

Annual Report

2004

CROATIAN NATIONAL BANK

Payment Operations

4

4.1 Interbank Payment Systems

The settlement of payment transactions through the CLVPS and the NCS was conducted in accordance with the rules on settlement in interbank payment system without any larger deviations as regards the time of settlement prescribed by payment execution schedule. In 2004, there were no occurrences that could in any way compromise the stability and safety of interbank systems as the basic payment transaction infrastructure in the country.

4.1.1 Payment System Transactions

In accordance with the data on interbank payment operations in 2004, the number and value of payment transactions executed through both interbank systems grew on the year before.

In 2004, an average of 9,500 transactions was settled monthly through the CLVPS, with the average value of a payment transaction totalling HRK 11,946,034. As compared to 2003, the number of transactions settled through the CLVPS increased by some 6%, while the increase observed as regards to the value of transactions totalled as much as 32%.

Analysed by type of payment message the largest share of payment transactions effected through the CLVPS in 2004 (64% of the total number of payment messages) was made up by interbank payment transactions: MT202.

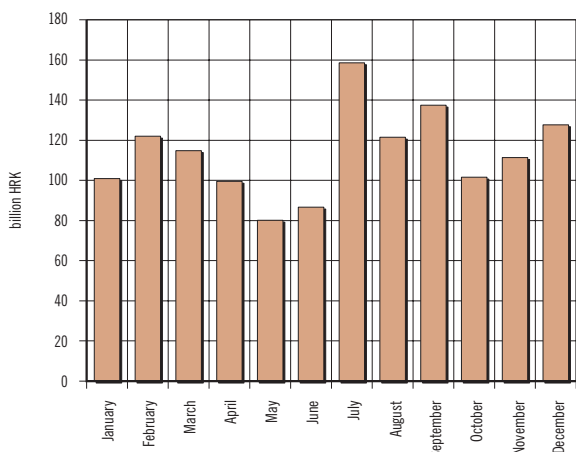
Table 4.1 CLVPS – Payment Transactions Executed in 2004
in HRK

Month	CLVPS		Average value per payment transaction
	Transaction value	Transaction number	
	a	b	c = (a/b)
January	100,971,435,138	8,725	11,572,657
February	121,949,524,016	8,558	14,249,769
March	114,852,787,912	10,721	10,712,880
April	99,538,944,871	9,170	10,854,847
May	80,193,519,035	7,790	10,294,418
June	86,637,048,301	7,609	11,386,128
July	158,497,923,282	10,890	14,554,447
August	121,406,109,797	10,320	11,764,158
September	137,527,419,184	10,399	13,225,062
October	101,581,690,184	9,321	10,898,154
November	111,281,245,179	9,432	11,798,266
December	127,661,045,695	11,086	11,515,519
Total	1,362,098,692,595	114,021	–
Average	113,508,224,383	9,502	11,946,034

Source: CNB.

4.1

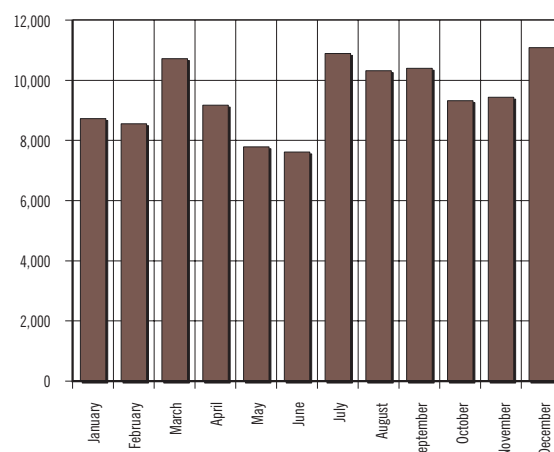
CLVPS – Value of Payment Transactions Executed in 2004



Source: CNB.

4.2

CLVPS – Number of Payment Transactions Executed in 2004



Source: CNB.

The average number of transactions settled through NCS totalled some 9.3 million transactions a month, with the average value of a payment transaction amounting to HRK 5,859. Payments effected through NCS in 2004 increased mildly on the previous year, while the increase in value of transactions over the same period totalled 11%.

The largest number of payment transactions effected through the NCS (75%) was settled during the second and the third clearing cycle, while the largest value of transactions (more than 48%) was settled during the third clearing cycle.

Table 4.2 CLVPS – Overview of Payment Transactions Executed in 2004 in HRK

	2003	2004
Transaction value	1,033,497,615,081	1,362,098,692,595
Transaction number	107,165	114,021
Transaction average value	9,643,985	11,946,034

Source: CNB.

Table 4.3 CLVPS – Change in the Number of Payment Messages in 2004, by type

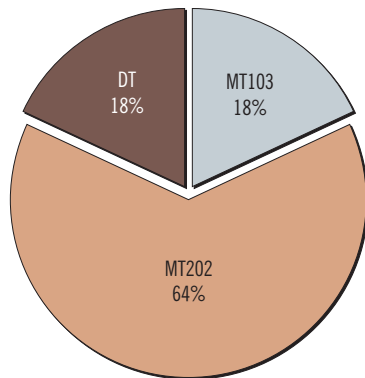
Month	MT103	MT202	Direct transfer	Total
	1	2	3	4 = (1 + 2 + 3)
January	1,436	5,613	1,676	8,725
February	1,448	5,456	1,654	8,558
March	1,744	7,075	1,902	10,721
April	1,475	5,975	1,720	9,170
May	1,349	4,724	1,717	7,790
June	1,412	4,632	1,565	7,609
July	2,008	7,111	1,771	10,890
August	1,605	7,023	1,692	10,320
September	1,902	6,733	1,764	10,399
October	1,678	6,087	1,556	9,321
November	2,017	5,769	1,646	9,432
December	2,512	6,752	1,822	11,086
Total	20,586	72,950	20,485	114,021
Average	1,716	6,079	1,707	9,502
Structure (%)	18	64	18	100

Source: CNB. • Note:

MT103 – Single Customer Credit Transfer
 MT202 – General Financial Institution Transfer
 Direct transfer – transfer of funds by the CNB directly debiting the account

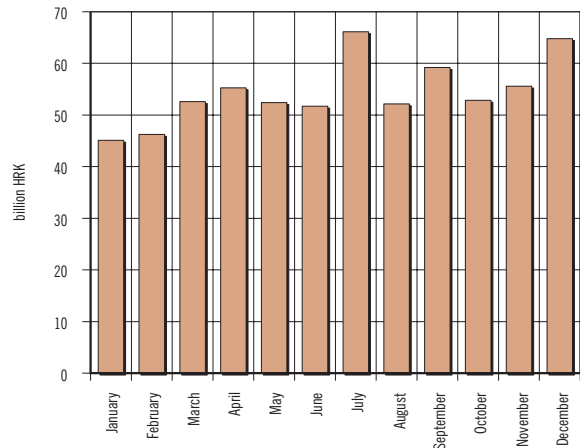
4.3

CLVPS – Structure of Payment Transactions in 2004 by message type



4.4

NCS – Value of Payment Transactions Executed in 2004



Source: CNB.

Source: FINA.

Table 4.4 NCS – Payment Transactions Executed in 2004 in HRK

Month	NCS		Average value per payment transaction
	Transaction value	Transaction number	
	a	b	c = (a/b)
January	45,122,683,871	8,085,812	5,580
February	46,233,484,964	8,076,344	5,725
March	52,572,430,210	9,521,741	5,521
April	55,274,061,021	9,410,719	5,874
May	52,375,529,501	9,401,038	5,571
June	51,687,645,807	9,274,613	5,573
July	66,119,161,561	9,904,171	6,676
August	52,153,055,468	9,298,411	5,609
September	59,216,655,404	9,547,709	6,202
October	52,847,949,189	9,202,860	5,743
November	55,552,683,879	9,543,933	5,821
December	64,796,480,757	10,352,587	6,259
Total	653,951,821,633	111,619,938	–
Average	54,495,985,136	9,301,662	5,859

Source: FINA.

Table 4.5 NCS – Overview of Payment Transactions Executed in 2004 in HRK

	2003	2004
Transaction value	591,427,550,489	653,951,821,633
Transaction number	110,023,890	111,619,938
Transaction average value	5,375	5,859

Source: FINA.

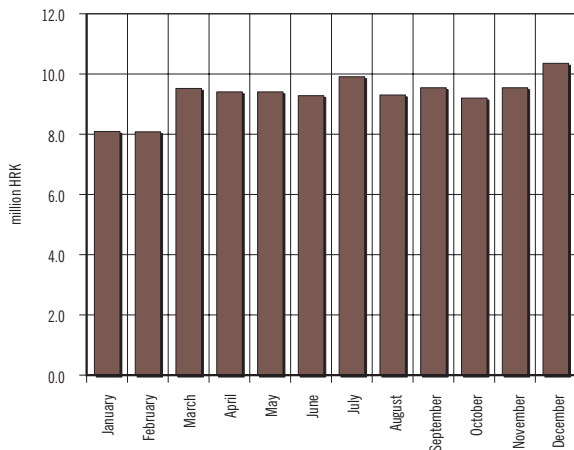
Table 4.6 NCS – Total Value and Number of Payment Transactions by Clearing Cycles in 2004 in HRK and %

	I clearing cycle	II clearing cycle	III clearing cycle	Total
Transaction value	127,962,084,041	208,258,355,730	317,731,381,862	653,951,821,633
Structure	20	32	48	100
Transaction number	28,169,447	45,963,223	37,487,268	111,619,938
Structure	25	41	34	100

Source: FINA. • Note: I clearing cycle – from 18.15 T-1 to 8.30 TO
 II clearing cycle – from 8.30 TO to 12.30 TO
 III clearing cycle – from 12.30 TO to 18.15 TO

4.5

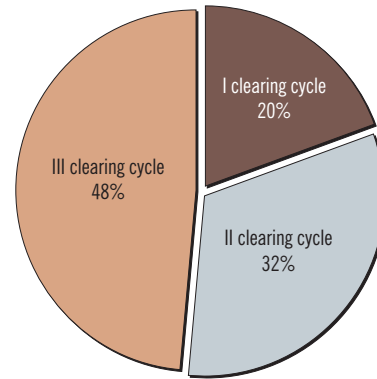
NCS – Number of Payment Transactions Executed in 2004



Source: FINA.

4.6

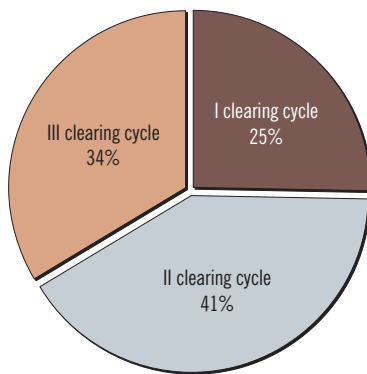
NCS – Value of Payment Transactions by Clearing Cycles in 2004



Source: FINA.

4.7

NCS – Number of Payment Transactions by Clearing Cycles in 2004



Source: FINA.

4.1.2 New Technological Solutions

In 2004, the messaging system within the CLVPS migrated to SWIFTNet technology that relies on a new communication protocol for access to SWIFT network. The migration encompasses all CLVPS participants: banks and the CNB.

SWIFTNet technology enables interactive file and message exchange, as well as information search (browse) in a completely secure environment. The new SWIFT generation includes SWIFTNet FIN messaging infrastructure based on an IP protocol which supplements the traditional FIN, which was based on X.25 protocol.

4.1.3 CLVPS Services Fee

As of the beginning of May 2004, the CNB has been charging a service fee to banks participating in settlement through the CLVPS. The monies obtained in this way are used to cover the costs connected with maintenance and development of the system. The CNB thus joined the practice observed by other central banks and defined by EU guidelines regulating the method for forming the prices of the abovementioned services.

4.2 Interbank/Interinstitutional Co-operation in the Area of Payment Operations

4.2.1 National Payment System Committee

The National Payment System Committee, consisting of the representatives of the Ministry of Finance, Croatian National Bank, the Croatian Banking Association, and the Banking and Finance Department of the Croatian Chamber of the Economy held four sessions in 2004, discussing various pressing issues as regards the domestic payment system. In accordance with its authorities as regards different issues, the Committee reached conclusions and issued recommendations on procedures to be followed in payment operations.

In addition, the Committee adopted the recommendation on collection of statistical data as regards payment operations, which are to be collected from banks and credit card issuing companies, aimed at meeting international standards and enabling the monitoring of payment operations developments within defined periods. The first reports on payment operations will be delivered to the CNB in July 2005.

The amended Decision on the Execution of Payment Orders from the Funds in Payer's Accounts Held with Different Banks stipulates a unique way of dealing with bills of exchange in payment operations.

As a result of the needs of all domestic payment system participants a conclusion was reached to expand the existing URBEA to include payment accounts of the Republic of Croatia maintained by the CNB (account type "17") prescribed by the Order on the Manner of Budget Revenue Collection, Collection of Contributions and Revenues for Financing Other Public Needs.

The members of the Committee issued an opinion in connection with the proposed amendments of the Foreclosure Act, especially the part regulating payment operations, which was communicated to the Ministry of Finance, that is, to the sponsors of the Act on Amendments to the Foreclosure Act.

As part of its activities, the Committee adopted conclusions on the dynamics and manner of introduction of the IBAN into the country's banking system, so the CNB prescribed a unique structure of the Croatian IBAN.

4.2.2 Council of Participants in the National Clearing System

The Council of participants in the NCS, which was established in 2004, and consists of representatives of banks and representatives of the CNB and FINA held

three special sessions dedicated to discussing the possibilities of technical and technological development of the NCS as well as improvement of its functionality and regulations governing the NCS operations.

At the said sessions the Council also discussed the activities of the NCS planned for 2005, reached conclusions as regards the new manner of determining tariffs for NCS services, issued a proposal of a revised Technical and Technological Instruction for Settlement through NCS, discussed topics connected to the utilisation of statistical data on payments executed through the NCS. As part of the said sessions, presentations were held on the development of payment systems in Europe.

4.3 National Payment System Survey

Significant changes in the national payment system in the past few years and the introduction of completely new technical and technological solutions for managing accounts of business entities by banks, created a need for a comprehensive analysis to evaluate the activities carried out so far in the context of payment system and to assess the current functioning of the payment system as a whole.

For the purpose of conducting a survey which would cover the entire territory of the Republic of Croatia, with the functioning of the payment system as its primary aim, the CNB engaged an independent agency specialising in market and public opinion research which uses European standards in its work to conduct the survey.

The survey conducted during May and June 2004 covered the entire country and included two target groups: banks as institutions responsible for executing payment transactions in the country and business entities (comprising companies and craftsmen) as end users in the payment system. The survey included all banks licensed in the Republic of Croatia and 505 companies and 111 craftsmen as a representative selection of business entities operating in the Republic of Croatia, chosen in accordance with territorial criteria, size (in terms of staff), and type of activity.

Banks found the new payment system to be more functional and to have a better infrastructure than the old payment system. As many as 95% of bank representatives responded that they were mainly or fully satisfied with the results of the payment system reform. For the most part, banks' representatives evaluated favourably both systems for interbank payments in the country (CLVPS and NCS) and particularly expressed their satisfaction with the CLVPS. In terms of its functionality, the technology it uses and the prescribed methodology of work, the CLVPS was rated high by most banks, while as many as 30% of banks rated it excellent.

The results of the survey point to a significant growth and development of services provided by banks to their clients. In particular this refers to the high percentage of banks (75%) which offer Internet payments to their customers. Internet pay-

ments contribute to lower payment transaction costs as fees for electronic payment orders are much lower than those for classical payment orders in paper form.

Most banks (some 60%) have their ATMs where clients can withdraw cash thus reducing the need for the provision of this type of service through bank counters. Most banks' clients may also use ATMs of other banks and around 50% of banks have their own POS devices installed.

As regards banks' preparedness for payment system reform, most of the respondents stated that they were satisfied with the way banks managed their regular operating accounts. Customer satisfaction was particularly large when it comes to business organisation and the level of technical and technological equipment. The majority of respondents (over 80%) agreed that the number of payment transaction services increased in comparison with the old system. The results of the survey showed that the majority of large companies were well informed about the laws and regulations governing the national payment system, while 30% of respondents from smaller companies and craftsmen said that they were not familiar with the relevant legislation.

As regards respondents' familiarity with and the use of Internet banking services, the survey showed this type of service to be extremely well-accepted and its use to be steadily increasing. Over 90% of respondents stated that their banks offered Internet banking services (or some other form of e-banking), and 70% of large and medium-size companies reported using such services. The survey showed that all users of Internet banking found this type of service to be mostly or fully contributing in terms of facilitating their business operations, while half of the respondents claimed that they helped them reduce their costs. In this segment too, craftsmen scored poorly. Only one third of them said that they used Internet banking. Over 60% of companies, both small, medium-size and large, reported using payment cards as a means of payment, with credit cards prevailing in comparison with debit cards. Only one third of surveyed companies reported using ATMs. Most of them use them only for disbursements and a smaller number reported using them for both disbursements and payments. Over 40% of craftsmen use ATMs. The use of ATMs is wider in Zagreb and the surrounding area than in the other parts of the country, which is logical in view of larger concentration of banks in this region.

Overall, respondents (business entities) were generally very happy with payment system services offered by their banks. Over 90% of all surveyed companies and 85% of all surveyed craftsmen said they were mostly or completely happy with the payment system services.

The results of the survey showed a high level of success of the payment system reform in the country. The analysis of the results of the survey showed that the majority of respondents found the new payment system to be better than the previous system. The new payment system was found to promote competition in the banking system and improve clients' business relations with banks which led to the development of new payment system services and reduced costs. It is evident from the survey that new technology enabling different electronic payments is developing rapidly, thus reducing the costs of the payment system as a whole.

The importance of the results of the survey also lies in the fact that they helped point to the relevant services in the CNB and in the banks to certain areas of the payment system where there is need for improvement.

4.4 Unified Register of Business Entities' Accounts (URBEA)

As shown by URBEA data as at 31 December 2004, the total number of registered business entities in the Republic of Croatia was 257,316, of which 130,108 were legal persons (50.56%), 116,334 (45.21%) were natural persons carrying out a registered activity (craftsmen), and 10,874 (4.23%) were free-lancers.

Business entities had a total of 313,986 regular operating accounts in banks, or 1.22 accounts on average per each business entity.

Of the total of 257,316 business entities at end-2003, 204,432 (79.45%) were liquid, while 52,884 (20.55%) of them had registered arrears (blocked accounts).

Of the total number of regular operating accounts, 252,642 (80.46%) were liquid, while 61,344 (19.54%) were blocked (registered arrears).

Table 4.7 Business Entities

in %

	2003		2004	
	Number	Share	Number	Share
1. Legal persons	124,923	50.89	130,108	50.56
2. Natural persons (craftsmen)	110,253	44.91	116,334	45.21
3. Free-lancers	10,308	4.20	10,874	4.23
Total	245,484	100.00	257,316	100.00

Source: FINA.

Table 4.8 Business Entities by Liquidity

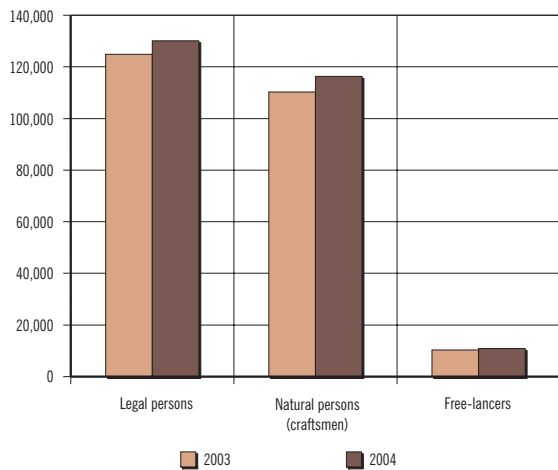
in %

	2003		2004	
	Number	Share	Number	Share
1. Liquid business entities	197,597	80.49	204,432	79.45
2. Illiquid (blocked) business entities	47,887	19.51	52,884	20.55
Total	245,484	100.00	257,316	100.00

Source: FINA.

4.8

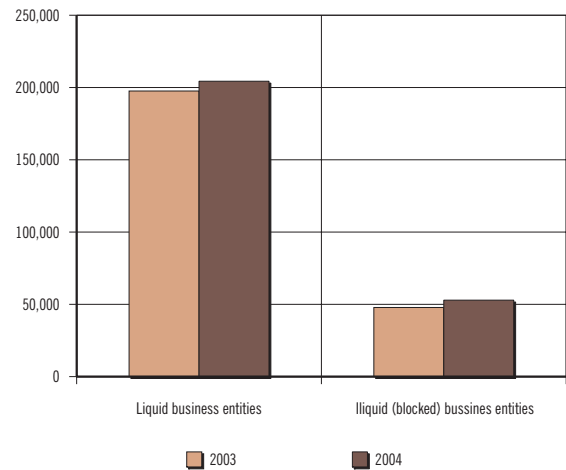
Business Entities



Source: FINA.

4.9

Bussines Entities by Liquidity



Source: FINA.

Table 4.9 Regular Operating Accounts

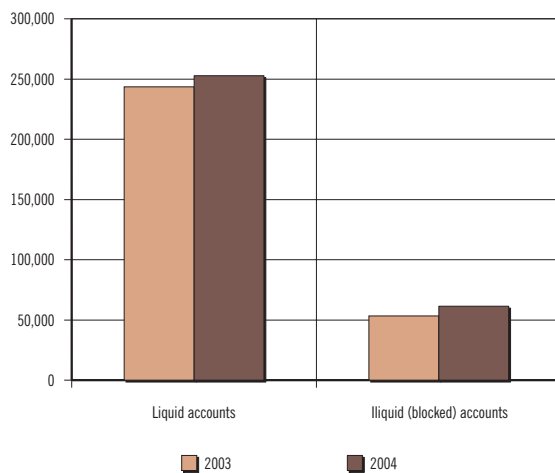
in %

	2003		2004	
	Number	Share	Number	Share
1. Liquid accounts	243,574	82.06	252,642	80.46
2. Illiquid (blocked) accounts	53,255	17.94	61,344	19.54
Total	296,829	100.00	313,986	100.00

Source: FINA.

4.10

Regular Operating Accounts



Source: FINA.

Table 4.10 Average Number of Regular Operating Accounts per Business Entity

	2003	2004
Average number of accounts per business entity	1.21	1.22

Source: FINA.

