology has been published at the end of each Red Book PDF publication. From now on, it will be published as a standalone document.

In addition, the official name of the Red Book has been changed from “Statistics on payments, clearing and settlement systems” to “Statistics on payments and financial market infrastructures” to reflect the change in the mandate and name of the Committee (from Committee on Payment and Settlement Systems (CPSS) to Committee on Payments and Market Infrastructures (CPMI)).<sup>2</sup>

### 4. General comments

<i>Exceptions</i>	Data in the tables conform to this methodology unless otherwise indicated in the table concerned. However, it should be noted that varying methods of collecting data can also complicate cross-country comparisons.
<i>Breaks in series</i>	Where these occur, they are indicated by a footnote. Footnotes may also explain substantial variations in the series.

<sup>2</sup> See [www.bis.org/cpmi/info.htm?m=3%7C16%7C29](http://www.bis.org/cpmi/info.htm?m=3%7C16%7C29).

<i>Sources of data</i>	These are indicated under the table concerned where appropriate.
<i>Time period</i>	Each table indicates the period (eg calendar year) or point in time (eg end-year) for which the data are presented. The data are totals unless the table explicitly indicates otherwise (eg a daily average).
<i>Estimated data</i>	Where data are broadly estimated and thus only indicative, this is indicated in a footnote.
<i>Seasonal adjustment</i>	Figures are not seasonally adjusted unless otherwise indicated.
<i>".", "... and "0"</i>	Where data are not applicable (ie the category does not exist in the reporting country), this is indicated by ".". Where data are not available (ie the category exists, but data are not available), this is indicated by "...". Where data are exactly zero or none this is indicated by "0".

## Part A: Statistical methodology for the country tables

Country tables include highly aggregated figures and – in most cases – their components for individual CPMI jurisdictions. For example, the total number of cards (ie the highly aggregated figure) is broken down by function (ie the decomposition dimension) into cards with a cash function, cards with a debit function, cards with a delayed debit function, cards with a credit function and cards with an e-money function (ie the components/subcategories). The methodology illustrates the decomposition in the lines immediately following the aggregated figure and visualises it by indenting the more granular information. A headline in bold (for example, "Breakdown of '*total number of cards*' by function") specifies the dimension along which the aggregated figure is decomposed and how the different components are then listed. Breakdowns contain components that are mutually exclusive and exhaustive, unless otherwise indicated.

The same highly aggregated figure may be decomposed along several dimensions (for example, "Breakdown of '*total number of cards*' by function" and "Breakdown of '*total number of cards*' by technology"). Whenever the categories of a decomposition are not exhaustive (partial breakdowns), these are introduced by '*of which*'.

A breakdown category can be decomposed into further subcategories: for example, in the tables 5 and 6 '*total cashless payments*' are first broken down by instrument type and the first category of this breakdown, '*credit transfers*', is further broken down into domestic and cross-border sent. A new headline in bold specifies which category is further decomposed and how (in the previous example, "Breakdown of '*credit transfers*' into domestic and cross-border"). The subcategories are then listed (in this example, '*domestic*' and '*cross-border sent*'). The new headline and the subcategories are further indented.

The highly aggregated figures are designed to avoid double-counting across countries. In addition, some tables are enriched with figures that are not part of the grand total but which provide additional context for the data. For example, while the total sum of payments reported by a country is comprised of domestic payments and cross-border payments where value is sent to a foreign country, this figure is complemented with data on cross-border payments where value is received from a foreign country. These additional figures are identified as memo items and indicated in grey.

Stock data are collected at annual frequency with reference date end-December, except when specified otherwise. Payment/transaction data cover the whole calendar year and represent totals for the year, except when specified otherwise. Stock data denominated in a currency other than the reporting country's currency is converted to the reporting country's currency using the exchange rate on the last business day of the year. Where it is specified that the payment/transaction denominated in a currency other than the reporting country's currency is included in the table, data are converted to the reporting country's currency using the exchange rate on the day of the payment/transaction. As a proxy, the monthly average exchange rates can also be used.

## A.1 Stock of money available for payments and general macroeconomic data

**Table 1: Basic statistical data**

GDP	Nominal GDP.
Population	Average for the year (computed as the average of two point values at the start and end of the year, or otherwise).
GDP per capita	GDP divided by population.
CPI inflation	Changes in the price of consumer goods and services (yearly averages of monthly values), in per cent.
Exchange rate (domestic currency vis-à-vis USD)	Provided both as a year-end value and as an average for the year.

**Table 2: Stock of money available for payments**

Narrow money supply (M1)	Cash in circulation outside banks (banknotes and coins) and all balances that can immediately be converted into currency or used for cashless payments.
<b>Breakdown of "narrow money supply (M1)" by component</b>	
Banknotes and coins (or currency) in circulation outside banks	The value of cash in circulation in the economy. This item is also one of the subcategories of "total banknotes and coins in circulation" broken down by holder.  <b>Included:</b> <ul style="list-style-type: none"> <li>• Banknotes and coins held by non-residents.</li> </ul> <b>Excluded:</b> <ul style="list-style-type: none"> <li>• Banknotes and coins kept in central banks' or banks' vaults.</li> <li>• Commemorative coins, because they are not commonly used for payments. Countries may specify stock of commemorative coins in a footnote.</li> </ul>
Overnight deposits by other than banks	Overnight deposits by other than banks which are resident in the country, denominated in domestic currency.
Other	Items other than banknotes and coins and overnight deposits included in "narrow money supply (M1)".
Total banknotes and coins in circulation	Outstanding value of banknotes and coins, as of the end of the year.  <b>Included:</b> <ul style="list-style-type: none"> <li>• Banknotes and coins held at banks.</li> </ul> <b>Excluded:</b> <ul style="list-style-type: none"> <li>• Banknotes and coins kept in central banks' or treasury departments' vaults.</li> </ul>

	<ul style="list-style-type: none"> <li>• Commemorative coins, because they are not commonly used for payments.</li> </ul>
<b>Breakdown of "total banknotes and coins in circulation" by holder</b>	
<i>Banknotes and coins (or currency) in circulation outside banks</i>	<p>The value of cash in circulation in the economy. This item is also one of the subcategories of "narrow money supply (M1)" broken down by component.</p> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Banknotes and coins held by non-residents.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Banknotes and coins kept in central banks' vaults or banks' vaults.</li> <li>• Commemorative coins because they are not commonly used to make payments.</li> </ul>
<i>Banknotes and coins held by banks</i>	Banknotes and coins kept in banks' vaults and thus not in circulation among the public.
<b>Breakdown of "total banknotes and coins in circulation" into banknotes and coins</b>	
<i>Total banknotes in circulation</i>	Value of banknotes which are part of the liabilities of the central bank; a breakdown by denomination is provided.
<i>Total coins in circulation</i>	Value of coins; a breakdown by denomination is provided.
Memo: Banknotes and coins withdrawn from the circulation	Total value of banknotes and coins withdrawn from circulation during the year.
<i>Bank deposits held at the central bank</i>	Deposits held by banks at the central bank which can be used for payments, regardless of the type of account (eg current account, reserve account, settlement account, clearing account).
<b>Breakdown of "bank deposits held at the central bank" into required and free reserves</b>	
<i>Required reserves</i>	Funds that banks are required to hold at the central bank. If only part of the required reserves can be used for payment purposes, that amount is indicated here.
<i>Free reserves</i>	Funds held voluntarily at the central bank that can be used for payments.
<i>Interbank deposits</i>	Banks' deposits held at banks in the country (not at the central bank) which are convertible into currency and/or can be used for payment purposes.
<i>Intraday credit extended by the central bank</i>	Credit extended by the central bank for a period of less than one business day. It is calculated as the average of the daily maximum value of simultaneous intraday overdraft positions or drawings on intraday credit facilities during the day for the aggregate of all banks, over the opening days of the large-value payment system.

## A.2 Retail payment services and instruments

### Descriptions

For the purpose of the Red Book statistics:

- *Account information service providers* are entities offering a service to provide consolidated online information on one (or more) payment account(s) held by end users with one (or more) other entity(ies) offering payment services.
- *Automated teller machines (ATMs)* are terminals that allow authorised users, typically by using a card, to access a range of services such as cash withdrawals, balance enquiries, transfers of funds and/or acceptance of deposits. Note that not all ATMs need to have cash withdrawal functionality.
- *ATM acquirers* are entities that are in a contractual relationship with the owner of the ATM and transfer payment-related data from the ATM, where the cash withdrawal occurs, to the issuer of the payment instrument, including data related to the authorisation of the cash withdrawal. Technical service providers, such as the ones offering mere processing and storage of data or operating ATMs, are not considered *ATM acquirers*.
- *Banks* are financial institutions whose business is to receive deposits, or close substitutes for deposits, and to grant credits or to invest in securities on their own account. For the purpose of this data collection, banks are institutions that are licensed as banks according to the jurisdiction's legal framework. Money market funds, investment funds and pension funds are excluded from this category.
- *Cards* are payment instruments based on a unique number that can be used to initiate a payment, cash withdrawal or cash deposit that is processed using/over a card scheme or – for withdrawals and deposits at the ATM – within the network operated by the issuer of the card. The number can be stored on a plastic card (one of the traditional meanings of the word "card"), on another physical device (eg key tag, sticker, smartphone) or can be held virtually without a physical device.
- *Card schemes* are a single set of rules, practices, standards and/or implementation guidelines for the execution of card payments.
- *Cheques* are payment instruments based on written orders 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. Cheques include traveller's cheques and banker's drafts.
- *Chips* are microprocessors embedded on a physical device, which are loaded with the information necessary to transmit payment information.
- *Contactless technology* allows for the transmission of payment information from a physical device to the terminals at the point of sale or ATM without the need for physical contact between the physical device and the terminal. Information used for contactless payments can be stored on a chip, plastic card or other physical device (eg smartphone, key tag, sticker, watch). For the purpose of this data collection, the concept of contactless extends beyond that of near field communication and also includes other forms of technology applied to perform contactless payments, eg Bluetooth low-energy and QR codes.
- *Credit transfers* are payment instruments based on payment orders or possibly sequences of payment orders made for the purpose of placing funds at the disposal of the payee. Both the payment orders and the funds move from the payer's institution to the payee's institution, possibly via several other institutions as intermediaries and/or one or more payment systems.

- *Device-present payments* are payments in which a physical device, loaded with the information necessary to perform payments, is physically present near the physical terminal at the time the payment is initiated. Contactless payments at POS (see below) terminals are considered device-present payments.
- *Device-not-present payments* (also called remote payments) are payments wherein the device, loaded with the information necessary to perform payments, is not physically present near the physical terminal at the time the payment is initiated (eg payments initiated via internet, mail order, mail, phone or fax, or card payments initiated by entering the card number on an EFTPOS (see below) terminal). This includes cases where the end user is present at the merchant's location, but the device is not physically present near the physical terminal at the time the payment is initiated (eg when a restaurant bill is charged to the credit card used for the reservation and no device is physically provided at the moment of payment).
- *Direct debits* are payment instruments based on preauthorised debits, possibly recurrent, of the payer's account by the payee.
- *Electronic funds transfer at the point of sale (EFTPOS) terminals* are point of sale terminals that can capture payment information electronically. This includes unattended terminals such as vending machines.
- *End users* are users of payment services as opposed to institutions offering payment services, for example consumers, corporates and merchants. The institutions providing payment services are also end users whenever they use payment services offered by others for their own retail payments (eg utility bills and salaries).
- *E-money* is prepaid value stored electronically, which represents a liability of the e-money issuer (a bank, an e-money institution or any other entity authorised or allowed to issue e-money in the local jurisdiction) and which is denominated in a currency backed by an authority. The aggregate does not include value of digital currencies as per the 2015 CPMI report "Digital currencies". For the purpose of this data collection, prepaid value stored electronically that is accepted only by the issuer (single-purpose) or by the issuer and a limited number of organisations/merchants, at a limited range of locations or for a limited number of purposes (limited uses) are not included under e-money.
- *E-money institutions* are legal entities other than banks which issue e-money, where applicable authorised based on the relevant legislation.
- *E-money issuers* include banks that issue e-money, e-money institutions and - if applicable - central banks and government issuing e-money.
- *E-money loadings* are transactions wherein funds are stored as e-money value (either from cash or from a payment account).
- *E-money unloadings* are transactions in which funds are withdrawn from an e-money storage (either into cash or to a payment account).
- *E-money payments* are payments where the holder of e-money transfers e-money value from his/her balance to the balance of the payee.
- *Fast payments* are payments in which the transmission of the payment message and the availability of "final" funds to the payee occur in real time or near-real time and on as near to a 24-hour and seven-day (24/7) basis as possible. Specific examples are available in Annex 2 of the 2016 CPMI report "Fast payments – Enhancing the speed and availability of retail payments".
- *Government* includes the central government, state government, local government and social security funds. In addition, it includes non-profit institutions engaged in non-market production

that are controlled and mainly financed by government units and social security funds. Central banks, other official monetary authorities and public corporations are not part of the government.

- *Issuers of payment instruments* are entities that (i) make payment instruments directly available to end users, (ii) authorise payments (at physical or online points of sale, or at ATMs) and (iii) in the case of card payments, guarantee payments to the acquirers.
- *Magstripes* are magnetic stripes on the back of a plastic card, which are loaded with information relevant to perform a payment.
- *Merchant acquirers* are entities responsible for (i) collecting from the payee (ie the merchant) all the information necessary to process the payment, and (ii) the subsequent transfer of the payment amount to the payee.
- *Money remittances* are payment services where funds are received from a payer, without any payment accounts being created in the name of the payer or the payee, for the sole purpose of transferring a corresponding amount to a payee or to another institution offering payment services that is acting on behalf of the payee, and/or where such funds are received on behalf of and made available to the payee.
- *Non-banks offering payment services/instruments* are entities not licensed as banks according to their jurisdiction's legal framework which offer payment services. This may include the government if it offers payment services. This concept applies only for the purpose of this data collection and differs from the definition included in the 2014 CPMI report "Non-banks in retail payments".
- *Non-electronic funds transfer at the point of sale (non-EFTPOS) terminals* are point of sale terminals that capture payment information by paper voucher (eg paper voucher imprinters).
- *On-us payments* are payments in which the payer's and payee's accounts are held by the same institution. In the case of card payments, this means that the issuer of payment cards and the acquirer are the same institution.
- *Payment accounts* are accounts where deposits or stored values which are convertible into currency and/or transferable on demand without significant delay, restriction or penalty are held in the name of one or more end users. The value can be used for payments (ie can be debited directly using one of the payment services/instruments mentioned in Tables 5 and 6). This excludes savings accounts; it may include time deposits. It also excludes credit card accounts that cannot be debited using one of the payment services/instruments mentioned in Tables 5 and 6.
- *Payment instruments* are credit transfers, direct debits, card payments, e-money payments and cheques.
- *Payment initiation service providers* are entities offering a service to initiate a payment at the request of the end user, accessing value stored on payment accounts held at another institution offering payment services.
- *Payment services* refer to any service that is required for payments or facilitates them.
- *Point of sale (POS) terminals* are devices typically used at a retail location to capture payment information electronically and – in some cases – on paper vouchers.
- *Retail payments* are payments where at least one of the parties is an end user. This includes payments by institutions offering payment services when they use payment services offered by others to pay their own utility bills, salaries etc.
- *Stored value* consists of either value stored in a payment account or e-money value. The aggregate does not include outstanding values of digital currencies as per the 2015 CPMI report "Digital currencies".

- *Storage of value* offers the possibility to store value in payment accounts or on devices.
- *Tokenisation* is the process of replacing sensitive data (eg account or card number) with unique identifiers (ie tokens) that either replace or mask attributes associated with the original data.

**Table 3: Institutions offering payment services/instruments**

The objective of this table is to provide an overview of the different categories of institutions offering payment services and instruments to end-users.

**Notes:**

- Each institution is counted only in the country of residence, independently from the countries where it offers services/instruments and irrespective of whether it is domestically or foreign-owned.
- Subsidiaries of foreign banks with legal personality in the reporting country are counted alongside domestic banks.

**Excluded:**

- Payment systems – data on payment systems are reported in Tables 7–9.
- Card schemes that are not also issuers of payment instruments. The full list of card schemes is reported in comparative table CS.

**Categories of institutions:**Main categories:

- Categories are mutually exclusive: when an entity is counted as a bank, it is not counted in any other category, even if it also offers the same services as non-banks listed in other categories.
- Categories are:
  1. Central bank
  2. Banks
  3. Non-banks offering payment services/instruments
- If any category requires specific explanation, a footnote is provided.

Subcategories of banks:

- Subcategories of banks are based on an individual country's payment industry and are ranked according to their importance in that industry.

Subcategories of non-banks offering payment services/instruments:

- Include non-banks offering storage of value (in a payment account or on a device) and non-banks not offering storage of value but relying on storage of value (in a payment account or on a device) offered by others.
- Subcategories are mutually exclusive, and a non-bank is classified in the first subcategory for which it offers services. For example, if a non-bank offers storage of value (in a payment account or on a device), it is counted in subcategory "*non-banks offering storage of value*", even if it also offers payment services that rely on storage of value (in a payment account or on a device) offered by others.
- Subcategories:
  - a) Non-banks offering storage of value (in a payment account or on a device) are, for example:
    - Non-bank e-money institutions
    - Post office giro institutions allowed by national law to offer payment services
  - b) Non-banks not offering storage of value but relying on storage of value (in a payment account or on a device) offered by others are, for example:

- Non-bank merchant acquirers
- Non-bank ATM acquirers
- Non-bank account information service providers
- Non-bank payment initiation service providers

<b>Total number of institutions offering payment services/instruments</b>	
<b>Breakdown of "total number of institutions offering payment services/instruments" by category</b>	Category of the institution offering payment services/instruments.
Central bank	
Banks	<p>Subcategories of banks are based on an individual country's payment industry and are ranked according to their importance in that industry.</p> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Foreign-owned banks: banks in which individuals or legal entities that are resident outside the country and that have a qualified participation in the bank directly or indirectly hold more than half the banks' voting shares or exercise a controlling interest in any other manner.</li> <li>• Banking subsidiaries of foreign banks: banks resident in the reporting country that are separate legal entities from their owners, which are resident outside the reporting country and incorporated abroad as banks.</li> <li>• Branches of foreign banks: banking offices wholly owned by a controlling parent bank resident outside the country.</li> </ul>
<b>Breakdown of "banks" by subcategory</b>	
Bank type I	
Bank type II	
Bank type III	
Bank type IV	
Branches of foreign banks	Banking offices wholly owned by a controlling parent institution resident outside the reporting country. Excludes banking subsidiaries of foreign banks. Some countries may count all branches of the same foreign bank as one single unit: should this be the case, a footnote will be provided.
Non-banks offering payment services/instruments	A footnote is provided if the figure also includes the government offering payment instruments/services. Countries that include in this item both licensed and unlicensed non-banks offering payment services/instruments specify in a footnote the number of unlicensed ones
<b>Breakdown of "non-banks offering payment services/instruments" by subcategory</b>	
Non-banks offering storage of value (in a payment account or on a device)	
Non-banks relying on storage of value (in a payment account or on a device) offered by others	

<b>For each category and subcategory, unless specified otherwise:</b>	
<i>Total number of entities</i>	Total number of entities for each category and subcategory, other than "central bank".
<i>Number of branches or offices</i>	Only for "central bank", "banks", all subcategories of "banks" and "non-banks offering storage of value (in a payment account or on a device)": all places of business of an institution headquartered in the country that offer cash and/or cashless payment services to end users. The head office of the institution is counted as an office if it offers such services.
<i>Number of payment accounts</i>	Only for "banks" and "non-banks offering storage of value (in a payment account or on a device)".
<b>Partial breakdown of "banks, number of payment accounts"</b>	
<i>Of which: internet-linked</i>	Only for the category "banks": number of payment accounts that can be accessed via the internet (with an app or a browser-based solution), regardless of the device used to access the account.
<i>Value of payment accounts</i>	Only for the categories "central bank", "banks" and "non-banks offering storage of value (in a payment account or on a device)": the aggregate amount of funds held by end users.
Memo: Focus on e-money	
Total number of e-money issuers	The total number of institutions that have issued e-money is included as a memo item. These may be banks issuing e-money and non-banks issuing e-money (e-money institutions, other e-money issuers like central banks or the government, if applicable).
<b>Partial breakdown of "total number of e-money issuers" by type of institution</b>	
<i>Of which: non-banks</i>	Number of non-banks that have issued e-money during the reference calendar year.
Total outstanding e-money value	The total of all outstanding e-money value issued by e-money issuers. A footnote is provided if the figure also includes prepaid value with limited uses, ie it is accepted only by the issuer, or by the issuer and a limited number of organisations/merchants, or at a limited range of locations or for a limited number of purposes.
<b>Partial breakdown of "total outstanding e-money value" by type of institution</b>	
<i>Of which: issued by a non-bank</i>	The outstanding e-money value issued by non-banks.

**Table 4: Payment cards and terminals**

The objective of this table is to provide the number of cards issued by institutions offering payment services/instruments resident in a country, as well as the number of terminals (POS terminals and ATMs) in a country.

**PART A. Number of cards****Notes:**

- For the purpose of this data collection, counting cards means counting unique card numbers, irrespective of the device used to store those card numbers. Besides plastic cards, card numbers can be stored on other physical devices (eg key tags, stickers, smartphones) or held virtually without a physical device. For example, if a card number is stored on a plastic card, key tag and smartphone, it is counted as a single card. Countries that include card numbers stored on physical devices only or count card numbers held virtually without a physical device in a different way specify this in a footnote.
- Each card with a unique card number is counted separately, even if multiple cards are linked to the same account.
- Cards are counted on the issuing side, meaning that the defining criterion is the residency of the issuer of payment cards, not the residency of the card holder (the payer). Each country reports the number of cards that have been issued by institutions offering payment services/instruments resident inside the country (and used for payments inside and outside the country) and not the number of cards used inside the country or the number of cards held by residents of the country.
- In the context of digital (and one-time) tokens generated from one card number, the number of generated tokens is not counted, but rather the number of card numbers which are linked to those tokens. For example, if digital tokens generated on a smartphone, a tablet and a computer all refer to the same card number, this counts as one single unit to be included under "*total number of cards*".
- If a card has multiple functions (eg debit and credit), it is included just once under "*total number of cards*". In the breakdown of "*total number of cards*" by function (eg "*cards with a debit function*", "*cards with a credit function*"), a card with multiple functions (eg debit and credit) is counted in each relevant subcategory. Therefore, in general, the figures of the individual subcategories should not be added because of the risk of double-counting. In cases where certain functions are not broken out separately but grouped together (for example, when a jurisdiction can only report the combined number of "*cards with a debit function*" and "*cards with a delayed debit function*"), this is specified in a footnote.

**Included:**

- All valid cards, irrespective of when they were issued and how actively they are used.

**Excluded:**

- Expired or withdrawn cards.

<b>Total number of cards issued in the country</b>	
<b>Breakdown of “total number of cards” by function</b>	<p><b>Note:</b> Categories are not mutually exclusive.</p>
<i>Cards with a cash function</i>	Number of cards enabling the holder to perform cash withdrawal/deposit transactions.
<i>Cards with a debit function</i>	<p>Number of cards enabling the holder to fund their payments directly charging them to value stored in the holder’s payment account. Such a payment account is typically held at a bank.</p> <p>If no distinction is possible between cards with a debit function and those with a delayed debit function, the latter are included in this item and a footnote is provided.</p>
<i>Cards with a delayed debit function</i>	<p>Number of cards enabling the holder to fund their payments up to an authorised limit by charging their account with the issuer of the payment card. These cards do not offer extended credit. The full amount of the debt incurred has to be settled at the end of a specified period. In some regions these are also called charge cards.</p>
<i>Cards with a credit function</i>	<p>Number of cards enabling the holder to fund their payments up to an authorised limit by using a line of credit that has been granted to them. 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.</p> <p>If no distinction is possible between cards with a credit function and those with a delayed debit function, the latter are included in this item and a footnote is provided.</p>
<i>Cards with an e-money function</i>	<p>Number of cards used to access and store outstanding e-money value.</p> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Cards with an e-money function issued by an issuer of payment cards resident inside the country, under a domestic or an international card scheme. Where these cards cannot be reported separately but are instead reported under “cards with a credit function”, “cards with a debit function” or “cards with a delayed debit function” issued by the same card scheme, a footnote is provided.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Prepaid cards with limited uses, ie cards that are accepted only by the issuer, or by the issuer and a limited number of merchants, or at a limited range of locations or for a limited number of purposes.</li> </ul> <p>Countries with a significant number of prepaid cards with limited usage may specify their number in a footnote.</p>
<b>Partial breakdown of “total number of cards” by technology</b>	<p>The way information stored on the card can be communicated to initiate the payment.</p> <p>Categories of this partial breakdown are not mutually exclusive.</p>
<i>Of which: contactless</i>	Information can be communicated using contactless technology (eg NFC technology, Bluetooth low-energy technology, QR codes).
<i>Of which: magstripe</i>	Information can be communicated by a magnetic stripe on a physical device.

<b>Partial breakdown of “total number of cards” by issuer</b>	Nature of the issuer of the payment card.
<i>Of which: by a non-bank</i>	Card was issued by a non-bank. A footnote is provided if the figure includes the number of cards issued by the government. Countries with a significant number of cards issued by the government may also specify their number in the same footnote.
<b>Partial breakdown of “total number of cards” by ability to initiate device-not-present payments</b>	This breakdown captures if a card can be used to initiate device-not-present payments.
<i>Of which: able to initiate device-not-present payments</i>	

## *PART B. Number of terminals*

### **POS terminals**

#### **Notes:**

- All POS terminals located in a country are included, regardless of the residency of the institution providing the terminals or the merchant acquirer.
- Only terminals that enable device-present payments are included. Virtual POS terminals accepting device-not-present payments (eg POS terminals for payments at internet stores) are not included.
- Each single POS terminal is counted separately, independently from the existence of several terminals within one merchant location. Countries that deviate from this formula specify this in a footnote.

### **ATMs**

#### **Notes:**

- All terminals located in a country are included, regardless of the residency of the institution providing the terminals or the ATM acquirer.
- A terminal allowing only balance enquiries does not qualify as an ATM.
- Each ATM is counted once, independently from the existence of several terminals within one location (including ATMs located at bank branches). Countries that deviate from this formula specify this in a footnote.
- In "*total number of ATMs*", each ATM is counted once, irrespective of its functions. In the breakdown by function, an ATM with multiple functions (eg cash withdrawal, cash deposit and credit transfer functions) is also counted in each relevant subcategory. Therefore, in general, the figures of the individual subcategories should not be added because of the risk of double-counting.

<b>Total number of POS terminals</b>	
<b>Breakdown of "total number of POS terminals" by terminal type</b>	The technology underpinning the POS terminal.
<i>Of which: EFTPOS terminals</i>	
<b>Partial breakdown of "EFTPOS terminals" by technology</b>	
<i>Of which: contactless</i>	Number of EFTPOS terminals that can receive information to initiate a payment in a contactless way or that can issue QR codes to be scanned by the end user to initiate a payment.
<b>Total number of ATMs</b>	
<b>Partial breakdown of "total number of ATMs" by function</b>	Functionality available at ATMs. <b>Note:</b> Categories are not mutually exclusive.
<i>Cash withdrawal</i>	ATMs allowing end users to withdraw cash from their payment accounts.
<i>Cash deposit</i>	ATMs allowing end users to deposit cash into their payment accounts (this may include depositing cheques at ATMs).
<i>Credit transfer</i>	ATMs allowing end users to make credit transfers.
<b>Partial breakdown of "total number of ATMs" by technology</b>	The way information can be communicated to initiate the payment.
<i>Of which: contactless</i>	ATMs that can receive information to initiate a payment or a cash withdrawal from a device that does not have physical contact with the ATM but is in proximity of the ATM, or ATMs that issue QR codes (eg to be scanned by the end user to initiate a cash withdrawal or credit transfer).

## **Tables 5 and 6: Indicators of the use of payment services/instruments and of deposit/withdrawal transactions (volume and value)**

The objective of these tables is to provide the volume and value of cashless payments (part A) and the volume and value of deposit and withdrawal transactions (part B).

### *PART A: Volume and value of payments*

#### **Notes:**

- Only retail payments are included.
- If a country is able to retrieve data of the use of payment services and instruments only from a sample of institutions offering payment services/instruments to end users, it will extrapolate from such data and report the overall figure covering the whole volume and value of cashless payment services in the country. If this is the case, a footnote specifies that the total volume/value is an estimate.
- Payments initiated with the help of physical devices such as mobile phones are classified according to the instrument type used to perform the payment. For example, if an end user initiates a credit transfer using their bank's mobile banking application, this is counted as a "*credit transfer*"; if they pay at a store by transmitting the payment card information stored on their mobile phone using contactless technology, this is counted as a "*card payment*"; if they initiate a transfer of e-money value using the e-money issuer's mobile application, this is counted as an "*e-money payment*".
- The guiding criterion to include a payment in a country's total is that the value used to perform such payment originates from that country; ie the value either stays within the country ("*domestic*") or is directed to a different country ("*cross-border sent*"). This criterion also applies for direct debits where the direction of funds determines a payment to be "*cross-border sent*" or "*cross-border received*" (and not the direction of the message, which is the opposite of the flow of funds in the context of direct debits).
- In addition, a memo item provides information on the payments that a country receives *from* other countries ("*cross-border received*").
- The guiding criterion for determining if a payment is considered domestic or cross-border is the residency of the payer's and payee's institutions offering payment services or instruments and the location of terminal where the payment is initiated. The residency of the payer or payee does not play a role in determining whether a payment is considered domestic or cross-border.
- The table below summarises two key aspects for classifying cashless payments as domestic or cross-border: (i) for each payment instrument, whether the residency of the payer/payee's institutions or the location of the terminal is the determining factor; and (ii) where the institution is resident or where the terminal is located:

Type of payment instrument	First determining factor to be considered (on the payer's side)	Second determining factor to be considered (on the payee's side)
Credit transfers / direct debits	Residency of institution where the <i>payer's payment account</i> is held	Residency of institution where the <i>payee's payment account</i> is held
Card payments	Residency of <i>card-issuing institution</i>	For device-present card payments: location of the <i>terminal</i> For device-not-present card payments: residency of institution where the <i>payee's payment account</i> is held

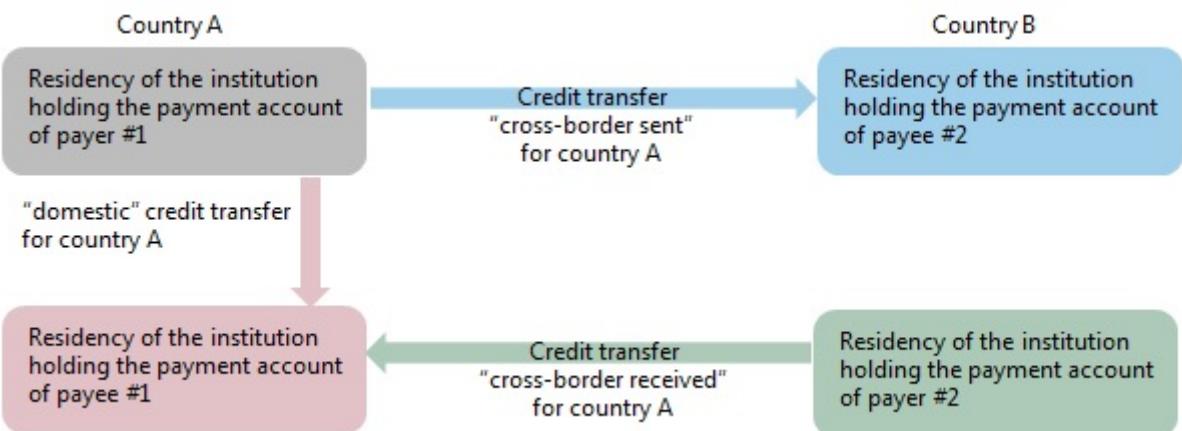
e-money payments	Residency of the <i>e-money issuer</i>	For device-present e-money payments: location of the <i>terminal</i> For device-not-present e-money payments: residency of institution where the <i>payee's payment account</i> is held
Domestic or cross-border payment	Condition to be met by the first determining factor	Condition to be met by the second determining factor
Domestic	Inside the country	Inside the country
Cross-border sent	Inside the country	Outside the country
Cross-border received	Outside the country	Inside the country

For example, for credit transfers (see Graph 1):

- If payer #1, whose payment account is held by an institution resident in country A, sends a credit transfer to payee #1, whose payment account is held by an institution resident in the same country (country A), the credit transfer is considered as *domestic* by the country (country A).
- If payer #1, whose payment account is held by an institution resident in country A, sends a credit transfer to payee #2, whose payment account is held at an institution resident in country B, the credit transfer is considered as *cross-border sent* by country A.
- If payer #2, whose payment account is held at an institution resident in country B, sends a credit transfer to payee #1, whose payment account is held at an institution resident in country A, the credit transfer is considered as *cross-border received* by country A.

Illustration of credit transfer flows (domestic and cross-border) from the perspective of country A

Graph 1



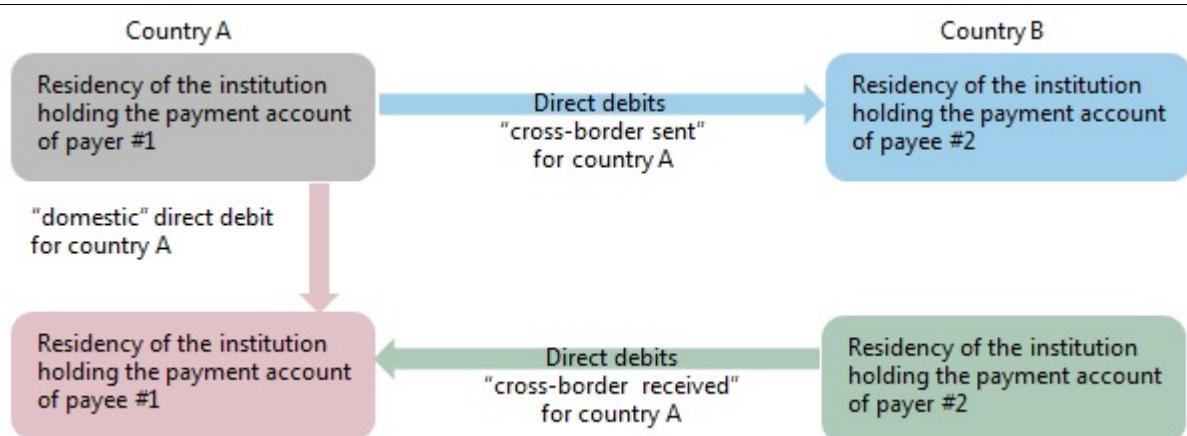
For example, for direct debits (see Graph 2):

- If payer #1, whose payment account is held at an institution resident in country A, authorises a direct debit requested by payee #1, whose payment account is held at an institution resident in the same country (country A), the direct debit is considered as *domestic* by country A.

- If payer #1, whose payment account is held at an institution resident in country A, authorises a direct debit requested by payee #2, whose payment account is held at an institution resident in country B, the direct debit is considered as *cross-border sent* by country A.
- If payer #2, whose payment account is held at an institution resident in country B, authorises a direct debit requested by payee #1, whose payment account is held at an institution resident in country A, the direct debit is considered as *cross-border received* by country A.

Illustration of direct debit flows (domestic and cross-border) from the perspective of country A

Graph 2



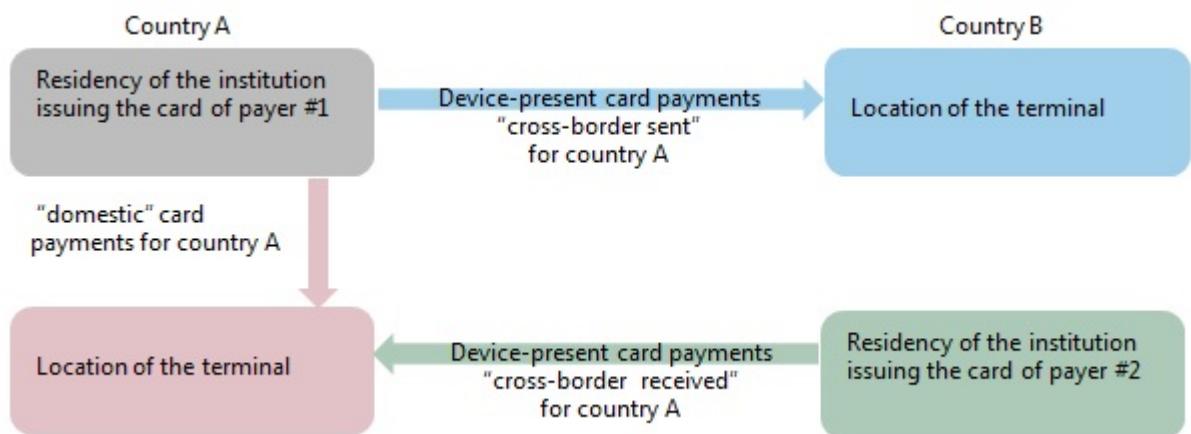
For example, for card payments (see Graph 3):

- If payer #1, whose card was issued by an institution resident in country A, performs a card payment at a physical terminal located in country A (or, in the case of device-not-present payments, performs a card payment to payee #1, whose payment account is held at an institution also resident in country A), the card payment is considered as *domestic* by country A.
- If payer #1, whose card was issued by an institution resident in country A, performs a card payment at a physical terminal located in country B (or, in the case of device-not-present payments, performs a card payment to payee #2, whose payment account is held at an institution resident in country B), the card payment is considered as *cross-border sent* by country A.
- If payer #2, whose card was issued by an institution resident in country B, performs a card payment at a physical terminal located in country A (or, in the case of device-not-present payments, performs a card payment to payee #1, whose payment account is held by an institution resident in country A), the card payment is considered as *cross-border received* by country A.

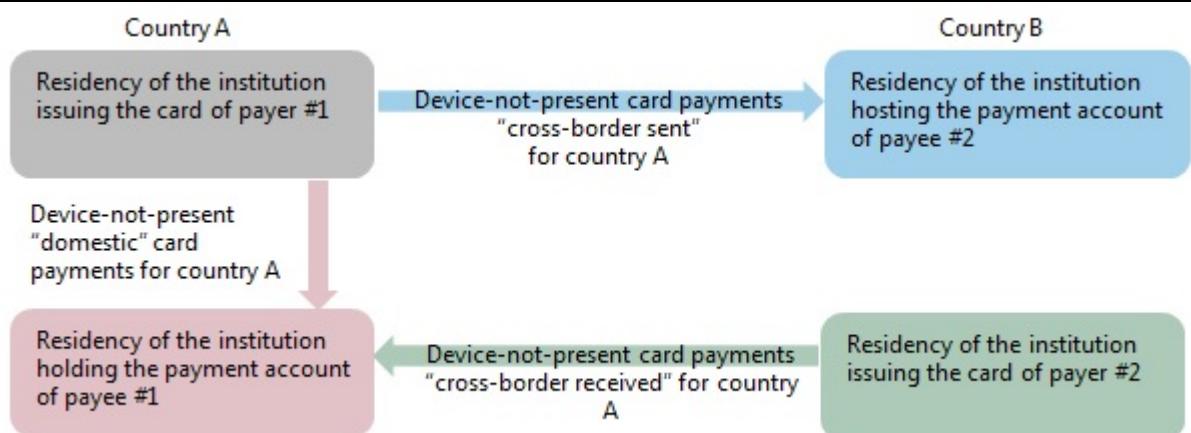
Illustration of card payment flows (domestic and cross-border) from the perspective of country A

For device-present card payments

Graph 3



For device-not-present card payments



For example, for e-money payments (see Graph 4):

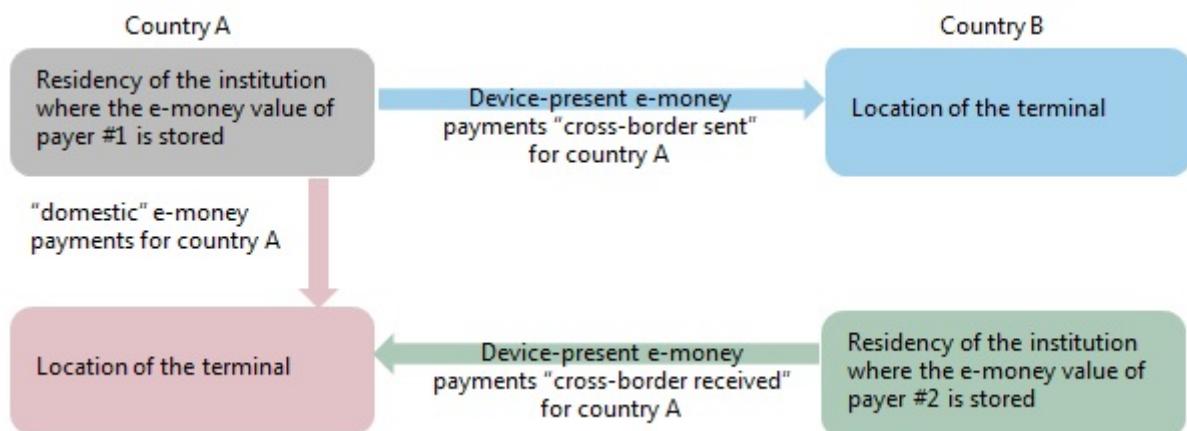
- If payer #1, whose e-money is stored at an institution resident in country A, performs an e-money payment at a physical terminal located in country A (or, in the case of device-not-present payments, performs an e-money payment to payee #1, whose payment account is located at an institution also resident in country A), the e-money payment is considered as *domestic* by country A.
- If payer #1, whose e-money is stored at an institution resident in country A, performs an e-money payment at a physical terminal located in country B (or, in the case of device-not-present payments, performs an e-money payment to payee #2, whose payment account is held by an institution resident in country B), the e-money payment is considered as *cross-border sent* by country A.
- If payer #2, whose e-money is stored at an institution resident in country B, performs an e-money payment at a physical terminal located in country A (or, in the case of device-not-present payments, performs an e-money payment to payee #1, whose payment account is held at an institution resident in country A), the e-money payment is considered as *cross-border received* by country A.

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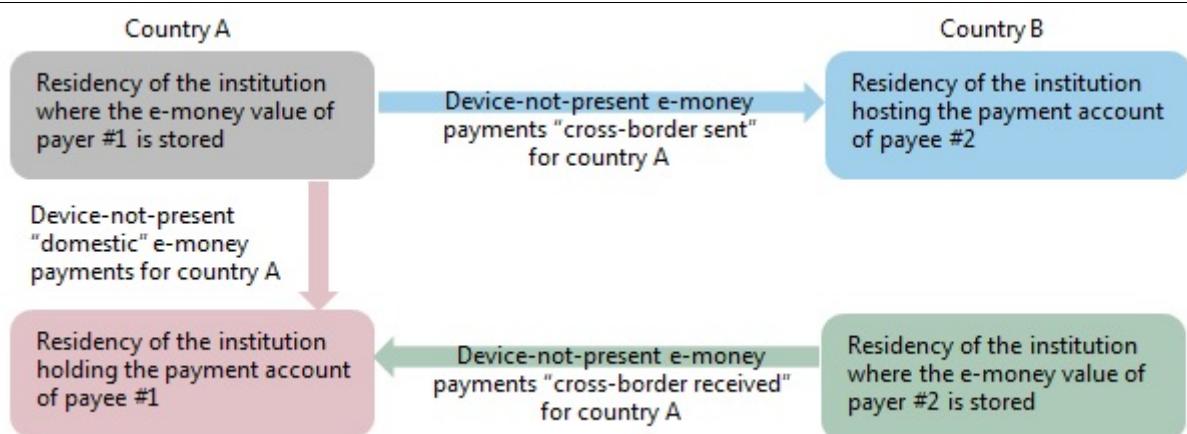
Illustration of e-money payment flows (domestic and cross-border) from the perspective of country A

For device-present e-money payments

Graph 4



For device-not-present e-money payments




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**Included:**

- On-us payments.
- Device-present and device-not-present payments.
- Transfers between accounts in the same name when these accounts are at different institutions.
- Payments denominated in domestic currency and in foreign currencies converted using the exchange rate on the day when the payment is performed. As a proxy, the monthly average exchange rate can be used. Countries that can include only payments denominated in the domestic currency specify this in a footnote.

**Excluded:**

- Cash withdrawals, cash deposits and e-money loadings and unloadings (listed in part B of this table).
- Transfers between accounts in the same name when these accounts are at the same institution (unless specified otherwise in a footnote).

- Payments without a specific transaction order (eg dividend or interest payments by the institution holding the payment account).
- Money remittances. Countries with a significant amount of money remittances may specify their value/volume in a memo item.

<b>Total cashless payments (Table 5: volume of cashless payments; Table 6: value of cashless payments)</b>	
<b>Breakdown of “total cashless payments” by instrument type</b>	Type of instrument used to perform the payment.
<i>Credit transfers</i>	<p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>For standing orders and batch/bulk orders, each credit transfer included in the batch/bulk is counted separately.</li> </ul> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Domestic and cross-border sent credit transfers.</li> <li>One-off single credit transfers, credit transfers initiated in batches/bulks and credit transfers initiated by standing orders.</li> <li>Credit transfers used to settle balances of cards with a credit or delayed debit function, as these payments – from the card holder to the issuer of payment cards – are separate from card payments whose balances they settle.</li> <li>Credit transfers performed via ATMs with a credit transfer function.</li> <li>Credit transfers which have cash at one or both ends of the payment (eg money and postal orders) and which are not money remittances.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Cross-border received credit transfers (a memo item below provides information on this figure).</li> <li>Cash deposits into and cash withdrawals out of a payment account – they are included in part B.</li> <li>Credit transfers used to store e-money. They are included under e-money loading transactions in part B. If such credit transfers cannot be reported separately and are included in this item, a footnote is provided.</li> </ul>
<b>Breakdown of “credit transfers” into domestic and cross-border sent</b>	
<i>Domestic</i>	(See Graph 1 for an illustration of domestic credit transfers.)
<i>Cross-border sent</i>	(See Graph 1 for an illustration of cross-border sent credit transfers.)
<i>Memo: Cross-border received</i>	(See Graph 1 for an illustration of cross-border received credit transfers.)
<b>Breakdown of “credit transfers” by device presence/absence</b>	
<i>Device-present: paper-based</i>	For example, payments performed with paper forms at a bank branch.
<i>Device-present: other</i>	
<b>Partial breakdown of “Credit transfers, Device-present: other” by terminals</b>	
<i>Of which: at POS terminals</i>	Where a payer initiates a credit transfer at a physical POS terminal using a physical device. For example, at the POS, the payer initiates a credit transfer directly from his/her payment account to the payment account of a merchant (no card schemes involved for processing the payment).

<i>Device-not-present</i>	For example, credit transfers performed online using an app or a browser-based solution.
<i>Direct debits</i>	<p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>For standing orders and batch/bulk orders, each direct debit included in the batch/bulk payments is counted separately.</li> </ul> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Domestic and cross-border sent direct debits.</li> <li>One-off single direct debits, direct debits initiated in batches/bulks and direct debits initiated by standing orders.</li> <li>Direct debits used to settle balances of cards with a credit or delayed debit function, as these payments – from the card holder to the issuer of payment cards – are separate from card payments whose balances they settle.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Cross-border received direct debits (a memo item below provides information on this figure).</li> <li>Cash payments into and out of a payment account – they are included in part B.</li> <li>Direct debits used to store e-money. They are included under e-money loading transactions in part B. If such direct debits cannot be reported separately and are included in this aggregate, a footnote is provided.</li> </ul>
<b>Breakdown of "direct debits" into domestic and cross-border sent</b>	
<i>Domestic</i>	(See Graph 2 for an illustration of domestic direct debits.)
<i>Cross-border sent</i>	(See Graph 2 for an illustration of cross-border sent direct debits.)
<i>Memo: Cross-border received</i>	(See Graph 2 for an illustration of cross-border received direct debits.)
<i>Cheques</i>	<p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>Cheques are counted on the payer side.</li> </ul> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Traveller's cheques.</li> <li>Banker's drafts.</li> <li>Cheques used to settle balances of cards with a credit or delayed debit function, as these payments – from the card holder to the issuer of payment cards – are separate from card payments whose balances they settle.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Cash withdrawals using bank forms – they are included in part B.</li> <li>Cheques issued but not submitted for clearing (ie cheques that are issued but not drawn).</li> </ul>
<b>Partial breakdown of "cheques"</b>	
<i>Of which: paper-based</i>	Cheques which are issued and transferred from the payer to the payee in paper (as opposed to digital) form, independently from whether the payee deposits the cheques in their payment account in paper form or electronically.
<i>Other payment instruments</i>	Forms of cashless payment not captured by other categories. This may include country-specific payment instruments. This may also include payment instruments resulting from innovation that are not captured in other categories. A footnote clarifies which

	<p>payment instruments are included. Remittances are excluded from this item; nevertheless, countries with significant volume/value of money remittances may specify their volume/value in the dedicated memo item.</p> <p><b>Included (for example):</b></p> <ul style="list-style-type: none"> <li>Commercial bills (bills of exchange, promissory note).</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Money remittances.</li> </ul>
<i>Card and e-money payments (with cards and e-money issued inside the country)</i>	<p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>Each payment is counted once irrespective of the instrument used.</li> <li>In the case of a card with several functions (eg a card with both debit and credit functions) a payment is included in the respective payment card function according to which the payment is processed (eg if a card with several functions is processed as a debit card, the payment is included in the category "<i>cards with a debit function</i>"; if it is processed as a credit card, the payment is included in the category "<i>cards with a credit function</i>").</li> </ul> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Domestic and cross-border sent card and e-money payments.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Cross-border received card and e-money payments (memo items below provide information on this figure).</li> <li>When it is not possible to distinguish card or e-money payments from cash withdrawals (for example, cash advances/cash back at a POS terminal), and the combined figure is reported under card and e-money payments, a footnote is provided.</li> <li>Credit transfers and other non-card/e-money payments that may have been initiated with the use of a card at a POS terminal or ATM.</li> </ul>
<b>Breakdown of "card and e-money payments" by function</b>	
<i>By card with a debit function</i>	<p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>E-money payments. This includes virtual prepaid card payments and payments with prepaid cards of domestic and international card schemes, as they qualify as e-money payments and are reported in the category "<i>e-money payments</i>" below. However, if they cannot be separated from "<i>payments by card with a debit function</i>", they are included in this item and a footnote is provided.</li> </ul>
<i>By card with a delayed debit function</i>	<p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>E-money payments. This includes virtual prepaid card payments and payments with prepaid cards of domestic and international card schemes, as they qualify as e-money payments and are reported in the category "<i>e-money payments</i>" below. However, if they cannot be separated from "<i>payments by card with a delayed debit function</i>", they are included in this item and a footnote is provided.</li> </ul>
<i>By card with a credit function</i>	<p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>E-money payments. This includes virtual prepaid card payments and payments with prepaid cards of domestic and international card schemes, as they qualify as e-money payments and are reported in the category "<i>e-money payments</i>"</li> </ul>

	below. However, if they cannot be separated from " <i>payments by card with a credit function</i> ", they are included in this item and a footnote is provided.
<i>E-money payments</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Payments with e-money cards issued in cooperation with domestic or international card schemes.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Cross-border received e-money payments (memo items below provide information on this figure).</li> </ul> <p><b>A footnote is provided:</b></p> <ul style="list-style-type: none"> <li>If e-money payments cannot be separated from payments by card with debit, delayed debit or credit function.</li> <li>In case specific kinds of e-money payments are considered relevant in the country but cannot be included for example for unavailability of data (eg e-money payments between mobile wallets).</li> </ul>
<b>Partial breakdown of "card and e-money payments" by device presence/absence</b>	
<i>Of which: device-present payments</i>	
<b>Partial breakdown of "card and e-money payments, device-present", by technology</b>	
<i>Of which: contactless</i>	Information to perform a payment was transmitted using contactless technology.
<i>Of which: magstripes</i>	Information to perform a payment was transmitted using a magstripe.
<b>Breakdown of "card and e-money payments" into domestic and cross-border</b>	(see graph 3 and 4 for an illustration of domestic and cross-border card and e-money payments)
<i>Domestic</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Domestic card and e-money payments with cards and e-money issued inside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Cross-border <i>sent</i> and cross-border <i>received</i> card and e-money payments.</li> </ul>
<b>Breakdown of "card and e-money payments, domestic" by function</b>	
<i>Card with a debit function</i>	
<i>Card with a delayed debit function</i>	
<i>Card with a credit function</i>	
<i>E-money payments</i>	

<i>Cross-border sent</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Cross-border <i>sent</i> card and e-money payments with cards and e-money issued inside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Domestic card and e-money payments.</li> </ul>
<b>Memo: Card and e-money payments at terminals inside the country (with cards and e-money issued inside and outside country)</b>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Domestic and cross-border received card and e-money payments with cards and e-money issued inside and outside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Cross-border sent card and e-money payments.</li> </ul>
<b>Breakdown of "card and e-money payments at terminals inside the country" by function</b>	
<i>Card with a debit function</i>	
<i>Card with a delayed debit function</i>	
<i>Card with a credit function</i>	
<i>E-money payments</i>	
<b>Partial breakdown of "card and e-money payments at terminals inside the country" by device presence/absence</b>	
<i>Of which: device-present payments</i>	
<b>Partial breakdown of "card and e-money payments at terminals inside the country, device-present payments" by technology</b>	
<i>Of which: contactless</i>	
<i>Of which: magstripe</i>	
<b>Partial breakdown of "card and e-money payments at terminals inside the country" by location of the card issuer</b>	

<i>Of which: at terminals inside the country with cards and e-money issued outside the country</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Cross-border received card and e-money payments with cards and e-money issued outside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Domestic card and e-money payments.</li> </ul>
<b>Partial breakdown of “total cashless payments” by speed</b>	
<i>Of which: fast payments</i>	<p><b>Includes:</b></p> <ul style="list-style-type: none"> <li>Fast payments between end users’ payment accounts held at different institutions.</li> <li>Fast payments between end users’ payment accounts held at the same institution (on-us).</li> </ul> <p>Those countries that cannot include both fast payments between end users’ payment accounts held at different institutions and on-us fast payments specify so in a footnote.</p>
<b>Breakdown of “fast payments” by instrument type</b>	
<i>Credit transfers</i>	Includes fast payments performed as credit transfers at POS terminals and fast payments performed as credit transfers elsewhere.
<i>Direct debits</i>	Includes fast payments performed as direct debits.
<i>Other</i>	A footnote specifies the instrument types used to perform a fast payment (other than credit transfers and direct debits) that are included here.
<b>Partial breakdown of “fast payments” on-us</b>	
<i>Of which: on-us</i>	Fast payments where the payer’s and the payee’s payment accounts are held at the same institution.
<b>Partial breakdown of “fast payments” by terminal</b>	
<i>Of which: initiated at a POS terminal</i>	Fast payments initiated at a physical or a virtual POS terminals.
<b>Partial breakdown of “total cashless payments” by issuer</b>	Issuer of the instrument used by the end user to perform the payment.
<i>Of which: issued by a non-bank</i>	Total cashless payments with instruments above (credit transfers, direct debits, cards and e-money) issued by non-banks. A footnote is provided if the figure includes cashless payments with instruments issued by the government. Countries with significant volume/value of cashless payments with instruments issued by the government may specify their volume/value in a footnote.
<b>Memo: Money remittances</b>	

## PART B: Volume and value of withdrawal/deposit transactions

### Notes:

- The guiding criterion to include a withdrawal/deposit transaction in a country's total is that the value withdrawn originates from that country and the withdrawal/deposit transaction occurs at a location either in or outside the country.
- A memo item provides information on withdrawal transactions where the value withdrawn originates from different countries but the withdrawal transactions occur at locations in the country.
- The table below summarises the determinants for classifying withdrawals/deposits as domestic or cross-border:

	Residency of <i>card-issuing institution</i> (for withdrawals/deposits initiated without a card); residency of the institution where the <i>end user's account</i> is located	Residency of the <i>location where the withdrawal/deposit transaction takes place</i>
Cash withdrawals/deposits with cards issued inside the country, at locations inside the country (corresponding to domestic cash withdrawals/deposits)	Inside the country	Inside the country
Cash withdrawals with cards issued inside the country at locations outside the country (corresponding to cross-border sent cash withdrawals)	Inside the country	Outside the country
Memo: Cash withdrawals with cards issued outside the country at locations inside the country (corresponding to cross-border received cash withdrawals)	Outside the country	Inside the country

<b>Total withdrawals/deposits (Table 5: volume of deposits/withdrawals; Table 6: value of deposits/withdrawals)</b>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals from / cash deposits to accounts.</li> <li>• Withdrawals from / deposits to e-money storages (called e-money unloading and loading transactions).</li> <li>• Withdrawals/deposits with cards issued in the country / where the end user's account is located in the country (at locations both inside and outside the country).</li> <li>• Transactions at ATMs, POS terminals, bank branches (without the use of an ATM) and other locations.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Withdrawals/deposits with cards issued outside the country / where the payer's account is located outside the country, at locations inside or outside the country. A memo item provides information on such withdrawals.</li> </ul>
<b>Breakdown of "total withdrawals/deposits" into withdrawals and deposits</b>	
<i>Cash withdrawals</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals at locations inside and outside the country, with cards issued (or from accounts located) inside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals with cards issued (or from accounts located) outside the country, at locations inside the country (a memo item provides information on this figure).</li> <li>• Cash withdrawals from e-money storages (these are included under "<i>e-money loading/unloading transactions</i>").</li> </ul>
<b>Breakdown of "cash withdrawals" by withdrawal location</b>	
<i>Cash withdrawals with cards issued inside the country at locations inside the country</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals with cards issued (or from accounts located) inside the country, at locations inside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals with cards issued (or from accounts located) outside the country.</li> <li>• Cash withdrawals at locations outside the country.</li> </ul>
<b>Breakdown of "cash withdrawals with cards issued inside the country" by terminal type</b>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Withdrawals at locations inside the country, with cards issued (or from accounts located) inside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Withdrawals with cards issued (or from accounts located) outside the country.</li> <li>• Withdrawals at locations outside the country.</li> </ul>
<i>At ATMs</i>	
<i>At POS terminals</i>	

<i>At bank branches, without the use of an ATM</i>	
<i>Cash withdrawals with cards issued inside the country at locations outside the country</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals with cards issued (or from accounts located) inside the country, at locations outside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals with cards issued (or from accounts located) outside the country.</li> <li>• Cash withdrawals at locations inside the country.</li> </ul>
Memo: <i>Cash withdrawals with cards issued outside the country at locations inside the country</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals with cards issued (or from accounts located) outside the country made at locations inside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals with cards issued (or from accounts located) inside the country.</li> <li>• Cash withdrawals at locations outside the country.</li> </ul>
Memo: <i>Cash withdrawals with cards issued inside and outside the country at locations inside the country</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals made at locations inside the country with cards issued (or from accounts located) inside or outside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Cash withdrawals at locations outside the country.</li> </ul>
<b>Partial breakdown of memo item “cash withdrawals with cards issued inside and outside the country at locations inside the country” by terminal type</b>	
<i>Of which: at ATMs</i>	
<b>Partial breakdown of “cash withdrawals” by terminal type</b>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Withdrawals at locations inside and outside the country with cards issued (or from accounts located) inside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Withdrawals with cards issued (or from accounts located) outside the country.</li> </ul>
<i>Of which: at ATMs</i>	
<i>Cash deposits</i>	<p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Cash deposits with cards issued (or to accounts located) inside the country, at locations inside and outside the country.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>• Cash deposits with cards issued (or to accounts located) outside the country, at locations inside the country.</li> <li>• Cash deposits to e-money storages (these are included under “e-money loading/unloading transactions”).</li> </ul>

<b>Partial breakdown of “cash deposits” by deposit location</b>	
<i>Of which: cash deposits with cards issued inside the country at locations inside the country</i>	
<i>E-money loading/unloading transactions</i>	Deposits to and withdrawals from e-money value stored at institutions resident in the country.

## A.3 Payment systems and critical service providers

### Descriptions

*Payment systems (PS)* are formal arrangements based on private contract or statute law with multiple membership, common rules and standardised arrangements for the transfer and settlement of money obligations arising between its members. For the purposes of this data collection, only payment systems whose participants are financial market participants or institutions offering payment services to end users are listed. Institutions that settle only on-us transactions are not included.

*Large-value Payment Systems (LVPS)* typically handle large-value and/or high-priority payments, usually in relation to financial market activity.

*Retail payment systems (RPS)* typically handle a large volume of relatively low-value payments in such forms as cheques, credit transfers, direct debits or card payments.

*Fast payment systems (FPS)* are infrastructures focused on clearing and/or settling fast payments for their participants.

Some payment systems cannot be classified exclusively or predominantly as LVPS, RPS or FPS. They handle both large-value and/or high-priority payments, usually in relation to financial market activity, and low-value payments in such forms as cheques, credit transfers, direct debits and card payment. Such systems can be classified either in the category *large-value payment systems and retail payment systems (LVPS+RPS)* or the category *large-value payment systems and fast payment systems (LVPS+FPS)*.

### Table 7: Participation in major payment systems

The objective of Table 7 is to list all payment systems with significant business of the reporting country, including the number of their direct and indirect participants.

#### Notes:

- Each system is listed with its full name and acronym.
- Each system is classified as RPS, LVPS, FPS, LVPS+RPS or LVPS+FPS.

#### Included:

- All major payment systems for the country, both those managed by the central bank and those managed by private operators.

<b>Figures for each system</b>	
<b>Total number of participants</b>	<p>All institutions identified/recognised by the system which are allowed to send transfer orders to and receive transfer orders from the system.</p> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>• Directly and indirectly connected participants.</li> </ul>
<b>Breakdown of "total number of participants" by directly/indirectly connected</b>	
<i>Directly connected participants</i>	<p>Any participant in a system that directly exchanges transfer orders with other participants in the system, without an intermediary, and is directly responsible for settling them. In some systems, direct participants also exchange orders on behalf of indirect participants.</p>
<b>Breakdown of "directly connected participants" by participant type</b>	
<i>Banks</i>	
<i>Central bank</i>	
<i>Government</i>	
<i>Postal institution</i>	<p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• A postal institution is only counted separately when it (i) participates directly in the system and (ii) is not considered (and supervised) as a bank (if this is the case, it is counted together with other banks).</li> </ul>
<i>Payment systems, central counterparties and securities settlement systems</i>	<p>All payment systems, central counterparties and securities settlement systems which are directly connected to the system.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Generally, retail and securities clearing and/or settlement organisations directly participate in the LVPS in which the respective retail or securities transactions are finally settled.</li> <li>• When the relevant settlement organisations are considered as banks, they can be counted either under "banks" or under the category "<i>payment systems, central counterparties and securities settlement systems</i>"; a footnote explains the choice made.</li> <li>• When CLS is recognised as a direct participant in the system, it is reported as in the category "<i>payment systems, central counterparties and securities settlement systems</i>".</li> </ul>
<i>Other</i>	<p>For example, non-banks that are not captured in the previous non-bank categories.</p>
<i>Indirectly connected participants</i>	<p>Indirectly connected participants are firms that rely on the services offered by other firms (directly connected participants) to use the PS's facilities.</p>

## **Tables 8 and 9: Payments processed by selected payment systems (volume and value of transactions)**

The objective of these tables is to provide the volume and value of transactions processed by selected payment systems. In these tables, all PS with significant business for the country are listed, both those managed by the central bank and those managed by private operators.

### **Notes:**

- Figures are provided system by system.
- Each system is listed with its full name and acronym.
- With regard to the volume and value of transactions, each payment instruction is counted only once (ie the debit from the payer's account and the credit to the payee's account are not counted separately).
- For each system, the total transfers originated within the PS are reported. If possible, further breakdowns are provided to distinguish intra- from inter-system transfers.

### **Included:**

- Transactions that represent central bank operations.

### **Excluded:**

- Liquidity transfers at the beginning and end of the business day between accounts of a participant at the central bank and its settlement account in the PS at the central bank.
- Liquidity transfers between accounts of a participant at the central bank and its settlement account in the FPS.
- Liquidity transfers between accounts at the central bank.

<b>For each payment system</b>	
<b>Total gross volumes/values (Table 8: total gross volumes; Table 9: total gross values)</b>	
<b>Breakdown of "total gross volumes/values" by instrument type</b>	See descriptions of these instrument types in the section " <i>Retail payment services and instruments</i> ".
<i>Credit transfers</i>	
<i>Direct debits</i>	
<i>Cheques</i>	
<i>Card and e-money payments</i>	
<i>Other payment instruments</i>	
<b>Partial breakdown of "total gross volumes/values"</b>	
<i>Of which: other PS' net volumes/value settled in the PS in question</i>	In aggregate terms, the net volumes/value of all other PS that settle in the PS in question. The reported value should be viewed as gross amounts entering into the settlement activity of the system in which the settlement occurs. At the same time, these values result from the netting/settlement cycles of the system whose transactions are settled and thus can be viewed as net from the perspective of that system.
<b>Breakdown of "other PS' net volumes/value settled in the PS in question" by system whose transactions are settled</b>	<b>Note:</b> Results in as many time series as there are systems whose transactions are settled in this system.
<i>Payment system's name</i>	For any other PS that settles in the PS in question, the net volume/value that each of those other PS settled in the considered PS.
<b>Concentration ratio in terms of volume/value (%)</b>	Market share of the five largest senders of payment transactions in each system (this may include the central bank). The five largest senders of transactions in terms of volume may differ from the five largest senders in terms of value. Each participant which has individual access to the system is counted separately, irrespective of whether there is a legal link (eg merger) between two or more participants.
<b>Number of netting cycles</b>	Only for RPS located in the country, the number of daily predetermined netting cycles as of the end of the year. In case the RPS has continuous netting cycles (ie nets whenever a specific threshold is reached), the average daily number of netting cycles over the past year. <b>Note:</b> This information is only provided for LVPS and LVPS/RPS systems where RPS with netting cycles settle their net balances. This information is not provided to LVPS and LVPS+RPS where RPS with continuous settlement cycles settle.

## Table 10: Participation in SWIFT by domestic institutions

These figures are provided by SWIFT.

<b>Total number of SWIFT users in the country</b>	
<b>Partial breakdown of "total number of SWIFT users in the country" by user type</b>	
<i>Of which: members</i>	
<i>Of which: sub-members</i>	Sub-members are any organisation, that is more than 50 percent directly or 100 percent indirectly owned by a shareholder, and that is involved in financial message transmission.
<i>Memo: Total number of SWIFT users</i>	
<b>Partial breakdown of "total number of SWIFT users" by user type</b>	
<i>Of which: members</i>	
<i>Of which: sub-members</i>	

## Table 11: SWIFT message flows to/from domestic users

These figures are provided by SWIFT. All traffic for domestic and international market infrastructures is allocated to the country of the SWIFT destination making the payment. The traffic exchanged between market infrastructures and their participants is excluded from the domestic traffic.

<b>Total number of messages sent</b>	Total number of messages sent by domestic banks to transfer funds.
<b>Breakdown of "total number of messages sent" by category</b>	
<i>Category I</i>	Messages used by banks to transfer funds to a customer's account (ie messages relating to payments that are category 1 messages, eg MT 100 messages).
<i>Category II</i>	Messages used by banks to transfer funds to an account of another bank (ie messages relating to payments that are category 2 messages, eg MT 200 messages).
<b>Total number of messages received</b>	Total number of messages received by domestic banks to transfer funds.
<b>Breakdown of "total number of messages received" by category</b>	
<i>Category I</i>	
<i>Category II</i>	
<i>Number of domestic messages</i>	Messages sent to/received from domestic users.
<i>Memo: Global SWIFT messages</i>	

## A.4 Central counterparties or clearing houses

### Descriptions

A *central counterparty (CCP)* is an entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer, either through novation or open offer or analogous binding arrangement.<sup>3</sup>

A *clearing house (CH)* is a central location or central processing mechanism reconciling and, in some cases, confirming payment orders or securities transfer instructions prior to settlement, including the netting of instructions and the establishment of final positions for settlement. A clearing house does not guarantee the settlement of transactions.

The name of the entity is followed in brackets by an indication of its function (either CCP or clearing house). When deemed necessary, a footnote provides additional information. When a single entity performs the functions of both clearing house or CCP and central securities depository, Tables 19 to 21 are completed, when relevant, with data on the entity's clearing house or CCP activities.

A CCP is reported in the country tables of the country in which it is located, even if it clears trades that have been negotiated on the other countries' trading systems. The cleared volumes/values of cleared trades that have been negotiated in other CPMI countries are singled out, along with the cleared volumes/values negotiated in any non-CPMI country.

OTC trades that are cleared by a CCP are reported in the table of the country where the CCP is incorporated.

Direct participants are firms that do not need to rely on the services offered by other firms to use the CCP's clearing facilities.

### Table 12: Number of clearing members

Figures are provided separately for each CCP or clearing house with categories of various participants as sub-items. When countries are unable to provide a breakdown, only the total number of participants is reported.

Each CCP or clearing house is listed with its full name and acronym.

<sup>3</sup> Through novation, the original contract between the buyer and seller is extinguished and replaced by two new contracts, one between the CCP and the buyer and the other between the CCP and the seller. In an open offer system, a CCP is automatically and immediately interposed in a transaction at the moment the buyer and seller agree on the terms. If all pre-agreed conditions are met, there is never a contractual relationship between the buyer and seller in an open offer system.

<b>For each CCP or clearing house</b>	
<b>Number of clearing members</b>	All direct participants of the clearing house or CCP. Includes direct clearing members (participants that are able to clear only their own obligations) and general clearing members (participants that are able to clear their own obligations as well as those of clients).
<b>Breakdown of "number of clearing members" by participant type</b>	
Central banks	
Banks	If a bank is also a CCP, it is classified as a CCP and not as a bank.
Other CCPs	CCPs which are clearing members of the reporting CCP or clearing house. Includes interoperable CCPs.
Other	Any direct participant that does not fall under one of the previous categories.
<b>Breakdown of "number of clearing members" by participants' residency</b>	<p>Any clearing member that is located in the country of incorporation of the CCP or clearing house (which is also the reporting country) is considered as a domestic clearing member. A footnote specifies whether participants located in other countries are also counted as domestic. A clearing member registered outside the reporting country but with a branch in this country is also considered a domestic clearing member.</p> <p>When it is not possible to identify clearing members' location, then the categories of clearing members appear as sub-items under "number of clearing members" instead of under the two subcategories "number of clearing members, domestic" and "number of clearing members, foreign".</p>
Domestic	
<b>Breakdown of "number of clearing members, domestic" by participant type</b>	
Central banks	
Banks	
Other CCPs	
Other	
Foreign	
<b>Breakdown of "number of foreign clearing members, foreign" by participant type</b>	
Central banks	
Banks	
Other CCPs	
Other	

## Tables 13 and 14: Number and value of contracts and trades cleared

Contracts/trades denominated in a currency other than the reported currency are converted to the reporting currency using the exchange rate effective on the day the trade takes place. As a proxy, the monthly average exchange rate can be used. If the CCP located in country A clears contracts and transactions that have been negotiated in other countries (for example B, C and D), the *Total contracts and transactions submitted to the CCP* located in country A is broken down for each CPMI country (for example country B) and for non-CPMI countries (for example C and D aggregated together). In the country table of country B, a footnote may provide information on the contracts and transactions negotiated in such country and cleared by CCPs located in country A.

<b>For each CCP</b>	
<b>Total contracts and transactions submitted to the CCP (Table 13: total number of contracts and transactions; Table 14: total value of contracts and transactions)</b>	
<b>Breakdown of "total contracts and transactions submitted to the CCP" into securities and derivatives</b>	
<i>Securities transactions submitted to the CCP</i>	<p>Includes both outright securities trades and repurchase trades.</p> <p><i>Number of securities transactions submitted to the CCP</i> (Table 13): For CCPs, the number and value of securities transactions is reported on a post-novation basis (counting the transactions with the CCP as it interposes itself as buyer to every seller and seller to every buyer).</p> <p><i>Value of securities transactions submitted to the CCP</i> (Table 14): Transactions in debt instruments and equity securities are valued at transaction values. When the trades cleared are free of payment, the securities are valued at market value. The monthly average price may be used as a proxy for the market value of transactions. When market value is not available, the latest available price is used.</p>
<b>Breakdown of "securities transactions submitted to the CCP" by security type</b>	
<i>Debt securities</i>	
<b>Breakdown of "securities transactions submitted to the CCP, debt securities" by original maturity</b>	
<i>Short-term paper</i>	
<i>Bonds</i>	
<i>Equity</i>	
<i>Other</i>	

<b>Partial breakdown of "securities transactions submitted to the CCP"</b>	
Of which: repurchase transactions	
<b>Partial breakdown of "securities transactions submitted to the CCP, of which: repurchase transactions" by security type</b>	
Debt securities	
<b>Partial breakdown of "securities transactions submitted to the CCP, of which: repurchase transactions, debt securities" by original maturity</b>	
Short-term paper	
Bonds	
Exchange-traded derivatives contracts submitted to the CCP	<p>Derivatives contracts are financial contracts whose value depends on the value of one or more underlying reference assets, rates or indices.</p> <p><i>Number of exchange-traded derivatives contracts submitted to the CCP</i> (Table 13): Each contract is counted separately, even if some may be traded together in one package (ie they are executed simultaneously and priced together). For CCPs, contracts are reported on a post-novation basis (counting the contract with the CCP as it interposes itself as buyer to every seller and seller to every buyer).</p> <p>Transfers of underlying assets to fulfil obligations from open positions in derivatives at expiry of a derivatives contract are not counted as derivatives trades. If the underlying is a security, such a transfer is counted as a securities trade.</p> <p><i>Value of exchange-traded derivatives contracts submitted to the CCP</i> (Table 14): Derivatives trades are valued at market value. The market value of an option is the actual premium to be paid by the option buyer. The market value of a futures contract is the market value of the underlying or, for futures with notional underlying, the market price of the futures contract itself.</p>
<b>Breakdown of "exchange-traded derivatives submitted to the CCP" by derivative type</b>	
Financial futures	Standardised contracts, traded on an exchange, that obligate one party to buy, and the other to sell, an underlying asset at a specific price and date in the future. In the case of financial futures, the underlying should be a financial instrument (eg securities) or an index (eg interest rates).
Financial options	Contracts that give the buyer the right, but not the obligation, to buy or sell an underlying asset by (or on) a specific date for a specific price. For this right the purchaser pays a premium. In the case of financial options, the underlying asset is a financial instrument (eg securities).

<i>Other financial derivatives</i>	Any financial derivatives other than future and option contracts, for example swaps.
<i>Commodity futures</i>	Standardised contracts, traded on an exchange, that obligate one party to buy, and the other to sell, a commodity (agricultural product, oil etc) at a specific price and date in the future.
<i>Commodity options</i>	Contracts that give the buyer the right, but not the obligation, to buy or sell a commodity by (or on) a specific date for a specific price. For this right the purchaser pays a premium.
<i>Other commodity derivatives</i>	Any commodity derivatives other than future and option contracts.
<i>OTC derivatives contracts submitted to the CCP</i>	<p>Derivatives trades that have not been executed on trading platforms of recognised and/or supervised exchanges or trading systems.</p> <p><i>Number of OTC derivatives contracts submitted to the CCP</i> (Table 13): Each contract is counted separately, even if some may be traded together in one package (ie they are executed simultaneously and priced together). For CCPs, contracts are reported on a post-novation basis (counting the contract with the CCP as it interposes itself as buyer to every seller and seller to every buyer).</p> <p>Transfers of underlying assets to fulfil obligations from open positions in derivatives at expiry of a derivatives contract are not counted as derivatives trades. If the underlying is a security, such a transfer is counted as a securities trade.</p> <p><i>Value of OTC derivatives contracts submitted to the CCP</i> (Table 14): Derivatives trades are valued at market value. The market value of an option is the actual premium to be paid by the option buyer. The market value of a futures contract is the market value of the underlying or, for futures with notional underlying, the market price of the futures contract itself.</p>
<b>Breakdown of “OTC derivatives contracts submitted to the CCP” by derivative type</b>	
<i>Financial futures</i>	
<i>Financial options</i>	
<i>Other financial derivatives</i>	
<i>Commodity futures</i>	
<i>Commodity options</i>	
<i>Other commodity derivatives</i>	

## A.5 Central securities depositories

A *central securities depository (CSD)* is an entity (or institution) that provides securities accounts, central safekeeping services and asset services which enable trades to be processed by book entry. Physical securities may be immobilised by the depository or securities may be dematerialised (ie so that they exist only as electronic records).

Direct participants are firms that do not need to rely on the services provided by other firms to use the CSD's facilities.

**Table 15: Number of direct participants in CSDs**

Figures are provided separately for each CSD, with categories of various participants as sub-items. When countries are unable to provide a breakdown, only the total number of participants is reported.

<b>For each CSD</b>	
<b>Total number of direct participants</b>	Direct account holders in a tiered system or account operators in a non-tiered system. In a tiered system, custodian banks or other CSDs hold accounts with the CSD. Individual customers can open accounts only with a custodian bank, not directly with the CSD. In a non-tiered system, every private individual can have an account with the CSD. However, the accounts are operated by only a few companies, the account operators. These are companies operating the accounts of (private) customers in non-tiered systems and are typically banks.
<b>Breakdown of "total number of direct participants" by participant type</b>	
<i>Central bank</i>	
<i>Central counterparties</i>	
<i>Central securities depositories</i>	
<i>Banks</i>	If a bank is also a CCP or CSD, the institution is classified as a CCP or CSD and not as a bank.
<i>Others</i>	
<b>Breakdown of "total number of direct participants" by participants' residency</b>	
<i>Number of domestic participants</i>	Any participant that is located in the country of incorporation of the CSD (which is also the reporting country) is considered as a domestic participant. When it is not possible to identify participants' location, then the categories of participants appear as subcategories under "total number of participants" only, instead of under the two subcategories "number of domestic participants" and "number of foreign participants".
<b>Breakdown of "number of domestic participants" by participant type</b>	
<i>Central bank</i>	
<i>Central counterparties</i>	
<i>Central securities depositories</i>	
<i>Banks</i>	

<i>Other</i>	
<i>Number of foreign participants</i>	
<b>Breakdown of “number of foreign participants” by participant type</b>	
<i>Central bank</i>	
<i>Central counterparties</i>	
<i>Central securities depositories</i>	
<i>Banks</i>	
<i>Other</i>	

## Tables 16 and 17: Number and value of securities held in accounts at CSDs

<b>For each CSD</b>	
<b>Total securities held (Table 16: number of securities; Table 17:value of securities)</b>	The number or value of securities held in accounts with the reporting CSD, comprising all securities issued or safe-kept in the reporting CSD, or transferred into the CSD through a link. The value of securities denominated in a currency other than the reporting currency is converted to the reporting currency using the exchange rate effective on the last business day of the year.
<b>Breakdown of "total securities held" into security type</b>	
<i>Debt securities</i>	A debt security is a promise on the part of the issuer (the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities are valued at nominal value.
<b>Breakdown of "total securities held, debt securities" by original maturity</b>	
<i>Short-term paper</i>	Debt securities (including convertible securities) with an original maturity of one year or less.
<i>Bonds</i>	Debt securities (including convertible securities) with an original maturity of more than one year.
<i>Equities</i>	Valued at market value. The monthly average price may be used as a proxy for market value. When market values are not available, the latest available price is used (as specified in a footnote). When no price or recent payment value can be associated with the security (eg in delivery versus payment (DVP) trades), each security is valued at one unit of national currency.
<i>Other</i>	All other securities. For securities for which no market price is available, the aim is to provide information about the relative importance of non-debt securities (ISIN or national codes) for which the valuation rule has been applied.

## Tables 18 and 19: Number and value of delivery instructions processed

<b>For each CSD</b>	
<b>Total delivery instructions (Table 18: number of delivery instructions; Table 19: value of delivery instructions)</b>	<p>The number or value of all instructions to move securities between accounts.</p> <p>For trades not cleared by a CCP: data related to delivery instructions are reported on a gross basis (without netting). For trades cleared by a CCP: data related to delivery instructions are reported on a post-netting basis.</p> <p><b>Included:</b></p> <ul style="list-style-type: none"> <li>Instructions to block (and de-block) securities for collateralisation purposes on a borrower's securities account with the CSD.</li> <li>Securities movements due to automatic securities lending or automatic collateralisation (including self-collateralisation).</li> <li>Delivery instructions to move securities from the participant's own account to his omnibus account and vice versa when there is segregation on a participant's account with the CSD.</li> <li>Delivery instructions related to the transfer of securities between two accounts of the same account operator in a non-tiered system.</li> </ul> <p><b>Excluded:</b></p> <ul style="list-style-type: none"> <li>Instructions related to securities movements due to corporate actions (restructuring the ownership of a company through eg a stock split or conversion), new issues and redemptions.</li> <li>Instructions related to purely technical bookings such as realignment procedures.</li> </ul> <p><u>For the <i>number of delivery instructions</i>:</u></p> <p>In principle, only <i>delivery</i> instructions are counted.</p> <p>An instruction to transfer two or more securities (ISIN or national codes) is counted as two (or more) instructions. When processing an instruction to transfer securities from a seller to a buyer requires two transfers, due to the use of a technical account (that cannot be assigned to a CSD participant), only one transfer is reported. If the CSD receives two instructions regarding the same trade (eg one from the seller and one from the buyer of the securities), only one instruction is reported (either the one of the seller <i>or</i> the one of the buyer, but not both of them).</p> <p>For transfers through a link between CSDs, only the issuer CSD reports. When the issuing CSD is not involved (eg transfers through the "bridge"), only the delivering CSD reports.</p> <p><u>For the <i>value of delivery instructions</i>:</u></p> <p>The value of securities denominated in a currency other than the reporting currency is converted to the reporting currency using the exchange rate effective on the day of the trade. As a proxy, the monthly average exchange rate can be used.</p>

<b>Breakdown of “total delivery instructions” into DVP or free of payment</b>	
DVP trades	A settlement mechanism that ensures that the delivery of a security occurs if, and only if, payment occurs.
<b>Breakdown of “total delivery instructions, DVP” by security type</b>	
Debt securities	Valued at nominal value.
<b>Breakdown of “total delivery instructions, DVP, debt securities” by original maturity</b>	
Short-term paper	
Bonds	
Equity	Valued at market value. See Table 17.
Other	
Free-of-payment trades	Delivery of securities with no corresponding payment of funds.

## Part B: Statistical methodology for the comparative tables

Comparative tables 1–14 are based fully on the country tables; comparative tables PS1–TR rely on both country tables and additional information. In this methodology, references to country and other comparative tables are made in brackets, where [CT 1] indicates that the figures used in the comparative table under consideration have been calculated with data from country table 1. When figures can be derived either from a country or a comparative table, only the reference to the country table appears, as the figures presented there are considered to be the source of the comparative tables. In some cases, however, reference is also made to other comparative tables, because of identical calculations. When calculations are identical for all or most items in a table, the full formula is given only once, with repetitions indicated by "idem".

In all tables, figures are given for individual CPMI countries. A figure for the euro area is added to the individual countries' figure in Table 2. A figure for all CPMI countries is also calculated in Tables 1–14 ("nap" indicates that it is not applicable). Where applicable, these totals or averages are expressed in or based on US dollar terms.

In the rest of this document, comparative tables are simply referred to as tables.

### B.1 Banknotes and coins; institutions; transferable deposits

**Table 1: Basic statistical data**

Based on CT 1.

<i>GDP</i>	Nominal figures, expressed in USD by dividing <i>GDP</i> in domestic currency [CT 1] by the average <i>exchange rate</i> of the domestic currency vis-à-vis the USD [CT 1].
<i>Population</i>	<i>Population</i> [CT 1].
<i>GDP per capita</i>	<i>GDP</i> in USD [CT 1] divided by <i>population</i> [CT 1].
<i>CPI inflation</i>	<i>CPI inflation</i> [CT 1].
<i>Exchange rate (domestic currency vis-à-vis USD)</i>	End-of-year and average <i>exchange rates</i> (domestic currency vis-à-vis USD) [CT 1].

**Table 2: Banknotes and coins in circulation**

Based on CT 2.

<b><i>Banknotes and coins in circulation:</i></b>	
<i>Total value</i>	<i>Banknotes and coins in circulation</i> [CT 2], converted to USD using the end-of-year <i>exchange rate</i> [CT 1].
<i>Value per inhabitant</i>	<i>Total value</i> (as described above) in USD [CT 2] divided by <i>population</i> [CT 1].
<i>Value as a percentage of GDP</i>	<i>Total value</i> [CT 2] divided by <i>GDP</i> [CT 1].
<i>Value as a percentage of narrow money</i>	<i>Total value</i> [CT 2] divided by <i>narrow money supply (M1)</i> [CT 2].

**Table 3: Deposits held by banks**

Based on CT 2.

<b>Bank deposits held at the central bank:</b>	
<i>Total value</i>	Value of <i>bank deposits held at the central bank</i> [CT 2], converted to USD using the end-of-year exchange rate [CT 1].
<i>Value as a percentage of GDP</i>	Value of <i>bank deposits held at the central bank</i> [CT 2], divided by <i>GDP</i> [CT 1].
<b>Interbank deposits:</b>	
<i>Total value</i>	Value of <i>interbank deposits</i> [CT 2], converted to USD using the end-of-year exchange rate [CT 1].
<i>Value as a percentage of GDP</i>	Value of <i>interbank deposits</i> [CT 2], divided by <i>GDP</i> [CT 1].

## B.2 Retail payment services and instruments

**Table 4: Institutions offering payment services/instruments**

Based on CT 3.

<b>Number of institutions:</b>	
<i>Total number</i>	<i>Total number of institutions offering payment services/instruments</i> [CT 3].
<i>Number per 1 million inhabitants</i>	<i>Total number of institutions offering payment services/instruments</i> [CT 3] divided by <i>population</i> , multiplied by 1 million [CT 1].
<b>Number of branches or offices:</b>	
<i>Total number</i>	The sum of <i>number of central bank branches or offices</i> [CT 3], <i>number of bank branches or offices</i> [CT 3] and <i>number of branches or offices of non-banks offering storage of value (in a payment account or on a device)</i> [CT 3].
<i>Number per 1 million inhabitants</i>	<i>Total number</i> (as described above) divided by <i>population</i> , multiplied by 1 million [CT 1].

**Table 5: Payment accounts held by end users**

Based on CT 3.

<i>Total number of payment accounts</i>	The sum of <i>number of payment accounts at the central bank</i> [CT 3], <i>number of payment accounts at banks</i> [CT 3] and <i>number of payment accounts at non-banks offering storage of value (in a payment account or on a device)</i> [CT 3].
<i>Number of accounts per inhabitant</i>	<i>Total number of payment accounts</i> (as described above) divided by <i>population</i> [CT 1].
<i>Total value of payment accounts</i>	The sum of <i>value of payment accounts at the central bank</i> [CT 3], <i>value of payment accounts at banks</i> [CT 3] and <i>value of payment accounts at non-banks offering storage of value (in a payment account or on a device)</i> [CT 3], converted to USD using the end-of-year exchange rate [CT 1].
<i>Value per inhabitant</i>	<i>Total value of payment accounts</i> (as described above) divided by <i>population</i> [CT 1].
<i>Value as a percentage of GDP</i>	<i>Total value of payment accounts</i> (as described above) divided by <i>GDP</i> [CT 1].

**Table CS: Card schemes**

<i>Card schemes legally incorporated in the country</i>	List of card schemes.
<i>Card schemes offering services in the country</i>	List of card schemes.

**Table 5: Use of payment services/instruments: volume of cashless payments**

Based on CT 5 part A.

<i>Total volume of cashless payments</i>	Volume of <i>total cashless payments</i> [CT 5].
<i>Increase in the total volume of cashless payments</i>	Difference between the volume of <i>total cashless payments</i> [CT 5] in the current and previous year, divided by that number for the previous year, in per cent.
<i>Average number of cashless payments per inhabitant</i>	Volume of <i>total cashless payments</i> [CT 5] divided by <i>population</i> [CT 1].
<i>Daily average volume of cashless payments</i>	Volume of <i>total cashless payments</i> [CT 5], divided by number of days per year.

**Table 6: Use of payment services/instruments: volume of cashless payments by instrument type**

Tables 6 and 6a–e are based on CT 5 part A. The objective of these tables is to compare the volume of cashless payment used in the countries concerned.

<i>Credit transfers</i>	Volume of <i>credit transfers</i> [CT 5].
<i>Direct debits</i>	Volume of <i>direct debits</i> [CT 5].
<i>Cheques</i>	Volume of <i>cheques</i> [CT 5].
<i>Card and e-money payments</i>	Volume of <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 5].
<i>By card with a debit function</i>	Volume of <i>payments by card with a debit function</i> [CT 5].
<i>By card with a delayed debit function</i>	Volume of <i>payments by card with a delayed debit function</i> [CT 5].
<i>By card with a credit function</i>	Volume of <i>payments by card with a credit function</i> [CT 5].
<i>E-money payments</i>	Volume of <i>e-money payments</i> [CT 5].
<i>Other payment instruments</i>	Volume of <i>other payment instruments</i> [CT 5].
<i>Memo: Money remittances</i>	Volume of <i>money remittances</i> [CT 5].

**Table 6a: Use of payment services/instruments: relative importance of cashless payments, in volume of payments**

This table is based on CT 5 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in volume terms, and expresses them as a percentage of the total volume of cashless payments.

<i>Credit transfers</i>	Volume of <i>credit transfers</i> [CT 5] expressed as a percentage of volume of <i>total cashless payments</i> [CT 5].
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 5].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 5].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 5].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 5].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 5].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 5].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 5].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 5].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 5].

**Table 6b: Use of payment services/instruments: increase in the volume of cashless payments**

This table is based on CT 5 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in volume terms, and calculates the year-on-year growth rate.

<i>Credit transfers</i>	Difference between the volume of <i>credit transfers</i> [CT 5] in the current and previous year, divided by that number for the previous year, in per cent.
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 5].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 5].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 5].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 5].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 5].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 5].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 5].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 5].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 5].

**Table 6c: Use of payment services/instruments: volume of cashless payments per inhabitant**

This table is based on CT 5 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in volume terms, and expresses them as a volume of payments per inhabitant.

<i>Credit transfers</i>	Volume of <i>credit transfers</i> [CT 5] divided by <i>population</i> [CT 1].
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 5].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 5].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 5].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 5].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 5].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 5].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 5].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 5].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 5].

**Table 6d: Use of payment services/instruments: daily average volume of cashless payments**

This table is based on CT 5 part A, to calculate the daily averages.

<i>Credit transfers</i>	Volume of <i>credit transfers</i> [CT 5] divided by number of days per year.
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 5].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 5].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 5].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 5].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 5].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 5].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 5].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 5].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 5].

**Table 6e: Use of payment services/instruments: volume of fast payments**

This table is based on CT 5 part A. Its objectives are: (i) to compare the volume of fast cashless payments used in the countries concerned, its relevance to the total volume of cashless payments and its composition in terms of instrument type; (ii) to calculate the year-on-year growth rate, in terms of volume; (iii) to express it as an average volume per inhabitant; and (iv) to calculate the daily average number of fast payments.

<i>Fast payments</i>	Volume of <i>fast payments</i> [CT 5].
<i>Fast payments by credit transfer (%)</i>	Volume of <i>fast payments, credit transfers</i> [CT 5] expressed as a percentage of the volume of <i>fast payments</i> [CT 5].
<i>Fast payments by direct debit (%)</i>	Volume of <i>fast payments, direct debit</i> [CT 5] expressed as a percentage of the volume of <i>fast payments</i> [CT 5].
<i>Fast payments by other instrument type (%)</i>	Volume of <i>fast payments, other instrument type</i> [CT 5] expressed as a percentage of the volume of <i>fast payments</i> [CT 5].
<i>Fast payments (%) of total cashless payments</i>	Volume of <i>fast payments</i> [CT 5] expressed as a percentage of the volume of <i>total cashless payments</i> [CT 5].
<i>Fast payments (increase in number)</i>	Difference between the volume of <i>fast payments</i> [CT 5] in the current and previous year divided by that number for the previous year, in per cent.
<i>Fast payments (average volume per inhabitant)</i>	Volume of <i>fast payments</i> [CT 5] divided by <i>population</i> [CT 1].
<i>Fast payments (daily average volume)</i>	Volume of <i>fast payments</i> [CT 5] divided by number of days per year.

**Table 7: Use of payment services/instruments: value of cashless payments**

Based on CT 6 part A and CT 5.

<i>Total value of cashless payments</i>	Value of <i>total of cashless payments</i> [CT 6] converted to USD using the average exchange rate [CT 1].
<i>Increase in the real value of cashless payments</i>	Difference between the value of <i>total cashless payments</i> [CT 6] in the current and previous year divided by that number for the previous year, deflated by <i>CPI inflation</i> in the current year [CT 1], in per cent. Each of the values is converted to USD using the respective average exchange rate [CT 1].
<i>Average value of cashless payments per cashless payment</i>	Value of <i>total cashless payments</i> [CT 6] converted to USD using the average exchange rate [CT 1], divided by the volume of <i>total cashless payments</i> [CT 5].
<i>Average value of cashless payments per inhabitant</i>	Value of <i>total cashless payments</i> [CT 6], converted to USD using the average exchange rate [CT 1], divided by <i>population</i> [CT 1].
<i>Value as a ratio to GDP</i>	Value of <i>total cashless payments</i> [CT 6], converted to USD using the average exchange rate [CT 1], divided by <i>GDP</i> [CT 1].
<i>Daily average value of cashless payments</i>	Value of <i>total cashless payments</i> [CT 6], converted to USD using the average exchange rate [CT 1], divided by number of days per year.

**Table 8: Use of payment services/instruments: value of cashless payments by instrument type**

Tables 8 and 8a–g are based on CT 6 part A. The objective of these tables is to compare the value of cashless payments used in the countries concerned. These tables are based on the same general methodological guidance as Tables 6 and 6a–e.

Credit transfers	Value of <i>credit transfers</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
Direct debits	Value of <i>direct debits</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
Cheques	Value of <i>cheques</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
Card and e-money payments	Value of <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
By card with a debit function	Value of <i>payments by card with a debit function</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1].
By card with a delayed debit function	Value of <i>payments by card with a delayed debit function</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
By card with a credit function	Value of <i>payments by card with a credit function</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
E-money payments	Value of <i>e-money payments</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
Other payment instruments	Value of <i>other payment instruments</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
Memo: Money remittances	Value of money remittances [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].

**Table 8a: Use of payment services/instruments: relative importance of cashless payments, in value of payments**

This table is based on CT 6 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in value terms, and expresses them as a percentage of the total value of cashless payments.

Credit transfers	Value of <i>credit transfers</i> [CT 6] expressed as a percentage of value of <i>total cashless payments</i> [CT 6].
Direct debits	Idem for <i>direct debits</i> [CT 6].
Cheques	Idem for <i>cheques</i> [CT 6].
Card and e-money payments	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 6].
By card with a debit function	Idem for <i>payments by card with a debit function</i> [CT 6].
By card with a delayed debit function	Idem for <i>payments by card with a delayed debit function</i> [CT 6].
By card with a credit function	Idem for <i>payments by card with a credit function</i> [CT 6].
E-money payments	Idem for <i>e-money payments</i> [CT 6].
Other payment instruments	Idem for <i>other payment instruments</i> [CT 6].
Memo: Money remittances	Idem for <i>money remittances</i> [CT 6].

**Table 8b: Use of payment services/instruments: increase in the real value of cashless payments**

This table is based on CT 6 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in value terms and in domestic currency, and calculates the year-on-year growth rate, deflated by CPI inflation.

<i>Credit transfers</i>	Difference between the value of <i>credit transfers</i> [CT 6] in the current and previous year divided by that number for the previous year, deflated by <i>CPI inflation</i> in the current year [CT 1], in per cent. Each of the values is converted to USD using the respective average <i>exchange rate</i> [CT 1].
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 6].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 6].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 6].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 6].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 6].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 6].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 6].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 6].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 6].

**Table 8c: Use of payment services/instruments: value of cashless payments per payment**

This table is based on CTs 5 and 6 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in value terms, and divides them by the volume of their use.

<i>Credit transfers</i>	Value of <i>credit transfers</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by the volume of <i>credit transfers</i> [CT 5].
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 6].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 6].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 6].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 6].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 6].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 6].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 6].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 6].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 6].

**Table 8d: Use of payment services/instruments: value of cashless payments per inhabitant**

This table is based on CT 6 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in value terms, and expresses them as a value per inhabitant.

<i>Credit transfers</i>	Value of <i>credit transfers</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by <i>population</i> [CT 1].
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 6].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 6].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 6].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 6].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 6].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 6].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 6].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 6].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 6].

**Table 8e: Use of payment services/instruments: value of cashless payments as a ratio to GDP**

This table is based on CT 6 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in value terms, and expresses them as a percentage of GDP.

<i>Credit transfers</i>	Value of <i>credit transfers</i> [CT 6] divided by <i>GDP</i> [CT 1].
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 6].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 6].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 6].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 6].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 6].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 6].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 6].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 6].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 6].

**Table 8f: Use of payment services/instruments: daily average value of cashless payments**

This table is based on CT 6 part A, in that it takes the figures concerning the use of cashless payments with different instrument types, in value terms, and calculates the daily averages.

<i>Credit transfers</i>	Value of <i>credit transfers</i> [CT 6] divided by number of days per year.
<i>Direct debits</i>	Idem for <i>direct debits</i> [CT 6].
<i>Cheques</i>	Idem for <i>cheques</i> [CT 6].
<i>Card and e-money payments</i>	Idem for <i>card and e-money payments (with cards and e-money issued inside the country)</i> [CT 6].
<i>By card with a debit function</i>	Idem for <i>payments by card with a debit function</i> [CT 6].
<i>By card with a delayed debit function</i>	Idem for <i>payments by card with a delayed debit function</i> [CT 6].
<i>By card with a credit function</i>	Idem for <i>payments by card with a credit function</i> [CT 6].
<i>E-money payments</i>	Idem for <i>e-money payments</i> [CT 6].
<i>Other payment instruments</i>	Idem for <i>other payment instruments</i> [CT 6].
<i>Memo: Money remittances</i>	Idem for <i>money remittances</i> [CT 6].

**Table 8g: Use of payment services/instruments: value of fast payments**

This table is based on CT 6 part A. The objectives are: (i) to compare the value of fast cashless payments used in the countries concerned (in USD), its relevance to the total value of cashless payments and its composition in terms of instrument type; (ii) to calculate the year-on-year growth rate deflated by CPI inflation (in value terms and in domestic currency); (iii) to divide it by the volume of use; (iv) to express it as a percentage of the total value of cashless payments; and (iv) to express it as a value of payments per inhabitant and as a percentage of GDP.

<i>Fast payments</i>	Value of <i>fast payments</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>Fast payments by credit transfer (%)</i>	Value of <i>fast payments, credit transfers</i> [CT 6] expressed as a percentage of the value of <i>fast payments</i> [CT 6].
<i>Fast payments by direct debit (%)</i>	Value of <i>fast payments, direct debit</i> [CT 6] expressed as a percentage of the value of <i>fast payments</i> [CT 6].
<i>Fast payments by other instrument type (%)</i>	Value of <i>fast payments, other instrument type</i> [CT 6] expressed as a percentage of the value of <i>fast payments</i> [CT 6].
<i>Fast payments as a percentage of total cashless payments</i>	Value of <i>fast payments</i> [CT 6] expressed as a percentage of the value of <i>total cashless payments</i> [CT 6].
<i>Fast payments (increase in real value)</i>	Difference between the value of <i>fast payments</i> [CT 6] in the current and previous year, divided by that number for the previous year, deflated by <i>CPI inflation</i> in the current year [CT 1], in per cent. Each of the values is converted to USD using the respective average <i>exchange rate</i> [CT 1].
<i>Fast payments (average value per payment)</i>	Value of <i>fast payments</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by the volume of <i>fast payments</i> [CT 5].
<i>Fast payments (average value per inhabitant)</i>	Value of <i>fast payments</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by <i>population</i> [CT 1].
<i>Fast payments value as ratio of GDP</i>	Value of <i>fast payments</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by <i>GDP</i> [CT 1].

**Table 9: Use of payment services/instruments: volume of withdrawals/deposits**

Based on CT 5 part B.

Total volume of withdrawals/deposits	Volume of total withdrawals/deposits [CT 5].
Increase in the total volume of withdrawals/deposits	Difference between the volume of total withdrawals/deposits [CT 5] in the current and previous year, divided by that number for the previous year, in per cent.
Average volume of withdrawals/deposits per inhabitant	Volume of total withdrawals/deposits [CT 5] divided by population [CT 1].
Daily average volume of withdrawals/deposits	Volume of total withdrawals/deposits [CT 5] divided by number of days per year.

**Table 10: Use of payment services/instruments: volume of withdrawals/deposits broken down by cash withdrawals, cash deposits and e-money loading and unloading transactions**

Tables 10 and 10a-d are based on CT 5 part B. The objective of these tables is to compare the volume of cash withdrawals, cash deposits and e-money loading/unloading transactions used in the countries concerned.

Cash withdrawals with cards issued inside the country	Volume of cash withdrawals [CT 5]. This includes cash withdrawals with cards issued inside the country, at locations inside and outside the country.
At locations inside the country	Volume of cash withdrawals with cards issued inside the country at locations inside the country [CT 5].
At locations outside the country	Volume of cash withdrawals with cards issued inside the country at locations outside the country [CT 5].
Memo: Cash withdrawals at locations inside the country	Volume of cash withdrawals with cards issued inside and outside the country at locations inside the country [CT 5].
With cards issued outside the country	Volume of cash withdrawals with cards issued outside the country at locations inside the country [CT 5].
Cash deposits at locations inside and outside the country	Volume of cash deposits [CT 5].
With cards issued inside the country at locations inside the country	Volume of cash deposits with cards issued inside the country at locations inside the country [CT 5].
E-money loading/unloading transactions	Volume of e-money loading/unloading transactions [CT 5].

**Table 10a: Use of payment services/instruments: relative importance of withdrawals/deposits, in volume of transactions**

This table is based on CT 5 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in volume terms and expresses them as a percentage of the total volume of withdrawals/deposits.

<i>Cash withdrawals with cards issued inside the country</i>	Volume of <i>cash withdrawals</i> [CT 5] expressed as a percentage of volume of <i>total withdrawals/deposits</i> [CT 5].
<i>At locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 5].
<i>At locations outside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations outside the country</i> [CT 5].
<i>Cash deposits</i>	Idem for <i>cash deposits</i> [CT 5].
<i>With cards issued inside the country at locations inside the country</i>	Idem for <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 5].
<i>E-money loading/unloading transactions</i>	Idem for <i>e-money loading/unloading transactions</i> [CT 5].

**Table 10b: Use of payment services/instruments: increase in the volume of withdrawals/deposits**

This table is based on CT 5 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in volume terms and calculates the year-on-year growth rate.

<i>Cash withdrawals with cards issued inside the country</i>	Difference between the volume of <i>cash withdrawals</i> [CT 5] in the current and previous year, divided by that number for the previous year, in per cent.
<i>At locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 5].
<i>At locations outside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations outside the country</i> [CT 5].
<i>Memo: Cash withdrawals at locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside and outside the country at locations inside the country</i> [CT 5].
<i>With cards issued outside the country</i>	Idem for <i>cash withdrawals with cards issued outside the country at locations inside the country</i> [CT 5].
<i>Cash deposits</i>	Idem for <i>cash deposits</i> [CT 5].
<i>With cards issued inside the country at locations inside the country</i>	Idem for <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 5].
<i>E-money loading/unloading transactions</i>	Idem for <i>e-money loading/unloading transactions</i> [CT 5].

**Table 10c: Use of payment services/instruments: volume of withdrawals/deposits per inhabitant**

This table is based on CT 5 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in volume terms and expresses them as a volume per inhabitant.

<i>Cash withdrawals with cards issued inside the country</i>	Volume of cash withdrawals [CT 5] divided by population [CT 1].
<i>At locations inside the country</i>	Idem for cash withdrawals with cards issued inside the country at locations inside the country [CT 5].
<i>At locations outside the country</i>	Idem for cash withdrawals with cards issued inside the country at locations outside the country [CT 5].
<i>Cash deposits</i>	Idem for cash deposits [CT 5].
<i>With cards issued inside the country at locations inside the country</i>	Idem for cash deposits with cards issued inside the country at locations inside the country [CT 5].
<i>E-money loading/unloading transactions</i>	Idem for e-money loading/unloading transactions [CT 5].

**Table 10d: Use of payment services/instruments: daily average volume of withdrawals/deposits**

This table is based on CT 5 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in volume terms and calculates the daily averages.

<i>Cash withdrawals with cards issued inside the country</i>	Volume of cash withdrawals [CT 5] divided by number of days per year.
<i>At locations inside the country</i>	Idem for cash withdrawals with cards issued inside the country at locations inside the country [CT 5].
<i>At locations outside the country</i>	Idem for cash withdrawals with cards issued inside the country at locations outside the country [CT 5].
<i>Memo: Cash withdrawals at locations inside the country</i>	Idem for cash withdrawals with cards issued inside and outside the country at locations inside the country [CT 5].
<i>With cards issued outside the country</i>	Idem for cash withdrawals with cards issued outside the country at locations inside the country [CT 5].
<i>Cash deposits</i>	Idem for cash deposits [CT 5].
<i>With cards issued inside the country at locations inside the country</i>	Idem for cash deposits with cards issued inside the country at locations inside the country [CT 5].
<i>E-money loading/unloading transactions</i>	Idem for e-money loading/unloading transactions [CT 5].

**Table 11: Use of payment services/instruments: value of withdrawals/deposits**

Based on CT 6 part B.

<i>Total value of withdrawals/deposits</i>	Value of <i>total withdrawals/deposits</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>Increase in the real value of withdrawals/deposits</i>	Difference between the value of <i>total withdrawals/deposits</i> [CT 6] in the current and previous year, divided by that number for the previous year, deflated by <i>CPI inflation</i> in the current year [CT 1], in per cent. Each of the values is converted to USD using the respective average <i>exchange rate</i> [CT 1].
<i>Average value per withdrawal/deposit transaction</i>	Value of <i>total withdrawals/deposits</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by the volume of <i>total cashless payments</i> [CT 5].
<i>Average value of withdrawals/deposits per inhabitant</i>	Value of <i>total withdrawals/deposits</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by <i>population</i> [CT 1].
<i>Total value of withdrawals/deposits as a ratio to GDP</i>	Value of <i>total withdrawals/deposits</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by <i>GDP</i> [CT 1].
<i>Daily average value of withdrawals/deposits</i>	Value of <i>total withdrawals/deposits</i> [CT 6], converted to USD using the average <i>exchange rate</i> [CT 1], divided by number of days per year.

**Table 12: Use of payment services/instruments: value of withdrawals/deposits broken down by cash withdrawals, cash deposits and e-money loading and unloading transactions**

Tables 12 and 12a-f are based on CT 6 part B. The objective of these tables is to compare the value of cash withdrawals, cash deposits and e-money loading/unloading transactions used in the countries concerned.

<i>Cash withdrawals with cards issued inside the country</i>	Value of <i>cash withdrawals</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>At locations inside the country</i>	Value of <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>At locations outside the country</i>	Value of <i>cash withdrawals with cards issued inside the country at locations outside the country</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>Memo: Cash withdrawals at locations inside the country</i>	Value of <i>cash withdrawals with cards issued inside and outside the country at locations inside the country</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>With cards issued outside the country</i>	Value of <i>cash withdrawals with cards issued outside the country at locations inside the country</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>Cash deposits at locations inside and outside the country</i>	Value of <i>cash deposits</i> [CT 6] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>With cards issued inside the country at locations inside the country</i>	Value of <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 5].
<i>E-money loading/unloading transactions</i>	Value of <i>e-money loading/unloading transactions</i> [CT 6].

**Table 12a: Use of payment services/instruments: relative importance of withdrawals/deposits, in value of transactions**

This table is based on CT 6 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in value terms and expresses them as a percentage of the total value of withdrawals/deposits.

<i>Cash withdrawals with cards issued inside the country</i>	Value of <i>cash withdrawals</i> [CT 6] expressed as a percentage of value of <i>total withdrawals/deposits</i> [CT 6].
<i>At locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 6].
<i>At locations outside the country</i>	Idem for <i>cash withdrawals with cards issued outside the country at locations inside the country</i> [CT 6].
<i>Cash deposits</i>	Idem for <i>cash deposits</i> [CT 6].
<i>With cards issued inside the country at locations inside the country</i>	Idem for <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 6].
<i>E-money loading/unloading transactions</i>	Idem for <i>e-money loading/unloading transactions</i> [CT 6].

**Table 12b: Use of payment services/instruments: increase in the real value of withdrawals/deposits**

This table is based on CT 6 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in value terms and in domestic currency and calculates the year-on-year growth rate, deflated by CPI inflation.

<i>Cash withdrawals with cards issued inside the country</i>	Difference between the value of <i>cash withdrawals</i> [CT 6] in the current and previous year, divided by that number for the previous year, deflated by <i>CPI inflation</i> in the current year [CT 1], in per cent. Each of the values is converted to USD using the respective average <i>exchange rate</i> [CT 1].
<i>At locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 6].
<i>At locations outside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations outside the country</i> [CT 6].
<i>Memo: Cash withdrawals at locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside and outside the country at locations inside the country</i> [CT 6].
<i>With cards issued outside the country</i>	Idem for <i>cash withdrawals with cards issued outside the country at locations inside the country</i> [CT 6].
<i>Cash deposits</i>	Idem for <i>cash deposits</i> [CT 6].
<i>With cards issued inside the country at locations inside the country</i>	Idem for <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 6].
<i>E-money loading/unloading transactions</i>	Idem for <i>e-money loading/unloading transactions</i> [CT 6].

**Table 12c: Use of payment services/instruments: value withdrawals/deposits per transaction**

This table is based on CTs 5 and 6 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in value terms and divides them by the volume of their use.

<i>Cash withdrawals with cards issued inside the country</i>	Value of <i>cash withdrawals</i> [CT 6], converted to USD using the average exchange rate [CT 1], divided by the volume of <i>cash withdrawals</i> [CT 5].
<i>At locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 6].
<i>At locations outside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations outside the country</i> [CT 6].
<i>Memo: Cash withdrawals at locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside and outside the country at locations inside the country</i> [CT 6].
<i>With cards issued outside the country</i>	Idem for <i>cash withdrawals with cards issued outside the country at locations inside the country</i> [CT 6].
<i>Cash deposits</i>	Idem for <i>cash deposits</i> [CT 6].
<i>With cards issued inside the country at locations inside the country</i>	Idem for <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 6].
<i>E-money loading/unloading transactions</i>	Idem for <i>e-money loading/unloading transactions</i> [CT 6].

**Table 12d: Use of payment services/instruments: average value of withdrawals/deposits per inhabitant**

This table is based on CT 6 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in value terms and expresses them as a value per inhabitant.

<i>Cash withdrawals with cards issued inside the country</i>	Value of <i>cash withdrawals</i> [CT 6], converted to USD using the average exchange rate [CT 1], divided by population [CT 1].
<i>At locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 6].
<i>At locations outside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations outside the country</i> [CT 6].
<i>Cash deposits</i>	Idem for <i>cash deposits</i> [CT 6].
<i>With cards issued inside the country at locations inside the country</i>	Idem for <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 6].
<i>E-money loading/unloading transactions</i>	Idem for <i>e-money loading/unloading transactions</i> [CT 6].

**Table 12e: Use of payment services/instruments: value of withdrawals/deposits as a ratio to GDP**

This table is based on CT 6 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in value terms and expresses them as a percentage of GDP.

<i>Cash withdrawals with cards issued inside the country</i>	Value of <i>cash withdrawals</i> [CT 6] divided by <i>GDP</i> [CT 1].
<i>At locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 6].
<i>At locations outside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations outside the country</i> [CT 6].
<i>Cash deposits</i>	Idem for <i>cash deposits</i> [CT 6].
<i>With cards issued inside the country at locations inside the country</i>	Idem for <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 6].
<i>E-money loading/unloading transactions</i>	Idem for <i>e-money loading/unloading transactions</i> [CT 6].

**Table 12f: Use of payment services/instruments: daily average value of withdrawals/deposits**

This table is based on CT 6 part B, in that it takes the figures concerning the use of withdrawals/deposits (broken down into cash withdrawals, cash deposits and e-money loading/unloading transactions) in value terms and calculates the daily averages.

<i>Cash withdrawals with cards issued inside the country</i>	Value of <i>cash withdrawals</i> [CT 6] divided by number of days per year.
<i>At locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations inside the country</i> [CT 6].
<i>At locations outside the country</i>	Idem for <i>cash withdrawals with cards issued inside the country at locations outside the country</i> [CT 6].
<i>Memo: Cash withdrawals at locations inside the country</i>	Idem for <i>cash withdrawals with cards issued inside and outside the country at locations inside the country</i> [CT 6].
<i>With cards issued outside the country</i>	Idem for <i>cash withdrawals with cards issued outside the country at locations inside the country</i> [CT 6].
<i>Cash deposits</i>	Idem for <i>cash deposits</i> [CT 6].
<i>With cards issued inside the country at locations inside the country</i>	Idem for <i>cash deposits with cards issued inside the country at locations inside the country</i> [CT 6].
<i>E-money loading/unloading transactions</i>	Idem for <i>e-money loading/unloading transactions</i> [CT 6].

## Cards and terminals

**Table 13: Number of cards**

Based on CT 4.

<i>Total number of cards</i>	<i>Total number of cards [CT 4].</i>
<i>With a cash function</i>	<i>Cards with a cash function [CT 4].</i>
<i>With a debit function</i>	<i>Cards with a debit function [CT 4].</i>
<i>With a delayed debit function</i>	<i>Cards with a delayed debit function [CT 4].</i>
<i>With a credit function</i>	<i>Cards with a credit function [CT 4].</i>
<i>With an e-money function</i>	<i>Cards with an e-money function [CT 4].</i>
<i>Of which: contactless</i>	<i>Total number of cards, of which: contactless [CT 4].</i>
<i>Of which: issued by a non-bank</i>	<i>Total number of cards, of which: issued by a non-bank [CT 4].</i>
<i>Of which: able to initiate device-not-present payments</i>	<i>Total number of cards, of which: able to initiate device-not-present payments [CT 4].</i>

**Table 13a: Increase in the number of cards**

This table is based on CT 4, in that it takes the figures concerning the number of cards and calculates the year-on-year growth rate.

<i>Total number of cards</i>	Difference between <i>total number of cards [CT 4]</i> in the current and previous year, divided by that number for the previous year, in per cent.
<i>With a cash function</i>	Idem for <i>cards with a cash function [CT 4]</i> .
<i>With a debit function</i>	Idem for <i>cards with a debit function [CT 4]</i> .
<i>With a delayed debit function</i>	Idem for <i>cards with a delayed debit function [CT 4]</i> .
<i>With a credit function</i>	Idem for <i>cards with a credit function [CT 4]</i> .
<i>With an e-money function</i>	Idem for <i>cards with an e-money function [CT 4]</i> .
<i>Of which: contactless</i>	Idem for <i>total number of cards, of which: contactless [CT 4]</i> .
<i>Of which: issued by a non-bank</i>	Idem for <i>total number of cards, of which: issued by a non-bank [CT 4]</i> .
<i>Of which: able to initiate device-not-present payments</i>	Idem for <i>total number of cards of which: able to initiate device-not-present payments [CT 4]</i> .

### Table 13b: Number of cards per inhabitant

This table is based on CT 4 and Table 13, in that it takes the figures concerning the number of cards and divides them by the country's population. It gives an indication of the penetration of cards in the population of different countries.

<i>Total number of cards</i>	<i>Total number of cards [CT 4] divided by population [CT 1].</i>
<i>With a cash function</i>	<i>Idem for cards with a cash function [CT 4].</i>
<i>With a debit function</i>	<i>Idem for cards with a debit function [CT 4].</i>
<i>With a delayed debit function</i>	<i>Idem for cards with a delayed debit function [CT 4].</i>
<i>With a credit function</i>	<i>Idem for cards with a credit function [CT 4].</i>
<i>With an e-money function</i>	<i>Idem for cards with an e-money function [CT 4].</i>
<i>Of which: contactless</i>	<i>Idem for total number of cards, of which: contactless [CT 4].</i>
<i>Of which: issued by a non-bank</i>	<i>Idem for total number of cards, of which: issued by a non-bank [CT 4].</i>
<i>Of which: able to initiate device-not-present payments</i>	<i>Idem for total number of cards, of which: able to initiate device-not-present payments [CT 4].</i>

### Table 14: Number of terminals

Based on CT 4.

<i>POS terminals</i>	<i>Total number of POS terminals [CT 4].</i>
<i>Of which: EFTPOS terminals</i>	<i>Total number of POS terminals, of which: EFTPOS terminals [CT 4].</i>
<i>Of which: EFTPOS and contactless</i>	<i>Total number of POS terminals, of which: EFTPOS, of which: contactless [CT 4].</i>
<i>ATMs</i>	<i>Total number of ATMs [CT 4].</i>
<i>Cash withdrawal</i>	<i>Total number of ATMs that allow cash withdrawals [CT 4].</i>
<i>Cash deposit</i>	<i>Total number of ATMs that allow cash deposits [CT 4].</i>
<i>Credit transfer</i>	<i>Total number of ATMs that allow credit transfers [CT 4].</i>
<i>Of which: contactless</i>	<i>Total number of ATMs, of which: contactless [CT 4].</i>

### Table 14a: Terminals located in the country: increase in the number of terminals

This table is based on CT 4, in that it takes the figures concerning the number of terminals and calculates the year-on-year growth rate.

<i>POS terminals</i>	Difference between <i>total number of POS terminals [CT 4]</i> in the current and previous year, divided by that number for the previous year, in per cent.
<i>Of which: EFTPOS terminals</i>	<i>Idem for total number of POS, of which: EFTPOS terminals [CT 4].</i>
<i>Of which: EFTPOS and contactless</i>	<i>Idem for total number of POS, of which: EFTPOS, of which: contactless [CT 4].</i>
<i>ATMs</i>	<i>Idem for total number of ATMs [CT 4].</i>
<i>Cash withdrawal</i>	<i>Idem for total number of ATMs that allow cash withdrawals [CT 4].</i>
<i>Cash deposit</i>	<i>Idem for total number of ATMs that allow cash deposits [CT 4].</i>
<i>Credit transfer</i>	<i>Idem for total number of ATMs that allow credit transfers [CT 4].</i>
<i>Of which: contactless</i>	<i>Idem for total number of ATMs, of which: contactless [CT 4].</i>

**Table 14b: Number of terminals per inhabitant**

This table is based on CT 4, in that it takes the figures concerning the number of terminals and divides them by the country's population. It shows the density of terminals expressed in terms of population.

<i>POS terminals</i>	<i>Total number of POS terminals [CT 4] divided by population [CT 1].</i>
<i>Of which: EFTPOS</i>	<i>Idem for total number of POS terminals, of which: EFTPOS [CT 4].</i>
<i>Of which: EFTPOS and contactless</i>	<i>Idem for total number of POS terminals, of which: EFTPOS, of which: contactless [CT 4].</i>
<i>ATMs</i>	<i>Idem for total number of ATMs [CT 4].</i>
<i>Cash withdrawal</i>	<i>Idem for total number of ATMs that allow cash withdrawals [CT 4].</i>
<i>Cash deposit</i>	<i>Idem for total number of ATMs that allow cash deposits [CT 4].</i>
<i>Credit transfer</i>	<i>Idem for total number of ATMs that allow credit transfers [CT 4].</i>
<i>Of which: contactless</i>	<i>Idem for total number of ATMs, of which: contactless [CT 4].</i>

### B.3 Payment systems and critical service providers

**Table PS1: Features of selected payment systems**

Figures are new and are not presented in the CTs. The first category, "system", is presented in all comparative tables devoted to payment systems (PS).

<i>System</i>	All systems presented in CT 7.
<i>Type</i>	<i>Large-value payment system (LVPS); retail payment system (RPS); foreign exchange settlement system (FX); or fast payment system (FPS).</i> <i>If the PS processes large-value and retail payments, it is shown as LVPS+RPS. If the PS processes large-value and fast payments, it is shown as LVPS+FPS.</i>
<i>Settlement</i>	<i>Real-time gross settlement (RTGS).</i> <i>Net (N), of which multilateral netting (MN) and bilateral netting (BN).</i> <i>Gross (G): other gross settlement.</i> <i>Batch settlement (BA): settlement of batches in gross value without netting.</i>
<i>Owner</i>	<i>The entity which directly owns the majority of the PS: central bank (CB), commercial bank (B) or payment association (PA).</i>
<i>Manager</i>	<i>The entity which manages the PS: central bank (CB), commercial bank (B) or payment association (PA).</i>
<i>Processing</i>	<i>Manual (M), automated clearing house (via an electronic clearing system in which payment orders are exchanged among financial institutions and handled by a data processing centre; ACH) or real-time transmission (the transmission of funds transfer instructions on an individual basis at the time they are initiated; RTT).</i>
<i>Membership</i>	<i>Open (without membership criteria; O) or restricted (subject to criteria; R).</i>
<i>Degree of centralisation</i>	<i>Centralised (one processing centre where all settlement instructions are processed; C) or decentralised (more than one processing centre; D).</i>
<i>Pricing</i>	<i>Costs passed on to payment system participants: full cost (F), including investments with a view to cost recovery; variable cost (V), with a view to recovering the costs of transactions; symbolic cost (S), below variable cost; or no cost (O).</i>
<i>Closing time for same day transactions</i>	<i>Latest time of the day at which transactions can be sent to the system for settlement on the same day; in local time.</i>

<i>Settlement finality</i>	<i>Real time</i> in RTGS systems. <i>Intraday</i> in prefunded net systems. Intraday finality is settlement finality achieved continuously or several times throughout the settlement day. It can be provided through real-time settlement procedures and/or the settlement of the results of multiple batch processing during the settlement day. At specific times of the day (in local time) in other net and gross systems.
<i>Cutoff for third-party orders</i>	Latest time of the day at which transactions can be sent by third-party or indirect participants to the system for settlement on the same day, in local time.
<i>Standard opening hours</i>	<i>Opening</i> and <i>closing</i> expressed in local time.
<i>Speed</i>	For fast payment systems: the maximum amount of time needed for the "final" funds to be available to the payee (expressed in seconds).

### Table PS2: Payments processed by selected payment systems: volume

Based on CT 8.

<i>Number of transactions</i>	<i>Total gross volume</i> per system [CT 8].
<i>Increase in the number of transactions</i>	Difference between the <i>total number of transactions</i> per system (as described above), for the current and previous year, divided by that number for the previous year, in per cent.
<i>Memo: CLS settlement</i>	The total number of transactions settled by CLS.

### Table PS3: Payments processed by selected payment systems: value of transactions

Based on CTs 8 and 9.

<i>Value of transactions</i>	<i>Total gross value</i> per system [CT 9] converted to USD using the average <i>exchange rate</i> [CT 1].
<i>Average value per transaction</i>	<i>Value of transactions</i> per system (as described above), converted to USD using the <i>average exchange rate</i> [CT 1], divided by <i>total gross volume</i> per system [CT 8].
<i>Increase in the real value of transactions</i>	Difference between the <i>value of transactions</i> per system (as described above), in the current and previous year, divided by that number for the previous year, deflated by <i>CPI inflation</i> in the current year [CT 1], in per cent.
<i>Value of transactions as a percentage of GDP</i>	<i>Value of transactions</i> per system (as described above), divided by <i>GDP</i> [CT 1], in per cent.

### Table PS4: Participation in selected payment systems

Figures concerning participation in payment systems from CT 7 and concentration ratios from CTs 8 and 9.

<i>Total number of participants</i>	<i>Total number of participants</i> [CT 7].
<i>Of which: directly connected participants</i>	<i>Directly connected participants</i> [CT 7].
<i>Concentration ratio in terms of volume</i>	<i>Concentration ratio in terms of volume</i> [CT 8], in per cent.
<i>Concentration ratio in terms of value</i>	<i>Concentration ratio in terms of value</i> [CT 9], in per cent.

## B.4 Central counterparties and clearing houses

**Table CCP1: Features of selected central counterparties and clearing houses**

Figures are new and are not presented in the CTs. The first category, "entity", is presented in all CCP tables.

<i>Entity</i>	All CCPs presented in CTs 12–14.
<i>CCP or clearing house</i>	States whether the entity is a <i>central counterparty (CCP)</i> or a <i>clearing house (CH)</i> .
<i>Direct parent company</i>	<i>Central bank (CB), commercial banks (B), a stock exchange/trading system (SE), another CCP (CCP) or clearing house (CH) or other (O).</i> If (fully or partially) owned by a <i>stock exchange/trading system</i> , a CCP or a clearing house, the name of that entity is provided, as well as the share of its ownership rights.
<i>Relationship with a trading system</i>	The CCP belongs to the same entity as a <i>stock exchange/trading system</i> (= internal, <i>int</i> ); is a (direct or indirect) subsidiary of the <i>stock exchange/trading system</i> (= parental, <i>par</i> ); or is independent from the <i>stock exchange/trading system</i> ( <i>indep</i> ). The name of the <i>stock exchange/trading system</i> is provided.
<i>Relationship with CSD</i>	The CCP belongs to the same entity as the CSD (= internal, <i>int</i> ); is a subsidiary of the CSD (= parental, <i>par</i> ); or is independent from the CSD ( <i>indep</i> ). The name of the CSD is provided.
<i>With a banking licence</i>	Yes (Y) or no (N).
<i>Intraday margining</i>	<i>Routine and/or event-driven.</i> When event-driven, price-driven ( <i>P</i> ) or size-driven ( <i>S</i> ).
<i>Products/markets cleared</i>	Cash markets: equities (EQU) or fixed income (SEC); repo (REP), securities lending/borrowing (SLB). Derivatives markets: FX derivatives (DFX), interest rate derivatives (IRS), commodity derivatives (CMD), equity derivatives (EQD), credit derivatives (CRD).
<i>Currencies</i>	ISO code of the cleared currencies.
<i>Securities settlement agent</i>	The securities settlement agent (CSD (the name of the CSD is provided), <i>central bank (CB), commercial banks (B) or other (O)</i> ) settles the securities leg of the transaction. The information is given per product and per currency.
<i>Cash settlement agent</i>	The cash settlement agent ( <i>central bank (CB), commercial banks (B) or other (O)</i> ) settles the cash leg of the securities transaction. The information is given per product and per currency.
<i>Links to other CCPs</i>	Such links can be based on <i>cross-participation</i> or on <i>common systems</i> . The number of links is provided per currency area.
<i>Trading platforms</i>	Names of the trading platforms whose transactions are cleared by the CCP.

**Table CCP2: Transactions cleared by selected central counterparties and clearing houses: number of contracts and transactions**

Based on CT 13.

<i>Number of transactions</i>	<i>Total number of contracts and transactions per CCP or clearing house [CT 13].</i>
<i>Increase in the number of transactions</i>	Difference between the <i>total number of contracts and transactions [CT 13]</i> per CCP or clearing house in the current and previous year, divided by that number for the previous year, in per cent.

**Table CCP3: Transactions cleared by selected central counterparties and clearing houses: value of contracts and transactions**

Based on CTs 13 and 14.

<i>Value of transactions</i>	<i>Total value of contracts and transactions per CCP or clearing house [CT 14] converted to USD using the average exchange rate [CT 1].</i>
<i>Average value per transaction</i>	<i>Total value of contracts and transactions per CCP or clearing house [CT 14], converted to USD using the average exchange rate [CT 1], divided by total number of contracts and transactions per CCP or clearing house [CT 13].</i>
<i>Increase in the real value of transactions</i>	<i>Difference between the total value of transactions per CCP or clearing house [CT 14] in the current and the previous year, divided by the total value of contracts and transactions [CT 14] in the previous year, deflated by CPI inflation in the current year [CT 1], in per cent.</i>
<i>Value of transactions as a percentage of GDP</i>	<i>Total value of contracts and transactions per CCP or clearing house [CT 14], divided by GDP [CT 1], in per cent.</i>

**Table CCP4: Participation in selected central counterparties and clearing houses**

Based on CT 12.

<i>Total number of clearing members</i>	<i>Number of clearing members in CCPs and clearing houses [CT 12].</i>
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## B.5 Central securities depositories

**Table CSD1: Features of selected central securities depositories**

Figures are new and are not presented in the CTs. The first category, "CSD", is presented in all central securities depositories (CSD) comparative tables.

<i>CSD</i>	All CSDs presented in CTs 15–19.
<i>Type of securities held</i>	<i>Domestic securities (DOM) and/or international securities (INT), bonds (B), certificates of deposit (C), government securities (G), equity (E) and/or other (O).</i>
<i>Direct parent company</i>	<i>The entity which directly owns the majority of the CSD: central bank (CB), commercial banks (B), the stock exchange (SE) or other (O).</i>
<i>Securities settlement system</i>	Name of the settlement system(s). If more than one system is in operation during the reporting period for the statistical tables, information and data can be sent separately for each settlement system.
<i>Closing time for same day transactions</i>	Latest time of the day at which transactions can be sent to the system for settlement on the same day; in local time.
<i>Links to other CSDs</i>	Such links can be <i>direct</i> (based on cross-participation) or <i>indirect</i> (through local agents). They can allow free of payment (FOP) or delivery versus payment (DVP) settlement. The number of links and their category is provided per currency area.
<i>With a banking licence</i>	Yes (Y) or no (N).
<i>Delivery lag (T+n)</i>	Time lag between entering into a transaction and its discharge by the final exchange of a financial asset for payment.
<i>Intraday finality</i>	Settlement finality achieved continuously or several times throughout the settlement day. Intraday finality can be provided through real-time settlement procedures and/or the settlement of the results of multiple batch processing during the settlement day (yes if the system offers intraday finality; no otherwise).

<i>DVP (delivery versus payment) mechanism</i>	A link between a securities transfer system and a funds transfer system that ensures that delivery occurs if, and only if, payment occurs.  In <i>DVP model 1</i> , transfer instructions for both securities and funds are settled on a trade by trade basis, with final transfer of securities from the seller to the buyer (delivery) occurring at the same time as final transfer of the funds from the buyer to the seller (payment).  In <i>DVP model 2</i> , securities transfer instructions are settled on a gross basis, with final transfer of securities from the seller to the buyer (delivery) occurring throughout the processing cycle, but funds transfer instructions being settled on a net basis, with final transfer of the funds from the buyer to the seller (payment) occurring at the end of the processing cycle.  In <i>DVP model 3</i> , transfer instructions for both securities and funds are settled on a net basis, with final transfer of both securities and funds occurring at the end of the processing cycle.
<i>Currencies</i>	For domestic CSDs, ISO code of the currencies in which settlement can be done; for international CSDs, number of currencies in which settlement can be done.
<i>Cash settlement agent</i>	The cash settlement agent ( <i>central bank (CB)</i> , <i>commercial banks (B)</i> , <i>stock exchange (SE)</i> or <i>other (O)</i> ) settles the cash leg of the securities transactions. The information is provided per currency, when relevant.

**Table CSD2: Transactions processed by selected central securities depositories: number of delivery instructions**

Based on CT 18.

<i>Number of delivery instructions</i>	<i>Total number of delivery instructions</i> per CSD [CT 18].
<i>Increase in the number of delivery instructions</i>	Difference between the <i>total number of delivery instructions</i> [CT 18] per CSD in the current and previous year, divided by that number for the previous year, in per cent.

**Table CSD3: Transactions processed by selected central securities depositories: value of delivery instructions**

Based on CTs 18 and 19.

<i>Value of delivery instructions</i>	<i>Total value of delivery instructions</i> per CSD [CT 19] converted to USD using the average exchange rate [CT 1].
<i>Average value per delivery instruction</i>	<i>Total value of delivery instructions</i> per CSD [CT 19], converted to USD using the average exchange rate [CT 1], divided by <i>total number of transactions</i> per CSD [CT 18].
<i>Increase in the real value of delivery instructions</i>	Difference between the <i>total value of delivery instructions</i> per CSD [CT 19] in the current and the previous year, divided by the <i>total value of delivery instructions</i> [CT 19] in the previous year, deflated by <i>CPI inflation</i> in the current year [CT 1], in per cent.
<i>Value of delivery instructions as a percentage of GDP</i>	<i>Total value of delivery instructions</i> per CSD [CT 19], divided by <i>GDP</i> [CT 1], in per cent.

**Table CSD4: Participation in selected central securities depositories**

Based on CT 15.

<i>Total number of participants</i>	<i>Total number of direct participants in CSDs [CT 15].</i>
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**Table CSD5: Securities held on account at selected central securities depositories**

Based on CTs 16 and 17.

<i>Number of securities held</i>	<i>Total number of securities held [CT 16].</i>
<i>Value of securities held</i>	<i>Total value of securities held [CT 17] converted to USD using the average exchange rate [CT 1].</i>

**B.6 Trade repositories**

**Table TR: Selected features of trade repositories**

<i>Trade repositories offering services in the country</i>	List of trade repositories authorised or allowed to offer service in the country.
<i>Legally incorporated in the country</i>	Yes (Y) or no (N).
<i>Reported transaction types</i>	FX derivatives (DFX), interest rate derivatives (IRS), commodity derivatives (CMD), equity derivatives (EQD), credit derivatives (CRD), repo (REP), securities lending/borrowing (SLB).

## Annex: Working group participants

France	Antoine Lhuissier (since April 2016) Bank of France
	Raphaël di Ruggiero (since April 2016) Bank of France
	Yann Testard (until April 2016) Bank of France
Germany	Miro Holzer (since January 2016 until October 2016) Deutsche Bundesbank
	Julien Novotny Deutsche Bundesbank
	Beatrix Stejskal-Passler (since October 2016) Deutsche Bundesbank
Hong Kong SAR	Ann Yuen Fan Kwan Hong Kong Monetary Authority
India	Pankaj Ekka (until June 2016) Reserve Bank of India
Italy	Luca Arciero (until June 2016) Bank of Italy
	Guerino Ardizzi (since June 2016) Bank of Italy
Japan	Akio Hattori (until June 2016) Bank of Japan
	Hiroaki Nyuba (since June 2016) Bank of Japan
Netherlands	Annemarie Hondius Netherlands Bank
	Judith Looman Netherlands Bank
Russia	Elena Pak Central Bank of the Russian Federation
Switzerland	David Maurer Swiss National Bank
	Simone Saupe Swiss National Bank
United States	David Mills (until July 2016) Board of Governors of the Federal Reserve System
	Krzysztof Wozniak Board of Governors of the Federal Reserve System

European Central Bank

Rosa Brave (since September 2016)  
Emanuela Cerrato (until September 2016)  
Hanna Häkkinen

Carlos Conesa (until June 2015)  
Cristina Picillo (since April 2015)

## **Secretariat:**