SECTION IV

PAYMENT SYSTEMS

Payment systems defines all the systems which are established with the aim of promoting the efficiency of interbank money transmissions, mitigating the risks arising from the payment and settlement system, ensuring convenience of funds management and providing new service opportunities to the banking sector[19]. The smooth functioning of national payment systems is important for central banks to ensure financial stability and to apply effective monetary policy. In line with the importance of the payment system, central banks are responsible for the oversight of all national payment systems and for the implications of the payment systems they operate. International institutions and central banks endeavor to set up certain standards to prevent potential risks that might arise from payment systems.

Since the transaction value and volume of payment systems are affected by international financial globalization, which is experienced as a result of rapid growth in financial markets and the transaction types and speed are differentiated by technological progress, the importance of payment systems in financial stability is increasing.

In Turkey, most payment systems transactions are realized electronically and the Central Bank plays an active role in the operations of these systems. In this section, the Turkish Interbank Clearing-Real Time Gross Settlement System (TIC-RTGS), the Electronic Security Transfer System (ESTS) and Cheque Clearing System will be explained respectively. Additionally, this section includes the Core Principles for Systemically Important Payment Systems and responsibilities of central banks in applying the Core Principles presented by the BIS (Box IV.I).

[19] http://www.tcmb.gov.tr/yeni/osi/I1Tr.htm

Box IV.1. Core Principles for Systemically Important Payment Systems

I. The system should have a well-founded legal basis under all relevant jurisdictions.

II. The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation in it.

III. The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.

IV. The system should provide prompt final settlement on the day of value, preferably during the day and at a minimum at the end of the day.

V. A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation.

VI. Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.

VII. The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.

VIII. The system should provide a means of making payments, which is practical for its users and efficient for the economy.

IX. The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.

X. The system's governance arrangements should be effective, accountable and transparent.

Responsibilities of the central bank in applying the Core Principles

A. The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.

B. The central bank should ensure that the systems it operates comply with the core principles.

C. The central bank should oversee compliance with the core principles by systems it does not operate and it should have the ability to carry out this oversight.

D. The central bank, in promoting payment system safety and efficiency through the core principles, should cooperate with other central banks and with any other relevant domestic or foreign authorities.

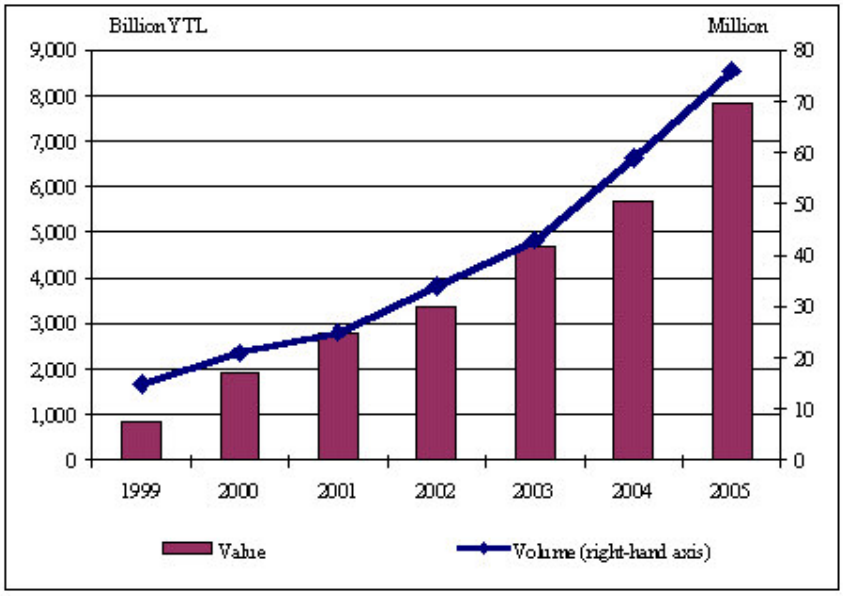
Source: BIS

IV.1.Turkish Interbank Clearing-Real Time Gross Settlement System

The Turkish Interbank Clearing-Real Time Gross Settlement System (TIC-RTGS) commenced its operations in 1992, providing real time electronic New Turkish Liras interbank funds transfer and gross settlement of payments[20]. In many countries, systemically important large value payment systems are operated and/or overseen by Central Banks. The TIC-RTGS is owned by the CBRT and the CBRT is responsible for its operation. Accordingly, operating rules and procedures of the TIC-RTGS are determined by the CBRT.

In the TIC-RTGS system, the settlement of funds is real-time and the obligation arising from a transaction is cleared when the transaction is realized. In the TIC-RTGS, the payment orders are executed provided that enough funds are held on the settlement accounts of the payer participants. By virtue of this, there is no credit risk arising from default.

Chart IV.1.1
Transaction volume and value of TIC-RTGS



Source: CBRT

In 2005 the transaction value of the TIC-RTGS increased by 37 percent compared to the previous year and amounted to 7,844 billion New Turkish Liras. In the first quarter of 2006, the transaction value of

[20] http://www.tcmb.gov.tr

the TIC-RTGS went up to 3,893 billion New Turkish Liras by rising 141 percent when compared to the same period of last year.

As of 2005, the transaction volume of the TIC-RTGS rose by 30.2 percent compared to year-end 2004, reaching 76.4 million. In the first quarter of 2006, the volume of the TIC-RTGS increased by 26.3 percent compared to the same period of last year, reaching 21.2 million (Chart IV.1.1).

There is no limit for transaction processing through the TIC-RTGS. New Turkish Liras interbank payments, CBRT money market transfers and retail payments are realized via the TIC-RTGS.

At the stage of Turkey's full membership of the European Union, the TIC-RTGS will be required to fully comply with TARGET (Trans European Automated Real-Time Gross Settlement Express Transfer System). The TIC-RTGS already has the technical infrastructure compatible with TARGET.

Table IV.1.1
Real Time Gross Settlement Payment Systems-Country Comparisons

	2000	2001	2002	2003	2004
Belgium (ELLIPS)					
Transaction Volume (Million)	1.8	1.8	1.7	1.8	1.8
Transaction Value (Billion USD)	12,212	12,808	12,573	15,306	18,232
France (TBF)					
Transaction Volume (Million)	3.0	3.8	3.8	3.9	4.0
Transaction Value (Billion USD)	62,765	78,365	86,007	108,745	134,689
Holland (TOP)					
Transaction Volume (Million)	3.8	4.1	4.8	4.9	5.0
Transaction Value (Billion USD)	19,519	21,665	23,520	29,660	36,876
Germany (RTGS-Plus)					
Transaction Volume (Million)	21.5	23.9	31.9	32.8	34.1
Transaction Value (Billion USD)	48,159	61,501	117,621	145,116	156,996
Switzerland (SIC)					
Transaction Volume (Million)	149.5	161.1	177.0	192.7	209.1
Transaction Value (Billion USD)	26,425	26,905	28,767	33,202	33,762
TARGET					
Transaction Volume (Million)	48.0	53.7	64.5	66.5	69.2
Transaction Value (Billion USD)	242,463	295,330	372,925	474,993	551,613
Turkey (TIC-RTGS)					
Transaction Volume (Million)	21.3	25.5	33.9	43.0	58.7
Transaction Value (Billion USD)	3,046	2,446	2,214	3,122	3,986

Source: BIS-March 2006, CBRT

The volume of transactions realized in the TIC-RTGS in 2004 was higher, while their value was lower compared with many European

countries, excluding Switzerland (Table IV.1.1). One of the main reasons is that the TIC-RTGS has no transaction limit and can be used by both households and firms. Especially since the payment systems can be reached via the Internet, the rate of usage of these systems has increased in Turkey. With these features, the TIC-RTGS is shown as a model to other countries for directing retail payments to reliable payment channels.

As a systemically important payment system, the TIC-RTGS, mostly complies with the Core Principles for Systemically Important Payment Systems.

IV.2. Electronic Security Transfer System (TIC-RTGS & ESTS)

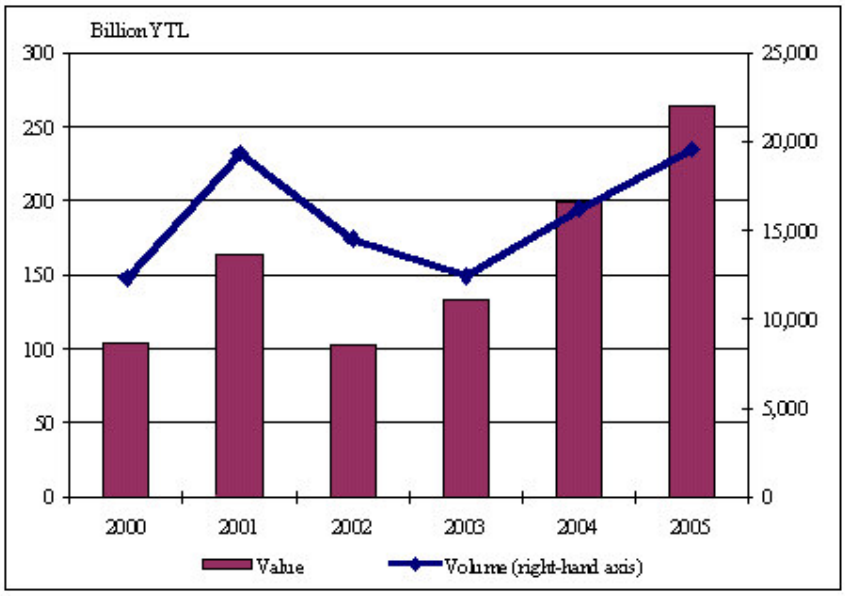
TIC-RTGS & ESTS, which were established in 2000, provide real time electronic security transfers among banks and real time settlement[21] . As in TIC-RTGS, ESTS is both owned and operated by the CBRT.

In the ESTS system, the transactions related to government bonds and promissory notes issued by other public sector institutions like the "Privatization Administration" and the "Public Sector Partnership Administration" are executed.

The transactions in the ESTS are realized according to the Delivery versus Payment-(DvP) principle. According to this principle, in the ESTS, the delivery of the securities, which is sold, can only be realized after the obligation amount is paid in the TIC-RTGS. In this system since the delivery and payment settlements are made simultaneously, the transactions realized in the ESTS do not carry credit risk. Only members of the TIC-RTGS are allowed to participate in the ESTS system.

[21] http://www.tcmb.gov.tr

Chart IV.2.1
Volume and value DvP transactions in ESTS



Source: CBRT

The number of transactions of DvP realized in the ESTS, increased by 20.8 percent compared to the previous year, amounting to 19,588 in 2005. In the first quarter of 2006, it decreased by 52.6 percent, reaching 3,081 compared to the same period last year.

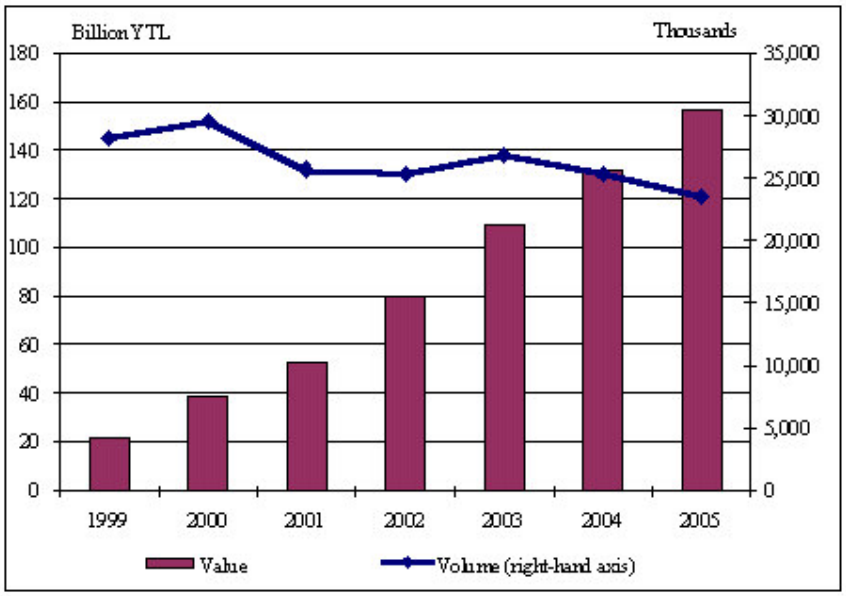
The amount of transactions of DvP in the ESTS increased to 264,712 million New Turkish Liras with a 33 percent change in 2005 compared to last year. In the first quarter of 2006, it decreased 18.6 percent compared to the same period last year, amounting to 61,931 New Turkish Liras (Chart IV.2.1).

IV.3.Cheque Clearing System

According to Article 55 of CBRT Law no 1211 and Law no 3167 on The Protection of Check Bearers and the Arrangement of Check Payments, the Central Bank is authorized and responsible for the establishment and supervision of the cheque clearing system. The CBRT established the Interbank Cheque Clearing Houses Center (ICH) as a legal entity to execute clearing and settlement system for cheques according to the By-Law on the ICH, which is issued by the CBRT in respect to Article 6 of the Check Law.

The clearing of cheques is made by netting in an electronic environment. After netting the cheques in the ICH, debtor or creditor participants are determined and settlement of the cheque clearing process is realized on the settlement account at the Central Bank via the TIC-RTGS on the next working day.

Chart IV.3.1
Transaction volume and value of Cheque Clearing System



Source: CBRT

As of 2005, the number of cheques, which are subject to clearing decreased by 7.2 percent compared to 2004, amounting to 23,520. The value of cheques reached 156,167 million New Turkish Liras by increasing 18.5 percent in the same period. As of the first quarter of 2006, the number of cheques increased by 1.9 percent, amounting to 5,688 and the value of cheques increased by 20 percent compared to 2004, reaching 40,247 million New Turkish Liras (Chart IV.3.1).