

commercial banks and money changers in the form of competitive bidding. Starting from the highest exchange rate, the exchange rate at which the target amount has been sold is quoted as the prevailing rate. A source of foreign currency is loans from the World Bank and IMF; the former covers US\$700,000 and the latter the remaining amount. As for loans from the World Bank, commercial banks are expected to report their applications, which are not basically limited. The amount traded at each auction ranges between \$500,000 and \$2 million. Bidding by commercial banks sometimes fall below the target amount, in which case the remaining amount is applied to purchase U.S. treasury bills and other securities.

Although inter-bank trading of foreign currencies has been started, the volume of trade seems to be less than the auction (no statistical data available). NBK announces the reference rate at each auction, which does not bind inter-bank transactions. Generally, selling and buying rates are lower for Som (higher for dollars) than the auction rates. Note that NBK does not trade foreign currency directly with commercial banks other than through the auctions.

4-5 Current Monetary Policy and Major Issues

4-5-1 Reserve Deposit System

Kyrgyz introduced a new reserve deposit system on July 15, 1993, under which banks maintain cash reserves equivalent to 20% of the outstanding balance of deposits by non-financial institutions at the beginning of each month. On the other hand, reserve requirements should be achieved on the average balance basis and may include cash reserves. Any bank which fails to meet reserve requirements is subject to the punitive interest rate, twice the latest credit auction rate, which is imposed to the amount calculated by subtracting the reserve requirements from the bank's overdraft at its correspondent account.

First of all, the calculation method based on the specific date – the first day of each month – encourages banks to manipulate reserve requirements by controlling the balance of deposits on that day. Instead, the average balance of deposits during each month should be used.

Secondly, the new system allows reserve requirements to achieve on the monthly average basis, in place of day-by-day requirements under the old system. This

provides banks with great flexibility in managing daily reserve positions. As a result, the new system will help control volatility of the future short-term money market due to market disturbance.

Thirdly, the 20% reserve deposit rate is very high. Although it is imposed to correct persisting excess liquidity by controlling bank loans, it restricts the credit creation ability of banks considerably.

As pointed out in "4-7-4 Credit Creation Capability," it is very important to fully utilize credit creation of banks for effective development of the Kyrgyz economy. It is desirable to adjust the money supply to an adequate level as early as possible, and to invigorate the credit creation capability of banks. Excess liquidity seen at present mainly comes from the increase in credit supply by NBK, such as special purpose credit. Concerted efforts should be taken to reduce free reserves of banks by controlling the supply of credit, then to boost the credit creation capability by declining the required ratio of reserves to deposits.

4-5-2 Overdraft

In principle, NBK does not accept overdraft for deposit accounts of commercial banks. In practice, however, many banks have accumulated deficits at their NBK deposits up to the reform in April 1994, which was generally referred to as overdraft in the country. NBK imposes a punitive interest rate, twice the credit auction rate, on a commercial bank which has a deficit in its NBK deposit.

The overdraft mainly occurred in the form of delay in repayment of special purpose credit. As pointed out in "4-7-2 Loan Service" default often occurred in NBK-designated loans which had been made by commercial banks to private enterprises, partly because the loan period for special purpose credit did not always reflect actual business cycles. Regardless of default, NBK deducted the amount of repayment due on special purpose credit from deposit accounts of commercial banks, which created the overdraft condition in many cases.

In fact, the condition is not overdraft generally known in the banking industry, and should be called overdue in most cases. With the absence of the bankruptcy law in the country, however, these two terms have been used interchangeably without a clear

boundary. If the situation continues without correction, however, it will generate the following problems, some of which have already happened:

- (1) To improve the efficiency of the present payment system as planned, one approach is to accept daylight overdrafts for NBK deposits used for inter-bank transactions, based on collateral such as government bonds. However, presence of large deficits on a permanent basis will severely restrict the development of the system.
- (2) Up to the reform in April 1994, most of commercial banks always received the supply of credit from NBK in the form of overdraft and paid the punitive interest twice the interest rate at the credit auction. As a result, commercial banks were under increasing burdens to repay the overdraft and are not able to supply funds to the inter-bank market. This is a major obstacle to the development of the short-term money market contemplated under the project.
- (3) Commercial banks in overdraft are not allowed to participate in NBK's credit auction and TB auction, having hindered smooth implementation of the monetary policy.

NBK, having recognizing the increasingly deteriorating condition that reaches a critical stage, adopted at its board of directors' meeting on April 1, 1994, a reform proposal entitled "Restructuring of Overdraft by Commercial Banks" that was prepared on the basis of IMF's recommendations. A general outline of the reform plan is summarized as follows:

- (1) On April 1, 1994, the total amount of overdraft for each commercial bank, including the interest overdue, will be converted to medium-term loans (3 years).
- (2) The principal and interest will be repaid weekly over 3 years (52 weeks x 3 years = 156 weeks).
- (3) The principal will be repaid in equal installments, and the interest will be paid at the rate determined at the credit auction nearest to the due date in each week.

Through this reform, credit supply by NBK to commercial banks in the form of overdraft is eliminated, and the credit auction will become a sole credit facility in the future. If the reform is implemented as scheduled, the total amount of overdraft as of

April 1, 1994 – 1,171 million Som – will be repaid over 156 weeks, or at a rate of 7.5 million Som per week. At the same time, NBK is expected to enforce its policy strictly to prevent the overdraft issue from recurring in the future.

Since the reform plan envisages that the overdraft problem is officially dealt with by transferring the existing overdrafts to an adjustment account, the following benefits to the financial market are expected:

- (1) Eliminating the overdrafts helps the price mechanism in the financial system to regain its normal functioning, which has been distorted by the penal interest rate.
- (2) Effectiveness of NBK's monetary policy measures to control credit supply through the credit auction will be boosted.
- (3) Increased participation by commercial banks in T/B and foreign currency auctions, previously excluded if they have overdrafts, will revitalize and unleash these markets to full-fledged growth.
- (4) Banks will be encouraged to operate in strict accordance with the self-accountability principle.

Yet, several problems will still remain unsolved. First of all, while the reform plan has eliminated the overdraft problem, commercial banks' debt still remain in the form of 3-year loans. For commercial banks which are expected to supply surplus funds to the money market in the future, repayment requirements should be taken into consideration as to how they limit fund supply.

Secondly, guidance policy finance which had been provided in the form of special purpose credit by NBK to commercial banks (which were discontinued after January 1994) seems to form significant portions of commercial banks' debt balance against NBK. Some estimate that the outstanding balance of special purpose credit accounted for 600 million Som of the total overdraft by commercial banks as of April 1, 1994, which amounted to 1,171 million Som, and that most of the remaining overdrafts were in fact interest on such loans. However, the reform envisages that NBK's credit supply to commercial banks will be made solely through the credit auctions, which cannot be used as an effective means of providing guidance policy finance. As a result, monetary

policy may be intertwined with fiscal policy in a counterproductive way. Further consideration is needed to find a workable solution for the potential problem.

4-5-3 Lombard Loan Program

NBK has Lombard Loan Program and Special Loan Program to cover a temporary deficit in payment reserves of commercial banks. Lombard Loan Program was introduced in August, 1993. The commercial banks can receive Lombard loans by pledging adequate collateral such as government bond. The loan period is 7 days or less, and the interest rate is the most recent credit auction rate plus 5%. For overdue, a penalty rate twice the ordinary rate is imposed during the overdue period.

4-5-4 Credit Auction

Credit auction is used to control the volume of currency or credit in circulation to stabilize the local currency and to allocate credit resources to banks in healthy financial condition. At present, credit auction is positioned as a temporary currency control instrument until open market operation using securities becomes full-fledged. In reality, it serves as the primary monetary instrument.

After the regulation for credit auction has been enacted under IMF's recommendations, 9 auctions with the total amount of 222 million Som between February through October 1993. After interruption for 6 months, it has been held weekly since April, 1994 (Table 4-4). The interruption occurred due to the increase in number of disqualified banks due to overdraft. At present, the auction is held on 10th each month, and two days earlier, auction terms including the upper limit for the total amount to be auctioned, the minimum interest rate, and the loan period (ordinarily 3 - 9 months) are notified to commercial banks.

Participants in the auction are limited to commercial banks which satisfy qualification standards set forth by NBK's Bank Supervision Division, such as managerial ratios, and comply with the reserve deposit ratio. At the first auction, small- and medium-sized banks were required to pledge collateral, government bond equivalent to 25% of the loan value, which was abolished in the second auction and thereafter. Bids are accepted from the highest rate, and the lowest interest rate for accepted bids is quoted as the auction rate. In Kyrgyz where the money market is at a

nascent stage, the credit auction rate is used by commercial banks as the reference rate to determine deposit and loan rates.

While credit auction plays a critical role in the country's monetary policy. To ensure its effective functioning, a major issue remains; separation of monetary policy and fiscal policy.

Recently, the country has terminated policy guidance finance in the form of special purpose credit and limited NBK's credit facility to the auction system. Allocating credit resources to commercial banks through auction is basically acceptable as the market-oriented method using price competition. However, if NBK's credit supply is not limited to the scope of monetary policy but implies policy-led supply of industrial funds, particularly meeting expectation to partially fulfill the role of the previous credit instrument, special purpose credit, then monetary policy will be intermingled with fiscal policy, which may adversely affect the effectiveness of the monetary policy.

4-5-5 TB Auction

TB auction is conducted by NBK, on the behalf of the government, to sell treasury bills to the public. While NBK sometimes buys back TBs from commercial banks, the market size is still too small to be used for NBK's open market operation. The buying rate of bought-back TBs is established on the basis of the selling rate. Bids are accepted at 1:00 p.m. on every Monday and are opened in the morning of Wednesday. Participants are limited to commercial banks, although the regulation accepts participation of general enterprises.

TB auction has been held 26 times between May and December, 1993. After one-month interruption, it has been held weekly since February, 1994 (Table 4-5). The temporary interruption occurred due to a large number of disqualified banks due to overdraft.

The volume of trade at each auction varies greatly, ranging between 7 million and 20 million Som in recent years.

The auction handles 3-month TBs only. Although the regulation covers 6-month and 1-year TBs, they have not been issued. TBs are traded under the book entry

system (all the holders are registered). Also, direct trading between commercial banks has started, albeit small in volume.

The secondary market for TBs, as discussed in "4-4-1 Short-term money Markets," is expected to play a leading role in fostering the short-term money market in the country. At the same time, it is expected to grow to the sufficient size allowing NBK's open market operation, with TB rates becoming benchmark rates. Thus, the development of TB auction into the future TB market is very important from the viewpoint of monetary policy. However, TBs have not gained public confidence and commercial banks are sometimes reluctant to participate in the auction process. Efforts should be made to improve public confidence on the government.

(Note: TBs can be used as collateral for NBK credit and settlement systems, and their confidence should be improved from the viewpoint other than monetary policy.)

4-5-6 Other NBK Loan and Credit

NBK extended loans called special purpose credit which were discontinued after January 1994 to commercial banks. This was refinance loans to supply credit to commercial banks by specifying a borrower for the purpose of providing policy guidance finance, estimated to account for around 80% of NBK loans. Commercial banks lent the loan amount to private enterprises with a 3% margin.

Special purpose credit was the remnant of traditional credit allocation to enterprises under the Gosbank system, and had been criticized as inflationary by supply a large amount of credit. The balance amount has been reduced significantly through recent efforts. However, since special purpose credit like policy guidance finance was supplied through the three major banks, which are former government banks, it were tending to concentrate on the three banks. IMF recommended that NBK loans should be extended through credit auction in order to avoid concentration of funds on the three banks. If this is done, it is difficult to provide policy guidance finance.

4-6 Current State of the Currency System and Major Issues

4-6-1 Background in Introduction of New Local Currency

Compared to the Ukraine and the three Baltic states which were quick to introduce their own currencies, the Kyrgyz Republic took a position to remain in the Ruble economy zone immediately after its independence because of its relatively heavy dependency on the Russian economy. Then, as the Russian economy deteriorated, the central bank chose a policy to expand credit supply to save ailing enterprises, which triggered acute inflation and forced Kyrgyz to block its economy from the adverse effect. IMF, originally urging the former Soviet countries to stay in the Ruble economy zone, changed its policy and assured financial assistance that free convertibility of a new currency could be guaranteed. In March, 1993, Kyrgyz decided to introduce its own currency, Som (Com). IMF provided a credit line of \$85 million as special assistance.

NBK exchanged 1 Som for 200 Rubles between May 10 through 14, 1993. On May 17, it abolished all the foreign exchange control regulations under the principle of freeing foreign exchange transaction and moved to the floating system. The original exchange rate was set at US\$1 against 4 Som, and Som depreciated to US\$1 = 10 Som in February 1994 and has been remaining at the level since then. Note that the foreign exchange control law has not been adopted by the parliament due to the delay in proceeding, and foreign exchange control seems to be conducted under the presidential decree issued in May 1993.

4-6-2 Major Issues for Currency Stability

Although the value of Som has been relatively stabilized in 1994, after the rapid fall in 1993, currency stability requires structural adjustments toward the market economy and to establish and maintain macroeconomic balance. In particular, the following fundamental issues related to macroeconomic policy needs to be addressed and dealt with.

First of all, the government has to control inflation, which is mainly caused by excess liquidity that has been created by the central bank's efforts to cover budget deficits, in addition to discontinued supply of raw materials and the rise in imported material prices following the collapse of the former Soviet Union. The rapid increase

in the money supply has deteriorated purchasing power of the currency appreciably. In the short term, the devaluation of Som following the theory of purchasing power parity seems to contribute greatly.

Secondly, the country has to improve its current account balance by achieving macroeconomic stability through the increase in domestic savings and export promotion. Even if hyper-inflation is controlled, the devaluation of the currency will continue so far as current account deficits remain due to the mechanism to adjust relative prices. In correcting the current account balance, however, the government must avoid economic development under excessive government leadership as seen in Latin American countries in the 1970s. What the I/S equation (Note) in macrocosmic theory says is that economic development driven by a combination of excess investment in the private sector and budget deficits must be balanced by current account deficits. It is important to move out of absolute shortage of savings through economic management based on market mechanism and initiatives of the private sector.

(Note) (Private savings – Private investment) + Budget surplus = Current account surplus

4-7 Current State of Banking Service and Major Issues

4-7-1 Deposit Service

Deposits form the core of fund raising means of commercial banks. Commercial banks in Kyrgyz are handicapped by their very weak ability to absorb deposits from the public, particularly in rural regions. For instance, one of three major banks, which is considered to have strength in rural markets, has only 1,108 depositors in the state of Jalal-abad having 800,000 population, with balance of deposits at 300,000 Som (US\$30,000).

Lack of ability to attract funds from the public increases liquidity risk of banks and deteriorates the ability to supply funds to borrowers, adversely affecting economic development. Generally, fund suppliers have to secure a certain degree of liquidity to cover uncertainty in future expenditures. On the other hand, investment desired by final fund borrowers requires relatively a longer period of recovery than that preferred by lenders. The mismatched supply and demand prevents financial transactions.

Here, the bank comes to fill the preferential gap in liquidity between the lender and the borrower. It does so by issuing "indirect securities" with relatively high liquidity, namely deposits, to provide the lender with a means of storing his value with liquidity, while purchasing "original securities" with relatively low liquidity. While an individual lender is uncertain about when and how he use his funds, actual needs arise at different times if many lenders exist. Again, the bank collects funds from many depositors to pool a risk of uncertainty about the future use of funds and enable risk sharing among depositors. This way, the bank can divert funds to long-term loans and investment while maintaining liquidity of deposits.

If the bank lacks the ability to absorb deposits effectively and timely, therefore, its capability of long-term function operation will be deteriorated or liquid risk rises significantly. In the former case, investment funds required to construction or improve industrial infrastructure are not supplied to the industrial community. In the latter case, funds saved by individuals flow to liquid assets such as precious metals, thus used for nonproductive purposes. In a macroeconomic sense, this means that the smooth supply of savings funds to investment opportunities is impeded, thus preventing sound economic development.

The apparent weakness in depository function of Kyrgyz banks, in addition to the fact that banks have not considered personal deposits to be an important element of their business, seems to come from the fact that people have lost interest in deposits and financial assets due to the following factors:

- (1) Hyper-inflation generates strong preference for physical assets.
- (2) The personal income level is low enough to keeps personal savings rate in macroeconomic terms at a very low level.
- (3) Most of payment made in daily life is done in cash, so that there is little demand for transaction through deposits.
- (4) Financial institutions often restrict customers from drawing their deposits due to the shortage of cash reserves.
- (5) Financial institutions are not trusted by the general public.

Under these circumstances, macroeconomic factors such as inflation and income level seem to play a critical role in overcoming the problem at this stage. Meanwhile, it is important to devise a financial system to attract personal deposits when the above factors are gradually improved.

4-7-2 Lending Service

The lack of ability to raise funds results in the chronic shortage of loanable funds. In addition, most of banks have non-performing funds due to the increase in bad loans and are not able to meet new loan demand.

Since the fall of 1993, bad loans have increased rapidly and adversely affect financial positions of commercial banks. Although the exact amount of bad loans is not known, hearings from commercial banks indicate that irrecoverable loans are not many, and mostly overdue. NBK plans to conduct official inspection on banks under the Law on National Bank of the Kyrgyz Republic and evaluate individual loans and credits from the viewpoints of credit standing of borrowers, coverage by collateral, interest rates and other loan terms, and screening of loan application. NBK's bank inspection department, which has no detailed evaluation data on loans and credits, feels that, as for small- and medium-sized banks, 50% of loans are rated as "good," 40 - 50% "marginal," with small percentage of "bad loans."

(Note) Loan and Credit Evaluation Criteria for NBK's Bank Inspection

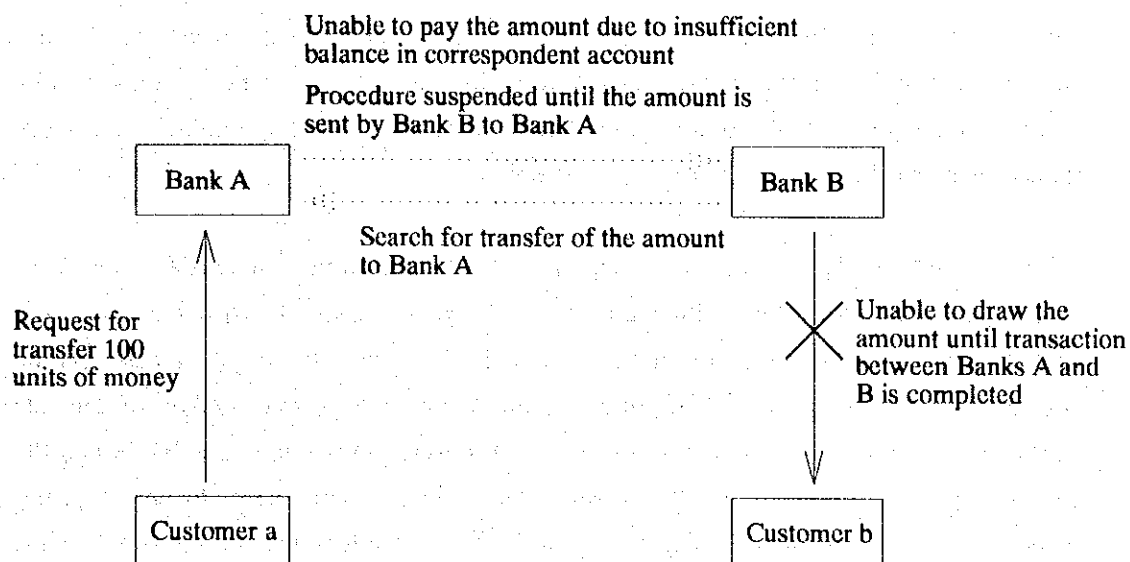
- <1> Good: Overdue period - Less than 90 days: Cash reserve requirements as a percentage of credit - 5%
 - <2> Marginal: Overdue period - Less than 180 days: Cash reserve requirements as a percentage of credit - 20%
 - <3> Doubtful: Overdue period - Less than 270 days: Cash reserve requirements as a percentage of credit - 50%
 - <4> Bad: Overdue period - 270 days or longer: Cash reserve requirements as a percentage of credit - 100%
-

According to hearings from commercial banks, most of bad loans are NBK-designated loans (special purpose credit) which were discontinued after January 1994, while many banks estimate that, among other types of loans, bad loans account for 20% - 30% of the total. A major reason for a high percentage of bad loans in NBK-designated loans seems to lie in a gap between loan period of special purpose credit and business cycle. The loan period for special purpose credit from NBK to commercial banks was relatively short, 3 - 6 months, to reflect tight government finance. Accordingly, the period of loans by commercial banks to businesses is invariably fixed at 3 - 6 months. If a borrower needs working capital longer than the loan period, his loan inevitably becomes overdue. This is evidenced in the fact that overdue loans are mainly found in the agricultural sector that has a relatively long business cycle.

At present, new credit supply has been terminated to stop further increase in bad loans. Nevertheless, as discussed in "4-7-1 Deposit Service," commercial banks are facing difficulty in meeting demand for long-term funds because of liquidity risk, so that overdue loans may increase again in the future. Also, the shortage of loanable funds should be dealt with by reinforcing the depository function of banks.

4-7-3 Payment Service

Payment service is one of major services provided by banks. At present, payment transaction service offered by banks in Kyrgyz is limited to fund transfer. Payment by bills and checks, credit cards, and automatic transfer is rarely performed. Moreover, fund transfer service seems to remain at a very low level as seen from frequent occurrence of "vzaimazachet" which typical proceeds as follows.



- 1) Bank A, having a deficit in its correspondence account, rejects request for fund transfer by Customer "a" to Customer "b" as far as possible.
- 2) Bank A reluctantly accepts the request, if demanded repeatedly, but delay transaction in order to avoid becoming default due to an insufficient balance in its correspondent account.
- 3) Bank A requests Bank B to find transfer payment in an opposite direction. If any, Bank A effectuates fund transfer to Bank B as soon as the payment and receipt (balance) with Bank B becomes square.
- 4) Even if Customer "a" completes transfer procedures, Customer "b," recipient of transferred money cannot draw it from his account until Bank A initiates transfer procedures against B.

The most basic method of payment is cash. In a modern economy, however, it is increasingly important to allow people to make their payment through his bank deposit by using a variety of means, including bills, checks, credit cards, remittance, and transfer, for smooth payment. To ensure smooth payment through bank deposits, the following conditions need to be met before hand:

First of all, convertibility of bank deposits to currency (legal tender) with circulating power granted by law must be accepted by the economic circle and the society at large. For instance, commercial banks in Kyrgyz are often unable to meet the

request for drawing by their customers due to the shortage of cash reserves. Clearly, deposits at these banks are not fully convertible to cash currency. Furthermore, "vzaimazachet" practiced by commercial banks significantly damage public confidence. Banks must make efforts to overcome the problem.

Secondly, Banks should form an inter-bank transaction network such as a clearinghouse and a cable remittance system, which serves as infrastructure to ensure simple and secured transfer of deposits. Such infrastructure, together with public confidence by meeting the first condition, creates a social norm that transfer of deposits is commonly accepted as completion of payment transaction between the debtor and the creditor (Note). Again, reality is opposite. Delay in payment seems to be a familiar scene due to physical or technical problems in the payment transaction system. Thus, the basic and reliable inter-bank transaction system is called for.

(Note) A final settlement of fund transfer is made by crediting and debiting accounts of the payer's bank and the payee's bank at the central bank, effected upon or after transfer of deposits from the payer to the payee. In other words, the means of payment with finality is limited to cash and deposits at the central bank, namely high-powered money.

4-7-4 Credit Creation Capability

Developing the inter-bank transaction system or enhancing fund transaction service through deposits, without relying on cash, is essential in not only streamlining payment transactions, but also strengthening the credit creation power of banks and promoting investment that is a primary engine for economic growth.

More precisely, when a bank obtains deposits from surplus units and makes loans, the whole amount of loan proceeds may be withdrawn immediately, leaving nothing on the hand of the bank. In this case, the bank merely serves as a pure intermediary to transfer funds from surplus units to deficit units. On the other hand, if a borrower withdraws only a certain portion of loan proceeds, the bank can use the remaining portion for other loans. In other words, the bank has created cash reserves for loans in excess of the original reserve. This is called credit creation.

This mechanism can be explained somewhat differently. The bank accepts deposits from its customers in cash (called original deposits), based on which loans are made. If

a portion of loan proceeds remains as a new deposit at the bank (called derivative deposits), the bank can use it for additional loans. As this process is repeated, the bank can create derivative deposits in amount that are equivalent to a several times as much as original deposits.

In particular, the relationship between original and derivative deposits is determined by using two factors, the deposit yield and the reserve rate, as follows:

- 1) Based on original deposits, or reserve fund (P) that can be freely used for payment, the bank makes loans (L).
- 2) When the deposit yield is denoted as α , the reserve fund the bank has to hold for withdrawal of the loan amount can be determined by using the following formula:

$$(1 - \alpha) L$$

- 3) When the reserve rate required by the central bank is denoted as β , the required reserve fund can be calculated as: $\beta\alpha L$
- 4) Thus, the total amount of reserve fund the bank has to hold is calculated from 2) and 3) as follows: $(1 - \alpha)L + \beta\alpha L = (1 - \alpha + \alpha\beta)L$
- 5) The bank can increase loans until the above value equals P, or:

$$(1 - \alpha + \alpha\beta)L = P$$

Therefore, given the reserve fund (P) that can be freely used for payment, the bank can create the total amount of credit (L) that can be determined as follows:

$$L = \frac{P}{1 - \alpha + \alpha\beta} \dots\dots(1)$$

- 6) For the private non-financial sector, the ratio of cash holdings to deposits, denoted as c, is determined as follows: $C = \frac{1 - \alpha}{\alpha}$

- 7) Thus, equation (1) above can be rewritten as follows:

$$L = \frac{C + L}{C + \beta} \cdot P(2)$$

Whereas, $c + 1/c + \beta$ is called credit multiplier (m).

This principle applies not only to individual banks but to the entire banking sector. It should be noted, however, that the increase or decrease in reserves at an individual bank is not always reflected in the increase or decrease in reserves for the entire banking industry. For instance, issuing a check results in an decrease in cash reserve of the paying bank and an increase in cash reserve of the receiving bank, settled by transfer of deposits at the central bank. Obviously, the balance of deposits by the banking industry at the central bank remains unchanged. As a result, α tends to become larger for the banking industry as a whole than individual banks.

As discussed above, the role of banks is by no means limited to the transfer of savings held by surplus units to investment by deficit units. Rather it creates credit on the basis of savings by surplus units and multiplies investment funds in the process. In macroeconomic terms, investment is not limited to the amount of savings previously made, but is can made by mobilizing future savings. To spur economic development in Kyrgyz where savings are in absolute shortage, it is important to utilize credit creation capability of banks to converge present as well as future savings into investment projects.

To improve the credit creation power of banks, the following policies seem to be essential:

- 1) To increase reserve fund (P) that can be freely used by banks for payment purposes. It should be noted, however, that this should be realized in the form of deposit absorption from surplus units (individuals in macroeconomic terms). Although free cash reserves can be increased by the supply of credit by the central bank, it inevitably increases the dependency of commercial banks on the central bank. In Kyrgyz, the supply of credit by the central bank has grown dramatically as a result of special purpose credit and has to be reduced and recovered urgently. In the process, free reserves decrease and need to be supplemented by absorption of deposits from surplus units. The question is, what is needed to attract deposits from surplus units?
- 2) First of all, to reinforce the liquidity creation capability of banks so as to ensure that savings of surplus units with a high degree of liquidity preference are retained by the banking industry as deposits, without diverting to precious metals and

other fluidity assets. Secondly, to improve the settlement system to ensure that settlement is done by using deposit currency and funds for settlement stay in the banking industry in the form of deposit. Through these measures, credit creation causes the rise in deposit yield (α) and the decline in cash holding ratio (c), thus to improve credit creation power.

4-7-5 Geographical Distribution of Branches

It is now clear that the rise in deposit yield is directly related to the improved credit creation power of banks, as much as credit creation accelerates economic growth. At the same time, developing branch networks is an important means of achieving the purpose, as important as developing the inter-bank transaction system, because accessibility of economic units to the banking system is proportional to availability of cash currency.

In Kyrgyz, the number of branches of commercial banks varies widely among states, ranging from 42 in Chui including Bishkek and 45 in Osh, to 14 in Talas. The regional difference is threefold (Tables 4-5, 4-6). However, comparison based on population per branch indicates a different picture. While population per branch in Chui and Osh having many branches exceeds 30,000 persons, that in Talas is 14,000 persons. From the viewpoint of profitability required for commercial banks, it is hard to tell whether the current distribution of branches is out of balance. Nevertheless, a service area covered by each branch is very large in rural regions. This suggests that people in urban and rural regions may not have equal access to banking services, expressed as opportunity for making deposits, loans, and payment transactions.

Under the current situation, savings banks and their presence in rural regions seem to be useful when considering a desirable way of fostering a nationwide network of financial institutions in the country. Characteristically, each branch of the savings banks supervises and incorporates several local units. As of July 1, 1994, there are 379 local units under 55 branches. Local units approved deposit and transfer services only, not handling loans, but they can be used as basic units to provide standardized fund transactions by using deposit currency. It should be noted, however, that the savings banks contract out fund transfer service to other banks, suggesting that they do not have sufficient transaction systems. This should be carefully checked and taken into consideration in the future plan.

4-8 Financial Assets and Liabilities

Financial assets and liabilities as of the end of 1993 are summarized as follows. The outstanding balance of cash currency held by households and businesses is 398 million Som, and deposits total 340 million Som (Table 4-7). Of total, 220 million Som are demand deposits and 120 million Som time deposits. By type of depositor, the outstanding balance of deposits by households is 58 million Som, 210 million Som by businesses, and 36 million Som by cooperatives.

The balance of loans to businesses, cooperatives, and households by financial institutions is 1,590 million Som, of which businesses account for 1,260 million Som, cooperatives 260 million Som, and households 43 million Som.

Finally, the outstanding balance of loans by the banking sector from NBK totals 1,099 million Som, accounting for 73% of the total amount of loans outstanding to businesses, cooperatives, and households.

4-9 Analysis of Major Restraints and Advantages Related to Development of the Financial System

4-9-1 Review on IMF and Other Studies

4-9-1-1 General

Fairly detailed analyses of restraints and advantages in development of the financial system in Kyrgyz have been largely conducted by the World Bank and the IMF. This section review the results of research projects conducted by the two organizations.

4-9-1-2 Review on the World Bank's Study

As part of a study related to the development of the financial system of the Kyrgyz Republic, the World Bank conducted a field survey in April 1992 and published a report entitled "KYRGYZSTAN - the Transition to a Market Economy." in August, 1993. The report analyzes the current situation of the banking system together with macroeconomy and various industry sectors. Then, it recommends the improvement of NBK's ability to supervise commercial banks, restriction on establishment of new banks, the increase in equity capital of banks, the curtailment of bank loans to their major

shareholders, the improvement of profitability by increasing spread, and the establishment of the inter-bank market.

Specific restraints and advantages related to the development of the financial system in the country, as pointed out in the report, are summarized as follows:

(1) Major restraints

- 1) High inflation rates and unstable foreign exchange rates
- 2) Shortage of cash, accompanying limited convertibility from deposits to cash, followed by distrust of banks by households and businesses, and private hoarding
- 3) The delay in inter-business settlement due to deterioration of financial conditions, the increase in unsettled accounts, and the rise in inter-business credit
- 4) The undeveloped payment system within the country and with other countries in the former Soviet Union
- 5) Undeveloped accounting and audit systems
- 6) High share of loans by banks to major holders under favorable terms, accompanying the shortage of loans to new businesses
- 7) High share of loans from the center bank in bank's lendable funds
- 8) Absence of inter-bank markets
- 9) Low interest rates and small spread due to the use of loans from the central bank for lendable funds, resulting in poor profitability
- 10) Depletion of banks' own capital as a result of persisting inflation
- 11) Negative real interest rates due to persisting inflation, resulting in low levels of deposits
- 12) Low interest rates on time deposits relative to those on demand deposits, resulting in low levels of time deposits

(2) Major advantages

- 1) High levels of education, culture and technology, including the literacy rate

4-9-1-3 Review on the IMF's Study

The IMF conducted a study related to the development of the financial system of Kyrgyz in 1992. It conducted a field survey the early 1992 and published a report entitled "Economic Review – Kyrgyzstan." in May the same year. The report analyzes the country's monetary policy prior to the adoption of the Som and recommends policies for reinforcing financial intermediary power through the banking system.

Specific restraints and advantages related to the development of the financial system in the country, as indicated in the reports, are summarized as follows:

(1) Major restraints

- 1) Disordered trade practices with countries in the former Soviet Union and uncontrolled payment methods, and the increase in barter trade
- 2) Aggravation of inflation as a result of price liberalization, the rise in import prices, and excess liquidity caused by credit supply from Gosbank
- 3) Growth of budget deficits partly due to the government's take-over of overdue inter-business debts
- 4) Large amounts of government spending required to settle inter-business debts owed by state enterprises as well as for capital formation
- 5) Deterioration of current account balance

(2) Major advantages

- 1) The government intends to pursue tight fiscal, financial and income policies.

4-9-2 Major Restraints and Advantages Related to Development of the Financial System, Perceived from the Survey Result on Financial Transactions by Institutions and Businesses

4-9-2-1 General

During the field survey, the study team examined the current state of financial transactions by financial institutions and businesses, primarily by interview and questionnaire surveys covering selected commercial banks and business enterprises. The result of the surveys was analyzed, and major restraints and advantages related to the development of the financial system in Kyrgyz are identified as follows.

4-9-2-2 Major Restraints and Advantages Perceived from the Current State of Financial Transactions by Institutions

(1) Major restraints

- 1) Lack of funds
- 2) Shortage of personnel experienced in banking business
- 3) Exclusive control of government funds by former-government banks
- 4) Inert inter-bank settlement
- 5) Difficulty in credit creation
- 6) Lack of communication infrastructure
- 7) Lack of adequate and uniform accounting and audit systems

(2) Major advantages

- 1) Availability of young and well educated human resources

4-9-2-3 Major Restraints and Advantages Perceived from the Current State of Financial Transactions by Businesses

(1) Major restraints

- 1) Lack of currency convertibility with the CISs

- 2) Difficulty in making payment transactions with the CISs
- 3) Lack of industrial promotion policy in the government and banks
- 4) Lack of public confidence on banks
- 5) Overdraft of banks (shortage of funds)
- 6) Delay in settlement on the bank side
- 7) Difficulty in borrowing the required funds
- 8) Shortage of loans with a longer period to meet business needs
- 9) Increase in doubtful or irrecoverable accounts receivable
- 10) Inability or difficulty in deposit encashment
- 11) Inability to withdraw cash from deposits due to the shortage of funds at banks
- 12) Delay in computerization
- 13) Absence of adequate and uniform accounting and audit systems

4-9-3 Major Restraints and Advantages Perceived from the Current State of the Central Bank, Government Agencies, and Organizations

4-9-3-1 General

The study team conducted a field survey on the current state of the central bank, government agencies, and organizations, through hearings from various departments of the central bank, and related agencies and organizations. The result of the survey was analyzed, and major restraints and advantages related to the development of the financial system in Kyrgyz are summarized as follows.

4-9-3-2 NBK

(1) Major restraints

- 1) Shortage of human resources, particularly bank inspectors
- 2) Limitation in monetary policy instruments
- 3) Delay in computerization
- 4) Development of adequate and uniform accounting and audit systems

(2) Major advantages

- 1) Independence from the government is secured under the Central Bank Law, with a wide range of authority ranging from monetary policy to supervision of banks
- 2) Assistance in the areas of policy, organization and technology is available from various government and international organizations, including the IMF, the Bank of France, the Bank of Japan, and JICA.
- 3) Employers are generally diligent and enthusiastic, especially many young and well-educated staff.

4-9-3-3 National Insurance Audit Organization

1) Major restraints

- (A) Lack of communication with the central bank

2) Major advantages

- (A) Within the government organization, it is positioned as a high-level agency similar to the Ministry of Finance and other central agencies.

Chapter 5 Present Situation of the Payment System in the Kyrgyz Republic

Chapter 5 Present Situation of the Payment System in the Kyrgyz Republic

5-1 Participants In the Payment System

The banking system of the Kyrgyz Republic has two levels, the National Bank of Kyrgyzstan, that is the central bank, and commercial banks authorized to operate on the basis of the Banking Law. Among them is a savings bank that has developed on the basis of taking deposits from households. Each of these banks participates in the payment systems together with companies, individuals and other users of banking services in the country.

5-1-1 NBK

NBK has its main office in Bishkek, Chui, and branches in every province. The main office is composed of seven departments that in turn have a total of 20 divisions, and an additional seven independent divisions (see Figure 4-3 for details). Among these departments, the following four are specifically involved in payment activities.

(1) Accounting Reporting Department

Two divisions within this department are involved in settlement.

A. Organization of Accounting Division

Here, in addition to balances obtained for each commercial bank based on data collected from the banks, each bank's balance with the central bank is obtained. This is done on the basis of the requirement, in force since October 1993, for each NBK branch to report its balance to the main office every ten days.

Daily information on the cash balance at each commercial bank is accumulated here, where it can be determined whether each bank has a deficit or surplus on its correspondent accounts. This information is referred to when deciding which banks are qualified to participate in auctions of foreign currency allocations.

B. Organization of Inter-bank Settlement

This division was created in early 1993. Originally, it processed documents related to inter-republic settlements for use as computer input data at the Moscow computer center. The scope of its activity was in the past limited to Ruble-denominated debts carried forward from the USSR era.

Note: The Accounting Reporting Department also contains the Division of Reform of Accounting and Reporting, which is concerned with the improvement of NBK's accounting system, and the Budget Execution Division, which undertakes disbursements against the budget.

(2) Inter-State Settlements Division

This division is in charge of payments to and from Kyrgyz and the 14 CIS nations. It undertakes settlements for inter-state transactions. It settles by use of the correspondent accounts with the central banks of those countries that were opened during June–October 1992 on the basis of IMF recommendations. Payment instruction documents are all sent through the mail.

During April–May of 1993, the number of payment instructions was about 3,000 a day. No settlements were performed with other CIS nations during the period from May 1993 to January 21, 1994, when a national currency was adopted.

Concerning transactions with ordinary companies, at present the commercial banks are being encouraged to open correspondent accounts on their own with banks in the CIS countries, and thus far about ten banks have obtained foreign currency exchange licenses and are using this system. As a result, payments by way of the central bank will be limited to exchanges between the CIS sovereign entities.

(3) Information System Department

In June 24, 1994 NBK decided to re-name Automation Division to Information System Department and to enhance and re-organize its functions. Information System Department, as shown in Figure 5-1, consists from four divisions and total of 24 member staff. Major function of the divisions is to establish and

construct operational structure and process of NBK and has objectives to promote for raising productivity by automization of the process. Among those divisions, Perspective Project Division is in responsible for payment systems planning including establishment of a clearing house and improvement plan of computerized payment systems which is a joint work with the JICA Study Team. As of August, 1994 the Department was still under stage of recruiting its staff members.

The computer network also functions, as the central activity of the Information System Department, for acquisition of information on foreign currency transactions of each commercial bank (exchange rate used, value transacted, etc.) and to obtain the banks' balance sheets. At present about half of the commercial banks are in this system. The telecommunications network is also linked to the CIS Inter-bank Network, and supplies on-line data to Moscow.

5-1-2 Commercial Banks

As of July 1st, 1994, the Kyrgyz Republic has 19 commercial banks with 179 registered branches in total. The main and branch offices of these banks participate in the payments system. The regional distribution of each bank's branches are shown in Table 4-1.

(1) The Three Major Banks and Commercial Banks Established After Founding of NBK

The commercial banks can be separated into two categories according to manner of development. First, there are the three major banks established after promulgation of the Banking Law, which were created from organizations that existed from before Kyrgyz's independence. Next, there are the banks established on the basis of the Banking Law after independence was attained. Most of the latter have their main offices in Bishkek, the capital of the Republic, and have relatively few branches. The former, on the other hand, have from 25 to 51 domestic branches and thus possess large organizations for engaging in banking business.

Each commercial bank is to receive requests from customers to open accounts and process transfers into and out of the customers' accounts. A bank will not undertake cash transfers for persons who do not have an account at the bank.

Each bank has only just begun to automate, but all banks are very eager to automate. Each bank assigns the greatest importance in automation to its applications for payments and for internal accounting. They are also eagerly studying automating banking services for depositors; and at some commercial banks this has already been realized. Study is now being made of more comprehensive automation.

Payments for transactions with countries outside of the CIS group are made using correspondent accounts opened in foreign banks. Much of these transactions are in US dollars, and some are in German Marks.

(2) Savings Bank

The savings bank takes deposits mainly from private citizens. As of August 1994, it still has not given a license as a commercial bank under the Banking Law. It comprises up a network serving the entire nation through a total of 379 branches in 17 regions of the country. The savings bank is depicted schematically in Figure 5-2.

It also provides services on behalf of private citizens for receipt of monthly payments, that requires inter-bank settlements, and for payments they request to have made. This cannot be done directly by the savings bank, so the transfers are entrusted to Kyrgyzstan Bank, Promstoroy Bank and other banks. The savings bank is scheduled to establish the account in NBK and the payment will be going through via its NBK's account in December, 1994.

In the Lenininskaya district, it was observed that automation of the savings business is at an advanced stage, and 90,000 depositor accounts are being managed by on-line processing in a Local Area Network (LAN) system. Transactions made against every account are recorded on an account by account basis since January 1, 1993, and can be reviewed in an instant. It is also possible to review payments made in all transactions on a month by month basis.

Transactions in the unit of the national currency, the Som, began on May 12, 1993, and records exist for conversion of Rubles in each account to the Som; the dividing line is immediately evident in the account columns because of the difference in the number of digits, at the time the new currency was introduced, one Som was exchanged for 200 Rubles.

5-1-3 Corporations and Individuals

Corporations and individuals are the users of the payments services but do not perform the service. Among them, however, some provide telecommunications services to banks, and it is possible that in the future companies that provide payment services could be created from among the aforementioned companies that provide telecommunication services.

Between the first field survey which were undertaken between January and March 1994, 20 companies were visited and frank discussions were held with the executives there. As an overall observation, it can be said that many of these people had a high level of awareness regarding financial systems and the present condition of banking services. Further, regarding payments business, there were few opinions expressed in favor of use of banks as a method of making payment. "When I'm in a hurry, I pay them myself," and "I only use a bank when I have no choice" were among the opinions heard.

The reason for these attitudes may well be lack of certain knowledge as to when the recipient will receive the money given to the bank for payment purposes. It is not unheard of for a payment to take up to 5-10 days, even within the same city. It was even said that sending money abroad was quicker and more certain than doing so at home; only two days are required in the case of the United States.

5-1-4 Other Parties Related to the Payments System

(1) Computer Centers

There are two computer centers, in Bishkek and Osh, that are independent companies affiliated with NBK. The Study Team made visit these Computer Centers in both cities.

In Bishkek Computer Center, payment information processing was being performed at these computer centers, as of January 1994, for 52 bank branches in the Chui region, and balances were being calculated for each bank from the information. The center in Osh was processing information for 17 branches at that time. These services are provided to each bank for a fee, based on the number of transactions, and each computer center is a going concern. In Bishkek, 10,000 documents are processed daily in January, 1994. In the past the number of documents per day was about 25,000, so it is evident that there has been a great decline in volume of business.

(2) RKC and Rashotonaya Parata

Prior to May 1, 1993, NBK had a Regional Cash Center (RKC), at each of its branches and all payments went through those centers. The arrangement was as shown in Figure 5-3. In this figure the following is schematically represented. The numbers ① and ② here correspond to the numbers in the figure.

- ①: Every branch had an account in RKC, and payments went through the RKC.
- ②: Payments to branches of the same bank also went through the RKC (heavy line in the chart).

Payments from one bank to another were handled in the same way. That is, there was no distinction made between inter-bank and intra-bank transactions. Further, all documents were in paper form, and physical transfer of the paper documents required from two weeks to a month. A problem existed because the funds were frozen during this period.

On May 1, 1993, NBK started to use a new payments system. This was based on a recommendation by the IMF, and a conceptual outline of the system is shown in Figure 5-4. The new system had the following four major features.

1. The payment process which went through the RKC's were abolished, and there was no longer intervention by NBK.
2. Intra-bank payments were made entirely within the bank.
3. Inter-bank payments were done directly, through use of correspondent accounts.
4. Amounts pending settlement were reviewed on a daily basis.

This system was not without its efficiency limitations, as each commercial bank had to have an account with every other one. The three major banks in particular felt greatly inconvenienced in having to open correspondent accounts with a large number of small banks.

In connection with this, the small banks formed an association, the Rashotonaya Parata, where the three major banks could open correspondent accounts for common use in connection with the small banks.

Extreme difficulties were encountered during the first month of operation of this new system, but the participating banks made improvements thereafter and eliminated many problems. The main point of the system is as follows. In every province except Chui, one "regional coordinating branch" was designated, one from among the branches of every bank, and a correspondent account was opened there, for transactions involving the banks of the respective regions. (It appears that guidance by NBK was to the effect that processing was done by each bank through its main office, as shown in dotted line in Figure 5-4.)

It was explained that the new system made it possible to complete payments in one day.

On the other hand, the basic payment instructions remained in the form of a paper document, so there was no great reduction in the time required for transmittal. It still required two weeks to a month to make a payment in a different province, and during that period the funds could not be usefully employed. It is evident from this that improvement of the organization for payments is necessary. NBK is now working on two areas of study, one involving a clearing house and the second intended to improve inter-bank communication.

5-2 Types of Payment and Number of Payments

5-2-1 Transactions at NBK Head Office and Branches of NBK

Branches of NBK send or receive cash through the Chui Cash Distribution Center (in the Chui region) to and from commercial banks in the region. A correspondent account is opened by the commercial banks only at the head office of NBK; no payments are done at NBK branches.

Withdrawals by commercial banks are done against banker's checks and checks are cashed to the extent that there are funds in NBK account, within the day. Need for some preparations exists, however, when large amounts of cash have to be paid out.

There is a Reserve Fund at each branch of NBK, and minimal attention appears to be given to keeping the physical movement of cash (several turnovers a month).

5-2-2 Inter-Bank Transactions

The inter-bank market is still under developing stage. However, when reviewing background of those individual transactions there seems to exist some transactions which are related to inter-bank market transactions. The Study Team were not able to verify the amount of those transactions. Usually, those transactions are being made in the following manner.

1. Using the Reserve Fund of NBK
Commercial banks request to RKC in Chui to transfer their reserve funds in NBK to other bank's accounts. Actual process are made in the Chui Computer Center.
2. Using Correspondent Accounts in Commercial Banks
Commercial banks request to a Computer Center to transfer their fund in correspondent accounts to other bank's account. Actual process are made in the Computer Center.
3. Using Correspondent Accounts in Rashotoya Parata
Commercial banks request to the Rashotonaya Parata to transfer their fund in correspondent accounts to other bank's accounts. Actual process are made in the Chui Computer Center.

These three methods may be used at the same time.

5-2-3 Transactions with Customers

A customer must have an account at a bank to remit funds through the bank. Many commercial banks require that a minimum balance of 2-5,000 Som is maintained in an account.

At present there is not an adequate means of monitoring the number of cash transfer transactions being made within the country. That is, there has been a major change in the mechanism of the payments system, after which there have been a number of adjustments, and the basic information is not well-ordered at each bank at this time. Further, there are influences from the extenuating circumstances in the nation's economy, the fact that commercial transactions themselves are in a transition period, and the level of confidence that the people place in financial institutions.

(1) Number of Documents When the RKC's Were Functioning

In line of current information, the Study Team was able to obtain information on the daily value transferred (in units of Ruble 1,000) and number of transactions during 1992, when the RKC's were still functioning. These data are shown in Table 5-1, "Payment Documents and Amount in Old RKC in 1992." This table provides the number of documents and amount of money for payments in the same region, other regions, and CIS countries, for Chui, Osh and four other regions. According to this information, in 1992, 4,402 documents were created a day in connection with payment of money, of which 1,903 were for payment within the same region, 1,360 for payment to other regions, and 1,139 for payment to other CIS countries.

Figure 5-5, "Number of Payment Documents in Old RKC in 1992," shows the data from the above table as a bar chart. The number of documents is greatest for the Chui region, at 2,209. Half or somewhat more of all documents sent within the country have sent from Chui. Jalal-abad is next most common sending province, accounting for about a fifth of the total number of documents sent within the republic, to totaling 756. Osh is next in importance, and these two regions and Talas are the most important fund transfer sending province within the Republic.

Figure 5-6 gives the shares of payment document destinations in each region and the republic as a whole. From these pie charts it can be seen that in Chui and Osh there is an approximate balance between the volume of documents to the same region, the rest of the republic, and to CIS countries, while in the other regions

the share within the same region is high and that of the CIS countries is no more than about 10%.

(2) Volume Handled by the Chui Computer Center

With regard to Chui, the region of Kyrgyz that handles the greatest number of documents, half of the republic's total, the study team was able to obtain data on document volume from NBK Computer Center. For details, see "a. Total Number of Documents" in Table 5-2, "Number of Documents Processed in Chui Computer Center of NBK." The volume handled in the five-year period from 1989 to 1993 and number of branches that were senders are shown combined on the chart. The chart's total column for 1989 shows that 8,860,700 documents were handled in 1989. The number fell to about half of that, 4,700,700, in 1990, however, and failed to recover thereafter. The number handled in 1993 was somewhat under 3,000,000.

Based on the research of which undertaken in July 1994, it was confirmed that these number of transactions were further decreased. As a result, the number of monthly transactions in May and June were in between 7,000 and 7,500. These numbers as follows:

<u>Month</u>	<u>Operation days</u>	<u>Transactions</u>	<u>Daily average</u>
May	19	139,113	7,322
June	22	154,734	7,152

Among these, the number of transactions which came via Rashotonaya Parata consisted from 30 % of the total transactions and these are shown in the table below:

<u>Month</u>	<u>RP transactions</u>	<u>Daily average</u>	<u>% of the total</u>
May	41,489	2,168	29.6
June	45,573	2,072	29.0

The each amount per transaction are shown below:

<u>Month</u>	<u>Total amount (1,000 Som)</u>	<u>RP processed (1,000 Som)</u>
May	1,184,053	48,842
Per transaction	8,511 Som	3,588 Som
June	1,269,633	182,599
Per transaction	8,205 Som	4,007 Som

In the total, average amount of 8,500 Som per transaction are processed, however, it is quite identical that only 4,000 Som which is nearly half of those of RP's have been processed.

Following table shows the recent statistics concerning processing activities of the Chui Computer Center.

	<u>May, 1994</u>	<u>June, 1994</u>
Business operation days	19	22
Number of transactions	139,113	154,734
Portion of RP	41,489	45,573
Others	97,624	109,161
Amount of payment (1,000 Som)	1,184,053	1,269,633
Portion of RP (1,000 Som)	148,842	182,599
Others (1,000 Som)	1,035,211	1,087,034
Average number of transactions per day	7,322	7,033
Portion of RP	2,184	2,072
Others	5,138	4,962
Average amount of payment per transaction (Som)	8,511	8,205
Portion of RP (Som)	3,588	4,007
Others (Som)	10,604	9,958

(Source: Computer Center and Study Team)

In Table 5-2, "B. Summary" contains a summary of the above-described data. Given, for the five years from 1989 to 1993, are annual totals of the number of documents, number of branches in operation, average number of documents per bank branch, the bank branches that handled the greatest numbers of documents, the numbers of the documents handled by these branches, and the ratio of the average number of documents handled at the branches that were the busiest to the

total number of documents handled among all the branches. The situation can be summed up as follows.

- 1) The number of participating bank branches rose every year from 27 in 1989 to 52 in 1993.
- 2) The average number of documents handled per branch peaked at 328,200 in 1989 and gradually declined after that, to about one-fifth the number, 57,600, in 1993.
- 3) The busiest branch in 1989 handled 1,455,300 documents, and volume there declined to less than a quarter of that, 325,600, in 1993. For the first four years of this period the busiest bank was the Promstoroy Bank, but the next year it was Kyrgyzstan Bank
- 4) The ratio of documents handled at the busiest branch to the total number of documents declined from 16% in 1989 to 11% in 1993, as the degree of concentration of document handling declined.
- 5) The ratio of the volume handled at the busiest branch to the average handled at all branches was 443% in 1989 and rose to 565% in 1993.

In Figure 5-7a, the total number of documents handled is shown as vertical bars and the number of bank branches is shown as a series of points linked laterally by a line. It can be seen that, starting in 1989, the number of documents handled declined, while the number of branches where documents were handled increased. The relationship between the branches that handled the most documents (bars) and their share in total documents handled (linked points) is shown in Figure 5-7b. It may be seen from this figure that the number of documents handled at the busiest branch declined greatly over time, while at the same time the degree of concentration declined.

Figure 5-7c depicts the relationship between the average number of documents handled at a branch (as bars) and the ratio of document volume at the busiest branch to the average number of documents in question. It can be seen from this that there was a great decline in the average number of documents handled at the branches, and a great increase in the multiple of busiest-branch volume to that at the others.

Upon the Study Team visit to the Chui Computer Center (January, 1994), the Center were handling 25,000 documents a day in the past but now volume is down to about 10,000 a day. Assuming that the number of business days in a year is 250, and that a year is 52 5-day weeks with some holidays, the following daily volumes maybe calculated from this table:

1989: 35,443

1990: 18,803

1993: 11,989

It is not easy to verify the "25,000 a day" from this data directly, but the data for 1989 and 1990 point toward such a figure. Moreover, the "10,000 a day" is more or less confirmed by the data for 1993, which was 12,000 per day for 1993. It is also evident that volume has declined late in the year.

(3) Volume of Documents Handled Between Regions

With the cooperation of the commercial banks, NBK implemented a questionnaire survey on the payment system during autumn, 1993. In it was an item on the number of payments made per destination, and the study team was able to obtain responses to the survey from nine banks (Agroprom, Promstoroy, Akniet, Saturn, Kurulush, Vnesh, Energo, Merkury and Adil Banks). The data for these banks was shown as a matrix of the daily volume of payments to six regions.

Because this study encompasses all banks, it should be noted that the results can not be applied, *mutatus mutandi*, to the overall situation in Kyrgyz. Nevertheless, two of the three major banks are included, as are seven newly established banks. Inasmuch as about half of the banks are represented, even though the results are not applicable to the nation as a whole, it can be understood that they are useful in showing the general tendencies, and shares, and are analyzed below on that basis.

In Table 5-3 are ten sub-tables, A to J. Each table has regions on both the x and the y coordinates, and the boxes of the matrix contain the number of documents sent from the vertical-axis regions to the horizontal-axis regions. Table 5-3-A summarizes inter-regional traffic for the nine banks as a whole. To the extent that one may judge from this table, the nine banks in total sent 20,000 documents.

It is carefully notified that the Agroprom Bank handled about 80%, or about eight times that handled by the Promstoroy Bank.

It would not be proper to generalize about the Kyrgyz Republic's payment document volume only on the basis of the above information, but if it is provisionally assumed that the national total is 1.5 times greater than this, the average daily volume is 30,000.

Referring to the table, it can be seen that the greatest volume was from Chui, and that most of that traffic was within Chui. Next in volume is Osh, and almost all transactions are within the region. It is evident that the high concentration within each region is to be found elsewhere as well.

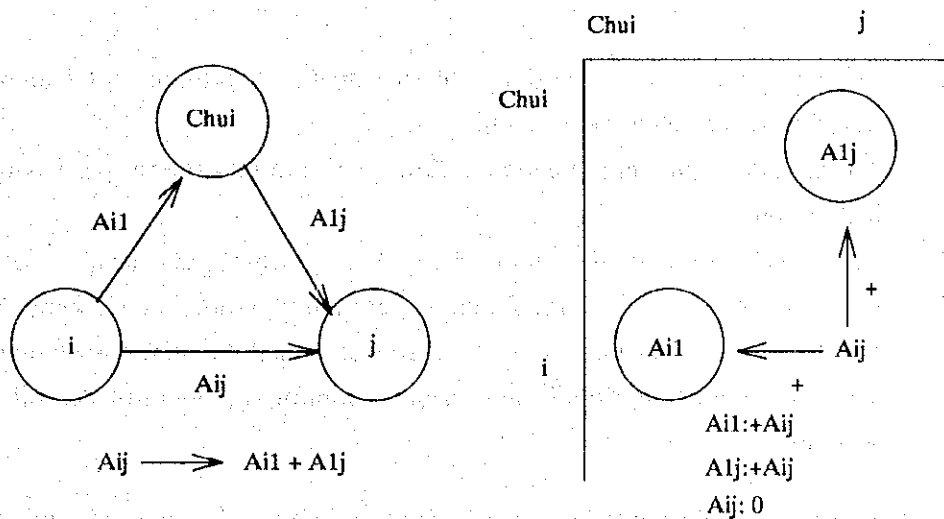
Figure 5-8 graphically shows the number of transactions on a province by province basis. The bars for each province are color-coded according to destination. Here too, it is evident that the number of transactions emanating from Chui is greater than those from other provinces, and the transfers within Chui account for the majority. At the same time, internal transfers in each province are also of high importance.

In Table 5-4 the number of transactions are indexed based on the above-introduced compilations, to give the composition on the basis of a unit of 1,000 transactions. The total at the lower right of the table is 1,000, the sum of the matrix components. For example, when total transactions are taken as 1,000, those in the upper right from Chui to Chui are equal to 361.37, and transactions to Chui, shown in the lower left, are 428.69. This shows the relative importance of payments made to Chui recipients and can be considered that almost 40 % of the payment is concentrated in Chui region.

Table 5-5 is made by using the data in the preceding table, to calculate the way that the number of inter-province transactions change by being routed through Chui. This table assumes that the telecommunications network of Kyrgyz is such that it radiates from Chui province, which is at the center, and that even if a computer network were to be used, this basic composition of transactions may not be changed. If the matrix is expressed as A and its component as A_{ij} ($i=1..6$ and $j=1..6$), the element of first line A_{1j} ($j=1..6$) shows the number of transactions

which originated in Chui; the element of A_{i1} ($i=1..6$) indicates the number of transactions to Chui from other regions; and the element A_{ii} ($i=1..6$) of A shows the number of transactions processed in each region. At that time each element A_{ij} indicates the number of transactions transmitted from i to j which indicated each region. If it was assumed that these elements are transmitted via Chui region, the same volume as A_{ij} is added to A_{i1} and A_{1j} , and they then can be expressed as $A_{ij}=0$. The following figure shows the way of the calculation.

The result of the calculation was very interesting, that is even the inter-region transactions go through the Chui region, the increase rate of the number of transactions comes up to only 2 %. This result makes the very important judgment that the transactions should really have to go through Chui upon the installation of the computer network.



(4) Processing Fee

The field study information on processing fees obtained from five banks and the Chui Computer Center is summarized in Table 5-6.

Two of the five banks do not charge, one charges a relatively low fixed fee, and two charge a fee that varies according to the amount transferred.

The average amount of the payment based on information which confirmed at the Chui Computer Center is about 8,000 Som. Then bank charges for receipt of payments vary 80 Som, 8.0 Som and 0.05 Som. Some banks did not charge.

The charges paid by the banks to the computer centers were checked. As can be seen from Table 5-6, from 0.19 to 0.24 Som per payment is charged in addition to which there are overhead charges of account management fees, documentation report preparation fees, and so on. There is a schedule of fees at the Chui Computer Center as shown in Table 5-7, by use of which receipts from participating banks can be obtained. If the approximate per-transaction cost is used, it is estimated that the direct cost per transaction is about 0.5 Som.

Bases on the Study Team research on the concept and methodology taken by each bank, it could be classified into 5 following methods:

1. To multiply constant charging rate (0.1 to 0.4 %) to the total amount transferred per account per month.
2. To set certain amount which varies from 0.5 Som to 4.0 Som per payment instruction.
3. To fix certain amount of monthly charge (e.g. 75 Som) per account.
4. Combination of above 1. and 2., but to set minimum amount 75 Som. And to calculate bases on above 1. if the charge exceeded the minimum amount.
5. To charge none, but the customer deposit minimum amount of deposit per account.

At present many banks are tending to accept above method 5 that is set minimum amount to be kept in a payment account. This may be a suitable measure when liquid assets are limited, but it may be considered necessary in the future for each bank to bill customers a fee and thereby make the cost of the service clear.

5-3 Major Payment Systems

In Kyrgyz, up to May 1993, there was no sharp distinction between intra- and inter-bank payment systems, and all payments were processed through the RKC of NBK. Through adoption of regulations in May for inter-bank settlements, the settlement function was taken out of the RKC and NBK does not intervene in payment

processing with the exception of the work of the Computer Centers that are an independent subsidiary of NBK.

This adoption of regulations represented a major change, as correspondent relationships established between banks are required so that payments could be made.

At present, however, the services provided by the Computer Center still do not distinguish between inter-bank and intra-bank payments.

5-3-1 NBK Payment System

(1) NBK Computer Centers (C.C.)

1) Functions of the Computer Center

The Computer Centers have a functional relationship with (that is, provide services to) 52 bank branches in Chui and 17 in Osh in January 1994. This is not done by a dedicated telecommunications link. The Center functions as a central office for intra-province payments and a computer bureau for private financial institutions, and provides the following services to head and branch offices of banks in connection with remission and receipt of payments.

1. Calculation and reporting of balances between banks and branches.
2. Reports on changes in customer account balances, calculation of the balance and reports.
3. Calculation and reporting of the balance in correspondent deposit between the three major banks and the Rashotonaya Parata.
4. Calculation and reporting of the balance between small commercial banks within the Rashotonaya Parata (similar function as above 3.)
5. Processing of documents at the rate of 10,000/day, 2,000 of which are related to inter-bank payments. (processing charge is 0.33 Som/process)

2) **Business Activities of the Computer Center**

Requests for payment are sent by banks via Telex and stored in the computer at the Center. For banks that do not have a Telex connection, the payment instructions, once received, are converted to data entries on magnetic tape by use of a personal computer. Requests from small banks are sent to the Center via the Rashotonaya Parata.

The above methods are used to collect the day's data by 4 p.m. Overnight, batch processing of the data at the Center is performed, and the results are sent to each bank by 8:00 a.m. the following day.

3) **Future Issues for the Computer Center**

The Computer Center is contributing to smooth, swift processing of payments between banks, and between banks and customers. The Center's equipment and facilities, however, are out of date and may not be adequate for the tasks ahead.

- A. Some commercial banks have stated that the Center's facilities and equipment are out of date even now, and are not adequate for provision of good service.
- B. Further progress in computerization at commercial banks in time will enable the banks to handle their own intra-bank payments. The definition of the role and functions of the Center must be modified in keeping with changing conditions.

For the Computer Center to continue performing a role in the inter-bank payment system through such activities as acting on behalf of the Rashotonaya Parata, it will be necessary not only to modernize the computer facilities and equipment, but also to improve the efficiency with which information is processed within the center, and make further progress toward improving payment-related services.

(2) Information Center in the Information System Department

1) Receipt of Reports from Commercial Banks

The Information Center is one function of the Information System Department of NBK. It receives the reports that NBK requires of each commercial bank regarding inter-bank payment balances and handling of foreign currency. The reports are made to the banks' head offices by Telex and telephone daily after the close of business at the banks' branches, and the reports are sent to NBK by computer links.

2) Analysis of Reports from Commercial Banks

The Information Center prepares computer diskettes containing the information received from commercial banks and distributes the diskettes to the respective divisions in NBK that require the information for analysis and documentation. NBK is working on the development of a PC-LAN to speed up the process of information supply to these divisions.

5-3-2 Cash

(1) Introduction of the Som and its Diffusion

After attaining independence, the country continued to use the Ruble for a period, and then in May 1993 introduced the Som, the national unit of currency. At present the use of the Som has spread virtually throughout the entire country. United States dollars have been used at hotels and international tourist-oriented shops, but as of January 1994, they will no longer be accepted.

(2) Paper Money Denominations

There are four denominations of paper money: 20 Som, 10 Som (issued from February 1994), 5 Som and one Som. In addition to these paper money in denominations of 50 Tin, 10 Tin and one Tin are distributed as provisional money, but it is said that these are to be replaced by coins. All currency is issued by NBK, and produced in England.

(3) Cash as a Means of Settlement

Cash is still preferred as a means of settlement among individuals as well as corporations. Because the delay in improvement of the payment system and a low level of confidence in the banks has kept the number of persons holding deposit accounts down.

(4) Method of Supply of Money and Restraint on Volume of Money Supply

The method of supplying money to commercial banks had to be changed when, in May 1993, the accounts of commercial bank branches at NBK were closed. Previously, when those branches wished to withdraw money from branches of NBK, they did so directly. Now they must request their head offices to request NBK to make a payment to the appropriate NBK branch be made. NBK branch pays the commercial bank branch after receiving authorization.

To combat inflation, NBK is now restricting the supply of money and maintaining a scrupulous check on withdrawals of cash from deposit accounts. NBK branches now control withdrawals from corporate accounts for purpose of payments to other companies, as a means of controlling money in accordance with actual transactions being made by firms.

5-3-3 Deposits

(1) Types of Deposit

There are three types of deposit account: 1) demand deposits, primarily for liquid assets of individuals, 2) current deposits, used by corporations for payment purposes, and 3) term deposits, used by both individuals and companies. The first two are used for making of payments. In Kyrgyz, the word "deposit" is used only in connection with the third category of account.

(2) Conditions of Accepting Deposit Accounts, and Payment Services

Demand deposits in the past were accepted only by savings bank. The number of such accounts totals more than a million. Today, duly authorized commercial banks also may accept deposits for payment upon demand, but the scale of such activity at those banks is very small. Recently, however, a shift of savings

accounts from savings bank to commercial banks has been observed, and it can be said that competition between these two types of financial institutions has begun.

Regarding the relation of these deposit accounts to the payment system, it is of course possible to transfer money from one account to another. The savings bank has for some time offered as services the automatic payment of wages into employee accounts, and automatic payment of utilities charges (automatic withdrawal has not been offered yet).

(3) Business Procedures and Systematization Related to Deposits

Banking business procedures and systematization related to deposits at commercial banks, at many of the banks, entail manual paperwork. Some banks have adopted use of personal computers for deposit and withdrawal entries and provide accounting information for accounting system use in the form of a diskette. CDs, ATMs, and bank cards (cash cards) are not being used yet at present. Among savings bank, withdrawals and deposits which involves in inter-branch process can be done through the request by telephone, but not by the computer transmission processing. In general, even at banks that have an exclusive-use line linking branches and the head office it is not possible at present to provide service that simultaneously withdraws funds from one branch and deposits them at another. And the services of deposit and withdrawal for other banks are not used at this moment.

5-3-4 Intra-Bank Payment System

(1) The Role of Computer Centers in the Intra-bank Payment System

Because intra-bank payments are by nature internal business of the bank concerned, there is scant need to use a computer center that is external to the bank. But the computer centers in the past had performed centralized business functions and calculations for all banks, and since it has an intimate relation to the nation's payment system, it is considered impossible to completely eliminate its role in intra-bank payments in a short time. Therefore, Kyrgyz's payments system in the actual processes involved does not now make a distinction between intra-bank and inter-bank payments.

The Kyrgyzstan Bank and some of the advanced banks, having developed their own payment systems, are interested in ending the use of a computer center. Many of the banks that lack such systems, however, have no choice but to continue using the computer centers for important services.

(2) Business Procedures of Intra-bank Payments

1) Flow of Documents and Information

In intra-bank payments, at the three major banks, it is of central importance that documents such as payment instructions and confirmations be received directly by the branches concerned, without passing through the "regional coordinating branch" (the head office in the case of Chui). When the paying branch or the recipient branch is in Chui (or in Osh), the computer center is used. In the case of small and medium-size commercial banks, with at least one branch (either send-in or send-out bank) is located in Chui, they are to use the Computer Center via Rashotonaya Parata. The center, having separated payment instruction and other documents according to destination, provides detailed statements for each branch and each account balance, and performs conciliation in accordance with the transfer and receipt of money.

2) Conditions of Business Activities Inside Banks

At many banks the internal business procedure related to intra-bank payments is handled mostly by manual work using paper documents. Payment instructions are accepted after the customer brings in the request and the account balance and authenticity of the signature are checked. Requests received prior to noon, after separation by destination and internal processing, are sent out by 4 p.m. Even when requests for payment are transmitted by Telex or personal computer, it is necessary to send the request form to the paying branch (it appears that there is a specialist firm engaged in clearing services). Confirmations are sent back by mail.

Some banks are using personal computers for input of requests for payment and account management simultaneously, but there are no banks that have an on-line system linking all branches to the head office. Even at the banks

that have relatively advanced procedures, data is accumulated and undergoes batch processing. The data accumulated in a personal computer is recorded on diskette and provided to for use in the accounting system. It appears that at Maksat and other advanced banks, however, PC-LANs are in use and there is a direct data linkage between the various relevant internal systems.

Even in the same bank, however, it is not necessarily the case that all branches are part of the system; there are many banks that have not been able to standardize procedures. Further, there are considerable differences in details of how banking business is conducted among the banks, such as when a computer center is used, for example, whether transmittal of confirmations are eliminated, or whether account balances are updated after receiving information from the computer center and confirming it.

5-3-5 Inter-Bank Payment System

(1) Trends

1) Role of the Computer Center

Computer Centers operated by NBK in Chui and Osh perform a vital role in operation of the payment system between banks through their centralized information processing and calculation services, similar to the case of to intra-bank payments.

2) Establishment of Rashotonaya Parata (RP)

Changes in the methods of making payments resulted from change in regulations for inter-bank payments and obliged private financial institutions to modify their procedures, so procedures for settlement now vary from bank to bank. Moreover, as of June 1993, the smaller commercial banks (excluding the three major banks) have made use of the Rashotonaya Parata to reduce money flow when making payments. Ordinance related to clearing house and regulations concerning clearing operation are shown in Annex 3.

(2) Functions of Rashotonaya Parata

1) Relationship of Rashotonaya Parata to the Three Major Banks

With regard to the three major banks, the RP is in effect as if all smaller commercial banks were one big bank as far as payments are concerned. That is, Rashotonaya Parata has correspondent accounts in their major banks and four parties (RP and three major banks) are in correspondent with each other for payment transactions. The participating banks maintain balances at the Rashotonaya Parata, which performs netting to the extent of those balances. If a bank's balance is insufficient, it must bring it up to the required level.

2) Functions as an Information Processing Center for Small and Medium Size Banks

The Rashotonaya Parata also functions as a common information processing center for small and medium-sized banks, including not only processing made within Bishkek but also processing of transactions made from the branches of small and medium-sized local banks . (Processing 1,000 to 2,000 transactions per day)

3) Structure of the Rashotonaya Parata

The Rashotonaya Parata is structured as follows.

- A. It uses funds deposited by participating banks for their correspondent accounts to maintain a balance in accounts at the three major banks.
- B. The participating banks and the three major banks use Telex or telephone line links to the Computer Center in Bishkek.
- C. All instructions to pay are sent to the Rashotonaya Parata and tabulated on a daily basis to determine the netting position of each commercial bank.
- D. Correspondent accounts of commercial banks at the Rashotonaya Parata are credited or debited according to the netting position tabulated.

- E. Payments between the participating banks and the three major banks are done by crediting or debiting the Rashotonaya Parata's correspondent accounts (#161) at the three major banks.
- F. All information related to payments (such as advice to pay notifications) involving the three major banks is sent to the Computer Centers. In addition to netting between participating banks, Rashotonaya Parata also documents the balances, netted, against the three major banks, and reports then to the participating banks.

By means of the above arrangements, the participating banks obtain the same effect as if they were to have a correspondent account at the Rashotonaya Parata and undertook payment services related to the participating banks as well as to the three major banks. From this viewpoint, it can be understood that the participating banks take their share of correspondent accounts at the Rashotonaya Parata to be the equivalent of "correspondent accounts opened at the Rashotonaya Parata". Articles of Association of Rashotonaya Parata are shown in Annex 4.

(3) Characteristics of and Issues Related to the Rashotonaya Parata

1) Characteristics

The Rashotonaya Parata has the following characteristics.

- A. It simplifies the transmission of information in comparison to the situation when payments are made by means of correspondent accounts. Banks participating in the Rashotonaya Parata have only to send payment information (instruction). They do not send to the receiving bank the document for confirmation and the former's copy.
- B. Participating banks do not have to maintain a blanché in correspondent accounts with each other. This makes it possible to reduce the amount of funds required to do business.
- C. The Rashotonaya Parata acts on behalf of participating banks for payment transfers to and from the three major banks.
- D. Even if the payment transfers to and from the three major banks do not go smoothly, those between participating banks will go smoothly.

2) Issues

The Rashotonaya Parata faces the following issues.

- A. According to the Rashotonaya Parata's charter, each participating bank is to subscribe to the Rashotonaya Parata (5,000 Som). At present, the subscription funds amount to 15,000 Som, far below the 60,000 required by the charter. This amount is also far, far below the 200,000 Som required in view of the Rashotonaya Parata's being taken as a financial institution. There is the possibility that if participating banks are short of funds beyond a certain extent, the Rashotonaya Parata will not be able to function properly. This under-subscription suggests that difficulties will be encountered if there is to be an effort to elevate the functions or performance of the Rashotonaya Parata.
- B. To the extent that there is not a serious shortage of funds at participating banks, the Rashotonaya Parata can function as an efficient system, but there is no guarantee that payment can be made with the finality of payment by NBK. This is because if a participating bank has a shortage of money, and other participants can not cover that shortfall, there is a danger that the system will break down.

(4) Business Procedures for Inter-bank Payments

1) Payments Between the Three Major Banks

The three major banks maintain correspondent accounts at the "regional coordinating branch" in each province (or at the head offices, in Chui). Final inter-bank settlements are made at these "regional coordinating branches." When payment is to be made across a provincial boundary, or when either payer or payee bank is in Chui (or Osh), the Computer Center is used, via the head office (or "regional coordinating branch, in Osh). The Computer Centers provide, in addition to the same services for intra-bank payments, reporting of the inter-bank balances.

2) Payments Between the Three Major Banks and the Smaller Commercial Banks

The arrangements for final payment between the three major banks, and payments between the smaller commercial banks, have been described above. But because the Rashotonaya Parata is only in Chui, when either the payer or the payee bank is a small commercial bank, even in the case of inter-bank settlements outside of Chui, it is necessary to use the Rashotonaya Parata in Chui (and the Computer Center).

Thus, for inter-bank payments outside of Chui, it now is inconvenient in comparison to the time when payments were made through NBK's RKC. Because of this, efforts to establish a Rashotonaya Parata in each province other than Chui have begun.

3) Business Procedures Inside Individual Banks

Business procedures at banks differ to a greater or lesser extent in detail, but internal procedures are the same as for intra-bank payments at branches from the time a request for payment is received to the remission of funds.

In order to improve the efficiency of procedures related to payments, on the basis of an agreement by the banks, for the sake of convenience, there is an ongoing process of direct exchange of documents and payment information.

5-3-6 Crossborder Payments System

There are two fundamentally different forms of crossborder (inter-bank) payment systems in use in Kyrgyz. One is the use of correspondent agreements, which is common among private financial institutions in the industrially advanced nations. The second is payment by means of the correspondent arrangement among central banks of the CIS nations.

(1) Correspondent System Among Private Banking Institutions

Many commercial banks make use of the correspondent system. For example, Maksat Bank, in addition to having signed correspondent agreements with

commercial banks in 14 CIS countries, has signed such agreements with banks in Germany and Switzerland. Adil Bank and Kyrgyzvnesch Bank have signed agreements with Japanese banks. Because this country is not a participant in SWIFT, payments between banks in Kyrgyz and their correspondent banks are made by means of personal computer connections. Some banks, such as Adil, aware of SWIFT, are planning to adopt a new system that use as a format patterned after that of SWIFT (network plan for the CIS countries).

(2) Payments by Means of Correspondent Relations with Central Banks

Regarding payments between central banks, the CIS nations' central banks have mutual correspondent accounts, and payments to private commercial financial institutions in other countries can be made through messages between the banks. In order to face the disruption caused by the collapse of the Soviet payment systems the Russian Central Bank undertook to enter into correspondent arrangements with the central banks of the FSU countries in January, 1992 so that the settlements between republics are carried out through these correspondent arrangements. The Russian Central Bank plays the main role in the working of this settlement mechanism and the Bank accords financing in the form of a technical credit to the debtor nation. Such credit places a considerable burden on Russia and enlarges the trading imbalances between individual countries and so in July, 1992 the Russian Central Bank strengthened its watch and control over this system and since the overdraft of individual states is to be paid in foreign currency and interest is calculated as a mid-term debt on a LIBOR base the volume of trading has decreased subsequent to these measures.

This method at present relies on transfer of paper documents by mail. Because of the time required when this system is used, NBK urges users to make payments through commercial banks' correspondent systems. Starting in April of this year it has been planned to unify the correspondent systems for payment transfers between commercial banks. This will mean that NBK will be involved in crossborder payments only for large amounts transferred between governments and special transactions.

(3) Establishment of an Intergovernmental Bank

New systems for settlement are being reviewed in order to ensure the maintenance and development of trading among FSU countries. Particularly promising is the proposal to set up an Interstate Bank (ISB) to permit a pluralistic settlement mechanism. At the CIS conference of October, 1992 the Unified Ruble Block Agreement was signed by eight states including the Kyrgyz Republic. This agreement aims to permit inter state settlements via the creation of the ISB system and determines the use of the Ruble as the common currency of trade between these countries. The ISB Charter establishing the creation of the ISB was signed by 10 CIS countries (excluding Georgia and Azerbaijan) in January, 1993. Initially establishment was planned to take place before October, 1993 but the subsequent independent issuing of currencies by the individual countries has resulted in the postponing of commencement of operations until the end of 1994. Other matters agreed upon by the signatories to present include agreement to use the Ruble as the currency for settlement and the election of Mr. Vistor Gelasiuku (President of the Russian Central Bank) to post of ISB Chairman and of Mr. Wheree Sabannin to post of ICB President.

The ISB Charter signed in January, 1993 sets down the following functions for the ISB;

- calculation of the net position of individual countries for settlement periods
 - ensuring maximum efficiency for settlements made in Rubles on the account book of the ISB
 - administration of the Ruble settlements made by the Central Banks of ISB member countries
 - distribution (finance) of limited settlement funds
 - brokerage for sales and purchase of the settlement currency
- etc.

5-3-7 Other Payment Systems

(1) Paper-Base Payment System

In Kyrgyz at the present time, commercial bills are not in general use. The only paper-base payment system is the cashier's check, but this too is not in general