



WP/02/129

IMF Working Paper

Treasury Reform in Kazakhstan: Lessons for Other Countries

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IMF Working Paper

Fiscal Affairs Department

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Authorized for distribution by Ehtisham Ahmad

August 2002

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Abstract

Kazakhstan's government has established a comprehensive and efficient treasury system for government revenues and expenditures, and introduced a state-of-the-art government financial management information system. Kazakhstan is among the leading BRO (Baltics, Russia, and other Former Soviet Union) countries in modernizing its budget execution system despite remaining challenges in other areas of fiscal management. The successful outcomes are related partly to the high quality of the reform process, and partly to the institutional design of the Kazakh treasury. Some design features are common for most well-functioning treasuries. Other features are related to the specific economic factors, institutional features, and financial management objectives of a transition economy, with a strong emphasis on fiscal control and financial discipline.

JEL Classification Number: H61

Keywords: Treasury reform, budget reform, transition economies

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I. INTRODUCTION

From 1994 onwards the Kazakhstan government has carried out a complete modernization of its budget execution systems. This includes the establishment of a comprehensive and efficient treasury system for government revenues and expenditures, and introduction of a state-of-the-art government financial management information system.

The results of the treasury reforms in Kazakhstan have been very impressive. An IMF assessment in 2000¹ indicated that Kazakhstan was among the leading BRO (Baltics, Russia, and other former Soviet Union) countries in such modernization, and it has strengthened its position further since then. A recent IMF fiscal transparency mission² identified several options for further improvements in fiscal institutions and policies, in particular related to government off-budget and quasi-fiscal activities, but was generally very appreciative of the new treasury system.

There are many reasons for the successful treasury reform. The results are partly related to the high quality of the reform **process**:

- high-level commitment to the reforms;
- clear reform objectives and consistent implementation strategies;
- long-term approach to information system development;
- use of standard application software for the treasury system;
- proactive use of technical assistance;
- emphasis on building broad stakeholder support;
- timely availability of staff and other resources;
- use of modern project management techniques;
- strong focus on sustainability; and
- realistic timeframes.

¹ Barry Potter and Jack Diamond, 2000, *Setting up Treasuries in the Baltics, Russia and Other Countries of the Former Soviet Union*, IMF Occasional Paper No. 198 (Washington: International Monetary Fund).

² *Ibid.*

The paper also reviews the institutional **design** of the Kazakh treasury. We find many features one would expect to find in any successful treasury, such as a clear and transparent legal framework, clear institutional responsibilities and close collaboration between institutions, a budget classification based on the IMF's Government Finance Statistics (GFS), a chart of accounts (CoA) that incorporates the budget classification, and the absence of significant extrabudgetary or off-budget activities.

Other design features are clearly related to the specific economic factors and institutional features of a transition economy, and the specific objectives for its financial management, with a strong emphasis on fiscal control and financial discipline. This is reflected in the high level of centralization, the broad range of functions entrusted to the treasury, and the strong focus on ex ante budget controls.

The next section of this paper describes the starting point for the reform process at independence in 1991 and outlines the broad range of reforms implemented during the 1990s. The third section describes the government's strategy for information system development and how this strategy has been implemented. The fourth section identifies the key factors behind the successful reforms in Kazakhstan and discusses their applicability to fiscal reforms in other countries.

II. TREASURY REFORMS IN KAZAKHSTAN

A. The Starting Position

Kazakhstan is one of the largest BRO countries. It has 14 oblasts (regions) and 320 rayons (districts). There are about 2,800 central government and about 8,300 local government-spending units (SUs).

At independence in 1991, Kazakhstan inherited a weak budgetary system and ineffective budget execution processes. Large lump sums were allocated to the "State Apparatus" without any breakdown by ministries or administrative units. A large share of government resources was channeled through extrabudgetary funds (EBFs) outside the national budget. Spending units were allowed to generate their own revenues, using their assets and staff resources to supplement their budgets, without intervention by the ministry of finance (MOF). Many SUs operated their own, separate bank accounts for foreign currency earnings outside the MOF and central bank control. There was also pervasive use of offset arrangements under which the arrears payments due from SUs to enterprises were allowed to be offset against the enterprises' tax arrears, resulting in rewarding the enterprises in tax default at the cost of enterprises that were tax compliant.

The central bank, the National Bank of Kazakhstan (NBK), was responsible for cash execution of the budget through its branch network. For this purpose, it established three or more bank accounts for each SU. These accounts were administered by a system of “credit limits” based on directions from the line ministries, transmitted through the MOF, and relying on cost estimates submitted by the SUs. The credit limits were only controlled against the aggregate budget allocations, not against individual programs or expenditure items. SUs also kept separate accounts for their off-budget transactions at the NBK. There were about 7000 bank accounts for the SUs, tax and customs authorities at NBK branches. The MOF had no information on balances in these accounts or control over them.

External loans were managed by a commercial bank. The MOF did not have full information about the debts, and were unable to plan effectively for making interest and amortization payments. For project-related loans from the World Bank or the Asian Development Bank (ADB), there were special accounts outside the MOF system, and proceeds from such loans and related project expenditures were not integrated into the budget. The MOF had no reliable record of the numerous guarantees given by the government on behalf of enterprises and the contingent liability arising from them.

Budget reports did not identify the amount of budget deficit and how it was financed. There was no clear classification of expenditures. Line ministries could not plan their expenditures in advance, because of the lack of transparency in the budget allocation process and the arbitrariness of budget allocations.

Monthly budget execution reports were prepared by the MOF from reports received from the NBK. Reports on expenditures by institutions and economic composition were only available with substantial lags. The MOF had no means of ascertaining actual government expenditure vis-à-vis the budget allocations in a timely manner, and could not effectively monitor compliance with strategic priorities or initiate in-year remedial measures.

Subnational governments’ budgets had to be approved by the MOF and their formulation cycle synchronized with that of the central government. There was no mechanism to monitor their expenditures, except the aggregate control imposed through the credit limits on their bank accounts. This resulted in substantial payment arrears and diversion of resources.

B. The Initial Reforms, 1994–96

Introduction

In early 1994, the Government of Kazakhstan initiated an ambitious fiscal reform program. The government established a central treasury department within the MOF, with a staff of about 80, and made it responsible for cash and debt management, budget execution, government accounting and reporting.

The fiscal year 1994 turned out to be extremely difficult, with revenues falling to 48 percent of the budget estimates. The MOF initiated a rationing system of weekly release of budget allocations based on cash balance reports from NBK, which did not however prevent SUs from incurring commitments in excess of allocations, as the Civil Code protected their contracting rights. The MOF therefore followed this “sequestration” procedure to prevent payments in excess of available cash resources. This caused widespread defaults in the payment of salaries and pensions and resulted in general demoralization in the civil service. The problems in 1994 increased the MOF’s appreciation of the urgent need to adopt a number of critical reform measures.

Revision of budget classification

The budget classification of expenditures was revised to include functions, institutions, programs and subprograms, with subprograms broken down by economic classification. The functions and the economic classification were based on the 1986 IMF Government Financial Statistics Manual (GFS). A separate section was created for financing items.

This revision facilitated a strategic overview of the allocation of budget resources between sectors of the economy, and inter-country and time-series comparisons. It allowed the treasury to identify the resources allocated to each line ministry and to ensure proper accountability. The new classification facilitated analysis of the expenditures by economic categories and made it possible to determine the cost of various types of inputs and the composition of program costs. The creation of a separate section for financing items facilitated monitoring of the budget deficit and how it was financed.

The implementation of the new budget classification required extensive training of the staff in the MOF and line ministries. The new system had to be implemented in the local governments for preparation of the consolidated fiscal reports for the general government. The budget systems law was amended to recognize the new classification as the basis for future budgets and treasury operations. The budget classification revision brought to light a number of overlapping functions between institutions and many redundant programs, and paved the way for major organizational reforms.

While the NBK had no reservation on the use of the new classification, it was not willing to invest in any revisions to its application software. Subsequently, NBK decided to close down its district level operations and gradually hand over the responsibility for budget execution and primary accounting to the treasury. It was decided that the new classification would be implemented simultaneously with the move of the budget execution and treasury functions from NBK to the treasury in 1996. In the transition phase, the budget reports were synthesized by the central treasury using bridge tables.

New procedures for budget execution

In the old budget execution system, each SU had a number of bank accounts at NBK branches. Credit limits for budget expenditures were established periodically by the NBK, with the approval of the MOF and the respective line ministries. Unused credit limits were not available for transfer to others and cash balances equivalent to the unused credits remained idle.

The treasury decided to replace this with a system of treasury warrants that would set the limit for expenditure commitments for the line ministries by program and line items, using the new budget classification code. The line ministries would in turn distribute the warrant allocation to SUs by the same classification code by issue of sub warrants. This reform intended to achieve optimum use of the cash resources and prevent accumulation of idle cash balances.

The treasury also established a commitment management system, to ensure that the SUs did not incur expenditures in excess of the funds released by warrants and sub warrants, and to prevent accumulation of arrears. In the absence of developed information system facilities, the initial system was based on manual controls. A manual commitment control register was developed. It was the responsibility of the SUs to maintain them. However, the treasury had no effective means of verifying compliance by the large number of SUs and the treasury therefore tended to use the sub warrants for control at the payment stage, not as commitment limits. Later, the system was modified by requiring pre-registration of contracts by SUs with the treasury, so that the treasury could verify that the contractual commitments did not exceed the available funds.

A system of financial planning was in use before 1994. It was inherited from the Soviet era, and its purpose was merely to compile cost estimates for each SU within the approved budget ceiling. This system was revised so that the financial plan became the tool for estimating the cash flow needs by time segments. The plan assisted the treasury in improving cash management and provided the basis for releasing funds. Concurrently, the earlier practice of aggregate release of budget allocations was replaced by line item allocations and corresponding release to SUs.

The new budget execution procedures were implemented from the beginning of 1996, to coincide with the introduction of the new budget classification and the establishment of regional treasury offices.

Strengthening the legal and administrative framework

In early 1995, the MOF began the preparation of a budget system law to support the establishment of the treasury and its functions, to define budget preparation and budget execution procedures, the powers of the local governments and their taxation and borrowing

limits, and to regulate auditing of periodical and year-end accounts. The law was approved by the parliament in November 1995 and came into effect from 1996.

The treasury established branches at 20 regional centers. The regional offices were made responsible for ex-ante control of all payment orders raised by SUs against their sub warrants, for calculating the division of designated tax revenues between the central government and the local governments and for advising the NBK regional branches of the allocation of revenues. In the short term, the NBK continued to be responsible for making payments and for the primary accounting of government transactions.

C. The Next Reform Phase, 1996–99

The interim budget bank

The decision of the NBK to close down its local level operations, and to restrict its banking operations to the regional level provided an opportunity for the MOF to accelerate its agenda for budget and treasury reforms, since these would not any longer be constrained by the rigid internal systems of the NBK.

The MOF considered several options for responding to the NBK decision. One possibility was to absorb NBK's surplus staff and reorganize the treasury accordingly. This option would require protecting the salaries of the staff transferred from NBK, and was not feasible under the existing civil service regulations. Another option was to contract another bank with an extensive branch network to take over the operations. The fragility of the banking sector ruled out this option.

In the end, the government decided to create a special bank, the Budget Bank (BB) for this purpose. This bank was established at the beginning of 1996, with the sole objective of servicing the SUs. It had an approved capital of Tenge 200 million. The establishment of a new state-owned bank was contrary to stated government policies. It was also fairly costly. The government agreed that this should only be a short-term, stopgap measure. Strict restrictions were placed on the scope of its operations. The BB would not open accounts for the public. All revenues would be paid directly into NBK accounts by the commercial banks, and BB would be responsible only for processing payments. The BB was allowed to establish correspondent accounts in the regional branches of NBK. Payments from these correspondent accounts were processed through inter-bank settlement centers, and reimbursed daily from the treasury single account (TSA).

The BB set up a central office and speedily established its branch offices at the regional and district levels during 1996, by taking over the NBK's redundant but experienced staff, their office premises, and equipment. The BB's administrative costs were borne by the MOF internal budget. From 1998, the Budget Bank and all its functions had been absorbed into the main treasury department, reconstituted as the treasury committee.

Creation of a TSA

NBK agreed to consolidate the government cash balances in a TSA. The MOF decided to close down the bank accounts of the SUs and the tax and customs authorities at the NBK. The process involved a complete inventory of all the bank accounts. The MOF opened nominal accounts in the BB ledger for each SU for budgetary transactions. Off-budget funds were allowed to be retained in commercial banks, with accounting reports on their receipts and payments provided to the BB and the treasury. Tax and customs accounts were opened at the NBK regional branch, with procedures for daily transfer of the balances to the TSA. Foreign currency accounts held by customs and SUs were also closed down transferring the foreign currency balances to the NBK.

Creation of a treasury ledger system and a new chart of accounts (CoA)

When the responsibility for primary accounting was transferred from the NBK in 1996, the treasury began preparation of a Treasury General Ledger (TGL) system, to include ledgers for financial accounting as well as for monitoring of budget implementation.

The TGL was based on a new CoA, which was adopted for use from 1997. The new CoA reflected the new budget classification of revenues and expenditures. It also captured information related to movements in certain financial assets and liabilities, but did not include a full balance sheet. It incorporated data on public debt received from the NBK and the special account flows from PIUs. The CoA included a coding structure for movements on off-budget accounts. The TGL also had provisions for recording data on original budgets, revisions as approved by the Budget Department, warrants issued by the treasury and sub warrants by line ministries at regional level.³ The establishment of the TGL system allowed generation of more timely and reliable monthly reports on budget execution for management purposes.

Expanding budget coverage

Prior to 1997, project loans from international institutions such as the World Bank and the ADB were kept in special accounts at the NBK. The expenditures incurred by the designated project implementation units were drawn directly from these accounts. Some project related payments were also made directly by the institutions that provided the approved loans. Neither the funds in the special accounts nor the direct payments flowed through the government budget, and these flows were not captured in the budget execution reports prepared by the treasury. During 1995 and 96 such expenditures totaled about

³ In some countries the term general ledger is used only to describe the financial accounts. In Kazakhstan, this term is used in a broader sense.

US\$800 million. These expenditures affected the measurement of the budget deficit and should have been integrated into the budget.

Because the loans were subject to special fiduciary requirements from the lenders, the need for keeping the loans in special accounts was recognized. However, there were no good reasons to keep them outside the budget. The MOF decided to include the related project expenditures and disbursements in the budget from 1997. Simultaneously, the treasury issued detailed instructions to the PIUs on how to obtain treasury warrants and line ministry sub warrants. These included monthly reporting procedures by the PIUs for incorporation into the consolidated budget execution reports. The instructions covered both payments from the special accounts at NBK and direct (off-shore) payments.

The extrabudgetary funds, including the Pension Fund and the Medical Insurance Fund were brought under the treasury system for administration in 1998 and have since been integrated into the budget. From 1999, off-budget sources of revenues for most SUs were abolished (save for four ministries including Education and Health, for specific purposes like user charging and donations) and integrated into the budget. Budget organizations eligible for funding from the national budget were strictly defined to exclude enterprises.

Extension of treasury services to local governments

The local governments depend heavily on financial resources provided by the central government. Prior to the reforms, the standard of financial control was poor in most local governments. There was substantial diversion of resources and accumulation of arrears. In order to improve financial discipline, it was important to extend treasury services to the local governments.

The revised budget classification was made mandatory for the local governments from the budget for 1997. With the closure of the NBK branches in the districts, the local governments were allowed to open bank accounts in commercial banks. The BB was responsible for processing the payment orders, taking account of the balances in the respective bank accounts.

From 1999, local governments are required to follow the same procedures for budget allocation release as the central government, using warrants and subwarrants. The bank accounts in commercial banks were closed, and the payments processed through correspondent accounts in NBK.⁴ The treasury system was extended to service each of the SUs of local governments.

⁴ The final step, planned to be completed by 2003, is to close these and process local government payments through a joint single account for central and local government.

Strengthening cash and debt management

When the MOF was reorganized, the departments managing internal and external debt were brought under the deputy minister in charge of the treasury, in order to improve the flow of information between the different treasury functions. A separate section was created within the treasury for cash flow forecasting and to deal with financial plans required from the line ministries.

D. Unresolved Issues

Some SUs are still allowed to maintain off-budget accounts outside the budget, but within the treasury system. This includes the ministries of health and education. In 2000, the revenue flow through such off-budget accounts amounted to Tenge 220 million, approximately 1 percent of the budgets of the institutions involved.

Despite having closed the older extrabudgetary funds, the MOF has recently established two new extrabudgetary funds, the National Fund of the Republic of Kazakhstan (NFRK) and a Social Insurance Fund. The government is also involved in certain quasi-fiscal activities through state-owned corporations, in particular the State Development Bank and energy enterprises. Recently, the government announced that it maintained an off-shore “secret” bank account with substantial balances that were not disclosed in the public accounts. The existence of these mechanisms reduces the transparency and quality of the budget management system, and undermines the validity of fiscal data. The recent IMF fiscal transparency mission gave several recommendations on how to resolve these issues.

During 2000, two “clearing houses” were established in Kazakhstan. The purpose of these clearing houses was to arrange offsets of mutual debts between SUs and enterprises and tax arrears of enterprises. In late 2001, the MOF indicated that only enterprises and local government entities were involved and this practice would be discontinued in regard to local government entities. In order to maintain the transparency and integrity of government financial operations, it would be preferable that no government institutions, at any level of government, were engaged in these operations.

The current government accounting system is primarily on a cash basis. Most governments are considering introducing accrual elements in their accounting frameworks, and to introduce more complete balance sheets. Because the financial management system in Kazakhstan already is fairly advanced in many ways, a move in this direction would probably be a natural and beneficial step.

So far, much of the focus has been on strengthening budget execution. It is also necessary to strengthen budget preparation, to ensure the realism of the budget, enhance the quality of budget spending and ensure that adequate attention is paid to budget outputs and effectiveness. In order to lay the foundation for this, the legal framework has recently been

amended to provide for inclusion of output specifications in the budget preparation phase. Procedures for approval and financing of investment projects are also under revision.

III. INFORMATION SYSTEM SUPPORT FOR THE TREASURY REFORM PROCESS

A. GFMIS Project Organization

Most costs of the Kazakh treasury reforms were covered from regular budget sources. However, it was clear that the GFMIS would be an expensive project, and that it would entail many implementation challenges. The whole project was estimated to cost about \$20 million and the World Bank agreed to provide a loan of \$15 million.

In early 1995, the MOF set up a steering committee, consisting of senior staff from the Budget and Treasury Departments and the major user ministries, to provide policy oversight of the GFMIS project. They also established a treasury working group, comprising the head of the treasury and the managers of the various treasury departments. The members of the working group had a blend of functional and IT skills. The working group was authorized to co-opt managers from other departments of the MOF when required. IMF assigned a resident treasury advisor to the MOF of Kazakhstan in November 1994. The resident advisor played a very active role in the treasury reform process, both on the functional side and in the GFMIS project.

The MOF saw the need for additional external resources at an early stage. At the end of 1994, the MOF hired a consulting firm to support the process, through a limited international tender. This firm would assist with the on-going treasury reforms and prepare the conceptual design for the GFMIS, as well as the functional requirements and detailed procedures of the system. It would also research the available application software packages in the market, prepare tender documents for procurement of the GFMIS and assist the treasury in the selection of the bidder. Finally it would assist in testing the system at selected pilot sites, develop a training program for the GFMIS and prepare a plan for nationwide replication of the system.

B. Short-Term Enhancements in Existing Information Systems

The full GFMIS was designed to provide the long-term solutions to the information management needs of the MOF. It was clear from the outset that it would take several years to implement the GFMIS. In the short term, the treasury had some immediate needs for information facilities to support some of the initial reforms in the treasury procedures. This was addressed in two ways:

Firstly, it was decided to carry out some modest enhancement of the current information systems to meet these needs. The existing treasury application software had been developed

in FoxPro⁵ by the MOF IT staff. It had to be enhanced to cope with the procedures for issue of treasury warrants and the basic functions of the regional treasury offices. In addition, the communication needs between the central treasury and its regional offices had to be addressed, so that subwarrants could be directly transmitted to them. These enhancements were fully implemented by the beginning of 1997.

Secondly, it was decided to develop an interim IT system for use by BB branches and treasury regional offices. The development work was contracted to a private firm, which previously had developed the NBK systems. Additional hardware was procured to support the regional and district operations. Table 1 gives an overview of the main elements in the specifications for the Interim IT system.

Table 1. Functional Requirements for Interim IT System

- Based on new budget classification and adjusted CoA
 - Identification of each SU in the accounts of the BB branch
 - Recording sub warrants for each SU and controlling payments against them
 - Accounting for receipts based on information received from the NBK
 - Keeping of accounts for off-budget transactions of SUs and local governments
 - Consolidation of receipts and payments data
 - Transfer of accounting data to the TGL
 - A number of prescribed reports, including to SUs on their funds status
-

The interim IT system was developed and ready for testing by July 1996 and was rolled out during the remainder of 1996. It used the BB regional centers as the processing nodes and the district BB branches were linked to the regional centers by dial-up connections. Where the communication links were poor, transfer of data depended on using magnetic media. The regions were allowed to use the NBK communication network for transmission between them and the central BB.

Extensive workshops were organized for the line ministries and their SUs. A core group of senior treasury functional and IT staff and BB staff was selected to work with the consultants at a troubleshooting center in the central treasury and to move to the regions for

⁵ Database tool for creating solutions for the desktop and the web.

implementation of the system enhancements. Close liaison was maintained with the NBK throughout the replication stage.

Another major effort in terms of IT support for the treasury reforms was the implementation of the UNCTAD (United Nations) system for external debt management in the External Debt Department using USAID assistance, which was completed in 1997. The staff were trained in entering the data from various loan agreements and to develop a comprehensive debt database.

C. Design of the GFMIS

Conceptual design

It was agreed that the GFMIS would be based on a modular design. The different modules were to be integrated and to exchange data seamlessly. There would be a single secure point of entry for commonly used data. Table 2 provides an overview of the main functional modules in the GFMIS design.

Table 2. GFMIS Modules

- Central General Ledger (Central Treasury)
 - Commitment Accounting and Procurement
 - Payments accounting
 - Revenue accounting
 - Payroll
 - Assets Management
 - Cash Management and Bank Reconciliation
-

At the time the GFMIS was designed, the MOF's Budget Department already had its own internal computer system, based on spreadsheets. Facilities for uploading the approved budget and subsequent revisions, and for storage of historical ten-year fiscal data to assist budget compilation, was included in the treasury system design. The GFMIS would also have to be able to interface with other important government information systems, including with systems for tax administration, NBK and debt management.

The consulting firm was required to research available standard application software packages and assess the suitability of their functionality to government systems. It was found that there were a number of packages that were able to meet the government system requirements.

Preparation of functional requirements

This task involved detailed study and analysis of existing functional processes, as well as the reforms to be implemented or under implementation. The project team defined the new sets of functional processes in the context of the GFMIS, and described information flows, procedures, transaction types, associated documents and forms, the organizational arrangements required to operate the new systems and the reports to be generated.

The team also developed detailed documentation for the overall systems design, the detailed functional requirements and systems specifications for the application software required to support them, in addition to their interfaces with external systems. These documents were prepared by May 1996.

Design of technology architecture

This task involved surveying the locations of the treasury offices, servicing bank branches and budgetary institutions and determining the location of the computer systems. The project team ascertained the associated transaction volumes and data requirements, in order to determine the size and configuration of the hardware and software to be installed at the nodes, as well as the mode of intercommunication. It also involved preparation of high-level technical design and specifications for the hardware and systems software required at the various sites for each phase of the project.

Preparation of tender documents

The next stage in the process was the preparation of tender documents in accordance with the World Bank guidelines for procurement of computer systems. It was decided at this stage to opt for a single (prime) contractor for supply of hardware and application software solution, but to restrict the hardware (and systems software) procurement to pilot site needs. The tender documents under the WB procedures called for two-stage bidding—a technical bid followed, after short listing, by a commercial bid with price schedules.

D. The Procurement Process

The World Bank formally approved the loan application for the GFMIS in mid-1996. The tender documents were issued in October 1996. Initially, it looked as if the contract with the successful bidder could be finalized by January 1998 as planned. However, in October, 1997, the Government of Kazakhstan decided to move the capital of the country from Almaty to Astana, about 600 kilometers to the North, from January 1998. At the same time, the treasury decided to include both the new capital region and Almaty, with their 20 districts, as GFMIS pilot sites, along with two ministries in Astana. This was a significant expansion compared to the original requirement.

The increase in the number of pilot sites and the moving of the capital constituted amendments to the original specifications for the GFMIS. One of the two short-listed bidders asked for substantial increases in their original price offer. The other bidder gave notification of a possible increase in price, but later withdrew its bid. The negotiations with the remaining bidder to arrive at an agreed price took nearly 8 months and the final agreed proposals were referred by the treasury to the WB for approval in November 1998. The WB gave its approval, after an independent review by its own consultant, in February 1999.

In the mean time, there were personnel changes at the top level of the MOF and a revision of approval procedures for large IT projects, which now needed clearance by a state commission. This contributed to further delays. After completion of the revised internal procedures, the contract was signed in May 1999. Project implementation commenced formally in October 1999 after the necessary letter of credit was established.

E. Implementation of the GFMIS

Table 3 lists the main five phases in the implementation process.

Table 3. Implementation Plan

-
- Create software solution
 - Agree user requirements and carry out gap analysis
 - Prepare mapping documents to define gaps in the standard application processes and to determine customization needs
 - Document system interfaces
 - Design custom business application architecture and detailed logical and physical database designs
 - Define acceptance test strategy and criteria
 - Build solution
 - Develop custom modules and prototype
 - Configure forms and reports
 - Translate software interface to Russian
 - Develop documentation for user reference and training
 - Prepare test scripts and data and carry out program and integration testing
 - Pilot site implementation
 - Preparation of replication plan and its implementation
 - Training of Treasury counterpart staff and general training of users.
-

Changes in functional requirements

While the development and training activities progressed according to the implementation plan, the Treasury decided to make some significant changes to the system requirements at the beginning of 2000:

- Excluding the payroll module. The authorities felt that implementation of the payroll module at the same time as the other main modules could cause delay in the project implementation because of the large size of the civil service⁶.
- Integration of the bank accounts of the local governments into the TSA. There would be no separate accounts for local governments at the NBK, but the balances of each government administration would be tracked through the accounts created in the TGL.
- Keeping detailed accounts of external borrowing: This requirement was not in the original requirements, as it was believed that an interface to the UNCTAD system would suffice.
- Centralize all payments processing in the central treasury in Astana. In the original design, the regional treasury offices were to keep their own databases, process payments through the payment module and update the general ledger. In the revised requirement, the separate databases were to be abolished and all modules were to be run by the central treasury accessing a single, centralized database.
- Extending the GFMIS to the banking operations of the treasury and development of a banking system interface. Originally, it was planned that the banking system software used by the Budget Bank (BASK) would be retained by the treasury. The treasury felt that maintaining two systems concurrently would strain the staff resources.

The contractor carried out a “gap analysis” to determine the extent of customization needed to meet the Treasury requirements. This process was kept to a minimum for two reasons: the additional cost involved and the future requirements for revisions when new versions of the application software were released. Customization was limited to a few essential functional requirements that could not be reengineered or met by standard functionality, and some special reports:

- interface to upload existing files (legacy system) to the GFMIS;

⁶ SUs have to still process checks or electronic advices for salary payments through the treasury system and the salary expenditures are thus subject to budgetary control by the treasury.

- funds availability check on bank accounts for additional control for certain categories of payments;
- freezing and unfreezing of payments in specified circumstances;
- aggregate financial plan adjustments;
- special validation for certain categories of payments;
- mass application of warrants and sub-warrants; and
- besides standard reports, the treasury identified some 130 additional reports to comply with statutory requirements and for providing management information involving special calculations

Training

The treasury saw training as a key factor in ensuring the sustainability of treasury reforms and the operation of the GFMIS. The GFMIS contract included provisions of a limited number of training courses in operating system, database management and application software. The treasury established a training facility at its office in Astana, and organized seminars for extensive training of its staff, as well as senior financial staff of the user ministries and local governments. This training focused on the functional aspects of the new treasury system.

Piloting and initial rollout of the GFMIS

The various modules of the GFMIS were ready for testing and for production run in March 2001, and the system went live from April 2001. The second pilot site (Akmola oblast and 18 rayons) went live from August 2001. The Astana city treasury office services all major line ministries' headquarters, city administration and 2 rayon governments, while the second pilot site services all national government SUs in that oblast and 18 rayon governments. Between them they process about 70 percent of national government budget.

Based on the results of the pilot stage testing and the progress in the establishment of the new communication system nation-wide, the treasury proposes to start replication of the system from June 2002 in the remaining areas and the rollout is expected to be completed by December 2002.

F. Current Status and Outstanding Issues

Evaluations by missions from the IMF and the World Bank in November 2001 indicated that all the modules were functioning as designed, that the local staff were well trained and

knowledgeable and that the interaction between the regional office and the central treasury in running the application software was smooth, fast, and without any major problems.

The development of the telecommunication network has been progressing as scheduled. However, the security features with respect to data transmission are yet to be fully tested.

The GFMIS provides the basis for a strongly centralized treasury system. All processing is done at the center. One implication of this centralization is that the role of the local treasury offices is changing. Eventually, the spending units will be able to access information and submit payment requests on-line, without involving the local treasury office in the processes. The authorities should clarify whether all of these offices will be needed in the future and what their role and functions should be.

The authorities deferred implementation of the payroll module until after completion of other modules. Implementation of payroll system is a major task and is expected to be taken up during 2002.

Over time, the GFMIS could be extended to include additional modules. Efforts to strengthen budget preparation could be supported by including a budget preparation module. This should be linked with a module for interfacing with the models for developing medium-term macroeconomic frameworks. It could also be beneficial to strengthen the system's capabilities for analytical support and for providing management information.

IV. THE KAZAKH EXPERIENCE: LESSONS FOR OTHER COUNTRIES

A. Overall Assessment

In 2000, IMF published a review of the results of its work in treasury reform in BRO countries.⁷ This review indicated that Kazakhstan was among the most advanced countries in the region in this area. The revision of the budget classification in line with the GFS framework has provided the basis for generation of timely and comprehensive fiscal reports for both central and local governments. Improved budget coverage, elimination of extrabudgetary and off-budget accounts, and less reliance on offsetting arrangements have promoted greater transparency and accountability in governance.

With the successful implementation of a state-of-the-art GFMIS, with full integration of functions and institutions and an advanced communication network, Kazakhstan will realize substantial, further improvements in the functioning of its treasury system. The treasury and the MOF will have powerful tools for efficient management of budget preparation and execution, including for commitment control, consolidation of cash resources in the single

⁷ Barry Potter and Jack Diamond, 2000, *Setting up Treasuries in the Baltics, Russia and Other Countries of the Former Soviet Union*, IMF Occasional Paper No. 198 (Washington: International Monetary Fund)

account at the Central Bank and timely and reliable information on program costs and institutional spending.

A recent assessment of fiscal transparency in Kazakhstan indicated that there is significant room for further improvements in transparency and in fiscal management. Most of these improvements are dependent upon policy choices. Unlike in other countries, where treasury systems are less developed, the need for further technical improvements in management capacity is marginal in Kazakhstan.

B. What Has Contributed to Kazakhstan's Success?

High-level commitment to the reform process

The treasury reforms received strong support from the highest levels of government. The cabinet and the president decided to support the treasury concept and to give the treasury a prominent role in budget execution, cash and debt management. This decision was immediately followed by the creation of a basic organizational structure for the treasury, by steps to ensure the cooperation from the central bank and by the recognition of the importance of the treasury's role by other departments within the MOF, as well as by most line ministries. The treasury modernization project and the GFMIS implementation benefited from the close supervision and the personal interest taken by the successive ministers of finance, deputy ministers, and heads of the treasury committee.

Initially there was resistance from some power ministries, such as the Ministry of Defense. They were reluctant to accept the requirements of the treasury system, in particular to give up their separate bank accounts, but the unwavering support from the cabinet made it possible for the MOF to take a firm stand and to achieve the transition.

Political support from the parliament was another important factor. In the first year of transition, the MOF presented the budget in the old as well as the new classification format to the members of the budget committee in the parliament, so that they could judge for themselves the advantages of the new classification system in promoting transparency and accountability in budget allocations. This also helped earn the members' support for legislative initiatives for the new budget and treasury systems.

Clear reform objectives and consistent implementation strategies

The first phase of the reform process included the specification of clear objectives and determination of concrete strategies to achieve these objectives. The objectives focused on functional improvements. The Kazakh government avoided the very common mistake of perceiving computerization as the main reform. There was a clear appreciation that the functional and procedural changes would be the major drivers of the reform and that computerization on its own would not deliver any significant benefits.

Many countries have experienced problems because reform objectives have not been properly specified, or because the focus has been on secondary issues, such as computerization. These countries have also encountered problems due to inconsistent or inappropriate implementation strategies.

Long-term approach to information system development

There are well-established international best practices for how to develop and introduce a GFMIS⁸. Unfortunately, many transition economy countries have chosen to deviate from these practices, with negative repercussions on their reform progress. Kazakhstan is an example of a country that generally has applied international best practices in a consistent manner, and that has benefited greatly from this approach.

Concurrently with the development of the full GFMIS, the treasury established an interim solution for information system support, focusing on the core functions within the new treasury system. This solution was based on moderate enhancements of existing applications. It was implemented nationwide in a very short time, about nine months. The rapid deployment of the interim solution allowed the treasury to implement the full state-of-the-art GFMIS solution in a more relaxed timeframe, without compromising its long-term functional objectives.

Misguided or badly managed information system development has derailed or delayed the fiscal reform processes in many other countries. In addition to problems related to the role of the information systems in the reform process, there are numerous examples of attempts to deploy new information systems with insufficient specification or within unrealistic timeframes, usually with very negative results.

Use of standard application software

Another common mistake is when countries put substantial resources into developing ambitious interim software solutions, often using in-house resources, which end up taking as much time and resources as a full GFMIS, but provide only a fraction of the benefits of a complete system. The Kazakh GFMIS project was based on an off-the-shelf application software package, and the requirements for customization of the software were kept at a minimum. This provides the basis for a very robust and resilient GFMIS, which will benefit from further updates and revisions of the application software.

⁸ See "Information systems for government fiscal management", A. Hashim and B. Allan, World Bank, 1999, and "Treasury reference model" Hashim and Allan, World Bank, 2001.

Pro-active use of technical assistance

Although the MOF and the treasury had a broad conceptual understanding of the reform needs, their initial enthusiasm for reform was not matched by the necessary level of expertise or experience. This made it difficult for them to identify the various reform stages and the detailed tasks associated with these stages.

The treasury took full advantage of the international experience made available through the IMF technical assistance program. Besides working closely with the advisor in the development of the reform strategy, the various measures to be taken and their sequencing, the treasury also made use of his services in preparing detailed procedural instructions to support the reform steps. The availability of the IMF advisor, first as a resident and later on a peripatetic basis, from the beginning of the reform process to the stage of implementation of the full function GFMIS, provided continuity and consistency in the technical support.

The World Bank assisted treasury modernization project also provided crucial inputs to the reform process, both financing and technical assistance. The same World Bank project manager was involved from the beginning, and helped the authorities to overcome a number of procedural and technical problems. He was also of great assistance to the authorities in the oversight of work scheduling, project costing and quality assurance.

Key treasury personnel received training in the GFS classification system and in treasury functions at the Joint Vienna Institute. This helped to strengthen the knowledge base and the confidence level of the participants in the reform process. Importantly, the trained staff were usually reengaged in budget and treasury related functions.

The MOF retained an international consulting company throughout the reform process. The consultant was particularly active in the design, specification, and contracting of the GFMIS, and provided scarce technical skills that were not readily available within the government. The consultant also complemented the IMF resident advisor and the World Bank in providing external quality assurance of the work done within the MOF and the treasury. The MOF managed the consulting contract closely and pro-actively. When it was found that some of the staff provided under the contract did not have sufficient skills, the company was instructed to replace these or to face cancellation of the contract.

Many countries have failed to make effective use of the skills and experience of advisors provided by international institutions. They often lack a clear strategy for the role of the advisor in the reform process. In addition, many countries are reluctant to hire external consulting companies, due to the perceived high cost of these consultants. The experiences from Kazakhstan illustrate that the value added by the consultants should more than compensate for the costs, provided that the whole project, including the consulting contract, is well specified and actively managed.

Building stakeholder support

In many treasury reform processes, modernization of business processes are not followed up with training efforts or efforts to explain the rationale behind them. In such cases, attempts to revise existing methodology or procedures meet with strong resistance.

The Kazakh treasury realized the importance of promoting a participatory approach at a very early stage. All major instructions put out for the new treasury business processes were followed by extensive seminars and workshops to disseminate information about the reasons for the changes and the new methodology. This approach led to greater appreciation by other stakeholders of the need for changes. The Budget Department in the MOF, as well as the NBK, have been strong positive forces in the reform process. In other countries, opposition from within the MOF and from the central bank has effectively derailed the reform process.

Throughout the reform process, the MOF has ensured that the necessary changes in legislation and institutional responsibilities have been effectively implemented. This is an area of considerable weakness in many countries' treasury reforms. A common mistake is to try to avoid conflicts by accepting legal and institutional ambiguities.

Timely availability of staff and other resources

As the treasury started to extend the reach of its operations, it needed staff, financial and infrastructure resources to match. The treasury received a major boost by the central bank's decision to move out of retail banking and transfer the bank's district level branches with the office equipment, including computers, and the redundant staff with experience in government operations, to the treasury. The MOF allocated financial resources from the budget to meet the additional costs of treasury expansion. Timely financing was available from an IBRD technical assistance loan for short-term enhancement of existing application software and to fill the hardware gaps. The full GFMIS has also been financed largely by an IBRD loan.

One of the most common mistakes in treasury reform processes is to assume that this can be done by staff who spend most of their time on other tasks, or who are not adequately trained to fulfill the new functions. In Kazakhstan, a full-time project team was made responsible for implementing most of the reforms. This was crucial in order to realize and sustain the benefits of the reforms.

Modern project management techniques

From the beginning of the project there was a high-level implementation plan with time-bound activity schedules for the various components of the project using the critical path analysis method. It was followed by detailed work schedules of each component of the plan as the project gained some momentum. The schedules were monitored closely by the treasury working group and a project implementation unit (PIU) monitored the project costs and attended to the contract administration and liaison with the World Bank. Whenever there

were delays due to factors beyond the control of the project staff, there was a realistic reevaluation of the work schedules and target dates and a revision of the implementation plan.

Strong focus on sustainability

The treasury has built up a treasury implementation team with the task of interacting with the contractor's project staff in the development and testing of the application software. The implementation team is now central to the management of the new GFMIS.

With the elevation of skill levels of the implementation team, the consultancy firm (that was engaged at the project commencement) was phased out by November 2000. Plans are now in hand to increase the number of staff exposed to the new system by staff rotation. With a view to retaining the highly skilled staff on the project, an incentive package has also been offered.

Realistic timeframes

The treasury reform process was initiated in 1994. The MOF plans to finalise the introduction of the new GFMIS by the end of 2002. It is realistic to assume that it may take 1 or 2 additional years before the main parts of the new treasury system are completely finalized and established. This indicates that the whole reform process will have taken about 10 years. A key question is whether this is a reasonable time frame for such a broad reform process, or whether it can be shortened?

A review of the different steps in the process indicates that it generally has proceeded quite smoothly. Many parts of the reform work have been carried out at a very impressive pace, and often much faster than similar processes in many other countries. The most time-consuming part of the process has been the introduction of the GFMIS. This is illustrated in Table 4.

Table 4. Timeline for GFMIS Introduction

Phase	Start	Finish
Conceptual design	Nov 94	Jun 95
Specification of functional requirements	Jul 95	Sep 96
Procurement	Oct 96	Sep 99
Implementation	Oct 99	Mar 01
Testing and piloting	Apr 01	May 02
Rollout	Jun 02	Dec 02

The only part of the GFMIS process that went significantly slower than expected was the procurement phase. It took three years from the time the tender was announced until implementation started. The main reason for the protracted process was the need to renegotiate the contract with the selected provider, which took about two years. This occurred because of changes in the basic project specification by the government, including the impact of the Kazakh capital moving to Astana, which were met by demands for additional payments. The need for World Bank approval of changes in the bidding documents also contributed to the delays.

In principle, the procurement phase could have been one to two years shorter. However, the impacts on overall program implementation would probably have been much more modest. While the GFMIS was being renegotiated, a number of other reform activities were developed and introduced at a reasonably brisk pace.

In conclusion, it seems as if an overall project period of up to ten years is a realistic timeframe for a broad reform process starting from a very basic level of financial management. However, many of the initial rewards were realized early in the process. The introduction of a new GFMIS, which is very time-consuming, serves to anchor the reforms and provides the final benefits of process modernisation, but most of the value added comes from procedural improvements which can be realised early in the reform process, before the GFMIS introduction.

C. Design of the Kazakh Treasury System

There are many similarities between well-functioning treasuries in different countries. These similarities are often related to the quality of the different treasury functions, more than to the specific technical solutions. There will also be many differences in the specific design of treasury systems in different countries, reflecting differences in fiscal objectives, administrative practices and economic and political development.

Common design features in well-functioning treasuries

The Kazakh treasury system embodies several features that one would expect to find in any successful treasury or other public financial management agency:

- a clear and transparent legal framework for all its activities;
- clear institutional responsibilities, as well as close collaboration between institutions;
- an organisation with sufficient staffing and resources, a clear mandate, and clear deliverables for its activities;
- a budget classification based on GFS, and a CoA that incorporates the budget classification;

- no significant extra-budgetary or off-budget activities.⁹ Any residual activities of this type are covered by treasury functions and procedures. No significant offsetting arrangements or other forms for non-cash settlements;
- close coordination between budget preparation and execution activities;
- facilities for effective coordination and management of government cash resources, through a single account arrangement, as well as debt;
- the ability to provide up-to-date information about government revenues, expenditures and other financial flows, including any statutory requirements for fiscal reporting; and
- effective integration and coordination with the institutions that are responsible for financial control, internal and external audit.

Design features that are linked to fiscal objectives and stages of development

Kazakhstan is a typical transition economy. The main objectives of fiscal management are to ensure fiscal control and financial compliance, and this is clearly reflected in the design of the Kazakh treasury system. Despite the many advanced elements in the treasury system, the Kazakh treasury has many similarities with other transition economy treasuries in this regard, and it is quite different from the treasury bodies in most OECD countries.¹⁰

The Kazakh treasury handles a broad range of functions. This is a common approach in transition economies and developing countries. Many OECD countries have chosen to give the treasury a more limited mandate, for instance by having debt and cash management handled by other agencies. The Kazakh treasury even handles financial planning, which is done in the budget departments in many other countries.

The treasury in Kazakhstan is based on a high degree of centralised authority. The degree of centralisation is higher than in most countries, even other transition economies and developing countries. The Kazakh treasury has a very strong position in relation to the line ministries and agencies. It also covers local governments. This level of centralisation seems to reflect a centralised political tradition, combined with a strong emphasis on the objectives of ensuring aggregate financial control and financial compliance.

⁹ The main exception from this principle is the petroleum revenue-based national fund (NFRK). The problems this raises is discussed in detail in the recent ROSC fiscal transparency module.

¹⁰ OECD countries that have a stable economy, and where fiscal control already is firmly established, will generally put more emphasis on the objectives of allocative efficiency and cost-effective service delivery.

There is a large field organisation, with both regional and local treasury offices. This model is common in developing countries, and in many transition economies. In OECD countries and in some transition countries, these functions may be handled by the line ministries and agencies, or by a much smaller number of treasury offices. The need for regional and local offices is to some extent a technological issue. The deployment of modern telecommunications and computer equipment, and the existence of a modern banking system, reduces the need for treasury field offices dramatically. The Kazakh treasury will need to decide whether it needs all the local offices in the future, and whether they should be given new tasks.

The treasury in Kazakhstan carries out ex-ante control of all government payments. There is generally a strong focus on control and compliance. In many OECD countries payment control has been delegated to the ministries or agencies, or it has been replaced by systematic, risk-based audit procedures. In these countries, the management focus has often shifted from control and compliance toward the quality of the expenditures.

The TSA will include all government financial flows, including for funds related to local government. Most modern treasury systems include some variant of a single account system. However, few countries have established a system which is as complete as in Kazakhstan. It is unusual that local government funds are included in a joint single account for all levels of government.

The Kazakh government accounts are done on cash basis. Almost all OECD countries have taken steps to move towards an accrual basis. A few countries have moved to full accrual, whereas most are still somewhere in the transition process. It is expected that transition and developing countries gradually will move in the same direction. Since Kazakhstan has adopted a flexible framework for the CoA, implementation of accrual features in the future should present no problem accounting wise.

The GFMIS in Kazakhstan is built on a standard application software. The software and databases are located on a central cluster of servers, and the users access it through browsers. Most countries still have more distributed treasury information systems. However, the market is clearly moving in the direction that Kazakhstan has taken, and the Kazakh system is a very relevant example for other countries.