THE URBAN INSTITUTE

MEMORANDUM

February 3, 1993

To: **David Olinger, Sarah Wines, USAID**

From: **Tom Kingsley**

Subject: **MEMORANDUM RE CONFERENCE PAPERS ON HOUSING AND INFRASTRUCTURE FINANCE**

Ref: **RFS 17, Task 2, Housing Policy and Finance Contract, Contract No. EUR-0034-C-00-2033-00, AID Project No. 180-0034 (UI#6251), Prepared for Regional Housing and Urban Development Office, Eastern Europe (RHUDO/EE), U.S. Agency for International Development.**

Copies: **Morton Grant, Carlotta Molitor**

....

The papers presented by George Peterson and Raymond Struyk at the Prague Finance Conference in May 1992, were judged to be useful for broader distribution within the CSFR. This task required that they be written formally for that purpose. The final versions of these papers are attached.

PN-ABN-592

FINANCING INFRASTRUCTURE IN CZECHOSLOVAKIA'S NEW FINANCIAL ENVIRONMENT

George E. Peterson

Paper Presented at the Conference on
Housing and Infrastructure Finance,
Prague

May 5, 1992

Prepared for the
Office of Housing and Urban Programs
U.S. Agency for International Development

Contract No. EUR-0034-00-C-2033-00
U.I. Project No. 6251/07

THE URBAN INSTITUTE
Washington, D.C.

It is a privilege to be able to participate in this conference. My assignment is to consider options for financing infrastructure investment within the market-oriented financial system which Mr. Salzman discussed. What do I mean by infrastructure? It includes public investment in basic capital systems like water distribution systems, wastewater collection and sewage treatment, roads, local land development, and central city reinvestment. I will target most of my remarks at the local level--on the systems that will, for the most part, become municipal responsibilities after the privatization process has been completed.

How large a part of total investment in the country are we talking about? In full market economies that operate under market principles across the board, infrastructure investment now occupies about 12 to 15 percent of total national investment. In the United States, for example, business investment amounts to about $580 billion, housing around $220 billion and infrastructure, around $120 billion. The proportions are remarkably similar, for example, in Germany.

Now, when a country is catching up on a backlog of deferred construction needs and reconstruction--such as lies ahead as in the Czech and Slovak Republics--or it is adjusting to higher standards of environmental protection, the infrastructure ratio is likely to be even higher. And keep in mind that housing and infrastructure are often linked together, not just in this conference, but in national strategies for the financial sector. Together they may account for one-third of national investment or something in that vicinity. Therefore, financing approaches to housing and infrastructure in combination, are likely to have an extremely important influence on overall financial sector reform. Let me now review the financing choices for infrastructure investment. Basically, you can pay for these investment costs at the central level, at the local level, or through the private sector or a combination of them. And what is happening in most countries, not just in formerly socialist countries but throughout the world, is that direct infrastructure investment by central governments is undergoing a severe decline as central government budgets either run into deficits or come under serious revenue constraints.

Central Grants to Local Governments

As local authorities gain increased responsibility, one of the mechanisms that is needed to be introduced in the public finance system is a system of grants from the central level to the local governments to help then finance their own expenditures. These can be general-purpose grants that transfer funds without restrictions or, in the case of capital infrastructure, there are frequently cost-sharing grants designated for particular types of projects. One example would be where the central government says it will pay 40 or 60 or 80 percent of the costs of wastewater treatment plants or improving local water distribution, with the requirement that cost-sharing by local governments make up the difference.

Clearly, one activity that lies ahead for the Czech and Slovak Republics is defining the grant system so that there is some substantial help for municipalities from the Republic level. That assistance is likely to considerably smaller in amount than the direct infrastructure investment previously borne by the central government, and it should be delivered in a way that leaves discretion and final choice at the local level within the municipal budget.

Other Alternatives

In some countries, local government savings plays an important part in financing infrastructure investment, but that is really not feasible here at present with municipalities that have almost no financial resources. It is not a significant option in this country at this time.

There are only two other options for financing local infrastructure: local government borrowing and working with the private sector. The latter option may include, for example, joint venture projects where a private firm pays for infrastructure in exchange for the right to develop land to and to earn a profit. In the workshop tomorrow we will be discussing the private sector options in more depth--the kind of deals that can be negotiated with private firms to transfer infrastructure costs from the public sector to the private sector.

Municipal Borrowing

What I want to concentrate on this morning is the use of local borrowing (municipal credit) for financing infrastructure. As the central government role declines, there will have to be an increase in the use of credit financing for local infrastructure. In the United States, municipal borrowing accounts for about two-thirds of all infrastructure investment--a share that is somewhat above average for developed nations. In Germany, the United Kingdom, and France the local borrowing share is somewhat smaller and the central government share is somewhat higher but, even there, municipal borrowing accounts for about half of local infrastructure investment.

In looking to the future--to integrating the financing of infrastructure into the financial system more generally--the country needs to prepare for the transition to a greater use of credit and develop a credit system to support that expansion. For a time, international capital donations might be able to fill that financing gap, but it should make more sense--should be a better use of resources--to use the external funds to help set up a continuing system of domestic credit that can sustain investment over the long-run.

Institutional Choices

What are the choices of institutional systems and what options do you have for providing credit to municipalities? There are various models being used around the world, and I thought it might be helpful to sketch some of them as the range of choices that you have in designing this system, and to comment on some of their common features.

One option is municipal savings banks. Municipalities can be part-owners of savings banks, and the banks can lend to municipalities at concessionary (below market) rates so that there is a return on the equity of the municipal holders in the banks. That is the way the German system operates. In the 1980s, about two-thirds of municipal credit in Germany came from savings banks that municipalities themselves partly own. It is my understanding that this is one of the models that has been under discussion in the Czech and Slovak Republics.

Special Funds for Municipal Borrowing

Secondly, you have what I have called special government funds. The central government can set up funds for lending to municipal governments to finance their capital requirements. The question is, from what sources can these funds get their capital? There are several basic choices. In the lesser developed countries, and up until recently in some countries in Europe like Spain, most of the capital came in the form of direct contributions from the central government budget. In many case, the government contributes capital into these infrastructure funds without charging an interest rate and the funds then loans to local governments, usually at a moderate interest rate.

The funds get some repayments back and they become revolving funds--revolving, in the sense that with repayments they can then make additional loans to other municipal governments. This model is something we have also been using in the United States at the state government level for financing some of our infrastructure requirements, especially wastewater treatment plants. The federal government set up a system of grants to serve as seed money to establish these funds at the state level. The state loans the money to local governments to pay for wastewater treatment plants, the money is repaid to the state funds, and these receipts are then loaned again to new localities.

This is actually a costly option if the full amount comes from the central budget--it does not reduce the national government subsidy. These are direct contributions of the government, and a fund of that kind is really only a mechanism for getting central government money out to the localities. Because of this problem, such funds generally of late have tended to evolve towards the market place as part of a market orientated strategy of raising capital on a more competitive basis in the capital markets.

One partial step in that direction is the system that they have used until recently in France. There are a number of local banks that are tied into the national credit system under the French national infrastructure fund. Until a few years ago, the system worked such that the local postal banks and other banks for small savers paid below market interest rates and the deposits collected went into the special fund. That fund was then used to lend at concessionary rates to municipalities for municipal investment. Loans also went to the housing sector for housing investment and to the nonprofit sector to finance investments by charitable organizations. This, then, had been an internal system that paid below-market deposit rates and lent money at below-market rates.

Bond Financing

Another alternative is for, special funds like this to go outside to the full competitive capital market by issuing their own bonds to raise capital. That is the direction in which all of the European systems have been moving in the last decade. That is, to raise capital by raising bonds--selling bonds at market rates and then on-lending that capital to municipal governments.

What happens in a bond fund is that you have a high level government agency which will collect the borrowing needs of many municipalities, issue one large bond issue, receive the capital and parcel it out to the participating municipalities in order to save on interest costs and save on administrative costs by having one large borrowing activity. In the UK at present, for example, all the borrowing needs of the local governments are amassed and the treasury issues one large bond series, raises all the capital funding for the local governments, and then allocates it to the participants in the bond fund.

As another type of option you have the possibility of local governments themselves issuing bonds, and that is the model that is used in the United States. Each year, about $125 billion in bonds are issued by local and state governments to finance their capital needs, and that system has been used in other countries--in fact, it was the most common system everywhere in the 19th century.

How much difference do these institutional alternatives make? In my mind, the details of the institutional organization do not make a great difference because there are some common issues that come up in all of these structures and I think it is important to concentrate on what the common issues are that you have to resolve regardless of the institutional design that you choose.

There are two principle issues. The first is how separate--how segmented and how protected from the rest of the capital markets--do you want the system for municipal financing to be? That is, how contained as opposed to how open to competition with the rest of the capital market. The second is how deeply subsidized should infrastructure lending be and how should that subsidy be delivered?

I think that you will see that these are really two sides of the same question. Governments usually want to subsidize some of the costs of infrastructure investment. And how can they do it? You really have only two choices. One is to coax people or force people into contributing savings at below-market rates which will pass on the concessionary rate structure to the borrower, i.e., the municipalities.

As I said, that was how, as one example, the French system worked. Small savers had no choice by law--they had to save either at the postal banks or other institutions which paid very low rates of interest. These funds were then collected and loaned to local governments at low rates of interest. And this system worked quite well for a long period of time.

But what such a system cannot do is to sustain finance--to continue to exist and to continue to function in a system of financial liberalization. If the rest of the market is going towards market principles in the financial sector there is no way that the infrastructure system can be protected in isolation. What happened in France was that as soon as they did away with the regulations requiring small savers to put their money in these postal banks, all the savers rushed out, took their money out of the postal banks, and put them into other instruments that paid higher rates of interest. The supply of capital flowing into the system fell very rapidly, and they had to entirely redesign it from the bottom up because there was no longer this guaranteed access to cheap capital.

France next converted the system to issuing bonds in the marketplace, paying full market rates, and then delivering the subsidy separately in the form of a government grant--a targeted grant to lower the cost of particular kinds of projects that the government wanted to favor, like environmental projects for example. So one choice is to set up a segmented system like France did originally, but this is very hard to do when the rest of the financial system is open.

The second choice is a subsidy from the treasury; that is, to pay into these funds large amounts of government contributions from the budget to bring down the cost of capital to make it possible to on-lend to the local governments at low rates. That has the disadvantage of being costly in terms of subsidy and not providing good control over the kinds of activities that get financed because the subsidy becomes much more general than if it were targeted to particular functions.

I think that you can conclude that market liberalization--the general market orientation that Mr. Salzman and others were discussing earlier in this conference--really reduces the possibility of setting up a segmented infrastructure financing system. There are clear advantages to having infrastructure financing, like the other sector financing mechanisms, compete for capital in the marketplace so that it is efficient to allocate capital by the potential rate of return and to make borrowers, including municipal borrowers, pay the market rate of interest and ensure that projects that it invests in will be able to recover the costs to repay their loans. Where the subsidy is needed, the subsidy can be delivered in a targeted fashion with a grant from the central government.

Let me just tell a short story about some of the problems that come up from my experience when I was working in South America. There they have state run municipal banks. In several countries, the typical model is that municipalities get concessionary loans, but they have to deposit all of the cash that they have in the municipal bank at zero interest rate, and the banks pay out the grants on a monthly basis. The municipalities are very poor, so they often send their personal representatives to the treasury to pick up their check in person on the last Friday of the month. When the representatives of the city go to pick up their checks there is always someone who stands behind him from the municipal bank tapping him on the shoulder and saying "don't forget, it is the law, you have to deposit that check in my bank, in the municipal bank, and if you leave this room and go off somewhere and deposit it in some other bank then I'm going to report you." So the whole system depends on capturing that captive savings.

Another type of problems has emerged in the United States. In the U.S., we have a system that grants exemption from taxes to bonds that local governments issue, and one thing that happened as a result is that localities try to go into all sorts of new businesses to take advantage of the cheap, tax-exempt, capital they can obtain. You have cities doing massive lending to business firms--if they will come and locate in their city they can have this tax-exempt capital that the local governments raises and give to them. Also, if the politicians want to get votes from homebuyers, state or municipal bonds can be used to finance home mortgages. Even for a time in the 1980s, municipalities were borrowing money at tax-exempt rates then going out and simply depositing it in a bank and earning taxable higher rates of interest. The result was that some cities in the U.S. were earning 35 percent of their total income just by exercising arbitrage--borrowing money at one rate and putting it in the bank and earning interest at a higher rate--until the federal government had to step in and prohibit it.

Loan Security

The last question, if you are setting up a borrowing system, is how do you assure the capacity for loan repayment and what kind of security can you offer to get greater access to the market? The unfortunate part about loans is that you have to pay them back. Where can the money come from? One option is local general revenues; i.e., using general taxes and general grants from the central government to repay loan obligations. Doing this requires a stable revenue system in which local governments have the power to impose the tax system and have a fairly high degree of certainty about the grants they will receive from higher levels of government. I think the important fact here is that you really cannot have a local credit system that relies on general funds until you have a legally-defined stable system of local revenue for local taxes and for transfers.

The second option is project revenues that you can invest in projects that will generate income enough to repay the loan obligation. Examples are found in the water system, where you are selling water and in the land development where you can rent property that is developed. This is really one of the best hopes in the intermediate term for generating revenue to repay credit, and I might say it is the growth area all over the world. More and more, municipal credit is becoming project-based and based on revenue streams from the investment.

But when you are making this transition for the first time, you are almost certainly going to need more security reassurance to the lenders than just the hope of earning revenue from projects. This is what I've called special security collateral. One way of providing this--and it would seem to be a possibility here--is to use municipally-owned land as collateral. Contracts are arranged so that in the case that the local government does not repay, the lenders can have access to the land and the value it represents.

Finally, there are guarantees of several kinds. First, municipalities can use a portion of the recurrent revenues they receive to set up reserve funds. Second, in the U.S. private sector firms have sprung up so that the private firms guarantee payment. Finally, you can have the grants due a municipality set aside by the central government so that if the locality doesn't repay, the lender has preferential access to the grant as security

* * * * * * * * *

Let me conclude by saying what I think the important things to keep in mind are in structuring this system. First, you almost certainly are going to be using more credit for infrastructure finance. It is a significant part of the system and thus you need to design it carefully. The basic design choices are whether you want a segmented system and a highly subsidized system, or one that is competitive with the rest of the capital market. In terms of gaining access and setting up the system in the first place, the question of security and the additional security that can be offered is an important part of the design. Thank you.