



Abstract

The discovery and extraction of natural resources has the potential to finance rapid, sustained and broad-based development.

However, the historical record of resource discoveries in developing countries is deeply worrying. Often discoveries have led to the plunder of those resources, whereby the few expropriate revenues that should benefit the many, and the present generation unsustainably consume revenues that should benefit future generations. For countries to avoid the recurrence of plunder and take full advantage of the unprecedented opportunity of new resource discoveries, a set of distinct policy responses are required. To inform African policy makers, this brief outlines a series of five key policy decisions needed to ensure that resource wealth is effectively captured and utilized for national development.¹

¹ This brief draws significantly from the discussions and presentation by Professor Paul Collier, Director, Centre for the Study of African Economies at Oxford University, which took place at a roundtable discussion organised by UONGOZI Institute on "Managing Natural Resources to Ensure Prosperity in Africa". The roundtable discussion was held in Dares Salaam. Tanzania. on 28 February. 2012.

The Decision Chain

How natural resources and associated revenues are managed will have a profound impact - for good or for bad - on the course of African economies and the prosperity of Africans. For the depletion of natural assets to be converted into sustainable national development, a series of decisions have to be made sufficiently right.

It is useful to think of these decisions as forming a chain made up of five links. The analogy of a chain is important because all of these links need to hold in order to achieve sustained growth. The five links in the chain are as follows:

POTENTIAL RESOURCE DEPOSITS			■ ▶▶▶ SUSTAINA	ABLE DEVELOPMENT AND NATIONAL PROSPERITY
LINK1	LINK 2	LINK 3	LINK 4	LINK 5
Managing the discovery of resources	Capturing the value of resources extracted	Managing local communities	Achieving the right balance between consumption and saving	Using savings for productive development

1. Managing the discovery of resources

The prudent management of the process to discover natural resources is the first link in the decision chain for harnessing resources to fuel national development.

To date, the failure to appropriately manage discoveries is one of the major reasons why natural resource extraction in Africa has gone so drastically wrong.

With respect to potential deposits of resources, there is liable to be asymmetry in information between resource extraction companies and the government, that is, companies are likely to know more than governments about the chances of making discoveries of valuable deposits. As a result, bilateral negotiations between a government and a prospecting company are liable to favour the company. One way to reduce information asymmetry is for African

governments to invest in public geological research. Although the discovery of natural resources is often an expensive, technically difficult and risky process, there are strong reasons for governments to secure as much geological information as is practicable and then share this information with all potential prospecting companies. By possessing more information on resource potential and promoting competition among equally well-informed

² With respect to natural resources, rent is the intrinsic or pure value of a resource above and beyond the full costs of extraction and production. Put simply, if all of the factor costs to extract and produce one barrel of oil (including wages to the workforce, the cost of capital, the cost of risk, etc.) are approximately USD 10 per barrel but the current market price for oil is USD 100 per barrel then the difference of USD 90 per barrel is the rent.



companies that are interested in purchasing exploration and extraction rights, governments can negotiate better deals and achieve higher financial returns. In addition, it is financially and strategically prudent to incrementally auction rights to areas with resource potential. In this way, if discoveries of deposits are made, the areas adjacent to where the discoveries are made are likely to significantly increase in value for later sale by the government. Governments should also ensure that agreements with all companies that purchase rights should include terms that stipulate that the companies must undertake search work within a reasonable time period; and if they don't, then those rights are forfeited.

2. Capturing the value of the resources extracted

The second link in the chain is capturing the value of the resources extracted for society. The economic returns on the extraction of natural resources come partly in the form of factor incomes to capital and labour, and partly in the form of economic rents.? However, in low-income African countries, relatively little of the factor incomes accrue to nationals as the massive capital investments required for resource extraction can only be financed by foreign companies, and the sophisticated skills needed are largely sourced

from foreign workers. Hence, by far the largest proportion of the overall return from a natural resource that is available to accrue to nationals is the rent. However, rents will only accrue to nationals to the extent that the government is able to adequately identify, capture and transfer the rent from the extraction companies through various forms of taxation for example, minority equity stakes in the extraction company, taxation of profits, and royalties. Each tax instrument has advantages and disadvantages, hence, a specially designed and enforced taxation system needs to be in place to ensure that the government effectively and efficiently captures rent for the benefit of the country and its citizens.

3. Managing local communities

The third link is properly dealing with people in the areas where natural resources are extracted. The challenge is that local communities will likely see the environmental and economic costs of extraction but not thebenefits, whichcan thenlead todemandsforcontroland ownership, and, in some situations, violence. To the extent politically and administratively possible, public revenues from resource extraction should accrue centrally to the government rather than to the locality of resource extraction. In turn, the centralisation of revenues permits their more equitable national distribution

than if resource-rich localities are privileged. Resource extraction companies do not have an interest in this principle. Generally, they would prefer public revenues to accrue to the areas in which they operate so as to minimise local opposition. Governments also have an interest in developing mechanisms of transparency which build confidence in the local population that all revenues are being openly reported and well-used.

With respect to environmental costs, local communities must have the right to full and generous compensation for any environmental damage. The full costs of environmental damage should be borne by the extraction companies. This principle is vitally important because only then does the company have an incentive to keep damage to a realistic minimum. Where the legal framework is inadequate, companies are not held accountable for the full environmental costs. Think of the difference between the response to the oil spill in the Gulf of Mexico in 2010 and the many oil spills over the last 20 years in West Africa. The difference is not in the scale and impact of the oil spills but the legal frameworks in which those spills occurred.

4. Achieving the right balance between present consumption and saving for the future

Link number four in the decision chain is about achieving the balance between consumption and savings of revenues derived from natural resources. Revenues from non-renewable resources are generated by depleting an asset and so are unsustainable unless this depletion is offset by accumulation of other productive assets. Hence, governments must use a proportion of resource revenues to strategically invest in long-term assets.

Currently, many countries do not save enough of their resource revenues. Indeed, they often do not even know what savings rate is in place as revenues for natural resources are not separated or treated differently from other government revenues. However, it is critical that governments have a savings policy for revenues of natural resources, distinct from all other revenues. The appropriate savings rate from such revenues depends upon the horizon to depletion of the resource. For a given extraction rate, the shorter the horizon until expected depletion, the higher should be the savings rate. A straightforward but important corollary is that for a given constant rate of extraction, the savings rate should rise as resources are depleted.

Another important reason for saving resource revenues is that the amount of these revenues is highly volatile due to the unpredictable nature of discoveries and movements in market prices. Hence, a spend-as-you-go policy would imply fluctuations in public spending that would be disruptive. Hence, the government is tasked with building up sufficient liquidity to enable the country to stay on a path of spending that does not result in accelerations and reductions in expenditure and investment that are inefficient.

5. Using savings for productive investment

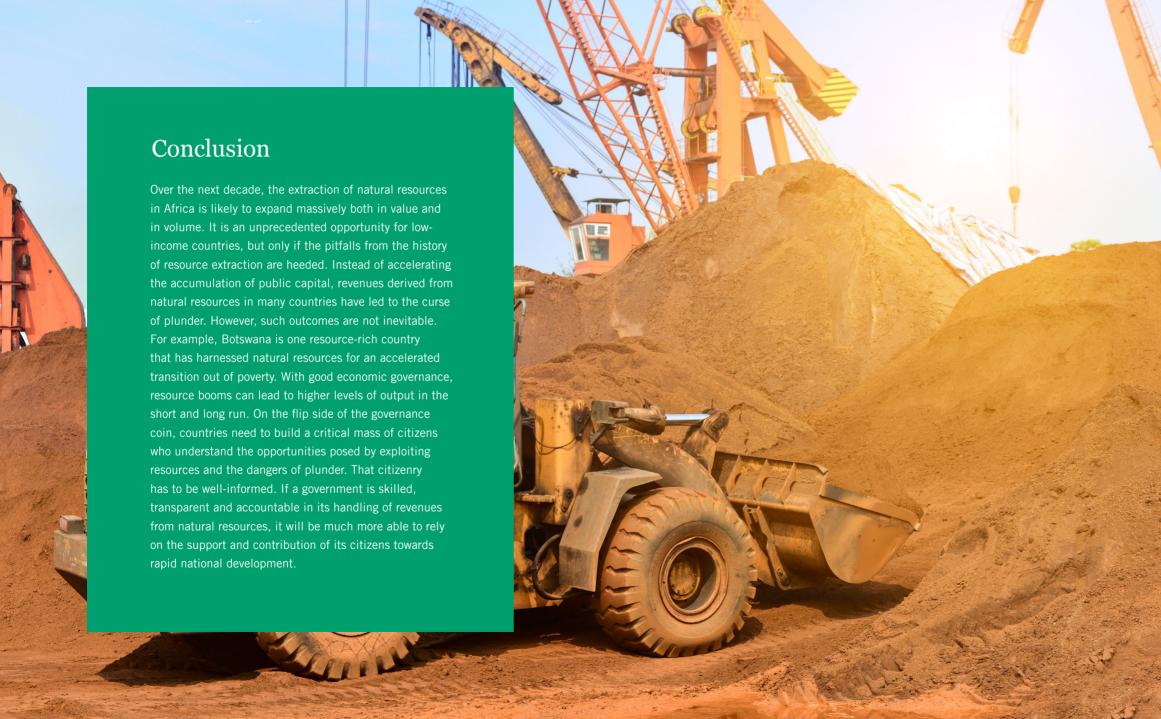
The fifth and final link in the decision chain is what to do with the revenues saved from natural resources. Here, the Norwegian model is influential. What Norway now does with accumulated savings from its oil revenues is invest the money in financial assets overseas; effectively, it maintains a sovereign wealth fund. However, this approach is not appropriate for low-income countries in Africa. Norway established its sovereign wealth fund years after it found oil. Moreover, Norway has more invested capital per member of its labour force than any other country in the world, i.e., it is the most capital-rich country in the world. So adding further to the Norwegian capital stock would not be very productive. It makes much more sense for Norwegians to buy capital assets in strong emerging economies such as Brazil or China.

Low-income countries are at the opposite end of the investment spectrum. Tanzania, for example, has less capital per member of the labour force than almost any country in the world. Therefore, the long-term task is to use national

savings to build up the country's stock of productive capital assets. For this, the government needs to have a strategic investment process such that the assets accumulated not only generate good returns but also diversify the economy.

As history shows, it is quite possible to spend a lot on investment and have very little to show for it. Therefore, a critical stage prior to an increase in domestic investment is to build the capacity to select and manage the investments, sometimes referred to as investing-in-investing'. Investing-in-investing takes time. The goal is for the country's leadership to develop a manageable set of tasks, processes and skills. In this way, emerging economies in Asia were able to build their investment capacity and ramp up their investment rate without the return on investment collapsing. Until investment capacity is built, any increase in savings generated from resource depletion should be invested abroad in financial assets.







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