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Revenue Sharing in Petroleum States

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Preface

The World Bank Oil, Gas, Mining and Chemicals Department, and the World Bank/UNDP Energy Sector Management Assistance Programme (ESMAP) hosted a Workshop on Petroleum Revenue Management on October 23-24, 2002 in Washington, D.C. The Workshop brought together petroleum industry, civil society, developmental agencies, academics and country representatives to discuss the recent and current experience, the most challenging operational problems that have been faced by various stakeholders, and emerging best practices with respect to petroleum revenue management. This document contains the proceedings of this conference. It includes the introductory remarks, the sessions on revenue collection, management, and distribution, and the roundtable and closing discussion.

As awareness of the critical importance of petroleum revenue management increases, stakeholders have determined to do something about it. These proceedings are intended to contribute to ongoing discussions and debate, enhancing understanding of the issues involved, and identifying emerging best practices.

Acknowledgments

On October 23-24, 2002 the World Bank Oil, Gas, Mining and Chemicals Department, and the World Bank/UNDP Energy Sector Management Assistance Programme (ESMAP) hosted a Workshop on Petroleum Revenue Management, that for the first time brought together all the interested stakeholders to discuss problems and challenges they had been facing in respect to oil revenue management. The workshop was organized by Charles McPherson, Senior Adviser, and Anastasiya Rozhkova, Consultant, the Oil, Gas, Mining, and Chemicals Department of the World Bank Group. It was financed by the Energy Sector Management Assistance Program (ESMAP). The hosts wish to thank all the colleagues who contributed to the organization of the workshop and to extend special thanks to Katharine Gratwick, Consultant, Fikerte Solomon, Program Assistant, Marketa Jonasova, Program Assistant, Abigail Tamakloe, Executive Assistant, and Margarita Atilano, Program Assistant. The report, which comprises all papers and presentations made at the workshop, was compiled by Anastasiya Rozhkova, Consultant, and edited and formatted by a team consisting of Esther Petrilli, Team Assistant, Carmen Pineda, Team Assistant, and Silvana Tordo, Senior Energy Economist, Oil and Gas Policy Division, Oil, Gas, Mining, and Chemicals Department, World Bank Group. Ms. Marjorie Araya from ESMAP supervised production, printing, distribution, and dissemination of this report.

Let me sum up the major challenges. First oil is approaching very rapidly—as I said, somewhere between June and August 2003. First oil revenue will come four to five months later. The date is looming very close. Many of us are getting increasingly concerned that the capacity building efforts simply are not keeping pace. The challenge is determining where we need to ratchet up efforts and put more resources into making sure that the country is at least adequately ready for managing petroleum revenue.

Timely capacity building is the major issue, but there is also an issue of absorptive capacity. According to the petroleum revenue law, mentioned by Philippe, petroleum revenue is supposed to be allocated principally to the priority sectors of health, education, and rural development. It is not yet clear, although we are working hard on it, that there will be mechanisms in place guaranteeing that the expenditures quickly result in better education services being delivered, better health care services being delivered, and rapidly improved outcomes in those sectors. The issue of revenue oversight, in particular building up the capacity of the college de surveillance (the oversight and controls committee) is still a major challenge. Civil society awareness, I think, is something that we need to continue to work on, but it is also at the same time a major check and balance on the whole process, and this is a positive thing.

Then there is an issue of country risk. The country still has some conflict going on in its northern part, and there is a continuing risk of diversion of public resources to military spending. This is an area that, I think, we are going to have to keep a very close eye on and ensure that it does not sabotage the petroleum revenue management effort. Thank you, I will stop there.

Revenue Sharing in Petroleum States

Roy Bahl, Professor of Economics, Georgia State University

I am going to introduce a different subject—the question of the sharing of natural resource revenues between different levels of government. It is not a major issue in every country in the world, but, where it is an issue, it can be a very significant and very contentious issue. I wish to discuss what I think we have learned over a period of years about this subject.

I propose to discuss three issues. The first is the linkage between natural resource revenue management and intergovernmental fiscal relations, or fiscal decentralization. The second is a normative question: Should natural resource revenues be shared between the levels of government, and what are the nonemotional arguments about why they should or should not be shared? The third issue is whether there is a case for a subnational government natural resource fund. If so, how could it work? (See R. Bahl and Bayar Tumennason, "How Should Revenues from Natural Resources Be Shared in Indonesia?" May 2002. http://isp-aysps.gsu.edu/papers/ispwp0214.pdf.)

I would like to begin with four stylized conclusions. The first is that subnational government sharing of natural resource revenues is irresistible. It is going to be part of the policy in most countries that have significant natural resource endowments. The only question is how well this sharing will be done. The second point is that natural resource revenue sharing ought to be done primarily with transfers, rather than with direct taxes by sub-national governments, and it ought to be done in a transparent way. Third, the focus ought to be on reimbursement for the cost of natural resource activities in regions, and on replacing an exhaustible resource. Finally, I think, there is a case for a subnational government fund to protect heritage, and I will try to make that case for you. Having said that, I cannot point to many countries outside the United States or Canada where a thought has been given to the creation of a heritage fund. I will not be discussing a country-specific strategy, but I do have some data from Indonesia, where I have been working, and what I have to say fits a lot of countries. I think that those of you who work in Russia, Sudan, or Nigeria certainly will recognize part of the story.

Fiscal Decentralization

First let us take up the question of the relationship between fiscal decentralization and natural resource revenue sharing. The idea of fiscal decentralization is to move government closer to the people. Fiscal decentralization has become a major policy initiative in many countries over the past two decades. One reason for this movement is the increasing number of democratically elected governments at the sub-national government level. Government policymakers believe that people could get better public service delivery under a decentralized system, because there would be much more accountability to local voters.[55] One of the arguments for decentralization—one that does not receive a great deal of attention—is its potential as an instrument for conflict resolution. This is a link with natural resource revenue sharing.

We know that, in many countries, there are tensions between the regions and the central government. Sometimes the root cause of these tensions is ethnic; sometimes it is religious; and sometimes it has to do with simple matters of geography. Whenever such tensions exist, the question inevitably arises about whether the region has been treated fairly by the central government. This question arises particularly in the case of natural resources. Regional representatives might state the farmers' question as follows: "Why should the federal government tax the heritage that belongs to the people of this region, and not return a part of it to them?" When there is a situation in which the ethnic and cultural tensions match up with the natural resource sharing issue, then a particularly difficult problem arises, and natural resource revenue sharing must become a part of the intergovernmental fiscal system. Thus, natural resource revenue sharing becomes an element in the nation-building objective of fiscal decentralization. That is the motive of the work that my colleagues and I have been doing at Georgia State University. It certainly fits the Indonesia story, where some of the disaffected peoples in the country live in the regions that are well endowed with natural resources.

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[55] For a discussion of the pros and cons of fiscal decentralization, see Roy Bahl, "Fiscal Decentralization as Development Policy," *Public Budgeting and Finance* 19, no.2 (1999): 59–75.

The 2001 decentralization initiative in Indonesia has been described by many as a "big-bang" decentralization.[56] The central government passed responsibility for all but five expenditure functions to the sub-national governments, transferred nearly 2 million civil servants to the local governments, and all but eliminated the provincial level of government. Financing of local governments is accomplished by a general-purpose grant from the central government and by natural resource revenue sharing.

A few statistical facts are worth noting. One is that the amount of money involved in the extractive sector, and, thus, the potential for revenue sharing can be significant. United Nations statistics show that the share of the extractive sector in GNP exceeds 10 percent in 16 countries. This means that there will be keen competition between the levels of government for those resources.

The second statistical hypothesis that one might argue is that, if there is a larger extractive share, there will be a higher level of taxation in the country, and, therefore, more revenue to distribute among the regions. That turns out not to be the case. Countries with a larger extractive sector do not raise a higher level of taxes relative to GDP. (R. Bahl, and Bayar Tumennason, "How Should Revenues From Natural Resources Be Shared In Indonesia?" 2002.) What we do find in Indonesia, however, is a substitution of oil tax revenues for nonoil tax revenues. In other words, the domestic tax burden—including income, sales, and value added tax, and excises—has been kept low, because the government was able to tax the natural resource sector. In the minds of the people in the country, there is a transfer from those who live in regions that are rich in natural resources to those who are in the formal tax sector, and who benefit from the lower levels of income and consumption taxes.

Finally, is there a relationship between a heavy concentration of natural resources and decentralization of the government sector? There is such a relationship. Even after adjustments are made for the level of income, for population size, and for economic structure, we find that countries that have more natural resource wealth are significantly more decentralized. In a way, there is a kind of test of the market, indicating that countries that have greater natural resource wealth tend to decentralize more fiscal responsibility to their subnational governments.

The Case for Sharing

Why should natural resources be shared? There are four arguments that continue to come up. One can be called the heritage argument, and most observers think that it is probably the most persuasive. The story goes like this: the region and its people have been given a heritage in the form of natural resources. If this endowment is going to be exhausted, it ought to be replaced; there ought to be some structural adjustment of this region's economy so

[56] Roy Bahl, James Alm, and Robert Aten, "Can Indonesia Decentralize Successfully? Plans, Problems, and Prospects," *Bulletin of Indonesian Economic Studies*, 37, no. 1 (2001): 83–102.

that its people may rely on some other economic base in the future. A share of the proceeds from the sale of this resource could be used to finance the structural adjustment.

Related to the heritage argument is a more philosophical question: Who owns the natural resources? Both the regionalists and the nationalists are persuaded about their position on this. This part of the debate cannot be resolved by either economics or politics.

The second argument is a cost reimbursement story. A region that is home to natural resource activities is subject to environmental degradation. Moreover, it has to pay for a significantly different and larger infrastructure. Natural resource activities may have attracted a particular workforce to this region that may involve a social intrusion for which people living in this region want to be compensated. Thus, there is a cost-reimbursement argument for sharing natural resources.

A third argument about why natural revenues should be shared is that, if there is a formal system of sharing natural resources with the regions or the districts, this system can preclude "backdoor" approaches to revenue raising, that arise if the central government does not give the region what the region considers to be a fair share of the revenue. If there is no formal sharing system, then various types of transfer taxes, transit taxes, increased fees and licenses and a whole range of nuisance levies will be enacted, that create problems for those trying to invest in the regions. There are many countries in the world where this sort of fiscal mischief has occurred.

Finally, there is the issue of politics and national unity, the notion that the country can be held together if some kind of revenue-sharing scheme is in place, through which the disaffected regions can feel that they have gotten fair treatment: "Give me a share of the revenue, and we will use that as a basis to stop the dissension and maybe even the shooting."

The Case Against Sharing

What is the case against the sharing of natural resources? The first argument is that subnational governments have no business at all tying their revenue streams to natural resources, because resource revenue is highly unstable. Certainly for Indonesia, GDP originating in the extractive sectors is more unstable than other sectors of GDP, and oil revenues are more unstable than nonoil revenue. Central governments are more able to deal with a revenue flow that is unstable than are local governments, precisely because the latter usually cannot borrow. Local governments cannot run deficits, and they provide more essential services that are not easily postponed.

A second issue has to do with the macroeconomy. Higher taxes on natural resources can address the national deficit issue, and they can help to keep the domestic tax burden lower. Moreover, shifting natural resource revenues to local governments would allow the latter (versus the national government) more latitude in directing investment.

Third is the question of equalization and fiscal disparities. Natural resources are geographically concentrated. If natural resources are allocated according to where they are extracted, there will be significant disparities in local government revenues. In the case of Indonesia, some local governments received relatively little, while others received three times their budget in one year. Some would argue that such large disparities are not good public policies. Moreover, there can be some perverse distribution effects. For example, in Indonesia, the distribution of natural resource revenue sharing was inversely related to the concentration of poverty.

A major reservation about sharing natural resource revenues with local governments is that they will squander the money. One concern is that subnational governments do not have the capacity to deliver many types of public services at adequate levels. Another is that corruption is a major issue at the local level. A third concern is the windfall issue, that is, there is no capacity to absorb such a large amount of money in so short a time, and local leaders might choose to spend the funds unwisely. For example, the funds might be invested in activities that do not promote future income generation, or they may be invested heavily in government and nontradables, thereby crowding out some future growth in the export sector.

Policy Choices

What are the options for building an intergovernmental fiscal system for natural resources? First, any government facing this issue must decide on both the vertical sharing arrangement and the horizontal sharing arrangement. The vertical share is that percent of total natural resource revenues that will be allocated down to the subnational governments. Normatively, one could argue how much this should be: it is the amount of money that needs to be invested to restructure the economy for the loss of the exhaustible resource, plus the compensation for the environmental degradation, plus the value of eliminating social unrest. This is a first set of guidelines for thinking about establishing the vertical share.

In fact, these guidelines for establishing a vertical share are conceptual, and they are not easily quantified. There is some cost of a higher vertical share, however, that can be quantified. For example, what vertical share might be affordable if we did not substitute natural resource taxes for other taxes? If we were to drop the taxation of natural resources for general budgetary support in Indonesia, for example, the ratio of tax to GDP would have to rise by about 2.2 percent. Many would argue this to be a far greater cost than should be paid, and would therefore argue for a much smaller vertical share.

The horizontal sharing arrangements refer to the way the natural resource revenues are allocated among the local governments. In most countries which share natural resource revenues, it has been done on a derivation basis. The idea is to return the funds to the origin of collection of the natural resource tax.

Should we allow local governments to tax natural resources? The general answer is, “No.” The goal is not to allow local governments to have broad-based taxes on the natural resource sector. One of the reasons mentioned in this conference is that countries need an overall tax regime that is conducive to the kind of investment policy that is desirable for the country.

Is special autonomy a good idea? In Indonesia, the central government negotiated a special agreement with Aceh and West Papua, and this is a good idea, in the sense that it is a way to recognize the differences between provinces in a country. Aceh is further along in using up its natural resources, while West Papua is just beginning to exploit its natural resources. Surely, it would be right to tailor such revenue sharing agreements to reflect those differences. However, the problem with special autonomy arrangements is that they never go away. The regions with special autonomy are like professional athletes. They want to renegotiate their contract when they think their bargaining power is greater. Special autonomy creates a situation in which everyone who has natural resources sooner or later will come to the door and point out that they indeed are "special" themselves. As a result, the country ends up with a system that is not transparent or stable, and which is subject to negotiation. Thus, while special autonomy is an easy thing to accomplish, it is a difficult thing to maintain.

The last issue is whether there should be a heritage fund for a subnational government in a developing country. Much of the discussion about central governments went toward questions of revenue stabilization. In the case of subnational governments, I think that this is not the key issue. Rather, the key issue is about replacing the exhaustible resource with another economic base. When the resource is gone, what will be the revenue base of that place? Here are the two problems:

On one side, there is a high probability that the windfall revenues that come in now will be squandered by the local government. They would not be spent on things that, in the long run, will lead to a restructuring. They may be treated as simply another source of current revenue.

On the other side is that the local governments do not trust the central government. The view, especially of the disaffected regions, may be that, when the central government offers to "save" that money for them (as was suggested), they do not believe that the money will ever find its way back down.

In Indonesia, the current arrangement for natural resource sharing is that the money is allocated to the local government with no strings attached. It is not at all pointed toward replacing an exhaustible resource.

What could be done? Let us take the case of Indonesia. A heritage fund can be created. What would be the characteristics of a heritage fund? There would be a regular set of payments of natural resource revenues, in terms of an established vertical or horizontal share for each district. A commission could decide this amount. The Indian model of a grants commission might be considered, or the Australian model could be used. How could the central government be made to follow up on the promise to pay the money into the fund? As we know, in many countries, payments to such funds have been a problem. The money would have to be earmarked for pre-approved development projects. For smaller recipients, it could work as a conditional grant program. For larger recipients, it would have to be part of a larger development strategy, and it probably would have to be tied to a loan program in the long run. The financial architecture would be a challenge.

In a country like Indonesia, it seems unlikely that the central or local government could be agreed upon as the manager of the fund. And finally, I wonder how a subnational government fund could be managed directly or indirectly by a third party.

Thank you.

Petroleum Revenue Management: The Nigerian Perspective

Honorable John Udeh, JP, FIMC

Introduction

The issue of oil mineral resources and petroleum revenue in Nigeria has come a long way. From a modest start of about 5,000 barrels of crude oil per day in 1957, the country now has the potential of producing well over 2.4 million barrels a day. In the same vein, the revenue accruing from oil has run into billions of naira over the years, as shown in Table 5.1 for 1981–1999. On oil mineral deposits, a recent publication by the Nigerian National Petroleum Corporation (NNPC) states that proven oil mineral reserves in Nigeria amount to over 32 billion barrels of crude, while the proven natural gas reserve is estimated at 260 trillion cubic feet. Further exploration is still being undertaken both onshore and offshore, within the Nigerian continental shelf.