

MFM Project

NIZHNY NOVGOROD MUNICIPAL FINANCE

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FINAL REPORT: NIZHNY-NOVGOROD MUNICIPAL FINANCE

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SUMMARY AND CONCLUSIONS

The purpose of the field visit to Nizhny-Novgorod was to obtain background information regarding the fiscal planning capabilities of the city administration, and to determine what the municipal finance project could offer by way of technical assistance. A number of individuals from various departments provided helpful input, and are listed in the appendix.

In summary, one could say that fiscal policy has played an important role in the economic development successes of Nizhny-Novgorod. The city has shown itself to be innovative in encouraging the formation of new enterprises and expansions by existing enterprises, through low-cost loans and tax abatements. The city is in process of developing innovative means to deal with the maintenance costs of housing over the next few years. While there is no question but that Nizhny-Novgorod has been active in its use of tax and expenditure measures in its economic development strategy, it has not established a fiscal planning capability. In effect, the city does not do long-term fiscal planning (in the form of revenue and expenditure forecasts) nor does it have the capacity to perform important short-term analysis of the effects of revenue and expenditure changes on its budget. At present, it has neither the trained staff nor the information system to support such work.

It can be argued that Nizhny-Novgorod cannot likely go much further without a capability to do fiscal planning. The recent successes of the region have come in the early years of transition when the policy "rules" -- taxation, privatization, asset management, expenditure assignment -- were

all in flux and there was considerable murkiness. But increasingly the fiscal and economic development fortunes of Nizhny-Novgorod will be tied to its ability to anticipate the impacts of federal and oblast actions and to measure the short term and intermediate term effects of its own policies. It is crucial that the city put in place a fiscal planning framework that will allow it to continually monitor and forecast its budgetary position, and do proper investment planning.

There are three elements of a fiscal planning framework:

Forecasting revenues and expenditures. The city and the rayons should be able to project (for a year--even a quarter) the expected level of revenues and spending under the assumption that neither the tax structure nor the level of services provided will change. This is necessary for budget planning.

Fiscal Impact Analysis. The city and the rayons should be able to analyze the effects of changes in expenditure and tax policy on their budgets. These might include changes in the tax rate laid down by the federal government, or the sharing rate laid down by the oblast/city, or discretionary changes in expenditure policy such as reducing employment or increasing wages, or cutting capital construction, etc.

Analyzing the potential for new sources of revenues. Projections of revenues and expenditures often yield an imbalance, i.e., a revenue gap that must be filled. The city/rayon needs to be able to analyze alternative ways of filling this gap, e.g., the effects of introducing new taxes or user charges. The city/rayon needs to be able to analyze the effects of introducing a new tax or fee structure.

Good fiscal planning requires four ingredients. The first is a data system that gives up the right information to accomplish the three activities described above. In Russia, this certainly means a strong information base on enterprise financial statistics, and detail on both rayon and city budgets. Second, it requires timely data. In present day Russia, this means quarterly and perhaps even monthly data, and it needs to be retrieved and used with very little delay. Third, it requires a model to use these data to forecast and do impact analysis. Fourth, it requires training for staff to be able to do fiscal planning, and for policy analysts to make use of the results of this analysis.

While both the city and rayon departments of finance currently forecast revenues and expenditures, the lack of data, computers and modelling make the procedure cumbersome and judgmental. Neither the city nor the rayon State Tax Service (STS) do any type of fiscal analysis, although they are being encouraged to do so by the central STS. Currently, the STS also lack data and other tools for such analysis.

Both the rayon and the city level do expenditure projections. Neither level, however, has detailed data on budget items in anything except a manual form, and there is no systematic projection exercise at either level. Expenditure projections (as in budgeted amounts) are arrived at by simply inflating last years amounts by some agreed upon factor. There is no formula based method for determining expenditure levels.

None of the offices of the local governments carry out impact analysis. When the federal government changes the tax rate or base, for example, an aggregate adjustment is made in the revenue estimates. The rayon offices may look to the enterprises for additional information on the enterprises' forecast of the revenue change. Often, however, there is little time to do this. There is no use of an enterprise sample or a model to estimate these impacts. The same is true on the expenditure side: It is not easy for any level of local government to make a quick estimate of the cost savings from changing a particular decision about local budgets, etc. Local governments do not do detailed analysis of the impacts of discretionary expenditure adjustments.

In summary, there are four constraints to better fiscal planning in Nizhny-Novgorod:

1. Uncertainty in the economy. Hyperinflation shortens the time horizon for any forecast. Moreover, economic instability limits the ability of higher level governments to plan ahead. The result has been that budgets are not approved until the end of the year and local governments operate with financial plans instead of approved budgets; sharing rates are often not decided until well into the

financial year and are often changed in mid year; and the tax structure remains in flux. While all of this makes forecasting and impact analysis difficult, one could also say that fiscal planning is most important in times of uncertainty.

2. The absence of timely information in a usable form. Enterprise financial data are available through the STS, and are collected monthly, but are kept in a manual form at the rayon STS office. The same is true of the detailed budget accounts of the individual departments of the rayon government. There is relatively little computerization of the basic data necessary for fiscal analysis, and virtually no networking among the city, rayon, and STS offices.
3. There are no models (either based on custom design or ready-made software) that are in use to analyze the impacts of fiscal actions, or to forecast.
4. Some local officials expressed the concern that there were not enough qualified people to carry out fiscal analysis.

The Project might consider taking on four tasks to assist local governments in Nizhny-Novgorod in the fiscal planning area. It is important not to let the technical assistance program be driven solely by the current inflation setting. To be sure this is important, but the objective must be to put in place a system that will be functional in other settings as well.

Baseline Study. A baseline study of taxation, expenditures, budgeting, and fiscal planning is necessary. This study would serve to develop the necessary technical assistance by providing the detailed information on how the entire system currently works. A two-week study of the entire tax system, expenditure assignment and budgeting process would help to define the most useful areas of assistance.

Revenue Forecasting. In this area, two specific tasks would be undertaken. First would be the development of an information data base, linking tax data and enterprise data. This will require

a networking among the rayon, STS and city. This task could take one to two years to be successfully completed.

The second task in revenue forecasting would be the development of two kinds of models. The first would be a projection model based on monthly aggregate data, and the second would be a simulation model using the enterprise sample. This task could be undertaken as the information database were being developed. The model development could take six months to one year.

Expenditure Forecasts. An information base needs to be created. All budget lines for each rayon need to be included in a spreadsheet type program, where the city and rayon officials could do various forms of simulation analyses. City and rayon budgets need to be linked.

Training. A training program in policy analysis could be developed. This would have two purposes. The first is to develop the skills of local officials in modelling for fiscal analysis. The second is to increase the skill level of more senior officials to use such technical material.

I. INTRODUCTION

The first section of this report describes our understanding of the setting for fiscal planning, i.e., the structure and diversity of local government within the Nizhny-Novgorod region. Section II provides information on the current system of budgeting and revenue sharing. The next three sections discuss the revenue forecasting and estimation procedures currently used by the finance departments in the city, and the State Tax Service; and the methods used for expenditure forecasting and budget analysis. Section VI discusses data and information that are currently available for purposes of fiscal analysis. The two final sections provide a summary and a more detailed discussion

of the program of assistance that could be developed for Nizhny-Novgorod in the area of fiscal planning.

II. THE BUDGET PROCESS

The city of Nizhny-Novgorod oversees 10 rayons, nine inside the city proper and one outside. The city is responsible for preparation of the consolidated budget for all ten rayon budgets.

The budget process is top down. The federal government determines the consolidated oblast budget through negotiation; the oblast determines the consolidated budget of each city (and each oblast level rayon) through negotiation; and the city, through negotiation, determines the budget of the rayons. The lower level governments are not dispossessed of all autonomy by this process. First, they are a party to the negotiation and often with enough power to soften their budget constraint. Second, they have considerable discretion in formulating their expenditure budget. The higher level government determines the revenue constraint on the lower level, but within that constraint the lower level can determine its expenditure budget without further approval from the higher level.

Revenue Sharing

There are four main central government taxes which are shared or retained totally by the city. The federal government determines the sharing rate for the oblast, and the oblast determines the sharing rate for the city. The sharing rates are not based on any underlying formula, and vary from year-to-year and oblast-to-oblast. Sharing rates are stated on a derivation basis, i.e., a government keeps some share of what is collected within its boundaries. The oblast may choose to vary the retention rate among its local governments, and usually does follow such a strategy in order to provide some equalization of fiscal capacity.

The *enterprise income tax* is leveled at a 35 percent rate: the federal government receives 13 percent, the oblast 15 percent and the city 7 percent. For the entire oblast, the cities are each allowed to retain 7 percent but the oblast level rayons are allowed to retain 15 percent. The city of Nizhny-Novgorod decides how to divide its 7 percent (of enterprise profits) among the 10 rayons. In some cases, rayons keep only 1 percent, while others retain 6 percent. The city has the discretion to raise the tax rate up to 3 additional points, and to retain the additional revenue, but Mr. Aksinyin of Nizhny-Novgorod city finance department said that would be foolish since the "taxes are too high already."

The sharing of the *value added tax* differs by oblast. The Nizhny-Novgorod oblast retains 20% of the VAT collections in the oblast, and passes 50% of its share on to the city. The city in turn shares with the rayons, but with variable rates. (Two examples were that the city gave the rayon 5% in one case and 2.5% in another).

The *individual income tax* is a progressive tax but most individuals are taxed at the bottom rate of 12%. The city retains 100% of this tax, and may share it with the rayons.

There are a variety of *excise taxes*, but the largest are excise taxes on alcohol and tobacco. In general, the excise rates vary widely, but oblasts are given 50 percent to be shared with the local governments.

The city can supplement its shared revenue with fixed revenue sources--taxes and fees that can be imposed at the discretion of the city government. While there are twenty-two local taxes that can be imposed, the city only imposes two: "the maintenance of housing tax" and a fee to trade on the streets. Plans were being made to introduce two additional taxes: a parking tax and a gambling tax.

Federal-Oblast Budget Determination

How are the revenue constraints determined? The federal government concentrates on the four major taxes: excises, enterprise income tax, individual income tax and value added tax. The federal government makes estimates of the revenue yield from each of these taxes (and other taxes) using its own methods, for each oblast. The oblast makes independent estimates of revenue from these taxes. Oblast officials then go to Moscow to discuss the difference in the revenue estimates. They then have a "dispute", which sometimes takes two or three visits to resolve. After the negotiation is complete, they sign a "protocol". The protocol includes the new sharing rates that are laid down by the federal government.

The same procedure is followed for what are termed the "local taxes". There are 22 of these, and the local governments have some discretion in determining whether they will be levied. The federal government however, sets the rate and the base. The revenue estimates for these are based on actual collections in the preceding year.

This process of negotiation took place twice in 1993. Once for the first quarter budget, and a second time in July or August for the remainder of the year.

Oblast- City Budget Negotiations

A similar process of negotiation goes on between the oblast and its constituent local governments. The oblast lays down the sharing rates and makes the revenue estimates (after a process of negotiation), and this sets the budget constraint for each local government. A protocol is signed on this.

City-Rayon Budget Negotiations

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The city and its rayons go through the same process. After a negotiation (which the city officials describe as less confrontational than that between city and oblast), they reach agreement on revenue estimates and sharing rates. They also sign a protocol. The rayons (and the city) have some small levies, mostly user charges, that they can levy "on their own", but these are very small in amount.

In the past, the rayon tax sharing rates were discussed and then determined by the city council. Now, the sharing rates are issued directly by the Mayor, without approval of the city council. Once the sharing rates have been set, the city then leaves it to the rayon to choose whatever budget they desire, with two primary constraints: the budget must be balanced, and the sharing rates cannot be changed. The rayons must satisfy a number of mandates laid down by higher levels of government, but otherwise may choose any mix of expenditures that they want.

There also are subventions from the city to the rayons. If revenues after sharing are insufficient to cover "necessary" expenditures (apparently, "necessary" is determined by the city), then a compensatory grant is given. The determination of the grant amount is a very judgmental process, i.e., there is no formula or objective guidelines for determining the amount of grants to be given to each rayon. This raises an interesting point: Since the consolidated budget must be balanced, some rayons implicitly subsidize others, and the city determines the extent of the cross subsidization.

Execution of the Sharing Rates

Implementation of these negotiated budgets involves allocating revenue collections among the various local government budgets. The sharing of the taxes is executed by the State Tax Service (STS). For example, the income tax paid by an enterprise in Nizhny-Novgorod will be shared among

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the federal, oblast, city and rayon governments. The enterprise will write one check and the STS will see to the proper division of revenues. In the past, the banks would divide the enterprise payments among the levels of government.

III. REVENUE FORECASTING

In developed economies, revenue forecasting (projecting revenue yield for future years) and revenue estimation (calculating the change in revenue due to a change in tax law, treaties, or macroeconomic changes) are often the function of both executive and legislative offices. The primary reason for revenue forecasts and estimates is to enable the government to plan its expenditure budget. The tax departments develop their own forecasts and estimates (often on a monthly basis) to determine how well revenue collections are tracking the budgeted amounts.

City and Rayon Finance Offices

In Nizhny-Novgorod, revenue forecasting is carried out by both the city finance office and the rayon finance office. It is no easy task, in part because of the high rates of inflation. It is also complicated by the frequent changes in the tax laws. The latter complicates the tax structure and has a significant effect on the compliance rate and therefore on revenue yield. Mr. Aksinyin gave specific examples of complications arising from tax law changes and how these effect revenue yield. In one case, a firm came to him with a question regarding the exemption status of goods for invalids. He noted that the law said that only certain goods were exempt from tax, but the firm claimed that it had already won two court cases regarding their tax exempt status based "on the law." In another case, the governor of the oblast declared that a law that had been passed by the city council was illegal. The city council in turn declared that the tax in question did not have to be paid. Taxpayers

were not sure whether or not to pay the tax. Revenue forecasts are also compromised by such effects.

The major taxes forecast by the finance offices include the value added tax, enterprise income tax, individual income tax, and excise taxes. Local taxes are also forecast by the finance departments.

Apparently, there is a process whereby each level of government does technical calculations to justify their revenue estimates. The City Finance Deputy Director implied that it was a technical process whereby production costs and revenues (enterprise sales) were adjusted for each tax. He said this was done with a set of coefficients, but the detail was not available. He said that it was an arithmetic problem and that "no one has written it down." More information regarding the forecasting methodology shows it to be fairly simplistic and to rely a great deal on expert judgment.

For 1994, the City Finance Department used the two previous years of information from the executed budget to analyze trends in revenue. They used quarterly data for this exercise according to the "IN Report" from the STS, which contains information on collections (discussed below). Using these data they determine growth trends in revenue by type of tax. The City Finance Department also analyzes the growth in total payrolls and prices. They use this analysis to develop coefficients of growth in all tax revenues. They also receive a coefficient (growth rate) from the oblast statistical committee, but they "don't always use that figure." These "coefficients" (growth rates) are applied to total revenue collections, rather than to collections from any particular tax or any particular sector. The coefficient used for the 1994 budget was 4 (for all taxes), for the year, to be revised quarterly.¹ City finance officials stated that this method of estimation has not given very

¹That is to say, revenues would quadruple between 1993 and 1994.

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accurate results in the immediate past because of the high rate of inflation. An example of the dimensions of the problem is Volga cars: the selling price has risen from Rb. 3000 to Rb. 12-15 million in five years.

While the City Finance Department thought that the rayon forecasting process was similar to that of the city, there were some differences in data and methods used. Still, the City Finance Department routinely finds that the city and rayon estimates of revenue are very similar.

In the Autovoksky rayon, enterprises send detailed monthly information on sales, profits, and payrolls to the STS and the finance department. This is done when the enterprise makes its advanced payment. The department then uses these reports as a basis for analysis of income growth, and to develop estimates of the taxable income base. They then apply a growth factor for inflation, with a different growth rate used for each tax. For new taxes, or major base changes, the department obtains the enterprises' estimates of the revenue consequences of tax changes and uses these as the main input into their own forecast. It appears that they simply add up these impacts for all enterprises in the rayon to obtain a revenue estimate.

The rayon receives no revenue from excise taxes. The revenue forecasts for the enterprise income tax and the VAT are derived from information from the enterprise reports. The reports include the planned income, taxable income, taxes paid. They also use actual data, as well as the planned enterprise data. These data are used to derive taxable income bases (similar to above). They also use a price coefficient as an inflation adjustment.

Few of the data used to make these estimates are taken from machine readable sources, and the forecasting models themselves are essentially spread sheets. The frustration over the inflationary situation has prevented any real movements toward computerization of the forecasting process.

State Tax Service

The STS is a central government agency responsible for tax administration and independent from the city government. The STS does not make revenue forecasts, and does not believe this to be their responsibility. The local STS does track revenue collections, but it does so using the forecast data provided by the city finance department.²

IV. REVENUE ESTIMATION

There is no set revenue estimation methodology. The City Finance Department does not systematically analyze the effects of a change in the tax law. Department officials said that they could use rayon level enterprise data on revenue, profits, and costs of enterprises for this purpose, it appears that this is rarely done. The city finance department actually uses a "coefficient" approach, a growth factor, to estimate revenue impact. The clear implication is that they use a lot of "judgement."

At all levels, the use of extra-budgetary funds complicates the revenue forecasting exercise. For example, medical enterprises can sell services for work performed outside the normal provision of health care. The proceeds from these sales can be used for payrolls, other medical expenditures, and for extra compensation for those who carry out the work. The extrabudgetary funds are always returned to the enterprise where the work was carried out.

²At the federal level, however, the STS does see revenue forecasting as their responsibility and makes projections for each tax on an annual basis, (Coopers and Lybrand/USAID *Intergovernmental Fiscal Relations in Russia*, November 1993, Chapter 6.)

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The rayon finance offices also lack the information and personnel to analyze the revenue impacts of tax law changes. The STS does have one office that claims responsibility for revenue estimation, but there was no systematic approach to making these estimates. Again, the STS has much of the data necessary to begin to formulate a methodology, but little of the information is now computerized and the staff has not been trained in the techniques of revenue estimation.

V. EXPENDITURE FORECASTING AND ANALYSIS

Rayon Finance Department

A very detailed description of the expenditure forecasting (planning) side of the budget was given by the Department of Health in the Autovokosy rayon. The Department of Health's budget is structured around 19 "articles", as are all local government department budgets. Several of these articles do not apply to the Health Department. These articles are discussed in turn.

1. Payroll. The payroll account is kept according to class of occupation (e.g., doctors, nurses, etc., of various grades). Payroll is the largest component of the budget.

How much discretion does the department have in determining the salary rates? The answer is that the health department can influence the salary rate to a significant degree. The salary is determined according to a unified schedule provided by the federal government. There are ranges, depending on experience, etc., and the rayon health department can set the actual salary within these ranges. In addition, workers can be paid additional amounts in the form of supplements for overtime, night shifts, holiday work, seniority, etc., and these supplements range between 30 percent and 75 percent of the "main salary". In addition, workers can be paid a bonus. The bonus is equivalent to 2 percent of the total payroll, and an additional bonus can be paid from hospital

savings. None of the bonus amounts are counted within the 75 percent limit. Certain employees can be paid an additional compensation for "outside work" (almost like consulting). This practice is described below under "extrabudgetary expenditures".

The other component of a payroll forecast is the number of employees. Certain "norms" are taken as general guidelines, but the hospital administrators, clinic administrators, etc., can decide on personnel complements using their own discretion. The constraint is that they must stay within the payroll limit.

Other articles include:

2. Fringe Benefits. Payments for sick leave, pensions, etc. are charged at 39 percent of payroll expenses.
3. Office and maintenance expenditures. This includes utilities, etc.
4. Per diem, etc. for business trips.
9. Meals for patients in hospitals.
10. Medicines for hospitals and clinics, and free medicines.
12. Purchase of equipment. Special medical furniture and equipment, transport.
14. Purchase of clothes and linens.
16. Capital Repairs.
18. Other expenditures. This includes the making of teeth, provision of milk for children under three years of age.

There is no line for capital construction. This is a sore point with the rayon health department. Capital construction (hospitals and clinics) is carried out by the city and the car plant. After construction, they turn the facility over to the rayon for management. However, this arrangement has been changing, e.g., the last clinic built by the car plant is being rented to the rayon.

The Rayon has been trying to convince the authorities to give them responsibility and resources for capital construction.

All inflation adjustments are tied to adjustments in the minimum wage. For each worker in the medical enterprise, the base salary is $X * \text{the minimum wage}$, where X is a scale factor for type of worker, level of experience, etc. The scale factors range from 3.53 to 10.07. When the minimum wage is increased, the base salary is automatically recalculated as $X * \text{the new minimum wage}$.

There still are norms for the number of doctors per population or per hospital of a certain size, and so on. These norms are issued from the federal government. But the employment norms are replaced by a wider set of rights based on the size of the payroll fund. The general idea is that the payroll fund is determined partly by the "normative" number of doctors, nurses, etc at some average salary. Once this limit is determined, the managers are free to hire as they wish.

Most other norms have been made obsolete by inflation (e.g., how much to spend for medicine, hospital meals, furniture, etc.). In these cases, the norms are ignored and the department attempts to project expenditures by analyzing inflation.

In Priotsky rayon each department (education, health services, etc.) submits their estimated expenditures to the finance director. The departments use norms to forecast expenditure and there are two type of norms used: natural (physical) norms and monetary norms. The first is something like number of schoolbooks per child, number of sheets per hospital, etc. Previously, the second used to be the cost per unit. While the physical norms are used somewhat, the monetary norms "cannot be used any longer." The department tends to use the most recent actual expenditure data and tries to inflate the expenditures.

The city checks on the expenditures in detail once every three years, with more frequent non-detailed checks.

Summary of expenditure forecasting

The inflation of the last two years has disrupted most attempts to hold on to the old system of using expenditure norms to forecast budgetary expenditures. Now, although the norms may be part of the process, the attempt to make inflationary adjustments (ad hoc or well researched) makes the norms more irrelevant.

VI. DATA AND COMPUTERIZATION

City and Rayon Finance Departments

There is not much general use of computers in the rayon finance departments. For example in the Autovokosy rayon, the accounting group does monitor expenditures and revenues using a software package developed by the Russian firm TAIC. The department receives payment documents from the bank, which are the enterprises' orders to the bank to transfer funds for payment of taxes. The department also receives a printout from the bank, which includes the enterprise account numbers, dates, and amount of payment. The department must use both the print out and the payment document to determine what type of tax payment was made. This information is then coded into their computer using the TABS software. They can then retrieve information by type of tax, enterprise, date, etc. We asked if the bank could put another column on the print out to include the type of tax payment. The department said that they did not think that was possible.

All of the rayons submit executed budgets to the city. Some rayons are computerized, but all of the information transfer is made by hard-copy. There is virtually no electronic transfer of budget data from the rayons to the city due to a lack of computers and differences in reporting formats by rayon.

There are 2 computers in the department of finance. The department uses the computers mainly to store revenue and expenditure data -- not for analysis. They are now installing software from TABS and they will "try to use it for forecasting and planning of the budget." They do not have a computer specialist in the department.

The head of the administration began the computerization process early. The city administration halted the process until the whole city could be consistently networked. The banks and the STS in the rayon have begun computerizing some of their procedures, but there has been no coordination with the Department of Finance.

State Tax Service (STS)

One of the potentially richest sources of information resides in the State Tax Service (STS). A number of bi-weekly to annual reports are made by the STS for the City Finance Department as well as for the oblast STS. The city STS is also responsible for overseeing the work of the rayon STS offices, and information on tax collections passes from the rayons to the city STS office.

There are five standard reports and one analytical report that provide very useful information for purposes of fiscal planning. These are:

1. IN report. Statement of all revenue collections by rayon, and the city total. Rayons send their information in hardcopy to the city STS office and then it is combined into a consolidated statement of collections (by type of tax). This report is prepared monthly for all taxes and bimonthly for the VAT and the enterprise income tax.

2. 2N report. Results of audits.
3. 3N report. Detailed information on the timing of payments by type of main tax (estimated, final, back taxes, etc.). This report is consolidated for all rayons and includes only the VAT and enterprise income taxes.
4. 4N report. This report is a listing of total delinquencies, sources of delay, penalties, etc. It does not contain the names of delinquent enterprises. The rayon may be asked for the identification of specific enterprises if the amount of delinquency "is large." There is a large difference in the level of delinquencies across rayons.
5. New form (currently not numbered). This form reports the results of a joint activity with the tax police on the number of enterprises checked and the amount of revenue and penalty collected.
6. Analytical note. This is an internal quarterly analysis of the level of revenue, overview of delinquencies, recommendations for the STS' own improvement in the collection of taxes. The report does not provide any policy analysis on alternative taxes, the STS representative said that "the department of finance should analyze the taxes used."

The STS has information on VAT and enterprise income tax bases. In the department in charge of analysis and reports, the officer said that different enterprises do actually pay different tax rates. The rayons aggregate the taxable income of enterprises by tax rate.

The current state of computerization, however, makes data transfer very difficult. The STS is under a severe financial constraint so that purchasing software and hardware is nearly impossible at this point. The STS does have a plan to link the rayon STS with the city STS, and the oblast has even agreed to the plan. The money that was allocated, however, "disappeared".

Presently, the STS has no computer "system". Apparently they have been given some hardware, but have been developing several different data bases for different applications.

All rayon STS offices are presently using computers, but some rayons are at a very early stage. The rayons have hired different software development firms. There is no centralization, and

no compatibility with other rayons or with the city. The oblast STS began a computerization program, but stopped "at the PC level".

An additional complication for the sharing of data is that the enterprise registration list is badly outdated; it includes many inactive firms and excludes many active firms. The city has about 15000 enterprises and 26 taxes and since there is no forced usage of a unique identification system, the STS (and finance office) have to spend countless hours matching payments and liabilities by hand. The time spent on this cumbersome registration process could be better spent controlling the assessment and collection function at the local level.

A new state numbering system is now available to the STS, and they are about to begin re-registering every enterprise. Moscow has provided the software for this. However, their PC capacity is inadequate to handle the re-registration and there is no guarantee that the banks will also use the new system.

Some rayon STS offices have begun computerizing their work (the officer in charge named three rayons specifically). These rayons use the computers to "trace tax collections" but not for any analytic purposes. The major goal in the STS is to develop a unified system of software and networks for the rayons and city STS office. They would also like to establish an information transfer between the enterprises and the finance department. In this way, the STS office could collect the revenue and compare it immediately with the department of finance's projections of revenue to see if the forecast "works."

Committee on Statistics

This committee gathers and coordinates important data for fiscal planning. Enterprises send a form containing the year-end volume of production, profit, costs of production, etc. to the

Committee on Statistics and to the Finance Department. The committee on statistics aggregates the enterprise data and makes it available for oblasts and rayons. The mission was unable to analyze the output of this work.

VII. PROBLEMS FACING THE CITY

In the city, social security objects (kindergartens, rest places, clinics, etc.) provided by enterprises may be deducted from enterprise income as an operating cost before paying the enterprise income tax. This has encouraged many firms to continue to provide these services. If the enterprises off-loaded them to the city, a senior official noted that "our budget would not hold."

The city has instituted a housing maintenance and improvement tax, aimed at relieving some of the enterprises' burden of providing housing. Each enterprise pays a 1.5 percent tax on gross receipts. The revenue goes into a fund that is administered by representatives from all enterprises. The revenue in the fund is distributed to enterprises that provide housing for employees. The plan is that as wages rise, more individuals will assume their own housing responsibility and in the meantime, this fund would help support the enterprises that provide subsidized housing. The intention of the city is that by 1998 individuals will pay most of their housing costs. The rough breakdown of the present distribution of the ownership of housing is as follows:

- 44% enterprise owned
- 35% municipal property
- 15% co-operatives
- 5% private

VIII. SUMMARY OF TECHNICAL ASSISTANCE FOR NIZHNY-NOVGOROD

Training

The objectives of a training program should be (a) to give local officials a feel for how analysts study fiscal policies of local governments in market economies; (b) to give local officials some familiarity with analytic techniques, particularly quantitative techniques of analysis, and (c) to introduce local officials to local governance and local government finance in relevant other countries.

A training course could be delivered in three modules:

The first module is lectures and directed readings. These will be three mornings per week, with a tutorial reading period in the afternoons. The lectures will be given by faculty with significant international experience in public finance, and many will have experience in Russia.

The lecture topics should include: Fiscal Federalism and the place of local governments in various systems: US, Canada, Germany, Australia, and Switzerland. Local government finance instruments: property sales and income taxes, user charges, borrowing and various means of capital financing. Expenditure Assignment and Budgeting. Methods of analyzing expenditure growth and designing expenditure control. Cost benefit analysis. Grant design and methods of analyzing grant impacts. Special Topics. Revenue and expenditure forecasting, fiscal impact analysis, and special assessments.

The second module is a computer laboratory. These should be supervised closely by individuals with experience in basic computer programming and public finance. The

lab work should be highly structured around a problem set, and each participant will be able to work at his/her own speed.

The computer laboratory problems could include:

- How to forecast revenues and expenditures using various techniques
- Analysis of variations in local government expenditures
- Analysis of the effectiveness of various subvention schemes
- Analytic techniques for relating economic base performance and revenue/expenditure growth
- Estimating the capacity of a local government to issue bonds

The third module is field trips. These should be organized around themes and accompanied by a lecture period. These will be less a "show and tell" than a demonstration of some techniques. Types of government offices that could be visited include: an IRS service center, a state budget office, a city budget office, and a local property tax appraisal unit. In addition, private offices should also be visited: a private company to discuss compliance issues, and a bond attorney to discuss municipal bond financing in the US.

Fiscal Planning Framework

To develop fiscal planning and policy analysis capabilities in Nizhny-Novgorod, emphasis should be placed on the creation of an information system, modelling in the areas of revenue and expenditure forecasting and analysis, and training in the use of such models. In the area of fiscal planning, the following technical assistance could be considered for Nizhny-Novgorod:

Revenue Forecasting. In this area, two specific tasks would be undertaken. First would be the development of an information data base, linking tax data and enterprise data. This will require a networking among the rayon, STS and city. This task could take one to two years to be successfully completed.

The second task in revenue forecasting would be the development of two kinds of models. The first would be a projection model based on monthly aggregate data, and the second would be a simulation model using the enterprise sample. This task could be undertaken as the information database were being developed. The model development could take six months to one year.

Expenditure Forecasts. An information base needs to be created. All budget lines for each rayon need to be included in a spreadsheet type program, where the city and rayon officials could do various forms of simulation analyses. City and rayon budgets need to be linked.