Republic of Kazakhstan

Country Economic Memorandum

Getting Competitive, Staying Competitive:
The Challenge of Managing Kazakhstan's Oil Boom*

Background Paper No. 6:
Note on macroeconomic management and National Fund Concept

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REPUBLIC OF KAZAKHSTAN

WORLD BANK MISSION ON NATIONAL FUND CONCEPT AND MACROECONOMIC MANAGEMENT[1]

July 25 – August 3, 2004
Preliminary Assessment

A. CONTEXT

Great opportunities but there are risks

1. Kazakhstan faces enormous opportunities. The planned expansion of oil production, the abundance of other natural resources, the increase in the international price of oil, the improvements in the policy regime and the prudent macroeconomic policies followed up to now set the stage for a very promising future. However, the country also faces significant risks. In particular, *the country faces a serious risk of overheating* which may significantly endanger diversification and competitiveness efforts.

What is meant by overheating?

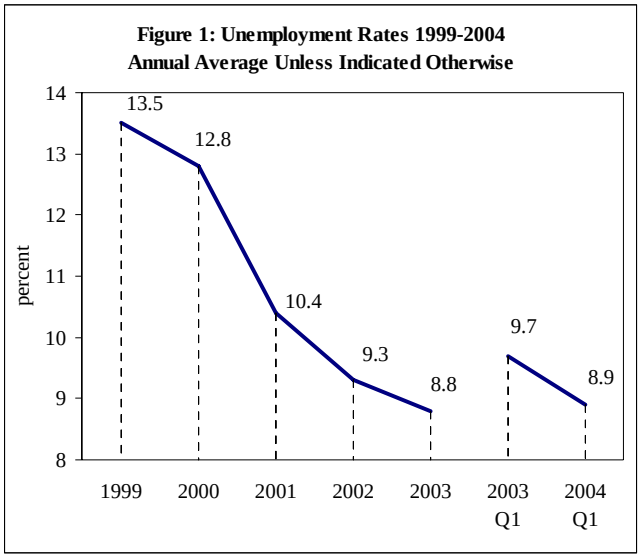
2. An economy overheats when domestic demand grows too fast relative to the country's capacity to produce. Currently in Kazakhstan, demand is rising very fast in the context of actual and expected increases in oil revenues. As the economy tries to spend the additional income, real or anticipated, the demand for all goods rises. Tradable goods such as agriculture and manufacturing—which are the ones the authorities would like to promote—can be easily supplied through imports, which the country can pay for with its ample access to foreign exchange. However, non-tradable goods and services such as construction, housing, commerce, transport, electricity, education, health and other services must be produced locally. Demand pressures will increase the price of these activities relative to tradable goods, leading to real appreciation of the exchange rate. This makes the non-tradable sector more profitable and stimulates productive resources to move out of tradable activities and into the booming non-tradable sector.

3. In this context, pressures in the labor market tend to move labor out of agriculture and manufacturing, whose output will decline in relative terms and into the non-tradable sector. The speed of the expansion tends to cause the development of bottlenecks in inputs and activities that have inelastic supplies. Typical examples are skilled labor, infrastructure, utilities (water, electricity, telephones), ports and airports, roads, etc. Prices of non-tradables and wages tend to rise, accelerating inflation. While skilled workers in cities may benefit from the rising wages, real income in rural areas may decline as the value of agricultural produce falls relative to the goods that farmers buy. Housing prices rise very rapidly as the stock of housing changes only slowly in any given year.

[1] The mission comprised Mssrs/Mmes: Hausmann, Van Wijnbergen, Rodriguez, Umbetaliev and Sarsenov.

What are the potential channels of overheating in Kazakhstan?

4. It is maybe premature to say that Kazakhstan is now overheated, but the risks are clearly there. Although unemployment was still 8.8 percent in December 2003, it is coming down very rapidly from 13.5 percent by the end 1999 (Figure 1). At the same time, the rate of labor force participation (i.e. the proportion of working age population that are either employed or seeking employment) went up from 66 percent to 70 percent in the same period. As a consequence, employment grew by 14 percent in this period while the economy grew by a cumulative 45 percent (see Annex 1). With this pattern of growth and employment, and assuming that the rate of labor force participation stabilizes around its current level, the unemployment rate would reach 4 percent sometime in 2006. At that rate of unemployment, skilled workers could become very hard to find and wage pressures could build up very quickly.



5. There are currently three major drivers of increased demand pressure: (1) large (FDI financed) oil investments, (2) fiscal and public sector expansion (i.e., the state government and the state-owned enterprises), and (3) a credit-fueled private boom. Ongoing investments in the oil sector are about 4 billion US$ per year for the rest of the decade. While much of this spending is on imports and hence does not put pressure on domestic resources, there is in fact a domestic component both directly and indirectly (inter alia, through the domestic expenditures of expatriate workers). Public spending by the Government grew 21 percent in real terms in 2003, and is expected to grow by 19 percent in 2004 also in real terms (see Annex 2).

6. Finally, Tenge loans by commercial banks in constant prices grew by 61 percent in the year to June 2004, while dollar denominated loans grew by 28 percent (the total grew by 42 percent) (see Annex 3). This constitutes a major credit boom by international standards and, unlike the growth in 2000 and 2001, it cannot be explained as a rebound after a currency collapse. In part, this expansion is accelerated by capital inflows, which are attracted to Kazakhstan given the improvement in economic prospects. Dollar-denominated borrowing is also stimulated by the fact that expected real appreciation makes the anticipated real interest rate on dollar loans very low.

7. Empirical studies have shown that credit booms often end in tears, i.e. in a banking crisis. Credit booms are dangerous for several reasons. First, during a boom it is very hard for banks to monitor credit quality. Banks give loans at a much faster speed than usual, and tend to reduce the level of analysis that goes into each loan. They also give loans to new customers, whose credit behavior they do not know. Second, since the rate of growth of credit is much higher than the interest rate, the banking system as a whole need not collect interest in net terms. The system has the resources to capitalize all interest payments and still give more credit. Under these conditions, borrowers can repay one bank by borrowing from another. Even one bank will have trouble distinguishing between funding a new project and recapitalizing old interest due. Once

the credit boom stops, borrowers need to actually pay in net terms to banks and that is when credit quality gets tested. Measures of credit quality during the boom always paint a rosier picture than the underlying reality. Finally in a dollarized system, as mentioned above, while the real exchange rate appreciates, dollar loans become cheaper. When a depreciation occurs, loans become more expensive and harder to pay. Finally, in Kazakhstan some banks may have portfolios highly concentrated in some tradable activities such as agriculture and livestock that are likely to do very poorly in the context of a major real appreciation.

What are the potential consequences of overheating? Aggregate spending volatility creates real exchange rate volatility and, thus, undermines diversification

8. As stated above, real appreciation would hurt the non-oil tradable sector and consequently put in danger the government's diversification strategy. In addition, the diversification strategy would also be hurt by real exchange rate volatility. This volatility will make profits in the tradable sector very unstable and risky, creating strong disincentives towards investment in these activities. Real exchange volatility since 1996 vis a vis the dollar and the euro has been 14 percent and 15 percent, respectively. This is high by international standards. International experience for oil-rich countries also suggest that such volatility tends to be related to government spending volatility.[2] Therefore, not only should the government need to care about whether spending is overheating the economy, but also whether the level of spending changes drastically from year to year. A policy that stabilizes spending over the years will help stabilize the real exchange rate.

9. Unless macro policies are adjusted, Kazakhstan may be heading for a serious problem of overheating that could end in a major real appreciation, a sudden slowdown of growth, a rapid destruction of non-oil tradable activities and potential problems in the banking system. Since the real exchange rate (competitiveness) is influenced by aggregate expenditure levels, then there is a direct conflict between expansionary expenditure policies and the objective of a diversified economy and the real exchange rate stability required by that diversification objective.

10. Out of the three drivers of spending (see paragraph 5), the pace of investments in the oil sector is tied to existing oil development plans and thus pretty much beyond control. Therefore macroeconomic policy should focus on the expansion of the public sector (state budget and public enterprises), and credit expansion.

B. FISCAL (PUBLIC SECTOR) POLICY

B1 The Medium Term Fiscal Framework (MTFF)

11. The MTFF is the most appropriate vehicle to highlight the trade-offs between public spending and diversification policies highlighted above. On the one hand an acceleration in the pace of spending may directly contribute to alleviate supply bottlenecks or address society's objectives over the medium term, once projects are finished (e.g., develop infrastructure, promote housing or agricultural development). On the other hand, during the construction phase, such spending expansion will increase the demand for scarce productive resources, increasing their relative price, causing real exchange rate appreciation and hurting the sectors that were

[2] The more specialize a country is (i.e., in the production of oil relative to non-oil comodities) the greater is the sensitivity of relative prices such as the exchange rate to the volatility in government spending. See Hausmann, Ricardo; and Rigobon, Roberto; "An Alternative Interpretation of the 'resource curse': Theory and Policy Implications; http://papers.nber.org/papers/w9424.pdf

intended to be helped in the first place (e.g., reducing the profitability of agriculture and manufacturing and increasing real state prices).

12. An acceleration of public spending could actually result in pressures to further increase spending in the future. For instance, an increase in public spending increases the demand for infrastructure (e.g., electricity), which results in higher budget demand for investment in infrastructure (paid for by the budget or borrowing by an SOE). Similarly, such acceleration could undermine tradable sectors such as agriculture, which in turn would come back to the budget requesting increasing amounts of budget subsidies (or greater protection). These are just examples of how an excessive growth of public expenditure could lead to even further fiscal expansion in the future. In addition, the increased public demand raises the price of the goods that the government is trying to acquire, reducing the effective domestic purchasing power of oil revenues. Too quick a spending increase means that, as the dollar price of those goods increases over time through real appreciation, the oil dollar revenue ends up buying fewer actual domestic goods than would have been feasible with a more gradual expansion.

13. In preparing the MTFF, it is therefore essential to carefully select a target for:

- **The real rate of growth of total public spending** (including local governments and, ideally, state-owned enterprises) in particular as it compares to the rate at which the economy could absorb the increase (e.g., vis a vis the expected real growth of the non-oil economy, or the expected real growth of real production in non-tradable sectors).

- **The magnitude of the non-oil public sector deficit**, as defined by the total expenditures minus non-oil fiscal revenues, since this concept will clearly reflect the amount external resources (from oil revenues or borrowing) that are being injected into the economy in a given period—either through increase in spending or through a reduction in non-tax revenues. In other words, the gap between the non-oil fiscal deficit and the actual oil revenues will ultimately determined how much is truly saved and how much truly spent out of oil revenues. To have a control on the actual saving out of oil income it is not enough to segregate a portion of the oil revenue into a fund. This is so, because the government could be running a deficit and increasing the debt at the same time it is accumulating some financial assets. The net worth of the government would only have increased if the savings out of oil exceeded the dissavings in the rest of the budget.

14. Two comments can be made to the current methodology for preparing the MTFF. First, it does not, at the moment, focus explicitly on these two variables of fiscal policy. Second, there is no “feedback mechanism” between the initial macroeconomic parameters used to prepare the budget (e.g., inflation, non-oil GDP growth, real and nominal exchange rates) and the impact that the resulting level of spending and non-oil deficit could have on them.

15. In this context, the authorities would need to consider the following options:

- The rule that is to govern the National Fund of the Republic of Kazakhstan (NFRK) (see section below) together with a balanced-budget rule should be used to determined the non-oil deficit. In other words, the non-oil deficit can at most equal the allocation to the budget from the NFRK. This will leave the MTFF to determine **only** the optimal level of non-tax revenues and aggregate spending compatible with the non-oil deficit.

- The aggregate fiscal balance (i.e., the consolidated balance of the Republican Budget and the change in the NFRK) will be determined as a residual, as it is this balance (rather than the level of spending) that should be absorbing the volatility in oil revenue coming from changes in prices and quantities.[3] The 'republican deficit' should not become an intermediate target as it is not useful in the design of macro policies. Instead, this variable should be volatile and absorb the shocks to oil prices and volumes automatically. The key economic parameters of interest are the non-oil deficit (in the republican budget) and the consolidated balance of the republican budget and the NFRK.

- An *assets and liabilities management policy* should be developed to assure the liquidity of the government and its capacity to withstand periods of low oil income since exactly in those periods access to external finance is often difficult. Being liquid will of course have a cost as the interest rate on safe, liquid NFRK assets will always be lower than the interest paid on the government's debt. The policy will need to optimize the costs and benefits of different asset and liability stances. Changes in the structure of assets and liabilities can be achieved through balance sheet operations such as early repayments of debt, as well as changes in the composition between foreign and domestic debt. In addition, in order to promote the development of the domestic capital market, the government may need to maintain a stock of government bonds large enough to generate a liquid market at different maturities to constitute an effective yield curve, out of which private bond issues can be priced.

B2 How Much to Save or Spend out of Oil Revenue

16. Fiscal policy must make sure that domestic expenditures do not lead to overheating. Real primary spending grew by 21 percent in 2003 and is expected to grow by 19 percent this year, much faster than the real growth of non-oil GDP (Annex 2). This expansion in expenditure was not matched by rising revenues: the non-oil budget deficit went from 2.5 percent of GDP in 2002 to an expected 5 percent of GDP in 2004 (and is expected to further widen to 6 percent of GDP next year). This has happened in spite of the fact that the country has an oil stabilization fund. It is therefore relevant to ask whether the current rules of the NFRK and other fiscal principles are adequate.

17. The current rule roughly comes down to saving all marginal oil income when prices exceed $19 bbl (and dis-saving when the price falls below $19).[4] If current prices stay for long time over $19 bbl, under the current rule the NFRK should accumulate amounts well above 4 billion dollar—unless the reference for the world price is changed. The rule is not applied consistently, however, as the definitions of oil income and oil enterprises are changed occasionally. In addition, privatization revenue and some non-oil resource income has been added to the fund in the recent past. Finally, although the rule looks simple it is actually quite difficult to compute: establishing the trigger point for contributions to the fund requires an estimate of oil-related revenues, taxes, bonus payments etcetera that will be transferred to the Treasury by each of the (now 9) companies reporting to the NFRK at the target price of $19.

18. A much more important objection to current practice is that the whole concept of the Fund is undermined by the debt-issuance policy of the government. Thus the government has occasionally both contributed to the fund and issued new debt, thereby reducing net savings

[3] As explained in the section below, the non-oil deficit will be however determined entirely by the rules governing the National Fund of the Republic

[4] The rule has a small savings component represented by the 10 percent transfer from the budget to the NFRK.

below the level of contributions to the fund. Obviously, if as much debt is issued as is contributed to the Fund, no net savings takes place; moreover since the cost of debt most likely exceeds the return on Fund assets, issuing debt while contributing an equal amount to the Fund deteriorates the position of the budget even when it does not increase net debt.

19. We strongly advise to stop issue of new debt whenever positive contributions are made to the NFRK, except as balance sheet operations in the context of the asset and liability management policy. There is obviously no point in issuing new debt while at the same time setting aside money through the NFRK. We therefore propose to adopt a rule setting the non-oil deficit at most equal to the allocation out of the NFRK to the budget. This rule will guarantee that the public debt will remain constant or will decline and that whatever moneys are accumulated in the NFRK will represent real savings.

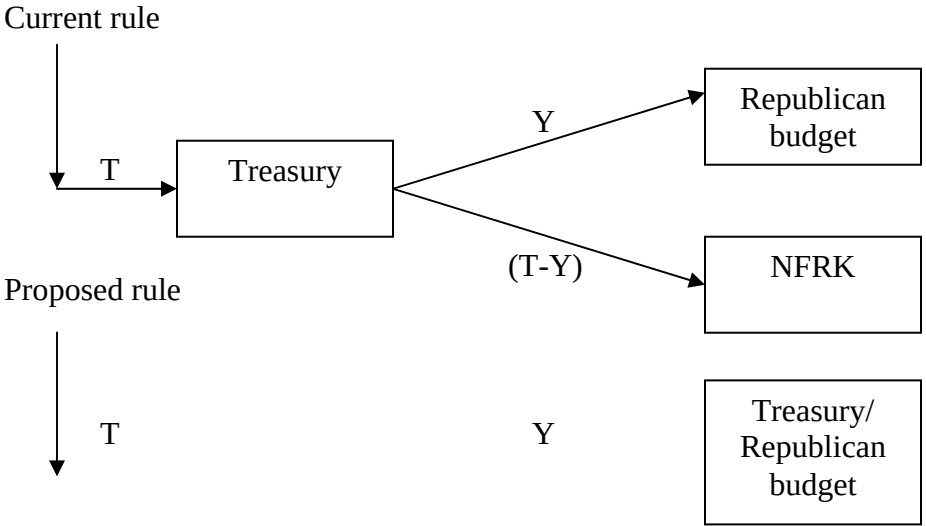
A new rule for the NFRK

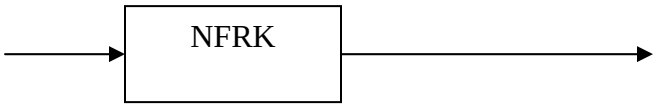
20. We propose a new rule for the NFRK, one that would achieve three objectives:

- Accumulate a rainy day fund to assure the financing of the budget during bad times (i.e. when oil prices are low or when export volumes are disrupted)
- Stabilize the level of government spending in order to reduce real exchange rate volatility
- Save a part of the oil revenue for future generations, the ones that will come after the oil boom

21. As will be explained below, the properties of the rule provide some control over the long-term level of the fund (addressing the question of how much money can a political system stash away without creating excessive pressures to change the rule).

22. Finally, if designed in such a way that the MOF takes oil revenues out of the NFRK (rather than deposit them), then the rule should also facilitate the management of the Treasury and the conduct of monetary policy within a given year. In particular, we propose that the oil revenues (coming from all oil extractive companies) of the government (excluding duties, VAT and social taxes) should be deposited at the NFRK. The amount of oil revenues included in the budget should be paid to the government by the NFRK. This will leave all the volatility in oil revenues in the accounts of the NFRK, thus protecting the domestic economy (See the diagram below).





23. Second, we propose that each year the amount of oil revenues included in the budget should be calculated using the following formula:

$Y(t) = \boldsymbol{A} + \boldsymbol{b}\ F(t-1)$

24. Where Y is the oil income to be included in the budget of year t, F(t-1) is the level of the NFRK at the time of budget approval and ***A*** and ***b*** are parameters. Note that this rule is a compromise between the Bird-In-Hand (BIH) (that is the rule used in Norway) and the Permanent Income Hypothesis (PIH), as elaborated in the World Bank's Aide Memoire of December 2003. A pure BIH rule would be:

$Y(t) = \boldsymbol{r}\ F(t-1)$

"***r***" is the (real) rate of return earned on the Fund. This formula would be very harsh on the current generation. For example, it would lead to a spending of only about 200 million dollars in the budget of 2005, instead of the planned 1.9 billion.[5]

19. The PIH rule would imply that:

$Y(t) = \boldsymbol{A} = \boldsymbol{r} * NPV(\text{oil income})$

25. This formula has the advantage that it distributes the rent equally among the different generations, but is nevertheless not advisable: it would imply a level of spending in the present that is too high from the point of view of macro balance and overheating and would require a level of borrowing that the government cannot safely achieve. In addition, it requires an assumption about the Net Present Value of the oil income, which is highly uncertain. And adjusting spending downwards after having overestimated the NPV may be difficult to achieve. Thus following a pure PIH rule early on could greatly increase the financial fragility of the Kazakh economy and make it vulnerable to the type of foreign exchange crisis that has plagued countries like Ecuador, Mexico, Nigeria and Venezuela.

26. Instead, our mixed formula allows us to balance the benefits of each approach. Choosing A below the current level of oil income and b at or slightly above the rate of return on the NFRK eliminates the financial fragility fears because spending will remain below oil income until substantially more is accumulated in the Fund. Moreover choosing ***b*** higher (lower) will increase (decrease) the volatility of spending. We propose to use a value of ***b*** higher than recently obtained rates of return, but relatively low (say 4 percent). In addition, we propose that ***A*** should be calculated to match the planned incorporation of oil tax revenues to the 2005 budget. This implies that the rule would only start binding in future budgets. For example, if Y for next year is

[5] Since the definition of oil revenue is not well established (it comprises 7 enterprises subject to NFRK rules, and a number that can range up to 80 for oil enterprises not subject to the NFRK rule), it is difficult to estimate the expected amounts of oil revenues included in the 2005 budget. Annex 2 puts them at $2,026 million based on a recent calcuation by the staff of the Ministry of Economy. In the rest of this section we would use $1.9 billion as the amount of oil revenue expected to be included in the 2005 budget.

about 1.9 billion, the level of the Fund is about 4 billion and we choose ***b*** to be 4 percent, then ***A*** should be about 1.7 billion. Once set, the parameters ***A*** and ***b*** should not be changed.[6]

Avoiding full depletion: an extension to the rule

27. The above formula has the problem that takes out a fixed amount (***A***) even when oil revenues fall, which may lead to depletion of the Fund if there were to be a long period of low oil prices or disruptions of oil revenues. To avoid this, the formula could be modified to specify that the budget will receive the minimum of:

$$Y(t) = A + b\,F(t-1) \text{ (as before)}$$
and
$$Y(t) = T(t) + c\,F(t-1)$$

28. The second equation in the formula would become binding only when oil revenues (T) are low. In this case, the budget would receive at most all what comes in from the oil sector plus a percentage of what is in the Fund.

A simulation

29. We ran a simulation of the rule assuming that oil income is derived from world oil prices that follow a random walk.[7] The estimated random price is then input into a excel file with field-by-field assumptions on production, investments, operating costs, and the tax regime embedded in the actual contracts to generate an estimate of the associated oil revenues (T).

30. As for the NFRK parameters, we assumed that ***A*** equals to US$ 1.7 billion, ***b*** equal to 0.04, ***c*** equal to 30 percent, that the initial level of the Fund at the end of this year is US$ 4.4 billion, and that its long-term rate of return (in US$) is 2.5 percent. We graph the simulated level of oil revenues over an 49 year period and look both at the portion of oil income incorporated into the budget and the level of the Fund (measured in the right-hand-side axis) (See Figure 1). Note the reduction in the volatility of Y relative to T and the fact that over a long period of time the Fund accumulates a level which tends to be about 8 to 10 times the average annual oil income.[8]

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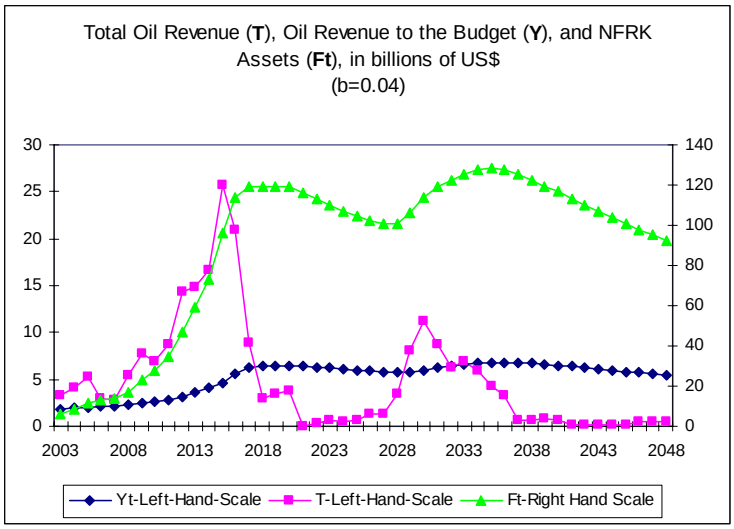
[6] Although the possibility of reviewing the parameter ***A,*** say every five years could be considered as long as this is done in the context of the budget process.

[7] Specifically we assumed that prices (P) comes from the following statistical process: $P(t) = P(t-1) * (1 + g + e)$; where g is the average growth in prices (1975-2002), and e is a random element of such growth, with mean zero and a standard deviation equivalent to that of the growth in oil prices over the same period. The particular 'draw' for oil prices forecast a mean price of $27.2 per bbl during the next 45 years.

[8] The long-run value of the ratio between F and T depends mainly on the choice of the parameter ***b***, the rate of return on the Fund, and on whether or not ***A*** ends up being larger or smaller than T in the long-run. In particular, if ***A*** is greater than T in the long-run (100 years) the Fund will converge to zero.

Figure 2



31. It should be noted that the 'transfer' of volatility from fluctuations in either prices of quantities to the budget (and thus to the economy) is determined by the coefficient ***b***. Table 1, below, illustrates the degree of 'insulation' that different values for the coefficient '***b***' would entail: for instance, a ***b*** equal to 0.04 transmits 29 percent of the volatility of oil revenues to the budget, while a ***b*** equal to 0.10 transmits 43 percent—for this particular price path. The table also illustrates the end of period stock of the NFRK.

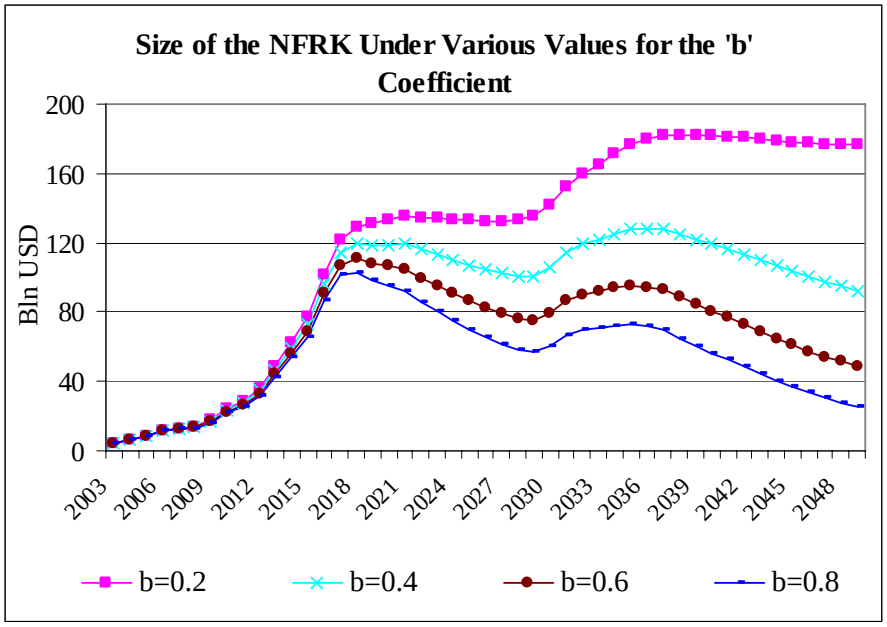
Table 1: Volatility of Total Oil Revenues and Oil Revenues to the Budget for Various Coefficients 'b'

b	Sta. Dev. (Y)	Sta. Dev. (T)	STD (Y)/ STD (T)	Ft (US$M, end-2049)
0.01	1	6	14%	240
0.02	1	6	22%	176
0.03	1	6	26%	126
0.04	2	6	29%	93
0.05	2	6	31%	66
0.06	2	6	33%	49
0.07	2	6	35%	34
0.08	2	6	38%	25
0.09	2	6	40%	18
0.10	2	6	43%	12
0.11	3	6	46%	9
0.12	3	6	48%	6

Y: Oil Revenues included in the budget; T: Total oil revenues; Ft: Stock of the NFRK
Sta. Dev.: Standard Deviation

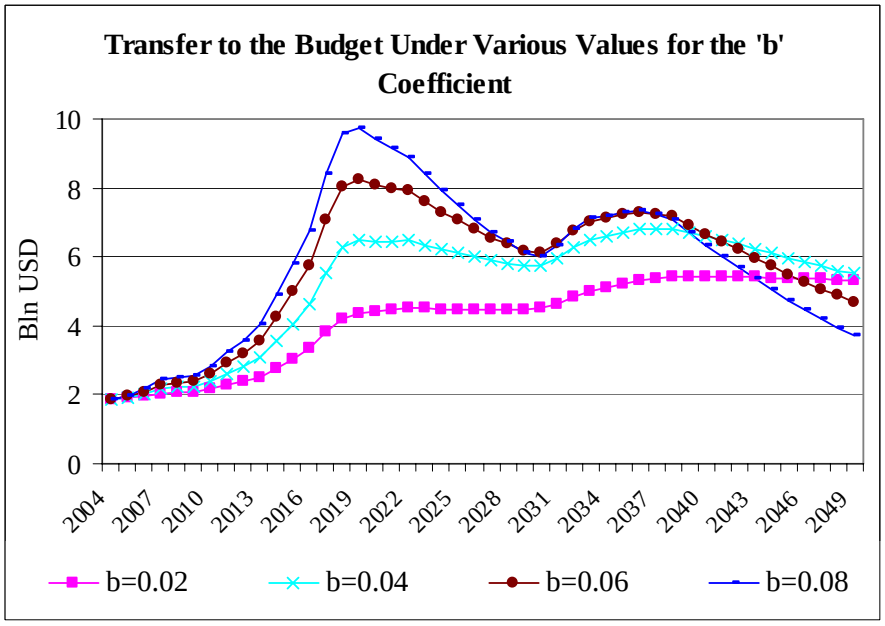
32. To calculate Table 1, the parameter ***A*** was chosen to ensure that the oil revenues in 2005 equal $1.9 billion. The larger the ***b***, the greater amounts of oil incomes that are passed to the budget and, hence, the lower the long-term size of the NFRK. Figure 2 below illustrates the size of the path for the balance in the NFRK as a function of ***b***.

Figure 3



33. And Figure 3 below illustrates the revenue flowing into the budget under various values of ***b***.

Figure 4



34. The simulation relies heavily on the path chosen for oil prices which, as mentioned earlier, follows a random walk. However, it would be relatively easy to simulate many prices like this (say 100 possibilities) and calculate key variables (e.g., the size of NFRK, the amounts transferred to the budget) derive from an average price. With 100 or more simulations, these values would have a statistical value (while our simulation is one possible outcome of many).

We attach to this Aide Memoire the spreadsheet used to generate the random price and the above graphs (See also Annex 4).

Some additional rules for the NFRK.

35. It is very important that the NFRK be considered just a form of external saving and not a way to circumvent the official budgeting process. It should not form an alternative source of domestic spending or investment as this would defeat the Fund's purpose as once again contributions would not anymore represent net savings; and moreover such a practice would create an alternative and less transparent spending venue of the government outside the regular budget. Such practices have in many countries signaled the beginning of the loss of budgetary discipline, with all the negative macroeconomic consequences it entails. Resources spent by the Government, directly through spending or indirectly through subsidies or guarantees, should always go through the regular budget—which is one of the important reasons for trying to accommodate current spending levels through the selection of the parameter ***A***.

36. We therefore think, for example, that it would not be appropriate for the NFRK to be used to make strategic investments in the CIS or to purchase shares of oil companies operating in Kazakhstan. The former example should not constitute a use of NFRK savings because it would be highly illiquid and subject to substantial political risk. The latter constitutes a financial investment in an asset that has a high correlation with the very risks that the NFRK is supposed to insure against. If the government wants an equity participation in oil firms, it should include this as part of the design of the PSA or as a form of payment for the concession. If needed, the government may consider issuing debt in order to acquire financial assets as part of its asset and liability management. If the assets purchased by the government are expected to have a return higher than the cost of funding the operation, then this would increase the NPV of the government without increasing domestic spending. Consideration should also be paid to the fact that the risk of such investments may increase the overall exposure of the economy to oil risk. Of course, there may also be strategic reasons for taking an equity stake in a major oil development.

37. A related issue is the borrowing that is made by state-owned enterprises (existing or new ones), with or without a government guarantee. Since the overall purpose of the NFRK is to generate savings in the overall public sector, it is essential that the Ministry of Economy and Budget Planning or the Ministry of Finance begin to systematically monitor SOEs' borrowing (as well as the guarantees that holdings might offer to their affiliates). Ideally, the MEBP/MOF should monitor actual investment plans and should exercise the authority to approve or veto investment plans early on in the project cycle in order to control the magnitude of future borrowing commitments and make sure that these are consistent with the financial capacity of each SOE. The world is full of examples of governments that have had adequate budgetary controls on fiscal expenditures but that were rendered insolvent by SOEs.

38. Rapid increases in Government expenditure also lead to concerns about effectiveness and quality of government expenditure. Are necessary supporting policies in place in the sectors targeted for expansion, such as health and education? Is the additional investment planned checked adequately for the rate of return it promises? Can the Government maintain control over the expenditures and subsidies set in motion? These issues will need to be discussed in detail at a later stage, in particular during the preparation of the forthcoming Public Expenditure and Institutional Review under the Joint Economic Research Program.

How should the NFRK assets be invested?

39. The NFRK should be concerned with liquidity, risk and return. The liquidity of the NFRK should guarantee that payments to the budget be made with full certainty even in periods of low oil income. The risk aspect implies that the NFRK should favor investments that have a negative correlation with the risks that the NFRK is set to minimize. Hence, it should not invest in oil. Kazakhstan also faces risks associated with the disruption of export routes, given that its oil must cross several countries to get to market, a fact which creates both technical and political risks. The NFRK should avoid investments in countries where political risk (or risk exposure) is already high (e.g., investing in a country that can both shut the pipeline and expropriate the NFRK investment).

40. A way to implement a portfolio that achieves the right risk – reward balance is by implementing a consumption-based Capital Asset Pricing Model (CAPM). This should take account of the export and import patterns of Kazakhstan, of the real exchange rate vis a vis its major trading partners, the volatility of its terms of trade and the variance and covariance of its business cycle vis a vis the rest of the world. Investing only in US Treasuries would not only imply a low return, but it exposes the NFRK to the inevitable fluctuations between the value of the dollar and that of Kazakhstan's consumption basket. Hence, the optimal portfolio should have a basket of stocks and bonds in different currencies optimally mixed, given the risks to the economy. A study of this nature should be done, possibly in cooperation with the external asset managers of the NFRK, in order to define the investment policy of the NFRK.

C FINANCIAL AND MONETARY POLICIES

41. The mission was requested to prepare a preliminary assessment of the consistency between monetary and financial sector polices on the one hand, and the overarching objective of economic diversification on the other. Such assessment follows.

C.1 Monetary Policy

42. Monetary policy has largely focused on restraining money growth in the face of substantial capital inflows occurring with a stable nominal exchange rate (capital inflows would be limited to the current account deficit under a freely floating exchange rate). To offset the expansionary impact on the money supply of these capital inflows, the central bank has intervened extensively, placing interest-bearing notes with the commercial banks. To this end, interest rates on primary issues are adjusted until enough notes can be sold and money supply targets are met. As this policy has been pursued, the NBK has begun to incur operational losses because the interest payments on notes exceed the interest earned on its assets, mainly international reserves.

43. There is a serious issue as to whether the authorities are pursuing the wrong targets however. Although there is no formal fixed exchange rate regime, the NBK seems to be buying reserves to maintain nominal exchange rate stability or at least to avoid "abrupt" changes. Maintaining nominal exchange rate stability implies however that capital flows move to offset differences between money supply targets and actual money demand. Thus rapid money increases are demand-induced and not themselves an inflationary impulse. Under a fixed exchange rate, domestic credit of the NBK should be targeted, not money, in order to assure that the level of reserves remains adequate to maintain the exchange rate commitment. If the nominal exchange rate is targeted, inflation is the mechanism that adjusts the real exchange rate; and the

real exchange rate (competitiveness) is influenced by fiscal policy and other factors in the real economy. Sterilizing the monetary impact of capital inflows cannot be achieved except for short periods and at high cost as this will raise interest rates, thus attracting further capital inflows that would in turn need to be sterilized. Eventually, the NBK would need to allow the exchange rate to appreciate or would need to abandon its sterilization efforts.

44. Under the current arrangement, Kazakhstan could end up being stuck with two forces leading to real appreciation: loose fiscal policy (putting pressure on non-tradable prices) and tight money (appreciating the nominal exchange rate). In the end, the attempt to compensate expansionary fiscal policy with excessively tight money can cause a recession that not only stops the growth process but also destroys the non-oil tradable sector.

45. We find it appropriate for the NBK not to target base money, but the adoption of an inflation targeting scheme, in the sense of setting an inflation target and changing interest rates in order to achieve it while letting the exchange rate float may leave too much volatility in the exchange rate and would not give operational guidance to the NBK as to how much and in what occasions to intervene in the foreign currency market. In addition, since the refinancing rate is likely to have a small impact on the Kazakh economy, very radical movements would be needed to influence the inflation rate. Instead, we suggest that the NBK considers adopting an exchange rate based system, implicitly or explicitly (and as intermedium target that still respect the focus on inflation) possibly with a band and with a target on a currency basket that reflects the trade patterns of the country. The precise basket would need to consider not just the quantities of trade with each country but also the nature of the price formation in the different goods. This recommending policy would still be consistent with the NBK's mandate to fight exclusively inflation. Credit policy will, of course, remain another key instrument for monetary and macroeconomic policy (see below) as will be a policy to control capital inflows.

C. 2 Credit Policy

46. Part of the expansion of non-oil GDP is due to a credit boom fuelling private expenditure. Real Tenge-denominated bank credit to the economy has increased by no less than 61 percent June to June 2003/4, up from an annual increase over 2003 of 36 percent (Annex 3). Bank credit is thus accelerating at a very fast clip, raising a whole series of financial sector issues in addition to macroeconomic concerns. The macro concerns relate to the real exchange rate impact of a sharp rise in expenditure and has been discussed above.

47. But fast credit growth also raises questions of risk exposure by banks; if credit is extended too fast, quality control is likely to slip (see paragraph 7). New loans (and the companies or persons taking them out) would be harder to screen, as the monitoring resources of banks are stretched. In addition, in good times, it is easy to appear solvent, but this may change if the economic situation deteriorates. Finding out the capacity of firms to actually generate cash is compromised by the fact that the banking system as a whole can capitalize all interests owed and still expand credit, without requiring firms to actually give cash back to banks. Collateral appears ample as asset prices are high and rising. These factors can change very quickly once the economy enters into more difficult times. Firm cash flow suffers; asset prices decline, thus reducing collateral value; interest rates go up just as the capacity of firms to pay is compromised. Indicators of credit quality usually turn from rosy to worrisome in a short period of time. In this context, concentrated exposures to particular sectors, such as real estate may cause serious bank problems when the situation turns bad.

48. Moreover much of this credit increase is financed by foreign borrowing. Although some of the foreign borrowing by commercial banks is siphoned off through NBK's sterilization operations, a substantial part of it is passed on, apparently to a substantial degree as dollar-denominated loans. If the foreign loans are on-lent in Tenge, the bank may loose its capital in the context of a currency crash, as the value of its assets would decline relative to that of its liabilities. If instead it lends in dollars to firms that sell in the domestic market it may achieve a currency match of assets and liabilities that may disguise currency risk in the form of credit risk, as firm may find themselves unable to pay dollar debts if the currency crashes. In anticipation of this concern, depositors may run against banks if they perceive a high risk of a currency depreciation. In the end, the bank runs exchange rate risk in spite of their apparent coverage; exchange rate related risk is transformed into commercial risk, but it is still exchange rate related. On top of that comes the fact that Tenge-denominated loans are increasing even faster than dollar-denominated loans, which obviously directly poses exchange risk exposure issues.

49. *Policy measures*. Within the NBK's financial framework there is no room for direct credit controls. Such direct interventions would also undermine the success of the financial sector reforms implemented in Kazakhstan during the past decade, reforms that have produced a remarkably stable and active private sector based banking sector in a very short time. Instead the following measures should be considered.

- First as rapid expansion creates its own risks, *a general increase in capital requirements for banks against risky assets must be considered*. This would raise the cost of extending credit and may in that way slow down the boom, while at the same time it would provide more of a capital cushion to protect against downturns. This measure should be considered despite the fact that Kazakhstan already has relatively high capital requirements.

- Second, in calculating capital requirements, excessive sector exposure should be considered. The very rapid credit expansion is related to the ongoing building boom and to high grain prices. With credit growth being as high as 40% in real terms, excessive single sector exposure is very likely to become an issue. *Increasing capital requirements when sector exposure is becoming skewed towards one sector might well be called for*.

- Third, a more direct approach would focus on limiting the ability of banks to convert liabilities into credit by increasing and extending the reserve requirements on all sources of funding, including the rapidly rising foreign borrowing by banks. So far, the NBK has been trying to absorb foreign borrowing by banks by selling NBK notes to them. As argued before, this creates an incentive for further borrowing abroad by banks. Instead, the NBK can simply make it more expensive to borrow abroad by *raising reserve requirements against <u>all</u> liabilities of banks including foreign currency liabilities*. So reserve requirements should be extended from just deposits to all liabilities, including foreign borrowing. In addition, a wedge should be introduced whereby requirements against foreign currency liabilities are higher than those against domestic currency deposits. This measure will increase the cost of foreign borrowing and will reduce incentives to the dollarization of deposits. Through this mechanism, the NBK can reduce the speed of the credit boom and at the same time reduce the exchange risk exposure that is building up.

50. These measures are suggested to slow down the recent very rapid growth of credit to the private sector. Of course, structural reforms in the banking sector should continue to address longer-term problems such as access to credit by Small and Medium Enterprises.

C.3 Financial Sector Policy

51. Kazakhstan has been remarkably successful in setting up a modern banking system and accompanying supervision institutions. The development of other capital market institutions is taking more time however (e.g., insurance, leasing, and the stock- market). In particular, stock-market capitalization (with less than 20 active enterprises) is less than the authorities had hoped for, which leaves deposits as the main domestic instrument available to pension funds apart from Government paper. This is the more an issue since Kazakhstan can be expected to be at the beginning of a long period of rapid increase in Pension Fund demand for domestic assets to invest in.

52. Moreover, there also seem to be as yet unresolved issues in the Banking sector. There is a substantial degree of concentration, leading to worries about insufficient competition; insider lending to related parties is most likely difficult to control given the ownership structure of the major banks (some of them are part of financial groups that also comprise client enterprises, like was the case with the financial groups that played an important role in the Mexican banking crisis of 1994/5); and some segments of the enterprise sector, in particular Small and Medium Enterprises or SMEs) seem to have more difficult access than larger companies. All of these issues are structural issues that should be seen as separate from the short term macro-concerns (e.g., aggregate credit policy) that we discussed so far; but that does not mean they should not receive high priority.

Bank Competition

53. Bank concentration *per se* does not have to be an issue of major concern, although it does make the life of competition authorities harder. Banking is very much an economies of scale industry, which explains the worldwide trend towards fewer and larger banks. According to Barth, Caprio and Levine (2001), the 5 largest banks accounted for 73 percent of deposits in Australia, 74 percent in Belgium, 76 percent in Canada, 79 percent in Denmark, 80 percent in Israel, 82 percent in Portugal and 85 percent in South Africa. By contrast, many developing countries showed a smaller degree of top-5 concentration: 48 percent in Argentina, 58 percent in Brazil, 38 percent in Guatemala, 51 percent in Nigeria and 30 percent in Panama. Whether fewer banks means less competitive banks is not clear given that the market remains contestable by new entrants or by the presence of a healthy group of smaller banks that would exploit opportunities when the leading banks engage in monopolistic (too high) pricing. Most industrial and developing countries have three of four major banks with most of the assets and a fringe of smaller banks in the second tier. Smaller banks tend to survive as niche players.

54. Interest rate margins between lending and deposit rates may be high in Kazakhstan, although we did not look at this issue in detail. High margins may be a symptom of lack of competition. However, there are at least two other major reasons why margins may be high: costs and risks. Costs may be high because of poor banking technology or high implicit taxation on the banking industry (through, for example, high unremunerated reserve requirements or high capital requirements). Risks may be high because of inefficient and costly contract enforcement, high litigation costs, difficulty in executing collateral, inadequate credit culture, etc. When calculating interest margins it is important to keep in mind that bank loans have a very high variation according to type, sector, costumer, etc. In this context, it is informative to look only at blue chip corporate clients and ask what is the margin between the rates paid on 30 or 90-day time deposits and the prime rate charged on loans. This gap must pay for the cost of the unremunerated reserve requirements, the operating costs of the bank and the capital which the bank must put up to do the operation. It is also important to note that there is a policy dilemma between lower interest margins and a healthy and well-capitalized banking system. If banks do not charge enough of a spread to cover potential risks, a bad turn of events may create a banking crisis. While some advanced countries may have very low intermediation margins, a well run system such as Chile's where credit to the private sector is a healthy 48 percent of GDP shows overhead costs of 3.1 percent and an interest margin of only 4.1 percent. By contrast, Brazil and Venezuela have interest margins of 11.5 and 10.2 percent respectively. If lack of competition is presumed, then this might be an issue for the competition authority.

55. Lending rates beyond the best corporate customers are always higher and depend on the risks involved. Housing and cars are relatively easy to finance because the good that is being financed can also be used as collateral. If property registries are adequate (and hence can keep track of the liens on properties that have been pledged as collateral) and if the costs of contract enforcement and repossession are low then interest rates may be low. Small and medium enterprises usually face greater difficulties because their financing needs usually involve working capital or very specific (and hence, illiquid) assets, which cannot be used as collateral. In addition, the costs of registering and formalizing firms as legal entities often prevent them from having the necessary documentation to become credit subjects. This sector usually requires some form of intervention in order to facilitate its access to credit. Credit guarantee agencies may provide firms with legal and managerial advice, monitor their advance and provide them with guarantees that can be used to access bank credit. In general, the problem of high interest rates is seldom one of lack of competition (which is relatively easy to address) and more one of lacking

an adequate institutional framework (e.g., well working registries). In addition, given that credit is expanding so quickly at present in Kazakhstan, lowering lending rates in general should not be a policy priority. The development of the institutions to support the credit market should.

Financial Groups (FGs) and Insider Lending

56. The financial groups issue, and the problem of preventing excessive lending to related parties ("insider lending") is a real problem, very prevalent in transition countries and other emerging markets, and difficult to solve. Insider lending is always difficult to police, but is especially difficult to ferret out once the Financial Groups (FGs) own both a bank and industrial companies. Spinning the banks out of the FGs, for example via a stock-market listing, would be an option, although one would need more than that to solve the incentive problems inherent in FGs. After all, a FG could also buy a large stake in a bank on the stock exchange. Additional rules on bank ownership would thus be necessary.

57. A good banking law would complement such ownership restrictions with limits on single borrower exposure, to further reduce the risk of improper influence of a single client on the bank's commercial decisions. The extent to which Kazakhstan's banking laws are adequate in these respects, and, if so, are complied with in practice, has not been discussed during the mission but is important.

Stock market development

58. That the stock market develops more slowly than hoped for, and stock exchange capitalization lags commensurately behind initial expectations, should unfortunately not come as a surprise. The prominent role of equity in American corporate finance has much to do with the very restrictive rules against interstate and universal banking under which US banks had to operate until recently. In continental Europe, where such restrictions never existed, the stock market plays a much smaller role in the financing of investment than in the US. A stock exchange listing requires complex and credible corporate governance. After all, minority shareholders own a claim on the residual cash flow of a firm, after all other claimants including management get paid. They must trust that they will not be abused through opportunistic behavior of management, majority shareholders, insider traders and others. If they cannot feel this sense of trust, they will demand a return on their investment high enough to cover these risks, and this may make the market disappear. In addition, to address governance issues the market must be provided with a lot of information that strategic investors may wish to be handled more discreetly. Measures to improve corporate governance and the functioning of the stock market are important and should be undertaken, but will not deliver major flows of new listings, nor probably liquidity in existing listings, for some time to come.

59. Yet the process could be helped along by selling stock of the public utilities or segments of the state oil company that could be privatized. In the case of natural monopoly sectors such as railways or electricity distribution, in addition to addressing issues of corporate governance, the right regulatory framework would be critical to ensuring efficient private sector participation..

Pension Fund Issues

60. The slower than hoped for stock market development means that other venues should be sought to allow Pension Funds (PFs) to invest in domestic assets. The provision of long-term loans by letting PFs place special Long-Term deposits in the banking system might be a way of providing PFs access to domestic assets of sufficient maturity. This would most likely fill a gap in most banks' portfolio since deposits will remain predominantly short term. It should be

investigated whether there are rules preventing PFs and banks to set up such arrangements. The mission has received conflicting information on this topic. It may also be important to explore whether this transaction should be done through a non-bank entity such as trust fund that invests in long-term subordinated debt and that issued shares instead of deposits. The important difference here is that deposits have a fixed price and hence cannot be loaned for riskier endeavors. In addition, banks are heavily regulated because they issue deposits, which are involved in the payment system. A trust fund may be able to avoid complicating an unnecessary regulation and can allow a better sharing of risks and rewards with pension funds.

61. In addition, there is a gap in the reform process in that no annuities market has emerged as yet given the underdeveloped state of the insurance system. This will become a problem as soon as the first pensioner under the plan reaches retirement age. Establishing an annuities market will be substantially simplified if there is an active life insurance industry. This industry could be jumpstarted by allowing a major reputable foreign life insurance company into the country. Are there any barriers keeping them out? Abolishing any barriers that exist and work on an adequate supervision structure should have a high priority.

62. There are of course other pension fund issues, such as for example the advisability of different portfolios for people of different age, and what should be the stance vis a vis investment abroad (including hedging for the foreign exchange risk). A more structural issue relates to the desirability of the complete phasing out of the PAYG system, as is currently envisaged, and the apparent underfunding of the new pension funds if reasonable pension coverage is to be reached. These issues deserve a separate study however and are not touched upon further in this note.

Credit Allocation Deficiencies

63. The Government has expressed concern about the excessive concentration of new credit in the construction and agriculture sectors. Should Government policy stimulate diversion of credit to other sectors as well, and if so, which instruments are appropriate? Similarly, SMEs in Kazakhstan have difficult access to credit as banks apparently concentrate their attention (and resources) on larger clients. In this regard, it should be noted that commercial banks are being rational: if real estate prices are high, why not provide increasing amounts of funding to the construction sector? Resources are indeed following profitability and to address issues of credit allocation the government has to address the pressures on aggregate demand (e.g., public spending) that are making those sectors (and all other non-tradable sectors) extraordinarily profitable in the first place. Government, therefore, should not aim at modifying or regulating credit allocations, but focus banking policy on risk consideration while using macroeconomic policy (monetary, fiscal and credit policy) to address the excessive growth of non-tradable sectors (and the credit that is flowing to them).

64. Directed credit is not really possible in the free privatized banking system that has been set up in Kazakhstan. Also, the pressures for appreciation and the high prices for grain and other commodities are likely to be a much stronger force than the sort of incentives the Government could use short of direct quantitative targets. Anyhow, the measures against excessive single sector exposure proposed in paragraph 49 above will help. The most effective policy would however be macroeconomic: lessen pressure on the real exchange rate by restraining Government spending expansion.

SME access to credit

65. As mentioned in paragraph 54 above, access to loans by SMEs is a similar structural issue that cannot be solved by macroeconomic policy instruments. SMEs have difficulty obtaining loans everywhere in the world since making smaller loans is more costly per unit than making large loans. In addition, SMEs will often have less collateralisable assets or assets that are more difficult to collateralize. That naturally makes banks more hesitant to lend.

66. This issue might better be solved through the provision of guarantees, although it should be stressed that guarantees are dangerous policy instruments; they can lead to large budgetary risks that are not always visible from published government accounts. The Development Bank of Kazakhstan might have a role to play here. If that route is taken, it is worthwhile to study the American system of assistance to SMEs through the Small Business Administration. That organization provides help on a wider set of issues than credit-access alone to, as the name suggests, small businesses. The website of the SBA gives an indication of the range of support offered.

D OTHER ISSUES REQUIRING FURTHER INVESTIGATION

D.1 How close to overheating?

Macroeconomic management is like taking a shower: it takes some time between the moment you move the knobs and the moment in which the temperature changes. If you react only to current temperature and not to the expected future temperature you are unlikely to stabilize the water temperature. A person that is 'turning the hot water up' should not wait until it actually feels the water very hot 'before turning it down' as this will lead to burning herself, and then to also try to cool off too quickly.

67. The authorities need to take a closer look at employment (labor force) issues to understand in a more systematic manner the constraints coming from the labor market. A related question is whether the stock of capital could become the constraint on output expansion, particularly in infrastructure (electricity, telecommunications, paved streets in major cities, railways, etc). The focus should be on understanding: (1) prices (are key suppliers of railways, electricity, water, telephone pressuring for price increases to moderate demand? Or do we observe abuse of monopoly power, always a problem in such highly concentrated network); (2) congestion (what is the level of utilization of current, say, electricity generation assets? Is there enough headroom in the system to meet expected increases in demand? and (3) shortages (are electricity blackout becoming more frequent or show longer duration? Are industries having to wait too much to get their goods moved through railways?).

68. Additional information can be obtained from investment plans. This can be done as part of the efforts to create capacity in the Ministry of Economy and Budget Planning to monitor investment plans (and indebtness) by the National and Regional SOEs.

69. More generally, a good survey, repeated at regular intervals would need to be constructed to assess the opinion of entrepreneurs about capacity utilization and, possibly, labor market constraints.

D.2 What should be the definition of diversification?

70. The authorities are rightly pursuing the objective of diversifying its economy away from oil through, among other means, the institutions recently created under the 'industrial innovation policy.' However, it needs to be made clear that resources will move to non-tradable sectors without any need for assistance, as profit margin there will be growing given the pressure exerted by aggregate demand. It is thus important that the authorities clarify to the development institutions and the public at large, that the aim of the diversification policy is to aid tradable sectors other than oil and rent-related (extractive) industries.

D.3. The choice of parameters for the proposed NFRK rule

71. While we have simulated earlier the outcomes coming from various choices for the key parameters ***b***, ***A***, and ***c,*** a more systematic analysis is called for. ***A*** and ***b*** should be set so as to reduce volatility in the economy, strike some fair balance between the interests of current and future generations, and safeguard the economy against the risks of financial fragility.

D.4. What is the best definition of oil revenues?

72. In principle all revenues from extractive industries should go into the NFRK, of course net of extraction costs, foreign profit shares, and so on. Primary candidates are all enterprises in the extractive sector. If a new extractive enterprise registers during a given year, it should become automatically subject to NFRK rules. Enterprises that are indirectly involved with oil and other mineral extraction, such as for example oil-field services (e.g., exploration and perhaps even transportation), or downstream industries such as refineries) should of course not fall under the Fund.

73. As for the taxes subject to the NFRK rule, we would favor the inclusion of all profit taxes, bonuses and royalties. Indirect taxes (VAT, custom duties) or taxes on labor (social tax and income tax) should not be subject to NFRK rules.

74. It should be stressed that dividends coming from government's participation in the sector (e.g., those paid by the National Company, or those coming from equity-position in large projects such as TCO) must also be placed in the NFRK.

76 Privatization revenues involve the same intergenerational trade-offs as oil revenues, although volatility is less of an issue. Placing them in the Fund should be considered, as has been done in a number of occurrences in the past.

D.5. Systems for the MEBP to monitor efficiency of public investments undertaken by budget institutions and SOEs

75. The best manner to establish a debt monitoring system (for SOEs) in the MEBP needs to be further elaborated. More importantly, the manner in which the MEBP is to monitor the investment plans of SOEs also merits further elaboration.

E NEXT STEPS

- A full paper elaborating on the topics of this Aide Memoire will be submitted to the authorities on or about end-September. In the meantime, the team stands ready to provide support to the main drafters of the National Fund Concept Note.

- The team will return to Kazakhstan for further discussions and elaborations at a mutually convenient date after October 2004.

- In the meantime, the mission encourage the authorities to launch:

    - Greater work on the definition of oil revenues and, in parallel, further simulations of the possible value for the parameters ***A***, ***b***, and ***c***

    - An assessment of the optimal pool of countries and currencies in which the assets of the NFRK should be invested.

    - A full-fledge financial sector review guided strongly by macroeconomic concerns, as well as the most important bottlenecks that should be addressed to ensure further development in this sector.

    - A labor market assessment.

F. REQUIRED DATA AND INFORMATION

76. To complete the final paper, the Mission wishes to request the following information, preferably in Excel format:

- Total oil revenue for the period 1999-2003 by company, and broken down by amounts into the budget and into the NFRK (CIT, Royalty, Bonuses, PSA receipts, dividends paid, and other revenue from oil exporting companies).

- Projections (2004-2007) for the total State and Republican expenditure, as well as the break down of such spending by key functions and economic categories.

- External and domestic debt of the SOE's (1999-2003 historical and 2004-07 projections), beginning with the National Companies.

- SOE's investment (1999-2003 historical and 2004-07 projections)

- Information on lending rates from Banks to their 'blue-chips' companies.

Annex 1. Kazakhstan: Key Economic Indicators

		1999 Actual	2000 Actual	2001 Actual	2002 Actual	2003 Actual	2004 Govt estimate		2005 Govt projection	2006 Govt projection	2007 Govt projection
National income											
GDP (billion tenge, at current prices)		2016	2600	3251	3776	4450	5083		5700	6494	7529
Oil		196	365	427	537	656	..		..	..	..
Non-oil		1820	2235	2824	3240	3794	..		..	..	..
GDP (US$ billion, at current prices)		17	18	22	25	30	37		43	50	58
Oil		2	3	3	4	4	..		..	..	..
Non-oil		15	16	19	21	25	..		..	..	..
GDP (% real growth)		2.7	9.8	13.5	9.8	9.2	8.1		6.9	8.2	9.3
Oil		18.6	26.5	23.2	12.9	10.5	..		..	..	..
Non-oil		1.5	8.0	11.9	9.3	9.0	..		..	..	..
Prices and exchange rates											
CPI inflation (% change)											
period average		8.3	13.2	8.4	5.8	6.4	5-7		4-6	4-6	4-6
December to December		17.8	9.8	6.4	6.6	6.8	6.9	1/	..	..	..
REER (2000=100; up=depreciation)	2/	94	100	101	106	111	110	3/	..	..	..
USD		92	100	98	98	92	81	3/	..	..	..
EUR		107	100	93	98	110	110	3/	..	..	..
RUR		89	100	112	119	126	128	3/	..	..	..
Labor market											
Employment (thousand people)		6105	6201	6699	6709	6985	7005	3/	..	..	..
Employment (% growth)		-0.4	1.6	8.0	0.2	4.1	..		..	..	..
Unemployment rate (% of labor force)		13.5	12.8	10.4	9.3	8.8	8.9	3/	..	..	..
Participation rate (labor force as % of population at the age 15+)		66.0	66.0	70.2	70.1	70.0	68.7	3/	..	..	..
Real wage (% growth)		13.1	7.0	11.1	10.9	7.5	15.8	3/	..	..	..

Sources: Ministry of Finance of Kazakhstan; National Bank of Kazakhstan; Statistics Agency of Kazakhstan; WB staff estimates.

1/ June to June.

2/ Real effective exchange rate (REER) is a weighted average of exchange rates of tenge to currencies of 24 countries.

3/ The first quarter of 2004.

Annex 2. Kazakhstan: Consolidated Government Fiscal Accounts

		1999 Actual	2000 Actual	2001 Actual	2002 Actual	2003 Actual	2004 Govt estimate	2005 Govt projection	2006 Govt projection	2007 Govt projection
(In billions of US dollars)										
Consolidated government revenue	1/	**3,018**	**3,998**	**5,441**	**5,530**	**7,543**	**9,756**	**10,404**	**11,982**	**13,799**
Total oil revenue	2/	121	592	1,036	864	1,645	2,158	2,278	2,518	2,836
Oil revenue to the budget		121	592	518	560	823	1,712	2,026	2,230	2,436
Oil revenue to the NFRK	3/	0	0	518	304	823	446	252	287	400
Total non-oil revenue		2,898	3,405	4,405	4,666	5,897	7,598	8,126	9,464	10,963
Non-oil revenue to the budget		2,898	3,405	4,371	4,628	5,810	7,598	8,126	9,464	10,963
Non-oil revenue to the NFRK	3/	0	0	34	38	87	0	0	0	0
Consolidated government spending		**3,894**	**4,176**	**5,090**	**5,273**	**6,941**	**9,498**	**10,796**	**11,942**	**13,689**
State budget expenses, net		3,743	4,054	4,948	5,144	6,782	9,378	10,710	11,892	13,631
of which Interest payments		163	250	257	254	237	289	308	372	415
Net budget lending		150	122	142	129	159	119	86	49	58
Consolidated budget balance		**-876**	**-178**	**351**	**257**	**601**	**259**	**-392**	**40**	**110**
State budget balance		-876	-178	-202	-85	-309	-187	-644	-247	-290
Revenue transferred to NFRK		0	0	552	342	910	446	252	287	400
Consolidated non-oil balance	4/	**-996**	**-770**	**-685**	**-607**	**-1,044**	**-1,900**	**-2,670**	**-2,478**	**-2,726**
Consolidated primary spending	5/	**3,731**	**3,926**	**4,833**	**5,019**	**6,704**	**9,209**	**10,488**	**11,570**	**13,274**
Consolidated primary balance	5/	**-713**	**72**	**608**	**511**	**838**	**548**	**-84**	**412**	**526**
(In billions of tenge)										
Consolidated government revenue	1/	**360,764**	**568,187**	**798,330**	**847,633**	**1,128,181**	**1,349,308**	**1,381,690**	**1,572,012**	**1,793,893**
Revenue kept by the budget		360,764	568,187	717,310	795,216	992,069	1,287,613	1,348,193	1,534,295	1,741,888
Oil revenue		14,430	84,156	75,980	85,888	123,059	236,810	269,012	292,599	316,679
NFRK companies, net	3/	0	0	64,322	74,282	96,047	83,787	81,825	90,455	113,640
NFRK companies, gross		0	0	56,813	84,533	106,719	93,097	90,917	100,505	126,267
Official transfers (-)		0	0	-7,509	10,251	10,672	9,310	9,092	10,051	12,627
Other companies		14,430	84,156	11,658	11,605	27,011	153,023	187,187	202,144	203,039
Non-oil revenue		346,334	484,030	641,330	709,328	869,011	1,050,803	1,079,181	1,241,696	1,425,209
NFRK companies, net	3/	0	0	18,136	21,468	16,423	0	0	0	0
NFRK companies, gross		0	0	18,136	23,854	18,248	0	0	0	0
Official transfers (-)		0	0	0	2,385	1,825	0	0	0	0
Other companies		346,334	484,030	623,195	687,860	852,587	1,050,803	1,079,181	1,241,696	1,425,209
Revenue transferred to NFRK		0	0	81,020	52,417	136,112	61,695	33,497	37,718	52,005
Oil revenue		0	0	75,972	46,607	123,045	61,695	33,497	37,718	52,005
Revenue exceeding plan	6/	0	0	83,481	36,356	112,373	52,385	24,405	27,667	39,378
Official transfers	7/	0	0	-7,509	10,251	10,672	9,310	9,092	10,051	12,627
Non-oil revenue		0	0	5,048	5,810	13,067	0	0	0	0
Revenue exceeding plan	6/	0	0	5,048	3,425	11,242	0	0	0	0
Official transfers	7/	0	0	0	2,385	1,825	0	0	0	0
Consolidated government spending		**465,410**	**593,512**	**746,891**	**808,222**	**1,038,253**	**1,313,526**	**1,433,693**	**1,566,765**	**1,779,533**
State budget expenses, net		447,426	576,181	726,016	788,434	1,014,496	1,297,000	1,422,293	1,560,271	1,772,004
State budget expenses, gross		447,426	576,181	726,016	801,070	1,026,992	1,306,310	1,431,385	1,570,321	1,784,631
of which Interest payments		19,442	35,541	37,764	38,936	35,437	39,977	40,908	48,789	53,959
Official transfers (-)		0	0	0	12,636	12,497	9,310	9,092	10,051	12,627
Net budget lending		17,984	17,331	20,876	19,788	23,757	16,526	11,400	6,494	7,529
Consolidated budget balance		**-104,646**	**-25,325**	**51,438**	**39,412**	**89,929**	**35,782**	**-52,003**	**5,248**	**14,360**
State budget balance		-104,646	-25,325	-29,581	-13,005	-46,183	-25,913	-85,500	-32,470	-37,645
Revenue transferred to NFRK		0	0	81,020	52,417	136,112	61,695	33,497	37,718	52,005
Total NFRK revenue		**0**	**0**	**189,808**	**109,303**	**229,123**	**72,259**	**45,507**	**50,637**	**65,937**
Revenue transferred to NFRK		0	0	81,020	52,417	136,112	61,695	33,497	37,718	52,005
Other revenue to NFRK		0	0	108,788	56,886	93,011	10,565	12,010	12,920	13,933
Investment income	8/	0	0	10,059	7,830	3,615	10,565	12,010	12,920	13,933
Capital revenue		0	0	98,729	49,055	89,396	0	0	0	0

Continued

		1999 Actual	2000 Actual	2001 Actual	2002 Actual	2003 Actual	2004 Govt estimate	2005 Govt projection	2006 Govt projection	2007 Govt projection
(In percent of GDP)										
Consolidated government revenue	1/	**17.9**	**21.9**	**24.6**	**22.4**	**25.4**	**26.5**	**24.2**	**24.2**	**23.8**
Total oil revenue	2/	0.7	3.2	4.7	3.5	5.5	5.9	5.3	5.1	4.9
Oil revenue to the budget		0.7	3.2	2.3	2.3	2.8	4.7	4.7	4.5	4.2
Oil revenue to the NFRK	3/	0.0	0.0	2.3	1.2	2.8	1.2	0.6	0.6	0.7
Total non-oil revenue		17.2	18.6	19.9	18.9	19.8	20.7	18.9	19.1	18.9
Non-oil revenue to the budget		17.2	18.6	19.7	18.8	19.5	20.7	18.9	19.1	18.9
Non-oil revenue to the NFRK	3/	0.0	0.0	0.2	0.2	0.3	0.0	0.0	0.0	0.0
Consolidated government spending		**23.1**	**22.8**	**23.0**	**21.4**	**23.3**	**25.8**	**25.2**	**24.1**	**23.6**
State budget expenses, net		22.2	22.2	22.3	20.9	22.8	25.5	25.0	24.0	23.5
of which Interest payments		1.0	1.4	1.2	1.0	0.8	0.8	0.7	0.8	0.7
Net budget lending		0.9	0.7	0.6	0.5	0.5	0.3	0.2	0.1	0.1
Consolidated budget balance		**-5.2**	**-1.0**	**1.6**	**1.0**	**2.0**	**0.7**	**-0.9**	**0.1**	**0.2**
State budget balance		-5.2	-1.0	-0.9	-0.3	-1.0	-0.5	-1.5	-0.5	-0.5
Revenue transferred to NFRK		0.0	0.0	2.5	1.4	3.1	1.2	0.6	0.6	0.7
Consolidated non-oil balance	4/	**-5.9**	**-4.2**	**-3.1**	**-2.5**	**-3.5**	**-5.2**	**-6.2**	**-5.0**	**-4.7**
Consolidated primary spending	5/	**22.1**	**21.5**	**21.8**	**20.4**	**22.5**	**25.1**	**24.4**	**23.4**	**22.9**
Consolidated primary balance	5/	**-4.2**	**0.4**	**2.7**	**2.1**	**2.8**	**1.5**	**-0.2**	**0.8**	**0.9**
Total non-oil revenue (% of non-oil GDP)		19.0	21.7	22.9	22.1	23.3	..	..	..	..
Consolidated non-oil balance (% of non-oil GDP)		-6.5	-4.9	-3.6	-2.9	-4.1	..	..	..	..
(% real growth)										
Consolidated government revenue	1/		**39.2**	**29.7**	**0.3**	**25.1**	**12.4**	**-2.5**	**8.4**	**8.7**
Total oil revenue	2/		415.4	66.6	-17.6	74.6	14.0	-3.5	4.0	6.3
Oil revenue to the budget			415.4	-16.7	6.8	34.7	80.9	8.2	3.6	3.1
Oil revenue to the NFRK	3/		..	..	-42.0	148.2	-52.9	-48.3	7.2	31.3
Total non-oil revenue			23.5	23.2	4.5	15.9	12.0	-2.2	9.6	9.3
Non-oil revenue to the budget			23.5	22.3	4.5	15.2	13.6	-2.2	9.6	9.3
Non-oil revenue to the NFRK	3/		..	..	8.7	111.4	-100.0	..	..	..
Consolidated government spending			**12.7**	**16.1**	**2.2**	**20.8**	**18.9**	**4.0**	**4.1**	**8.2**
State budget expenses, net			13.8	16.3	2.6	21.0	20.2	4.4	4.5	8.2
of which Interest payments			61.5	-1.9	-2.6	-14.4	6.0	-2.5	13.6	5.3
Net budget lending			-14.8	11.2	-10.4	12.9	-34.6	-34.3	-45.7	10.4
Consolidated budget balance			**-78.6**	**-287.4**	**-27.6**	**114.5**	**-62.6**	**-238.4**	**-109.6**	**160.6**
State budget balance			-78.6	7.8	-58.5	233.8	-47.3	214.2	-63.8	10.4
Revenue transferred to NFRK			..	..	-38.9	144.1	-57.4	-48.3	7.2	31.3
Consolidated non-oil balance	4/		**-18.8**	**-15.3**	**-12.5**	**57.7**	**58.1**	**28.5**	**-12.7**	**3.8**
Consolidated primary spending	5/		**10.6**	**17.3**	**2.5**	**22.5**	**19.4**	**4.2**	**3.8**	**8.3**
Consolidated primary balance	5/		**-110.6**	**705.8**	**-17.0**	**50.4**	**-43.2**	**-113.9**	**-563.8**	**20.4**
Memorandum items:										
GDP (billion tenge)		2,016	2,600	3,251	3,776	4,450	5,083	5,700	6,494	7,529
Oil		196	365	427	537	656	..	..	..	..
Non-oil		1,820	2,235	2,824	3,240	3,794	..	..	..	..
Exchange rate (KZT/US$)		119.5	142.1	146.7	153.3	149.6	138.3	132.8	131.2	130.0
World oil price (US$ per barrel)		18.1	28.2	24.4	24.9	28.9	27.1	24.8	25.0	25.2
CPI inflation pa (% change)		8.3	13.2	8.4	5.8	6.4	6-7	4-6	4-6	4-6
CPI inflation pa (2000=100)		88.4	100.0	108.4	114.7	122.0	129.8	136.3	143.1	150.3

Source: Ministry of Finance of Kazakhstan; Ministry of Economy and Budget Planning of Kazakhstan; WB staff estimates.

1/ Including revenue of the National Fund of the Republic of Kazakhstan (NFRK).

2/ Oil CIT, royalties, bonuses and PSA receipts (according to the data on Monitoring the large tax payers from the MOF's Tax Committee).

3/ The list of NFRK companies was updated (reduced from 11 to 6 oil companies and excluded 3 non-oil companies) in the beginning of 2004.

4/ Excluding oil revenue.

5/ Excluding interest payments.

6/ Revenue exceeding budget revenue planned at the reference price (US$19 per barrel for oil).

7/ 10% of planned budget revenue from NFRK companies.

8/ Net of the NFRK management expenses.

Annex 3: Kazakhstan: Credit and deposits of commercial banks, 1999-2004

(in billions of tenge, end of period unless otherwise indicated)

	1999	2000	2001	2002	2003	2003 June	2004 June
Banking system							
Net domestic assets	17	94	264	348	530	399	676
Domestic credit	204	321	568	792	1131	891	1302
Net credit to the government	35	26	13	51	52	27	-1
Credit to the economy	169	295	550	739	1076	858	1299
Claims on local governments	0	0	5	2	3	6	4
Capital accounts and other items net	-188	-227	-304	-443	-600	-493	-626
Commercial bank loans	149	276	490	672	978	782	1184
in national currency	69	135	141	212	435	318	546
in foreign currency	80	141	349	461	543	464	637
Bank deposits	80	170	291	445	603	702	918
in national currency	50	89	143	160	242	362	495
in foreign currency	30	81	148	285	362	340	423
	Annual growth rates (in percent)						
Domestic credit	35.6	57.0	77.1	39.3	42.8		46.0
Credit to the economy	50.5	74.3	86.6	34.3	45.6		51.4
Commercial bank loans	59.3	85.6	77.3	37.3	45.5		51.4
in national currency	29.4	97.2	4.4	50.0	105.5		72.0
in foreign currency	98.5	75.7	147.3	32.1	17.9		37.3
Bank deposits	113.5	70.5	53.1	35.6	21.4		30.8
in national currency	76.9	60.4	12.2	50.7	60.3		36.7
in foreign currency	175.7	81.6	92.6	27.1	-4.5		24.5
	Real annual growth rates (in percent)						
Domestic credit	15.1	43.0	66.4	30.6	33.7		36.6
Credit to the economy	27.8	58.7	75.4	26.0	36.3		41.6
Commercial bank loans	35.2	69.1	66.7	28.8	36.2		41.6
in national currency	9.9	79.6	-1.8	40.7	92.4		60.9
in foreign currency	68.5	60.0	132.5	24.0	10.3		28.4
Bank deposits	81.2	55.3	43.9	27.2	13.7		22.3
in national currency	50.2	46.1	5.5	41.4	50.0		27.8
in foreign currency	134.1	65.4	81.0	19.2	-10.6		16.5
	Composition						
Commercial bank loans	100	100	100	100	100	100	100
in national currency	46	49	29	32	45	41	46
in foreign currency	54	51	71	68	55	59	54
Bank deposits	100	100	100	100	100	100	100
in national currency	63	52	49	36	40	52	54
in foreign currency	37	48	51	64	60	48	46

Source: National Bank of Kazakhstan and World Bank staff calculations

Annex 4: Simulation of the NFRK