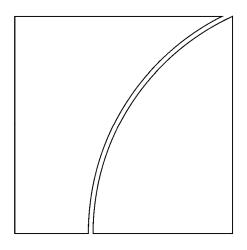
# Committee on Payment and Settlement Systems



# Payment systems in Turkey

Prepared by the Central Bank of the Republic of Turkey and the Committee on Payment and Settlement Systems of the central banks of the Group of Ten countries

June 2007



<u> </u>	1 11 41	
( 'ANIAC At	nublications	are available from:
CODICS OF	Dublications	are available from:

Bank for International Settlements Press & Communications CH-4002 Basel, Switzerland

E-mail: publications@bis.org

Fax: +41 61 / 280 9100 and +41 61 / 280 8100

This publication is available on the BIS website (www.bis.org).

© Bank for International Settlements 2007. All rights reserved. Brief excerpts may be reproduced or translated provided the source is cited.

ISBN 92-9131-739-X (print)

ISBN 92-9197-739-X (online)

#### **Foreword**

The Committee on Payment and Settlement Systems (CPSS) periodically publishes – under the aegis of the Bank for International Settlements (BIS) – reference works on payment systems in its member countries, widely known as Red Books. The CPSS has also invited the central banks of a number of other countries where important developments in payment systems are under way to prepare – in collaboration with its Secretariat at the BIS – separate volumes on their respective payment systems. The present volume, the second edition of the Red Book for Turkey, is a further step towards increasing our understanding of the way payment systems work in different countries.

Properly functioning payment systems enhance the stability of the financial system, reduce transaction costs in the economy, promote the efficient use of financial resources, improve financial market liquidity and facilitate the conduct of monetary policy. In recent years, issues relating to the economic efficiency and financial risks of all types of payment systems have come to the fore.

Central banks have a strong interest in promoting safety and improving efficiency in payment systems as part of their overall concern with financial stability. They play a key role in domestic payment system development and, in many cases, operate large-value payment systems. Central banks in many countries have been influential in improving public understanding of payment and settlement arrangements in their countries and public awareness of the various policy issues connected with such arrangements. This volume aims to portray the significant steps taken by the Central Bank of the Republic of Turkey in promoting safe and efficient payment systems in Turkey.

We hope that this volume will contribute to the general understanding and awareness of payment and securities settlement arrangements in Turkey, both domestically and internationally.

Timothy F Geithner Chairman Committee on Payment and Settlement Systems Durmuş Yılmaz Governor Central Bank of the Republic of Turkey

# **Contents**

For	eword.			iii	
Intro	oductio	on		1	
1.	Insti	tutional	aspects	2	
	1.1	The g	eneral institutional framework	2	
		1.1.1	Regulatory institutions	2	
		1.1.2	The legal framework for the payment and settlement systems	3	
		1.1.3	The role of financial intermediaries	4	
	1.2	The ro	ole of the CBRT	6	
		1.2.1	General responsibilities	7	
		1.2.2	Administration of accounts	7	
		1.2.3	Payment systems oversight	8	
		1.2.4	Activities in the area of securities clearing and settlement systems	8	
		1.2.5	The operational role of the CBRT	9	
		1.2.6	Cooperation with other institutions	9	
	1.3	The ro	ole of other private and public sector bodies	9	
		1.3.1	Banks Association of Turkey	9	
		1.3.2	Participation Banks Association of Turkey	10	
		1.3.3	Istanbul Stock Exchange (ISE)	10	
		1.3.4	ISE Settlement and Custody Bank, Inc (Takasbank)	10	
		1.3.5	Central Registry Agency	11	
2.	Payı	Payment media used by non-banks			
	2.1	Cash	Cash payments		
	2.2	Non-c	cash payments	12	
		2.2.1	Paper-based payments	12	
		2.2.2	Cheques	12	
		2.2.3	Postal cheques	13	
		2.2.4	Promissory notes	13	
		2.2.5	Credit transfers	13	
		2.2.6	Payment cards	13	
		2.2.7	ATMs and POS terminals	15	
		2.2.8	Other access channels for banking and payments	15	
	2.3	Recei	nt developments	15	
3.	Inter	Interbank exchange and settlement systems			
	3.1	3.1 General overview			
	3.2	The re	eal-time gross settlement system	17	

	3.2.1	Operating rules	17
	3.2.2	Participants in the system	17
	3.2.3	Types of transactions handled	17
	3.2.4	Operation of the system	18
	3.2.5	Operating hours	18
	3.2.6	Transaction processing environment	18
	3.2.7	Settlement procedures	19
	3.2.8	Pricing policies	20
	3.2.9	Risks and risk management in TIC-RTGS	20
	3.2.10	) Statistical data	22
3.3	The la	arge-value payment system	22
	3.3.1	Operating rules	22
	3.3.2	Participants in the system	22
	3.3.3	Types of transactions handled	22
	3.3.4	Operation of the system	22
	3.3.5	Operating hours	23
	3.3.6	Transaction processing environment	23
	3.3.7	Settlement procedures	23
	3.3.8	Pricing policies	23
	3.3.9	Risk management	24
	3.3.10	) Statistical data	24
3.4	Retail	payment systems	24
	3.4.1	Interbank Card Centre (BKM)	24
	3.4.2	Interbank Clearing Houses Centre (BTOM)	25
	3.4.3	E-money schemes	26
3.5	Excha	ange and settlement systems for international transactions	26
	3.5.1	Cross-border payments	27
	3.5.2	Retail payments (credit and debit cards)	27
	3.5.3	Post Office remittances	27
	3.5.4	Traveller's cheques	27
Seci	urities s	ettlement systems	27
4.1	Gove	rnment bonds, treasury bills and CBRT liquidity bills	27
	4.1.1	Primary market operations	28
	4.1.2	The ISE market	28
4.2	Stock	s	29
	4.2.1	Trading	29
	4.2.2	Clearing and Settlement	29

4.

	4.3	The u	se of the securities infrastructure by the CBRT	29
		4.3.1	Open market operations	30
		4.3.2	Securities lending and borrowing market in the CBRT	30
		4.3.3	CBRT securities settlement system (TIC-ESTS)	30
5.	The	role of	the central bank in interbank settlement systems	31
	5.1	TIC-R	RTGS and ESTS	31
	5.2	Provis	sion of settlement (and credit) facilities	32
		5.2.1	Use of central bank accounts for payments	32
		5.2.2	Use of central bank accounts for securities transactions	32
	5.3	Mone	tary policy and payment systems	32
		5.3.1	TRY interbank money market in the CBRT	32
		5.3.2	Foreign exchange and banknote market in the CBRT	32
Stati	stical	tables		35
Com	narat	ive table	es	49

# List of abbreviations

BAT Banks Association of Turkey

BKM Interbank Card Centre

BRSA Banking Regulation and Supervision Agency

BTOM Interbank Clearing Houses Centre

CBRT Central Bank of the Republic of Turkey

CMB Capital Markets Board of Turkey

CRA Central Registration Agency
CSD Central Securities Depository

DDNs Domestic Debt Notes (government bonds and treasury bills)

DVP Delivery versus payment
ICH Interbank Clearing House
ISE Istanbul Stock Exchange

RC Relay computer (front-end processor for connecting to TIC-RTGS

and ESTS)

SDIF Savings Deposits Insurance Fund

TCA Turkish Competition Authority
TCS Takasbank Clearing System

TIC-ESTS Turkish Interbank Clearing - Electronic Securities Transfer and

Settlement System

TIC-RTGS Turkish Interbank Clearing – Real-Time Gross Settlement System

TKBB Participation Banks Association of Turkey

TRL Turkish lira (national currency unit before 1 January 2005)

TRY New Turkish lira (national currency unit since 1 January 2005)

Ykr New kurus (sub-unit of the national currency, one 100th of the new

Turkish lira)

# Introduction

As a result of an extensive structural adjustment and liberalisation process launched in the early 1980s, the Turkish economy grew strongly up to the early 1990s. After a downturn in 2001, declining inflation and weakening fiscal dominance promoted high and stable growth, which surpassed the high-growth environment that existed during the 1990s. In the 2002–05 period, average growth in the economy reached 7.1% as opposed to the 3.2% average of the 1990–2001 period. Moreover, the volatility of growth declined fivefold, with the standard deviation falling from 5.9 in 1990–2001 to 1.2 in the post-2001 period.

Turkey managed a significant transformation in the aftermath of the 2001 financial crisis. This included measures for improving market efficiency, strengthening the financial sector and managing the transition to the status of a prospective European Union member.

The structural changes were broadly supported by institutional changes; central bank independence, a shift to the floating exchange rate regime and the setting-up of a supervisory banking institution were the major steps towards ensuring macroeconomic and financial stability. Along with institutional reform, policies were also altered. An "implicit" inflation targeting regime was initiated in 2002 to reduce inflation to single digits. The stability achieved and the success of the institutional reform process were reflected in the decline of inflation from 68.5% in 2001 to below 8% in 2005, and the extension of maturities, initially in public borrowing and later in private contracts.

Liberalisation and structural adjustments had a significant impact on the financial sector. The policy changes created a competitive environment as banks were allowed to widen their range of activities and the conditions for foreign banks' entry into the domestic financial markets were liberalised. These changes provided the impetus for financial institutions in Turkey to make rapid strides in modernising their services. In particular, payment services have improved substantially with the introduction of new technology. The developments in the communications infrastructure and computer technology have helped banks to improve services throughout the country. Users have been quick to adopt the new instruments and services.

The Central Bank of the Republic of Turkey (CBRT) has played a leading role in the modernisation of payment services. It has developed secure, reliable and efficient interbank payment and settlement systems. In particular, the Turkish real-time gross settlement (RTGS) system, TIC-RTGS, has become an efficient funds transfer system and hence an indispensable component of the financial system.

# 1. Institutional aspects

# 1.1 The general institutional framework

# 1.1.1 Regulatory institutions

In Turkey, there are five major regulators for financial institutions:

- The CBRT is responsible for securing the objectives of price stability and financial system stability. The CBRT is also responsible for the operation, regulation and oversight of payment systems in Turkey. The details of the CBRT's role are described in Section 1.2.
- The Banking Regulation and Supervision Agency (BRSA), which was established under the Banks Law (Law No 4389 enacted in 1999; annulled by the Banking Law, Law No 5411 enacted in 2005), issues licences, and regulates and supervises all major financial institutions, including banks, financial holding companies, leasing, factoring and consumer finance companies. The BRSA also ensures that independent external auditing firms and rating agencies offering services to financial institutions act in accordance with the principles and methods set by the Agency.
- The BRSA aims to safeguard the rights and benefits of depositors and to create the
  proper environment in which banks can operate with market discipline in a healthy,
  efficient and globally competitive manner, thus contributing to the achievement of
  long-run economic growth and stability of the country.
- The Capital Markets Board of Turkey (CMB) is the regulatory and supervisory authority in charge of securities markets in Turkey. Authorised by the Capital Markets Law (Law No 2499 enacted in 1981), the CMB is responsible for regulating and supervising securities markets and institutions, determining the operational principles of capital markets, and protecting the rights and interests of investors.
- In this framework, the CMB regulates and supervises corporations offering securities to the public, securities market intermediaries, securities investment funds (mutual funds), investment companies (including real estate investment companies and venture capital investment companies), independent external auditing firms offering services to capital market institutions, stock exchanges and secondary markets in general, precious metal exchanges and derivatives exchanges, and other related institutions operating on the capital markets, such as ratings agencies, clearing and depository institutions.
- The regulation of capital market instruments, including futures and options, also falls under the regulatory scope of the CMB. In this framework, it also assumes responsibility for introducing and developing new instruments.
- Based on the overall objectives of ensuring the fair and orderly functioning of the
  markets and protecting the rights of investors, the major goal of the CMB is to take
  necessary measures to foster the development of capital markets, hence
  contributing to the efficient allocation of financial resources in the country while
  ensuring investor protection.
- The General Directorate of Insurance under the Turkish Treasury is responsible for the regulation and supervision of the insurance business, both life insurance and casualty insurance, in accordance with the *Insurance Law* (Law No 7397 on "Supervision of Insurance Companies", enacted in 1959).
- The Turkish Competition Authority (TCA), which was established by the *Protection* of Competition Law (Law No 4054 enacted in 1994) and commenced operation in 1997, is responsible for preventing proposed mergers and acquisitions that would create a dominant position in the market and adversely affect competition.

In accordance with the *Regulation on Mergers and Acquisitions Requiring Authorisation by the TCA* (Communiqué No 1997/1 enacted in 1997), authorisation by the TCA is obligatory when the total market share of the undertakings, including banks, carrying out the merger or acquisition exceeds 25% of the relevant product market throughout the country or a part thereof, or when their total turnover exceeds TRY 25 million. The TCA may authorise a proposed merger or acquisition on condition that other measures deemed appropriate are taken and certain obligations are met.

# 1.1.2 The legal framework for the payment and settlement systems

Although there are no laws dealing specifically with payment and settlement systems, a number of laws have a bearing on payment-related activities and institutions:

- The Law on the Central Bank of the Republic of Turkey (CBRT Law) (Law No 1211 enacted in 1970; last amended by Law No 4651 enacted in 2001) regulates the operations of the CBRT, whose major functions and responsibilities derive from this Law inter alia the exclusive right to issue banknotes in Turkey. The Law authorises the CBRT to establish payment, securities transfer and settlement systems, to enact regulations to ensure the uninterrupted operation and oversight of existing or future systems, and to determine the methods and instruments, including the electronic environment for payments.
- The Banking Law (Law No 5411 enacted in 2005; amended by Law No 5472 enacted in 2006) regulates the business activities of all banks, namely deposit banks, participation banks and development and investment banks, in Turkey and Turkish branches of such institutions established abroad. The Law lays down rules and procedures governing the incorporation, management, transactions, transfer, merger, liquidation and supervision of banks, acceptance of deposits and participation funds, in order to protect the rights and interests of depositors. Its purpose is also to ensure the efficient functioning of the credit system by giving due consideration to confidence and stability in financial markets. All activities of financial holding companies, the Banks Association of Turkey (BAT), the Participation Banks Association of Turkey (TKBB), the Banking Regulation and Supervision Agency (BRSA) and the Savings Deposits Insurance Fund (SDIF) are also governed by the provisions of this Law.
- Article 79 of the Banking Law makes it obligatory for all deposit, development and investment banks subject to this Law to become a member of the BAT, and for all participation banks to become a member of the TKBB, within one month of receipt of their operating licence.
- The Capital Markets Law (Law No 2499 enacted in 1981; amended by Law No 4487 enacted in 1999) regulates and controls the secure, transparent and stable functioning of the capital markets and protects the rights and interests of investors, for the purpose of ensuring efficient and widespread participation by the public in the development of the economy through investment of savings in the securities market. Capital market instruments and their public offering and sale, exchange markets and other markets organised pursuant to the Law, capital market activities, capital market institutions and the Capital Markets Board are subject to the provisions of the Law. The Law focuses on shares offered to the public and does not apply to the issuance of shares not offered to the public by joint stock corporations that are not publicly held.
- The Cheque Law (Law No 3167 on "Arrangement of Payments by Cheque and Protection of Cheque Bearers", enacted in 1985; amended by Law No 4814 enacted in 2003) governs all aspects of payment by cheque and provides the framework for

issuance, acceptance and payment of cheques. Article 6 of the Law governs the establishment and functioning of the interbank clearing houses (ICHs). Under the Central Bank Law, the CBRT is responsible for their supervision.

- The Bank Cards and Credit Cards Law (Law No 5464 enacted in 2006) aims to
  ensure the efficient functioning of card-based payment systems by establishing rules
  and procedures governing the issuance, usage and clearing of bank and credit
  cards. The Law also governs the issuance and revocation of operating licences, the
  obligations of card issuers, and the penalties and obligations of card bearers.
- The Public Finance and Debt Management Law (Law No 4749 enacted in 2002; last amended by Law No 5335 enacted in 2005) establishes rules and procedures for domestic and foreign public debt management. Article 6, paragraph 4, of the Law authorises the Undersecretariat of the Treasury and the CBRT to regulate the issuance of government bonds and treasury bills in book entry form. All securities transfers under this Law are registered with the Electronic Securities Transfer and Settlement System (TIC-ESTS), which is the securities settlement system of the CBRT. The final settlement of the related payments is provided by the national Real-Time Gross Settlement System (TIC-RTGS).
- The *Turkish Commercial Code* (Law No 6762 enacted in 1956) defines in Articles 557–815 the form and usage of negotiable instruments, namely promissory notes, bills and cheques, which are used widely for commercial payments.
- The rules and procedures governing participation in TIC-RTGS and TIC-ESTS are governed by a special agreement between the CBRT and participating banks. The banks sign a participation contract with the CBRT agreeing to comply with the provisions of the TIC-RTGS & ESTS Operational Rules. These rules define the relationship between the CBRT and the participating banks and between the participants concerning the services provided by TIC-RTGS and TIC-ESTS. In particular, they specify the roles of the various parties involved in the system. The operational procedures, rights, obligations and a clause stipulating arbitration as a means of dispute resolution are also governed by these rules.

#### 1.1.3 The role of financial intermediaries

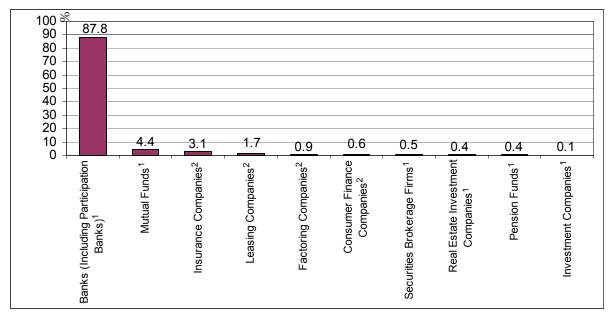
As of the third quarter of 2006, the financial sector in Turkey comprised 50 banks, 77 leasing companies, 87 factoring companies, 45 insurance companies and nine consumer finance companies, along with 286 mutual funds, 30 investment companies, 106 securities brokerage firms and 11 pension companies (102 pension funds). However, as seen in Graph 1, banks dominate the financial system, and as of September 2006 87.8% of financial sector assets consisted of bank assets. As of the same date, the ratio of total bank assets to GDP stood at 86.5%. Compared to EU countries, the Turkish banking system is still small and has the potential to grow much further.

Prior to the Banks Law (Law No 4389 enacted in 1999; annulled by the *Banking Law* No 5411 enacted in 2005), the Undersecretariat of the Treasury and the CBRT jointly supervised the banks. While the CBRT was mainly involved in off-site supervision, the Treasury carried out on-site supervision and regulation. The Banks Law established the BRSA as the sole regulatory and supervisory body for the Turkish banking sector. With the establishment of the BRSA, the Savings Deposits Insurance Fund (SDIF), which had operated under the CBRT, was restructured under the BRSA. Finally, in December 2003, the SDIF became an autonomous body.

Leasing, factoring and consumer finance companies began to be supervised and regulated by the BRSA in 2006. Previously, these institutions were supervised by the Treasury. Insurance companies continue to be supervised and regulated by the Treasury. The CMB supervises capital market institutions and activities.

# Graph 1 Share in financial assets

September 2006



<sup>&</sup>lt;sup>1</sup> Data as of September 2006. <sup>2</sup> Data as of June 2006.

Sources: CBRT; BRSA, CMB, Treasury, Turkish Brokerage Firms Association.

#### 1.1.3.1 Banks

Banks in Turkey are established as joint stock companies and are subject to the provisions of the Banking Law. In line with the criteria set forth in this Law, a bank established abroad may also operate in Turkey by opening a branch. There is no distinction between foreign and Turkish banks in terms of the regulatory and supervisory framework. Banks' paid-up capital should not be less than TRY 30 million.

Banks in Turkey are grouped into deposit banks, investment and development banks, and participation banks. As of January 2007, there were 33 deposit banks (three public, 15 private and 15 foreign banks), 13 development and investment banks (three public, eight private and two foreign banks), and four participation banks. The total number of branches of all banks, including participation banks, was 7,304 and the total number of personnel was 150,851.

All types of deposit banks – private, public or foreign – perform traditional banking operations such as deposit-taking, payment services, foreign exchange operations and marketing of securities and other financial products. However, deposit banks are not allowed to provide financial leasing activities. Deposit banks, with a nationwide branch network, provide most of the payment services. Sight deposits are mostly used for funds transfers. Banks offer cheque and card facilities for account holders. Deposit banks are members of the national RTGS system and interbank clearing houses (ICHs).

Most banks have largely computerised their operations. Internet banking services are offered by all commercial banks. These services include a variety of technology-intensive applications such as online credit transfers, online investment accounts, trading of government bonds, mutual funds and equities. Many banks offer customers a real-time funds transfer service through TIC-RTGS.

The development and investment banks carry out all banking operations apart from deposit-taking. They provide investment advisory services and consultancy on transfer and merger issues, financial restructuring and efficient management practices in commercial enterprises. They also grant credits from their own funds and other funds under their management; they can offer cheque accounts and participate in ICH clearing. Development and investment banks' total paid-in capital may not be less than two-thirds of that stipulated for other banks (ie TRY 20 million).

Participation banks (formerly known as special finance houses, or SFHs) operate pursuant to the Banking Law. Similar to deposit banks, they can collect deposits in Turkish liras and in foreign currency. However, they operate on profit and loss sharing principles and do not pay interest on deposits.

Participation banks provide payment services and cheque and card facilities and participate in clearing and settlement in the same manner as other banks. In contrast to deposit banks, participation banks are allowed to engage in leasing activities along with development and investment banks. Currently, there are four participation banks in Turkey and their share in the total financial system is around 2%.

Following the 2000–01 crisis period, a restructuring programme was initiated by the BRSA, based on four pillars: restructuring of state banks, resolution of the banks managed and controlled by the SDIF, strengthening of private banks and strengthening of the regulatory and supervisory framework. As a result, the banking sector entered into a consolidation process, the share and burden of state-owned or SDIF-controlled banks have declined, fragilities in the banking sector have diminished and the supervisory and regulatory framework has been upgraded to international standards and become more risk-focused. The increased soundness of the banking system as a result of this rehabilitation process is well demonstrated by the increasing interest shown by major foreign banks in Turkish banks. As of November 2006, the share of non-residents in the Turkish banking system has reached 20.2% in terms of banking sector assets.

#### 1.1.3.2 The Post Office

The Post Office (the General Directorate of Posts, which comes under the Ministry of Transportation) plays a significant role in providing payment and remittance services to customers all over Turkey. At end-2006, there were 3,049 Post Office branches that handle remittances. The Post Office offers cheque accounts and money order services. The money order facility can be used for remitting money all over the country and beneficiaries are not required to have an account with the Post Office. In 2006, 24.5 million domestic money orders worth TRY 22 billion were processed by the Post Office. In addition to these services, Post Office branches can issue domestic traveller's cheques, change foreign currency and receive postal money orders from abroad.

#### 1.2 The role of the CBRT

The CBRT was established in 1930 under the Central Bank Law (Law No 1715). In 1970, the Law on the Central Bank of the Republic of Turkey (CBRT Law) (Law No 1211) was enacted. This Law introduced considerable changes in central banking and the central bank's responsibilities for managing and controlling currency circulation. To allow the CBRT to better fulfil its functions, the Law was amended several times between 1970 and 2001. With the last amendment in 2001, the primary objective of the CBRT was clearly set as achieving and maintaining price stability, and the CBRT was given direct authority to formulate monetary policy and to choose monetary instruments at its own discretion in order to achieve its primary objective. The CBRT has exclusive power and responsibility for designing and implementing its monetary policy.

The central bank's head office is in Ankara. The CBRT has 21 branches in Turkey and four representative offices abroad, in Frankfurt, London, New York and Tokyo.

# 1.2.1 General responsibilities

The CBRT determines monetary policy and the monetary instruments needed to achieve and maintain price stability. The *CBRT Law* sets out the fundamental duties and powers of the CBRT as follows:

- to take necessary measures jointly with the government to protect the domestic and international value of the national currency and to establish the exchange rate policy for determining the parity of the Turkish lira against gold and foreign currencies; to execute transactions, such as spot and forward purchases and sales of foreign currency, foreign exchange swaps and other derivatives transactions, in order to determine the value of the Turkish lira against other currencies;
- to regulate the volume and circulation of the Turkish lira;
- to establish payment, securities transfer and settlement systems, to enact regulations to ensure the uninterrupted operation and oversight of the existing or future systems, and to determine the methods and instruments, including the electronic environment for payments;
- to carry out open market operations;
- to conduct rediscount and advance transactions;
- to manage gold and foreign exchange reserves;
- to take precautions to enhance stability in the financial system and to adopt regulatory measures with respect to money and foreign exchange markets;
- to issue banknotes in Turkey, under the exclusive right and privilege given to it;
- to utilise the monetary policy instruments described in the Law and to identify and implement other monetary policy instruments directly when it so deems appropriate;
- as the lender of last resort, to carry out credit operations with the banks.

# 1.2.2 Administration of accounts

The Treasury, banks, exchange offices, public entities (state-owned economic enterprises, ministries) and international organisations (IMF, World Bank, Asian Development Bank) hold accounts with the CBRT. Accounts, with the exception of reserve requirement accounts, do not bear interest, and are used for funds transfers between the account holders, including settlement of obligations arising from interbank clearing systems. Banks hold giro accounts, reserve requirement accounts and TIC-RTGS accounts. Giro accounts are mostly used for cash withdrawal. The funds maintained in giro accounts are usually a small portion of the total bank funds deposited with the CBRT. A separate account, the TIC-RTGS account, is used for payments routed through TIC-RTGS. Although banks' reserve requirement accounts are separate from their settlement accounts, the balance of the former is transferred to the latter at the beginning of each day for settlement purposes.

Accounts are decentralised and the account holders may have accounts with more than one branch of the CBRT. These accounts are controlled exclusively by their holders and debits from them may be made only on the holders' instructions.

Since August 2001, reserve requirement accounts have borne interest.

# 1.2.3 Payment systems oversight

According to the CBRT Law, the CBRT is responsible for the oversight of payment systems in Turkey. The Law stipulates the fundamental duties and powers of the central bank, including:

"... to regulate the volume and circulation of the Turkish lira, to establish payment, securities transfer and settlement systems, to enact regulations to ensure the uninterrupted operation and oversight of the existing or future systems, and to determine the methods and instruments, including the electronic environment for payments."

Consistent with the CBRT Law, the objectives and policies of the CBRT in the payment systems area are defined as follows:

- to make the necessary arrangements to ensure the smooth, reliable and efficient functioning of payment systems and to mitigate the possible risks involved in payment systems;
- to determine the appropriate tools and procedures for payments;
- to make the necessary arrangements to effectively apply monetary policy designed to ensure financial and monetary stability;
- to ensure public confidence in payment and securities transfer systems;
- to continuously monitor system compliance with the Core Principles for Systemically Important Payment Systems (Core Principles for SIPS)<sup>2</sup> in order to prevent the systemic risks that can arise from payment systems;
- to monitor developments that can affect the effectiveness and reliability of the systems; and
- to coordinate its work with other supervisory authorities and system participants.

The CBRT has disclosed its major objectives and policies concerning payment systems to the public both on its website (www.tcmb.gov.tr) and in its publications.

Since its first day of operation, the CBRT has used various instruments in the performance of its oversight function for TIC-RTGS: issuance of regulations, moral suasion vis-à-vis the participants, direct provision of payment services (as the owner and operator of the system) and application of sanctions (as described in the *TIC-RTGS* and *ESTS* Operational Rules).

In line with the development of the payment system oversight concept, the CBRT has recently attempted to restructure and formalise its payment system oversight role.

# 1.2.4 Activities in the area of securities clearing and settlement systems

The CBRT is the owner, operator and overseer of TIC-ESTS, the Electronic Securities Transfer and Settlement System. The TIC-ESTS system, which began operating in October 2000, has a real-time connection to TIC-RTGS and is used for the issuance and settlement of short- and medium-term debt instruments on behalf of the Treasury (see Section 4.3.3 for details).

See Committee on Payment and Settlement Systems, Core Principles for systemically important payment systems, Basel, 2001.

# 1.2.5 The operational role of the CBRT

The CBRT is the operator of TIC-RTGS and TIC-ESTS. The details of its operational role are described in Section 5.1.1.

# 1.2.6 Cooperation with other institutions

Cooperation between the CBRT and other authorities is based on mutual understanding. For example, the CBRT has cooperated with the CMB on the project for safekeeping of customer securities under the customer's name in the Central Registry Agency (see Sections 1.3.5 and 4.3.3.3). Similarly, the CBRT cooperated closely with the Undersecretariat of the Treasury on the project for the improvement of public payments processing.

The CBRT is entitled to receive financial information from financial institutions, including the BRSA, pursuant to the CBRT Law. Moreover, in August 2000, the CBRT, the Undersecretariat of the Treasury and the BRSA signed a memorandum of understanding on information sharing in the financial sector.

# 1.3 The role of other private and public sector bodies

# 1.3.1 Banks Association of Turkey

The Banks Association of Turkey (BAT) was founded in 1958 under Article 57 of the *Banks Law*<sup>3</sup> (Law No 7129 enacted in 1958). Its duties and powers have been revised in the new Banking Law (Law No 5411 enacted in 2005). A professional organisation, the BAT is a legal entity with the status of a public institution, and it is the representative body for all banks operating in Turkey with the exception of the participation banks.

According to its statute, the purpose of the BAT is to: preserve the rights and interests of banks; carry out studies aimed at enhancing the growth and robust operation of the banking sector, the development of the banking profession and the strengthening of competitiveness; adopt and implement all measures necessary for the prevention of unfair competition; and ensure implementation of these measures in line with the principles of open market economies and perfect competition and with the regulations, principles and rules of the banking industry. All deposit, investment and development banks operating in Turkey are legally bound to become members of the BAT. Each bank is represented in the Association by its chairperson, managing director or general manager.

The BAT is responsible for:

- ensuring the development of the banking profession;
- ensuring that banks function in a prudent and well disciplined manner as required by the Association and the banking profession in order to meet the needs of the national economy;
- adopting and implementing all measures necessary for the prevention of unfair competition among banks;
- determining the principles and conditions to be respected by banks, based on approval by the Banking Regulation and Supervision Agency.

The BAT monitors implementation of the decisions taken pursuant to the applicable legislation and measures required by the Agency. The organisational structure of the Association consists of the General Assembly, the Board of Directors, the Secretariat

-

The Banking Law (Law No 5411) superseded the Banks Law in 2005.

General and the Auditors. The operations of the Association are executed through several structural and functional groups.

# 1.3.2 Participation Banks Association of Turkey

The Participation Banks Association of Turkey (TKBB) was founded in 2005 under Articles 79–81 of the Banking Law (Law No 5411). Like the BAT, the TKBB is an institutional association whose members are participation banks (see Section 1.1.3.1). The status of the TKBB was defined by the Participation Banks Association Decree of the Council of Ministers (No 2006/10018).

# 1.3.3 Istanbul Stock Exchange (ISE)

The ISE, which began operation in 1986, is the only securities exchange in Turkey. It is a public institution regulated by the CMB. Government bonds, treasury bills, CBRT liquidity bills, capital market instruments, share income certificates and international securities are traded on the ISE.

The bonds and bills market is the only organised, fully automated market for both outright purchases and sales and repurchase/reverse repurchase transactions with fixed income securities. The market's purpose is to provide a transparent, liquid, competitive and efficient environment for the secondary market of government bonds, treasury bills, revenue-sharing certificates, bonds issued by the Privatisation Administration and corporate bonds listed on the ISE. Treasury bills and government bonds are the most actively traded instruments. The bonds and bills market was established in June 1991, while repo/reverse repo transactions began in February 1993.

# 1.3.4 ISE Settlement and Custody Bank, Inc (Takasbank)

Takasbank is the clearing and settlement institution of the ISE, the clearing house for the Turkish Derivatives Exchange, the official custodian for investment and pension funds, and the national numbering agency for securities issued in Turkey.

Takasbank is also a specialised bank dedicated to securities services in Turkey. It serves the financial markets in the capacity of a non-deposit-taking bank. In relation to banking services, Takasbank is regulated by the BRSA. With respect to clearing and settlement functions, Takasbank is regulated by the CMB and the ISE.

Takasbank was originally set up as a department of the ISE in 1988, with responsibility for settlement and custody. In 1991 it became an independent organisation and in 1996 it was converted into a bank. As a specialised bank, Takasbank provides ISE members with money market facilities. It offers short-term loans to capital market players through securities purchasing loans (cash credits) and ensures that money market transactions between banks and brokerage houses are carried out in a transparent, fast and reliable environment.

Takasbank, which is a participant in TIC-RTGS and ESTS, provides ISE members with indirect access to the system through an interface called TETS (Takasbank Electronic Transfer System). TETS enables brokerage houses to transfer both cash and government bonds and bills in and out of the Takasbank system electronically, through a real-time connection with the central bank's TIC-RTGS and ESTS, and receive reports related to these transactions. Through TETS, brokerage houses can participate in treasury auctions, provide collateral for bids, and make other payments quickly and in a cost-effective manner.

Takasbank has giro and TIC-RTGS accounts at the CBRT. Payments in connection with securities transactions between Takasbank members are settled net in the Takasbank accounts (see Sections 3.3 and 4).

Takasbank also provides custody services for the portfolio assets of mutual funds and investment trusts and assumes various responsibilities regarding private pension funds (introduced in 2003 in the context of the private pension savings and investment system). The Bank also carries out custody, settlement and other related operations of pension fund transactions in capital markets.

Takasbank has a correspondent relationship with Euroclear Bank. In this capacity, Takasbank provides international settlement and custody services for foreign securities such as eurobonds, foreign bonds, depository receipts, etc. With these services, Takasbank has taken its expertise in clearing, settlement and custody services abroad, aiming to make post-trade services accessible to all financial institutions in terms of technical expertise, operational experience and cost. At end-2006, there were 74 institutions receiving international securities correspondent services from Takasbank.

Takasbank carries out settlement of securities trade in all ISE markets. The bank clears ISE trades in the Takasbank Clearing System (see Sections 3.3 and 4.1.2.2) by multilateral netting and settles accordingly. Payments are settled on a "delivery versus payment" (DVP) principle; the members do not get their receivables unless they fulfil their obligations. In case of partial fulfilment of an obligation, proportional payment or transfer out of the receivable is made to the member. Net obligations are legally binding, but Takasbank does not guarantee settlement.

The Securities lending and borrowing market (SLBM) was established in November 2005 to minimise potential defaults in the market. The SLBM provides an organised market environment for borrowing share certificates and exchange-traded fund certificates for a certain period against collateral as determined by Takasbank and approved by the CMB.

# 1.3.5 Central Registry Agency

The Central Registry Agency (CRA) registers capital market instruments and rights related to them in book entry form. The CRA is a private company established in 2001 as a legal entity under the provisions of the *Capital Markets Law* and is regulated by the CMB. The CRA keeps records in electronic format with respect to issuers, intermediary institutions and owners of rights. The CMB can determine the rights to be recorded and the types of related capital market instruments.

The Central Dematerialisation System was put into operation in November 2005. The CRA took over central securities depository functions for equities upon completion of the dematerialisation system. All equities are registered as dematerialised shares in the Central Dematerialisation System. Clients' safekeeping accounts were transferred from Takasbank to the CRA and book entry records were automatically registered by the CRA in line with the dematerialisation process and recorded at the beneficial owner level. Takasbank currently has a 65% stake in the share capital of the CRA. Takasbank will maintain its functions as the clearing and settlement institution for the Istanbul Stock Exchange, providing the omnibus account with the CRA for securities settlement purposes. The CRA and Takasbank systems will be interlinked in real time so calculated securities transfers will be reflected in the CRA instantaneously. Real-time gross DVP "member-to-member" settlement will continue to be executed via Takasbank.

# 2. Payment media used by non-banks

# 2.1 Cash payments

Cash is the dominant retail payment medium in Turkey, although in recent years there has been a growing tendency to use alternative payment methods. No exact figures are available

for cash payments but households mostly use cash for their everyday payment requirements. However, the use of cash to pay wages, salaries and pensions is declining as an increasing proportion of such payments are being made by credit transfer.

The CBRT is the sole issuing authority for banknotes with the status of legal tender. As of 1 January 2005, six zeros were removed from the Turkish lira (TRL) and the currency was renamed as the new Turkish lira<sup>4</sup> (TRY). The subunit, which is one 100th of a new Turkish lira, is called the new kurus (Ykr). Banknotes are issued in denominations of TRY 1, 5, 10, 20, 50 and 100. The TRY 50 note has the largest share of the currency in circulation. Coins are issued by the Undersecretariat of the Treasury in six denominations: 1, 5, 10, 25 and 50 new kurus (Ykr) and 1 new Turkish lira.

TRL banknotes and coins were withdrawn from circulation at the beginning of 2006. However, as from 1 January 2006, they will be converted into TRY at the CBRT and T.C. Ziraat Bank branches for a period of 10 years for banknotes and one year for coins.

As of September 2006, total banknotes and coins in circulation amounted to TRY 23.9 billion. The share of cash in M1 (52.5% in 2006) illustrates the dominance of cash payments in Turkey. Cash withdrawals are made mainly from bank branches or cash dispensers. Banks encourage the use of ATMs for cash withdrawals and their usage is increasing. Some banks share their ATM networks and this has allowed small banks to offer ATM facilities to their customers.

# 2.2 Non-cash payments

# 2.2.1 Paper-based payments

Traditionally, cheques and promissory notes were the commonly used non-cash payment instruments. However, in recent years other payment methods, notably electronic and card-based instruments, have increasingly supplanted the paper-based instruments.

# 2.2.2 Cheques

The Turkish Commercial Code and the Cheque Law govern all aspects of cheque payments and provide the framework for issuance, acceptance and payment of cheques. Banks provide a cheque account facility to their customers in accordance with the Cheque Law. The bank of issue pays the cheques directly or through clearing houses when other banks present them. Cheques are free of collection charges for both the drawer and the payee. However, if a cheque is paid by a branch other than the branch where the account is maintained, an authorisation charge is usually levied.

To facilitate electronic processing, cheques are coded with MICR (magnetic ink character recognition) code in E13B format.

Traveller's cheques are issued by banks and are not accepted for interbank clearing. Banks collect traveller's cheques and send them directly to the branch of the paying bank for payment. In 2006, clearing houses processed 23.6 million cheques with a total value of TRY 186.9 billion.

The word "new" will be dropped from the name of the currency at the end of a transition period, the end date of which will be decided by the Council of Ministers. Hence, the text refers to the currency simply as Turkish lira, unless a value is specified.

# 2.2.3 Postal cheques

The Post Office provides postal cheque account facilities to any firm or individual. These accounts do not pay interest but are free of any commission charges for operations conducted through them. Postal cheque accounts are used mostly by public institutions for collecting various types of tax and by companies for receiving payment instalments.

In 2006, there were over 692,000 postal cheque accounts, and 10.2 million postal cheques were processed, for a total value of TRY 15.6 billion.

# 2.2.4 Promissory notes

Promissory notes are defined in the Turkish Commercial Code. They are widely used like cheques in the small and medium-sized business sector. They do not contain any bank information. They are signed by the two parties and indicate the amount to be paid and the value date. The beneficiary may obtain funds before the value date by having the promissory note discounted by a bank.

#### 2.2.5 Credit transfers

Credit transfers are an increasingly popular means of transferring funds among customers. To make such transfers, customers are required to maintain sight deposits, which carry a low rate of interest.

There are two categories of credit transfer: (1) credits to other account holders with any bank; (2) credits to non-account holders. The first is an ordinary credit transfer operation between two accounts. The account holder gives a written transfer order, which is carried out if there are enough funds in the account. The second category of credit transfer enables funds to be sent to a beneficiary who does not maintain an account with any bank. In this case, the customer making the payment specifies the name of the beneficiary, the address and the bank/branch where the payment is to be made. When the transfer reaches the counterpart bank/branch, the beneficiary is notified of the remittance and can go to the branch and withdraw the money.

All interbank and intrabank credit transfers are processed electronically. Most branches receive credit transfer instructions from customers in written form and these are sent electronically to the final destination. Most banks also provide a credit transfer facility via ATMs, the internet or telephone.

Bank customers can issue standing orders for regular payments that are executed automatically on specified dates. The Post Office also provides credit transfer facilities to its account holders.

In 2006, 142.3 million credit transfers<sup>5</sup> were executed, up by 36.2% from 2004, with 94.2 million being processed via TIC-RTGS, 24.5 million via the Post Office and 23.6 million via the BTOM (interbank cheque clearing houses centre).

# 2.2.6 Payment cards

# 2.2.6.1 Credit cards

Credit cards offer a cashless payment medium combined with a revolving credit and cash advance facility. In recent years, many banks have also introduced a facility for paying back

Interbank transfers only; data on intrabank transfers are not available. The Post Office figure covers only domestic transfers. For postal cheque transactions and international transfers by the Post Office, see Sections 2.2.3 and 3.5.3, respectively.

credit card transactions in instalments without incurring any interest charges. These features have made credit cards very popular and their numbers are steadily rising. Cardholders are charged an annual subscription fee while the merchants pay a commission to the acquirer.

Credit cards were first introduced in 1968, but their growth began in the early 1990s. In the last decade the number of credit cards provided to customers by banks and financial institutions has risen strongly. By the end of 2006, the total number of credit cards issued in Turkey reached 32.4 million, an increase of 63.3% since end-2003. In 2006, the total number of transactions inside and outside Turkey using cards issued in Turkey was 1.34 billion, for a total value of TRY 108.4 billion.

Turkey launched the chip and PIN method (PIN entrance and offline PIN validation for chip credit card purchases) on 31 March 2006, the third country in Europe to do so. The chip and PIN is a new payment method minimising the risk of credit card fraud by preventing counterfeit and lost or stolen card usage. End-2006 figures show that 91% of POS terminals and 82% of credit cards in the market are EMV-compliant. In a recent development, the Interbank Card Centre (BKM) has prepared local regulations for cash withdrawal with credit cards at the point of sale.

#### 2.2.6.2 Debit cards

Debit cards are typically used to withdraw cash and to send remittances by debiting the holder's account at ATMs. Since 1994, they may also be used for retail purchases direct from the current account via POS terminals at merchant establishments. To create awareness on debit card use at the point of sale, the Interbank Card Centre (BKM) launched an advertising campaign beginning in October 2004, with the aim of generalising the use of debit cards and convincing cardholders to use debit cards instead of cash when shopping. As a result, the total volume and value of such purchases increased by about 140% in two years, and reached 50 million transactions with a total value of TRY 1.52 billion in 2006. The BKM continued this effort in subsequent years and will continue in the upcoming years to promote debit card usage at the point of sale.

At the end of 2006, the total number of debit cards was 53.5 million. At end-2006, 1,282,658 POS terminals that accept debit cards were available at 840,059 merchant establishments, including department stores, supermarkets, petrol stations, numerous retailers covering such sectors as clothing and luxury goods, food, electronics, drugs and sanitary products, furniture, car rentals, etc.

The latest development in debit card services consists of allowing consumers to withdraw cash at selected retail stores through POS terminals. This "cashpoint" service, which was introduced by a major bank in January 2006, resembles a cash-back transaction, yet it does not require the consumer to purchase any item at the retail store. The service is free of charge and, as of June 2006, was available at 217 points.

Furthermore, in March 2006, the BKM prepared the infrastructure and the local regulations that allow all applicant member banks to provide a cash withdrawal service on a debit card purchase transaction ("cash-back") at the point of sale.

# 2.2.6.3 Prepaid cards

The most frequently used prepaid cards are disposable phone cards issued by Turkish Telekom for making calls from public telephones, reloadable cellular phone cards issued by GSM operators, reloadable payment cards used at ticket gates of toll roads, and reloadable public transportation tickets issued by municipalities (see also Section 3.4.3).

The municipalities of some cities, including Istanbul and Izmir, are providing reloadable public transportation tokens and cards for travel on the metro, boats, buses and trams, as well as the natural gas and water utilities.

In 2006, TRY 107.1 million worth of phone cards were sold, while the total value reloaded on transportation cards issued by the municipalities of eight cities<sup>6</sup> was over TRY 809 million.

#### 2.2.7 ATMs and POS terminals

The first ATM service in Turkey started in December 1987. Since then, ATMs have continually increased in number. At end-2006, there were a total of 16,511 ATMs installed in Turkey, representing a rise of 11.4% over 2005. ATMs allow consumers to check their current account balance, withdraw cash, initiate credit transfers, pay bills or credit card debts, access their investment accounts and generate transactions themselves. In addition, some banks have begun to operate advanced ATMs that allow consumers to deposit cash, which becomes instantly available in their current account. A major bank also allows withdrawals in foreign currencies through a limited number of ATMs, typically located in tourist areas.

BKM member banks have made significant investments in the payments infrastructure by installing POS terminals that authorise and record transactions at merchant outlets. At end-2006 there were 1.3 million POS terminals, an increase of 12.4% over 2005.

# 2.2.8 Other access channels for banking and payments

# 2.2.8.1 Telephone banking

Since the introduction of telephone banking in 1991, the range of phone banking services has increased. Besides being able to transfer funds and conduct account balance enquiries over the telephone, bank customers can also pay bills or credit card balances, trade mutual funds or stocks, and set up a time deposit.

# 2.2.8.2 Internet banking

The growth and spread of internet banking services has been unexpectedly high, reflecting a high degree of public acceptance. First introduced in 1997, internet banking is now provided by all deposit banks. This facility allows consumers to conduct account balance enquiries, transfer funds (including transfers to third-party accounts with other banks), trade mutual funds or stocks, apply for loans, pay credit card balances or bills, and trade or transfer foreign exchange. In addition, other services, such as operations related to insurance and pension funds, are increasingly available via internet banking.

# 2.2.8.3 Mobile banking

Since 2000, bank customers have been able to conduct banking transactions by means of GSM-based mobile phones. This feature, which was initiated for mobile phones with WAP-GPRS functionality, was extended to all types of phones after about a year. Using this channel, customers can do almost everything they can do via internet banking.

# 2.3 Recent developments

In November 2004 a major bank introduced a new facility to transfer funds via mobile phones. This was followed by a similar facility from another major bank in September 2005. These facilities allow a customer to enter a funds transfer order via his or her mobile phone by specifying the amount and the phone number of the recipient. The latter receives an SMS message indicating the receipt of the transfer and a four-digit code, to be used at an ATM to withdraw the money transferred without needing a card.

15

In 2006, reloadable transportation tokens were available in Istanbul, Izmir, Manisa, Denizli, Adana, Kocaeli, Çanakkale and Bandirma.

# 3. Interbank exchange and settlement systems

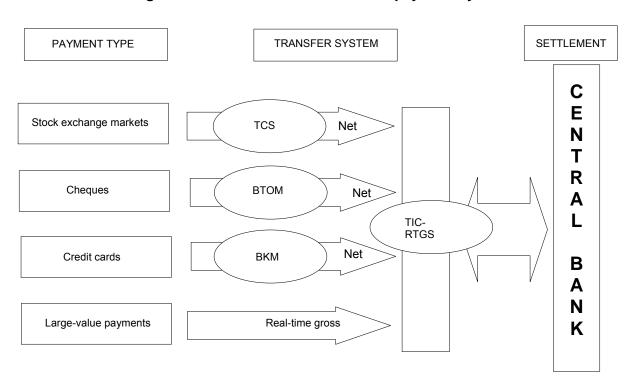
#### 3.1 General overview

In Turkey, the major interbank payment systems are those related to stock exchange payments, check clearing and credit card payments, and other large-value interbank payments, and include:

- TCS: the Takasbank clearing system;
- BTOM: the system of the Interbank Clearing Houses Centre;
- BKM: the Interbank Card Centre system;
- TIC-RTGS: the RTGS system of the CBRT.

Chart 1

Organisation of the Turkish interbank payment system



TIC-RTGS is a real-time gross settlement system, whereas the BTOM and the BKM are deferred net settlement systems. Payment obligations resulting from stock exchange transactions are settled through the TCS.

All payments in the BTOM and the BKM are finally settled in the books of the CBRT. A separate account, the TIC-RTGS account, is used for settlement of interbank payments processed by TIC-RTGS. The BTOM and the BKM have special settlement accounts at the CBRT. Banks monitor their liquidity position by reviewing the balances in all settlement accounts. As for the settlements in the TCS, the banks' net claims are directly transferred from their Takasbank giro account to their TIC-RTGS account.

# 3.2 The real-time gross settlement system

TIC-RTGS is the real-time gross settlement system of Turkey. The system is owned and operated by the CBRT. The CBRT developed TIC-RTGS between October 1989 and March 1992 and put it into live operation in April 1992.

Driven by the changing demands of the banking sector and developments both in the payment systems area and in technology, a project was started in 1997 to develop the second generation of the system, which began operating in April 2000.

The second-generation RTGS system introduced an emergency backup centre and many new features, including a central queuing mechanism, funds management facilities, a direct debiting operation, phased closure of operations, and message bulking for low-value payments.

The scope of the second-generation project also covered the development of an electronic securities transfer and settlement system, TIC-ESTS, which went live in October 2000 (see Section 4.3.3).

TIC-RTGS and TIC-ESTS work in an integrated manner. Participant banks access them using a single interface, called SWITCH (a message switching system). TIC-RTGS and TIC-ESTS are directly connected to SWITCH through a proprietary network (TICNET).

Owing to their integration and common interface, TIC-RTGS and TIC-ESTS are usually regarded as a single system, which is referred to as TIC-RTGS and ESTS.

# 3.2.1 Operating rules

The CBRT Law, as amended in April 2001, defines the central bank's duties and responsibilities with respect to payment systems. The law authorises the CBRT to establish payment systems, determine the procedures and conditions of payment methods and instruments, and draw up regulations for ensuring their smooth operation.

The operational procedures, rights and obligations of the CBRT, as the system operator, and the participants in the system are governed by private agreements. These are supported by procedures and rules documented in the *TIC-RTGS* and *ESTS* Operational Rules, *TIC-RTGS* and *ESTS* User Guide, *TIC-RTGS* and *ESTS* Disaster Recovery Guide, and the relevant CBRT circulars.

# 3.2.2 Participants in the system

Any bank acting pursuant to the Banking Law may participate in TIC-RTGS and ESTS. The participants must be established in Turkey and maintain giro accounts with the CBRT. It is not obligatory for all banks to participate in TIC-RTGS and ESTS. Banks that do not participate in the system may access it through one of the participant banks. At end-2006, there were 48 participants in TIC-RTGS and ESTS, including the CBRT.

For ISE members that are not direct participants in TIC-RTGS and ESTS (eg brokerage houses), Takasbank (see Section 1.3.4) has developed a proprietary system called TETS through which brokerage houses can access TIC-RTGS and ESTS for cash and securities (government bonds and T-bills) transfer purposes.

#### 3.2.3 Types of transactions handled

The TIC-RTGS system is used for interbank payments in Turkish liras relating to interbank operations (eg money market and securities settlement transactions), final settlements of cheque and credit card operations, and customer payments.

Since TIC-RTGS works in an integrated manner with TIC-ESTS, settlement of the payment leg of all DVP operations is also carried out in TIC-RTGS.

The system provides facilities for the exchange of payment-related information messages between participants.

# 3.2.4 Operation of the system

TIC-RTGS is based on a V-shaped architecture, where the entire message is sent to the TIC-RTGS Centre by the sending bank. A payment instruction embodied in the message is executed only if the sending bank has sufficient covering funds in its TIC-RTGS account. A successful execution of the payment instruction will result in transfer of the payment from the sending to the receiving bank across their TIC-RTGS accounts. The message is then forwarded in real time to the receiving bank.

Payments that cannot be settled because of insufficient funds are placed in a centralised payments queue. The queuing algorithm is first-in-first-out (FIFO) within priorities. TIC-RTGS has a gridlock resolution algorithm for queued payments (see Section 3.2.9.2).

The settlement in TIC-RTGS is final and irrevocable. If an operational error occurs, the parties involved must resolve it bilaterally. Participants can check their TIC-RTGS accounts at any time during the business day from their relay computers (see Section 3.2.6) and from the TIC-RTGS Centre. The participants may obtain a number of reports from their relay computers.

# 3.2.5 Operating hours

A typical business day lasts about 21 hours. The system opens at  $08:00^7$  on Monday and on those days following official holidays. On every workday, the participants log on to the system by 09:00. The system closes at 17:30 on regular workdays and at 13:00 on half workdays.<sup>8</sup>

During the end-of-day procedure, the balances of TIC-RTGS settlement accounts are transferred to the participants' CBRT accounts. The housekeeping process lasts around three hours and at about 20:30 the system opens to receive messages with the next business value date. On Fridays and on the eve of official holidays, however, the system remains closed until 08:00 on the next business day. TIC-RTGS is closed during weekends and official holidays; hence, it operates 252 days a year on average.

# 3.2.6 Transaction processing environment

The TIC-RTGS system comprises a relay computer (RC) located on the participant's premises, a proprietary communication network (TICNET), and a central computer system.

Every participant, including the CBRT, must have an RC to participate in TIC-RTGS. The RC system, which provides all the functionality needed by the participant, is a standard hardware and software configuration managed by the CBRT. The RC provides the participant with secure message entry, message verification, account enquiry, archiving and backup facilities. The RC has a mirror copy of the central computer's reserve balances for each participant. This obviates the need for a query system on the central computer. The central bank's RC has some additional facilities. The participant's primary RC can be backed up online to a secondary RC in case of primary RC failure.

A participant's host computer can be integrated into TIC-RTGS through a connection to the RC. In this way, a host terminal at a bank branch can be used to generate payment

Turkey's time zone is CET + 1.

For the National Day (29 October) and two religious holidays (Bairams), the preceding day is officially a half workday.

messages. Currently, 77% of banks have host connections with TIC-RTGS. In case of a host computer failure, a bank can still send payments via its RC.

The TIC-RTGS Centre has a computer system that has no single point of failure due to redundant backup facilities. Apart from the production system, there are other systems used for system development and maintenance.

A secondary centre (emergency backup centre) has been set up to take over the operations in a very short time in the event of complete site failure at the primary centre. Moreover, in case of an online connection failure, offline facilities are also available for RC-host computer and RC-Centre connections.

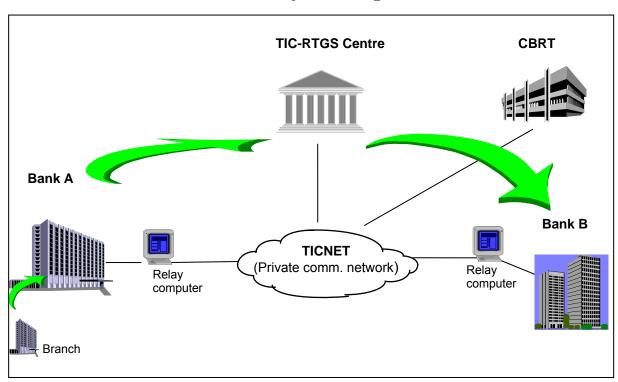


Chart 2
TIC-RTGS system configuration

RCs are connected to the TIC-RTGS Centre via a private TCP/IP network called "TICNET". Participants access TICNET nodes through leased telecommunication lines. TICNET is operated by the CBRT and the participants share its operating costs. The participants' leased lines are backed up by ISDN lines.

A high degree of security is provided in TIC-RTGS. Multilevel security controls have been implemented to ensure the integrity, authenticity and confidentiality of transactions. Data transfers between RCs and TIC-RTGS are secured by using data encryption.

# 3.2.7 Settlement procedures

All messages received at the TIC-RTGS Centre are processed immediately, either by being settled, should the sender have sufficient funds for the payment, or otherwise by being queued. Settlement is final and irrevocable.

TIC-RTGS accounts are used for settlement. Initial values for these accounts are transferred from participants' reserve requirement accounts at the CBRT at the beginning of each business day. A bank can request a transfer of funds from its free (giro) account at any time

during the business day. At the end of the day, the balances in the TIC-RTGS accounts are transferred back to the participants' reserve requirement accounts at the CBRT.

Funds are made available to the recipient bank immediately after settlement in the TIC-RTGS account. The TIC-RTGS and ESTS Operational Rules recommend that customer accounts be credited the same day.

In order to help settle as many payments as possible, the gridlock resolution algorithm (see Section 3.2.9.2) is manually run before the end of the day. Moreover, all funds reservations (see Section 3.2.9.2) are released upon the End-of-Day Announcement, a message issued by TIC-RTGS Centre five minutes before system closure. Any payments that remain unsettled are cancelled by the end-of-day procedure.

# 3.2.8 Pricing policies

There is no entrance fee or annual fee for TIC-RTGS and ESTS participants. The CBRT charges a transaction fee in order to recover the long-term operational cost and the investment cost of setting up the system. Fees are based on the value of the transaction and charged to the sending participant.

TIC-RTGS & ESTS pricing structure, 2006 <sup>1</sup>			
Up to TRY 4,000 (USD 2,837)	TRY 0.10 (USD 0.07)		
TRY 4,000–420,000 (USD 4,785–297,872)	0.000025 × payment amount (USD 0.07–7.45)		
Over TRY 420,000 (USD 296,296)	TRY 10.50 (USD 7.45)		
Non-payment transaction	TRY 0.10 (USD 0.07)		

<sup>&</sup>lt;sup>1</sup> The USD exchange rate at end-2006 was TRY 1.41.

In addition to the transaction fees, there are communication network-related expenses, which are shared equally by all participants. The BAT coordinates maintenance and expense sharing for the RCs and network support.

# 3.2.9 Risks and risk management in TIC-RTGS

# 3.2.9.1 Credit risk

In TIC-RTGS, payment instructions are executed only if there are sufficient funds in the participant's TIC-RTGS account. There is thus no credit risk for any payments accepted in the system for payments. Recipients are notified after the payments are settled. The central bank's intraday liquidity provisions for system participants are fully collateralised.

# 3.2.9.2 Liquidity risk

As a tool for managing liquidity risk, the CBRT provides an intraday liquidity facility to the participants. The funds reservation facility, central queuing and gridlock resolution mechanisms, prioritisation of payments and advanced queue management facilities also help participants to contain liquidity risks, as described below.

In order to meet temporary liquidity shortages and hence to mitigate liquidity risk in TIC-RTGS, the CBRT provides banks with an *intraday liquidity facility* between 09:00 and

15:00 (since July 1999) and a *late liquidity window facility* between 16:00 and 16:30 (since July 2002), both of which are collateralised.

The intraday liquidity facility is provided to banks within their borrowing limits. Banks do not pay interest on this facility but only a commission of 0.0048% on the principal amount of each transaction. The facility must be repaid by the end of the day; otherwise, the bank's collateral is liquidated and its intraday liquidity is converted into a penalised overnight credit.

As a lender of last resort, the CBRT also provides the late liquidity window facility to banks. Under this facility, banks can lend money to the CBRT at the central bank's borrowing rate and borrow from the CBRT at the central bank's lending rate without any limit, provided that their needs are fully collateralised.

The types of collateral that are accepted are chosen from among marketable and liquid assets. The CBRT also applies haircuts according to each asset type's historical price volatility and liquidity. Collateral holdings are blocked on a transaction basis and the collateral is marked to market. There is a centralised system in place to monitor the status of the collateral. Market participants are not able to access this system directly.

Apart from these facilities, participants may use the funds reservation facility to preplan their payments. There are three mechanisms to manage funds reservations:

- Participant may reserve a quantity of liquidity against their account for use later in the day (headroom). Headroom is not associated with any particular anticipated payments, and remains reserved until the participant releases it, or until the end of the day.
- The participant may reserve funds for high-priority payments (priority reservations).
   Funds reserved in this way may be used only for the settlement of high-priority payments.
- The participant may reserve funds for a specific payment anticipated later the same day (earmark). Earmarks may be created for anticipated individual payments.

As a fourth facility to manage liquidity risk, TIC-RTGS has a centralised payment queue facility. Payments are released from the queue within each priority on a first-in-first-out (FIFO) basis. Participants have full real-time control over their payment queue. They can query their queue, change the priority and order of queued payments, and cancel a payment upon the approval of the TIC-RTGS and ESTS Operation Centre. They can also query the total amount of queued incoming payments.

Moreover, the system has a gridlock resolution facility that allows payment settlements from two or more queues simultaneously without altering predetermined payment priorities, even though the payments cannot be settled separately. The facility, which is transparent to the participants, may be used manually or automatically (in preset periods).

# 3.2.9.3 Operational risk

In order to minimise the operational risk of TIC-RTGS, every component of the system has its backup.

A remote emergency backup centre began operating in 2000. The disaster centre was developed to take over the operations in a very short time, in the event of complete site failure at the primary centre. In such a case, participants' connections are automatically routed to the backup centre, which takes over the operation without any data loss or duplication.

Moreover, the business continuity arrangements in TIC-RTGS are well documented in the *Disaster Recovery Guide* and are available for implementation. The *Disaster Recovery Guide* describes the operational facilities to be used in the event of a failure in any component of the system, defines decision and notification procedures for handling abnormal situations,

and includes sample forms for information dissemination as well as the contact information of the teams that will be in charge in case of a problem. The guide also contains a section dedicated to the measures that should be taken by the participants to minimise the operational risks.

As part of the CBRT Contingency Plan, the emergency backup centre and the *TIC-RTGS* Disaster Recovery Guide are tested twice a year with different crisis scenarios.

#### 3.2.10 Statistical data

At end-2006, TIC-RTGS had 48 participants. There has been a trend increase in both volume and value of the messages over the years. In 2006, TIC-RTGS processed 94.2 million messages for a value of TRY 15.05 trillion (USD 10.53 trillion). The average volume and value of transactions settled per day during that period were 375,337 and TRY 60.0 billion (USD 41.9 billion), respectively.

# 3.3 The large-value payment system

The Takasbank Clearing System (TCS) clears and settles large-value payments related to securities trades on the Istanbul Stock Exchange (ISE).

Takasbank, as the clearing and settlement institution of the ISE (see Sections 1.3.3 and 1.3.4), calculates the net obligations of parties involved in ISE markets on a multilateral basis. Both cash and securities settlement are handled by the TCS.

# 3.3.1 Operating rules

The operational procedures, rights and obligations of the parties are governed by the Capital Markets Law, related CMB decrees, the ISE settlement regulations, and other relevant ISE and Takasbank circulars, all of which are available on the websites of these institutions (www.cmb.gov.tr, www.ise.org, www.takasbank.com.tr). The rules do not vary with regard to the identity, type and location of the member.

# 3.3.2 Participants in the system

Members of the ISE are automatically members of Takasbank for settlement purposes and sign the standard agreement with Takasbank. The criteria for membership of the ISE are stated in the relevant clauses of the Capital Markets Act and in the ISE rules and regulations.

Members' terminals are connected to the Takasbank system. Prior to connection to the system, members must meet certain criteria set by Takasbank, such as system configurations, leased lines, etc.

As of November 2006, the stock market had 97 members (only brokerage houses can operate in the stock market). The bills and bonds markets had 133 members, of which 40 were banks and 93 were brokerage houses.

# 3.3.3 Types of transactions handled

The TCS handles the clearing and settlement of both the security and the cash legs of ISE operations.

# 3.3.4 Operation of the system

Takasbank calculates and announces the net obligations of members resulting from their operations in ISE markets.

On the value date, members are obliged to provide sufficient funds in their funds debit and securities debit accounts by the cutoff times set by Takasbank.

Members can credit their Takasbank funds accounts by TIC-RTGS transfers, cash delivery, or transfers from other Takasbank members. It is also possible to cover their debit positions by their claims in other markets.

At the cutoff time, Takasbank transfers members' liabilities from their funds accounts to a funds pool account. Members with net credit positions are then paid from this pool: for a bank member, its TIC-RTGS account is credited; for a non-bank member, its Takasbank giro account is credited.

If members fail to provide sufficient funds in their funds debit accounts by the cutoff time, they are charged a penalty. The penalty charges are transferred into the guarantee pool (see Section 3.3.9.1).

# 3.3.5 Operating hours

For the bills and bonds market, same day value trading closes at 14:00, while forward value trading can be carried out until 17:00. At 15:15 on the settlement day, Takasbank announces members' net obligations. Members then have until 16:30 to provide a sufficient balance in their funds debit account.

For the stock market, Takasbank announces the debt positions in the morning on T + 1. Members are then expected to pay their funds obligations by 16:00 on the settlement day (T + 2).

There is no end-of-day procedure. The balance of the funds debit accounts becomes zero as Takasbank debits them for settlement. Members usually transfer the balances of their giro accounts to their TIC-RTGS accounts.

# 3.3.6 Transaction processing environment

In the TCS, all settlement members perform settlement-related transactions from their office terminals with their leased line connections to the Takasbank host system, using the programme products downloaded to their terminals by Takasbank.

Takasbank has developed a disaster recovery plan which addresses all possible major risks that can interrupt operations. Takasbank also has a remote disaster recovery centre, which hosts a full duplicate of the primary system as well as data backups.

# 3.3.7 Settlement procedures

Takasbank performs multilateral netting using its members' funds and securities debit accounts. In order to minimise the principal risk, the DVP principle is used. Partial DVP is also applied, allowing members to receive the securities in amounts proportional to payment of their liabilities.

# 3.3.8 Pricing policies

Takasbank charges neither an entrance fee nor an annual fee to its members. Settlement is also free of charge.

# 3.3.9 Risk management

#### 3.3.9.1 Principal risk

In order to eliminate principal risk, all operations are performed according to DVP (model 3).9

Takasbank does not guarantee settlement, and a timely settlement depends on whether members pay their obligations on time. Two guarantee funds have been established under the ISE Regulation, one for each market, in order to facilitate timely settlement and reduce settlement risk.

If a member fails to cover its funds obligations, the guarantee fund is used instead. If the amount of the unpaid obligation exceeds the guarantee fund, the security claims arising from the same settlement cycle that have been blocked for DVP settlement are liquidated to cover the outstanding obligations.

# 3.3.9.2 Operational risk

To mitigate the operational risk, Takasbank has established a remote disaster recovery centre, which hosts a full duplicate of the primary system as well as data backups.

#### 3.3.10 Statistical data

In 2006, the net settled cash value of transactions in the stock market and the bills and bonds market totalled TRY 31.6 billion (USD 22.4 billion) and TRY 437.9 billion (USD 310.6 billion), respectively.

# 3.4 Retail payment systems

# 3.4.1 Interbank Card Centre (BKM)

The Interbank Card Centre (BKM) was founded as a non-profit organisation by 13 major public and private Turkish banks in 1990. As of December 2006 it had 28 members (10 shareholders) and six service providers. The regulations require that a member be either a bank or a VISA or MasterCard member.

The Centre's main fields of activity are:

- to develop procedures to be applied by banks implementing credit card and debit card systems;
- to generate decisions by performing activities aimed at standardisation;
- to establish domestic rules via applications used throughout Turkey;
- to carry out interbank clearing transactions;
- to establish relations with foreign entities and commissions and, if necessary, to represent its members with these entities;
- to carry out transactions already being performed by banks in a more secure, faster and more cost-effective manner from a single centre.

In addition, payables and receivables arising from purchases by cardholders are cleared through the Centre's domestic clearing and settlement system.

\_

In a DVP model 1 the securities and funds are transferred on a gross basis. In a DVP model 2 the securities are transferred on a gross basis while funds are settled on a net basis. In a DVP model 3 both securities and funds are simultaneously transferred on a net basis.

The BKM is the service provider handling all activities related to the processing of credit card and debit card payments. It clears and settles all domestic credit card payments and settles debit card payments between banks. It also establishes the legal and administrative infrastructure, sets technology standards, issues a national combined warning bulletin, operates the BKM system, and provides training and security services for its members.

The BKM system started operations in 1993, enabling banks to make rational use of infrastructure and resources, typically by sharing networks and ATMs. The system's services include online credit card authorisation, standalone credit card authorisation, ATM and POS sharing for debit cards and gateways to external networks. Banks that share ATMs enable their debit cardholders to use each other's ATMs under bilateral agreements.

The BKM has a separate settlement account with the CBRT under a special agreement. This account is used exclusively for credit and debit card settlement. The BKM advises the banks and the CBRT of each bank's net debit or credit position. Banks with a debit position send instructions to the CBRT for payment out of their giro accounts. After these accounts have been debited, the payments are credited to the creditor banks. The CBRT has no responsibility for credit and debit card clearing other than providing settlement services. All debits and credits in the settlement account are booked on the basis of the details supplied by the BKM.

# 3.4.2 Interbank Clearing Houses Centre (BTOM)

# 3.4.2.1 Rules and participants

The Cheque Law defines the Interbank Clearing Houses Centre (BTOM) as a legal entity and empowers the CBRT to supervise and control the cheque clearing process nationwide. The Cheque Law and the CBRT's by-law on the BTOM govern the establishment and functioning of the interbank clearing houses (ICHs), which operate as branches of the BTOM. The CBRT issues directives and regulates the functioning of all clearing houses.

Currently, there are two clearing houses located in Ankara and Istanbul. All cheque clearing transactions are carried out electronically in the BTOM. The BTOM only processes TRY cheques.

Only banks can be members of the BTOM. All banks that provide cheque account facilities are members of the BTOM. As of end-2006, the BTOM had a total of 41 members (the CBRT, 31 commercial banks, five development and investment banks and four participation banks).

The Executive Board of the BTOM consists of a representative from the CBRT as chairman and representatives from 12 banks forming the Executive Board of the BAT.

ICHs are administered by a committee which consists of the CBRT branch manager and three representatives from banks. Their operating expenses are financed by member banks according to the banks' share in the total number of cheques processed over the year. Fixed expenditure on such items as acquisition of fixed assets, computer hardware or software is evenly distributed among member banks.

Legally, cheques are required to be presented to the clearing houses physically. However, to improve the efficiency of the clearing process and to avoid the risks associated with the physical delivery of cheques, a cheque truncation system was introduced in 1998. This allows cheques to be cleared without directly presenting them in the clearing house. This system is optional and is currently used by 32 banks. Banks wishing to use this facility are required to sign a protocol which sets out the procedures and defines obligations in the event of any legal dispute that may arise due to the non-physical presentation of cheques.

In order to improve the efficiency of the clearing process, a new electronic cheque clearing system has been in operation since September 2006.

# 3.4.2.2 Operation of the system

Cheques are cleared through the BTOM. Collecting banks transmit cheque information to the central computer of the clearing house around the clock. On the clearing day, information on cheques issued and received is transmitted by the banks until 06:00. This information is stored in the central computer and sent to the drawee banks where the cheque account is opened at 06:00. Although nine out of 41 banks carry out cheque transactions electronically, they also present cheques physically until 09:00 on the clearing day. Banks request provisions for cheques and the provision results (bad cheque information) are sent to the BTOM until 17:00 on the same day.

The BTOM sends a list of daily cheque clearing results to the central bank's Ankara branch for final settlement.

In 2006, a total of 23,558,235 cheques amounting to TRY 186.9 billion (USD 132.5 billion) were processed through the BTOM.

#### 3.4.2.3 Settlement

The BTOM determines the net debit or credit positions for each bank on a multilateral basis. Banks are informed about the outcome by 18:00 each day.

The CBRT maintains a separate settlement account for the BTOM at its Ankara branch. The final settlement of operations is carried out through this account. Debtor banks have to settle their daily clearing debt by payment from their giro deposits at the central bank's Ankara branch or via TIC-RTGS not later than 12:00 on the following business day. Once all debtor banks have paid their debts, the Ankara branch makes payments to creditor banks through TIC-RTGS.

The BTOM Regulations define the rules to be applied if a participant in the system fails to fulfil its obligations. If a liquidity problem arises, the CBRT is authorised to use all the accounts of the participants at the CBRT. In addition, since the BTOM participants are banks and the CBRT provides a fully collateralised intraday liquidity facility to banks, BTOM participants may use this credit facility. Moreover, in case of failure of a participant (ie revocation or restriction of a participant's operating licence), the net positions of other participants will be recalculated by excluding the failed participant.

# 3.4.3 E-money schemes

Currently, e-money schemes in Turkey are limited to a few pilot projects at university campuses. A major private bank has started a pilot project at its headquarters in Istanbul and at three universities in three major Turkish cities: Ankara, Istanbul and Izmir. Smart cards issued by banks have an embedded chip that is capable of holding value and identification information for the user. Cards are used to purchase goods at vending machines and to allow users access to restricted areas. Money transfer to the card is performed at the bank's ATMs. The total numbers of cards and merchant terminals for these projects are 59,000 and 45, respectively.

# 3.5 Exchange and settlement systems for international transactions

Currently, there are 15 foreign banks (subsidiaries or branches of banks incorporated abroad) in Turkey. Turkish banks also have an extensive presence abroad. International transfers of both small- and large-value payments are mainly handled by the banks. The Post Office and credit card companies are also involved in small-value international payments. Like the banks, the CBRT uses the SWIFT system for foreign currency transactions.

## 3.5.1 Cross-border payments

International payment messages are mostly transmitted through SWIFT, which was introduced in Turkey in 1989. As of 2006, 50 financial institutions in Turkey participated in this network. In 2006, the total (sent and received) message traffic of Turkey was about 0.7% of the worldwide SWIFT traffic, with a daily average of 83,126 messages. The total numbers of messages sent and received via SWIFT in 2006 were 9.75 million and 11.06 million, respectively. Banks may use either their foreign offices or correspondent banks for making cross-border payments.

## 3.5.2 Retail payments (credit and debit cards)

Retail payments are made not only via banks, but also via credit card companies and the Post Office. Credit card payments are settled through the credit card companies. At end-2006, credit and debit cards issued by foreign banks had been used in Turkey for 16.4 million transactions for a total value of TRY 4.8 billion. As a result of credit and debit card transactions in the payment card system, BKM members have been instrumental in generating a considerable net foreign exchange inflow into Turkey.

#### 3.5.3 Post Office remittances

Cross-border remittances can be sent and received via the Post Office. The Post Office has agreements and contracts with its counterparts in 40 countries and accepts remittances only from them. Since there is no postal bank in Turkey, settlement is carried out via a correspondent bank. The Post Office mostly receives remittances from Turkish workers abroad. Due to the increasing number of Turkish bank branches abroad and the presence of foreign banks in Turkey, however, there has been a decline in the use of the Post Office for international transactions. In 2006, the Post Office processed a total of 141,000 international remittances, amounting to TRY 111.3 million.

## 3.5.4 Traveller's cheques

Traveller's cheques are widely used in Turkey. Foreign banks issue them in all major currencies. Foreign currency traveller's cheques are encashed by directly presenting them to the paying bank.

# 4. Securities settlement systems

#### 4.1 Government bonds, treasury bills and CBRT liquidity bills

Based on the Public Finance and Debt Management Law (Law No 4746 enacted in 2002), book entry government bonds and treasury bills (Domestic Debt Notes (DDNs)) are issued by the CBRT on behalf of the Undersecretariat of the Treasury in accordance with the financial services agreement between the Treasury and the CBRT.

The CBRT is the central securities depository for DDNs. It is possible to print and deliver physical certificates, but most DDNs are created by the CBRT only in the books of its securities settlement system, TIC-ESTS (see Section 4.3.3 for details). TIC-ESTS is integrated with TIC-RTGS so that a DVP model 1 is achieved.

CBRT liquidity bills are designed to absorb excess liquidity in the market in order to increase the effectiveness of the central bank's monetary policy. The liquidity bills, with a maturity of up to 91 days, may also be subject to early redemption. The bills are created by the CBRT only in the books of TIC-ESTS.

Primary market operations involving DDNs and CBRT liquidity bills are performed in TIC-ESTS, while secondary market operations are mainly carried out in ISE markets. Trades on the ISE are cleared and settled by the ISE Settlement and Custody Bank (Takasbank).

## 4.1.1 Primary market operations

The Treasury, which is the issuer of DDNs, determines the method and terms of issuance. The CBRT performs all operations related to issuance on behalf of the Treasury. The CBRT uses the TIC-RTGS and ESTS infrastructure to collect bids for the auctions. In the context of DDN auctions, the settlement is generally performed on T + 1, and sometimes T + 2.

Primary market settlement of DDNs and CBRT liquidity bills takes place in TIC-ESTS.

The CBRT initiates DVP settlement of the transactions based on the result of the auctions, and the participants then buy the associated securities. The settlement is performed in real time in a DVP model 1.

In addition to primary market operations, over-the-counter transactions and CBRT open market transactions are settled in TIC-ESTS on a gross basis.

#### 4.1.2 The ISE market

## 4.1.2.1 Trading

Most DDN trades are performed in the ISE bonds and bills market, which is the organised, fully automated market for both outright purchases and sales and repurchase/reverse repurchase transactions. The purpose of the market is to provide a transparent, liquid, competitive and efficient environment for secondary market trading of fixed income securities comprising DDNs, CBRT liquidity bills, revenue-sharing certificates, bonds issued by the Privatisation Administration, and corporate bonds listed on the ISE. Although there is a market for the securities stated above, most of the transactions are conducted on treasury bills and government bonds.

Outright purchases and sales and repo/reverse repo transactions take place between 09:30 and 17:00 Monday to Friday. Same day value orders (the beginning value date for the repo/reverse repo market) can be matched until 14:00, whereas forward value orders are valid until 17:00. Same day value orders for mutual fund transactions can be executed until 17:00. Trading is halted during the lunch break, from 12:00 to 13:00.

# 4.1.2.2 Clearing and settlement

The DDN trades performed in the ISE bonds and bills market are cleared and settled by Takasbank, using the TCS. All securities intermediary institutions (brokerage houses and banks) that are certified by the CMB can be members of the ISE, and ISE members are automatically entitled to be settlement members of Takasbank.

Those trades that are matched by 14:00 are settled on the same day (T + 0). Multilateral netting is applied on a daily basis. Takasbank calculates and announces the net obligations of parties arising from their operations in ISE markets. Net obligations are legally binding but Takasbank does not guarantee settlement.

For settlement, the DVP (model 3) principle is observed, as members do not get their receivables unless they fulfil their obligations. In case of partial fulfilment of the obligation, a proportional amount of the receivable is transferred to the buyer.

Members must fulfil their obligations by transferring funds and DDNs to the specific Takasbank accounts by 16:30 through TIC-RTGS and ESTS or the Takasbank environment.

Up to 16:30 of every day, Takasbank debits member liabilities from their securities account at Takasbank and deposits them in a securities pool account. Members must have sufficient

securities in their accounts by 16:30. The securities can be transferred to the member accounts by TIC-ESTS transfers, physical delivery or transfers from other Takasbank accounts. At 16:30, the securities in the pool account are delivered to creditor members on condition that they fulfil their funds and securities obligations.

If members fail to provide sufficient securities and funds by the cutoff time, they are charged a penalty. The penalty charges are transferred into the guarantee fund.

#### 4.2 Stocks

Capital market instruments including stocks, and the capital markets themselves, are regulated and supervised by the CMB. All stocks are registered as dematerialised shares in the CRA, which is the central securities depository. Stocks are traded on the ISE and are cleared and settled by Takasbank.

## 4.2.1 Trading

Stocks are traded on the ISE stock market. The fully computerised trading system enables ISE members to trade stocks and rights coupons. Prices are determined according to a "multiple price—continuous auction" method, utilising a computerised system that automatically matches buy and sell orders on a price and time priority basis. All information regarding transparency, except standing order IDs, is displayed in the trading system during the sessions.

## 4.2.2 Clearing and Settlement

Financial institutions operating on the ISE stock market must open custody accounts with the CRA (the central securities depositary for stocks in Turkey) and fund settlement accounts at Takasbank. All securities intermediary institutions (brokerage houses and banks) that are certified by the CMB can be members of the ISE. ISE members are automatically entitled to be settlement members of Takasbank. Both the funds and the securities legs of ISE trades are settled in the TCS.

Takasbank calculates the stock and fund obligations of the parties using multilateral netting based on the data received by the ISE. The stock obligations are reported to the members and the CRA in customer details on the morning of the following business day (T + 1).

The settlement of stock trades on the ISE is done on T + 2 using electronic messaging between the CRA and Takasbank. The CRA blocks and transfers related stocks (obligations) from the participants' accounts to the Takasbank pool account with the CRA. Members must make the stocks available to the CRA and the funds must be in Takasbank by 16:00.

The DVP model 3 is applied during the settlement process in Takasbank. Net obligations are legally binding in Turkey but Takasbank does not guarantee settlement. In case of partial fulfilment of the obligation, a proportional amount of the receivable is transferred to the buyer.

If members fail to provide enough stocks and funds by the cutoff time, they are charged a penalty. The penalty charges are transferred into the guarantee fund.

## 4.3 The use of the securities infrastructure by the CBRT

The CBRT, being responsible for issuing treasury bills and government bonds on behalf of the Undersecretariat of the Treasury, developed an electronic securities transfer and settlement system, TIC-ESTS, in 2000. TIC-ESTS also provides an efficient infrastructure for the market operations carried out by the CBRT as part of its monetary policy operations and for managing collateral.

# 4.3.1 Open market operations

To regulate the money supply and liquidity in the economy in the framework of monetary policy targets, the CBRT conducts open market operations against the Turkish lira, including outright purchase and sale of government securities, repo and reverse repo transactions, issuance of liquidity bills, and lending and borrowing of Turkish lira deposits and DDNs.

The cash settlement of these transactions takes place in the banks' TIC-RTGS accounts. The securities settlement takes place in TIC-ESTS.

Open market operations can be performed in TIC-RTGS and ESTS or on the ISE.

# 4.3.2 Securities lending and borrowing market in the CBRT

The collateralised securities lending and borrowing market, in which the CBRT acts as a blind broker, was established in the CBRT in 2003. Only six benchmark securities, chosen by the Treasury, are eligible for lending/borrowing transactions in this market and the transfer of loaned securities takes place through the accounts held in TIC-ESTS, as the custodian.

While primary dealers are allowed to borrow and lend, other banks can only lend securities in this market. Institutions and private investors can only lend, with banks as intermediaries.

## 4.3.3 CBRT securities settlement system (TIC-ESTS)

As an agent of the Undersecretariat of the Treasury, the CBRT is responsible for issuing and settling DDNs (government bonds, T-bills) on behalf of the Treasury. In October 2000, the CBRT began operating the electronic securities transfer and settlement system, TIC-ESTS, for the issuance and settlement in book entry form of DDNs and other securities issued by governmental organisations.

The TIC-ESTS system provides real-time transfer and settlement of securities. With the online real-time TIC-RTGS connection, settlement of the securities and associated funds is synchronised so that a DVP model 1 is achieved. Settled operations are irrevocable.

## TIC-ESTS handles:

- primary market operations (issuance and sale of securities by the CBRT);
- secondary market operations (DVP sales between participants, transfers related to the settlement of ISE market transactions, repo and reverse repo operations);
- free transfers between the participants;
- transfers between the sub-accounts of a participant (repositioning operations);
- transfers between physical and book entry forms (rematerialisation/dematerialisation);
- redemption and coupon payment notifications;
- online inquiry and periodic reporting facilities.

On the issuance day the securities are created in the books of TIC-ESTS in the CBRT sub-account. They are then transferred to the participants' accounts in the context of primary market operations. Transfers resulting from secondary market operations are also conducted in TIC-ESTS. In addition, TIC-ESTS permits conversion of physical securities to electronic form and vice versa. In other words, securities in TIC-ESTS can be delivered in paper form if investors so require. Similarly, paper certificates may be entered into the electronic system once the holder physically submits them to a CBRT branch. As the fiscal agent of the Treasury, the CBRT issues securities in TIC-ESTS and makes principal and interest payments on government bonds and treasury bills.

#### 4.3.3.1 Sub-accounts

TIC-ESTS transfers securities between the participants' securities sub-accounts. There are three types of sub-accounts: free sub-accounts, customer securities sub-accounts and collateral sub-accounts. The holdings in a participant's free sub-accounts constitute the securities directly owned by that participant. The participants segregate customer securities that are in their custody in customer securities sub-accounts. This segregation is compulsory only for securities subject to customer-based repurchase transactions. The input and output to and from collateral sub-accounts are under the control of the CBRT, and securities held in the collateral sub-accounts determine the participant's limits in the CBRT markets. The intraday liquidity limit in the TIC-RTGS system is also determined by the holdings in one of these sub-accounts within the same borrowing limits.

#### 4.3.3.2 DVP flow

The DVP settlement procedure is initiated at the request of the seller. The TIC-ESTS system blocks the securities that are subject to the sell request and informs the buyer. The buyer responds either with a buy request for the full amount or with several buy requests to purchase the securities in parts. The sell and buy requests are matched in TIC-ESTS. For a valid buy request, TIC-ESTS forwards a payment request to TIC-RTGS, where the funds are settled. The payment requests for TIC-ESTS settlements are treated by TIC-RTGS as ordinary payment requests of the buyer. The securities are delivered in TIC-ESTS only if the associated funds are transferred into TIC-RTGS.

## 4.3.3.3 A recent project

The TIC-ESTS system keeps records of the securities in the name of its participants rather than in the name of customers. The system, however, allows banks to keep their customers' securities separate from their own securities.

A project has been initiated for the safekeeping of DDNs in the name of customers in the CRA, as is done with other capital market instruments. When the project is completed, banks and other intermediaries will transfer the DDNs they keep in custody for their customers to the CRA, where they will be registered in the name of the customer. Other DDNs owned by banks will reside in TIC-ESTS, but the CRA will be informed about the total holdings in each security.

In order to achieve this goal, the CRA will become a participant in TIC-RTGS and ESTS. Participants in TIC-RTGS and ESTS will transfer DDNs to and from the CRA system as they are sold to or bought from their customers using the TIC-ESTS infrastructure. The CRA will keep the records in the name of the customer based on information from the banks and other intermediaries. After the integration, TIC-ESTS will continue to be the major settlement system for primary and secondary market operations as before.

# 5. The role of the central bank in interbank settlement systems

#### 5.1 TIC-RTGS and ESTS

TIC-RTGS and ESTS, which consists of the domestic RTGS payment system and the integrated securities settlement system, was developed and is operated and overseen by the CBRT.

The CBRT is responsible for:

 operating the system and providing technical and help desk support to the participants;

- setting up the legal and operational framework of the system;
- overseeing and controlling the system as a whole;
- investigating changes in participants' requirements and the need for improvements to the system, and planning development in coordination with the participants and the BAT;
- assessing new trends and needs in the banking sector and their implications for the development of the system.

## 5.2 Provision of settlement (and credit) facilities

## 5.2.1 Use of central bank accounts for payments

Banks, financial institutions, some brokerage houses and exchange offices hold cash accounts at CBRT branches. The funds in some of these accounts are used for reserve requirements and for operations in financial markets. Cheques can be drawn on these accounts.

## 5.2.2 Use of central bank accounts for securities transactions

Most banks hold securities accounts in the TIC-ESTS system at the CBRT head office, except for a few banks that do not participate in TIC-ESTS and thus hold securities accounts at CBRT branches. Only securities listed in the Official Gazette (ie treasury bills and government bonds) may be held in these accounts in book entry form. Securities in some of these accounts are used as collateral for operations in the CBRT interbank money market, foreign exchange and banknote markets, the securities lending and borrowing market, and in open market operations. The CBRT sets operating limits for banks for each market. Transfer of securities from collateral accounts is subject to CBRT authorisation to prevent banks exceeding the defined limit.

## 5.3 Monetary policy and payment systems

The CBRT determines monetary policy and uses monetary instruments to achieve and maintain price stability. It also aims at adjusting liquidity in such a way as to avoid disturbing market stability. The CBRT makes use of open market operations, the interbank money market and the foreign exchange market to maintain financial stability.

#### 5.3.1 TRY interbank money market in the CBRT

The interbank money market was established in 1986. Lending and borrowing operations in this market are effected through the CBRT, which performs the role of blind broker. The CBRT can also borrow and lend in this market in order to regulate liquidity in the system. On 2 December 2002, the CBRT abandoned its intermediary function in the interbank money market. Since then, the CBRT has continued to perform interbank money market operations on its own behalf based on the interest rates announced by the central bank.

# 5.3.2 Foreign exchange and banknote market in the CBRT

The interbank foreign exchange market in Turkey is an over-the-counter market. The banks make foreign exchange transactions among themselves and through brokers. Payments related to these transactions are cleared via TIC-RTGS for Turkish liras and via SWIFT for foreign exchange. There is also a derivatives exchange established in the city of Izmir, where banks may buy and sell foreign exchange futures contracts.

Since 2002, the CBRT has ceased to act as a blind broker in the foreign exchange market. The CBRT conducts daily foreign exchange buying auctions to accumulate reserves only as long as market conditions prevail, and it occasionally intervenes in the market in the event of excess volatility.

Statistical tables

Table 1
Basic statistical data

	2001	2002	2003	2004	2005
Population (thousands)	68,407	69,388	70,363	71,332	72,065
GDP (TRY billions)	178.4	277.6	359.8	430.5	486.8
GDP per capita (TRY)	2,608	4,000	5,113	6,035	6,756
Consumer price inflation (per cent, end of year)	68.5	29.7	18.4	9.3	7.7
Exchange rate (national currency TRY/USD):					
end of year	1.4465	1.6424	1.4026	1.3486	1.3495
average	1.2300	1.5244	1.5124	1.4292	1.3473

Table 2 Settlement media used by non-banks

(TRY billions, end of year)

	2001	2002	2003	2004	2005
Notes and coin in circulation outside banks	4.46	6.90	9.78	12.44	17.23
Value of transferable deposits <sup>1</sup>	6.91	9.78	13.24	16.35	19.62
Narrow money supply (M1)	11.37	15.83	23.01	28.79	36.85
Memo:					
Transferable deposits in foreign currencies <sup>2</sup>	57.15	72.26	68.93	76.07	74.98
Outstanding value on e-money storages <sup>3</sup>	nap	nap	nap	nap	nap
on card-based products	nap	nap	nap	nap	nap
on software and network-based products	nap	nap	nap	nap	nap

<sup>&</sup>lt;sup>1</sup> Demand deposits. <sup>2</sup> FX deposits. <sup>3</sup> There is no fully operational electronic money scheme currently in place.

Table 3
Settlement media used by banks

(TRY billions)

	2001	2002	2003	2004	2005
Transferable balances held at the central bank	4.85	4.32	4.94	6.33	12.61
of which (end of year) 1:					
required reserves <sup>2</sup>	2.77	3.37	4.21	5.19	11.48
free reserves	2.08	0.95	0.73	1.14	1.13
Transferable balances held at other banks	27.83	27.46	38.68	53.50	73.46
Memo:					
Institutions' borrowing from the central bank	286.35	421.54	698.84	798.67	890.16
of which (interbank market-year total):					
intraday	78.27	212.03	199.40	39.55	27.72
overnight	208.08	209.51	499.44	759.12	862.44
longer refinancing operations	0.00	0.00	0.00	0.00	0.00

<sup>&</sup>lt;sup>1</sup> The figures are the average of the last reserve maintenance period. <sup>2</sup> The figures before 2002 are free deposits to be held for liquidity requirements.

Table 4
Banknotes and coin
(TRY billions, end of year)

	2001	2002	2003	2004	2005
Total banknotes and coin in circulation	5.33	7.72	10.79	13.60	20.17
Total banknotes in circulation	5.28	7.64	10.68	13.47	19.61
of which:					
100 TRY	nap	nap	nap	nap	4.91
50 TRY	nap	nap .	nap .	nap .	8.21
20,000,000 TRL (20 TRY)	0.89	5.28	8.55	11.36	4.68
10,000,000 TRL (10 TRY)	3.25	1.56	1.30	1.30	1.22
5,000,000 TRL (5 TRY)	0.86	0.49	0.49	0.49	0.49
1,000,000 TRL (1 TRY)	0.19	0.21	0.24	0.25	0.08
500,000 TRL ( 0.5 TRY)	0.05	0.07	0.07	0.05	0.01
250,000 TRL (0.25 TRY)	0.03	0.02	0.01	0.01	0.01
Other denominations	0.01	0.01	0.01	0.01	0.01
Total coin in circulation	0.05	0.08	0.12	0.13	0.56
of which:					
1 TRY	nap	nap	nap	nap	0.31
0.5 TRY	nap	nap	nap	nap	0.10
250,000 TRL (0.250 TRY)	0.00	0.02	0.04	0.05	0.07
100,000 TRL (0.100 TRY)	0.03	0.04	0.05	0.06	0.06
50,000 TRL (0.050 TRY)	0.01	0.02	0.02	0.02	0.03
25,000 TRL (0.025 TRY)	0.01	0.01	0.01	nap	nap
10,000 TRL (0.010 TRY)	0.00	nap	nap	nap	0.00
5,000 TRL (0.005 TRY)	0.00	nap	nap	nap	nap
Banknotes and coin in circulation held by banks	0.87	0.82	1.02	1.16	1.90
Banknotes and coin in circulation outside banks	4.46	6.90	9.78	12.44	18.27

Table 5 Institutions offering payment services to non-banks (end of year)

	2001	2002	2003	2004	2005
Central bank	1	1	1	1	1
Number of branches or offices	21	21	21	21	21
Number of accounts (thousands)	nav	nav	nav	nav	nav
Value of accounts (TRY billions)	32.68	42.20	41.87	36.05	35.82
Banks					
Number of institutions	66	59	55	53	51
Number of branches or offices	6,983	6,225	6,250	6,455	6,569
Number of accounts (thousands) <sup>1,2</sup>	55,853	59,469	70,424	73,765	74,558
of which: number of internet/PC-linked accounts	nav	nav	nav	nav	nav
Value of accounts (TRY billions) <sup>2</sup>	18.06	26.84	32.56	40.13	50.90
of which: Public banks					
Number of institutions	3	3	3	3	3
Number of branches or offices	2,718	2,088	2,057	2,236	2,110
Value of accounts (TRY billions) <sup>2</sup>	5.91	7.97	11.41	14.20	17.50
Private banks	3.91	1.51	11.41	14.20	17.50
Number of institutions	22	20	18	18	17
Number of branches or offices	3,516	3,597	3,604	3,734	3,737
Value of accounts (TRY billions) <sup>2</sup>	11.21	16.55	19.61	24.33	29.43
Investment banks					
Number of institutions	15	14	14	13	13
Number of branches or offices	14	18	17	33	36
Value of accounts (TRY billions) <sup>2</sup>	nav	nav	nav	nav	nav
SDIF-controlled banks					
Number of institutions	6	2	2	1	1
Number of branches or offices	408	203	175	1	1
Value of accounts (TRY billions) <sup>2</sup>	0.67	1.42	0.45	0.07	0.05
Participation banks					
Number of institutions	5	5	5	5	4
Number of branches or offices	115	118	189	255	292
Value of accounts (TRY billions) <sup>2</sup>	nav	nav	nav	nav	1.84
Foreign banks					
Number of institutions	15	15	13	13	13
Number of branches or offices	212	201	208	196	393
Value of accounts (TRY billions) <sup>2</sup>	0.27	0.89	1.09	1.53	2.07
Other institutions offering payment services to PTT	non-banks				
Number of institutions	1	1	1	1	1
Number of branches or offices <sup>3</sup>	3,245	3,135	3,022	2,957	2,936
Number of accounts (thousands) <sup>4</sup>	206	234	283	394	522
Value of accounts (TRY billions)	0.00	0.00	0.00	0.00	0.00
value of describe (TTT 2e.io)	0.00	0.00	0.00	0.00	0.00
Institutions offering payment services to non-ba	anks (total)				
Number of institutions	68	61	57	55	53
Number of branches or offices	10,249	9,381	9,293	9,433	9,526
Number of accounts held by non-banks	50.050	50.700	70 707	74.450	75.000
(thousands) of which: number of internet/PC-linked	56,059	59,703	70,707	74,159	75,080
Value of accounts held by non-banks (TRY					
billions)	50.747	69.040	74.437	76.173	86.715
billions)	30.747	09.040	74.437	70.173	00.713
Memo:					
Electronic money institutions					
Number of institutions	nav	nav	nav	nav	nav
Outstanding value on e-money storages issued					
by e-money institutions (TRY billions)	nav	nav	nav	nav	nav
	deposit accounts equing accounts			s. Incl	udes central

Table 6
Payment card functions and accepting devices (thousands, end of year)

	2001	2002	2003	2004	2005
Cards issued in the country <sup>1</sup>					
Cards with a cash function	34,456	38,198	43,536	48,421	54,239
Cards with a debit function	31,657	35,057	39,563	43,085	48,243
Cards with a delayed debit function	nav	nav	nav	nav	nav
Cards with a credit function	13,997	15,705	19,863	26,681	29,978
Cards with an e-money function	nav	nav	nav	nav	nav
of which: cards with an e-money function which					
have been loaded at least once	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card)	45,654	50,763	59,427	69,766	78,221
of which: cards with a combined debit, cash and					
e-money function	nav	nav	nav	nav	nav
Memo:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	12	12	13	14	15
of which:					
ATMs with a cash withdrawal function	12	12	13	14	15
ATMs with a credit transfer function	12	12	13	14	15
POS terminals	365	496	662	912	1,140
of which: EFTPOS terminals	nap	nap	nap	nap	nap
E-money card terminals	nav	nav	nav	nav	nav
of which:					
e-money card loading/unloading terminals	nav	nav	nav	nav	nav
e-money card payment terminals	nav	nav	nav	nav	nav

<sup>&</sup>lt;sup>1</sup> Source: www.bkm.com.tr - Interbanks Card Center website.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

Credit transfers of which:         nav         nav </th <th></th> <th>2001</th> <th>2002</th> <th>2003</th> <th>2004</th> <th>2005</th>		2001	2002	2003	2004	2005
of which:         paper-based         nav	Transactions per type of payment instrument					
paper-based   nav   na		nav	nav	nav	nav	nav
nav						
Direct debits						
Card payments with cards issued in the country of which: payments by cards with a debit function payments by cards with a debit function payments by cards with a delayed debit naw	• •					
of which:     payments by cards with a debit function     payments by cards with a delayed debit     payments by cards with a delayed debit     payments by cards with a delayed debit     payments by cards with a credit function       463       594       787       1,080       1,241						
nav payments by cards with a delayed debit payments by cards with a cerdit function		468.44	602.55	799.42	1,099.92	1,274.75
Payments by cards with a credit function   463   594   787   1,080   1,241	payments by cards with a debit function	5.44	8.55	12.42	19.92	33.75
E-money payment transactions in a nav of which: by cards with an e-money function through other e-money storages nav	payments by cards with a delayed debit	nav	nav	nav	nav	nav
of which:         by cards with an e-money function         nav         16.49         19.49         20.67           Total number of transactions with payment instruments         505.66         643.99         842.13         1,144.76         1,318.94           of which: cross-border transactions sent         nav	payments by cards with a credit function	463	594	787	1,080	1,241
by cards with an e-money function through other e-money storages         nav	E-money payment transactions	nav	nav	nav	nav	nav
through other e-money storages         nav         25.29         26.22         25.55         23.52         23.52         20.67           Total number of transactions with payment instruments         505.66         643.99         842.13         1,144.76         1,318.94         nav	of which:					
Cheques¹         25.69         25.29         26.22         25.35         23.52           Post office cheques and credit transfers         11.53         16.15         16.49         19.49         20.67           Total number of transactions with payment instruments of which: cross-border transactions sent         505.66         643.99         842.13         1,144.76         1,318.94           of which: cross-border transactions sent         nav	by cards with an e-money function	nav	nav	nav	nav	nav
Post office cheques and credit transfers	through other e-money storages	nav	nav	nav	nav	nav
Total number of transactions with payment instruments	Cheques <sup>1</sup>	25.69	25.29	26.22	25.35	23.52
instruments of which: cross-border transactions sent         505.66 nav         643.99 nav         842.13 nav         1,144.76 nav         1,318.94 nav           Memo: Cross-border transactions received         nav	Post office cheques and credit transfers	11.53	16.15	16.49	19.49	20.67
of which: cross-border transactions sent         nav	Total number of transactions with payment					
Memo:         Cross-border transactions received         nav         547.76         470.4         547.76         A77.76         A77.76         A77.70         A77.4         547.76         A77.76         A77.70         A77.4         547.76         A77.76         A77.70         A77.4         547.76         A77.76         A77.70         A77.70         A70.4         547.76         A77.76         A77.70         A77	instruments	505.66	643.99	842.13	1,144.76	1,318.94
Cross-border transactions received         nav         nav         nav         nav         nav           Transactions per type of terminal²         763.78         936.85         1,187.35         1,569.86         1,822.12           Cash transactions at terminals in the country         763.78         936.85         1,187.35         1,569.86         1,822.12           Cash transactions         294.63         331.79         386.97         470.4         547.76           ATM cash withdrawals         294.63         331.79         386.97         470.4         547.76           ATM cash withdrawals         294.63         331.79         386.97         470.4         547.76           ATM cash deposits         nav	of which: cross-border transactions sent	nav	nav	nav	nav	nav
Transactions per type of terminal <sup>2</sup> Total transactions at terminals in the country         763.78         936.85         1,187.35         1,569.86         1,822.12           Cash transactions         294.63         331.79         386.97         470.4         547.76           ATM cash withdrawals         294.63         331.79         386.97         470.4         547.76           ATM cash deposits         nav         n	Memo:					
Total transactions at terminals in the country Cash transactions         763.78         936.85         1,187.35         1,569.86         1,822.12           Cash transactions         294.63         331.79         386.97         470.4         547.76           ATM cash withdrawals         294.63         331.79         386.97         470.4         547.76           ATM cash deposits         nav         nav </td <td>Cross-border transactions received</td> <td>nav</td> <td>nav</td> <td>nav</td> <td>nav</td> <td>nav</td>	Cross-border transactions received	nav	nav	nav	nav	nav
Total transactions at terminals in the country         763.78         936.85         1,187.35         1,569.86         1,822.12           Cash transactions         294.63         331.79         386.97         470.4         547.76           ATM cash withdrawals         294.63         331.79         386.97         470.4         547.76           ATM cash deposits         nav         na	Transactions per type of terminal <sup>2</sup>					
ATM cash withdrawals         294.63         331.79         386.97         470.4         547.76           ATM cash deposits         nav         nav <td></td> <td>763.78</td> <td>936.85</td> <td>1,187.35</td> <td>1,569.86</td> <td>1,822.12</td>		763.78	936.85	1,187.35	1,569.86	1,822.12
ATM cash deposits         nav	Cash transactions	294.63	331.79	386.97	470.4	547.76
POS payment transactions (irrespective of card used)         469.15         605.06         800.38         1,099.46         1,274.36           E-money card loading/unloading transactions         nav         nav <td>ATM cash withdrawals</td> <td>294.63</td> <td>331.79</td> <td>386.97</td> <td>470.4</td> <td>547.76</td>	ATM cash withdrawals	294.63	331.79	386.97	470.4	547.76
of card used)         469.15         605.06         800.38         1,099.46         1,274.36           E-money card loading/unloading transactions         nav	ATM cash deposits	nav	nav	nav	nav	nav
E-money card loading/unloading transactions E-money card payment transactions nav		460.45	605.06	900.39	1 000 46	1 27/ 26
E-money card payment transactions and variable in the country by cards issued outside the country by cards issued in the country by	*				•	•
cards issued in the country         752         924         1,175         1,555         1,805           Cash transactions         288         326         381         463         539           ATM cash withdrawals         288         326         381         463         539           ATM cash deposits         nav         n						
Cash transactions         288         326         381         463         539           ATM cash withdrawals         288         326         381         463         539           ATM cash deposits         nav	a) Transactions at terminals in the country by					
ATM cash withdrawals         288         326         381         463         539           ATM cash deposits         nav         nav <td< td=""><td>cards issued in the country</td><td>752</td><td>924</td><td>1,175</td><td>1,555</td><td>1,805</td></td<>	cards issued in the country	752	924	1,175	1,555	1,805
ATM cash deposits POS payment transactions A64 598 794 1,092 1,266 E-money card loading/unloading transactions nav nav nav nav nav nav nav nav nav E-money card payment transactions nav	Cash transactions	288	326	381	463	539
POS payment transactions E-money card loading/unloading transactions nav	ATM cash withdrawals	288	326	381	463	539
E-money card loading/unloading transactions nav	ATM cash deposits	nav	nav	nav	nav	nav
E-money card loading/unloading transactions nav	POS payment transactions	464	598	794	1,092	1,266
E-money card payment transactions nav	E-money card loading/unloading transactions	nav	nav	nav		nav
cards issued outside the country         11.78         12.85         12.35         14.86         17.123           Cash transactions of which:         6.63         5.79         5.97         7.4         8.8           ATM cash withdrawals ATM cash deposits         6.63         5.79         5.97         7.4         8.8           ATM cash deposits         nav         nav <td< td=""><td>E-money card payment transactions</td><td>nav</td><td>nav</td><td>nav</td><td>nav</td><td>nav</td></td<>	E-money card payment transactions	nav	nav	nav	nav	nav
Cash transactions of which:       6.63       5.79       5.97       7.4       8.8         ATM cash withdrawals ATM cash deposits       6.63       5.79       5.97       7.4       8.8         ATM cash deposits       nav       nav <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
of which:  ATM cash withdrawals ATM cash deposits ATM cash deposit	•					
ATM cash deposits  POS payment transactions E-money card loading/unloading transactions nav		6.63	5.79	5.97	7.4	8.8
ATM cash deposits  POS payment transactions E-money card loading/unloading transactions nav	ATM cash withdrawals	6.63	5.79	5.97	7.4	8.8
POS payment transactions E-money card loading/unloading transactions nav						
E-money card loading/unloading transactions nav	·					
E-money card payment transactions nav nav nav nav nav nav nav c) Transactions at terminals outside the country by cards issued in the country 3.47 4.2 5.51 6.95 8.85 Cash transactions 0.61 0.53 0.53 0.76 1.28 of which:						
by cards issued in the country 3.47 4.2 5.51 6.95 8.85 Cash transactions 0.61 0.53 0.53 0.76 1.28 of which:						
Cash transactions 0.61 0.53 0.53 0.76 1.28 of which:	c) Transactions at terminals outside the country					
of which:	by cards issued in the country	3.47	4.2	5.51	6.95	8.85
	Cash transactions	0.61	0.53	0.53	0.76	1.28
• • • • • • • • • • • • • • • • • • •	of which:					
ATM cash withdrawals 0.61 0.53 0.53 0.76 1.28	ATM cash withdrawals	0.61	0.53	0.53	0.76	1.28
ATM cash deposits nav nav nav nav	ATM cash deposits					
POS payment transactions 2.86 3.67 4.98 6.19 7.57		2.86		4.98	6.19	7.57
E-money card loading/unloading transactions nav nav nav nav nav						
						nav

<sup>&</sup>lt;sup>1</sup> Only those cheques processed in the Interbank Clearing Houses. <sup>2</sup> Source: Interbank Cards Center (www.bkm.com.tr).

Table 8
Indicators of the use of payment instruments and terminals: value of transactions (TRY billions, total for the year)

	2001	2002	2003	2004	2005
Transactions per type of payment instrument Credit transfers	nav	nav	nav	nav	nav
of which:	nav	nav	nav	nav	1144
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits	nav	nav	nav	nav	nav
Card payments with cards issued in the country of which:	12.15	22.02	35.82	58.94	78.29
payments by cards with a debit function	0.05	0.12	0.22	0.44	0.89
payments by cards with a delayed debit	nav	nav	nav	nav	nav
payments by cards with a credit function	12.1	21.9	35.6	58.5	77.4
E-money payment transactions	nav	nav	nav	nav	nav
of which:					
by cards with an e-money function	nav	nav	nav	nav	nav
through other e-money storages	nav	nav	nav	nav	nav
Cheques <sup>1</sup>	52.63	79.65	109.45	131.85	156.17
Post office cheques and credit transfers	18.31	47.17	60.45	10.73	19.56
Total value of transactions with payment	70.04	100.00	400.00	4.40.50	475.70
instruments of which: cross-border transactions sent	70.94	126.82	169.90	142.58	175.73
of which, cross-border transactions sent	nav	nav	nav	nav	nav
Memo: Cross-border transactions received	nav	nav	nav	nav	nav
Closs-bolder transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal <sup>2</sup>					
Total transactions at terminals in the country	44.71	60.88	86.57	134.09	176.3
Cash transactions	32.33	38.52	50.84	74.71	97.58
of which:					
ATM cash withdrawals	32.33	38.52	50.84	74.71	97.58
ATM cash deposits POS payment transactions (irrespective of type	nav	nav	nav	nav	nav
of card used)	12.38	22.36	35.73	59.38	78.72
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
a) Transactions at terminals in the country by					
cards issued in the country	43.97	59.62	83.82	130.44	171.82
Cash transactions	32.0	38.0	49.6	73.0	95.4
of which:					
ATM cash withdrawals	32.0	38.0	49.6	73.0	95. <i>4</i>
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions (irrespective of type	44.07	04.00	0.4.00	· · ·	70.40
of card used)	11.97	21.62	34.22	57.44	76.42
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
b) Transactions at terminals in the country by cards issued outside the country	0.74	1.26	2.75	3.65	4.48
Cash transactions	0.74	0.52	1.24	1.71	2.18
of which:	0.00	0.02			2.10
ATM cash withdrawals	0.33	0.52	1.24	1.71	2.18
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions (irrespective of type					
of card used)	0.41	0.74	1.51	1.94	2.3
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country	0.0	0.50	4.44	4.4	4.07
by cards issued in the country	0.3	0.52	1.11	1.4	1.67
Cash transactions of which:	0.06	0.08	0.1	0.15	0.23
ATM cash withdrawals	0.06	0.08	0.1	0.15	0.23
ATM cash withdrawais  ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions (irrespective of type					
of card used)	0.24	0.44	1.01	1.25	1.44
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
<sup>1</sup> Only those cheques processed in the Interbank Clearing F	Houses. <sup>2</sup> Sou	rce: Interbank (	Cards Center (v	www.bkm.com.	tr).

<sup>&</sup>lt;sup>1</sup> Only those cheques processed in the Interbank Clearing Houses. <sup>2</sup> Source: Interbank Cards Center (www.bkm.com.tr).

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2001	2002	2003	2004	2005
Large-value payment systems					
TIC-RTGS					
Number of participants	68	59	55	51	50
Direct participants	68	59	55	51	50
Credit institutions	67	58	54	50	49
Central bank	1	1	1	1	1
Other direct participants	0	0	0	0	0
Public administration	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	0	0	0	0	0
Other	0	0	0	0	0
Indirect participants	nap	nap	nap	nap	nap
TCS					
Number of participants	nap	437	516	527	546
Direct participants	nap	437	516	527	546
Credit institutions	nap	437	516	527	546
Central bank	0	0	0	0	0
Other direct participants	0	0	0	0	0
Public administration	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	0	0	0	0	0
Other	0	0	0	0	0
Indirect participants	nap	nap	nap	nap	nap
Retail payment systems					
ICH					
Number of participants	52	50	49	44	42
Direct participants	52	50	49	44	42
Credit institutions	51	49	48	43	41
Central bank	1	1	1	1	1
Other direct participants	0	0	0	0	0
Public administration	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	0	0	0	0	0
Other	0	0	0	0	0
Indirect participants	nap	nap	nap	nap	nap
ВКМ					
Number of participants	34	33	30	29	34
Direct participants	34	33	30	29	34
Credit institutions	34	33	30	29	34
Central bank	0	0	0	0	0
Other direct participants	0	0	0	0	0
Public administration	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	0	0	0	0	0
Other	0	0	0	0	0
Indirect participants	nap	nap	nap	nap	nap

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

(millions, total for the year)	2001	2002	2003	2004	2005
Large-value payment systems	2001	2002	2000	2004	
5					
TIC-RTGS/ESTS					
Credit transfers	25.50	33.93	43.03	58.69	76.75
of which:					
paper-based credit transfers	nap	nap	nap	nap	nap
non-paper-based credit transfers	25.50	33.93	43.03	58.69	7.67
Direct debits	nap	nap	nap	nap	nap
Card payments	nap	nap	nap	nap	nap
ATM transactions	nap	nap	nap	nap	nap
E-money transactions	nap	nap	nap	nap	nap
Cheques	nap	nap	nap	nap	nap
Other payment instruments	nap	nap	nap	nap	nap
Total national transactions sent	25.50	33.93	43.03	58.69	76.75
Concentration ratio in terms of volume (%)	49.0	57.0	56.0	46.0	56.0
Takasbank Clearing System (TCS)					
Credit transfers	31.69	29.49	30.05	42.44	45.01
of which:					
paper-based credit transfers	nav	nav	nav	nav	nav
non-paper-based credit transfers	31.69	29.49	30.05	42.44	45.01
Direct debits	nav	nav	nav	nav	nav
Card payments	nap	nap	nap	nap	nap
ATM transactions	nap	nap	nap	nap	nap
E-money transactions	nap	nap	nap	nap	nap
Cheques	nap	nap	nap	nap	nap
Other payment instruments	nap	nap	nap	nap	nap
Total national transactions sent	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	nav	nav	nav	nav	nav
Retail payment systems					
Interbank Clearing Houses					
Credit transfers	nap	nap	nap	nap	nap
of which:	Παρ	Пар	Пар	Παρ	пар
paper-based credit transfers	nap	nap	nap	nap	nap
non-paper-based credit transfers	nap	nap	nap	пар	nap
Direct debits	nap	nap	nap	nap	nap
Card payments	nap	nap	nap	nap	nap
ATM transactions	nap	nap	nap	nap	nap
E-money transactions	nap	nap	nap	nap	nap
Cheques <sup>1</sup>	25.69	25.29	26.22	25.35	23.52
Other payment instruments	nap	nap	nap	nap	nap
Total national transactions sent	25.69	25.29	26.22	25.35	23.52
Concentration ratio in terms of volume (%)	48.0	51.0	49.0	5.0	47.0
2					
BKM <sup>2</sup>					
Credit transfers	nap	nap	nap	nap	nap
of which:					
paper-based credit transfers	nap	nap	nap	nap	nap
non-paper-based credit transfers	nap	nap	nap	nap	nap
Direct debits	nap	nap	nap	nap	nap
Card payments	472.01	608.73	805.36	1,105.65	1,281.93
ATM transactions	nap	nap	nap	nap	nap
E-money transactions	nap	nap	nap	nap	nap
Cheques	nap	nap	nap	nap	nap
Other payment instruments	nap	nap	nap	nap	nap
Total national transactions sent	472.01 79.9	608.73	805.36	1,105.65	1,281.93
Concentration ratio in terms of volume (%)  1 Only those chaques processed in the Interbank Clearing		77.9	79.8	81.4	82.8

<sup>&</sup>lt;sup>1</sup> Only those cheques processed in the Interbank Clearing Houses. <sup>2</sup> www.bkm.com.tr - Interbanks Card Center website.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (TRY billions, total for the year)

	2001	2002	2003	2004	2005
Large-value payment systems					
TIC-RTGS/ESTS					
Payment transactions sent (credit transfers)	2,784.09	3,379.98	4,686.85	5,970.00	7,844.21
Concentration ratio in terms of value (%)	62.0	66.0	71.0	66.0	60.0
Takasbank Clearing System (TCS)					
Payment transactions sent (credit transfers) <sup>1</sup>	98.07	119.15	171.30	229.43	324.00
Concentration ratio in terms of value (%)	nav	nav	nav	nav	nav
Retail payment systems					
Interbank Clearing Houses					
Payment transactions sent (cheques) <sup>2</sup>	52.63	79.65	109.45	131.85	156.17
Concentration ratio in terms of value (%)	30.0	35.0	34.0	33.0	36.0
<b>BKM</b> <sup>3</sup>					
Payment transactions sent (card payments)	12.62	22.80	36.74	60.63	80.16
Concentration ratio in terms of value (%)	79.9	77.9	80.0	81.0	83.0
1 Total value for stock and DNN (Demostic Debt No	ota) DDN aattlame	ant 2 Only th		processed in t	ha Intarbank

<sup>&</sup>lt;sup>1</sup> Total value for stock and DNN (Domestic Debt Note) DDN settlement. <sup>2</sup> Only those cheques processed in the Interbank Clearing Houses. <sup>3</sup> Source: www.bkm.com.tr - Interbanks Card Center website.

Table 12a
Instructions handled by trading platforms, clearing houses and securities settlement systems: volume of transactions

(thousands, total for the year)

	2001	2002	2003	2004	2005
Trading platforms					
IMKB (stock contracts) <sup>1</sup>	31,188	28,956	29,320	41,508	43,940
IMKB (DDN contracts) <sup>2</sup>	499	538	729	936	1,075
Clearing houses					
TCS (stock contracts cleared)	31,188	28,956	29,320	41,508	43,940
TCS (DDN contracts cleared)	498	536	726	934	1,073
Securities settlement systems TIC-ESTS <sup>3</sup>					
Volume of settlement instructions	234	153	150	175	172
Takasbank Clearing System (TCS)					
TCS (stock settlement transactions)	nap	nap	nap	nap	nap
TCS (DNN settlement transactions)	498	536	726	934	1,073

<sup>&</sup>lt;sup>1</sup> Number of stock trading contracts between two participants. This number does not contain the number of stocks sold or bought.

<sup>&</sup>lt;sup>2</sup> Number of DNN (Domestic Debt Note) trading contracts between two participants. <sup>3</sup> TIC-ESTS went live at end-October 2000.

Table 12b
Instructions handled by trading platforms, clearing houses and securities settlement systems: value of transactions

(TRY billions, total for the year)

(,	2001	2002	2003	2004	2005
Trading platforms					
IMKB (stock transaction value)	92.11	107.15	146.22	210.45	268.54
IMKB (DDN transaction value in TRY) <sup>1</sup>	735.99	838.23	1,252.77	1,923.50	2,340.41
Clearing houses					
TCS (stock transaction value)	91.90	107.04	146.33	210.38	270.00
TCS (DDN transaction value)	736.00	838.00	1,253.00	1,916.00	2,339.00
Securities settlement systems					
TIC-ESTS <sup>2,3</sup>					
Value of settlement instructions	3,451.78	1,913.55	2,309.73	2,572.52	2,448.03
Takasbank Clearing System (TCS)					
TCS (Stock transfer transaction value)	28.00	33.00	40.00	64.00	91.00
TCS ( DDN transfer transaction value)	367.00	366.00	433.00	655.00	1,069.00
<sup>1</sup> Trade value between two counterparties. <sup>2</sup>	Nominal value of transaction	ns. <sup>3</sup> TIC-ES	TS went live in	2000.	

Table 12c	
Number of participants in trading platforms, clearing houses and securities settlement systems	
(end of year)	

• •	2001	2002	2003	2004	2005
Trading platforms					
IMKB					
Banks	58	48	44	43	41
investment	12	11	11	11	11
commercial	46	37	33	32	30
Brokers/dealers	126	119	117	112	107
domestic	nav	nav	nav	nav	nav
foreign	nav	nav	nav	nav	nav
Others	0	0	0	0	0
Total	184	167	161	155	148
Securities settlement systems					
TIC-ESTS					
Banks	68	59	55	51	50
domestic	52	43	41	38	38
foreign	16	16	14	13	12
Brokers/dealers	0	0	0	0	0
domestic	0	0	0	0	0
foreign	0	0	0	0	0
Others	0	0	0	0	0
Total	68	59	55	51	50
TCS (members in ISE Stock Market Settlement S	• ,				
Banks	nav	26	18	17	15
domestic	nav	nav	nav	nav	nav
foreign	nav	nav	nav	nav	nav
Brokers/dealers	nav	115	112	101	100
domestic	nav	nav	nav	nav	nav
foreign	nav	nav	nav	nav	nav
Others					
Pension funds	nav	0	72	81	96
Mutual funds & investment trust companies	nav	277	292	307	313
Asset management companies	nav	19	22	21	20
ISE mutual funds	nav	nav	nav	nav	2
Total	nav	437	516	527	546

Table 12d Outstanding securities

(end of year)

	2001	2002	2003	2004	2005
Trading platforms					
IMKB					
Value of securities listed/outstanding/registered					
(TRY billions)	68.6	56.37	96.07	132.55	218.32
	0.10	000	005	007	004
Number of securities listed/outstanding/registered	310	288	285	297	304
Securities settlement systems					
TIC-ESTS					
Value of securities outstanding (TRY billions) <sup>1,2</sup>	122.83	132.16	186.82	231.10	270.67
Number of securities outstanding	243	191	196	205	288
<sup>1</sup> Nominal value of outstanding securities. <sup>2</sup> TIC-ESTS wei	nt live in 2000.				

Table 13
Participation in SWIFT by domestic institutions (end of year)

	2001	2002	2003	2004	2005
Members	39	30	32	31	29
of which: live	39	30	32	31	29
Sub-members	17	17	15	14	14
of which: live	17	17	15	14	14
Participants	14	13	10	9	8
of which: live	13	13	10	9	8
Total users	70	60	57	54	51
of which: live	69	60	57	54	51
Мето:					
Total SWIFT users	7,457	7,465	7,654	7,667	7,863
members	2,265	2,203	2,327	2,280	2,229
sub-members	3,143	3,079	3,083	3,019	3,060
participants	2,049	2,183	2,244	2,368	2,574

Table 14
SWIFT message flows to/from domestic users
(thousands, total for the year)

	2001	2002	2003	2004	2005
Total messages sent	5,435.2	5,548.5	6,050.6	7,297.6	8,861.6
of which:					
category I	1,727.7	1,975.1	2,229.4	2,627.8	2,963.4
category II	1,070.1	988.7	1,109.4	1,324.4	1,531.3
Total messages received of which:	6,804.8	7,362.6	8,363.7	9,469.2	10,359.3
category I	2,382.9	2,923.6	3,376.5	3,761.4	4,083.3
category II	442.3	454.1	507.1	606.4	804.7
Domestic traffic	481.7	524.0	688.3	945.0	1,292.9
Мето:					
Global SWIFT traffic	1,533,906.0	1,817,444.0	2,047,564.4	2,299,074.2	2,518,285.0

**Comparative tables** 

Table 1
Basic statistical data

	GDP (USD billions) <sup>1</sup>				Po	pulation (m	nillions, year	rly average)		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	145	182	238	301	361	68.4	69.4	70.4	71.3	72.1
Belgium	232	252	310	360	371	10.3	10.3	10.4	10.4	10.5
Canada	715	735	869	992	1,133	31.0	31.4	31.7	32.0	32.3
France	1,340	1,460	1,801	2,061	2,124	61.1	61.5	61.9	62.3	62.7
Germany	1,891	2,020	2,440	2,742	2,783	82.3	82.5	82.5	82.5	82.5
Hong Kong SAR	167	164	158	166	178	6.7	6.7	6.8	6.8	6.8
Italy	1,117	1,221	1,508	1,728	1,768	57.3	57.5	57.5	57.6	58.1
Japan	4,100	3,926	4,229	4,607	4,550	127.3	127.5	127.7	127.8	127.8
Netherlands	401	438	538	609	628	16.0	16.1	16.2	16.3	16.3
Singapore	86	88	92	107	117	4.1	4.2	4.2	4.2	4.3
Sweden	221	244	304	349	357	8.9	8.9	9.0	9.0	9.0
Switzerland	250	277	323	360	366	7.3	7.3	7.4	7.5	7.5
United Kingdom	1,435	1,573	1,813	2,155	2,228	59.1	59.3	59.6	59.8	60.2
United States	10,128	10,470	10,971	11,734	12,487	285.3	288.2	291.1	293.9	296.6
CPSS <sup>1</sup>	22,083	22,869	25,357	27,970	29,089	757.0	761.5	765.8	770.0	774.7

Table 1	(cont)
I able I	COLL

		GDP pe	er capita (U	ISD) <sup>1</sup>		CPI	inflation (p	per cent, yea	arly average	<del>)</del>
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	2,120	2,624	3,381	4,223	5,014	68.5	29.7	18.4	9.3	7.7
Belgium	22,533	24,422	29,890	34,527	35,406	2.4	1.6	1.5	1.9	2.5
Canada	23,050	23,433	27,427	31,029	35,078	2.5	2.3	2.8	1.8	2.2
France	21,920	23,722	29,072	33,073	33,874	1.8	1.9	2.2	2.3	1.9
Germany	22,965	24,491	29,572	33,240	33,754	1.9	1.4	1.0	1.8	1.9
Hong Kong SAR	24,744	24,340	23,427	24,394	26,000	-1.6	-3.0	-2.6	-0.4	0.9
Italy	19,483	21,241	26,229	30,019	30,404	2.3	2.6	2.8	2.3	2.2
Japan	32,200	30,798	33,122	36,058	35,616	-0.8	-0.9	-0.2	0.0	-0.3
Netherlands	24,973	27,156	33,192	37,400	38,479	5.1	3.9	2.2	1.4	1.5
Singapore	20,740	21,182	22,066	25,205	26,891	1.0	-0.4	0.5	1.7	0.5
Sweden	24,870	27,340	33,963	38,827	39,548	2.7	1.9	2.3	1.0	0.8
Switzerland	34,385	37,690	43,642	48,321	48,748	1.0	0.6	0.6	0.8	1.2
United Kingdom	24,279	26,524	30,439	36,016	36,999	1.2	1.3	1.4	1.3	2.0
United States	35,495	36,326	37,690	39,925	42,095	2.3	1.3	2.0	2.5	2.9
CPSS <sup>1</sup>	29,172	30,030	33,110	36,323	37,548	1.6	1.1	1.6	1.8	2.0

Table 1 (cont)
----------------

	Excha	nge rate to	the USD (	yearly avera	age)	Excl	nange rate	to the USD	(end of yea	ar)
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	1.2300	1.5244	1.5124	1.4292	1.3473	1.4465	1.6424	1.4026	1.3486	1.3495
Belgium	1.1175	1.0609	0.8858	0.8049	0.8051	1.1347	0.9536	0.7918	0.7342	0.8477
Canada	1.5489	1.5702	1.4004	1.3012	1.2112	1.5928	1.5776	1.2965	1.2020	1.1630
France	1.1175	1.0609	0.8858	0.8049	0.8051	1.1347	0.9536	0.7918	0.7342	0.8477
Germany	1.1175	1.0609	0.8858	0.8049	0.8051	1.1347	0.9536	0.7918	0.7342	0.8477
Hong Kong SAR	7.7990	7.7990	7.7870	7.7880	7.7773	7.7970	7.7980	7.7630	7.7740	7.7525
Italy	1.1175	1.0609	0.8858	0.8049	0.8051	1.1347	0.9536	0.7918	0.7342	0.8477
Japan	121.41	125.14	115.93	108.16	110.18	130.86	118.61	106.93	102.53	117.74
Netherlands	1.1175	1.0609	0.8858	0.8049	0.8051	1.1347	0.9536	0.7918	0.7342	0.8477
Singapore	1.7917	1.7906	1.7422	1.6903	1.6646	1.8510	1.7365	1.7008	1.6338	1.6642
Sweden	10.3432	9.7194	8.0838	7.3453	7.4780	10.5540	8.7278	7.1892	6.6226	7.9584
Switzerland	1.6866	1.5556	1.3453	1.2419	1.2458	1.6782	1.4410	1.2664	1.1453	1.3047
United Kingdom	0.6947	0.6665	0.6125	0.5460	0.5504	0.6905	0.6203	0.5580	0.5176	0.5809
United States	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
CPSS	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

Note: Please refer to the individual country tables for a detailed explanation.

CPSS: 1 Sum or average excluding those countries for which data are not available.

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates.

Table 2
Banknotes and coin in circulation (end of year)

		Total val	ue (USD bil	llions) <sup>1</sup>			Value per	inhabitant	(USD) <sup>1</sup>	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	3.7	4.7	7.7	10.1	14.9	53.9	67.7	109.4	141.4	207.4
Belgium	8.5	nap	nap	nap	nap	827.2	nap	nap	nap	nap
Canada	26.8	28.7	35.8	40.4	43.5	863.8	914.3	1,129.2	1,263.0	1,346.2
France	30.1	nap	nap	nap	nap	493.1	nap	nap	nap	nap
Germany	73.1	nap	nap	nap	nap	887.3	nap	nap	nap	nap
Hong Kong SAR	14.6	16.0	18.1	19.7	20.2	2,162.7	2,376.0	2,680.7	2,902.4	2,947.7
Italy	58.5	nap	nap	nap	nap	1,019.5	nap	nap	nap	nap
Japan	560.1	673.1	760.6	804.1	711.5	4,399.6	5,280.2	5,956.8	6,293.3	5,569.2
Netherlands	10.0	nap	nap	nap	nap	625.7	nap	nap	nap	nap
Singapore	7.1	7.8	8.3	9.2	9.6	1,709.8	1,865.9	1,972.6	2,179.8	2,205.0
Sweden	10.1	12.3	15.2	16.4	14.0	1,140.8	1,373.4	1,691.6	1,828.1	1,545.6
Switzerland	25.1	29.1	33.9	36.8	33.6	3,449.3	3,963.6	4,577.6	4,936.0	4,478.5
United Kingdom	50.2	59.1	68.9	79.5	73.0	848.7	996.8	1,157.3	1,327.9	1,212.9
United States	643.3	687.5	724.2	754.9	794.0	2,254.6	2,385.5	2,487.8	2,568.3	2,676.6
Euro area	nap	412.1	569.0	704.6	687.4	nap	1,338.0	1,836.1	2,259.3	2,191.9
CPSS excl euro										
area countries1	1,337.3	1,513.6	1,664.9	1,761.0	1,699.3	2,524.0	2,836.8	3,098.6	3,255.3	3,120.2
CPSS incl euro	•	•	•	•	•	•	•	•	•	•
area <sup>1</sup>	nap	1,925.7	2,233.9	2,465.6	2,386.6	nap	2,288.3	2,636.8	2,891.1	2,781.0

#### Table 2 (cont)

		Value as a	percentage	e of GDP		Value	as a perc	entage of n	arrow mor	ney
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	2.5	2.6	3.2	3.3	4.1	46.9	48.8	46.9	47.2	54.7
Belgium	3.7	nap	nap	nap	nap	14.0	nap	nap	nap	nap
Canada	3.9	3.9	3.8	3.8	3.7	14.8	14.7	14.2	13.6	13.3
France	2.3	nap	nap	nap	nap	8.4	nap	nap	nap	nap
Germany	3.9	nap	nap	nap	nap	13.8	nap	nap	nap	nap
Hong Kong SAR	8.7	9.8	11.4	11.9	11.3	49.4	48.0	39.7	37.2	44.9
Italy	5.3	nap	nap	nap	nap	12.6	nap	nap	nap	nap
Japan	14.7	16.3	16.6	16.5	16.7	26.0	22.9	22.4	21.8	21.0
Netherlands	2.5	nap	nap	nap	nap	7.1	nap	nap	nap	nap
Singapore	8.5	8.5	8.7	8.4	8.2	36.3	37.8	36.3	34.2	34.6
Sweden	4.7	4.5	4.4	4.2	4.2	13.0	12.5	12.1	11.5	10.2
Switzerland	10.0	9.7	9.9	9.4	9.6	19.1	17.4	14.8	15.3	15.1
United Kingdom	3.5	3.5	3.5	3.5	3.5	5.3	5.2	4.9	4.9	4.6
United States	6.4	6.6	6.6	6.4	6.4	53.2	55.2	54.4	53.9	56.8
Euro area	nap	5.4	6.0	6.7	7.3	nap	15.7	16.5	17.5	16.7
CPSS excl euro										
area countries <sup>1</sup>	7.8	8.7	8.9	8.6	7.9	28.2	26.0	24.5	23.5	23.8
CPSS incl euro										
area <sup>1</sup>	nap	7.9	8.2	8.2	7.6	nap	22.8	21.8	21.4	21.2

Note: Please refer to the individual country tables for a detailed explanation.

CPSS excl euro area countries/incl euro area: <sup>1</sup> Sum or average excluding those countries for which data are not available.

<sup>&</sup>lt;sup>1</sup> Converted at end-of-year exchange rates.

Table 3
Transferable deposits held by banks

(average for December or average of last reserve maintenance period) 1

			Tra	nsferable	balances h	eld at the c	entral banl	k		
		Total val	ue (USD bi	llions) <sup>2</sup>			Value as a	percentage	e of GDP	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	3.35	2.63	3.52	4.69	9.35	2.3	1.4	1.5	1.6	2.6
Belgium	6.74	7.67	9.59	11.35	11.16	2.9	3.0	3.1	3.2	3.0
Canada	0.32	0.41	0.11	0.08	0.05	0.0	0.1	0.0	0.0	0.0
France	20.64	24.75	29.90	34.75	33.65	1.5	1.7	1.7	1.7	1.6
Germany	34.60	40.64	47.91	51.08	46.33	1.8	2.0	2.0	1.9	1.7
Hong Kong SAR <sup>1</sup>	0.09	0.07	3.64	2.03	0.20	0.1	0.0	2.3	1.2	0.1
Italy	11.54	14.22	18.38	20.64	19.57	1.0	1.2	1.2	1.2	1.1
Japan	82.94	152.53	231.66	264.33	213.12	2.0	3.9	5.5	5.7	4.7
Netherlands	nav	14.50	17.14	18.65	18.26	nav	3.3	3.2	3.1	2.9
Singapore	3.07	4.01	3.80	4.03	4.07	3.6	4.5	4.1	3.8	3.5
Sweden <sup>1</sup>	0.00	0.01	0.08	0.09	0.03	0.0	0.0	0.0	0.0	0.0
Switzerland	2.05	2.12	4.37	4.72	3.80	0.8	0.8	1.4	1.3	1.0
United Kingdom	2.47	2.98	3.52	3.99	5.83	0.2	0.2	0.2	0.2	0.3
United States	17.79	20.90	22.62	21.48	17.50	0.2	0.2	0.2	0.2	0.1
CPSS <sup>1</sup>	182.26	284.81	392.70	437.23	373.57	0.8	1.2	1.5	1.6	1.3

#### Table 3 (cont)

			-	Transferab	le balance:	s held at oth	ner banks			
		Total va	lue (USD b	illions) <sup>2</sup>		Value as a percentage of GDP				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	19.24	16.72	27.58	39.67	54.44	13.3	9.2	11.6	13.2	15.1
Belgium	10.51	8.15	18.50	23.47	21.63	4.5	3.2	6.0	6.5	5.8
Canada	3.26	3.27	4.73	5.92	6.70	0.5	0.4	0.5	0.6	0.6
France <sup>1</sup>	210.79	235.90	266.90	319.06	269.31	15.7	16.2	14.8	15.5	12.7
Germany	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Hong Kong SAR	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Italy <sup>1</sup>	74.20	129.88	134.25	125.45	122.07	6.6	10.6	8.9	7.3	6.9
Japan <sup>1</sup>	58.19	73.84	88.19	87.49	93.13	1.4	1.9	2.1	1.9	2.0
Netherlands <sup>1</sup>	48.17	57.65	68.00	83.16	36.82	12.0	13.1	12.6	13.7	5.9
Singapore	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Sweden <sup>1</sup>	20.57	23.03	31.53	45.66	41.70	9.3	9.4	10.4	13.1	11.7
Switzerland <sup>1</sup>	27.39	27.77	52.34	62.93	58.86	10.9	10.0	16.2	17.5	16.1
United Kingdom	430.15	582.06	730.15	959.44	1,024.91	30.0	37.0	40.3	44.5	46.0
United States <sup>1</sup>	34.79	35.70	35.32	28.14	30.12	0.3	0.3	0.3	0.2	0.2
CPSS <sup>1</sup>	918.02	1,177.26	1,429.90	1,740.72	1,705.26	4.6	5.7	6.3	7.0	6.6

Note: Please refer to the individual country tables for a detailed explanation.

France: <sup>1</sup> Average of fourth quarter.

Hong Kong: 1 End of year.

Italy: 1 End of year.

Japan: <sup>1</sup> Balances at end-September, converted at end-September exchange rates.

Netherlands: 1 End of year.

Sweden: 1 End of year.

Switzerland: 1 End of year.

United States: 1 End of year.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available.

<sup>&</sup>lt;sup>1</sup> Except as noted. <sup>2</sup> Converted at end-of-year exchange rates, except as noted.

Table 4 Institutions offering payment services to non-banks (end of year)<sup>1</sup>

		Number of institutions										
		То	tal number			Number per 1 million inhabitants						
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005		
Turkey	68	61	57	55	53	1.0	0.9	0.8	0.8	0.7		
Belgium	114	113	110	106	106	11.1	10.9	10.6	10.2	10.1		
Canada	1,700	1,517	1,405	1,295	1,255	54.8	48.4	44.4	40.5	38.9		
France	1,053	992	941	899	856	17.2	16.1	15.2	14.4	13.7		
Germany	2,527	2,364	2,226	2,149	2,090	30.7	28.7	27.0	26.0	25.3		
Hong Kong SAR	251	225	216	209	200	37.3	33.5	31.9	30.7	29.2		
Italy	844	828	802	791	799	14.7	14.4	14.0	13.7	13.7		
Japan <sup>1</sup>	2,493	2,208	2,027	1,937	1,773	19.6	17.3	15.9	15.2	13.9		
Netherlands	599	566	514	492	429	37.3	35.1	31.7	30.2	26.3		
Singapore	203	183	176	170	163	49.1	43.8	42.0	40.1	37.5		
Sweden	130	128	126	128	125	14.6	14.3	14.1	14.2	13.8		
Switzerland	371	358	344	340	339	50.9	48.8	46.5	45.6	45.2		
United Kingdom	482	449	425	407	393	8.2	7.6	7.1	6.8	6.5		
United States	20,039	19,445	18,942	18,366	17,882	70.2	67.5	65.1	62.5	60.3		
CPSS <sup>1</sup>	30,806	29,376	28,254	27,289	26,410	40.7	38.6	36.9	35.4	34.1		

# Table 4 (cont)

				Numb	er of branc	ches or offi	ces			
		To	tal number	•		Number per 1 million inhabitants				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	10,249	9,381	9,293	9,433	9,526	149.8	135.2	132.1	132.2	132.2
Belgium	7,641	7,055	6,512	6,156	5,922	743.2	683.0	627.7	590.9	565.5
Canada	14,314	14,249	14,424	14,175	14,227	461.2	454.2	455.5	443.6	440.7
France	41,487	37,465	39,562	40,003	40,692	678.8	608.9	638.8	641.9	649.0
Germany	56,833	53,392	49,630	47,648	46,219	690.2	647.3	601.4	577.5	560.5
Hong Kong SAR	1,766	1,640	1,531	1,512	1,502	262.4	243.8	226.3	222.4	219.7
Italy	43,100	43,827	44,771	44,870	44,592	751.5	762.6	778.9	779.6	767.0
Japan <sup>1</sup>	62,950	61,058	59,686	58,618	57,539	494.5	479.0	467.4	458.8	450.4
Netherlands	5,613	4,939	4,551	4,139	4,407	349.9	305.9	280.5	254.3	270.0
Singapore	623	565	517	489	484	150.6	135.3	123.5	115.4	111.5
Sweden	3,272	3,105	2,927	2,675	2,666	367.8	347.9	326.7	297.4	295.2
Switzerland	6,062	5,719	5,474	5,292	5,262	832.1	778.8	739.2	710.0	701.4
United Kingdom	32,529	32,085	31,520	29,977	28,437	550.3	540.9	529.3	501.0	472.3
United States	83,092	84,915	104,983	106,445	110,434	291.2	294.6	360.7	362.2	372.3
CPSS <sup>1</sup>	359,282	350,014	366,088	361,999	362,383	474.6	459.6	478.0	470.1	467.8

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> End-March of the following year.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available.

<sup>&</sup>lt;sup>1</sup> Except as noted.

Table 5
Transferable deposits held by non-banks (end of year)<sup>1</sup>

		Number of deposit accounts									
	Tota	al number o	of accounts	(thousand	s)	Nu	mber of ac	counts per	r inhabitant	:	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	
Turkey	56,059	59,703	70,707	74,159	75,080	0.82	0.86	1.00	1.04	1.04	
Belgium	12,536	12,697	12,984	12,679	13,200	1.22	1.23	1.25	1.22	1.26	
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
France	68,156	68,360	68,820	69,749	70,816	1.12	1.11	1.11	1.12	1.13	
Germany	88,925	87,906	83,957	84,529	85,479	1.08	1.07	1.02	1.02	1.04	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Italy <sup>1</sup>	33,571	33,957	33,259	32,848	33,091	0.59	0.59	0.58	0.57	0.57	
Japan <sup>1</sup>	536,001	537,061	536,402	532,658	528,939	4.21	4.21	4.20	4.17	4.14	
Netherlands	22,600	20,800	22,800	22,900	21,622	1.41	1.29	1.41	1.41	1.32	
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Sweden	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Switzerland	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
United Kingdom	157,488	157,579	141,902	142,216	134,054	2.66	2.66	2.38	2.38	2.23	
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
CPSS <sup>1</sup>	919,278	918,360	900,125	897,579	887,201	2.20	2.19	2.14	2.13	2.10	

# Table 5 (cont)

				Val	ue of depo	sit account	s			
		Total val	ue (USD bi	llions) <sup>2</sup>			Value per	inhabitant	$(USD)^2$	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	35	42	53	56	64	513	606	754	792	892
Belgium	68	81	110	128	129	6,598	7,844	10,587	12,294	12,355
Canada	158	170	219	260	287	5,098	5,420	6,931	8,131	8,901
France	334	398	488	557	540	5,463	6,463	7,882	8,935	8,604
Germany	495	639	829	931	920	6,009	7,752	10,052	11,291	11,152
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy <sup>1</sup>	423	547	683	781	730	7,373	9,520	11,891	13,577	12,554
Japan <sup>1</sup>	2,160	2,784	3,319	3,391	3,231	16,965	21,842	25,996	26,535	25,291
Netherlands	134	169	207	232	227	8,331	10,464	12,760	14,251	13,938
Singapore	104	109	117	130	138	25,222	26,201	28,058	30,596	31,842
Sweden	112	143	180	209	194	12,646	15,985	20,115	23,217	21,516
Switzerland	63	84	131	135	126	8,588	11,445	17,627	18,133	16,817
United Kingdom	3,119	4,146	5,030	6,041	6,472	52,763	69,897	84,469	100,963	107,495
United States	874	847	877	915	902	3,063	2,940	3,014	3,113	3,041
CPSS <sup>1</sup>	8,044	10,119	12,193	13,710	13,897	10,721	13,406	16,063	17,963	18,099

Table 5 (cont)

	Value of de	eposit acco	ounts as a	percentage	of GDP
	2001	2002	2003	2004	2005
Turkey	24.2	23.1	22.3	18.8	17.8
Belgium	29.7	28.9	31.7	32.5	36.7
Canada	22.7	23.2	23.4	24.2	24.4
France	25.3	24.5	24.2	24.6	26.7
Germany	26.6	28.5	30.4	31.0	34.8
Hong Kong SAR	nav	nav	nav	nav	nav
Italy <sup>1</sup>	38.4	40.3	40.5	41.3	43.5
Japan <sup>1</sup>	57.5	67.2	70.3	72.7	75.8
Netherlands	33.9	34.6	34.4	34.8	38.1
Singapore	125.6	120.0	124.1	117.3	118.4
Sweden	51.9	52.5	52.7	53.9	57.9
Switzerland	24.9	28.1	38.0	34.6	36.1
United Kingdom	216.0	245.2	252.8	265.8	306.7
United States	8.6	8.1	8.0	7.8	7.2
CPSS <sup>1</sup>	36.7	44.6	48.4	49.3	48.1

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> March of the following year. Values are converted at March (following year) exchange rates.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available.

<sup>&</sup>lt;sup>1</sup> Except as noted. <sup>2</sup> Converted at end-of-year exchange rates, except as noted. Italy: <sup>1</sup> Only deposits held at banks.

Table 6
Payment transactions by non-banks: total number of transactions
(total for the year)

	Tota	l number c	f transacti	ons (million	ıs)	Increas	se in the nu	ımber of tra	ansactions	(%)
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	506	644	842	1,145	1,298	12.9	27.4	30.8	35.9	13.4
Belgium	1,543	1,704	1,669	1,798	1,893	10.9	10.4	-2.1	7.7	5.3
Canada	6,271	6,588	6,964	7,345	7,856	6.3	5.0	5.7	5.5	7.0
France	12,366	13,347	13,692	14,071	14,280	3.2	7.9	2.6	2.8	1.5
Germany	12,521	12,157	13,432	14,612	15,893	2.6	-2.9	10.5	8.8	8.8
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	3,018	3,129	3,233	3,423	3,517	46.2	3.7	3.3	5.9	2.7
Japan <sup>1</sup>	3,738	3,778	3,934	4,551	6,478	7.1	1.1	4.1	15.7	42.3
Netherlands	3,141	3,409	3,582	3,738	3,802	8.5	8.5	5.1	4.4	1.7
Singapore	326	947	1,801	1,876	1,921	5.6	190.2	90.1	4.2	2.4
Sweden	1,267	1,148	1,316	1,590	1,734	4.5	-9.4	14.6	20.9	9.1
Switzerland	877	939	983	1,021	1,070	-0.6	7.0	4.8	3.9	4.8
United Kingdom	11,104	11,586	12,309	13,184	13,934	5.7	4.3	6.2	7.1	5.7
United States	74,565	77,212	79,772	84,528	88,815	3.3	3.6	3.3	6.0	5.1
CPSS <sup>1</sup>	130,736	135,943	142,687	151,738	161,193	4.5	4.0	5.0	6.3	6.2

# Table 6 (cont)

		Numbe	r per inhab	itant		Number	per deposit	account h	eld by non	-banks
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	7	9	12	16	18	9	11	12	15	17
Belgium	150	165	161	173	181	123	134	129	142	143
Canada	202	210	220	230	243	nav	nav	nav	nav	nav
France	202	217	221	226	228	181	195	199	202	202
Germany	152	147	163	177	193	141	138	160	173	186
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	53	54	56	59	60	90	92	97	104	106
Japan	29	30	31	36	51	7	7	7	9	12
Netherlands	196	211	221	230	233	139	164	157	163	176
Singapore	79	227	430	443	442	nav	nav	nav	nav	nav
Sweden	142	129	147	177	192	nav	nav	nav	nav	nav
Switzerland	120	128	133	137	143	nav	nav	nav	nav	nav
United Kingdom	188	195	207	220	231	71	74	87	93	104
United States	261	268	274	288	299	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	174	180	188	199	210	52	55	60	64	70

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> For credit transfers, total transactions during the fiscal year ending March of the following year.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7
Use of payment instruments by non-banks: number of transactions per payment instrument (millions, total for the year)

		Cre	dit transfe	rs			D	irect debits	;	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	742.9	808.1	731.2	788.6	817.7	176.9	168.8	192.4	211.4	219.0
Canada	637.2	655.4	725.8	796.5	857.7	488.5	520.4	560.6	590.0	626.0
France	2,175.5	2,564.2	2,587.5	2,599.2	2,408.4	2,063.5	2,183.8	2,353.2	2,542.7	2,512.8
Germany	5,688.5	5,552.5	5,787.6	6,170.9	6,713.1	4,834.4	4,554.3	5,458.8	6,056.0	6,662.1
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	1,046.5	989.1	1,018.4	1,048.8	1,048.3	361.9	401.5	414.4	453.2	463.2
Japan <sup>1</sup>	1,262.4	1,285.3	1,302.8	1,330.5	1,354.1	nav	nav	nav	nav	nav
Netherlands	1,226.6	1,260.5	1,271.4	1,264.2	1,224.8	876.1	947.0	1,000.8	1,051.3	1,023.9
Singapore	16.8	17.7	19.9	21.8	24.0	19.0	30.3	44.7	47.5	51.0
Sweden	764.0	436.0	425.0	462.0	511.0	98.0	119.0	130.0	143.0	160.0
Switzerland	503.2	537.7	564.2	585.9	613.2	47.6	50.0	51.2	51.5	52.2
United Kingdom	1,934.9	2,013.1	2,215.8	2,606.4	2,997.7	2,152.1	2,288.6	2,429.9	2,589.9	2,722.2
United States	4,232.0	4,458.5	4,746.7	5,096.2	5,513.1	2,929.9	3,462.2	4,208.6	5,796.2	7,282.8
CPSS <sup>1</sup>	20,230.4	20,578.2	21,396.3	22,771.1	24,083.2	14,047.8	14,726.0	16,844.6	19,532.8	21,775.3

## Table 7 (cont)

			Cheques				E-money pa	ayment trar	nsactions	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	25.7	25.3	26.2	25.3	23.5	nav	nav	nav	nav	nav
Belgium	60.1	28.9	23.7	19.1	15.7	60.5	120.8	107.1	106.9	102.0
Canada	1,589.0	1,515.0	1,449.8	1,377.6	1,353.5	nav	nav	nav	nav	nav
France	4,338.6	4,349.5	4,261.5	4,133.8	3,916.3	2.8	18.4	18.1	16.0	17.0
Germany	319.8	149.7	131.8	110.9	107.5	29.4	35.9	37.4	38.3	37.8
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	583.9	538.2	505.8	487.2	465.6	nav	1.0	2.7	9.3	20.4
Japan	208.9	187.1	172.0	159.2	146.5	nav	nav	nav	nav	nav
Netherlands	5.3	0.1	nap	nap	nap	30.9	87.0	109.2	127.3	146.9
Singapore	92.0	90.7	87.6	86.8	85.7	102.2	702.1	1,535.9	1,598.2	1,621.6
Sweden	2.0	2.0	1.0	1.0	1.0	1.5	0.7	0.2	nap	nap
Switzerland	7.2	4.5	3.5	2.7	1.8	19.8	20.0	19.3	19.0	19.2
United Kingdom	2,567.0	2,393.0	2,251.0	2,089.0	1,931.0	nav	nav	nav	nav	nav
United States	40,130.0	38,370.0	36,600.0	34,830.0	33,070.0	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	49,903.8	47,628.6	45,487.6	43,297.2	41,094.5	247.0	985.9	1,829.8	1,915.0	1,964.9

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> For credit transfers, total transactions during the fiscal year ending March of the following year.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7 (cont)

	C	ard payme	nts (excep	t e-money)		of w	hich: by ca	rds with a	debit funct	ion
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	468.4	602.6	799.4	1,099.9	1,274.4	5.4	8.6	12.4	19.9	33.8
Belgium	502.2	577.3	614.5	671.3	738.5	432.8	506.8	544.1	597.3	659.5
Canada	3,556.6	3,897.0	4,228.0	4,581.0	5,019.3	2,236.6	2,404.0	2,590.0	2,819.2	3,071.3
France <sup>1</sup>	3,670.7	4,095.6	4,341.5	4,650.0	5,243.8	nav	nav	nav	nav	nav
Germany	1,649.0	1,864.3	2,016.5	2,236.4	2,372.1	1,334.1	1,535.8	1,670.3	1,869.0	1,982.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	747.8	910.4	984.7	1,105.6	1,196.3	433.4	552.0	610.7	672.0	732.8
Japan	2,266.5	2,305.3	2,459.5	3,061.2	4,977.1	6.2	8.3	9.5	10.9	11.8
Netherlands	1,001.9	1,114.1	1,201.2	1,295.6	1,406.4	954.4	1,068.6	1,157.1	1,247.1	1,333.6
Singapore	96.5	106.3	112.7	121.5	138.8	96.5	106.3	112.7	121.5	138.8
Sweden	401.0	590.0	759.3	984.0	1,062.0	326.0	509.0	670.3	808.0	878.0
Switzerland	299.4	326.3	345.0	362.1	384.0	201.1	225.6	244.6	259.5	276.6
United Kingdom	4,450.0	4,891.0	5,412.0	5,899.0	6,283.0	2,757.0	3,063.0	3,441.0	3,791.0	4,206.0
United States	27,272.7	30,921.2	34,217.1	38,805.8	42,948.7	10,524.0	13,390.4	16,197.8	19,680.0	22,203.3
CPSS <sup>1</sup>	45,914.3	51,598.9	56,691.9	63,773.5	71,770.1	19,302.1	23,369.8	27,248.0	31,875.5	35,493.8

Table 7	(cont)
I able 1	COLL

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credi	t function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	463.0	594.0	787.0	1,080.0	1,241.0
Belgium	69.4	70.5	70.4	74.0	79.1	nav	nav	nav	nav	nav
Canada <sup>1</sup>	nav	nav	nav	nav	nav	1,320.0	1,493.0	1,638.0	1,761.8	1,948.0
France <sup>1</sup>	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany <sup>1</sup>	314.8	328.6	346.2	367.3	389.8	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy <sup>1</sup>	nav	nav	nav	nav	nav	314.4	358.4	374.0	433.6	463.5
Japan <sup>1</sup>	nav	nav	nav	nav	nav	2,260.3	2,297.1	2,450.0	3,050.2	4,965.4
Netherlands <sup>1</sup>	47.5	45.6	44.1	48.5	72.8	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	52.0	51.0	64.3	65.0	54.0	23.0	30.0	24.7	111.0	130.0
Switzerland <sup>1</sup>	nav	nav	nav	nav	nav	98.3	100.7	100.4	102.6	107.4
United Kingdom	237.0	231.0	240.0	238.0	265.0	1,456.0	1,597.0	1,731.0	1,870.0	1,812.0
United States	nav	nav	nav	nav	nav	16,748.7	17,530.8	18,019.3	19,125.8	20,745.4
CPSS <sup>1</sup>	720.8	726.6	765.0	792.9	860.7	22,220.7	23,406.9	24,337.4	26,455.1	30,171.8

Note: Please refer to the individual country tables for a detailed explanation.

Canada: <sup>1</sup> For cards with a credit function, includes charge cards.

France: <sup>1</sup> A breakdown by types of function is not available.

Germany: <sup>1</sup> For cards with a delayed debit function, includes cards with a credit function.

Italy: <sup>1</sup> For cards with a credit function, includes cards with a delayed debit function.

Japan: <sup>1</sup> For cards with a credit function, includes cards with a delayed debit function.

Netherlands: <sup>1</sup> For cards with a delayed debit function, includes cards with a credit function.

Switzerland: <sup>1</sup> For cards with a credit function, includes cards with a delayed debit function.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available.

Table 7a
Use of payment instruments by non-banks: relative importance of payment instruments, in number of transactions

(% of total number of transactions)

		Cre	dit transfer	's			Di	rect debits		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	48.2	47.4	43.8	43.9	43.2	11.5	9.9	11.5	11.8	11.6
Canada	10.2	9.9	10.4	10.8	10.9	7.8	7.9	8.0	8.0	8.0
France	17.8	19.4	19.1	18.6	17.1	16.8	16.5	17.4	18.2	17.8
Germany	45.4	45.7	43.1	42.2	42.2	38.6	37.5	40.6	41.4	41.9
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	38.2	34.8	34.8	33.8	32.8	13.2	14.1	14.2	14.6	14.5
Japan	33.8	34.0	33.1	29.2	20.9	nav	nav	nav	nav	nav
Netherlands	39.1	37.0	35.5	33.8	32.2	27.9	27.8	27.9	28.1	26.9
Singapore	5.1	1.9	1.1	1.2	1.3	5.8	3.2	2.5	2.5	2.7
Sweden	60.3	38.0	32.3	29.1	29.5	7.7	10.4	9.9	9.0	9.2
Switzerland	57.4	57.3	57.4	57.4	57.3	5.4	5.3	5.2	5.0	4.9
United Kingdom	17.4	17.4	18.0	19.8	21.5	19.4	19.8	19.7	19.6	19.5
United States	5.7	5.8	6.0	6.0	6.2	3.9	4.5	5.3	6.9	8.2
CPSS <sup>1</sup>	15.5	15.2	15.0	15.1	15.0	10.8	10.9	11.8	12.9	13.6

#### Table 7a (cont)

			Cheques			ı	E-money pa	ayment trar	nsactions	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	5.2	4.0	3.2	2.3	1.8	nav	nav	nav	nav	nav
Belgium	3.9	1.7	1.4	1.1	0.8	3.9	7.1	6.4	5.9	5.4
Canada	25.3	23.0	20.8	18.8	17.2	nav	nav	nav	nav	nav
France	35.4	32.9	31.4	29.7	27.8	nap	nap	0.1	0.1	0.1
Germany	2.6	1.2	1.0	0.8	0.7	0.2	0.3	0.3	0.3	0.2
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	21.3	18.9	17.3	15.7	14.6	nav	nav	0.1	0.3	0.6
Japan	5.6	5.0	4.4	3.5	2.3	nav	nav	nav	nav	nav
Netherlands	0.2	0.0	nap	nap	nap	1.0	2.6	3.0	3.4	3.9
Singapore	28.2	9.6	4.9	4.6	4.5	31.3	74.1	85.3	85.2	84.4
Sweden	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	nav	nav
Switzerland	0.8	0.5	0.4	0.3	0.2	2.3	2.1	2.0	1.9	1.8
United Kingdom	23.1	20.7	18.3	15.8	13.9	nav	nav	nav	nav	nav
United States	53.8	49.7	45.9	41.2	37.2	neg	neg	neg	neg	neg
CPSS <sup>1</sup>	38.3	35.1	32.0	28.6	25.6	0.2	0.7	1.3	1.3	1.2

Note: Please refer to the individual country tables for a detailed explanation.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7a (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a d	debit functi	on
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	94.8	96.0	96.8	97.7	98.2	1.1	1.4	1.5	1.8	2.6
Belgium	32.6	33.9	36.8	37.4	39.0	28.1	29.7	32.6	33.2	34.8
Canada	56.7	59.2	60.7	62.4	63.9	35.7	36.5	37.2	38.4	39.1
France	30.0	31.0	32.0	33.4	37.2	nav	nav	nav	nav	nav
Germany	13.2	15.3	15.0	15.3	14.9	10.7	12.6	12.4	12.8	12.5
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	27.3	32.1	33.7	35.6	37.5	15.8	19.4	20.9	21.6	22.9
Japan	60.6	61.0	62.5	67.3	76.8	0.2	0.2	0.2	0.2	0.2
Netherlands	31.9	32.7	33.5	34.7	37.0	30.4	31.3	32.3	33.4	35.1
Singapore	29.6	11.2	6.3	6.5	7.2	29.6	11.2	6.3	6.5	7.2
Sweden	31.7	51.4	57.7	61.9	61.2	25.7	44.3	51.0	50.8	50.6
Switzerland	34.1	34.8	35.1	35.5	35.9	22.9	24.0	24.9	25.4	25.8
United Kingdom	40.1	42.2	44.0	44.7	45.1	24.8	26.4	28.0	28.8	30.2
United States	36.6	40.0	42.9	45.9	48.4	14.1	17.3	20.3	23.3	25.0
CPSS <sup>1</sup>	35.2	38.1	39.9	42.2	44.7	14.8	17.2	19.2	21.1	22.1

Table 7a (cont)

	by c	ards with a	delayed d	ebit function	on	1	by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	93.7	94.6	95.3	96.0	95.6
Belgium	4.5	4.1	4.2	4.1	4.2	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	21.0	22.7	23.5	24.0	24.8
France	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany	2.5	2.7	2.6	2.5	2.5	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	11.5	12.6	12.8	14.0	14.5
Japan	nav	nav	nav	nav	nav	60.5	60.8	62.3	67.0	76.7
Netherlands	1.5	1.3	1.2	1.3	1.9	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	4.1	4.4	4.9	4.1	3.1	1.8	2.6	1.9	7.0	7.5
Switzerland	nav	nav	nav	nav	nav	11.2	10.7	10.2	10.0	10.0
United Kingdom	2.1	2.0	1.9	1.8	1.9	13.1	13.8	14.1	14.2	13.0
United States	nav	nav	nav	nav	nav	22.5	22.7	22.6	22.6	23.4
CPSS <sup>1</sup>	0.6	0.5	0.5	0.5	0.5	17.0	17.3	17.1	17.5	18.8

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 7 for a detailed explanation.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available.

Table 7b
Use of payment instruments by non-banks: increase in the number of transactions (% change on previous year)

	Credit transfers					Direct debits				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	13.1	8.8	-9.5	7.8	3.7	6.5	-4.6	14.0	9.9	3.6
Canada	12.3	2.9	10.7	9.7	7.7	9.9	6.5	7.7	5.2	6.1
France	3.9	17.9	0.9	0.5	-7.3	4.8	5.8	7.8	8.1	-1.2
Germany	1.9	-2.4	4.2	6.6	8.8	1.4	-5.8	19.9	10.9	10.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	227.4	-5.5	3.0	3.0	0.0	10.9	11.0	3.2	9.4	2.2
Japan	3.7	1.8	1.4	2.1	1.8	nav	nav	nav	nav	nav
Netherlands	4.8	2.8	0.9	-0.6	-3.1	4.8	8.1	5.7	5.1	-2.6
Singapore	14.8	5.7	12.1	10.0	10.1	9.6	59.9	47.4	6.4	7.3
Sweden	-3.6	-42.9	-2.5	8.7	10.6	7.7	21.4	9.2	10.0	11.9
Switzerland	-7.7	6.9	4.9	3.8	4.7	3.3	5.0	2.4	0.6	1.4
United Kingdom	4.7	4.0	10.1	17.6	15.0	7.1	6.3	6.2	6.6	5.1
United States	12.1	5.4	6.5	7.4	8.2	23.8	18.2	21.6	37.7	25.6
CPSS <sup>1</sup>	8.9	1.7	4.0	6.4	5.8	7.7	4.8	14.4	16.0	11.5

#### Table 7b (cont)

	Cheques					E-money payment transactions				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-13.0	-1.6	3.7	-3.3	-7.2	nav	nav	nav	nav	nav
Belgium	-15.1	-51.9	-18.0	-19.3	-18.0	17.9	99.9	-11.4	-0.1	-4.6
Canada	-4.2	-4.7	-4.3	-5.0	-1.7	nav	nav	nav	nav	nav
France	-3.5	0.3	-2.0	-3.0	-5.3	nap	nap	-1.6	-11.6	6.4
Germany	-18.7	-53.2	-12.0	-15.9	-3.1	10.4	22.1	4.2	2.5	-1.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	3.3	-7.8	-6.0	-3.7	-4.4	nav	nav	nav	nav	nav
Japan	-7.5	-10.4	-8.1	-7.4	-8.0	nav	nav	nav	nav	nav
Netherlands	-62.3	-98.6	nap	nap	nap	22.0	181.6	25.5	16.6	15.4
Singapore	0.4	-1.4	-3.5	-0.9	-1.2	2.1	587.0	118.8	4.1	1.5
Sweden	0.0	0.0	-50.0	0.0	0.0	-48.3	-53.3	-71.4	nav	nav
Switzerland	-35.7	-37.5	-22.2	-22.9	-33.3	10.0	1.0	-3.5	-1.6	1.1
United Kingdom	-5.0	-6.8	-5.9	-7.2	-7.6	nav	nav	nav	nav	nav
United States	-4.2	-4.4	-4.6	-4.8	-5.1	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	-4.3	-4.6	-4.5	-4.8	-5.1	10.2	299.1	85.6	4.7	2.6

Note: Please refer to the individual country tables for a detailed explanation.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions; however, the total number is relatively small.

# Table 7b (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a d	debit functi	on
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	14.6	28.6	32.7	37.6	15.9	51.5	57.2	45.3	60.4	69.4
Belgium	12.7	14.9	6.4	9.3	10.0	13.9	17.1	7.4	9.8	10.4
Canada	10.1	9.6	8.5	8.3	9.6	14.1	7.5	7.7	8.8	8.9
France	11.5	11.6	6.0	7.1	12.8	nav	nav	nav	nav	nav
Germany	14.7	13.1	8.2	10.9	6.1	17.7	15.1	8.8	11.9	6.1
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	26.7	21.7	8.2	12.3	8.2	36.3	27.4	10.6	10.0	9.1
Japan	10.6	1.7	6.7	24.5	62.6	91.1	34.0	15.0	15.4	7.4
Netherlands	18.1	11.2	7.8	7.9	8.5	19.1	12.0	8.3	7.8	6.9
Singapore	12.9	10.2	6.0	7.8	14.2	12.9	10.2	6.0	7.8	14.2
Sweden	24.1	47.1	28.7	29.6	7.9	27.4	56.1	31.7	20.5	8.7
Switzerland	14.2	9.0	5.7	5.0	6.0	17.4	12.2	8.4	6.1	6.6
United Kingdom	12.7	9.9	10.7	9.0	6.5	15.6	11.1	12.3	10.2	10.9
United States	12.9	13.4	10.7	13.4	10.7	26.6	27.2	21.0	21.5	12.8
CPSS <sup>1</sup>	12.9	12.4	9.9	12.5	12.5	22.1	21.1	16.6	17.0	11.4

# Table 7b (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	14.3	28.3	32.5	37.2	14.9
Belgium	5.7	1.5	-0.1	5.2	6.8	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	3.9	13.1	9.7	7.6	10.6
France	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany	3.6	4.4	5.4	6.1	6.1	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	15.5	14.0	4.4	15.9	6.9
Japan	nav	nav	nav	nav	nav	10.5	1.6	6.7	24.5	62.8
Netherlands	1.5	-4.1	-3.2	10.0	50.1	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	11.3	-1.9	26.0	1.1	-16.9	11.1	30.4	-17.6	349.0	17.1
Switzerland	nav	nav	nav	nav	nav	8.1	2.4	-0.3	2.2	4.7
United Kingdom	17.9	-2.5	3.9	-0.8	11.3	6.7	9.7	8.4	8.0	-3.1
United States	nav	nav	nav	nav	nav	5.6	4.7	2.8	6.1	8.5
CPSS <sup>1</sup>	8.5	0.8	5.3	3.6	8.6	6.2	5.3	4.0	8.7	14.0

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 7 for a detailed explanation.

Table 7c
Use of payment instruments by non-banks: number of transactions per inhabitant (total for the year)

		Cre	dit transfer	s			Di	rect debits		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	72.3	78.2	70.5	75.7	78.1	17.2	16.3	18.5	20.3	20.9
Canada	20.5	20.9	22.9	24.9	26.6	15.7	16.6	17.7	18.5	19.4
France	35.6	41.7	41.8	41.7	38.4	33.8	35.5	38.0	40.8	40.1
Germany	69.1	67.3	70.1	74.8	81.4	58.7	55.2	66.2	73.4	80.8
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	18.2	17.2	17.7	18.2	18.0	6.3	7.0	7.2	7.9	8.0
Japan <sup>1</sup>	9.9	10.1	10.2	10.4	10.6	nav	nav	nav	nav	nav
Netherlands	76.5	78.1	78.4	77.7	75.0	54.6	58.7	61.7	64.6	62.7
Singapore	4.1	4.2	4.7	5.2	5.5	4.6	7.3	10.7	11.2	11.7
Sweden	85.9	48.9	47.4	51.4	56.6	11.0	13.3	14.5	15.9	17.7
Switzerland	69.1	73.2	76.2	78.6	81.7	6.5	6.8	6.9	6.9	7.0
United Kingdom	32.7	33.9	37.2	43.6	49.8	36.4	38.6	40.8	43.3	45.2
United States	14.8	15.5	16.3	17.3	18.6	10.3	12.0	14.5	19.7	24.6
CPSS <sup>1</sup>	26.7	27.0	27.9	29.6	31.1	18.6	19.3	22.0	25.4	28.1

# Table 7c (cont)

		(	Cheques				E-money pa	yment trai	nsactions	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	0.4	0.4	0.4	0.4	0.3	nav	nav	nav	nav	nav
Belgium	5.8	2.8	2.3	1.8	1.5	5.9	11.7	10.3	10.3	9.7
Canada	51.2	48.3	45.8	43.1	41.9	nav	nav	nav	nav	nav
France	71.0	70.7	68.8	66.3	62.5	0.0	0.3	0.3	0.3	0.3
Germany	3.9	1.8	1.6	1.3	1.3	0.4	0.4	0.5	0.5	0.5
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	10.2	9.4	8.8	8.5	8.0	nav	nav	0.0	0.2	0.4
Japan	1.6	1.5	1.3	1.2	1.1	nav	nav	nav	nav	nav
Netherlands	0.3	0.0	nap	nap	nap	1.9	5.4	6.7	7.8	9.0
Singapore	22.2	21.7	20.9	20.5	19.7	24.7	168.1	366.9	377.1	373.5
Sweden	0.2	0.2	nav	nav	nav	0.2	0.1	0.0	nav	nav
Switzerland	1.0	0.6	0.5	0.4	0.2	2.7	2.7	2.6	2.5	2.6
United Kingdom	43.4	40.3	37.8	34.9	32.1	nav	nav	nav	nav	nav
United States	140.6	133.1	125.7	118.5	111.5	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	65.9	62.5	59.4	56.2	53.0	0.3	1.3	2.4	2.5	2.5

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> For credit transfers, total transactions during the fiscal year ending March of the following year.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7c (cont)

	С	ard payme	nts (except	e-money)		of which: by cards with a debit function				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	6.8	8.7	11.4	15.4	17.7	0.1	0.1	0.2	0.3	0.5
Belgium	48.8	55.9	59.2	64.4	70.5	42.1	49.1	52.4	57.3	63.0
Canada	114.6	124.2	133.5	143.3	155.5	72.1	76.6	81.8	88.2	95.1
France	60.1	66.6	70.1	74.6	83.6	nav	nav	nav	nav	nav
Germany	20.0	22.6	24.4	27.1	28.8	16.2	18.6	20.2	22.7	24.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	13.0	15.8	17.1	19.2	20.6	7.6	9.6	10.6	11.7	12.6
Japan	17.8	18.1	19.3	24.0	39.0	0.0	0.1	0.1	0.1	0.1
Netherlands	62.5	69.0	74.0	79.6	86.2	59.5	66.2	71.3	76.6	81.7
Singapore	23.3	25.5	26.9	28.7	32.0	23.3	25.5	26.9	28.7	32.0
Sweden	45.1	66.1	84.8	109.4	117.6	36.6	57.0	74.8	89.8	97.2
Switzerland	41.1	44.4	46.6	48.6	51.2	27.6	30.7	33.0	34.8	36.9
United Kingdom	75.3	82.4	90.9	98.6	104.4	46.6	51.6	57.8	63.4	69.9
United States	95.6	107.3	117.5	132.0	144.8	36.9	46.5	55.6	67.0	74.8
CPSS <sup>1</sup>	60.7	67.8	74.0	82.8	92.6	25.5	30.7	35.6	41.4	45.8

# Table 7c (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	6.8	8.6	11.2	15.1	17.2
Belgium	6.8	6.8	6.8	7.1	7.5	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	42.5	47.6	51.7	55.1	60.3
France	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany	3.8	4.0	4.2	4.5	4.7	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	5.5	6.2	6.5	7.5	8.0
Japan	nav	nav	nav	nav	nav	17.8	18.0	19.2	23.9	38.9
Netherlands	3.0	2.8	2.7	3.0	4.5	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	5.8	5.7	7.2	7.2	6.0	2.6	3.4	2.8	12.3	14.4
Switzerland	nav	nav	nav	nav	nav	13.5	13.7	13.6	13.8	14.3
United Kingdom	4.0	3.9	4.0	4.0	4.4	24.6	26.9	29.1	31.3	30.1
United States	nav	nav	nav	nav	nav	58.7	60.8	61.9	65.1	69.9
CPSS <sup>1</sup>	1.0	1.0	1.0	1.0	1.1	29.4	30.7	31.8	34.4	38.9

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 7 for a detailed explanation.

Table 8
Payment transactions by non-banks: total value of transactions
(total for the year)

	Total	value of tra	ansactions	(USD billio	ns)¹	Increase in the real value of transactions (in %) <sup>2</sup>				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	58	83	112	100	116	-51.3	11.2	14.1	-18.7	7.9
Belgium	15,694	12,574	17,062	20,152	23,746	5.1	-25.1	11.6	5.3	15.0
Canada	6,274	6,121	6,434	7,038	8,274	-1.5	-3.3	-8.8	-0.2	7.1
France	86,304	94,300	115,173	138,100	21,463	17.6	1.8	-0.2	6.5	nap
Germany	29,388	31,188	36,673	40,525	43,705	5.1	-0.6	-2.8	-1.4	5.9
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	5,804	6,362	7,963	9,363	9,816	-1.0	1.4	1.7	4.4	2.6
Japan <sup>1</sup>	26,536	24,386	25,895	27,394	26,395	-3.2	-9.6	-1.3	0.6	1.8
Netherlands	3,137	3,400	4,501	5,742	6,753	8.7	-1.0	8.1	14.3	15.9
Singapore	6,747	5,890	5,958	6,166	7,921	18.0	-12.4	-2.1	-1.3	25.9
Sweden	877	704	876	1,043	1,147	-6.1	-26.0	1.2	7.2	11.0
Switzerland	27,800	29,718	34,251	34,875	33,868	-0.5	-2.0	-0.9	-6.7	-3.7
United Kingdom	108,879	110,972	126,732	145,297	151,386	10.4	-3.5	3.5	0.9	3.0
United States	61,336	63,004	65,674	66,624	68,919	0.5	1.4	2.2	-1.0	0.6
CPSS <sup>1</sup>	378,776	388,619	447,191	502,320	403,393	3.4	1.5	13.3	10.4	2.8

	Ave	rage value	per transa	ction (USD	) <sup>1</sup>	Average	value per	inhabitant	USD thous	ands) 1
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	114	129	133	87	89	0.8	1.2	1.6	1.4	1.6
Belgium	10,170	7,377	10,221	11,210	12,543	1,526	1,217	1,645	1,934	2,267
Canada	1,000	929	924	958	1,053	202	195	203	220	256
France	6,979	7,065	8,412	9,815	1,503	1,412	1,533	1,860	2,216	342
Germany	2,347	2,566	2,730	2,773	2,750	357	378	444	491	530
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	1,923	2,033	2,463	2,735	2,791	101	111	139	163	169
Japan <sup>1</sup>	7,099	6,455	6,582	6,020	4,075	208	191	203	214	207
Netherlands	999	997	1,256	1,536	1,776	196	211	277	353	414
Singapore	20,669	6,218	3,309	3,287	4,123	1,630	1,410	1,423	1,455	1,824
Sweden	692	613	666	656	661	99	79	98	116	127
Switzerland	31,692	31,665	34,836	34,151	31,640	3,816	4,047	4,625	4,679	4,514
United Kingdom	9,805	9,578	10,296	11,020	10,865	1,842	1,871	2,128	2,428	2,514
United States	823	816	823	788	776	215	219	226	227	232
CPSS <sup>1</sup>	2,897	2,859	3,134	3,310	2,503	505	515	589	658	525

#### Table 8 (cont)

		Value a	s a ratio to	GDP		Value as a ratio to deposits held by non-banks <sup>3</sup>				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	39.8	45.7	47.2	33.1	32.1	1.6	2.0	2.1	1.8	1.8
Belgium	67.7	49.8	55.0	56.0	64.0	231.4	155.2	155.4	157.3	183.5
Canada	8.8	8.3	7.4	7.1	7.3	39.7	36.0	29.3	27.1	28.8
France	64.4	64.6	64.0	67.0	10.1	258.5	237.1	235.9	248.0	39.8
Germany	15.5	15.4	15.0	14.8	15.7	59.4	48.8	44.2	43.5	47.5
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	5.2	5.2	5.3	5.4	5.6	13.7	11.6	11.7	12.0	13.5
Japan	6.7	6.0	6.0	5.9	6.0	12.3	8.8	7.8	8.1	8.2
Netherlands	7.8	7.8	8.4	9.4	10.8	23.5	20.1	21.7	24.8	29.7
Singapore	78.6	66.6	64.5	57.7	67.8	64.6	53.8	50.7	47.6	57.3
Sweden	4.0	2.9	2.9	3.0	3.2	7.8	4.9	4.9	5.0	5.9
Switzerland	111.0	107.4	106.0	96.8	92.6	444.3	353.6	262.4	258.0	268.5
United Kingdom	75.9	70.5	69.9	67.4	68.0	34.9	26.8	25.2	24.1	23.4
United States	6.1	6.0	6.0	5.7	5.5	70.2	74.3	74.8	72.8	76.4
CPSS <sup>1</sup>	17.3	17.1	17.7	18.1	14.0	47.1	38.4	36.7	36.6	29.0

Note: Please refer to the individual country tables for a detailed explanation.

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates, except as noted. <sup>2</sup> Total value of transactions in domestic currency deflated by yearly average CPI inflation. For the CPSS area, in US dollar terms. <sup>3</sup> For Italy, as a ratio to deposits held only at banks.

Japan: <sup>1</sup> For the most part, data refer to total transactions during the fiscal year ending March of the following year (see Japan, Table 8). As a consequence, they are converted at average fiscal year exchange rates.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom, includes interbank transactions in credit transfers. Since the value of these transactions is relatively large, cross-country comparison and the CPSS figures should be treated with caution.

Table 9
Use of payment instruments by non-banks: value of transactions per payment instrument (USD billions, total for the year)<sup>1</sup>

		Cre	dit transfe	rs			Di	rect debits		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	15,526	12,402	16,865	19,941	23,541	48	44	55	60	63
Canada	2,644	2,691	3,335	3,815	4,588	168	196	251	298	354
France	83,138	90,656	110,748	133,632	16,721	630	708	853	972	1,126
Germany	24,909	26,647	32,010	35,405	38,679	3,563	3,687	3,748	4,239	4,187
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	3,988	4,404	5,573	6,604	7,024	182	202	265	341	359
Japan <sup>1</sup>	19,331	18,392	20,055	21,503	21,431	nav	nav	nav	nav	nav
Netherlands	2,935	3,170	4,195	5,392	6,389	157	177	239	272	280
Singapore	6,480	5,640	5,702	5,881	7,621	12	15	19	22	24
Sweden	825	638	791	940	1,043	25	26	34	41	46
Switzerland	27,715	29,626	34,144	34,759	33,747	43	47	56	63	65
United Kingdom	104,975	106,862	122,214	140,127	146,309	800	926	1,081	1,374	1,448
United States	9,962	11,156	12,532	13,977	15,628	10,006	10,622	12,110	11,893	12,917
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	15,636	16,649	18,711	19,576	20,868

#### Table 9 (cont)

			Cheques			E-money payment transactions				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	43	52	72	92	116	nav	nav	nav	nav	nav
Belgium	89	94	98	101	85	0.242	0.632	0.621	0.659	0.609
Canada	3,321	3,070	2,648	2,690	3,046	nav	nav	nav	nav	nav
France	1,979	2,239	2,748	2,590	2,702	0.009	0.066	0.079	0.066	0.053
Germany	807	729	755	696	641	0.000	0.000	0.000	0.000	0.000
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	1,074	1,127	1,332	1,475	1,442	nav	0.057	0.207	0.718	2.012
Japan	7,226	5,636	5,460	5,579	4,802	nav	nav	nav	nav	nav
Netherlands	0	0	nap	nap	nap	0.076	0.223	0.336	0.435	0.494
Singapore	244	223	225	248	269	0.117	0.369	0.712	0.787	0.852
Sweden	2	2	6	8	4	nav	nav	nav	nav	nav
Switzerland	11	8	7	6	3	0.042	0.045	0.052	0.056	0.056
United Kingdom	2,812	2,844	3,010	3,260	3,056	nav	nav	nav	nav	nav
United States	39,689	39,406	38,979	38,417	37,729	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	57,254	55,379	55,267	55,070	53,780	0.485	1.391	2.007	2.720	4.077

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> For credit transfers, total transactions during the fiscal year ending March of the following year, converted at average fiscal year exchange rates.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPSS figures related to credit transfers have not been calculated.

<sup>&</sup>lt;sup>1</sup>Converted at yearly average exchange rates, except as noted.

Table 9 (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a	debit functi	on
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	9.9	14.4	23.7	41.2	58.1	0.0	0.1	0.1	0.3	0.7
Belgium	25.7	30.6	39.0	45.6	51.5	19.4	23.7	30.7	37.1	41.0
Canada	139.8	164.2	200.7	235.0	286.5	61.3	66.8	82.8	95.6	113.5
France	152.1	179.1	230.3	272.8	323.2	nav	nav	nav	nav	nav
Germany	108.3	125.4	158.1	186.4	196.2	83.2	97.1	123.1	144.1	150.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	55.4	74.1	97.0	124.3	136.8	29.0	42.2	57.4	72.1	78.9
Japan	194.2	200.7	233.9	276.2	299.2	2.5	3.5	4.6	6.6	7.3
Netherlands	44.3	52.6	66.4	77.0	83.7	39.6	47.7	60.8	70.5	73.9
Singapore	10.3	11.0	11.8	13.8	16.6	4.2	4.4	4.7	5.5	7.0
Sweden	25.2	37.6	45.0	nav	nav	18.0	30.6	35.5	nav	nav
Switzerland	31.4	36.9	43.8	46.0	52.8	20.2	24.5	29.7	30.0	35.9
United Kingdom	291.6	340.4	427.6	536.0	572.6	142.5	169.1	222.8	288.2	325.1
United States	1,679.4	1,820.3	2,053.2	2,335.8	2,645.5	386.3	480.0	588.1	728.9	868.3
CPSS <sup>1</sup>	2,757.6	3,072.8	3,606.8	4,148.8	4,664.7	806.1	989.4	1,240.1	1,478.6	1,701.2

#### Table 9 (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	9.8	14.4	23.5	40.9	57.4
Belgium	6.2	6.9	8.3	8.4	10.4	nav	nav	nav	nav	nav
Canada <sup>1</sup>	nap	nap	nap	nap	nap	78.5	97.4	117.8	139.4	173.0
France <sup>1</sup>	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Germany <sup>1</sup>	26.0	28.3	35.0	42.2	46.0	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy <sup>1</sup>	nav	nav	nav	nav	nav	26.4	31.9	39.6	52.2	57.9
Japan <sup>1</sup>	nap	nap	nap	nap	nap	191.7	197.2	229.3	269.6	292.0
Netherlands <sup>1</sup>	4.7	5.0	5.6	6.5	9.8	nap	nap	nap	nap	nap
Singapore <sup>1</sup>	nav	nav	nav	nav	nav	6.2	6.6	7.1	8.3	9.7
Sweden	5.0	5.1	6.7	7.9	7.3	2.2	1.9	2.9	3.5	3.4
Switzerland <sup>1</sup>	nav	nav	nav	nav	nav	11.2	12.4	14.1	15.9	16.9
United Kingdom	34.5	35.9	39.4	46.4	48.0	114.5	135.4	165.4	201.4	199.5
United States	nav	nav	nav	nav	nav	1,293.1	1,340.4	1,465.2	1,606.9	1,777.2
CPSS <sup>1</sup>	76.4	81.1	94.9	111.5	121.5	1,723.9	1,823.2	2,041.4	2,297.3	2,529.6

Note: Please refer to the individual country tables for a detailed explanation.

Canada: <sup>1</sup> For cards with a credit function, includes charge cards.

France: <sup>1</sup> A breakdown by types of function is not available.

Germany: <sup>1</sup> For cards with a delayed debit function, includes cards with a credit function.

Italy: <sup>1</sup> For cards with a credit function, includes cards with a delayed debit function.

Japan: <sup>1</sup> For cards with a credit function, includes cards with a delayed debit function.

Netherlands: <sup>1</sup> For cards with a delayed debit function, includes cards with a credit function.

Singapore:  $^{1}$  For cards with a credit function, includes charge cards.

Switzerland: <sup>1</sup> For cards with a credit function, includes cards with a delayed debit function.

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates.

Table 9a
Use of payment instruments by non-banks: relative importance of payment instruments, in value of transactions

(% of total value of transactions)

		Cre	dit transfer	s			Di	rect debits		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	99.0	98.7	98.9	99.0	99.2	0.3	0.3	0.3	0.3	0.3
Canada	42.1	44.0	51.8	54.2	55.4	2.7	3.2	3.9	4.2	4.3
France	96.8	96.7	96.7	97.2	80.1	0.7	0.8	0.7	0.7	5.4
Germany	84.8	85.4	87.3	87.4	88.5	12.1	11.8	10.2	10.5	9.6
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	75.2	75.8	76.7	77.3	78.4	3.4	3.5	3.6	4.0	4.0
Japan	72.3	75.9	77.9	78.6	80.8	nav	nav	nav	nav	nav
Netherlands	93.6	93.2	93.2	93.9	94.6	5.0	5.2	5.3	4.7	4.1
Singapore	96.1	95.8	95.7	95.4	96.1	0.2	0.3	0.3	0.4	0.3
Sweden	94.1	90.7	90.3	95.0	95.4	2.9	3.7	3.9	4.2	4.2
Switzerland	99.7	99.7	99.7	99.7	99.6	0.2	0.2	0.2	0.2	0.2
United Kingdom	96.4	96.3	96.4	96.4	96.6	0.7	0.8	0.9	0.9	1.0
United States	16.2	17.7	19.1	21.0	22.7	16.3	16.9	18.4	17.9	18.7
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	20.7	22.2	24.1	24.8	26.3

#### Table 9a (cont)

		(	Cheques			E	E-money pa	yment trar	nsactions	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	81.2	78.3	75.3	69.1	66.6	nav	nav	nav	nav	nav
Belgium	0.6	0.7	0.6	0.5	0.4	0.0	0.0	0.0	0.0	0.0
Canada	52.9	50.2	41.2	38.2	36.8	nav	nav	nav	nav	nav
France	2.3	2.4	2.4	1.9	12.9	0.0	0.0	0.0	0.0	0.0
Germany	2.7	2.3	2.1	1.7	1.5	0.0	0.0	0.0	0.0	0.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	20.3	19.4	18.3	17.3	16.1	nav	0.0	0.0	0.0	0.0
Japan	27.0	23.3	21.2	20.4	18.1	nav	nav	nav	nav	nav
Netherlands	0.0	0.0	nap	nap	nap	0.0	0.0	0.0	0.0	0.0
Singapore	3.6	3.8	3.8	4.0	3.4	0.0	0.0	0.0	0.0	0.0
Sweden	0.2	0.3	0.6	nav	nav	nav	nav	nav	nav	nav
Switzerland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
United Kingdom	2.6	2.6	2.4	2.2	2.0	nav	nav	nav	nav	nav
United States	64.7	62.5	59.4	57.7	54.7	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	75.7	73.7	71.2	69.9	67.8	0.0	0.0	0.0	0.0	0.0

Note: Please refer to the individual country tables for a detailed explanation.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPSS figures related to credit transfers have not been calculated.

# Table 9a (cont)

	С	ard payme	nts (except	e-money)		of wl	nich: by car	rds with a c	debit functi	on
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	18.8	21.7	24.7	30.9	33.4	0.1	0.1	0.2	0.2	0.4
Belgium	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Canada	2.2	2.7	3.1	3.3	3.5	1.0	1.1	1.3	1.4	1.4
France	0.2	0.2	0.2	0.2	1.5	nav	nav	nav	nav	nav
Germany	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.4	0.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	1.0	1.3	1.3	1.5	1.5	0.5	0.7	0.8	0.8	0.9
Japan	0.7	0.8	0.9	1.0	1.1	0.0	0.0	0.0	0.0	0.0
Netherlands	1.4	1.5	1.5	1.3	1.2	1.3	1.4	1.4	1.2	1.1
Singapore	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Sweden	2.9	5.3	5.1	nav	nav	2.0	4.3	4.1	nav	nav
Switzerland	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
United Kingdom	0.3	0.3	0.3	0.4	0.4	0.1	0.2	0.2	0.2	0.2
United States	2.7	2.9	3.1	3.5	3.8	0.6	0.8	0.9	1.1	1.3
CPSS <sup>1</sup>	3.6	4.1	4.6	5.3	5.9	1.1	1.3	1.6	1.9	2.1

# Table 9a (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	18.7	21.5	24.5	30.7	33.0
Belgium	0.0	0.1	0.0	0.0	0.0	nav	nav	nav	nav	nav
Canada	nap	nap	nap	nap	nap	1.3	1.6	1.8	2.0	2.1
France	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Germany	0.1	0.1	0.1	0.1	0.1	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	0.5	0.5	0.5	0.6	0.6
Japan	nap	nap	nap	nap	nap	0.7	0.8	0.9	1.0	1.1
Netherlands	0.2	0.1	0.1	0.1	0.1	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	0.1	0.1	0.1	0.1	0.1
Sweden	0.6	0.7	0.8	0.8	0.7	0.3	0.3	0.3	0.4	0.3
Switzerland	nav	nav	nav	nav	nav	0.0	0.0	0.0	0.0	0.1
United Kingdom	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
United States	nav	nav	nav	nav	nav	2.1	2.1	2.2	2.4	2.6
CPSS <sup>1</sup>	0.1	0.1	0.1	0.1	0.2	2.3	2.4	2.6	2.9	3.2

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 9 for a detailed explanation.

Table 9b
Use of payment instruments by non-banks: increase in the real value of transactions
(% change on previous year, adjusted by CPI inflation)<sup>1</sup>

		Cre	dit transfer	's			Di	rect debits		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	5.1	-25.4	11.9	5.4	15.2	3.8	-16.1	3.9	-3.1	3.4
Canada	6.8	0.8	7.5	4.4	9.5	22.7	15.4	11.1	8.2	8.1
France	18.7	1.6	-0.2	7.2	nap	5.1	4.8	-1.6	1.2	13.7
Germany	4.0	0.2	-0.7	-1.3	7.2	18.2	-3.1	-16.0	1.0	-3.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	-3.4	2.2	2.8	5.3	4.1	5.7	2.3	6.7	14.3	3.1
Japan	2.3	-6.4	1.3	2.0	5.3	nav	nav	nav	nav	nav
Netherlands	9.0	-1.3	8.1	15.2	16.8	3.0	3.0	10.3	2.2	1.3
Singapore	19.3	-12.7	-2.1	-1.6	27.0	10.8	32.3	16.9	11.0	7.8
Sweden	-6.8	-28.7	0.8	6.8	12.1	-1.1	-6.0	7.1	9.1	13.0
Switzerland	-0.5	-2.0	-0.9	-6.8	-3.8	1.2	0.0	3.4	3.3	0.9
United Kingdom	10.8	-3.6	3.6	0.9	3.2	6.2	9.6	5.9	11.9	4.1
United States	9.5	10.6	10.1	8.8	8.7	4.3	4.8	11.7	-4.2	5.6
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	6.8	5.4	10.7	2.8	4.5

#### Table 9b (cont)

			Cheques				E-money pa	ayment trai	nsactions	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-18.6	16.6	16.1	10.2	10.0	nav	nav	nav	nav	nav
Belgium	11.5	-1.3	-14.3	-7.9	-17.2	31.8	144.2	-19.1	-5.4	-9.8
Canada	-8.3	-8.4	-25.2	-7.3	3.1	nav	nav	nav	nav	nav
France	-4.6	5.4	0.2	-16.3	2.4	nap	586.9	-2.2	-26.1	-20.5
Germany	-10.3	-15.5	-14.3	-17.8	-9.6	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	2.3	-2.9	-4.0	-1.7	-4.3	nav	nav	192.2	208.1	174.4
Japan	-16.0	-18.9	-10.1	-4.7	-12.1	nav	nav	nav	nav	nav
Netherlands	-62.3	-98.3	nap	nap	nap	11.1	168.2	23.5	15.8	12.0
Singapore	-8.7	-8.2	-2.4	5.2	6.0	22.3	215.5	86.9	5.5	6.1
Sweden	-29.2	27.1	114.9	29.0	-50.0	nav	nav	nav	nav	nav
Switzerland	-33.9	-29.6	-24.1	-21.6	-51.2	nap	-0.6	-0.6	-0.8	-1.2
United Kingdom	-2.2	-4.2	-4.1	-4.7	-7.3	nav	nav	nav	nav	nav
United States	-2.6	-1.9	-3.1	-3.9	-4.5	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	-7.2	-4.3	-1.7	-2.1	-4.2	22.1	183.8	42.1	33.1	47.0

Note: Please refer to the individual country tables for a detailed explanation.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPSS figures related to credit transfers have not been calculated.

<sup>&</sup>lt;sup>1</sup> Value of transactions in domestic currency deflated by yearly average CPI inflation. For the CPSS area, in US dollar terms.

#### Table 9b (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	ds with a d	lebit functi	on
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-5.5	39.7	37.4	50.5	23.3	-1.1	85.0	54.9	83.0	87.8
Belgium	8.5	11.2	4.9	4.3	10.2	10.0	13.8	6.6	7.9	7.8
Canada	0.2	16.4	6.0	6.9	11.1	8.7	8.0	7.6	5.3	8.1
France	9.1	9.7	5.1	5.2	16.3	nav	nav	nav	nav	nav
Germany	7.9	8.4	4.2	5.2	3.4	10.0	9.2	4.8	4.5	2.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	24.9	23.6	6.4	13.8	7.7	37.1	34.6	10.5	11.5	7.1
Japan	8.3	7.5	8.2	10.2	10.7	109.2	43.9	22.3	33.5	13.3
Netherlands	11.0	8.6	3.0	3.9	7.1	12.8	10.1	4.2	3.9	3.4
Singapore	5.6	7.0	4.2	11.1	18.3	8.5	5.1	4.7	10.8	25.0
Sweden	20.5	37.7	-2.8	nav	nav	26.5	57.1	-5.7	nav	nav
Switzerland	nav	7.9	2.0	-3.8	13.9	nav	11.4	4.1	-7.3	18.4
United Kingdom	15.7	10.6	13.9	10.3	5.6	23.6	12.4	19.4	13.8	11.5
United States	5.9	7.0	10.5	11.0	10.1	21.8	22.7	20.1	20.9	15.8
CPSS <sup>1</sup>	5.8	10.3	15.6	13.0	10.3	17.9	21.4	23.4	17.1	12.8

#### Table 9b (cont)

	by c	ards with a	a delayed d	ebit function	on		by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	-5.5	39.5	37.3	50.3	22.8
Belgium	3.9	3.1	-0.9	-9.1	20.5	nav	nav	nav	nav	nav
Canada	nap	nap	nap	nap	nap	-5.6	23.0	4.9	8.0	13.1
France	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Germany	5.4	2.0	2.3	7.7	6.8	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	13.8	11.5	0.9	17.2	8.5
Japan	nap	nap	nap	nap	nap	7.7	7.0	7.9	9.7	10.7
Netherlands	-2.5	-3.9	-8.3	4.8	47.4	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	3.7	8.2	3.9	11.2	13.8
Sweden	-1.0	-6.4	6.2	6.4	-6.9	34.4	-19.7	20.3	11.6	-1.8
Switzerland	nav	nav	nav	nav	nav	nav	1.5	-2.1	3.4	5.3
United Kingdom	16.2	-1.5	-0.5	3.7	2.3	7.2	12.0	10.7	7.1	-2.1
United States	nav	nav	nav	nav	nav	1.9	2.4	7.1	7.0	7.5
CPSS <sup>1</sup>	4.5	5.0	15.3	15.4	6.8	1.0	4.6	10.3	10.6	8.0

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 9 for a detailed explanation.

<sup>&</sup>lt;sup>1</sup> Value of transactions in domestic currency deflated by yearly average CPI inflation. For the CPSS area, in US dollar terms.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available.

Table 9c
Use of payment instruments by non-banks: average value per transaction
(USD, total for the year)<sup>1</sup>

		Cre	dit transfe	's			Di	rect debits		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	20,900	15,347	23,064	25,288	28,792	274	258	286	283	289
Canada	4,150	4,105	4,594	4,790	5,349	345	377	448	505	565
France	38,216	35,354	42,801	51,412	6,943	305	324	362	382	448
Germany	4,379	4,799	5,531	5,737	5,762	737	810	687	700	628
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	3,811	4,453	5,472	6,297	6,701	504	502	639	752	775
Japan <sup>1</sup>	15,313	14,309	15,394	16,161	15,827	nav	nav	nav	nav	nav
Netherlands	2,393	2,515	3,300	4,265	5,216	179	187	239	259	273
Singapore	386,658	318,462	287,233	269,289	316,904	616	508	416	455	467
Sweden	1,080	1,464	1,862	2,034	2,041	257	216	261	288	288
Switzerland	55,077	55,097	60,517	59,327	55,034	902	936	1,099	1,232	1,238
United Kingdom	54,254	53,084	55,155	53,763	48,807	372	404	445	531	532
United States	2,354	2,502	2,640	2,743	2,835	3,415	3,068	2,877	2,052	1,774
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	1,113	1,131	1,111	1,002	958

#### Table 9c (cont)

			Cheques				E-money pa	ayment trai	nsactions	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	1,665	2,066	2,760	3,640	4,928	nav	nav	nav	nav	nav
Belgium	1,476	3,238	4,112	5,266	5,449	4.0	5.2	5.8	6.2	6.0
Canada	2,090	2,026	1,826	1,953	2,251	nav	nav	nav	nav	nav
France	456	515	645	626	690	nap	3.6	4.4	4.1	3.1
Germany	2,524	4,867	5,731	6,275	5,963	0.0	0.0	0.0	0.0	0.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	1,840	2,094	2,634	3,027	3,097	nav	nav	75.6	76.9	98.7
Japan	34,591	30,125	31,747	35,051	32,788	nav	nav	nav	nav	nav
Netherlands	76	103	nap	nap	nap	2.5	2.6	3.1	3.4	3.4
Singapore	2,654	2,462	2,571	2,863	3,133	1.1	0.5	0.5	0.5	0.5
Sweden	773	1,066	5,638	nav	nav	nav	nav	nav	nav	nav
Switzerland	1,523	1,871	2,124	2,356	1,739	2.1	2.2	2.7	3.0	2.9
United Kingdom	1,096	1,189	1,337	1,560	1,583	nav	nav	nav	nav	nav
United States	989	1,027	1,065	1,103	1,141	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	1,147	1,163	1,215	1,272	1,309	2.0	1.4	1.1	1.4	2.1

Note: Please refer to the individual country tables for a detailed explanation.

Japan: 1 For credit transfers, total for the fiscal year ending March of the following year, converted at average fiscal year exchange rates.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPSS figures related to credit transfers have not been calculated.

<sup>&</sup>lt;sup>1</sup>Converted at yearly average exchange rates, except as noted.

# Table 9c (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a c	lebit functi	on
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	21.1	24.0	29.6	37.5	45.6	7.5	9.2	11.7	15.5	19.6
Belgium	51.1	52.9	63.4	67.9	69.7	44.9	46.7	56.4	62.2	62.2
Canada	39.3	42.1	47.5	51.3	57.1	27.4	27.8	32.0	33.9	37.0
France	41.4	43.7	53.0	58.7	61.6	nav	nav	nav	nav	nav
Germany	65.7	67.2	78.4	83.3	82.7	62.4	63.2	73.7	77.1	75.8
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	74.1	81.3	98.5	112.5	114.4	66.9	76.4	94.0	107.3	107.7
Japan	85.7	87.1	95.1	90.2	60.1	408.0	421.2	482.7	598.8	618.3
Netherlands	44.2	47.2	55.3	59.4	59.5	41.4	44.6	52.6	56.5	55.4
Singapore	106.9	103.4	105.0	113.4	119.8	43.0	40.9	41.7	45.0	50.2
Sweden	62.9	63.8	59.3	nav	nav	55.1	60.1	52.9	nav	nav
Switzerland	104.8	113.1	126.9	127.0	137.5	100.2	108.6	121.3	115.7	129.7
United Kingdom	65.5	69.6	79.0	90.9	91.1	51.7	55.2	64.8	76.0	77.3
United States	61.6	58.9	60.0	60.2	61.6	36.7	35.8	36.3	37.0	39.1
CPSS <sup>1</sup>	60.1	59.6	63.6	65.1	65.0	41.8	42.3	45.5	46.4	47.9

# Table 9c (cont)

	by c	ards with a	delayed d	ebit function	on	1	by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	21.2	24.2	29.9	37.9	46.3
Belgium	89.8	97.6	117.7	114.1	132.0	nav	nav	nav	nav	nav
Canada	nap	nap	nap	nap	nap	59.5	65.3	71.9	79.1	88.8
France	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Germany	82.4	86.1	101.1	115.0	117.9	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	84.1	88.9	105.8	120.4	124.9
Japan	nap	nap	nap	nap	nap	84.8	85.9	93.6	88. <i>4</i>	58.8
Netherlands	99.5	109.1	126.6	134.6	134.1	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	96.8	100.2	103.9	121.5	134.8	96.3	64.3	115.4	31.9	26.5
Switzerland	nav	nav	nav	nav	nav	114.0	123.2	140.7	155.4	157.7
United Kingdom	145.5	155.3	164.2	195.0	181.2	78.7	84.8	95.6	107.7	110.1
United States	nav	nav	nav	nav	nav	77.2	76.5	81.3	84.0	85.7
CPSS <sup>1</sup>	106.1	111.6	124.1	140.7	141.1	77.6	77.9	83.9	86.8	83.8

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 9 for a detailed explanation.

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates.

CPSS: 1 Sum or average excluding those countries for which data are not available.

Table 9d
Use of payment instruments by non-banks: value of transactions per inhabitant (USD, total for the year)<sup>1</sup>

		Cr	edit transfe	ers			Di	rect debits		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	1,510,187	1,200,543	1,625,689	1,914,106	2,247,825	4,713	4,213	5,299	5,734	6,041
Canada	85,208	85,763	105,302	119,374	142,092	5,428	6,253	7,935	9,321	10,950
France	1,360,236	1,473,363	1,788,217	2,144,146	266,675	10,302	11,510	13,773	15,599	17,960
Germany	302,512	323,065	387,905	429,147	469,043	43,275	44,704	45,422	51,384	50,774
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	69,539	76,627	96,954	114,750	120,830	3,182	3,509	4,608	5,921	6,176
Japan <sup>1</sup>	151,842	144,274	157,060	168,287	167,752	nav	nav	nav	nav	nav
Netherlands	182,957	196,350	258,594	331,366	391,415	9,778	10,950	14,716	16,737	17,144
Singapore	1,566,069	1,350,566	1,362,059	1,387,749	1,755,161	2,820	3,684	4,440	5,104	5,481
Sweden	92,715	71,496	88,338	104,491	115,485	2,837	2,882	3,784	4,571	5,094
Switzerland	3,804,334	4,034,564	4,610,886	4,663,188	4,498,388	5,892	6,373	7,599	8,512	8,613
United Kingdom	1,775,835	1,801,384	2,052,147	2,341,924	2,430,012	13,537	15,602	18,154	22,971	24,053
United States	34,913	38,706	43,052	47,557	52,684	35,069	36,853	41,604	40,466	43,544
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	20,655	21,862	24,433	25,422	26,937

#### Table 9d (cont)

			Cheques			E	E-money pa	ayment trai	nsactions	_
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	625	753	1,028	1,293	1,609	nav	nav	nav	nav	nav
Belgium	8,623	9,061	9,403	9,676	8,163	23.5	61.1	59.9	63.2	58.1
Canada	107,025	97,853	83,615	84,184	94,359	nav	nav	nav	nav	nav
France	32,377	36,389	44,363	41,550	43,098	0.1	1.1	1.3	1.1	0.8
Germany	9,803	8,833	9,153	8,434	7,772	0.0	0.0	0.0	0.0	0.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	18,734	19,610	23,179	25,621	24,800	nav	nav	3.6	12.5	34.6
Japan	56,757	44,211	42,761	43,665	37,589	nav	nav	nav	nav	nav
Netherlands	25	0	nap	nap	nap	4.7	13.8	20.7	26.7	30.3
Singapore	58,997	53,488	53,777	58,594	61,840	28.3	88.3	170.0	185.7	196.2
Sweden	174	239	629	nav	nav	nav	nav	nav	nav	nav
Switzerland	1,506	1,147	1,004	853	417	5.7	6.1	7.0	7.6	7.5
United Kingdom	47,575	47,948	50,534	54,479	50,763	nav	nav	nav	nav	nav
United States	139,095	136,724	133,907	130,713	127,189	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	75,636	72,721	72,166	71,517	69,421	0.6	1.8	2.6	3.5	5.3

Note: Please refer to the individual country tables for a detailed explanation.

Japan: 1 For credit transfers, total for the fiscal year ending March of the following year, converted at average fiscal year exchange rates.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPSS figures related to credit transfers have not been calculated.

<sup>&</sup>lt;sup>1</sup>Converted at yearly average exchange rates, except as noted.

# Table 9d (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a d	debit functi	on
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	144	208	337	578	806	1	1	2	4	9
Belgium	2,497	2,958	3,758	4,376	4,913	1,890	2,292	2,959	3,565	3,917
Canada	4,504	5,235	6,336	7,352	8,874	1,974	2,129	2,616	2,992	3,516
France	2,489	2,911	3,719	4,378	5,155	nav	nav	nav	nav	nav
Germany	1,315	1,520	1,915	2,259	2,380	1,011	1,177	1,491	1,747	1,822
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	967	1,288	1,688	2,160	2,354	506	734	999	1,253	1,358
Japan	1,525	1,574	1,832	2,161	2,342	20	27	36	51	57
Netherlands	2,760	3,260	4,093	4,732	5,128	2,465	2,952	3,749	4,331	4,530
Singapore	2,493	2,633	2,827	3,250	3,829	1,003	1,042	1,124	1,289	1,605
Sweden	2,834	4,217	5,025	nav	nav	2,019	3,429	3,961	nav	nav
Switzerland	4,305	5,025	5,912	6,168	7,040	2,767	3,335	4,005	4,029	4,783
United Kingdom	4,932	5,737	7,181	8,958	9,510	2,411	2,850	3,741	4,817	5,399
United States	5,886	6,316	7,054	7,947	8,918	1,354	1,665	2,020	2,480	2,927
CPSS <sup>1</sup>	3,643	4,035	4,710	5,388	6,021	1,065	1,299	1,619	1,920	2,196

# Table 9d (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	144	207	335	574	797
Belgium	607	666	799	811	996	nav	nav	nav	nav	nav
Canada	nap	nap	nap	nap	nap	2,530	3,106	3,721	4,361	5,358
France	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Germany	315	343	424	512	557	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	461	554	689	907	996
Japan	nap	nap	nap	nap	nap	1,506	1,547	1,796	2,110	2,285
Netherlands	295	308	344	401	598	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	1,489	1,591	1,703	1,961	2,224
Sweden	566	573	745	878	806	249	216	319	394	381
Switzerland	nav	nav	nav	nav	nav	1,538	1,690	1,907	2,139	2,258
United Kingdom	584	605	662	776	798	1,937	2,283	2,778	3,366	3,313
United States	nav	nav	nav	nav	nav	4,532	4,651	5,033	5,467	5,991
CPSS <sup>1</sup>	101	107	124	145	157	2,277	2,394	2,666	2,983	3,265

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 9 for a detailed explanation.

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available.

Table 9e
Use of payment instruments by non-banks: value of transactions as a ratio to GDP
(in %, total for the year)

		Cre	dit transfer	s			Di	rect debits		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	6,702	4,916	5,439	5,544	6,349	20.9	17.3	17.7	16.6	17.1
Canada	370	366	384	385	405	23.6	26.7	28.9	30.0	31.2
France	6,206	6,211	6,151	6,483	787	47.0	48.5	47.4	47.2	53.0
Germany	1,317	1,319	1,312	1,291	1,390	188.4	182.5	153.6	154.6	150.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	357	361	370	382	397	16.3	16.5	17.6	19.7	20.3
Japan	472	468	474	467	471	nav	nav	nav	nav	nav
Netherlands	733	723	779	886	1,017	39.2	40.3	44.3	44.8	44.6
Singapore	7,551	6,376	6,173	5,506	6,527	13.6	17.4	20.1	20.2	20.4
Sweden	373	262	260	269	292	11.4	10.5	11.1	11.8	12.9
Switzerland	11,064	10,705	10,565	9,651	9,228	17.1	16.9	17.4	17.6	17.7
United Kingdom	7,314	6,792	6,742	6,502	6,568	55.8	58.8	59.6	63.8	65.0
United States	98	107	114	119	125	98.8	101.5	110.4	101.4	103.4
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	70.8	72.8	73.8	70.0	71.7

#### Table 9e (cont)

			Cheques				E-money pa	ayment trai	nsactions	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	29.5	28.7	30.4	30.6	32.1	nav	nav	nav	nav	nav
Belgium	38.3	37.1	31.5	28.0	23.1	0.10	0.25	0.20	0.18	0.16
Canada	464.3	417.6	304.9	271.3	269.0	nav	nav	nav	nav	nav
France	147.7	153.4	152.6	125.6	127.2	0.00	0.00	0.00	0.00	0.00
Germany	42.7	36.1	31.0	25.4	23.0	0.00	0.00	0.00	0.00	0.00
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	96.2	92.3	88.4	85.3	81.6	nav	nav	0.01	0.04	0.11
Japan	176.3	143.5	129.1	121.1	105.5	nav	nav	nav	nav	nav
Netherlands	0.1	0.0	nap	nap	nap	0.02	0.05	0.06	0.07	0.08
Singapore	284.5	252.5	243.7	232.5	230.0	0.14	0.42	0.77	0.74	0.73
Sweden	0.7	0.9	1.9	2.3	nav	nav	nav	nav	nav	nav
Switzerland	4.4	3.0	2.3	1.8	0.9	0.02	0.02	0.02	0.02	0.02
United Kingdom	196.0	180.8	166.0	151.3	137.2	nav	nav	nav	nav	nav
United States	391.9	376.4	355.3	327.4	302.1	neg	neg	neg	neg	neg
CPSS <sup>1</sup>	259.3	242.2	218.0	196.9	184.9	0.00	0.01	0.01	0.01	0.01

Note: Please refer to the individual country tables for a detailed explanation.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. For credit transfers, Belgium, France (prior to 2005), Singapore, Switzerland and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPSS figures related to credit transfers have not been calculated.

# Table 9e (cont)

	С	ard payme	nts (except	e-money)		of wl	nich: by car	rds with a d	lebit functi	on
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	6.8	7.9	10.0	13.7	16.1	0.0	0.0	0.1	0.1	0.2
Belgium	11.1	12.1	12.6	12.7	13.9	8.4	9.4	9.9	10.3	11.1
Canada	19.5	22.3	23.1	23.7	25.3	8.6	9.1	9.5	9.6	10.0
France	11.4	12.3	12.8	13.2	15.2	nav	nav	nav	nav	nav
Germany	5.7	6.2	6.5	6.8	7.1	4.4	4.8	5.0	5.3	5.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	5.0	6.1	6.4	7.2	7.7	2.6	3.5	3.8	4.2	4.5
Japan	4.7	5.1	5.5	6.0	6.6	0.1	0.1	0.1	0.1	0.2
Netherlands	11.1	12.0	12.3	12.7	13.3	9.9	10.9	11.3	11.6	11.8
Singapore	12.0	12.4	12.8	12.9	14.2	4.8	4.9	5.1	5.1	6.0
Sweden	11.4	15.4	14.8	nav	nav	8.1	12.5	11.7	nav	nav
Switzerland	12.5	13.3	13.5	12.8	14.4	8.0	8.8	9.2	8.3	9.8
United Kingdom	20.3	21.6	23.6	24.9	25.7	9.9	10.7	12.3	13.4	14.6
United States	16.6	17.4	18.7	19.9	21.2	3.8	4.6	5.4	6.2	7.0
CPSS <sup>1</sup>	12.5	13.4	14.2	14.8	16.0	3.7	4.3	4.9	5.3	5.8

# Table 9e (cont)

	by c	ards with a	a delayed d	ebit function	on		by cards w	ith a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	6.8	7.9	9.9	13.6	15.9
Belgium	2.7	2.7	2.7	2.3	2.8	nav	nav	nav	nav	nav
Canada	nap	nap	nap	nap	nap	11.0	13.3	13.6	14.1	15.3
France	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Germany	1.4	1.4	1.4	1.5	1.7	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	2.4	2.6	2.6	3.0	3.3
Japan	nap	nap	nap	nap	nap	4.7	5.0	5.4	5.9	nav
Netherlands	1.2	1.1	1.0	1.1	1.6	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	7.2	7.5	7.7	7.8	8.3
Sweden	2.3	2.1	2.2	2.3	2.0	1.0	0.8	0.9	1.0	1.0
Switzerland	nav	nav	nav	nav	nav	4.5	4.5	4.4	4.4	4.6
United Kingdom	2.4	2.3	2.2	2.2	2.2	8.0	8.6	9.1	9.3	9.0
United States	nav	nav	nav	nav	nav	12.8	12.8	13.4	13.7	14.2
CPSS <sup>1</sup>	0.3	0.4	0.4	0.4	0.4	7.8	8.0	8.1	8.2	8.7

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 9 for a detailed explanation.

Table 10
Cards issued in the country: number of cards (thousands, end of year)<sup>1</sup>

		Cards w	ith a cash t	function		(	Cards with	an e-mone	y function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	34,456	38,198	43,536	48,421	54,239	nav	nav	nav	nav	nav
Belgium	13,987	14,902	15,619	15,727	15,931	7,998	8,271	8,804	8,979	9,617
Canada	nav	nav	nav	nav	nav	74	77	nav	nav	nav
France	43,315	45,404	47,646	49,112	81,912	319	838	1,272	1,160	22,340
Germany	125,508	119,392	116,355	114,836	113,311	67,333	62,597	62,817	63,372	64,575
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	24,863	27,729	29,928	31,947	35,059	nav	74	668	1,432	3,275
Japan <sup>1</sup>	413,730	427,040	437,570	445,170	449,810	nav	nav	nav	nav	nav
Netherlands	31,100	31,800	33,100	33,600	31,754	21,000	17,300	17,600	18,000	17,748
Singapore	3,078	5,913	5,801	6,200	7,481	5,639	9,776	11,513	10,673	11,114
Sweden	4,769	4,780	5,181	8,312	8,725	557	490	293	nap	nap
Switzerland	8,644	9,056	9,295	9,410	9,742	3,524	3,692	3,889	3,983	4,376
United Kingdom	132,623	142,092	158,123	164,684	164,440	51,701	58,794	66,825	69,888	69,858
United States	824,200	864,500	896,100	928,000	965,330	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	1,625,817	1,692,608	1,754,718	1,806,998	1,883,495	158,145	161,909	173,681	177,487	202,903

Table 10 (cont)										
		Cards witl	n a paymer	t function		of	which: card	s with a de	ebit functio	n
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	45,654	50,763	59,427	69,766	78,221	31,657	35,057	39,563	43,085	48,243
Belgium	13,987	14,902	15,619	15,727	15,931	10,942	11,863	12,522	12,551	12,672
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	39,733	41,852	44,383	45,985	78,832	nav	nav	nav	nav	38,911
Germany	111,203	113,352	110,218	108,934	112,718	93,234	93,658	90,015	88,502	91,577
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	44,859	49,412	54,905	57,535	60,676	24,863	27,655	29,260	30,515	31,784
Japan <sup>1</sup>	584,590	614,000	653,620	663,380	nav	340,000	360,000	390,000	390,000	390,000
Netherlands	31,100	31,800	33,100	33,600	31,754	26,100	26,700	27,400	27,800	26,552
Singapore	5,894	9,138	9,296	10,133	11,923	3,078	5,913	5,801	6,200	7,481
Sweden	8,162	8,250	9,240	10,301	11,432	4,818	4,894	5,574	6,331	6,825
Switzerland	8,691	9,131	9,299	9,412	9,787	5,410	5,798	5,940	6,021	6,333
United Kingdom	110,432	122,524	134,110	139,855	141,572	54,305	59,419	62,854	65,544	66,990
United States	1,476,100	1,505,900	1,525,000	1,513,000	1,543,910	242,100	249,000	249,000	266,700	269,000
CPSS <sup>1</sup>	2,434,751	2,520,261	2,598,790	2,607,862	2,018,535	804,850	844,900	878,366	900,164	948,125

	cai	rds with a d	delayed del	bit function	1		cards wi	th a credit	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	13,997	15,705	19,863	26,681	29,978
Belgium	3,045	3,039	3,097	3,176	3,259	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	47,000	52,000	53,000	56,536	60,232
France	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany	17,969	19,694	20,203	20,432	21,141	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	19,996	21,757	25,645	27,020	28,892
Japan <sup>1</sup>	nav	nav	nav	nav	nav	244,590	254,000	263,620	273,380	nav
Netherlands	5,000	5,100	5,700	5,800	5,202	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	2,816	3,225	3,495	3,933	4,442
Sweden	1,025	772	839	890	983	2,319	2,584	2,827	3,080	3,624
Switzerland	nav	nav	nav	nav	nav	3,281	3,333	3,359	3,391	3,454
United Kingdom	4,426	4,311	4,431	4,423	4,724	51,701	58,794	66,825	69,888	69,858
United States	nav	nav	nav	nav	nav	1,234,000	1,256,900	1,276,000	1,246,300	1,274,910
CPSS <sup>1</sup>	31.465	32,916	34,270	34,721	35.309	1,605,703	1.652.593	1.694.771	1.683.528	1.445.412

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 9 for a detailed explanation.

<sup>1</sup> Except as noted

Japan: <sup>1</sup> For cards with a cash function and cards with a credit function, at end-March of the following year; for cards with a debit function, October.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available.

Table 10a
Cards issued in the country: increase in the number of cards (% change on previous year)

		Cards wit	h a cash fu	ınction		C	ards with a	an e-money	function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	6.9	10.9	14.0	11.2	12.0	nav	nav	nav	nav	nav
Belgium	0.4	6.5	4.8	0.7	1.3	0.8	3.4	6.4	2.0	7.1
Canada	nav	nav	nav	nav	nav	-14.9	4.1	nav	nav	nav
France	5.8	4.8	4.9	3.1	66.8	nav	162.7	51.8	-8.8	1,826
Germany	14.7	-4.9	-2.5	-1.3	-1.3	10.9	-7.0	0.4	0.9	1.9
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	17.4	11.5	7.9	6.7	9.7	nav	nav	802.7	114.4	128.7
Japan	2.8	3.2	2.5	1.7	1.0	nav	nav	nav	nav	nav
Netherlands	0.3	2.3	4.1	1.5	-5.5	0.5	-17.6	1.7	2.3	-1.4
Singapore	3.2	92.1	-1.9	6.9	20.7	20.1	73.4	17.8	-7.3	4.1
Sweden	-2.5	0.2	8.4	60.4	5.0	-6.1	-12.0	-40.2	nav	nav
Switzerland	4.4	4.8	2.6	1.2	3.5	5.0	4.8	5.3	2.4	9.9
United Kingdom	9.9	7.1	11.3	4.1	-0.1	9.8	13.7	13.7	4.6	0.0
United States	8.5	4.9	3.7	3.6	4.0	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	2.9	4.1	3.7	3.0	4.2	8.8	2.4	7.3	2.2	14.3

#### Table 10a (cont)

		Cards with	a payment	function		of v	vhich: card	s with a de	bit functio	n
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	6.2	11.2	17.1	17.4	12.1	7.1	10.7	12.9	8.9	12.0
Belgium	0.4	6.5	4.8	0.7	1.3	-0.2	8.4	5.6	0.2	1.0
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	7.7	5.3	6.0	3.6	71.4	nav	nav	nav	nav	nav
Germany	1.6	1.9	-2.8	-1.2	3.5	-17.3	0.5	-3.9	-1.7	3.5
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	17.6	10.1	11.1	4.8	5.5	17.4	11.2	5.8	4.3	4.2
Japan	6.0	5.0	6.5	1.5	nav	6.3	5.9	8.3	0.0	0.0
Netherlands	0.3	2.3	4.1	1.5	-5.5	0.4	2.3	2.6	1.5	-4.5
Singapore	8.3	55.0	1.7	9.0	17.7	3.2	92.1	-1.9	6.9	20.7
Sweden	-2.6	1.1	12.0	11.5	11.0	5.4	1.6	13.9	13.6	7.8
Switzerland	4.0	5.1	1.8	1.2	4.0	3.5	7.2	2.4	1.4	5.2
United Kingdom	9.8	10.9	9.5	4.3	1.2	9.2	9.4	5.8	4.3	2.2
United States	0.2	2.0	1.3	-0.8	2.0	8.5	2.9	0.0	7.1	0.9
CPSS <sup>1</sup>	2.4	3.5	3.1	0.3	3.8	1.5	5.0	4.0	2.5	5.3

Tabl	<u>ء ۱۸ م</u>	(cont

	cai	rds with a d	delayed del	bit function	)		cards with	h a credit f	unction	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	4.4	12.2	26.5	34.3	12.4
Belgium	2.5	-0.2	1.9	2.6	2.6	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	11.9	10.6	1.9	6.7	6.5
France	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany	8.0	9.6	2.6	1.1	3.5	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	17.8	8.8	17.9	5.4	6.9
Japan	nav	nav	nav	nav	nav	5.6	3.8	3.8	3.7	nav
Netherlands	0.0	2.0	11.8	1.8	-10.3	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	14.4	14.5	8.4	12.5	12.9
Sweden	1.6	-24.7	8.7	6.1	10.4	-17.2	11.4	9.4	8.9	17.7
Switzerland	nav	nav	nav	nav	nav	4.8	1.6	0.8	1.0	1.9
United Kingdom	17.3	-2.6	2.8	-0.2	6.8	9.8	13.7	13.7	4.6	0.0
United States	nav	nav	nav	nav	nav	-1.3	1.9	1.5	-2.3	2.3
CPSS <sup>1</sup>	7.1	4.6	4.1	1.3	1.7	0.6	2.9	2.6	-0.7	2.5

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 9 for a detailed explanation.

Table 10b

Cards issued in the country: number of cards per inhabitant (end of year)<sup>1</sup>

		Cards wit	h a cash fu	ınction		C	ards with	an e-money	/ function	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	0.50	0.55	0.62	0.68	0.75	nav	nav	nav	nav	nav
Belgium	1.36	1.44	1.51	1.51	1.52	0.78	0.80	0.85	0.86	0.92
Canada	nav	nav	nav	nav	nav	0.00	0.00	nav	nav	nav
France	0.71	0.74	0.77	0.79	1.31	0.01	0.01	0.02	0.02	0.36
Germany	1.52	1.45	1.41	1.39	1.37	0.82	0.76	0.76	0.77	0.78
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	0.43	0.48	0.52	0.56	0.60	nav	nav	0.01	0.02	0.06
Japan <sup>1</sup>	3.25	3.35	3.43	3.48	3.52	nav	nav	nav	nav	nav
Netherlands	1.94	1.97	2.04	2.06	1.95	1.31	1.07	1.08	1.11	1.09
Singapore	0.74	1.42	1.39	1.46	1.72	1.36	2.34	2.75	2.52	2.56
Sweden	0.54	0.54	0.58	0.92	0.97	0.06	0.05	0.03	nav	nav
Switzerland	1.19	1.23	1.26	1.26	1.30	0.48	0.50	0.53	0.53	0.58
United Kingdom	2.24	2.40	2.66	2.75	2.73	0.87	0.99	1.12	1.17	1.16
United States	2.89	3.00	3.08	3.16	3.25	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	2.26	2.34	2.41	2.47	2.56	0.56	0.57	0.56	0.59	0.67

Table 10b (cont)										
	(	Cards with	a payment	function		of v	vhich: card	s with a de	bit function	n
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	0.67	0.73	0.84	0.98	1.09	0.46	0.51	0.56	0.60	0.67
Belgium	1.36	1.44	1.51	1.51	1.52	1.06	1.15	1.21	1.20	1.21
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	0.65	0.68	0.72	0.74	1.26	nav	nav	nav	nav	nav
Germany	1.35	1.37	1.34	1.32	1.37	1.13	1.14	1.09	1.07	1.11
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	0.78	0.86	0.96	1.00	1.04	0.43	0.48	0.51	0.53	0.55
Japan <sup>1</sup>	4.59	4.82	5.12	5.19	nav	2.67	2.82	3.05	3.05	3.05
Netherlands	1.94	1.97	2.04	2.06	1.95	1.63	1.65	1.69	1.71	1.63
Singapore	1.42	2.19	2.22	2.39	2.75	0.74	1.42	1.39	1.46	1.72
Sweden	0.92	0.92	1.03	1.15	1.27	0.54	0.55	0.62	0.70	0.76
Switzerland	1.19	1.24	1.26	1.26	1.30	0.74	0.79	0.80	0.81	0.84
United Kingdom	1.87	2.07	2.25	2.34	2.35	0.92	1.00	1.06	1.10	1.11
United States	5.17	5.22	5.24	5.15	5.20	0.85	0.86	0.86	0.91	0.91
CPSS <sup>1</sup>	3.39	3.48	3.57	3.57	3.32	1.22	1.28	1.32	1.35	1.41

	cai	rds with a d	delayed del	bit function	)		cards with	h a credit f	unction	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	0.20	0.23	0.28	0.37	0.42
Belgium	0.30	0.29	0.30	0.30	0.31	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	1.51	1.66	1.67	1.77	1.87
France	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany	0.22	0.24	0.24	0.25	0.26	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	0.35	0.38	0.45	0.47	0.50
Japan <sup>1</sup>	nav	nav	nav	nav	nav	1.92	1.99	2.06	2.14	nav
Netherlands	0.31	0.32	0.35	0.36	0.32	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	0.68	0.77	0.83	0.93	1.02
Sweden	0.12	0.09	0.09	0.10	0.11	0.26	0.29	0.32	0.34	0.40
Switzerland	nav	nav	nav	nav	nav	0.45	0.45	0.45	0.45	0.46
United Kingdom	0.07	0.07	0.07	0.07	0.08	0.87	0.99	1.12	1.17	1.16
United States	nav	nav	nav	nav	nav	4.32	4.36	4.38	4.24	4.30
CPSS <sup>1</sup>	0.18	0.19	0.19	0.20	0.20	2.77	2.83	2.88	2.85	3.09

Note: Please refer to the individual country tables and the country footnotes to Comparative Table 9 for a detailed explanation.

Japan: <sup>1</sup> For cards with a cash function and cards with a credit function, at end-March of the following year; for cards with a debit function, October.

<sup>1</sup> Except as noted

Table 11
Terminals located in the country: number of terminals (thousands, end of year)<sup>1</sup>

			ATMs			POS terminals					
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	
Turkey	12.1	12.1	12.9	13.5	14.8	364.6	495.7	662.4	912.1	1,140.0	
Belgium	11.4	11.7	12.5	13.2	13.5	144.4	135.7	113.1	108.3	101.1	
Canada	35.6	40.0	44.2	48.5	52.7	463.2	494.9	520.6	546.0	571.4	
France	36.9	39.0	42.0	43.7	47.8	904.3	956.4	1,000.0	1,060.0	1,095.0	
Germany	49.6	50.5	51.1	52.6	53.4	435.7	460.6	495.8	520.0	569.5	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Italy	36.6	39.6	39.1	39.7	40.6	774.7	847.5	928.0	1,007.5	1,045.0	
Japan <sup>1</sup>	142.7	140.2	137.8	136.5	136.3	987.4	1,063.1	1,148.1	1,242.7	1,375.3	
Netherlands	7.1	7.5	7.6	7.9	7.5	165.8	177.2	186.3	195.0	206.4	
Singapore	1.8	1.5	1.6	1.6	1.7	20.9	23.5	28.0	26.8	59.7	
Sweden	2.6	2.6	2.7	2.7	2.8	88.2	102.0	108.1	161.1	176.6	
Switzerland	5.0	5.2	5.4	5.4	5.6	73.9	80.7	80.0	88.1	110.2	
United Kingdom	36.7	40.8	46.5	54.4	58.3	772.0	810.6	861.3	920.0	974.1	
United States <sup>1</sup>	324.0	352.0	371.0	383.0	396.0	3,100.0	3,500.0	3,890.0	4,900.0	5,032.0	
CPSS <sup>1</sup>	690.1	730.7	761.2	789.2	816.1	7,930.5	8,652.2	9,359.1	10,775.5	11,316.4	

# Table 11 (cont)

	E-mon	ey card loa	ading/unloa	ding termi	nals	Е	-money car	rd payment	terminals	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	182.8	208.2	213.2	213.6	181.5	88.8	104.5	108.0	114.8	94.0
Canada	0.5	0.3	nav	0.0	0.0	0.0	0.0	0.0	0.0	0.0
France	2.1	15.9	23.1	23.0	21.6	13.6	69.2	105.8	77.8	62.0
Germany	36.0	35.8	32.4	30.0	30.0	80.2	98.5	120.9	142.3	172.1
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	2.7	5.5	7.8	11.9	12.0	nav	24.3	87.8	143.4	184.4
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	4.3	4.8	5.1	5.4	6.6	148.2	164.9	180.1	192.3	203.4
Singapore	nav	nav	nav	nav	nav	17.9	42.5	45.9	42.2	78.6
Sweden	7.0	6.6	5.9	nav	nav	40.0	31.3	32.2	nav	nav
Switzerland	31.3	33.5	34.5	35.2	18.4	31.3	33.5	34.5	35.2	18.4
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	266.6	310.6	321.8	319.1	270.1	420.1	568.7	715.2	748.0	812.9

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> For ATMs, at end-March of the following year. For POS terminals, see Japan, Table 6.

United States: <sup>1</sup> For POS terminals, PIN-based debit terminals only.

<sup>&</sup>lt;sup>1</sup> Except as noted.

Table 11a

Terminals located in the country: increase in the number of terminals
(% change on previous year)

			ATMs				РО	S terminals	s	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	1.1	-0.5	6.5	5.3	9.4	21.7	35.9	33.6	37.7	25.0
Belgium	4.6	2.5	7.0	5.6	2.3	24.0	-6.0	-16.7	-4.2	-6.6
Canada	11.6	12.2	10.5	9.7	8.6	5.7	6.8	5.2	4.9	4.6
France	5.0	5.6	7.7	4.1	9.4	7.8	5.8	4.6	6.0	3.3
Germany	4.1	1.7	1.3	2.9	1.5	-26.3	5.7	7.6	4.9	9.5
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	15.5	8.3	-1.5	1.7	2.2	29.4	9.4	9.5	8.6	3.7
Japan	0.1	-1.8	-1.7	-0.9	-0.2	7.3	7.7	8.0	8.2	10.7
Netherlands	3.2	5.4	0.3	4.4	-4.7	6.5	6.9	5.1	4.7	5.9
Singapore	0.2	-13.9	0.4	3.6	5.5	7.4	12.1	19.1	-4.1	122.9
Sweden	-1.9	3.1	1.1	0.9	3.7	1.3	15.6	5.9	49.1	9.6
Switzerland	3.6	2.9	3.1	0.6	3.2	9.4	9.2	-0.8	10.1	25.2
United Kingdom	11.1	11.3	13.8	17.1	7.1	5.0	5.0	6.3	6.8	5.9
United States	18.7	8.6	5.4	3.2	3.4	10.7	12.9	11.1	26.0	2.7
CPSS <sup>1</sup>	10.9	5.9	4.2	3.7	3.4	7.6	9.1	8.2	15.1	5.0

# Table 11a (cont)

	E-mon	ey card loa	ading/unloa	ding termi	nals	E	-money car	rd payment	terminals	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	48.7	13.9	2.4	0.2	-15.0	31.0	17.7	3.3	6.3	-18.1
Canada	nap	-32.0	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	45.0	-0.2	-5.9	nav	nav	53.0	-26.5	-20.3
Germany	47.1	-0.7	-9.5	-7.4	0.0	19.8	22.8	22.8	17.7	20.9
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	41.5	53.4	0.7	nav	nav	nav	63.3	28.6
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	-41.3	13.3	4.9	6.7	22.9	11.0	11.2	9.2	6.7	5.8
Singapore	nav	nav	nav	nav	nav	10.3	136.8	8.0	-7.9	86.2
Sweden	1.2	-6.2	-10.7	nav	nav	10.9	-21.6	2.9	nav	nav
Switzerland	15.0	7.1	2.9	2.2	-47.9	15.0	7.1	2.9	2.2	-47.9
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	41.2	8.5	3.6	1.0	-15.4	20.8	18.9	10.3	-11.5	8.7

Note: Please refer to the individual country tables for a detailed explanation.

Table 11b

Terminals located in the country: number of terminals per 1 million inhabitants (end of year)<sup>1</sup>

			ATMs				РО	S terminals	5	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	177	174	183	190	206	5,330	7,144	9,414	12,787	15,819
Belgium	1,108	1,130	1,204	1,267	1,289	14,047	13,141	10,900	10,394	9,653
Canada	1,148	1,275	1,395	1,517	1,631	14,927	15,775	16,439	17,086	17,697
France	604	633	678	701	763	14,795	15,544	16,147	17,008	17,464
Germany	603	612	620	638	647	5,291	5,584	6,008	6,303	6,906
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	639	690	680	690	698	13,509	14,746	16,145	17,506	17,976
Japan <sup>1</sup>	1,121	1,099	1,079	1,068	1,067	7,755	8,339	8,991	9,725	10,765
Netherlands	445	466	466	485	461	10,333	10,972	11,482	11,981	12,645
Singapore	434	370	371	380	391	5,058	5,618	6,677	6,324	13,757
Sweden	289	297	299	300	310	9,917	11,431	12,062	17,912	19,561
Switzerland	692	706	722	722	740	10,139	10,984	10,803	11,813	14,692
United Kingdom	620	688	780	909	968	13,060	13,664	14,463	15,376	16,178
United States	1,136	1,221	1,275	1,303	1,335	10,864	12,144	13,364	16,672	16,963
CPSS <sup>1</sup>	920	968	1,003	1,034	1,063	10,570	11,463	12,330	14,118	14,738

# Table 11b (cont)

	E-mon	ey card loa	ading/unloa	ding termi	nals	E	-money car	rd payment	terminals	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	17,777	20,150	20,556	20,504	17,332	8,642	10,120	10,410	11,016	8,974
Canada	16	11	nav	0	0	0	0	0	0	0
France	nav	258	372	369	345	nav	1,124	1,708	1,248	989
Germany	438	434	393	364	364	974	1,194	1,465	1,725	2,087
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	95	135	207	206	nav	nav	1,528	2,492	3,172
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	265	299	312	332	407	9,238	10,210	11,102	11,814	12,462
Singapore	nav	nav	nav	nav	nav	4,336	10,174	10,958	9,966	18,110
Sweden	787	735	654	nav	nav	4,496	3,512	3,600	nav	nav
Switzerland	4,295	4,563	4,655	4,724	2,447	4,295	4,563	4,655	4,724	2,447
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	1,710	1,127	1,164	1,189	1,001	2,625	2,558	2,547	2,743	2,964

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> For ATMs, at end-March of the following year. For POS terminals, see Japan, Table 6.

<sup>&</sup>lt;sup>1</sup> Except as noted.

Table 12
Transactions at terminals: number of cash withdrawals and loading transactions (millions, total for the year)<sup>1</sup>

			Casl	h withdraw	als at ATM	Is located i	n the coun	try		
	with	cards issu	ed outside	the count	ry	v	vith cards i	issued in th	ne country	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	6.63	5.79	5.97	7.40	8.80	288.00	326.00	381.00	463.00	539.00
Belgium	4.02	3.77	6.92	6.78	6.80	217.05	239.89	256.89	244.38	250.50
Canada	nav	nav	nav	nav	nav	1,232.70	1,219.50	1,145.10	1,114.90	1,076.90
France	nav	nav	nav	nav	26.68	1,165.04	1,212.99	1,244.88	1,260.00	1,431.95
Germany	nav	nav	nav	nav	nav	1,648.40	1,668.31	2,036.37	2,398.67	2,445.07
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nap	nap	nap	nap	nap	452.46	460.60	434.55	453.79	456.41
Japan <sup>1</sup>	nav	nav	nav	nav	nav	438.88	414.58	406.46	411.78	429.76
Netherlands	nav	nav	nav	nav	7.18	490.00	493.00	494.00	484.00	463.45
Singapore	nav	nav	nav	nav	nav	8.77	9.13	6.86	6.53	6.36
Sweden	nav	nav	nav	nav	nav	335.00	321.00	328.00	320.00	316.00
Switzerland	5.20	5.30	5.20	5.60	5.60	104.60	110.40	113.20	110.60	103.60
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	6,092.90	6,149.40	6,466.30	6,804.65	6,980.00

#### Table 12 (cont)

	Cash wit	thdrawals a		cated outsi	de the	E-mon	-	unloading		ns at
			country					Is in the co	untry	
						d in the cou	•			
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	0.61	0.53	0.53	0.76	1.28	nav	nav	nav	nav	nav
Belgium	7.43	7.73	8.38	8.69	9.60	10.78	18.15	16.71	16.99	16.82
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	nav	30.58	0.60	2.60	2.79	2.00	2.10
Germany	nav	nav	nav	nav	nav	3.71	4.42	4.16	4.17	4.47
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nap	nap	nap	nap	nap	nav	3.34	3.32	8.98	19.28
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	14.30	14.10	15.20	16.30	18.89	2.93	11.93	15.02	17.98	36.11
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	0.30	0.10	0.00	nap	nap
Switzerland	8.20	8.40	8.60	8.60	9.30	nav	nav	nav	nav	1.00
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> For cash withdrawals at ATMs located in the country with cards issued in the country, total for the fiscal year ending March of the following year.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. Excludes data for the United States, for which only 2003 is available.

<sup>&</sup>lt;sup>1</sup> Except as noted.

Table 12a

Transactions at terminals: increase in the number of cash withdrawals and loading transactions (% change on previous year)

			Casi	h withdraw	als at ATM	s located ir	the count	ry		
	with	cards issu	ed outside	the count	ry	W	ith cards i	ssued in th	e country	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-19.9	-12.7	3.1	24.0	18.9	9.9	13.2	16.9	21.5	16.4
Belgium	5.2	-6.2	83.6	-2.0	0.3	9.3	10.5	7.1	-4.9	2.5
Canada	nav	nav	nav	nav	nav	0.0	-1.1	-6.1	-2.6	-3.4
France	nav	nav	nav	nav	nav	7.6	4.1	2.6	1.2	13.6
Germany	nav	nav	nav	nav	nav	-4.4	1.2	22.1	17.8	1.9
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	5.2	1.8	-5.7	4.4	0.6
Japan	nav	nav	nav	nav	nav	1.0	-5.5	-2.0	1.3	4.4
Netherlands	nav	nav	nav	nav	nav	4.3	0.6	0.2	-2.0	-4.2
Singapore	nav	nav	nav	nav	nav	2.7	4.1	-24.9	-4.8	-2.6
Sweden	nav	nav	nav	nav	nav	4.4	-4.2	2.2	-2.4	-1.3
Switzerland	nav	1.9	-1.9	7.7	0.0	10.8	5.5	2.5	-2.3	-6.3
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	1.6	0.9	5.2	5.2	2.6

#### Table 12a (cont)

	Cash wi	thdrawals	at ATMs lo	cated outsi	de the	E-mon	ey loading/	unloading	transactio	ns at
			country				termina	ls in the co	untry	
				with ca	ards issue	d in the cou	intry			
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-21.8	-13.1	0.0	43.4	68.4	nav	nav	nav	nav	nav
Belgium	24.9	4.0	8.4	3.7	10.5	38.9	68.4	-7.9	1.7	-1.0
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	nav	nav	0.0	nap	7.3	-28.3	4.9
Germany	nav	nav	nav	nav	nav	0.3	19.0	-5.8	0.3	7.1
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	nav	nav	-0.6	170.5	114.7
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	12.6	-1.4	7.8	7.2	15.9	22.4	306.8	25.9	19.7	100.9
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	-50.0	-66.7	-100.0	nav	nav
Switzerland	nav	2.4	2.4	0.0	8.1	nav	nav	nav	nav	nav
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

Note: Please refer to the individual country tables for a detailed explanation.

Table 13
Transactions at terminals: value of cash withdrawals and loading transactions (USD billions, total for the year)<sup>1</sup>

			Casi	h withdraw	als at ATM	ls located in	the coun	try		
	with	cards issu	ed outside	the count	ry	W	ith cards i	ssued in th	ne country	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	0.27	0.34	0.82	1.20	1.62	26.02	24.93	32.79	51.08	70.81
Belgium	0.45	0.55	1.15	1.17	1.34	20.07	23.44	30.63	34.18	34.26
Canada	nav	nav	nav	nav	nav	66.99	68.92	75.45	82.15	88.42
France	nav	nav	nav	nav	5.34	63.53	71.63	91.45	105.86	127.30
Germany	nav	nav	nav	nav	nav	233.55	249.78	343.21	422.44	474.47
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	65.55	88.88	80.93	95.63	98.21
Japan <sup>1</sup>	nav	nav	nav	nav	nav	208.02	190.85	201.75	218.57	218.09
Netherlands	nav	nav	nav	nav	nav	39.90	49.92	57.47	63.38	67.31
Singapore	nav	nav	nav	nav	nav	1.09	0.90	0.67	0.64	0.64
Sweden	nav	nav	nav	nav	nav	27.26	27.68	34.88	37.30	36.77
Switzerland	0.76	0.76	0.87	1.13	1.07	16.02	17.56	17.60	21.50	18.95
United Kingdom	nav	nav	nav	nav	nav	183.44	204.58	235.31	295.39	312.56
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	925.44	994.14	1,169.35	1,377.04	1,476.97

#### Table 13 (cont)

	Cash wit	thdrawals a	at ATMs loo	cated outsi	de the	E-mon		unloading		ns at
			•	with ca	ards issue	d in the cou			•	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	0.05	0.05	0.07	0.10	0.17	nav	nav	nav	nav	nav
Belgium	0.82	1.00	1.29	1.44	1.61	0.30	0.63	0.63	0.67	0.62
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	nav	4.36	0.02	0.08	0.09	0.00	0.07
Germany	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	nav	0.40	1.40	2.57	4.32
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nav	nav	nav	nav	3.78	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	0.01	0.00	0.00	nap	nap
Switzerland	1.33	1.64	1.98	2.13	2.37	nav	nav	nav	nav	0.06
United Kingdom	0.14	0.16	0.47	0.59	0.62	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

Note: Please refer to the individual country tables for a detailed explanation.

Japan: <sup>1</sup> For cash withdrawals at ATMs located in the country with cards issued in the country, total for the fiscal year ending March of the following year, converted at average exchange rates for the fiscal year ending March.

CPSS: <sup>1</sup> Sum or average excluding those countries for which data are not available. Excludes data for the United States, for which only 2003 is available.

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates, except as noted.

Table 13a

Transactions at terminals: increase in the real value of cash withdrawals and loading transactions
(% change on previous year, adjusted by CPI inflation)<sup>1</sup>

			Casl	h withdraw	als at ATM	s located in	n the count	ry		
	with	cards issu	ed outside	the count	ry	W	ith cards i	ssued in th	e country	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-36.8	21.4	101.5	26.2	18.4	-51.6	-8.5	10.3	34.7	21.3
Belgium	3.9	14.2	73.3	-9.6	12.1	4.6	9.1	7.5	-0.5	-2.2
Canada	nav	nav	nav	nav	nav	1.5	2.0	-5.0	-0.6	-2.0
France	nav	nav	nav	nav	nav	5.7	5.0	4.3	2.8	18.0
Germany	nav	nav	nav	nav	nav	0.8	0.1	13.6	9.9	10.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	0.8	25.5	-26.0	5.0	0.5
Japan	nav	nav	nav	nav	nav	2.3	-4.6	-1.9	1.1	nav
Netherlands	nav	nav	nav	nav	nav	4.2	14.3	-5.9	-1.2	4.7
Singapore	nav	nav	nav	nav	nav	-4.9	-17.0	-28.8	-8.5	-2.1
Sweden	nav	nav	nav	nav	nav	1.3	-6.4	2.5	-3.8	-0.4
Switzerland	13.7	-7.5	-1.4	18.3	-6.3	4.8	0.5	-13.8	11.9	-12.6
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	-2.2	6.3	15.8	15.7	5.2

#### Table 13a (cont)

	Cash wi	thdrawals a	at ATMs lo	cated outsi	de the	E-mon	ey loading/	unloading/	transactio	ns at
			country		1		termina	Is in the co	untry	
				with ca	ards issue	d in the coເ	ıntry			
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-55.5	2.8	5.6	37.2	42.4	nav	nav	nav	nav	nav
Belgium	21.4	13.4	6.0	-0.1	9.3	53.5	99.8	-17.7	-5.4	-9.7
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	nav	nav	0.0	0.0	-2.2	nap	nap
Germany	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	nav	nav	187.2	63.2	64.4
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Switzerland	9.7	13.4	3.7	-1.4	10.2	nav	nav	nav	nav	nav
United Kingdom	-47.4	8.8	160.2	11.2	4.8	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

Note: Please refer to the individual country tables for a detailed explanation.

<sup>&</sup>lt;sup>1</sup> Value of cash withdrawals and loading transactions in domestic currency deflated by yearly average CPI inflation. For the CPSS area, in US dollar terms.

CPSS: 1 Sum or average excluding those countries for which data are not available.

Table 14
Transactions at terminals: number of payment transactions (millions, total for the year)

			POS t	ransaction	s at termi	nals locate	d in the cou	untry		
	with	cards issu	ed outside	the count	ry	,	with cards	issued in t	he country	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	5.15	7.06	6.38	7.46	8.36	464.00	598.00	794.00	1,092.00	1,266.00
Belgium	23.63	18.08	31.65	25.41	26.65	469.24	544.34	579.83	632.24	693.93
Canada	nav	nav	nav	nav	nav	3,556.60	3,897.00	4,228.00	4,581.00	5,019.30
France	nav	nav	nav	nav	145.46	3,670.72	4,095.59	4,341.46	4,650.00	5,114.36
Germany	nav	nav	nav	nav	nav	1,678.33	1,900.20	2,053.89	2,274.69	2,409.87
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nap	nap	nap	nap	nap	433.39	552.04	610.73	671.97	732.80
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nap	nap	nap	nap	nap	985.30	1,155.59	1,266.24	1,374.36	1,480.48
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	326.00	454.00	542.00	632.00	755.00
Switzerland	23.50	23.10	24.00	24.30	25.30	258.70	284.70	302.70	317.70	336.00
United Kingdom	78.00	74.00	38.00	123.00	327.00	4,258.00	4,681.00	5,186.00	5,639.00	6,008.00
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	15,636.29	17,564.46	19,110.85	20,772.96	22,549.74

# Table 14 (cont)

-	POS trans	actions at	terminals l	ocated out	side the	E-money	payment tr	ansactions	at termina	ls in the
			country				_	country		
				with ca	ards issue	d in the cou	intry			
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	2.86	3.67	4.98	6.19	7.57	nav	nav	nav	nav	nav
Belgium	32.98	32.94	34.64	39.10	44.60	60.46	120.83	107.06	106.90	102.02
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	nav	129.46	2.80	18.40	18.10	16.00	17.03
Germany	nav	nav	nav	nav	nav	29.35	35.85	37.37	38.31	37.78
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nap	nap	nap	nap	nap	nav	1.03	2.74	7.74	15.01
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nav	nav	nav	nav	8.15	30.90	87.02	109.16	127.27	146.93
Singapore	nav	nav	nav	nav	nav	102.20	702.11	1,535.90	1,598.15	1,621.60
Sweden	nav	nav	nav	nav	nav	1.50	0.70	0.20	nap	nap
Switzerland	40.70	41.60	42.30	44.40	48.10	19.80	20.00	19.30	19.00	19.20
United Kingdom	192.00	211.00	226.00	260.00	275.00	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	247.01	985.94	1,829.83	1,913.37	1,959.56

Note: Please refer to the individual country tables for a detailed explanation.

Table 14a

Transactions at terminals: increase in the number of payment transactions (% change on previous year)

			POS t	ransaction	s at termin	als located	in the cou	ntry		
	with	cards issu	ed outside	the count	ry	W	ith cards i	ssued in th	e country	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	32.1	37.1	-9.6	16.9	12.1	15.1	28.9	32.8	37.5	15.9
Belgium	36.4	-23.5	75.1	-19.7	4.9	12.7	16.0	6.5	9.0	9.8
Canada	nav	nav	nav	nav	nav	10.1	9.6	8.5	8.3	9.6
France	nav	nav	nav	nav	nav	11.5	11.6	6.0	7.1	10.0
Germany	nav	nav	nav	nav	nav	14.6	13.2	8.1	10.8	5.9
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	36.3	27.4	10.6	10.0	9.1
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nav	nav	nav	nav	nav	19.2	17.3	9.6	8.5	7.7
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	27.3	39.3	19.4	16.6	19.5
Switzerland	nav	-1.7	3.9	1.3	4.1	nav	10.1	6.3	5.0	5.8
United Kingdom	-60.0	-5.1	-48.6	223.7	165.9	12.4	9.9	10.8	8.7	6.5
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	13.2	12.3	8.8	8.7	8.6

# Table 14a (cont)

	POS trans	actions at	terminals l	ocated out	side the	E-money	payment tra	ansactions	at termina	Is in the
			country					country		
				with ca	ards issue	d in the cou	ıntry			
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	14.4	28.3	35.7	24.3	22.3	nav	nav	nav	nav	nav
Belgium	12.1	-0.1	5.2	12.9	14.1	17.9	99.9	-11.4	-0.1	-4.6
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	nav	nav	0.0	nap	-1.6	-11.6	6.4
Germany	nav	nav	nav	nav	nav	10.4	22.1	4.2	2.5	-1.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nav	nav	nav	nav	nav	22.0	181.6	25.5	16.6	15.4
Singapore	nav	nav	nav	nav	nav	2.1	587.0	118.8	4.1	1.5
Sweden	nav	nav	nav	nav	nav	-48.3	-53.3	-71.4	nav	nav
Switzerland	nav	2.2	1.7	5.0	8.3	10.0	1.0	-3.5	-1.6	1.1
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	10.2	299.1	85.6	4.6	2.4

Note: Please refer to the individual country tables for a detailed explanation.

Table 15
Transactions at terminals: value of payment transactions
(USD billions, total for the year)<sup>1</sup>

			POS t	ransaction	s at termin	als located	in the cou	intry		
	with	cards issu	ed outside	the count	ry	W	ith cards	ssued in th	ne country	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	0.33	0.49	1.00	1.36	1.71	9.73	14.18	22.63	40.19	56.72
Belgium	2.42	1.73	3.64	3.50	3.52	22.89	27.55	35.24	41.52	46.32
Canada	nav	nav	nav	nav	nav	139.78	164.23	200.66	234.96	286.49
France	nav	nav	nav	nav	15.36	152.12	179.09	230.31	272.84	329.29
Germany	nav	nav	nav	nav	nav	108.28	125.36	158.06	186.37	197.49
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	29.01	42.20	57.44	72.10	78.92
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nap	nap	nap	nap	nap	39.63	47.89	61.15	70.92	74.43
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	17.89	21.61	29.69	36.62	39.98
Switzerland	2.91	2.96	3.20	3.54	3.69	26.50	31.43	37.39	38.57	44.79
United Kingdom	nav	nav	nav	nav	15.28	271.40	316.49	398.17	499.95	535.50
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	807.49	955.85	1,208.10	1,453.84	1,633.22

# Table 15 (cont)

	POS trans	actions at	terminals l	ocated out	side the	E-money	payment tra	ansactions	at termina	ls in the	
			country				•	country			
				with ca	ards issue	ed in the country					
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	
Turkey	0.20	0.29	0.67	0.87	1.07	nav	nav	nav	nav	nav	
Belgium	2.78	3.01	3.75	4.06	5.14	0.24	0.63	0.62	0.66	0.61	
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
France	nav	nav	nav	nav	10.46	0.00	0.00	0.00	0.00	0.00	
Germany	nav	nav	nav	nav	0.00	0.00	0.00	0.00	0.00	0.00	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Italy	nav	nav	nav	nav	nav	0.00	0.00	0.00	0.00	0.00	
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Netherlands	nav	nav	nav	nav	0.55	0.08	0.22	0.34	0.43	0.49	
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Sweden	nav	nav	nav	nav	nav	0.00	0.00	0.00	0.00	0.00	
Switzerland	4.86	5.46	6.39	7.41	8.03	0.00	0.00	0.00	0.00	0.00	
United Kingdom	14.00	15.91	18.05	19.69	20.42	nav	nav	nav	nav	nav	
United States	nav	nav	nav	nav	nav	neg	neg	neg	neg	neg	
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	0.32	0.85	0.96	1.09	1.10	

Note: Please refer to the individual country tables for a detailed explanation.

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates.

Table 15a
Transactions at terminals: increase in the real value of payment transactions
(% change on previous year, adjusted by CPI inflation)<sup>1</sup>

			POS t	ransaction	s at termin	als located	in the cou	ntry		
	with	cards issu	ed outside	the count	ry	W	ith cards i	ssued in th	e country	
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-2.7	39.1	72.4	17.5	10.1	-5.3	39.2	33.7	53.6	23.5
Belgium	42.5	-32.9	72.4	-14.1	-2.1	8.8	12.5	5.2	5.1	8.9
Canada	nav	nav	nav	nav	nav	0.2	16.4	6.0	6.9	11.1
France	nav	nav	nav	nav	nav	9.1	9.7	5.1	5.2	18.5
Germany	nav	nav	nav	nav	nav	7.9	8.4	4.2	5.2	4.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	37.1	34.6	10.5	11.5	7.1
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nav	nav	nav	nav	nav	12.8	10.4	4.3	3.9	3.4
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	26.0	11.4	11.7	11.0	10.3
Switzerland	nav	-6.7	-7.1	1.5	3.3	nav	8.7	2.2	-5.5	15.1
United Kingdom	nav	nav	nav	nav	nav	15.8	10.5	14.0	10.5	5.9
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	nav	17.1	24.5	18.2	10.2

# POS transactions at terminals located outside the country E-money payment transactions at terminals in the country

			country					country		
				with ca	ards issue	d in the cou	intry			
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	-5.1	41.3	93.9	13.2	7.0	nav	nav	nav	nav	nav
Belgium	5.5	1.0	2.5	-3.3	23.5	31.8	144.2	-19.1	-5.4	-9.8
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	nav	nav	0.0	nap	nav	nav	nav
Germany	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	nav	nav	nav	nav	nav	11.1	168.2	23.5	15.8	12.0
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Switzerland	nav	3.0	0.6	6.1	7.4	nav	nav	nav	nav	nav
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS <sup>1</sup>	nap	nap	nap	nap	nap	28.1	166.2	10.4	12.2	-1.1

Note: Please refer to the individual country tables for a detailed explanation.

<sup>&</sup>lt;sup>1</sup> Value of payment transactions in domestic currency deflated by yearly average CPI inflation. For the CPSS area, in US dollar terms.

CPSS: 1 Sum or average excluding those countries for which data are not available.

Table PS1
Features of selected interbank funds transfer systems (at end-2005)

System	Туре	Settlement	Owner/manager	Processing	Membership	Degree of centralisation
Turkey			_			
TIC-RTGS	L+R	RTGS	СВ	RTT	R	С
TCS	L	MN	В	ACH	R	С
ICH	R	MN	В	ACH	R	D
BKM	R	MN	В	RTT	0	С
Belgium	_				_	_
ELLIPS	L	RTGS	B+CB	RTT	R	С
Clearing house	R	MN	B+CB	RTT	0	С
CEC	R	MN	B+CB	RTT	0	С
Canada			D.4	DTT	•	•
LVTS	L	MN	PA	RTT	0	С
France		DTOO	0.0	DTT	ъ	0
TBF	L	RTGS	CB	RTT	R	С
PNS	L	BN/RTGS	CB+B/PA	RTT	0	С
SIT	R	MN	CB+B/PA	ACH	0	С
Germany						
RTGS <sup>plus</sup>	L	RTGS	СВ	RTT	R	С
RPS	R	G	СВ	ACH	0	С
Hong Kong SAR						
HKD CHATS	L+R	RTGS	CMA <sup>1</sup>	RTT	R	С
USD CHATS	L+R	RTGS	В	RTT	0	С
EUR CHATS	L+R	RTGS	В	RTT	0	С
Italy						
BI-REL	L	RTGS	СВ	RTT	R	С
BI-COMP	R	MN	СВ	ACH	0	С
Japan						
BOJ-NET	L	RTGS	СВ	RTT	R	С
FXYCS	L	MN/RTGS	В	RTT	R	С
Zengin System	R	MN	В	RTT	R	C
Tokyo Clearing House	R	MN	В	ACH	R	Č
Netherlands	11	1711.4	5	7.011	1	· ·
TOP	L	RTGS	СВ	RTT	R	С
Interpay	R	MN/BA	В	ACH	R	Č
Singapore	11	WII V/ D/ C	5	7.011	1	· ·
MEPS	L	RTGS	СВ	RTT	0	С
SGDCCS	R	MN	PA	ACH	Ö	Č
USDCCS	R	G	PA	ACH	Ö	Č
IBG	R	MN	PA	ACH	ŏ	Č
EFTPOS	R	MN	В	RTT	R	Č
Sweden			J		• • • • • • • • • • • • • • • • • • • •	Ü
E-RIX	L	RTGS	СВ	RTT	R	С
K-RIX	L	RTGS	CB	RTT	R	Č
Bankgirot	R	MN	В	ACH	Ö	Č
Dataclearing	R	MN	В	ACH	Ö	Č
Switzerland	IX	IVII	5	AOIT	O	O
SIC	L+R	RTGS	B+CB	RTT	O <sup>1</sup>	С
					O <sup>1</sup>	
DTA/LSV	R	G	В	ACH	U	С
United Kingdom		DTOO	D. OD	DTT	Г.	•
CHAPS Euro	L	RTGS	B+CB	RTT	R	C
CHAPS Sterling	L	RTGS	B+CB	RTT	R	С
Cheque/credit	R	N	В	ACH	R	C C
BACS	R	N	В	M	R	C
United States <sup>1</sup>						
CHIPS <sup>2</sup>	L	MN/BN/G	В	RTT	R	С
Fedwire	L	RTGS	СВ	RTT	$O^3$	С
European Union						
TARGET	L	RTGS	CB/B/PA	RTT	R/O	С
EURO1 / STEP1	L	MN	В	RTT	R	С
STEP2	R	BA	В	ACH	R	С
Memo:						
CLS	FX	RTGS	$B^1$	RTT	R	С

	PS1	

System	Pricing	Closing time for same day	r Settlement finality	Cutoff third- party orders	Standard mone	y market hour
		transactions			opening	closing
Turkey						
TIC-RTGS	F	17:30	real-time	nap	8:30	17:30
TCS	0	14:00	T+0, T+2	nap	nap	nap
ICH	F	nap	T+1	nap	nap	nap
BKM	F	nap	intraday	nap	nap	nap
Belgium	'	Παρ	intraday	Пар	Παρ	Пар
ELLIPS	F	10.00	roal times	47.00	07.00	18:00
_		18:00	real-time	17:00	07:00	
Clearing house	F	15:15	nav	nav	nap	nap
CEC	F	15:00	nav	nav	nap	nap
Canada						
LVTS	F	18:30	intraday <sup>1</sup>	18:00	nap <sup>2</sup>	nap
France			•		•	·
TBF	F	18:00	real-time	17:00	07:00	18:00
PNS	F	16:00	real-time	16:00	nap	nap
SIT	F	13:30	15:15	nav	nap	nap
Germany						
RTGS <sup>plus</sup>	F	18:00	real-time	17:00	07:00	18:00
		20:00/21:00				
RPS	F	7:00/09:00 <sup>1</sup>	intraday <sup>1</sup>	nap	nap	nap
Hong Kong SAR	•	1.30/03.00	muday	пар	Пар	пар
	E	47.20	roal time	17:00	00:00	47.00
HKD CHATS	F	17:30	real-time	17:00	09:00	17:30
USD CHATS	F	17:30	real-time	17:00	09:00	17:30
EUR CHATS	F	17:30	real-time	17:00	09:00	17:30
taly						
BI-REL	F	18:00	real-time	17:00	07:00	18:00
BI-COMP	F	12:00	1	12:00	nap	nap
	•	12.00		12.00	Παρ	Пар
Japan	$V^1$	47.002	1.4	4.4.004	00.00	47.005
BOJ-NET		17:00 <sup>2</sup>	real-time	14:00 <sup>4</sup>	08:30	17:00 <sup>5</sup>
FXYCS	F	13:45/17:00 <sup>2</sup>	14:30/real-time	13:45/17:00 <sup>2</sup>	08:30	17:00 <sup>5</sup>
Zengin System	F	15:30	16:15	15:30	08:30	17:00 <sup>5</sup>
Tokyo Clearing House	F	08:00 <sup>3</sup>	12:30	08:00 <sup>3</sup>	08:30	17:00 <sup>5</sup>
Netherlands						
TOP	F	18:00	real-time	17:00	07:00	18:00
	F					
Interpay	F	17:00	every 30 mins <sup>1</sup>	15:30	nap	nap
Singapore <sup>1</sup>						
MEPS	V	18:30 (14:45)	real-time (14:45)	18:30 (14:45) <sup>2</sup>	09:00	18:30
SGDCCS	F	17:00 (13:30)	T+1: 15:45 (14:30)	17:00	nap	nap
USDCCS	F	15:30 (nap)	T+1: 17:00	15:30	nap	nap
IBG	F	12:00 (10:00)	T+1: 18:15 (14:30)	12:00	nap	nap
EFTPOS	F	22:00	T+1: 20:00 <sup>3</sup>	nap	nap	nap
Sweden	-		= • . • •			
	_	10.00	roal times	47.00	00.00	10.15
E-RIX	F	18:00	real-time	17:00	09:00	16:15
K-RIX	F	17:00	real-time	17:00	09:00	16:15
Bankgirot	F	nap <sup>1</sup>	intraday <sup>2</sup>	16:20 <sup>3</sup>	nap	nap
Dataclearing	F	nap <sup>1</sup>	intraday <sup>2</sup>	15:20 <sup>4</sup>	nap	nap
Switzerland		= 11,			- 1	-15
SIC	F	16:15 <sup>2</sup>	real-time	15:00	09:00	16:00
DTA/LSV	F	10:00	13:00 – 16:15	10:00		
	Г	10.00	10.00 - 10.10	10.00	nap	nap
Jnited Kingdom	-	4= 00	1.2	40.00	07.00	40.00
CHAPS Euro	F	17:00	real-time	16:00	07:00	16:00
CHAPS Sterling	F	17:00	real-time	16:00	07:00	16:00
Cheque/credit	F	nap	1	nav	nap	nap
BACS	F	nap	1	nav	nap	nap
Jnited States <sup>1</sup>	'	παρ		IIQV	Παρ	παρ
	_	47.00	introdo: 4	17.00	00.205	40.00
CHIPS <sup>2</sup>	F	17:00	intraday <sup>4</sup>	17:00	08:30 <sup>5</sup>	18:30
Fedwire	F	18:30	real-time	18:00	08:30 <sup>5</sup>	18:30
European Union <sup>1</sup>						
TARGET	F	18:00	real-time	17:00	07:00	18:00
EURO1 / STEP1	F	16:00	about 16:30	16:00	07:00	18:00
STEP2	F	nap	about 07:30 <sup>2</sup>	22:00 on T-1	07:00	18:00
	•	·IQP			000	. 0.00
Memo:						
	_	2				
CLS	F	$06:30^2$	real-time	nap	nap	nap

95

Table PS2
Payments processed by selected interbank funds transfer systems: number of transactions (total for the year)

System	N	umber of t	ransactio	ns (million	s)	Increa		number o		ions
	2001	2002	2003	2004	2005	2001	(% cnange	e on previo <b>2003</b>	us year) <b>2004</b>	2005
Turkey	2001	2002	2003	2004	2003	2001	2002	2003	2004	2003
TIC-RTGS	25.5	33.9	43.0	58.7	76.7	19.9	33.1	26.8	36.4	30.8
TCS	31.7	29.5	30.0	42.4	45.0	2.1	-6.9	1.9	41.3	6.1
ICH	25.7	25.3	26.2	25.3	23.5	-13.0	-1.6	3.7	-3.3	-7.2
BKM	472.0	608.7	805.5	1,105.8	1,281.9	15.3	29.0	32.3	37.3	15.9
Belgium ELLIPS	1.8	1.7	1.8	1.8	1.8	3.5	-5.9	1.4	1.5	-0.7
Clearing house	3.5	1.7	1.6	1.3	0.6	-16.0	-50.9	-9.2	-16.6	-56.5
CEC	917.7	985.4	1,019.0	1,009.6	952.2	3.9	7.4	3.4	-0.9	-5.7
Canada										
LVTS	3.7	3.9	4.1	4.4	4.6	5.7	5.4	5.1	7.3	4.5
France TBF	2.0	2.0	2.0	4.0	4.0	20.0	0.0	4.0	2.0	0.0
PNS	3.8 8.0	3.8 7.6	3.9 7.4	4.0 7.0	4.3 6.8	26.8 45.5	0.2 -5.2	1.3 -3.0	3.6 -4.7	8.0 <b>-</b> 2.4
SIT		11,043.5				10.0	54.9	2.3	2.8	2.2
CH Paris	677.8	93.3	nap	nap	nap	-0.7	-86.2	nap	nap	nap
CH Province	2,469.1	53.6	nap	nap	nap	-10.9	-97.8	nap	nap	nap
CREIC	270.2	4.3	nap	nap	nap	-12.2	-98.4	nap	nap	nap
Germany <sup>2</sup>										
RTGS <sup>plus</sup> (former ELS)	23.9	31.9	32.8	34.1	35.8	10.8	33.7	2.8	4.0	5.0
EAF (former EAF2)	11.0	nap	nap	nap	nap	-15.3	nap	nap	nap	nap
RPS (former DTA)	2,197.5	2,156.8	2,188.3	2,230.3	2,174.7	-1.3	-1.9	1.5	1.9	-2.5
Hong Kong SAR HKD CHATS	3.5	3.4	3.5	3.8	4.1	1.8	-1.5	2.6	7.6	7.8
USD CHATS	0.7	0.8	1.0	1.3	1.5	nap	17.8	22.7	27.4	16.7
EUR CHATS	nap	nap	nav	nav	0.0	nap	nap	nap	nap	nap
Italy							•	•	•	
BI-REL	10.2	9.6	9.4	9.1	10.4	-1.5	-6.2	-2.0	-3.6	14.3
BI-COMP	1,375.2	1,733.2	1,808.7	1,867.6	1,895.4	23.5	26.0	4.4	3.3	1.5
Japan	<b>5</b> 0	4.0	4.0	5.0	5.0	7.0	<b>5</b> 4	0.0	<b>5</b> 4	0.4
BOJ-NET FXYCS	5.0 9.6	4.8 9.2	4.9 8.0	5.2 7.4	5.3 6.9	7.0 2.9	-5.1 -3.4	2.9 -13.2	5.1 -7.5	2.4 -7.4
Zengin System	1,220.0	1,244.5	1,260.8	1,286.9	1,314.8	4.5	2.0	1.3	2.1	2.2
Tokyo Clearing House	71.6	63.0	57.5	53.2	48.9	-8.3	-12.0	-8.7	-7.6	-8.1
Netherlands										
TOP	4.1	4.8	4.9	5.0	4.7	8.6	15.4	3.4	1.2	-5.6
Interpay	2,558.3	2,812.4	2,964.9	3,123.5	3,272.1	9.9	9.9	5.4	5.3	4.8
Singapore	2.4	2.0	2.1	2.2	2.5	0.4	1.1	4.4	F 2	10 5
MEPS SGDCCS	2.1 91.6	2.0 90.3	2.1 87.0	2.2 86.1	2.5 84.9	8.4 0.4	-1.4 -1.4	4.4 -3.6	5.2 -1.1	12.5 -1.3
USDCCS	0.4	0.4	0.6	0.7	0.8	2.6	10.0	25.0	27.3	11.4
IBG	33.6	46.0	62.4	67.1	72.5	12.2	36.7	35.7	7.6	8.0
EFTPOS	87.7	97.2	105.8	114.8	125.5	14.0	10.8	8.9	8.5	9.3
Sweden										
E-RIX	0.1	0.1	0.1	0.1	0.1	16.7	14.3	25.0	0.0	10.0
K-RIX	0.7	1.1	1.3	1.3	1.5	29.4	66.7	18.2	0.0	15.4
Bankgirot Dataclearing	345.0 67.0	363.4 73.0	381.5 102.0	430.0 105.0	484.0 83.0	-1.7 -14.3	5.3 9.0	5.0 39.7	12.7 2.9	12.6 -21.0
Switzerland	01.0	70.0	102.0	100.0	00.0	14.0	0.0	00.7	2.0	21.0
SIC	161.1	177.0	192.7	209.1	256.4	7.8	9.9	8.9	8.5	22.6
DTA/LSV	103.7	103.3	100.1	94.0	66.8	-2.1	-0.4	-3.1	-6.1	-28.9
United Kingdom										
CHAPS Euro	2.4	3.4	4.2	4.7	5.1	20.4	42.3	23.9	10.4	7.9
CHAPS Sterling	22.1	24.1	27.2	28.3	29.6	1.9	8.8	13.1	4.1	4.5
Cheque/credit BACS	160.9 1,375.3	153.8 1,446.1	143.9 1,630.4	135.9 2,012.6	126.0 2,411.9	-2.3 5.3	-4.4 5.2	-6.4 12.7	-5.6 23.4	-7.3 19.8
United States	1,375.5	1,440.1	1,030.4	2,012.0	2,411.9	5.5	5.2	12.7	23.4	19.0
CHIPS	60.4	63.3	64.5	68.5	71.5	1.0	4.8	1.9	6.2	4.3
Fedwire	112.5	115.0	123.3	125.1	132.4	3.8	2.2	7.2	1.5	5.9
European Union										
TARGET	53.7	64.5	66.8	69.4	76.3	12.0	19.9	3.6	3.9	10.0
EURO1 / STEP1	29.7	37.1	43.1	44.3	46.4	19.9	25.0	16.2	2.9	4.7
STEP2 <sup>3</sup>	nap	nap	3.9	26.2	45.6	nap	nap	nap	567.7	73.6
Momo:										
Memo: CLS <sup>3</sup>		4 7	40.0	20.0	47.0			1.040.5	CO C	40.0
ULO	nap	1.7	19.3	32.6 parative Tab	47.9	nap	nap	1,040.5	69.0	46.9

Table PS3
Payments processed by selected interbank funds transfer systems: value of transactions (total for the year)

System	Valu	ue of trans	sactions (	USD billion	s) <sup>1</sup>	Average value per transaction (USD thousands) <sup>1</sup>					
	2001	2002	2003	2004	2005	2001	(US <b>2002</b>	D thousan <b>2003</b>	ds)¹ <b>2004</b>	2005	
Turkey	2001			2001		2001		2000	2001		
TIC-RTGS	2,263	2,217	3,099	4,177	5,822	0.1	0.1	0.1	0.1	0.1	
TCS	80	78	113	161	240	_	3.1	4.3	6.3	10.2	
ICH	43	52	72	92	116		2.1	2.8	3.6	4.9	
BKM	10	15	24	42	59	0.0	0.0	0.0	0.0	0.0	
Belgium	40.000	40.570	45.007	40.000	04 440	0.057.0	7.054.0	0.744.0	40.000.0	10 117 0	
ELLIPS	12,808	12,573	15,307	18,233	21,448	6,957.0	7,254.8		10,226.0		
Clearing house CEC	79 455	71 500	74 623	73 727	60 786		40.9 0.5	46.8 0.6	56.0 0.7	105.9 0.8	
Canada	433	500	023	121	700	0.5	0.5	0.6	0.7	0.0	
LVTS	18,395	18,444	22,518	25,378	30,321	4,971.7	4,729.2	5,492.1	5,767.8	6,591.5	
France	10,000	10,444	22,010	20,010	00,021	4,57 1.7	7,720.2	0,402.1	0,707.0	0,001.0	
TBF	78,364	86,003	108,750	134,697	151,425	20.594.9	22,561.1	28.151.8	33.657.3	35.019.6	
PNS	19,976	18,847	20,299	21,719	19,432	2,497.1	2,486.0	2,760.7	3,099.6	2,842.5	
SIT	2,187	4,187	5,274	5,675	5,906		0.4	0.5	0.5	0.5	
CH Paris	683	173	nap	nap	nap	1.0	1.9	nap	nap	nap	
CH Province	883	22	nap	nap	nap	0.4	0.4	nap	nap	nap	
CREIC	21	0	nap	nap	nap	0.1	0.1	nap	nap	nap	
Germany <sup>2</sup>											
RTGS <sup>plus</sup> (former ELS)	61,501	117,616	145,123	157,005	172,023	2,577.6	3,687.0	4,424.5	4,604.2	4,805.1	
EAF (former EAF2)	31,343	nap	nap	nap	nap	2,849.3	nap	nap	nap	nap	
RPS (former DTA)	1,971	1,990	2,372	2,637	2,610	0.9	0.9	1.1	1.2	1.2	
Hong Kong SAR											
HKD CHATS	11,134	10,536	11,174	13,146	14,936	3,208.8	3,082.5	3,185.3	3,482.4	3,668.9	
USD CHATS	931	1,274	1,232	1,356	1,588	1,346.8	1,565.3	1,233.2	1,065.0	1,069.3	
EUR CHATS	nap	nap	135	230	422	nap	nap	nap	nap	42,238.3	
Italy											
BI-REL	24,288	23,705	27,954	34,883	40,840		2,466.2	2,966.6	3,841.3	3,934.1	
BI-COMP	2,191	2,448	3,207	3,742	3,948	1.6	1.4	1.8	2.0	2.1	
Japan	450 700	444400	101 010	400.007	400 450	04 074 4	00 440 7	00 077 0	00.405.0	07.050.0	
BOJ-NET FXYCS	156,796	144,186	161,916	188,837	196,452		30,112.7				
Zengin System	56,643	48,954 17,834	41,568 18,909	39,782 20,828	36,514 21,235	-	5,299.4 14.3	5,185.5 15.0	5,366.7 16.2	5,318.6 16.2	
Tokyo Clearing House	20,133 5,252	3,997	3,832	3,949	3,301	73.4	63.5	66.6	74.3	67.6	
Netherlands	3,232	3,331	3,032	3,343	3,301	73.4	03.3	00.0	74.5	07.0	
TOP	21,665	23,519	29,669	36,878	38,126	5,252.1	4,941.0	6,025.4	7,400.7	8,104.9	
Interpay	1,409	1,577	2,008	2,281	2,413	0.6	0.6	0.7	0.7	0.7	
Singapore	,	,-	,	, -	, -						
MEPS	6,447	5,604	5,658	5,831	7,564	3,114.5	2,747.1	2,656.5	2,603.1	3,001.7	
SGDCCS	233	212	212	229	244	2.5	2.4	2.4	2.7	2.9	
USDCCS	11	11	14	20	24	27.3	25.0	24.7	28.1	31.2	
IBG	45	51	62	72	80	1.3	1.1	1.0	1.1	1.1	
EFTPOS	3	3	4	5	6	0.0	0.0	0.0	0.0	0.0	
Sweden											
E-RIX	1,377	1,383	2,141	2,220	2,591		17,291.2				
K-RIX	10,962	11,731	13,932	14,633	14,867	,	10,664.4		•	9,911.2	
Bankgirot	376	416	523	625	690		1.1	1.4	1.5	1.4	
Dataclearing	107	124	208	252	230	1.6	1.7	2.0	2.4	2.8	
Switzerland	26.005	20 707	22 202	22 700	22.050	107.0	100 5	170.0	101 5	400 5	
SIC DTA/LSV/	26,905	28,767	33,202	33,762	32,956		162.5	172.3	161.5	128.5	
DTA/LSV United Kingdom	202	229	253	244	155	2.0	2.2	2.5	2.6	2.3	
CHAPS Euro	24,117	23,919	33,954	39,798	45,704	10,019.7	6,981.7	7,996.7	8,489.2	9,034.3	
CHAPS Sterling	70,937	71,880	83,255	94,864	94,299	-	2,987.0	3,059.5	3,350.0	3,187.2	
Cheque/credit	2,073	2,102	2,210	2,410	2,270		13.7	15.4	17.7	18.0	
BACS	3,118	3,571	4,200	5,278	5,719		2.5	2.6	2.6	2.4	
United States	0,110	0,07 1	1,200	0,210	0,110		2.0	2.0	2.0		
CHIPS	311,707	315,709	326,561	345,793	349,871	5,162.6	4,987.7	5,061.9	5,045.0	4,894.5	
Fedwire	423,606	405,762	447,342	478,947	518,547		3,529.0	3,628.6	3,828.4	3,915.4	
European Union	,,,,,,	,	. ,	-,	,1	,,,,,,,,,,	-,0.0	-,0.0	.,	.,	
TARGET	294,315	373,434	478,474	558,091	613,614	5,476.6	5,794.2	7,168.2	8,045.1	8,042.1	
EURO1 / STEP1	46,572	45,274	50,578	54,880	53,333		1,221.6	1,174.2	1,238.2	1,149.2	
STEP2 <sup>3</sup>	nap	nap	11	75	130		nap	2.9	2.9	2.8	
	· · r	- F	•	_			F	_	_		
Memo:											
CLS <sup>3</sup>	nap	23,790	220,574	379,506	545,838	nap	14,074.6	11,442.5	11,649.8	11,406.8	
Note: For the footnotes reg											

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates.

Table PS3 (cont)

System		ge on prev	eal value o			Value of	transaction	217.7 1,302.8 1,386.7 1,67 42.9 47.6 53.3 6 28.7 30.4 30.6 3 8.2 10.2 14.1 2 883.6 4,936.3 5,068.9 5,78 28.1 23.7 20.4 2 198.4 201.1 202.0 2 2608.7 2,592.6 2,559.3 2,67 892.2 6,040.0 6,534.7 7,12 891.2 1,127.4 1,053.7 9 291.2 1,127.4 1,053.7 9 291.2 1,127.4 1,053.7 9 21.5 nap		
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey TIC-RTGS	-14.2	-6.4	17.2	16.5	22.0	1,560.5	1 017 7	1 202 0	1 206 7	1,611.2
TCS	-14.2 -43.5	-6.4 -6.4	21.5	22.5	31.1	55.0	,			66.6
ICH	-18.6	16.6	16.1	10.2	10.0	29.5				32.1
BKM	-5.2	39.2	36.1	51.0	22.8	7.1				16.5
Belgium							_			
ELLIPS	5.4	-8.3	0.1	6.2	14.8	5,528.7	4,983.6	4,936.3	5,068.9	5,784.2
Clearing house	-17.2	-16.7	-14.6	-11.1	-19.7	34.3	28.1	23.7	20.4	16.3
CEC	2.5	2.9	2.5	3.9	5.5	196.2	198.4	201.1	202.0	211.9
Canada										
LVTS	6.7	-0.6	5.9	2.9	8.8	2,571.5	2,508.7	2,592.6	2,559.3	2,677.3
France TBF	20.2	2.2	2.2	10.0	10.4	E 040 0	E 000 0	0.040.0	0.504.7	7 400 4
PNS	26.2 0.4	2.2 -12.1	3.3 -12.0	10.0 -5.0	10.4 -12.2	5,849.2 1,491.1	,	,		7,129.4 914.9
SIT	-2.3	78.4	2.9	-3.0 -4.4	2.2	163.3				278.1
CH Paris	3.3	-76.4	nap	nap	nap	51.0				nap
CH Province	-16.6	-97.7	nap	nap	nap	65.9		•	•	nap
CREIC	-12.4	-98.3	nap	nap	nap	1.5		-	-	nap
Germany <sup>2</sup>				•						•
RTGS <sup>plus</sup> (former ELS)	nap	79.1	2.0	-3.4	7.6	3,252.4	5.822.4	5.947.0	5.725.2	6,180.2
EAF (former EAF2)	-17.2	nap	nap	nap	nap	1,657.5	nap	,	*	nap
RPS (former DTA)	-3.7	-5.4	-1.5	-0.8	-2.9	104.2	98.5	97.2	96.2	93.8
Hong Kong SAR										
HKD CHATS	-3.0	-2.4	8.7	18.1	12.4	6,685.9	6,435.9			8,401.2
USD CHATS	nap	41.2	-0.9	10.5	15.9	558.8	778.3			893.2
EUR CHATS	nap	nap	nap	71.9	81.4	nap	nap	84.9	139.0	237.6
Italy BI-REL	1 5	-9.7	-4.2	10.8	14.6	2,173.7	1 0 1 1 7	1 05 1 0	2.010.0	2 240 6
BI-COMP	-4.5 6.0	-9.7 3.4	-4.2 6.4	3.6	3.3	196.1				2,310.6 223.4
Japan	0.0	0.4	0.4	3.0	0.0	130.1	200.0	212.1	210.0	220.4
BOJ-NET	-45.8	-4.4	4.2	8.8	6.3	3,824.7	3,672.5	3,828.5	4,098.6	4,317.5
FXYCS	11.0	-10.1	-21.2	-10.7	-6.2	1,381.7	1,246.9			802.5
Zengin System	10.0	-7.9	-1.6	2.8	4.2	491.1	454.2	447.1	452.1	466.7
Tokyo Clearing House	-17.8	-20.8	-11.0	-3.9	-14.6	128.1	101.8	90.6	85.7	72.6
Netherlands										
TOP	8.7	-0.8	3.1	11.4	1.9	5,407.5	5,363.7			6,070.5
Interpay	2.7	2.3	4.0	1.8	4.3	351.6	359.7	372.9	3/4./	384.2
Singapore MEPS	19.4	-12.8	-2.3	-1.7	27.1	7,511.9	6,335.5	6 125 8	5 458 8	6,478.4
SGDCCS	-8.7	-8.6	-3.6	3.2	4.6	271.7			,	209.1
USDCCS	-8.0	0.9	19.7	37.7	21.4	12.7				20.8
IBG	10.8	14.2	16.8	10.9	9.6	52.5				68.9
EFTPOS	15.9	13.2	12.3	13.8	17.1	3.6	3.9	4.3	4.5	4.9
Sweden										
E-RIX	-23.2	-6.4	26.3	-6.7	15.8	622.4	566.9	703.8	635.7	725.5
K-RIX	2.4	-1.3	-3.4	-5.5	2.6	4,954.7	4,807.6	4,579.3	4,190.3	4,163.0
Bankgirot	0.3	2.1	2.3	7.4	11.6	169.8	170.5	172.0	178.9	193.3
Dataclearing Switzerland	-20.0	7.0	35.8	9.1	-7.7	48.4	50.9	68.2	72.1	64.4
SIC	0.7	-2.0	-0.8	-6.9	-3.2	10 7/0 8	10,394.3	10 273 8	9,373.6	9,011.6
DTA/LSV	-12.1	3.8	-5.1	-11.7	-36.8	80.8	82.8	78.2	67.7	42.5
United Kingdom		0.0	0		00.0	00.0	02.0	. 0.2	0	0
CHAPS Euro	nav	-7.1	16.9	5.1	12.6	1,680.4	1,520.2	1,873.0	1,846.8	2,051.6
CHAPS Sterling	-0.9	-4.0	5.0	0.3	-1.8	4,942.6	4,568.3	4,592.7	4,402.1	4,233.0
Cheque/credit	-2.1	-3.9	-4.7	-4.1	-6.9	144.4	133.6	121.9	111.8	101.9
BACS	11.3	8.5	6.6	10.6	7.1	217.2	227.0	231.7	244.9	256.7
United States										
CHIPS	4.3	0.0	1.4	3.3	-1.6	3,077.7	3,015.5	2,976.5	2,946.9	2,801.9
Fedwire	9.1	-5.4	8.0	4.4	5.3	4,182.5	3,875.6	4,077.4	4,081.6	4,152.7
European Union <sup>4</sup>	20.0	47.0	47	2.0	7 7	4 202 2	E 150 1	6 447 7	7 204 4	7 674 4
TARGET EURO1 / STEP1	22.3 2.7	17.8 -9.8	4.7 -8.7	3.8 -3.4	7.7 -4.8	4,202.2 665.0	5,153.1 624.7	6,417.7 678.4	7,204.1 708.4	7,671.1 666.7
STEP2 <sup>3</sup>	2.7 nap	-9.o nap	-o.7 nap	-3.4 489.9	-4.0 69.3	nap	nap	0.2	1.0	1.6
Note: For the footnotes rega						Παρ	ιιαμ	0.2	1.0	1.0

Table PS4
Participation in selected interbank funds transfer systems (end of year)

System		Total num	ber of par	ticipants						
oyoto	2001	2002	2003	2004	2005	2001	2002	direct part 2003	2004	2005
Turkey										
TIC-RTGS	68	59	55	51	50	68	59	55	51	50
TCS	nav	437	516	527	546	nav	437	516	527	546
ICH	52	50	49	44	42	52	50	49	44	42
BKM Belgium	34	33	30	29	34	34	33	30	29	34
ELLIPS	96	93	89	87	85	17	17	16	15	15
Clearing house	94	92	88	83	82	34	34	32	27	25
CEC	94	95	89	85	83	33	30	28	24	22
Canada										
LVTS	nav	nav	nav	nav	86	14	14	14	15	15
France										
TBF	192	176	173	171	167	192	175	156	151	144
PNS SIT	28	27	42	42	45 505	23 17	21 17	20	18 14	17
CH Paris	713 nap	686 nap	641 nap	626 nap	595 nap	nap	17 nap	15 nap	nap	13 nap
CH Province	nap	nap	nap	nap	nap	пар	nap	пар	пар	пар пар
CREIC	nap	nap	nap	nap	nap	nap	пар	пар	nap	пар
Germany <sup>2</sup>					1.54					
RTGS <sup>plus</sup> (former ELS)	8,664	8,402	8,505	8,499	842	59	75	93	127	171
EAF (former EAF2)	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
RPS (former DTA)	326	318	316	320	267	326	318	316	320	267
Hong Kong SAR										
HKD CHATS	136	130	130	130	129	136	130	130	130	129
USD CHATS	180	212	227	232	230	65	64	67	68	68
EUR CHATS	nap	nap	45	44	45	nap	nap	23	23	23
<b>Italy</b> BI-REL	863	844	787	767	762	682	663	204	120	118
BI-COMP	nav	nav	nav	nav	702	211	207	179	139	137
Japan	i i a v	nav	i i a v	nav	, 20		207	,,,	700	101
BOJ-NET <sup>6</sup>	669	637	617	600	594	669	637	617	600	594
FXYCS <sup>7</sup>	244	234	230	223	225	40	37	34	34	32
Zengin System	2,021	1,816	1,678	1,619	1,579	154	153	149	146	146
Tokyo Clearing House	420	381	370	356	354	121	116	111	106	106
Netherlands										
TOP	166	166	155	161	155	108	108	106	102	100
Interpay	72	72	73	69	68	72	72	73	69	68
Singapore MEPS	130	119	117	115	111	86	76	70	67	64
SGDCCS	104	85	61	60	61	40	36	34	34	34
USDCCS	53	48	43	42	43	31	31	31	31	32
IBG	45	38	38	39	39	41	35	35	36	36
EFTPOS	5	3	4	4	4	5	3	4	4	4
Sweden										
E-RIX	15	13	13	12	11	15	13	13	12	11
K-RIX	20	19	19	19	21	20	19	19	19	21
Bankgirot	21 21	19	18	17 17	19	21	19 19	18	17 17	19 19
Dataclearing Switzerland	21	19	18	17	19	21	19	18	17	19
SIC	313	314	307	306	325	313	314	307	306	325
DTA/LSV	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
United Kingdom			- 1	- 1		-7-				
CHAPS Euro	nav	nav	nav	nav	nav	20	20	19	19	19
CHAPS Sterling	nav	nav	nav	nav	nav	13	13	13	13	15
Cheque/credit	516	418	456	445	434	12	12	12	12	11
BACS	62,012	62,012	62,012	65,012	65,013	12	12	12	12	13
United States CHIPS	58	54	54	51	40	2011	nou	2011	2011	nou
Fedwire <sup>6, 7</sup>				7,134	48	nav	nav	nav	nav	nav
European Union	7,772	7,650	7,374	1,134	6,819	nav	nav	nav	nav	nav
TARGET	10,580	10,253	10,272	10,253	10,197	1,629	1,576	1,105	1,050	1,126
EURO1 / STEP1	159	213	246	256	267	159	213	246	256	267
STEP2 <sup>3</sup>	nap	nap	1,150	1,451	1,625	nap	nap	48	78	97
	- 1	-1.	,	'	,	-1-	-1-	-	-	-
Memo:										
CLS	nap	50	54	57	56	nap	50	54	56	55
Note: For the footnotes rega	arding the sy	stems, see	after Comp	arative Tabl	e PS4.					

99

Table PS4 (cont)

System	Concentr	ation ratio	in terms	of volume	(in %)	Concent	ration rat	io in terms	of value	(in %)
Oystem	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey	2001			2001	2000	2001			200-	2000
TIC-RTGS	49.0	57.0	56.0	46.0	56.0	62.0	66.0	71.0	66.0	60.0
TCS	22.7	26.2	23.3	26.9	25.0	30.4	34.6	66.0	68.0	2.3
ICH	48.0	51.0	49.0	50.0	47.0	30.0	40.0	30.0	33.0	36.0
BKM	79.8	77.8	79.8	81.3	82.8	79.8	77.8	80.0	80.0	83.0
Belgium										
ELLIPS	80.0	83.0	82.0	84.0	84.0	85.4	87.0	88.0	89.0	90.0
Clearing house	72.1	74.0	78.0	81.8	85.0	71.6	70.5	81.0	85.1	90.5
CEC Canada	73.2	73.7	81.0	83.4	82.0	72.9	74.0	80.0	81.3	81.5
LVTS	84.7	84.2	84.1	84.0	83.1	82.9	81.3	80.2	79.9	77.0
France	04.7	04.2	04.1	04.0	03.1	02.9	01.5	00.2	13.3	11.0
TBF	40.5	44.1	46.2	47.1	45.8	43.6	46.1	48.1	52.0	54.0
PNS	60.1	63.3	63.7	62.8	62.2	54.6	61.6	61.1	59.0	61.3
SIT	nav	57.1	57.5	60.4	60.5	nav	49.7	50.7	60.5	59.3
CH Paris	nav	nav	nap	nap	nap	nav	nav	nap	nap	nap
CH Province	nav	nav	nap	nap	nap	nav	nav	nap	nap	nap
CREIC	nav	nav	nap	nap	nap	nav	nav	nap	nap	nap
Germany										
RTGS <sup>plus</sup> (former ELS)	nav	53.3	52.5	51.9	48.0	nav	53.7	53.7	53.7	54.0
EAF (former EAF2)	nav	nap	nap	nap	nap	nav	nap	nap	nap	nap
RPS (former DTA)	nav	nav	33.0	29.3	28.4	nav	nav	20.2	18.7	16.7
Hong Kong SAR										
HKD CHATS	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
USD CHATS	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
EUR CHATS	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	40.7	45.4	47.0	47.5	54.5	00.7	07.7	00.0	44.7	40.4
BI-REL	40.7	45.1	47.3	47.5	51.5	38.7	37.7	38.8	44.7	48.1
BI-COMP	26.2	34.0	35.5	41.6	44.1	22.5	31.5	33.3	36.6	38.7
<b>Japan</b> BOJ-NET	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
FXYCS	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Zengin System	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Tokyo Clearing House	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands										
TOP	70.4	64.2	62.7	62.0	58.7	70.8	70.7	69.4	69.1	73.1
Interpay	93.3	93.4	93.5	93.5	96.9	92.3	92.0	92.2	93.0	96.0
Singapore										
MEPS	53.0	56.0	61.0	56.0	nav	nav	nav	nav	52.0	nav
SGDCCS	76.5	85.6	77.6	87.9	87.9	69.2	81.1	71.7	82.5	81.9
USDCCS	57.8	63.3	65.2	70.6	72.5	59.4	61.0	62.5	64.5	66.4
IBG	73.1	83.8	88.6	88.7	88.6	69.2	74.1	80.3	80.0	80.2
EFTPOS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sweden		00.0	00.4	00.0	00.4		00.0	00.5	00.0	00.0
E-RIX	nap	98.0	98.4	98.3	98.4	nap	98.9	99.5	99.3	99.6
K-RIX	nav	83.5	85.5	85.7	85.5	nap	87.9	84.2	81.6	80.3
Bankgirot Dataclearing	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Switzerland	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
SIC	54.4	55.1	57.8	60.5	62.2	71.9	70.5	70.0	70.2	69.5
DTA/LSV	54.4	55.1	57.8	60.5	62.2	71.9	70.5	70.0	70.2	69.5
United Kingdom	04.4	00.1	07.0	00.0	02.2	71.5	70.0	70.0	70.2	00.0
CHAPS Euro	69.0	69.0	70.0	72.0	72.0	84.0	84.0	83.0	81.0	79.0
CHAPS Sterling	84.0	83.0	81.0	80.0	79.0	79.0	78.0	77.0	78.0	78.0
Cheque/credit	78.0	78.0	78.0	79.0	78.0	81.0	80.0	80.0	79.0	78.0
BACS	75.0	74.0	74.0	76.0	76.0	nav	nav	nav	nav	nav
United States										
CHIPS	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Fedwire	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
European Union										
TARGET	16.8	26.4	25.9	25.5	22.6	17.9	22.3	21.8	21.7	19.9
EURO1 / STEP1	24.3	23.5	22.8	25.5	26.2	43.0	44.0	44.5	45.4	45.0
STEP2 <sup>3</sup>	nap	nap	60.0	39.9	33.7	nap	nap	57.6	37.3	31.7
Note: For the footnotes rega	arding the sy	stems, see	after Compa	arative Table	e PS4.					

#### Footnotes for Tables PS1-4

Canada: <sup>1</sup> Final settlement occurs at 18:30. However, due to the risk controls in place, the LVTS provides intraday settlement finality. <sup>2</sup> No standard hours.

**Germany:** <sup>1</sup> Payments are processed in several windows. Payment orders which are submitted between 07:00 and 20:00 (domestic credit transfers as well as STEP2 credit transfers) and between 09:00 and 21:00 (direct debits and payments arising from the paperless cheque collection procedure) are processed in the evening processing. The equivalent values of credit transfers are blocked in the submitter's Bundesbank account on the submission day from 19:00 and transformed into account debit entries on the next business day. The value of cheques and direct debits is credited on the business day following submission ("subject to collection"). Payment orders which are submitted exclusively by data telecommunication between 20:00 and 07:00 (credit transfers) and 21:00 and 09:00 (direct debits and payments arising from the paperless cheque collection procedure) are processed in the morning processing. The payments are booked and delivered directly on the morning of the processing day. During the morning processing, delivery and booking of cross-border transfers received from EBA/STEP2 and the data delivery and booking of GSE items and BSE cheques (only paper-based submission by public authorities) submitted on the previous day also take place. 
<sup>2</sup> Introduction of RTGS<sup>plus</sup> on 5 November 2001 and closedown of ELS and EAF. ELS serves, along with SWIFT, as a means of communication to RTGS<sup>plus</sup> only.

Hong Kong SAR: 1 Central Monetary Authority.

**Italy:** <sup>1</sup> Transfer orders are legally enforceable and binding on third parties when the system completes the gathering of the transfer orders or the bilateral balances stemming from the two BI-COMP subsystems ("Local Clearing" and "Retail").

Japan: <sup>1</sup> Processing costs of transfer orders are recovered from the participants, but development and maintenance costs are covered by the Bank of Japan. <sup>2</sup> Cutoff time is extended to 19:00 only for the participants who are approved by the Bank of Japan. <sup>3</sup> Cutoff time for bills and cheques sorted by banks. Bills and cheques for sorting at TCH must be submitted by 21:00 of the day before the value date. <sup>4</sup> With the consent of the receiving bank, the third-party orders may be entered for same day settlement until the cutoff time of the system. <sup>5</sup> 19:00 for market participants with access to the extended operating hours of BOJ-NET.

**Netherlands:** <sup>1</sup> In principle; sometimes less.

**Singapore:** <sup>1</sup> Where they differ, times for Saturdays are shown in brackets. <sup>2</sup> MEPS does not impose a cutoff time for third-party/international correspondents' payments, but the Association of Banks in Singapore (ABS) bye-laws on MEPS require all such payments to be made by 17:30 on Mondays-Fridays and 12:30 on Saturdays. <sup>3</sup> On weekend transaction submissions, settlement occurs on the following Monday.

**Sweden:** <sup>1</sup> No same day transaction. <sup>2</sup> Payments become final on completion of settlement, which occurs throughout the day. <sup>3</sup> The settlement points for the different flows are spread out between 07:15 and 16:20. <sup>4</sup> The settlement points for the different flows are spread out between 07:15 and 15:20.

**Switzerland:** <sup>1</sup> R for remote members. <sup>2</sup> The system is open for input 24 hours a day. Settlement services are limited by the indicated opening and closing times. A value day starts at 17:00 local time on the previous business day and ends at 16:15 on the value day. Third-party payments may be entered for same day settlement until 15:00. Between 15:00 (cutoff 1) and 16:00 (cutoff 2) only cover (bank-to-bank) payments are accepted for same day settlement. From 16:00 to 16:15, transactions are restricted to the processing of lombard credits (collateralised loans from the Swiss National Bank at a penalty rate).

United Kingdom: 1 In net settlement, the payment becomes final and irrevocable when the payment has had an effect on the bilateral net position

**United States:** <sup>1</sup> Local times are Eastern time. <sup>2</sup> CHIPS, the Clearing House Interbank Payments System, is operated by CHIPCo, which is owned by the Clearing House (formerly known as the New York Clearing House Association). <sup>3</sup> Any depository institution, including a US branch or agency of a foreign bank, may maintain an account with a Federal Reserve Bank. To obtain an account, an institution must execute an account agreement pursuant to Operating Circular 1 (Account Relationships), which outlines the terms and conditions for a master account. An institution with an account at a Federal Reserve Bank may access Fedwire subject to the conditions detailed in Federal Reserve Operating Circular 6 and the Federal Reserve Board's Policy Statement on Payment System Risk. <sup>4</sup> Payments over CHIPS become final on completion of settlement, which occurs throughout the day. <sup>5</sup> Trading occurs among dealers for funds on deposit at Federal Reserve Banks (ie federal funds) as early as 06:30. <sup>6</sup> Number of depository institutions that used the Fedwire Funds Transfer Service in 2004. Other Fedwire Funds Transfer participants not included here are: the US Treasury and any entity specifically authorised by federal statute to use the Reserve Banks as fiscal agents or depositories; entities designated by the Secretary of the Treasury; foreign central banks, foreign monetary authorities, foreign governments and certain international organisations. <sup>7</sup> Data prior to 2003 are revised to correspond to the 2004 figure.

**European Union**: <sup>1</sup> All times are Central European Time (CET). <sup>2</sup> STEP2 payments are settled in EURO1 at 07.30 CET. <sup>3</sup> STEP2 commenced settlement transactions on 29 April 2003. <sup>4</sup> Using euro area consumer price (HICP) inflation and GDP respectively.

**CLS**: <sup>1</sup> Includes some non-bank financial institutions. <sup>2</sup> Central European Time (CET). <sup>3</sup> Each side of the transaction is counted separately. Spot and forward transactions have two sides, while swaps have four.

Table SSS1
Features of selected securities settlement systems (at end-2005)

System	Type of securities	Owner/ manager	Delivery lag (T+n)	Settlement of cash leg	Securities settlement (delivery)
Turkey					,
TIC-ESTS	G	СВ	nap	G	G, RTGS
TCS	G, E	SE	T+0, T+2	N	N
Belgium					
NBB SSS	B, C, G, O	СВ	T+2, T+3	G	G
CIK (FMS)	E, O	SE <sup>1</sup> , O	T+3	N	G
CIK (EMSS)	B, E, O	SE <sup>1</sup> , O	T+3	G	G
Euroclear Bank	B, C, G, E, O	O, B	T-T+n	G, RTGS	G, RTGS
Canada	, , , , , , ,	- ,		-,	-,
CDSX	B, G, E, O	B, SE, O	T, T+1, T+3	N	G
France	_, _, _, _	-,, -	,, ,		
RGV2					
Irrevocable channel	B, C, G, E, O	Euroclear France	T-T+100	RTGS	RTGS
Revocable channel	B, C, G, E, O	Euroclear France	T-T+30	N	G
Germany					
Clearstream Banking Frankfurt <sup>1</sup>	B, G, E, O	SE	T-T+40	N, RTGS	G, RTGS
Hong Kong SAR					
CCASS	E, O	SE	T+2, T+3	N, RTGS	G, RTGS
CMU	G, O	CMA	T	G, N	G, N
Italy					
LDT	B, G, E, O	СВ	T+3 (B, G), T+5 (E, O)	N	N
Monte Titoli	B, G, E, O	Monte Titoli	Ť	nap	RTGS
EXPRESS II	B, G, E, O	Monte Titoli	T-T+n	N, RTGS	N, RTGS
Japan					
BOJ-NET JGB Services	G	СВ	T-T+3	RTGS	RTGS
JASDEC	O <sup>1</sup>	JASDEC	T-T+3	RTGS	RTGS
	$E^2$	JASDEC	T-T+3	N	RTGS
	E <sup>3</sup>	JASDEC	T+2, T+3	N	N
Netherlands		= =	, -		
Euroclear Netherlands	B, G, E	Euroclear Netherlands	T+3	RTGS	RTGS
Singapore					
DCSS	В	SE	T+n <sup>1</sup>	G	G
CDP	E, O	SE	T+3	N	G
MEPS	G	CB	T+1, T+2, T+3	RTGS	G
Sweden					
Stockholmsbörsen	0	0	T+3	N	N
VPC	G, E, O	B, O	T+2, T+3	G, N	G
Switzerland			•		
SECOM	B, G, E, O	B, O	T+3	G	G
United Kingdom	, .				
CREST	B, C, G, E, O	B, O	T-T+3	RTGS	RTGS
United States	' ' ' ' '	•			
NBES <sup>1</sup>	G, O	СВ	T, T+1	RTGS	RTGS
· ·	B, C, E, O	B, O	T, T+3	N	G

Table SSS1 (cont) Intraday DVP (delivery Central Cash settlement System Closing time for versus payment) finality same day securities agent mechanism transactions depository Turkey DVP 1 **CBRT** TIC-ESTS 17:30 **CBRT** yes **TCS** DVP 3 no 14:00 CBRT, CRA Belgium 17:00, 17:30<sup>2</sup> NBB SSS DVP 1 **NBB SSS** NBB yes CIK EMSS (OTC) DVP 1 15:15 (DVP) CIK NBB yes 16:00 (FOP) DVP 2 NBB FMS (stock exchange) yes 14:00 CIK Euroclear Bank DVP 1 18:00 Euroclear Euroclear/NBB yes (eurobonds) Canada CB1 **CDSX** DVP 2 yes 16:00 CDS France RGV2 DVP 1 17:00 Euroclear France CB Irrevocable channel yes DVP 2 16:00 Revocable channel Euroclear France CB ves Germany DVP 1, DVP 2/32 yes 17:30,3 18:004 Clearstream CB, B Clearstream Banking Frankfurt<sup>1</sup> Banking Frankf. Hong Kong SAR **CCASS** DVP 1, DVP 3 15:30 **CCASS** В no CMU DVP 1, DVP 3 CMU CMA yes 15:00 Italy Monte Titoli LDT DVP 3 СВ no nap Monte Titoli 18:30 Monte Titoli nap nap yes DVP 1, DVP 3 **EXPRESS II** 18:00 Monte Titoli CB yes Japan **BOJ-NET JGB Services** DVP 1 yes 16:30 СВ CB **JASDEC JASDEC** DVP1 16:20 CB yes DVP2 13:50 **JASDEC** CB no DVP3 no nap **JASDEC** CB, B Netherlands DVP 1 **Euroclear Netherlands** yes 16:00,<sup>1</sup> 17:30<sup>2</sup> Euroclear CB, B Netherlands Singapore DCSS DVP 1 CDP СВ yes nap CDP DVP 2 CDP yes nap В **MEPS** DVP 1 yes nap<sup>2</sup> CB CB Sweden Stockholmsbörsen yes 17:30 OM CB VPC 17:00 **VPC** СВ ves yes **Switzerland SECOM** DVP 1 SIS yes 16:00 CB SegaInterSettle **United Kingdom CREST** DVP 1 yes 14:55 nap CB, B **United States** 

DVP 1

yes

15:15<sup>2</sup>

15:20<sup>2</sup>

СВ

DTC

CB

CB

NBES<sup>1</sup>

DTC

Table SSS2
Transactions processed by selected securities settlement systems: number of transactions (total for the year)

System	Nun	nber of tr	ansactio	ns (millio	ons)	Increase in the number of transactions (% change on previous year)				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey										
TIC-ESTS	0.2	0.2	0.2	0.2	0.2	246.4	-34.4	-2.0	16.5	-1.6
TCS (stock transactions)	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
TCS (DDN transactions)	0.5	0.5	0.7	0.9	1.1	-16.0	7.6	35.4	28.7	14.9
Belgium										
NBB SSS	0.1	0.2	0.2	0.2	0.3	26.2	9.5	10.3	-13.2	74.9
CIK	0.4	0.4	0.4	0.5	1.0	43.3	0.6	-1.3	29.7	126.3
Euroclear Bank	15.1	18.4	22.0	24.0	27.0	nap	21.9	19.6	9.1	12.3
Canada										
CDSX (former SSS and DCS)	33.2	30.4	39.2	49.3	66.0	-22.9	-8.4	29.2	25.7	33.8
France										
Euroclear France	31.4	29.0	27.8	27.9	32.9	-23.0	-7.6	-4.1	0.1	18.0
Germany										
Clearstream Banking Frankfurt <sup>1</sup>	66.9	67.3	45.6	33.3	47.3	-11.0	0.5	-32.2	-27.0	42.1
Hong Kong SAR										
CCASS	29.4	24.6	33.8	43.3	43.3	-35.0	-16.4	37.6	28.1	0.1
CMU	0.0	0.0	0.0	0.0	0.0	-16.1	-13.5	-8.2	-10.2	26.8
Italy										
LDT	42.4	40.9	34.2	3.4	nap	-4.2	-3.4	-16.4	-90.1	nap
Monte Titoli	1.8	1.8	1.6	1.6	1.2	31.0	-3.5	-7.9	-1.8	-25.6
EXPRESS II	0.1	0.1	0.2	21.9	25.3	nav	3.1	90.0	11,411	15.8
Japan										
BOJ-NET JGB Services	2.9	2.9	2.9	3.1	3.3	29.1	0.0	2.8	6.3	6.7
JASDEC	36.3	35.5	37.6	48.1	61.4	4.5	-2.0	5.7	27.9	27.8
Netherlands										
Euroclear Netherlands	3.1	3.0	3.1	2.9	3.0	-3.0	-2.6	2.6	-5.1	2.9
Singapore										
DCSS	0.0	0.0	0.0	0.0	0.0	170.0	18.1	-4.3	-6.0	-18.6
CDP	· ·	111,837	,			-6.3	20.2	94.6	-17.9	14.2
MEPS	0.1	0.1	0.1	0.0	0.0	150.0	0.0	40.0	-42.9	13.0
Sweden										
Stockholmsbörsen	96.5	98.6	102.9	131.1	141.8	22.7	2.2	4.4	27.4	8.2
VPC	6.1	10.9	10.3	11.6	13.0	-21.1	78.8	-5.4	12.6	12.4
Switzerland										
SECOM	13.4	15.3	19.9	20.0	22.5	-7.7	13.8	30.3	0.4	12.6
United Kingdom										
CREST	73.4	75.7	63.8	64.2	68.8	24.2	3.1	-15.7	0.6	7.2
CMO	0.2	0.1	0.1	nap	nap	-0.5	-50.0	0.0	nap	nap
United States										
NBES <sup>1</sup>	15.0	17.4	20.4	20.2	22.4	10.4	16.1	16.8	-1.0	10.9
DTC	220.1	224.3	225.2	243.0	263.0	-4.4	1.9	0.4	7.9	8.2

Table SSS3

Transactions processed by selected securities settlement systems: value of transactions (total for the year)

System	Value	e of trans	actions	(USD billi	ons) <sup>1</sup>	Average value per transaction					
					/		(USE	D thousands) <sup>1</sup>			
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	
Turkey										,	
TIC-ESTS	2,806	1,255	1,527	1,800	1,817	11,988	8,180	10,157	10,274	10,536	
TCS (stock transactions)	23	22	26	45	68	nav	nav	nav	nav	nav	
TCS (DDN transactions)	298	240	286	458	793	599	448	394	491	739	
Belgium											
NBB SSS	2,481	2,576	4,099	4,201	6,390	17,099	16,209	23,379	27,615	24,024	
CIK	90	92	85	147	201	254	258	240	321	194	
Euroclear Bank	77,762	97,555	133,332	164,750	191,780	5,150	5,302	6,061	6,865	7,113	
Canada											
CDSX (former SSS and DCS)	20,466	16,622	29,063	nav	nav	617	547	741	nav	nav	
France											
Euroclear France	39,046	49,952	59,364	182,457	207,330	1,244	1,722	2,134	6,551	6,306	
Germany											
Clearstream Banking Frankfurt <sup>1</sup>	nav	12,284	16,148	17,328	48,623	nav	183	354	521	1,029	
Hong Kong SAR											
CCASS	989	808	1,135	1,729	2,052	34	33	34	40	47	
CMU	683	725	670	548	852	15,757	19,319	19,477	17,731	21,739	
Italy											
LDT	26,090	31,177	39,130	2,716	nap	616	762	1,144	804	nap	
Monte Titoli	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
EXPRESS II	1,009	1,050	1,439	60,636	65,234	10,402	10,500	7,574	2,773	2,576	
Japan											
BOJ-NET JGB Services	85,857	88,319	101,044	130,454	147,008	30,004	30,865	34,365	41,742	44,092	
JASDEC	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Netherlands											
Euroclear Netherlands	863	690	779	959	1,183	281	231	253	329	394	
Singapore											
DCSS	6	5	5	5	4	1,298	1,023	929	998	1,138	
CDP	74	66	93	109	123	0	0	0	0	0	
MEPS	262	414	450	312	340	5,244	8,290	6,430	7,789	7,511	
Sweden											
Stockholmsbörsen	386	278	303	462	503	4	3	3	4	4	
VPC	8,492	9,155	10,802	12,590	14,514	1,398	843	1,051	1,088	1,116	
Switzerland											
SECOM	3,822	4,800	6,425	7,610	8,571	285	315	323	381	381	
United Kingdom											
CREST	74,892	77,263	95,162	142,837	162,110	1,020	1,021	1,492	2,225	2,356	
CMO	3,246	2,562	2,374	nap	nap	16,231	25,625	23,739	nap	nap	
United States					•						
NBES <sup>1</sup>	212,343	228,907	267,644	313,425	368,897	14,143	13,128	13,138	15,543	16,499	
DTC		103,600				545	462	469	489	563	

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates.

Table SSS3 (cont)

System	Increase	Value of transactions as a percentage of								
	(% chang	GDP								
			inflation)							
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Turkey										
TIC-ESTS	156.3	-57.3	2.0	1.9	-11.6	1,935	689	642	598	503
TCS (stock transactions)	-52.5	-9.2	2.4	46.4	32.0	16	12	11	15	19
TCS (DDN transactions)	37.0	-23.1	0.0	38.4	51.5	206	132	120	152	220
Belgium										
NBB SSS	14.2	-3.0	30.9	-8.6	48.5	1,071	1,021	1,322	1,168	1,723
CIK	29.8	-4.5	-24.6	54.4	33.9	39	37	27	41	54
Euroclear Bank	nav	17.2	12.4	10.2	13.6	33,567	38,670	42,999	45,802	51,720
Canada										
CDSX (former SSS and DCS)	28.9	-19.5	51.7	nav	nav	2,861	2,261	3,346	nav	nav
France										
Euroclear France	16.4	19.2	-2.9	173.0	11.5	2,914	3,422	3,297	8,852	9,762
Germany										
Clearstream Banking Frankfurt <sup>1</sup>	nav	nav	8.7	-4.2	175.5	nav	608	662	632	1,747
Hong Kong SAR										,
CCASS	-27.8	-15.7	44.0	52.9	17.4	594	494	717	1,043	1,154
CMU	-8.7	9.4	-5.2	-17.9	53.9	410	443	423	331	479
Italy										
LDT	7.2	10.6	1.9	-93.8	nap	2,335	2,554	2,596	157	nap
Monte Titoli	nav	nav	nav	nav	nap	nav	nav	nav	nav	nav
EXPRESS II	1,868.8	-3.7	11.3	3,642.9	5.3	90	86	95	3,510	3,691
Japan										
BOJ-NET JGB Services	-3.1	7.0	6.2	20.5	15.1	2,094	2,250	2,389	2,831	3,231
JASDEC	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands										
Euroclear Netherlands	-7.0	-26.9	-7.9	10.3	21.6	215	157	145	157	188
Singapore										
DCSS	117.7	-6.6	-15.9	-3.6	-9.1	7	6	5	4	4
CDP	-24.2	-9.5	35.8	11.4	11.3	86	75	101	102	106
MEPS	168.1	58.6	5.1	-34.0	6.8	306	469	487	292	291
Sweden										
Stockholmsbörsen	-12.7	-33.6	-11.2	36.8	10.1	175	114	100	132	141
VPC	12.9	-0.6	-4.1	4.8	16.4	3,838	3,752	3,551	3,605	4,064
Switzerland										
SECOM	10.8	15.1	15.1	8.5	11.6	1,526	1,734	1,988	2,113	2,344
United Kingdom										
CREST	5.6	-2.3	11.6	32.1	12.2	5,218	4,910	5,250	6,628	7,277
CMO	nav	-25.2	-16.0	nap	nap	226	163	131	nap	nap
United States					•					
NBES <sup>1</sup>	10.4	6.5	14.6	14.2	14.4	2,097	2,186	2,440	2,671	2,954
DTC	0.8	-14.7	0.0	9.6	21.3	1,185	990	963	1,012	1,187

<sup>&</sup>lt;sup>1</sup> Converted at yearly average exchange rates.

Table SSS4
Participation in selected securities settlement systems

System		Total nu	mber of participa	nts		
	2001	2002	2003	2004	2005	
Turkey						
TIC-ESTS	68	59	55	51	50	
TCS	nav	437	516	527	546	
Belgium						
NBB SSS	134	123	109	107	94	
CIK	104	97	93	87	81	
Euroclear Bank	1,778	1,634	1,538	1,491	1,497	
Canada	,	,	,	,	•	
CDSX (former SSS and DCS)	189	185	0	77	76	
France						
Euroclear France	145	193	241	190	184	
Germany						
Clearstream Banking Frankfurt <sup>1</sup>	422	437	411	405	369	
Hong Kong SAR					000	
CCASS	527	529	493	487	480	
CMU	354	333	330	324	307	
Italy	001	000	000	021	001	
LDT	281	266	212	nap	nap	
CAT	nap	nap	nap	nap	nap	
Monte Titoli	1,867	1,916	1,869	1,967	2,174	
EXPRESS II	107	1,510	153	131	129	
Japan	101	120	100	101	120	
BOJ-NET JGB Services						
(book-entry system)	360	348	341	340	335	
BOJ-NET JGB Services	000	040	041	040	000	
(registration system)	398	379	370	357	351	
JASDEC (equities)	290	272	275	272	277	
JASDEC (CP)	nap	nap	47	57	65	
Netherlands	пар	Пар	•••	O1	00	
Euroclear Netherlands	56	82	80	79	57	
Singapore	00	02	00	7.5	07	
DCSS	50	52	51	44	44	
CDP	1,196	1,208	1,220	1,324	1,278	
MEPS	133	120	117	115	111	
Sweden	100	120		110		
Stockholmsbörsen	84	83	79	79	100	
VPC	47	45	44	44	42	
Switzerland	71	40	77	77	72	
SECOM	433	489	462	448	437	
United Kingdom	400	400	402	440	407	
CREST	41,227	52,881	38,054	41,882	43,051	
CMO	64	58	nap	nap	nap	
United States	0-7	00	пар	пар	Пар	
NBES <sup>1</sup>	1,888	1,793	1,667	1,547	1,319	
DTC	1,000 475	1,793 474	436	362	334	
Note: For the footnotes regarding the sys		414	430	302	334	

#### Footnotes for Tables SSS1-4

**Belgium:** <sup>1</sup> Since January 2006, SSS CIK has been part of the Euroclear Group and been referred to as "Euroclear Belgium". (The ICSD that is part of the Euroclear Group is referred to as "Euroclear Bank".) <sup>2</sup> ESCB monetary policy and credit operations (FOP).

Canada: <sup>1</sup> The Bank of Canada acts as the cash settlement agent for CAD transactions that settle in CDSX. For domestic USD transactions that settle in CDSX, a commercial bank acts as the cash settlement agent. The value and volume of domestic USD transactions are relatively insignificant when compared to overall CDSX figures.

**Germany:** <sup>1</sup> Introduction of a central counterparty (Eurex Clearing (Equities)) in April 2003. <sup>2</sup> Mixture of DVP2 and DVP3 (securities disposition on a gross basis without finality until final settlement of net cash position). <sup>3</sup> For DVP (delivery versus payment) transactions. <sup>4</sup> For FOP (free of payment) transactions.

**Japan:** <sup>1</sup> Since January 2006, in addition to commercial paper, corporate and other debt securities have been eligible for JASDEC. <sup>2</sup> For equities traded outside the exchanges and cleared via the JASDEC DVP Clearing Corporation. <sup>3</sup> For exchange-traded equities cleared via the Japan Securities Clearing Corporation.

**Netherlands:** <sup>1</sup> For DVP (delivery versus payment) transactions. <sup>2</sup> For FOP (free of payment) transactions.

**Singapore:** <sup>1</sup> By mutual agreement between counterparties. <sup>2</sup> Intraday repo trading is possible but rare; in such cases, transactions must be completed by 16:30.

**United States:** <sup>1</sup> NBES is the Federal Reserve's National Book-Entry System. <sup>2</sup> Eastern time.