



# Securities trading, clearing and settlement statistics

June 2023

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## Methodological notes

### 1 Trading in securities exchanges

#### 1.1 Number of participants at the end of the year

A participant in a securities exchange is a legal entity that can submit (buy and sell) orders to the exchange on its own behalf or on behalf of its customers.

Domestic participants are those located in the same country as the securities exchange.

	Number of participants with access to the trading system		
	1	Domestic 2	Non-domestic 3
<b>Total number of participants</b>			
of which Central banks			
of which Central clearing counterparties			
of which Credit institutions			
of which Others			

#### 1.2 Number of listed securities at the end of the year

The number of debt instruments and 'other' can be approximated with the number of ISIN<sup>1</sup> codes listed. In the case of equity, this refers to the number of listed companies (including investment funds) whose shares are listed on the stock market.

A company (investment fund) with several classes of shares is counted only once.

The distinction between domestic and non-domestic securities refers to the country of issue (rather than for example the country of residence of the issuer). Thus, a security that has been issued in the country of the securities exchange is considered domestic.

Depository receipts are considered domestic (equities).

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<sup>1</sup> ISIN: International Securities Identification Number

	Total number of listed securities		
	1	Domestic 2	Non-domestic 3
Type of instrument			
Debt instruments			
Equity			
of which investment fund shares/units			
Other (e.g. securitised derivatives)			

### 1.3 Market capitalisation of listed companies at the end of the year

Total market value of company, i.e. the total number of a company's shares outstanding multiplied by the current market price per share. In this context, the market capitalisation of listed companies refers only to domestic equities and exclusive foreign listings. An exclusive listing means that the foreign shares listed at the respective exchange are not listed at any exchange in their home country.

If shares are listed on several exchanges they are only taken into account for the calculation of the market capitalisation on the exchange where the shares have been issued.

In case of exchanges that are part of a large international group (e.g. Euronext, OMX), all securities listed in one of the participating countries are included.

Investment fund shares/units are not included in the market capitalisation.

	Total market capitalisation
	1
Equity excluding investment fund shares/units	

### 1.4 Executed trades

Each transaction is counted once, regardless of whether the transaction has been executed on an order-driven or on a quote-driven system.

Unsecuritised derivatives transactions and repo transactions are not included.

	Total number/value of executed trades		
	1	Electronic order book transactions 2	Negotiated deals 3
Type of instrument			
Debt instruments			
Equity			
of which investment fund shares/units			
Other (e.g. securitised derivatives)			

## 2 Clearing by central counterparties

A central clearing counterparty is an entity that interposes itself, in one or more markets, between the counterparties to the contracts traded, becoming the buyer to every seller and the seller to every buyer and thereby guaranteeing the performance of open contracts<sup>2</sup>.

### 2.1 Number of clearing members at the end of the year

Clearing members are broken down by central banks, CCPs, credit institutions, and other (types of institutions). They comprise the following types:

- individual or direct clearing members: CCP participants that are able to clear only their own obligations; and
- general clearing members: CCP participants that are able to clear their own obligations as well as those of clients/non-clearing members.

The number of clearing members refers to the last day of the year.

Domestic participants are those located in the same country as the CCP.

<sup>2</sup> Source of definition: ECB Glossary.

	Total number of clearing members			Non-domestic non-EU
	1	Domestic 2	Non-domestic EU 3	
Type of institution				
Central banks				
Central clearing counterparties				
Credit institutions				
Other				

## 2.2 Non-OTC derivatives contracts cleared

The number and value of non-OTC derivatives contracts cleared are broken down by type of instrument<sup>3</sup> and payment (euro and other currencies). Non-OTC derivatives contracts are executed on a regulated market or multilateral trading facility (MTF). Derivative contracts executed or entered as pre-arranged trades on a regulated market or MTF are also included as non-OTC derivative contracts. Non-OTC derivative contracts are reported on a post-novation basis (rather than a pre-novation basis). When several contracts are traded in one transaction, the number of non-OTC derivatives contracts cleared refers to the number of individual contracts only.

Some CCPs may provide a guarantee that obligations from trades are being fulfilled, but do not interpose themselves between buyer and seller as long as buyer and seller are able to fulfil their obligations. These reporting institutions do not apply novation as a rule. Consequently, contracts are to be reported only once. If, however, one party involved fails to fulfil its obligations and the reporting institution interposes itself between buyer and seller to ensure that the other party is satisfied, then the original transaction is included twice (this applies also to repos and securities – see below) .

Transfers of underlying assets to fulfil obligations from open positions in derivatives on expiry of a derivatives contract are not counted as derivatives transactions.

<sup>3</sup> Financial futures, financial options, other financial derivatives, commodity futures, commodity options and other commodity derivatives.

	Total number/value of non-OTC derivatives contracts cleared		
	1	Payment denominated in EUR 2	Payment denominated in other currencies 3
Type of instrument			
Financial futures			
Financial options			
Other financial derivatives			
Commodity futures			
Commodity options			
Other commodity derivatives			

## 2.3 OTC derivatives transactions cleared

The number and value of OTC derivatives contracts cleared are broken down by type of instrument<sup>4</sup> and payment (euro and other currencies). OTC derivatives transactions are not executed on a regulated market or multilateral trading facility (MTF). Derivative transactions executed or entered as pre-arranged trades on a regulated market or MTF are not reported as OTC derivative transactions (but as non-OTC derivatives contracts, see above).

	Total number/value of OTC derivatives transactions cleared		
	1	Payment denominated in EUR 2	Payment denominated in other currencies 3
Type of instrument			
Financial futures			
Financial options			
Other financial derivatives			
Commodity futures			
Commodity options			
Other commodity derivatives			

## 2.4 Repo transactions cleared

The number and value of repo transactions cleared are broken down by type of instrument<sup>5</sup> and payment (euro and other currencies).

Each repo transaction is counted once, although this comprises two steps: the delivery of the underlying and the redelivery of the underlying.

For derivatives transactions, the numbers and values of repo transactions are reported on a post-novation basis.

<sup>4</sup> Financial futures, financial options, other financial derivatives, commodity futures, commodity options and other commodity derivatives.

<sup>5</sup> Debt securities repos, equity repos and other repos.

	Total number/value of repo transactions cleared		
	1	Payment denominated in EUR	Payment denominated in other currencies
Type of instrument			
Debt securities repos			
Equity repos			
Other repos			

## 2.5 Cash (outright) securities transactions cleared

The number and value of cash (outright) securities transactions cleared are broken down by type of instrument<sup>6</sup> and payment (euro and other currencies). In a cash (outright) securities transaction, securities are bought or sold outright in the market. Spot market securities transactions are considered as cash (outright) securities transactions. Transfers of underlying assets to fulfil obligations from open positions in derivatives on expiry of a derivatives contract are counted as cash (outright) securities transactions, if the underlying is a security. As for derivatives and repo transactions, numbers and values of outright securities transactions are reported on a post-novation basis.

	Total number/value of cash securities transactions cleared		
	1	Payment denominated in EUR	Payment denominated in other currencies
Type of instrument			
Debt securities			
Equity			
of which investment fund shares			
Other securities			

## 2.6 Contracts cleared through a clearing link

The number and value of contracts/transactions cleared through a clearing link are broken down by type of instrument.<sup>7</sup> So, the contracts/transactions in this item are contained in the previous items.

A contract/transaction is cleared through a clearing link between two CCPs, e.g. CCP 1 and CCP 2, when the buying clearing member is clearing member of CCP 1 and the selling clearing member is clearing member of CCP 2. CCP 1 interposes itself between the buyer and CCP 2 (buys from CCP 2 and sells to the buyer). CCP 2 interposes itself between the seller and CCP 1 (buys from the seller and sells to CCP 1).

<sup>6</sup> Debt securities, equity and other securities.

<sup>7</sup> Financial derivatives contracts, commodity derivatives contracts, repo transactions, and cash (outright) securities transactions.

Note that in the novation process the transaction between the buyer and the seller is transformed into three transactions: one between the buyer and CCP 1, one between CCP 1 and CCP 2 and one between CCP 2 and the seller.

For other derivatives, repo and (cash) outright contracts/transactions, reporting is done (by each involved) CCP on a post-novation basis. However, each CCP reports only those transactions in which it is involved.

	<i>Of which: number/value of contracts cleared through a clearing link</i>
	1
Type of instrument	
Financial derivatives contracts	
Commodity derivatives contracts	
Repo transactions	
Cash (outright) securities transactions	

## 2.7 Securities transfers

The number and value of contracts/transactions cleared through a clearing link are broken down by type of instrument and payment.

A securities transfer refers to a movement of securities from one account to another. Only securities transfers that result directly from the clearing by novation of derivative, repo or securities transactions are counted. Transfers from a clearing member to the CCP or from the CCP to a clearing member are counted only if the securities are transferred as collateral. Transfers from one clearing member to another clearing member without an operational involvement of an account of the CCP are only counted if the CCP legally interposes itself between buyer and seller.

Transfers for rebalancing purposes are not counted, e.g. from one account of the reporting CCP (for example with a CSD 1) to another account of the reporting CCP (for example with another CSD 2). Securities transfers to fulfil obligations from open positions in derivatives at expiration of a contract are counted (transfers from a clearing member to the CCP or vice versa).



	Total number/value of securities transfers from one account (with CSD x) to another account (with CSD x)						
	1	Securities transfers from an account of the reporting CCP to an account of a clearing member or vice versa			Securities transfers from the account of one clearing member directly to the account of another clearing member (no account of the CCP involved)		
		Free of payment	Payment in EUR	Payment in other currency	Free of payment	Payment in EUR	Payment in other currency
	2	3	4	5	6	7	
Type of instrument							
Debt securities							
Equity							
Other securities							

### 3 Settlement in central securities depositories

A central securities depository (CSD) is an entity that: 1) enables securities transactions to be processed and settled by book entry; 2) provides custodial services (e.g. the administration of corporate actions and redemptions); and 3) plays an active role in ensuring the integrity of securities issues. Securities can be held in a physical (but immobilised) form or in a dematerialised form (whereby they exist only as electronic records).

A securities settlement system (SSS) is a system which allows the transfer of securities, either free of payment (FOP) or against payment (delivery versus payment).

#### 3.1 Number of direct participants at the end of the year

Direct participants are direct account holders in a tiered system and account operators in case of non-tiered systems. If in a non-tiered system private investors have two types of accounts – holding accounts and trading accounts – and only the trading accounts are operated by an account operator (as, for example, in Cyprus or Slovakia), the number of direct participants is the number of trading account operators. Domestic participants are those located in the same country as the CSD.

	Direct participants		
	Total	Domestic	Non-domestic
	1	2	3
Type of institution			
1.11 Central banks			
1.12. Central Counterparties (CCPs)			
1.13 Central securities depositories (CSDs)			
1.14 Credit institutions			
1.15 Other			

### 3.2 Securities held on accounts with the reporting CSD at the end of the year

Securities held on accounts with the reporting CSD comprise those issued or safe-kept in the reporting CSD, or transferred into the CSD through a link.

A security may be issued or safe-kept in a CSD in paper form and, later, some units of this security may be physically removed from the CSD and transferred, for example, to the owners; those units are not considered to be securities held on accounts with the reporting CSD.

	Value of securities held on accounts with the reporting CSD by source				
	1	Issued or safekept in the reporting CSD 2	Transferred into the reporting CSD through a (direct) link to		
			Total 3	Another CSD 4	A custodian bank 5
Type of instrument					
Bonds					
Short-term paper					
Equity					
Other					

	Value of securities held on accounts with the reporting CSD by use		
	6	Held on an account of:	
		another CSD	Other participants (e.g. credit institutions, brokers, dealers, central banks, CCPs)
		7	8
Type of instrument			
Bonds			
Short-term paper			
Equity			
Other			

### 3.3 Delivery instructions

Delivery instructions cover all instructions to move securities between accounts.

Those instructions where one of the accounts involved is the account of a CCP are identified as “of which”.

Trades cleared by a CCP relate to delivery instructions on a post-netting basis.

Delivery instructions include instructions to block (and de-block) securities for collateralisation purposes on a borrowers’ securities account with the CSD, as well as securities movements owing to automatic securities lending or automatic collateralisation (including self-collateralisation).

If there is segregation on a participant’s account with the CSD, delivery instructions to move securities from the participant’s own account to his omnibus account and vice versa are included.

Similarly, if in a non-tiered system (like Finland), securities are transferred from one account to another and both accounts have the same account operator, delivery instructions related to these transactions are included.

An instruction to transfer two (or more) different securities is included as two (or more) instructions.

Delivery instructions for the settlement of transactions between two clearing members of the CCP and also delivery instructions to transfer collateral from a clearing member to the CCP and back are included.

	Total number/value of delivery instructions processed									
	Total	Internal transfer: transfer from one account with the reporting CSD to another account with the reporting CSD, neither of them being a link account of another CSD			Internal transfer: transfer from one account with the reporting CSD to another account with the reporting CSD, at least one of them is a link account of another CSD			Transfer through an account of the reporting CSD with (link of the reporting CSD to) another entity (i.e. only one account with the reporting CSD is credited or debited)		
		Free of payment	Payment in EUR	Payment in other currencies	Free of payment	Payment in EUR	Payment in other currencies	Free of payment	Payment in EUR	Payment in other currencies
1	2	3	4	5	6	7	8	9	10	
Type of instrument										
Bonds										
Short-term paper										
Equity										
Other										

### 3.4 New issues and redemptions

The new issues correspond to the new ISIN codes of securities issued or safe-kept in the reporting CSD.

Redemptions correspond to the ISIN codes of securities issued or safe-kept in the reporting CSD that are deleted.

New or deleted ISIN codes of stripped securities are not considered.

	Number of new issues and redemptions		
	Total	Number of new issues	Number of redemptions
	1	2	3
Type of instrument			
Bonds			
Short-term paper			
Equity			
of which investment fund shares/units			
Other			

## Annex 1

### Valuation of transactions

#### **Derivatives transactions**

Derivatives transactions are valued at the market value of the underlying. In the case of option contracts, the exercise (strike) price of the underlying is used as the value of the contract (rather than the actual premium of the option to be paid by the option buyer). In the case of futures contracts, the market value of the underlying at the time of transaction or – for futures with notional underlying – the market price of the futures contract at the time of the transaction is used.

#### **Repo transactions**

Each repo transaction is valued at the amount of money borrowed through it. The value excludes the interest to be paid by the borrower.

#### **Securities transactions**

Transactions in securities, i.e. debt instruments and equity securities are valued at transaction values. In the case that free-of-payment transactions are cleared, the market value of the securities is used. In cases where market values are not available, the latest available price is used.

#### **Transactions denominated in a currency other than the reporting currency**

The values of cleared contracts/transactions denominated in a currency other than the reporting currency, are converted to the reporting currency, taking the exchange rate on the day when the transaction takes place.

## Compilation notes

### 1 Notes for data on Securities Exchanges (SEE)

Note that from 2020 onwards the production of Securities Exchanges data has been discontinued.

### 2 Notes for data on Central Clearing Counterparties (CCP)

Data for Nasdaq OMX DM are reported by NASDAQ OMX directly.

All other CCP data are reported by the National Central Banks of the country in which the system(s) is(are) located.

Time series on central clearing counterparties are identified with the first dimension code of "CCP".

- **Central Counterparty Austria (Austria):** Trading on the non-OTC derivatives market has fallen sharply in 2013, because options and futures products were delisted as a preparation for the market shutdown. From 21/03/2014 trading of non-OTC derivatives has been completely stopped.
- **BME Clearing (Spain):** In October 2012, "MEFF Sociedad Rectora de Productos Derivados, S.A.U." (MEFF), which cleared derivatives contracts, was authorised to perform the central counterparty activities for fixed income securities (activity carried out by MEFFCLEAR until that moment). As a consequence, MEFFCLEAR was taken over, and MEFF became the CCP for derivatives and fixed income securities (repo transactions). In September 2013, and in order to meet the requirements of the European Market Infrastructure Regulation, MEFF split up into two companies. A new company, called "MEFF Sociedad Rectora del Mercado de Productos Derivados" (MEFF Exchange) in charge of the derivatives trading activities was created, while "BME Clearing" assumed the entire activity of MEFF, providing clearing and settlement services.
- **European Central Counterparty N.V. (The Netherlands):** Previously known as European Multilateral Clearing Facility (EMCF). As from the end of 2013, EMCF and EuroCCP combined their strengths. The name of the new combined company is EuroCCP N.V. For the indicators on the "Number- and Value of securities transfers for settlement of cleared transactions", the "totals" include transactions of the EuroCCP with the non-EU counterpart central securities depositories of Switzerland (SIX SIS) and Norway (VPS).

- **ICE Clear Netherlands (The Netherlands):** ICE Clear Netherlands is a central counterparty for derivatives. Previously named Holland Clearing House. As from May 2017, the ICE Clear Netherlands is no longer providing clearing services for the Dutch market
- **KDPW\_CCP S.A. (Poland):** KDPW\_CCP started clearing of EUR OTC trade as of 3 April 2018. Consequently, the amendments of the Detailed Rules of the OTC Clearing System applicable to EUR OTC trade entered into force, including provisions governing trades denominated and cleared in EUR concerning the application of the EURIBOR and EONIA rates, as well as provisions governing the calculation of margins and valuation of such trades. KDPW\_CCP's new service offers the clearing of EUR OTC trade in interest rate derivatives whose underlying is EURIBOR or EONIA. KDPW\_CCP S.A. has launched the service of clearing WIBOR 1M IRS with tenors extended up to 20 years. The clearing service previously covered tenors up to 3 years. As a result, the tenors of transactions accepted for clearing are the same for all IRS (WIBOR 1M, 3M, 6M): up to 20 years.

From 5 October 2020 KDPW\_CCP has been clearing all SP sale transactions (except for conditional ones) concluded on TBSP BondSpot in the organized trading formula.

On 25 April 2022 KDPW\_CCP S.A. launched the TBSP Alternative Trading System, a service for clearing repo transactions executed on organised markets. KDPW\_CCP S.A. clears classic repo transactions involving Treasury securities, excluding indexed bonds. The trading value for repo transactions is given as the sum of the value of opening and closing transactions.
- **Casa Romana de Compensatie SA (RCH) (Romania):** Romanian Clearing House (RCH) acted as central counterparty for financial, equity and commodities derivatives contracts traded at SIBEX Sibiu Stock Exchange, Romania. Romanian Clearing House was established in 1998, has been authorised as a CCP by the Romanian regulatory authority (i.e. the Romanian National Securities Commission) in 2005. Casa Romana de Compensatie ceased its activity at the end of 2014 and the transactions in derivatives concluded on SIBEX Sibiu Stock Exchange are now cleared by the Athens Exchange Clearing House – Athex Clear.
- **Casa de Compensare Bucuresti SA (CCB) (Romania):** Bucharest Clearing House (CCB) is authorised as a clearing house and central counterparty. Since 14 September 2007, it performs specific activities under the oversight of the Romanian Securities Commission. CCB is owned by (with a share of 52.5%) the Bucharest Stock Exchange (BVB). The CCB role is to perform the registration, guarantee, clearing and settlement of transactions involving financial derivatives (FD), concluded on the Bucharest Stock Exchange Derivatives Market, using an integrated platform with the trading system, thus offering one single point of access for the participants. CCB ensures the adequate carrying out of operations mentioned in the previous paragraph, by performing the functions of clearing house and central counterpart as well as administrating risks to which is exposed by means of using specific

mechanisms, techniques and instruments. Case de Compensare Bucuresti SA has been inactive since 2014. As of 2016, the Financial Supervisory Authority in Romania withdrew the authorisation of CCB.

- **Nasdaq OMX DM (Sweden):** Repo transactions were reported for the first time, from 2013.
- **OMIClear (Portugal):** OMIClear has acted as a clearing house, a central counterparty and a settlement system for Iberian energy markets since July 2006, having obtained authorisation to operate as a CCP under EMIR in October 2014. Currently, OMIClear provides clearing and settlement services for:
  - power derivatives contracts stemming from the associated market (OMIP derivatives), whereby listed contracts cover several different load types (base load, peak load and solar), a number of countries (Spain, Portugal, France and Germany) and multiple maturities (ranging from overnight to ten years ahead);
  - natural gas derivatives contracts stemming from the associated markets (OMIP, MIBGAS derivatives and MIBGAS) – particularly physical futures contracts relating to the Spanish virtual trading point (PVB) – with maturities ranging from overnight to two years ahead.

OMIClear's clearing and settlement activity comprises (i) the registration of trades stemming from the above-mentioned markets, (ii) assessment of the risk exposures arising from the relevant positions, (iii) calculation of the collateral required to cover those risk exposures, (iv) daily cash settlement via the TARGET payment system, (v) notification of physical positions to the Iberian power spot market and the Iberian transmission system operator for natural gas, and (vi) the billing process.

### 3 Notes for data on Centralised Securities Depositories (SST)

Data for Euroclear Sweden is reported directly by the organisation itself.

All other data are reported by the National Central Banks of the country in which the system(s) is(are) located.

Time series on centralised securities depositories are identified with the first dimension code of "SST".

- Data for the **Central Depository and Clearing Company Inc. (Središnje klirinško depozitarno društvo) (Croatia)** is not yet planned for inclusion.
- **Euroclear Belgium:** In January 2009, the platform ESES (Euroclear Settlement of Euronext-zone Securities) was launched in Belgium.



- **Euroclear France:** The figures since 2007 are based on a new methodology related to the implementation of the single platform ESES (Euroclear Settlement of Euronext-zone securities), launched in November 2007 in France. This may trigger a break in series when comparing the figures with those from previous years.
- **Monte Titoli (Italy):** Delivery instructions do not include corporate actions, deposits and withdrawals on securities, money transfers and roll over transactions.
- **Euroclear Netherlands:** Until 2009, bonds include short-term papers. As from 2009 bonds exclude short-term papers. In January 2009, the platform ESES (Euroclear Settlement of Euronext-zone Securities) was launched in The Netherlands.
- **OeKB (WSB SYSTEM) (Austria):** 'Number of direct participants': the domestic central securities depository (CSD) that participates in OeKB is OeKB itself.
- **Euroclear Finland:** Number of direct participants': Euroclear Finland's link participants are CSDs (free-of-payment links). 'Value of securities held in central securities depositories': Warrants and exchange-traded funds are included in "Equity" in 2004, and "Other" in 2005 and 2006.
- **SKD, RM-SYSTEM, SCP and CDCP (Czech Republic):** The CSD (CDCP) started its operations in the Czech Republic in 2010. Commonly with the SKD, which is a Securities Settlement System (SSS) and register for short-term securities run by Česká národní banka, they fulfil a role of institutions in the Czech Republic which fully carries out the functions of a CSD. The Securities Centre (SCP) stopped its activities in 2010 and at the same time the Central Securities Depository (CDCP, former UNIVYC) took over the records`
- **Regional SSSs (Spain):** Bolsas y Mercados Españoles ("BME") decided to integrate all the services related to central securities depositories provided by the regional Securities Settlement Systems in the Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A. ("IBERCLEAR"). Therefore, SCL Valencia, SCL Bilbao and SCL Barcelona transferred all their securities positions to IBERCLEAR on January 2016, September 2016 and December 2016 respectively and do no longer provide SSS services.
- **SC Depozitarul Sibex SA (Romania):** As of 2017, the SC Depozitarul Sibex SA is no longer active.
- **ECSD (Estonia):** Since 17 September 2017, the ECSD is no longer providing services.
- **SITEME (Banco de Portugal):** Since 30 November 2012, SITEME (Banco de Portugal) is no longer providing services.

- **Nasdaq CSD SE Estonian Securities Settlement System:** On 18 September 2017, the Nasdaq CSD SE Estonian SSS started operating.
- **LCD-DENOS (Latvia):** Since 17 September 2017, the LCD-DENOS is no longer providing services.
- **Nasdaq CSD SE Latvian Securities Settlement System:** On 18 September 2017, the Nasdaq CSD SE Latvian SSS started operating.
- **CSLD (Lithuania):** Since 17 September 2017, the CSLD is no longer providing services.
- **Nasdaq CSD SE Lithuanian Securities Settlement System:** On 18 September 2017, the Nasdaq CSD SE Lithuanian SSS started operating.
- **NCDCP (Slovakia):** Since 1 November 2021 the National Central Securities Depository (NCDCP) is no longer providing services.
- **VP LUX (Luxembourg):** Since 2020, the VP LUX is no longer providing services.
- **KDPW S.A. (Poland):** Komisja Nadzoru Finansowego (KNF) in its decision of 3 March 2020 has authorised KDPW under Regulation (EU) No 909/2014 (CSDR), where under the single passport system the authorisation confirms that KDPW is ready to provide services under EU standards across the EU including recording and safe-keeping of financial instruments as well as settlement of transactions.

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For specific terminology please refer to the [ECB glossary](#) (available in English only).

## Securities Exchange Statistics

	Number of participants		Number of executed trades (in thousands of transactions)		Value of executed trades (in millions of euro)	
	2017	2018	2017	2018	2017	2018
<b>Euro area countries</b>						
<b>Belgium</b>						
Euronext Brussels SA	147	133	19,691	19,692	108,353	125,188
<b>Germany</b>						
Deutsche Börse AG <sup>3)</sup>	170	169	150,140	144,677	1,565,919	1,779,402
<b>Ireland</b>						
Irish Stock Exchange Ltd	21	22	3,326	3,802	135,059	101,495
<b>Greece</b>						
Athens Stock Exchange	52	48	4,389	5,073	14,820	13,696
Bank of Greece	23	23	0	5	555	5,002
<b>Spain</b>						
BME (Spanish Exchanges)	57	56	51,393	44,507	6,685,717	1,105,463
<b>France</b>						
NYSE Euronext Paris	147	148	145,383	137,708	1,187,723	1,250,368
<b>Italy</b>						
Borsa Italiana SpA	104	98	80,273	81,992	953,148	923,370
MTI Wholesale Market (government securities)	55	51	213	212	1,215,566	1,161,554
MTI BONDVISION	189	175	156	144	979,151	889,123
MTI Wholesale Market (corporate and intl organisations' bonds) <sup>*)</sup>	-	-	-	-	-	-
<b>Cyprus</b>						
Cyprus Stock Exchange	15	13	29	27	170	113
<b>Luxembourg</b>						
Société de la Bourse de Luxembourg SA	26	26	16	12	198	177
<b>Malta</b>						
Malta Stock Exchange	17	18	31	26	572	394
<b>The Netherlands</b>						
Euronext Amsterdam Cash Market	-	-	69,387	68,837	586,606	596,439
<b>Austria</b>						
CEESEG - Vienna	79	80	6,793	5,609	33,768	35,910
<b>Portugal</b>						
Euronext Lisbon SA	94	99	5,446	4,483	25,874	25,168
<b>Slovenia</b>						
CEESEG - Ljubljana	14	12	50	38	347	337
<b>Slovakia</b>						
Bratislava Stock Exchange	14	13	7	10	7,240	480
<b>Non-euro area countries</b>						
<b>Bulgaria</b>						
Bulgarian Stock Exchange	51	49	78	51	963	239
<b>Czech Republic</b>						
Prague Stock Exchange	19	18	782	712	5,519	5,927
RM-SYSTEM Czech Stock Exchange	15	15	178	169	241	219
<b>Hungary</b>						
Budapest Stock Exchange	19	19	1,941	1,890	9,790	11,213
<b>Poland</b>						
Gielda Papierow Wartosciowych w Warszawie	53	50	21,095	19,026	64,023	51,864
BondSpot S.A.	14	13	0	0	56	46
<b>Romania</b>						
Bursa de Valori Bucuresti	37	29	947	617	2,459	3,393
<b>United Kingdom</b>						
London Stock Exchange Ltd	338	336	288,909	258,009	12,133,633	3,105,140
<i>NYSE Euronext<sup>1)</sup></i>	-	-	240,481	230,469	2,621,303	2,001,670
<i>NASDAQ OMX Nordic &amp; Baltics<sup>2)</sup></i>	116	120	140,751	156,827	2,346,368	912,031

1) Includes the exchanges in Brussels, Paris, Amsterdam, Lisbon and London.

2) Includes the exchanges in Helsinki, Copenhagen, Tallinn, Riga, Vilnius, Stockholm and Reykjavik.

3) The system was closed during year 2017.

\*) The system was closed.

## Securities clearing statistics

### 1 Number of participants in central counterparty clearing

	2018	2019	2020	2021	2022
<b>Euro area countries</b>					
EUREX Clearing AG ( <i>Germany</i> )	209	218	222	210	205
Hellenic Exchanges Holdings SA ( <i>Greece</i> )	19	19	17	17	18
BME Clearing ( <i>Spain</i> )	64	68	67	61	59
LCH.Clearnet SA ( <i>France</i> )	125	119	130	133	135
CC&G ( <i>Italy</i> )	84	91	93	90	87
European Central Counterparty N.V. ( <i>The Netherlands</i> )	42	44	45	47	46
CCP ( <i>Austria</i> )	51	51	48	41	38
OMIClear, C.C., S.A ( <i>Portugal</i> )	13	11	9	9	9
<b>Non-euro area countries</b>					
KELER CCP Zrt. ( <i>Hungary</i> )	21	18	18	18	18
KDPW_CCP S.A. ( <i>Poland</i> )	35	33	32	34	33
Nasdaq OMX DM ( <i>Sweden</i> )	88	97	87	79	65

## 2 Number of cash (outright) securities transactions cleared through central counterparty clearing (in thousands)

	2018	2019	2020	2021	2022
<b>Euro area countries</b>					
EUREX Clearing AG ( <i>Germany</i> )	243,566	216,573	336,530	289,508	296,475
Hellenic Exchanges Holdings SA ( <i>Greece</i> )	1	1	1	1	1
BME Clearing ( <i>Spain</i> )	88,737	74,627	111,407	90,510	77,826
LCH.Clearnet SA ( <i>France</i> )	484,008	424,512	674,237	608,609	555,619
transactions cleared in France	296,186	254,182	414,306	370,314	336,508
transactions cleared in Belgium	39,564	34,032	44,785	35,728	33,334
transactions cleared in Germany	-	-	-	-	-
transactions cleared in Spain	0	0	0	0	0
transactions cleared in Italy	398	336	625	1,190	930
transactions cleared in Luxembourg	23	18	19	20	18
transactions cleared in the Netherlands	138,928	127,908	202,605	191,010	174,896
transactions cleared in Portugal	8,819	8,035	11,896	10,347	9,925
transactions cleared in the United Kingdom	91	0	0	-	-
CC&G ( <i>Italy</i> )	159,359	146,291	200,511	189,456	177,982
European Central Counterparty N.V. ( <i>The Netherlands</i> )	1,642,262	1,305,013	1,682,410	1,797,643	2,110,869
transactions cleared in The Netherlands	-	12	1,242	227,583	18,166
transactions cleared in Germany	779	1,060	3,743	8,326	7,679
transactions cleared in Sweden	36,802	135,896	241,630	282,959	260,624
transactions cleared in the United Kingdom	1,556,087	1,049,945	1,235,617	896,354	1,428,163
transactions cleared in Norway	179	5,686	15,039	15,352	17,349
transactions cleared in Hungary	-	-	-	-	-
CCP ( <i>Austria</i> )	11,225	9,527	12,036	11,298	10,950
OMIClear, C.C., S.A ( <i>Portugal</i> )	-	-	-	-	-
<b>Non-euro area countries</b>					
KELER CCP Zrt. ( <i>Hungary</i> )	1,902	1,815	2,393	1,871	2,412
KDPW_CCP S.A. ( <i>Poland</i> )	19,025	18,982	39,232	37,779	35,453
Nasdaq OMX DM ( <i>Sweden</i> )	-	-	-	-	-

### 3 Value of cash (outright) securities transactions cleared through central counterpart clearing (in billions of euro)

	2018	2019	2020	2021	2022
<b>Euro area countries</b>					
EUREX Clearing AG ( <i>Germany</i> )	3,270	2,729	3,462	3,104	3,198
Hellenic Exchanges Holdings SA ( <i>Greece</i> )	0	0	0	0	0
BME Clearing ( <i>Spain</i> )	1,137	931	844	742	711
LCH.Clearnet SA ( <i>France</i> )	7,198	6,811	9,230	13,305	11,043
transactions cleared in France	2,981	2,620	2,919	2,701	2,767
transactions cleared in Belgium	263	667	595	800	696
transactions cleared in Germany	-	-	-	-	-
transactions cleared in Spain	-	-	-	-	-
transactions cleared in Italy	2,255	1,799	3,670	7,841	5,829
transactions cleared in Luxembourg	0	0	0	0	0
transactions cleared in the Netherlands	1,225	1,676	1,987	1,906	1,687
transactions cleared in Portugal	49	48	58	58	64
transactions cleared in the United Kingdom	425	0	0	-	-
CC&G ( <i>Italy</i> )	2,981	2,666	3,728	5,716	4,342
European Central Counterparty N.V. ( <i>The Netherlands</i> )	10,134	9,046	10,527	11,068	12,446
transactions cleared in The Netherlands	-	0	9	700	119
transactions cleared in Germany	6	10	26	50	42
transactions cleared in Sweden	163	587	888	1,019	891
transactions cleared in the United Kingdom	9,415	7,533	8,268	7,325	9,288
transactions cleared in Norway	1	21	46	52	67
transactions cleared in Hungary	-	-	-	-	-
CCP ( <i>Austria</i> )	72	63	70	75	73
OMIClear, C.C., S.A ( <i>Portugal</i> )	-	-	-	-	-
<b>Non-euro area countries</b>					
KELER CCP Zrt. ( <i>Hungary</i> )	11	10	12	11	13
KDPW_CCP S.A. ( <i>Poland</i> )	52	46	74	85	80
Nasdaq OMX DM ( <i>Sweden</i> )	-	-	-	-	-

## Securities settlement statistics

### 1 Number of participants in central securities depositories (end of period)

	2018	2019	2020	2021	2022
<b>Euro area countries</b>					
<b>Belgium</b>					
NBB SSS	67	69	65	63	62
Euroclear Belgium	75	75	72	68	68
Euroclear Bank	1,650	1,657	1,641	1,765	1,845
<b>Germany</b>					
Clearstream Banking AG	330	261	286	274	281
<b>Estonia</b>					
Nasdaq CSD SE Estonian Securities Settlement System	18	20	18	18	17
<b>Greece</b>					
BOGS	37	37	37	37	33
Hellenic Exchanges (HELEX)	51	49	48	47	44
<b>Spain</b>					
Iberclear	70	71	70	63	64
<b>France</b>					
Euroclear France	141	146	139	137	134
<b>Italy</b>					
Monte Titoli	175	177	186	186	230
<b>Cyprus</b>					
CDCR	33	32	35	34	29
<b>Latvia</b>					
Nasdaq CSD SE Latvian Securities Settlement System	24	24	27	26	26
<b>Lithuania</b>					
Nasdaq CSD SE Lithuanian Securities Settlement System	29	27	25	25	25
<b>Luxembourg</b>					
Clearstream Banking Luxembourg	1,438	1,339	1,395	1,410	1,436
VP Lux *)	14	-	-	-	-
LUX CSD	15	15	15	15	16
<b>Malta</b>					
MSE	18	19	18	18	19
<b>Netherlands</b>					
Euroclear Netherlands	75	77	78	74	75
<b>Austria</b>					
OEKB (WSB SYSTEM)	77	74	75	76	73
<b>Portugal</b>					
Euronext Securities Porto	46	49	53	55	42
<b>Slovenia</b>					
KDD	21	21	20	19	18
<b>Slovakia</b>					
CDCP SR	25	26	26	24	24
NCDCP *)	7	7	7	-	-
<b>Finland</b>					
Euroclear Finland	23	23	24	22	22
<b>Non-euro area countries</b>					
<b>Bulgaria</b>					
CDA	88	84	82	81	77
GSD	26	25	24	24	24
<b>Czech Republic</b>					
SKD	28	28	27	27	27
RM-SYSTEM	15	16	15	15	17
CDCP	24	27	26	27	28
<b>Denmark</b>					
Euronext Securities Copenhagen	152	138	134	129	114
<b>Hungary</b>					
KELER	98	251	117	118	108
<b>Poland</b>					
KDPW S.A.	63	61	61	61	59
SKARBNET4	41	41	42	40	39
<b>Romania</b>					
SC Depozitarul Central SA	39	38	36	35	36
SaFIR	33	33	38	33	31
<b>Sweden</b>					
Euroclear Sweden AB	44	44	44	44	44

\*) The system was closed.

## 2 Value of securities held on accounts with central securities depositories (end of period)

	Value of securities (EUR billions)					Increase in the value of securities (% per annum)				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
<b>Euro area countries</b>										
<b>Belgium</b>										
NBB SSS	621	643	697	714	755	1	3	8	2	6
Euroclear Belgium	180	222	197	221	193	-25	24	-11	12	-12
Euroclear Bank	13,605	15,025	15,754	17,375	17,702	4	10	5	10	2
<b>Germany</b>										
Clearstream Banking AG	8,778	9,596	10,551	11,572	11,350	6	9	10	10	-2
<b>Estonia</b>										
Nasdaq CSD SE Estonian SSS	9	9	10	12	12	9	-2	5	28	-4
<b>Greece</b>										
BOGS	111	115	134	151	153	1	4	16	13	1
Hellenic Exchanges (HELEX)	47	52	47	60	58	-16	11	-9	27	-4
<b>Spain</b>										
Iberclear	2,286	2,367	2,591	2,672	2,419	-4	4	9	3	-9
<b>France</b>										
Euroclear France	6,559	7,322	7,714	8,722	8,473	-2	12	5	13	-3
<b>Italy</b>										
Monte Titoli	3,305	3,364	3,426	3,698	3,709	0	2	2	8	0
<b>Cyprus</b>										
CDCR	7	8	8	7	9	14	18	6	-11	25
<b>Latvia</b>										
Nasdaq CSD SE Latvian SSS	4	4	4	4	3	-14	3	11	4	-22
<b>Lithuania</b>										
Nasdaq CSD SE Lithuanian SSS	12	13	15	18	18	-1	6	22	15	3
<b>Luxembourg</b>										
Clearstream Banking Luxembourg	7,473	8,012	8,204	9,116	9,411	2	7	2	11	3
VP Lux *)	3	-	-	-	-	-58	-	-	-	-
LUX CSD	24	26	46	66	54	13	8	77	42	-18
<b>Malta</b>										
MSE	14	16	15	16	15	-3	7	-5	6	-2
<b>Netherlands</b>										
Euroclear Netherlands	964	1,101	1,217	1,534	1,319	-10	14	10	26	-14
<b>Austria</b>										
OEKB (WSB SYSTEM)	589	587	625	707	666	-3	0	7	13	-6
<b>Portugal</b>										
Euronext Securities Porto	2,222	351	384	400	387	245	-84	9	4	-3
<b>Slovenia</b>										
KDD	35	36	42	46	47	12	3	17	9	2
<b>Slovakia</b>										
CDCP SR	52	54	63	105	115	4	4	17	67	10
NCDPCP *)	1	1	1	-	-	-	21	29	-	-
<b>Finland</b>										
Euroclear Finland	359	390	444	514	480	-2	9	14	16	-7
<b>Non-euro area countries</b>										
<b>Bulgaria</b>										
CDA	36	12	10	10	13	4	-68	-11	-2	23
GSD	3	3	3	4	6	-19	0	3	53	27
<b>Czech Republic</b>										
SKD	156	158	159	166	170	-2	1	1	5	2
RM-SYSTEM	0	0	0	0	0	-	-	-	-	-
CDCP	116	117	133	165	179	1	1	13	25	8
<b>Denmark</b>										
Euronext Securities Copenhagen	1,095	1,246	1,414	1,582	1,519	-5	14	13	12	-4
<b>Hungary</b>										
KELER	145	123	130	177	166	4	-15	6	36	-6
<b>Poland</b>										
KDPW S.A.	315	322	388	442	422	-8	2	20	14	-5
SKARBNET4	12	15	30	40	54	-45	23	99	32	34
<b>Romania</b>										
SC Depozitarul Central SA	21	27	25	36	34	-10	25	-6	43	-5
SaFIR	35	39	49	52	57	16	12	26	5	9
<b>Sweden</b>										
Euroclear Sweden AB	1,054	1,642	1,897	2,535	1,932	-24	56	16	34	-24

\*) The system was closed.



### 3 Transactions processed by central securities depositories: Number of transactions

	Number of delivery instructions (thousands)					Increase in number of delivery instructions (% per annum)				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
<b>Euro area countries</b>										
<b>Belgium</b>										
NBB SSS	789	952	1,029	1,136	1,301	13	21	8	10	15
Euroclear Belgium	2,651	2,582	2,865	2,643	2,564	7	-3	11	-8	-3
Euroclear Bank	106,599	116,050	128,430	146,560	162,929	12	9	11	14	11
<b>Germany</b>										
Clearstream Banking AG	63,261	65,218	101,818	113,011	106,461	6	3	56	11	-6
<b>Estonia</b>										
Nasdaq CSD SE Estonian SSS	109	174	445	1,232	1,210	445	60	156	177	-2
<b>Greece</b>										
BOGS	94	112	94	100	71	-30	19	-16	6	-29
Hellenic Exchanges (HELEX)	5,281	7,007	8,476	7,843	2,645	16	33	21	-7	-66
<b>Spain</b>										
Iberclear	9,208	9,394	10,076	9,596	9,366	12	2	7	-5	-2
<b>France</b>										
Euroclear France	27,952	29,214	32,690	32,460	32,911	7	5	12	-1	1
<b>Italy</b>										
Monte Titoli	27,858	25,662	46,499	26,398	25,959	-2	-8	81	-43	-2
<b>Cyprus</b>										
CDCR	28	36	31	23	31	-7	29	-14	-26	35
<b>Latvia</b>										
Nasdaq CSD SE Latvian SSS	20	19	35	93	65	150	-5	84	166	-30
<b>Lithuania</b>										
Nasdaq CSD SE Lithuanian SSS	62	54	221	384	378	38	-13	309	74	-2
<b>Luxembourg</b>										
Clearstream Banking Luxembourg	22,344	66,521	74,574	76,950	80,720	-14	198	12	3	5
VP Lux *)	1	-	-	-	-	-55	-	-	-	-
LUX CSD	17	19	24	26	12	-6	9	25	10	-55
<b>Malta</b>										
MSE	37	35	29	23	21	-1	-5	-17	-22	-5
<b>Netherlands</b>										
Euroclear Netherlands	6,288	6,588	7,903	7,451	6,918	3	5	20	-6	-7
<b>Austria</b>										
OEKB (WSB SYSTEM)	1,311	1,321	1,478	1,540	1,412	8	1	12	4	-8
<b>Portugal</b>										
Euronext Securities Porto	896	930	941	1,733	1,299	-4	4	1	84	-25
<b>Slovenia</b>										
KDD	69	52	59	51	61	-48	-25	13	-14	20
<b>Slovakia</b>										
CDCP SR	22	32	15	53	23	38	46	-52	248	-57
NCDPCP *)	0	0	1	-	-	-	33	60	-	-
<b>Finland</b>										
Euroclear Finland	9,263	9,576	15,264	12,887	10,428	22	3	59	-16	-19
<b>Non-euro area countries</b>										
<b>Bulgaria</b>										
CDA	50	42	58	82	5	-26	-16	38	41	-94
GSD	4	4	2	2	1	33	0	-50	0	-50
<b>Czech Republic</b>										
SKD	29	28	28	28	33	53	-3	0	0	18
RM-SYSTEM	169	139	158	129	289	-5	-18	14	-18	124
CDCP	1,250	1,300	1,547	1,362	1,604	-7	4	19	-12	18
<b>Denmark</b>										
Euronext Securities Copenhagen	16,332	59,144	39,322	46,072	40,054	-4	262	-34	17	-13
<b>Hungary</b>										
KELER	526	556	597	939	1,225	-24	6	7	57	30
<b>Poland</b>										
KDPW S.A.	7,792	6,707	15,054	13,811	10,810	-18	-14	124	-8	-22
SKARBNET4	0	0	0	0	0	-	-	-	-	-
<b>Romania</b>										
SC Depozitarul Central SA	752	636	1,043	1,602	1,730	-31	-15	64	54	8
SaFIR	40	28	32	26	39	43	-30	14	-19	50
<b>Sweden</b>										
Euroclear Sweden AB	14,992	13,768	15,866	18,746	17,180	-5	-8	15	18	-8

\*) The system was closed.

## 4a Transactions processed by central securities depositories: Value of transactions

	Value of delivery instructions (EUR billions)					Average value per delivery instruction (EUR thousands)				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
<b>Euro area countries</b>										
<b>Belgium</b>										
NBB SSS	13,994	12,077	13,095	16,240	17,177	17,737	12,686	12,726	14,295	13,203
Euroclear Belgium	964	784	705	722	735	364	304	246	273	287
Euroclear Bank	527,775	543,828	580,577	657,107	694,499	4,951	4,686	4,521	4,484	4,263
<b>Germany</b>										
Clearstream Banking AG	50,250	68,366	84,285	81,710	148,274	794	1,048	828	723	1,393
<b>Estonia</b>										
Nasdaq CSD SE Estonian SSS	8	8	8	10	11	77	47	17	8	9
<b>Greece</b>										
BOGS	4,005	5,282	6,211	5,407	5,477	42,602	47,162	66,077	54,065	77,145
Hellenic Exchanges (HELEX)	31	39	40	49	52	6	6	5	6	20
<b>Spain</b>										
Iberclear	29,229	32,235	36,126	39,205	37,208	3,174	3,431	3,585	4,086	3,973
<b>France</b>										
Euroclear France	92,370	112,464	116,038	123,481	143,049	3,305	3,850	3,550	3,804	4,347
<b>Italy</b>										
Monte Titoli	86,534	97,731	99,443	77,804	81,702	3,106	3,808	2,139	2,947	3,147
<b>Cyprus</b>										
CDCR	6	0	0	0	0	231	10	5	9	7
<b>Latvia</b>										
Nasdaq CSD SE Latvian SSS	4	5	3	3	6	215	255	100	30	86
<b>Lithuania</b>										
Nasdaq CSD SE Lithuanian SSS	8	5	14	9	8	136	100	65	24	22
<b>Luxembourg</b>										
Clearstream Banking Luxembourg	134,032	220,233	237,428	224,856	226,972	5,999	3,311	3,184	2,922	2,812
VP Lux *)	2	-	-	-	-	2,185	-	-	-	-
LUX CSD	16	17	26	26	39	930	880	1,117	988	3,308
<b>Malta</b>										
MSE	3	2	2	3	2	78	50	75	142	85
<b>Netherlands</b>										
Euroclear Netherlands	5,313	5,619	6,369	7,692	7,582	845	853	806	1,032	1,096
<b>Austria</b>										
OEKB (WSB SYSTEM)	870	640	700	898	1,004	664	485	473	583	711
<b>Portugal</b>										
Euronext Securities Porto	164	172	186	206	268	183	185	197	119	206
<b>Slovenia</b>										
KDD	17	18	38	38	36	249	346	648	750	596
<b>Slovakia</b>										
CDCP SR	40	34	63	49	46	1,809	1,056	4,132	910	2,034
NCDPCP *)	0	0	0	-	-	819	434	345	-	-
<b>Finland</b>										
Euroclear Finland	1,463	1,557	1,598	1,498	1,320	158	163	105	116	127
<b>Non-euro area countries</b>										
<b>Bulgaria</b>										
CDA	1	0	0	0	0	14	11	1	1	16
GSD	16	14	9	8	7	4,014	3,569	4,428	4,039	7,222
<b>Czech Republic</b>										
SKD	6,919	7,167	7,465	7,868	8,515	238,573	255,952	266,618	280,986	258,043
RM-SYSTEM	0	0	0	0	1	1	1	1	2	2
CDCP	142	186	219	709	433	114	143	142	520	270
<b>Denmark</b>										
Euronext Securities Copenhagen	5,123	40,128	18,943	24,750	26,283	314	678	482	537	656
<b>Hungary</b>										
KELER	698	856	615	1,203	1,186	1,326	1,540	1,031	1,281	968
<b>Poland</b>										
KDPW S.A.	13,171	13,662	14,732	16,609	17,296	1,690	2,037	979	1,203	1,600
SKARBNET4	147	154	228	309	284	-	-	-	-	-
<b>Romania</b>										
SC Depozitarul Central SA	9	8	13	16	10	12	12	12	10	6
SaFIR	201	114	279	147	422	5,025	4,060	8,704	5,670	10,808
<b>Sweden</b>										
Euroclear Sweden AB	10,568	13,311	9,593	9,602	9,005	705	967	605	512	524

\*) The system was closed.

## 4b Transactions processed by central securities depositories: Value of transactions (continued)

	Increase in value of delivery instructions (%; HICP adjusted)					Value of delivery instructions as a ratio to GDP				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
<b>Euro area countries</b>										
<b>Belgium</b>										
NBB SSS	31	-15	8	17	-4	30	25	28	32	31
Euroclear Belgium	0	-20	-10	-4	-8	2	2	2	1	1
Euroclear Bank	4	2	6	7	-5	1,147	1,136	1,263	1,308	1,264
<b>Germany</b>										
Clearstream Banking AG	9	35	24	-9	72	15	20	25	23	38
<b>Estonia</b>										
Nasdaq CSD SE Estonian SSS	-	-	-	-	-	-	-	-	-	-
<b>Greece</b>										
BOGS	-1	31	20	-17	-6	22	29	38	30	26
Hellenic Exchanges (HELEX)	12	27	3	19	-2	0	0	0	0	0
<b>Spain</b>										
Iberclear	-32	9	13	2	-11	24	26	32	32	28
<b>France</b>										
Euroclear France	14	20	3	3	9	39	46	50	49	54
<b>Italy</b>										
Monte Titoli	9	12	2	-26	-7	49	54	60	43	42
<b>Cyprus</b>										
CDCR	1,339	-95	-59	34	2	0	0	0	0	0
<b>Latvia</b>										
Nasdaq CSD SE Latvian SSS	-	-	-	-	-	-	-	-	-	-
<b>Lithuania</b>										
Nasdaq CSD SE Lithuanian SSS	-	-	-	-	-	-	-	-	-	-
<b>Luxembourg</b>										
Clearstream Banking Luxembourg	53	63	8	-11	-5	2,229	3,528	3,680	3,107	2,928
VP Lux *)	-94	-	-	-	-	0	-	-	-	-
LUX CSD	-24	1	59	-8	46	0	0	0	0	1
<b>Malta</b>										
MSE	-3	-40	24	46	-50	0	0	0	0	0
<b>Netherlands</b>										
Euroclear Netherlands	2	3	12	14	-12	7	7	8	9	8
<b>Austria</b>										
OEKB (WSB SYSTEM)	8	-28	8	25	1	2	2	2	2	2
<b>Portugal</b>										
Euronext Securities Porto	-11	5	8	8	20	1	1	1	1	1
<b>Slovenia</b>										
KDD	-33	3	114	-5	-16	0	0	1	1	1
<b>Slovakia</b>										
CDCP SR	-36	-18	85	-28	-20	0	0	1	0	0
NCDCP *)	-	-	-	-	-	-	-	-	-	-
<b>Finland</b>										
Euroclear Finland	130	5	2	-9	-21	6	6	7	6	5
<b>Non-euro area countries</b>										
<b>Bulgaria</b>										
CDA	814	-37	-88	62	-29	0	0	0	0	0
GSD	41	-14	-38	-15	-25	0	0	0	0	0
<b>Czech Republic</b>										
SKD	40	0	5	-3	-13	33	32	35	33	31
RM-SYSTEM	-13	-25	3	13	123	0	0	0	0	0
CDCP	-36	28	19	208	-58	1	1	1	3	2
<b>Denmark</b>										
Euronext Securities Copenhagen	-9	684	-53	27	-3	17	130	61	72	69
<b>Hungary</b>										
KELER	5	21	-25	92	-17	5	6	4	8	7
<b>Poland</b>										
KDPW S.A.	0	2	8	8	-8	26	26	28	29	26
SKARBNET4	21	2	50	32	-21	0	0	0	1	0
<b>Romania</b>										
SC Depozitarul Central SA	2	-18	65	19	-52	0	0	0	0	0
SaFIR	23	-46	148	-53	172	1	1	1	1	1
<b>Sweden</b>										
Euroclear Sweden AB	1	28	-29	-8	-13	22	28	20	18	16

\*) The system was closed.