

Precept 7. Allocating revenues

Technical Guide

1 Introduction: Objectives, Trade-offs and General Principles

Natural resource revenues can be large and volatile. This makes transforming the proceeds of resource extraction into sustained and inclusive economic development challenging. A country is faced with a range of choices:

- how much should be consumed and how much saved;
- should it be saved abroad or at home; and
- should the government spend it or the public?

The broad objective is sustained and inclusive development, although, since there may be a trade-off between benefits accruing at different times, this requires a view about the relative importance of present and future generations. Achieving the objective involves many choices which we discuss in this and the following three Precepts (Precept 8, 9 and 10).

Effective use of revenues and implementation of investment and spending plans raises many further issues and entails many more choices. Precept 8 deals with the revenue volatility, and with the role of fiscal rules in constraining current spending and meeting investment objectives. Precept 9 looks at the efficiency of public spending and how to increase domestic '*absorptive capacity*', and Precept 10 turns the wider strategies for leveraging private sector investment and diversifying the economy away from its natural resource base.

Objectives, trade-offs and general principles

Having captured the maximum value from the extraction of the country's natural resources (the subject of Precepts 3, 4, 5 and 6), the next task is to use the revenues to promote sustained, inclusive economic growth. For most countries, particularly poor ones, the advice of this Precept is to invest the majority of revenues domestically.

Saying that the majority of revenues should be invested in the country, is easier said than done. With large flows of revenue, government may face a range of problems that can steer the actions of government away from this ideal. Among these being:

- Dealing with the immediate welfare concerns of the population;

- Managing the conflicting pressures to spend from a host of interest groups in the country;
- Being able to choose the right projects to invest in.

Dealing with these problems means making choices.

Saving or consumption. The first choice, discussed in Section 2, concerns the balance between using revenues for current expenditures and investing them for the future. This Precept argues that most of the revenue should be saved. Many countries have invested much too little of their resource revenues. However, there is a trade-off between using revenues to meet immediate needs, such as poverty reduction, and accumulation of assets that will yield returns in the future.

Domestic or foreign assets. The second choice is the use to which investments should be put, i.e. how they should be invested. At the broadest level this is the choice between building assets (human and physical, private and public) in the domestic economy, or accumulating foreign assets (a Sovereign Wealth Fund, SWF). Section 3 discusses the appropriate balance between these alternatives for societies at different levels of development.

Private sector decisions. While the balance between current expenditure, investment in domestic assets and building a portfolio of foreign assets is important, it is not fully under government control and probably does not correspond to the alternatives perceived by government. Many of the key choices are made by the private sector, and the government is the conduit through which funds reach the private sector. Broadly speaking, government has three channels through which it can push revenues:

1. One is to retain them in public control (current public spending and public investment).
2. The second is to give funds to the private sector, through tax changes, subsidies or 'dividends', in which case the private sector makes the saving and spending decisions.
3. The third is to lend to the private sector, either by new lending or by buying back debt (previous government borrowing).

These alternative 'distribution channels' are discussed in Section 4.

General Principles

In achieving these objectives, some general principles are useful to consider:

- A substantial proportion of revenues should be saved, although some immediate consumption can be beneficial.
- Having decided to save revenues, it is usually best for developing countries to devote as much as possible to investments in domestic assets rather than foreign ones.
- Investment in public capital can be particularly beneficial as it complements private capital, raising returns and providing an incentive for private investors to contribute more capital themselves.

2 Choosing the right level of saving and consumption

In choosing how much resource revenue to consume and how much to invest, there are ethical, economic and political dimensions to consider.

Ethical consideration. Firstly, the resource belongs to all generations. As such some of the resource revenue should be used to benefit future generations. This does not necessarily imply that revenues should be shared equally across generations however. One argument is that, if the future is expected to be richer than the present (because of technical progress and poverty reduction achieved through growth), then benefits should be skewed towards the current generation.¹ A more extreme argument is that the natural resource does not belong to any generation in particular: the current generation can only act as the custodian of the asset for other generations. If past generations have not depleted the asset, the current generation has no right to do so.²

Both of these frameworks point to some concern for the future and the need for a high investment rate—although they may differ in the preferred balance between consumption and accumulation of assets. Both imply an ethical responsibility towards the welfare of future generations. Further, in a democracy, future citizens do not have a vote and so the protection of the rights of subsequent generations falls to the present electorate; they must assume the responsibility of protecting the interests of those yet to come.

Economic consideration. Second, a decision over saving should consider the economic dimension. Using revenues to encourage economic growth via investment can lead to a far higher standard of living than using revenues for consumption. The main way in which household incomes and consumption can be sustainably increased is by growing the domestic economy. This creates employment, bids up wages, and also broadens the tax base for future public

¹ This is the *utilitarian* philosophical approach to this problem.

² This is the *rights-based* approach.

spending and service provision. Private sector investment—small scale as well as large—is the mechanism through which the economy grows. Public policy, including expenditure on infrastructure, is an important lever to stimulate private sector investment and economic growth. Of course, revenue can be invested in foreign assets which will also earn a return. The arguments for and against this are covered in the next section.

Political consideration. Thirdly, there is a political dimension. Some rapid increase in benefits accruing to the population, in particular the poor, is generally desirable. There is an urgent unmet need to reduce poverty across many countries. It is also important that citizens at large perceive that they have an entitlement to resource income—a share in the national endowment— rather than it being held in the hands of a small elite. The benefits may flow through a combination of channels: the tax system, conditional cash transfers, public expenditure on health and education, etc. This should not be taken too far however. There is likely to be significant pressures on government to spend revenues on competing beneficiaries, as well as on consumption rather than investment. Precept 8 explains how these pressures might be mitigated.

Allocation strategies

It is worth contrasting these three points with two widely recommended consumption/ investment strategies.

Permanent income strategy

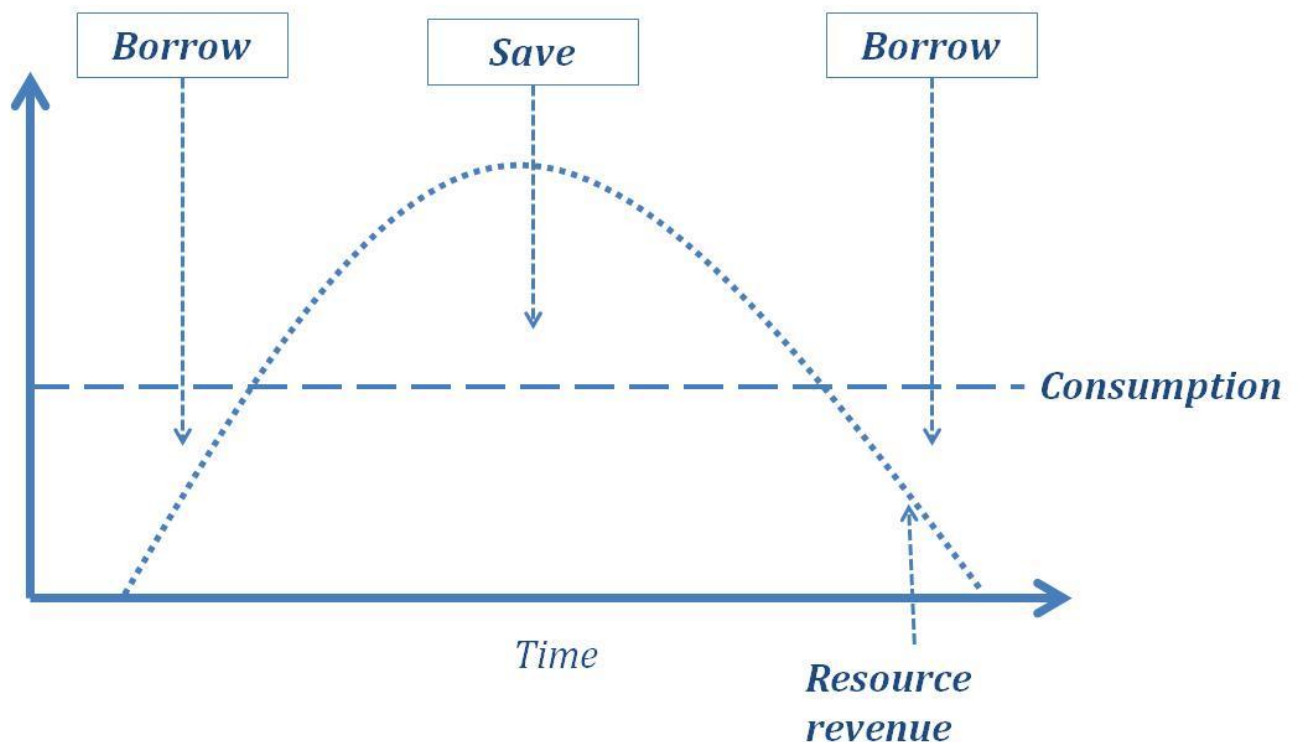
The first is the ‘*permanent income strategy*’ (PIS). Under this strategy the revenue is used to give all generations an equal increase in consumption from the resource revenue. In order to do this the committed increase in consumption is equal to the annuity value³ of the resource revenue (commencing as soon as the resource is discovered).⁴ If the flow of resource revenues is hump shaped, as is common for modest oil exporting countries, then achieving a constant flow of consumption might involve some borrowing in early years in anticipation of rising revenues, heavy saving while revenue flows are at their peak (thus building up a stock of assets), and eventually using interest on these assets to finance consumption once resource revenue has run out.

³ In practice this is not always straightforward to implement. For example estimating the annuity value of the entire resource discovery can present significant challenges and may suffer from optimism bias. This can be particularly dangerous if it leads to accumulation of excessive debt through borrowing.

⁴ The permanent income hypothesis is similar to the tax smoothing literature (Barro, 1979) or the optimal use of the current account (e.g., Sachs, 1981), and underlies much of the advice for the setting up of a Sovereign Wealth Fund (SWF) proffered by the International Monetary Fund.

This concept is illustrated in figure 1. Across time, consumption is a constant amount, depicted as the horizontal line. Revenues from resource extraction are not constant but vary, often rising to a maximum before falling away as the resource is depleted. To maintain the constant rate of consumption, the country must borrow in the early and late stages, and save when resource revenues are at their highest.

Figure 1 *Time profile of consumption and resource revenues according to the Permanent Income Strategy*



The PIS also implies that countries should condition their saving rate on the expected life of the resource deposit; as a rule of thumb, the shorter the extraction life, the greater the rate of savings.

This approach is attractive from the viewpoint of custodianship, since the economy's resource wealth is preserved. This is because assets in the ground are converted into other forms of assets that are maintained forever, only the interest on the total value of assets is consumed, while the value of wealth is preserved.⁵ It is superficially attractive from the standpoint of equity, since all

⁵ An implication of this result is sometimes known as the Hartwick rule (Hartwick, 1977). Saving the whole of the revenue from a depletable asset will (under the unrealistic assumptions of no population growth or technical change) result in a constant path of consumption, i.e. inter-temporal egalitarianism.

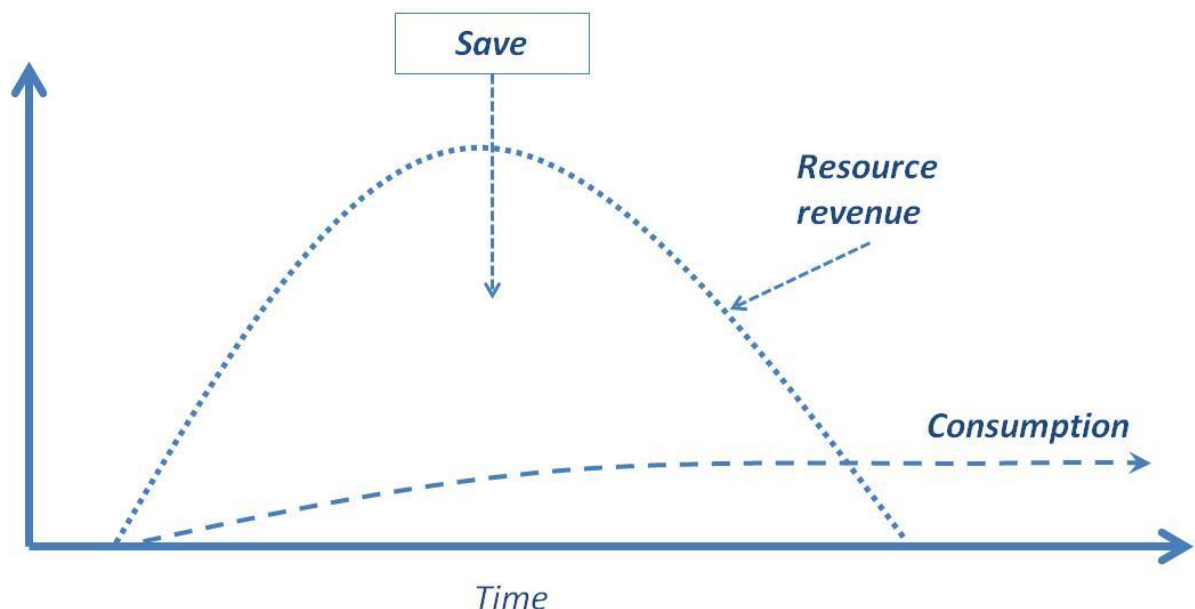
generations get the same ‘permanent consumption’ (or ‘permanent income’) from this flow. However, if consumption is in any case growing—due to economic growth and development—then the policy is not equitable, since it gives as much to future, rich generations as it does to the current poor one. This is an inappropriate strategy for a poor society.

Bird-in-hand strategy

The ‘*bird-in-hand strategy*’ (BIHS) ⁶ is that *all* resource revenues are used to acquire assets, and countries consume *only* the interest on those assets already accumulated. This is a more conservative strategy than the PIS as consumption builds up slowly, being linked not to the total value of assets (underground and saved, as with the PIS), but just to assets that have been extracted and saved. Consumption from resource revenues therefore reaches its maximum value when resource stocks are exhausted. It yields a large increment in consumption to future generations, but the cost is that these benefits are pushed far into the future. Norway has adopted the BIHS approach. From the point of view of a society with current poverty reduction needs it is too conservative.

Figure 2 illustrates the BIHS concept. Consumption can only begin once resource revenues start, and then only by an amount equal to the interest on the invested assets. This produces a smaller and more delayed consumption profile than the PIS shown in figure 1.

Figure 2 *Time profile of consumption and resource revenues according to the Bird in Hand Strategy*



⁶ Bjerkholt 2002; Barnett and Ossowski 2003.

An alternative approach

Both the PIS and the BIHS have the advantage of focusing on the asset value of the resource, and hence the sustainability of consumption streams drawn from it. The BIHS is more conservative than the PIS in terms of consumption, but does not rely on having to correctly estimate the value of the resource and the corresponding dangers with borrowing against this amount in the early years of extraction. However, the origins of both strategies are in analyses of high-income countries, and they are not entirely appropriate for developing countries. Both strategies deliver the wrong time-profile of consumption, pushing benefits too far into the future. They pay inadequate attention to the capital scarcity of developing countries and the consequent potential for domestic investment that yields high rates of return, and they underestimate the wider benefits of economic growth as a strategy to deliver sustainable increases in income and increases that are distributed in the form of employment and higher wages, rather than as financial returns on assets.

The conclusion to draw from this discussion is that, while citizens should see some rapid consumption benefit from resource revenues, it is essential that there should be high levels of investment to grow the domestic economy. As well as longer-run benefits of growth, this will bring short-run benefits of job creation. While there is a theoretical argument for raising spending from the date of discovery and before revenue flows, extreme caution will be necessary in borrowing against future income, given the great uncertainties which remain relative to that income, even after declaration of commerciality.

3 Where to invest?

The preceding section argued that a substantial part of resource revenues should be invested, but what assets should be acquired? At the broadest level this is a choice between investment in the domestic economy, or the accumulation of foreign assets held in some form of Sovereign Wealth Fund (SWF); where the choice depends on which assets offer the greatest return for society.

Foreign assets. For high-income countries which are 'capital-abundant', it is probably appropriate to accumulate foreign assets. For such countries, high-return domestic investment opportunities have been exhausted and further domestic investment would not achieve the rates of return that can be earned abroad. Hence why Norway's Government Pension Fund (essentially an SWF) and the United Arab Emirates' Abu Dhabi Investment Authority pursue the latter strategy of accumulating foreign assets. Funds of this type are known as savings funds to emphasize their longer term perspective and distinguish them from

stabilization funds which have a short term focus on protecting against revenue volatility. The latter are discussed in Precept 8.

Domestic investment. For a low or middle income country which is ‘capital-scarce’ the priority is investment in the domestic economy, building up domestic stocks of human and physical capital. Because of initial capital scarcity, high-return domestic investment opportunities have not yet been exhausted⁷. This is particularly true for public capital. A developing country is likely to not only be capital-scarce, but also short of public funds. Underdeveloped tax systems make it difficult for governments to raise funds, and consequently levels of public capital are low; the Spence Commission on Growth and Development emphasized that the share of public spending devoted to infrastructure by African governments is markedly too low⁸. Since resource revenues accrue to government, the constraint on public funds may be relaxed, as well as the constraint on the overall capital stock. This suggests the use of resource revenues for public investments in infrastructure projects, and also in education and health (technically counted as current expenditure, but nevertheless building the human capital stock of the country).

Investments in public capital have additional value as they are complementary with private sector investment. Complementarities run in both directions: infrastructure investment raises the return to private sector investments, and a larger private sector capital stock and associated demand for labor raises the return to investing in education and human capital. Private sector investment is the ultimate mechanism through which sustainable growth will be achieved, and public investments can be used to increase the productivity of private capital and thereby increase the level of private investment; breaking the trap of low private investment often found in poor countries. Used this way, resource revenues have the potential of increasing the rate of growth and bringing forward the development of the economy. These arguments are further elaborated in Precept 10.

An argument in favor of domestic investment is that the wider benefits of the investment are captured in the country. Investment in the domestic economy

⁷ The growth of the economy—even at relatively low rates, and certainly if per capita growth rates in excess of 5% p.a. can be achieved for a sustained period—will, for most countries, come to dwarf income flows that can be derived from holding resource wealth in financial assets. This cautions against strategies of accumulating large Sovereign Wealth Funds (SWFs), except in countries where domestic capital assets (human and physical) are as abundant as they are in high income countries, and where rates of return have fallen to world interest levels.

⁸ Commission on Growth and Development, *The Growth Report: Strategies for Sustained Growth and Inclusive Development* (Washington, DC: World Bank on behalf of the Commission for Growth and Development, 2008).

will lead (directly and indirectly) to employment creation, unlike accumulation of offshore funds in an SWF. If there is significant unemployment, then this is an additional argument for domestic investment; real income is raised by job creation. Benefits also arise from greater entrepreneurial activity, and spillover effects to the rest of the domestic economy. Putting this somewhat differently, the choice between investing in an SWF and investing domestically is, in part, a choice between having future income flows distributed as foreign dividends that must then be distributed in society or distributed as wage income and profits to domestic businesses within the country. Indeed, even where the return to the foreign investment may be equivalent to the return to the domestic investment, the domestic distribution of benefits can contribute to a deepening of domestic financial systems and other benefits.

A further argument is to do with political economy. The current political leader knows that savings decisions taken now may be reversed by future political leaders. This reversal is particularly easy if the saving is held in form of financial assets, an SWF. Such funds can easily be looted by less benevolent future leaders, and there is no point in saving now to finance the profligacy of a future leader. An advantage of turning the saving into the physical assets in the domestic economy is that these investments are sunk; while there may be a risk of them being depreciated by low levels of future saving and lack of maintenance, human capital and roads and bridges cannot be directly looted and consumed by a future government. Essentially, investment in domestic capital is a commitment to a higher capital stock, whereas investments in an SWF do not have this commitment effect.

Despite these benefits to domestic investment, the economy is likely to have a certain capacity to absorb large flows of capital before the side effects of inefficiency and inflation are felt. This calls for a controlled flow of investment funds, using a stabilization savings fund. This is explained further in Precept 9.

Summing up Sections 2 and 3, the long-run balance of expenditures for a developing country should include some early increase in consumption, but priority should be given to saving. For a developing country savings should go into investment in the domestic economy, rather than into foreign assets. However, this long run argument will need to be qualified in the light of the, the macroeconomic effects of large-scale inflow of revenues (see Precept 8), efficiency of domestic investment and the government's ability to select appropriate investment projects (see Precept 9), and short run volatility,(as discussed in Precept 8).

4 What Distribution Channels?

Sections 2 and 3 explained the high-level choices between saving and consumption. This section explains how these choices are implemented on a more practical level. The desired time-profile of benefit is achieved by a balance of consumption and investment through time, yet most of the ultimate consumption and investment decisions are taken not by government, but by the private sector. Many of government's decisions on what to do with resource revenue relate to the distribution of funds to the private sector, and the consequent effects on private sector behavior. We now turn to these 'distribution channels', and to the broader question of how government's handling of resource revenues influences and interacts with private sector behavior.

At the broadest level, government has three options: it can give money away, it can lend it, or it can spend it itself. More formally it can:

- Distribute to the private sector through citizen dividends or through variations in the tax/ benefit system.
- Retain as a government financial asset, but:
 - Lend to the domestic private sector, either by government lending (e.g., development banks or mortgage lending) or by reducing existing domestic debt.
 - Lend to foreigners, by foreign reserve accumulation or establishing a SWF.
- Increase public spending, either on public consumption or the construction of public assets.

Each of these will bring about different patterns of consumption and investment, and we now discuss them in turn.

4.1 Distribution to the Private Sector

Distribution to the private sector can be achieved through lower taxes, higher subsidies, social transfers, or 'citizen dividends'. A policy of citizen dividends has been followed explicitly in a few cases (e.g. Alaska) while most countries, with less capacity to undertake such transfers, have reduced taxes in response to resource revenues.

If funds are distributed to the private sector in any of these ways then government retains no ownership of the resource wealth and consequently has reduced macro-economic control over spending once the transfer is made. It does however have a choice over which economic groups benefit from the transfer, and the incentives faced by those groups via the tax system. It also decentralizes the micro-economic spending decision to private citizens, rather than seeking to implement projects through government ministries. Transfers

will typically induce both private consumption and investment, although the balance between these will be a matter of private, not public, control.

What are the pros and cons of transferring the proceeds directly to private individuals?

There are a number of factors governments should take into account when considering distribution to the private sector and the appropriate channels through which to do so. The size and lifetime of the resource revenues clearly matters, influencing the desired level of investment from revenues versus consumption and so the amount that can be distributed to citizens. Also, the size of resource revenues has political economy implications. Where resource revenues form a significant portion of national income, the case for direct distribution to the private sector is strengthened. As a rule of thumb it is never desirable to have public expenditure exceed that of private households, and to transform resource wealth into sustained economic prosperity it is important that investment by the private sector is facilitated. For example, this could be done by using resource revenue to fund a reduction in corporate taxes.

A fundamental argument in favor of a scheme of private transfers is that resource revenues belong to private citizens and so they should be handed directly to them. This argument may be particularly relevant in countries with bad governance where it is important to remove funds from the un-transparent discretion of unaccountable government officials, and place them within reach of legitimate and effective citizens as quickly as possible (as has been argued for the case of Nigeria by Sala-i-Martin and Subramanian, 2003). However, where weak governance threatens the effective use of public funds, such a distribution scheme faces the same challenges of elite capture and abuse.

It is sometimes argued further that all revenues should be handed over and, if government wants to spend on public services or infrastructure, it should raise the funds by taxing back part of what it has just handed out. Such a scheme could provide the political economic basis of long-term improvements in governance. However, this argument may be of limited relevance in practice; the countries with the worst governance are less able to effectively undertake such cash transfer to citizens. While on the other hand, those most able to implement it have least need of it.

The issues can be set in somewhat wider terms, via the argument that building state accountability requires taxation. Some authors argue that bargaining over tax is the basis of the social contract between the state and its citizens and a key building block in the development of democracy (Brautigam et al., 2008). According to this argument, government should only be able to spend the funds itself if it has taxed them back from the private individuals to whom the revenue has already been given. Of course, this has a disadvantage of administrative

complexity as there are two layers of government process, initial distribution and then taxation.⁹

An economic advantage of distribution to private citizens arises from the microeconomic detail of spending. Private individuals are better at identifying investment projects than are government officials, and have sharper incentives to implement them well and make sure they succeed. Underdeveloped credit markets in developing countries mean that many high return investments do not get undertaken, and putting cash in the hands of individuals may remove credit constraints and cause such investments to be made. This argument is supported by the evidence that agricultural-based resource booms have had much more positive effects than booms in 'point resources' such as minerals or oil, in part because individual farmers have increased investment in their small-holdings.

There are some counter-arguments to private transfers. The first is to do with the fundamental problem of the inter-generational distribution of the benefits. Will private choices lead to the optimal time-profile of consumption versus investment that was discussed above? It is possible that individuals currently alive give too little weight to future generations, and therefore invest too little. This may be exacerbated if individuals have limited information about the magnitude of resource revenues, particularly if they interpret revenues as permanent, rather than time-limited. Society would then have an obligation to increase savings rates by direct government action, instead of accepting the outcome of individual choice alone. The argument has particular force for the proceeds of a resource windfall which the current generation has no more claim on ownership than other generation.

A further argument is that the types of investments made by individuals may have lower returns, both on an individual and social level, than larger scale investments that could be made by the banking sector or the government. Evidence on microfinance initiatives, which is comparable to the type of investments many individuals could make, have shown disappointing returns.

Even if individuals wanted to save at a sufficiently high level, they would not necessarily do so by undertaking their own investment projects. Efficiency therefore requires an effective system of financial intermediation which both rewards depositors and identifies investors who can best use the funds. Without such a system, the argument that the private sector has better information and

⁹ An alternative might be to do away with two layers of administration by simply using the revenues to reduce taxes/increase subsidies. However the tax system is often an important element of the 'social contract' between the government and its citizens, helping to strengthen the accountability the government has with the public. Reducing the size of the tax system either through reducing taxes or increasing subsidies therefore damages this contract.

incentives than the public sector is eroded. Of course, cutting in the other direction, substantial cash transfers to citizens would be a powerful force to promote development of a wider and deeper financial system. A policy of direct transfers in a country should therefore be made in tandem with the promotion of its financial sector.

The arguments above are couched primarily in terms of a ‘citizen dividend’ or pure transfer. In practice, any transfer to the private sector is likely to take place through adjustment of tax, subsidy or social protection schemes, and each of these has to be evaluated on its own merits. Resource revenues provide an opportunity for reducing distortionary taxation that may have a negative impact on economic activity, but they also provide the opportunity for maintaining highly inefficient subsidy programs. For example, fuel subsidies may look politically attractive in an oil-rich country, but are no less distortionary simply because the country has plentiful petroleum reserves. On the other hand, social protection schemes have many advantages, particularly in so far as they are associated with private sector accumulation in either human capital (e.g., transfer programs conditional on school attendance) or physical capital (e.g., by allowing farm assets to be retained during an economic downturn or drought).

The balance of these arguments depends on the specific country’s circumstances and the expenditure channels available, but some broad conclusions can be drawn. It is important that some fraction of revenues gets into citizens hands quite early on. As we argued above, there is a need to raise consumption rapidly, and it is also likely that these flows would finance some very high return investments. Risk of large-scale theft of revenues would be diminished and, perhaps most importantly, transfers establish the principle that the resource belongs to citizens and is being used for the benefit of the nation as a whole, rather than for a small elite. But while these are arguments for the transfer of *some* fraction of revenue to individuals, it is not an argument for the transfer of all of it. Private individuals’ choices alone will not lead to an efficient profile of consumption or spending, and there are pressing needs for direct investment in public, or publicly funded, assets.

Box 1 provides further details on citizen dividends.

Box 1: Direct Distribution of Resource Revenues¹⁰

The most direct way to ensure that citizens in resource-rich countries benefit from their natural resources is to distribute resource revenues to them as an equal, universal and unconditional cash transfer, or Resource Dividend. The conceptual justification for this policy is that resource rents belong equally to all citizens, so each citizen should receive her or his per capita share. This is consistent with the standard formulation in international human rights treaties that natural resources should be at the free disposal of “peoples” (Wenar, 2007).

Practical arguments in favor of direct distribution include:

- The Resource Dividend is the easiest form of expenditure to make transparent: once the media and population know the total quantity of resource revenues, and the size of the population, they know how much each individual should receive.
- Removing revenues from government expenditure budgets eliminates some standard mechanisms of corruption such as over-bidding for contracts.
- Governments that receive revenues from natural resources may have a freer hand in neglecting the well-being of their citizens. Direct distribution ensures that the government remains dependent on its citizens for tax receipts. This may improve its accountability to the population, and can encourage development of fiscal institutions.
- Cash transfers loosen the credit constraints that many poor people face and may enable them to make higher-return investments, including in education.
- If government is weak or unaccountable then households may be better at choosing both beneficial consumption expenditures and high-return investments—although effective private sector investment may require a good financial intermediation sector.
- It may make it politically easier to remove inefficient and regressive subsidies.

Ideally, the government pays out the Resource Dividend and independently levies general taxation to fund the optimal amount of government expenditures. However, developing countries face constraints in raising

¹⁰ This case study draws on Paul Segal, “Resource Rents, Redistribution and Halving Global Poverty: The Resource Dividend,” *World Development*, forthcoming 2011.

taxes, so withdrawing resource revenues from the government may lower public expenditures. In this case the potential trade-offs are:

- Reduced expenditure on infrastructure and other large-scale, high-return investments.
- Reduced provision of public goods.
- Reduced provision of public services.

Direct distribution does not preclude smoothing: as with resource revenues more generally, a stabilization fund may be used to reduce the volatility of the Dividend. The institutional questions then raised are similar to those raised by any Natural Resource Fund: should it be managed independently, or from within the government? The establishment of an independent agency may help to insulate funds from misuse.

4.2 Domestic Debt Management (Lending and Debt Reduction)

The second alternative is that government retains ownership of the revenue, but lends it on to the domestic private sector to consume or invest. In this way the government decentralizes the microeconomic decisions to the private sector, while maintaining a broad macroeconomic control over which sectors receive the revenue. This strategy could take the form of government lending—e.g. through a development bank—or could simply consist of the reduction of existing domestic government debt.

One option for increasing funds available to the private sector is new lending by government via institutions such as development banks. Unfortunately, the historical record of such banks has been extremely poor, although it may be worthwhile for resource-rich countries to revisit and rethink this option. A disadvantage of using development banks, rather than commercial banks, to distribute funds, is that they are more likely to come under pressure to make non-economic or politically motivated loans.¹¹ However, development banks can be an effective way of supporting key strategic investments that can spur economic growth, such as new infrastructure projects. This concept can be extended the lending to other types of institutions and other asset classes. For

¹¹ This is because development banks are likely to have a closer relationship with the government, for instance, if the Directors or other staff are government appointed; and because all their funds are sourced from government. However, in countries where there is not a clear distinction between government and the commercial banking sector, similar pressures may be brought to bear on the commercial banks.

instance, an alternative option for domestic lending is through government-supported mortgages for residential construction, particularly where there is a shortage of such private finance. However, similar risks can apply in these cases too.

An alternative to lending by the government to the private sector is a reduction in domestic government debt. Levels of government debt held domestically in many developing countries are generally quite low relative to GDP, but large relative to the banking sector, often amounting to a quarter of total commercial bank deposits. What is the effect of reducing the availability of government bonds in such circumstances? By reducing the opportunities to invest in government debt, capital will have to be invested in other assets. Ideally these would be domestic, although the extent to which this occurs depends on investment opportunities. One important mechanism may be that a reduction in government debt deprives commercial banks of the easy option of simply lending to government, and thereby induces them to be more pro-active in seeking out other lending opportunities. While this sounds good in theory, there is limited empirical evidence on the relationship between government debt and lending to the private sector, with such evidence as there is suggesting that the response of private sector investment might be as low as \$0.15 increase in lending to the private sector for each \$1 decrease in domestic debt.

4.3 Foreign Debt Management (Debt Reduction, Lending, Sovereign Wealth Funds)

Lending might be to foreigners, rather than within the domestic economy. In an indebted economy this takes the form of paying back foreign debt or, once this has been done, it might involve the construction of a Sovereign Wealth Fund (SWF). Paying back foreign debt may have the attraction of increasing the country's creditworthiness, lowering domestic interest rates (since the government requires less from the domestic capital market), and increasing the attractiveness of private investment in the country. These are important arguments, though their relevance is highly country-specific and they do not diminish the importance of domestic investment to grow the economy.

For a country with low debt, a strategy of foreign investment involves the acquisition of foreign assets, for example in a SWF. As discussed above, this is not a preferred strategy for a developing country. The basic argument is, as we have suggested before, that such an economy is capital-scarce and needs within-country investment in order to grow. Such a fund may be appropriate for a high income country which is capital-abundant and has reduced the return to domestic investment down to world interest rates, but developing countries have the potential of earning higher returns by stimulating activity in the

domestic economy. Furthermore, holding foreign assets is not without risk. The value of these assets can fall and, since they are easily marketable and possibly also outside the reach of domestic jurisdiction, they are vulnerable to looting by future governments.

4.4 Public Spending

The final channel is direct public spending, typically some mixture of current and capital spending. The latter may add to the public capital stock (e.g. infrastructure) and becomes a government asset, or may contribute to the private human capital stock (e.g. spending on education or health). Public spending generally centralizes control both at the macro level and at the micro level of project design and implementation.

Public domestic investment covers infrastructure and, in principle, other expenditures that add to human as well as physical capital, such as education and health spending that are unlikely to be provided by the private sector. There are several strong arguments in favor of accumulating assets in these forms, the first of which is that these assets are chronically under-supplied in many developing countries. The Spence Commission on Growth and Development points to the low level of infrastructure investment levels in many slow growing developing countries, and contrasts them with the success stories. This is despite the fact that estimates of rates of return to infrastructure investment, and also to health and education spending, are often in excess of 10%. The second argument is that high levels of public investment are a key factor in raising private sector investment. Poor roads, ports, productivity and skill levels are a major barrier to private investment, and improving these assets is a way to trigger private investment. This means that public infrastructure investment is a way to accelerate growth in the domestic economy, and a sustained period of compound growth will yield an income increment an order of magnitude larger than the likely interest on a SWF. Furthermore, there is likely to be job creation and higher wages, and this is a more acceptable and sustainable way of distributing income to citizens than are alternative ways of distributing funds through government.

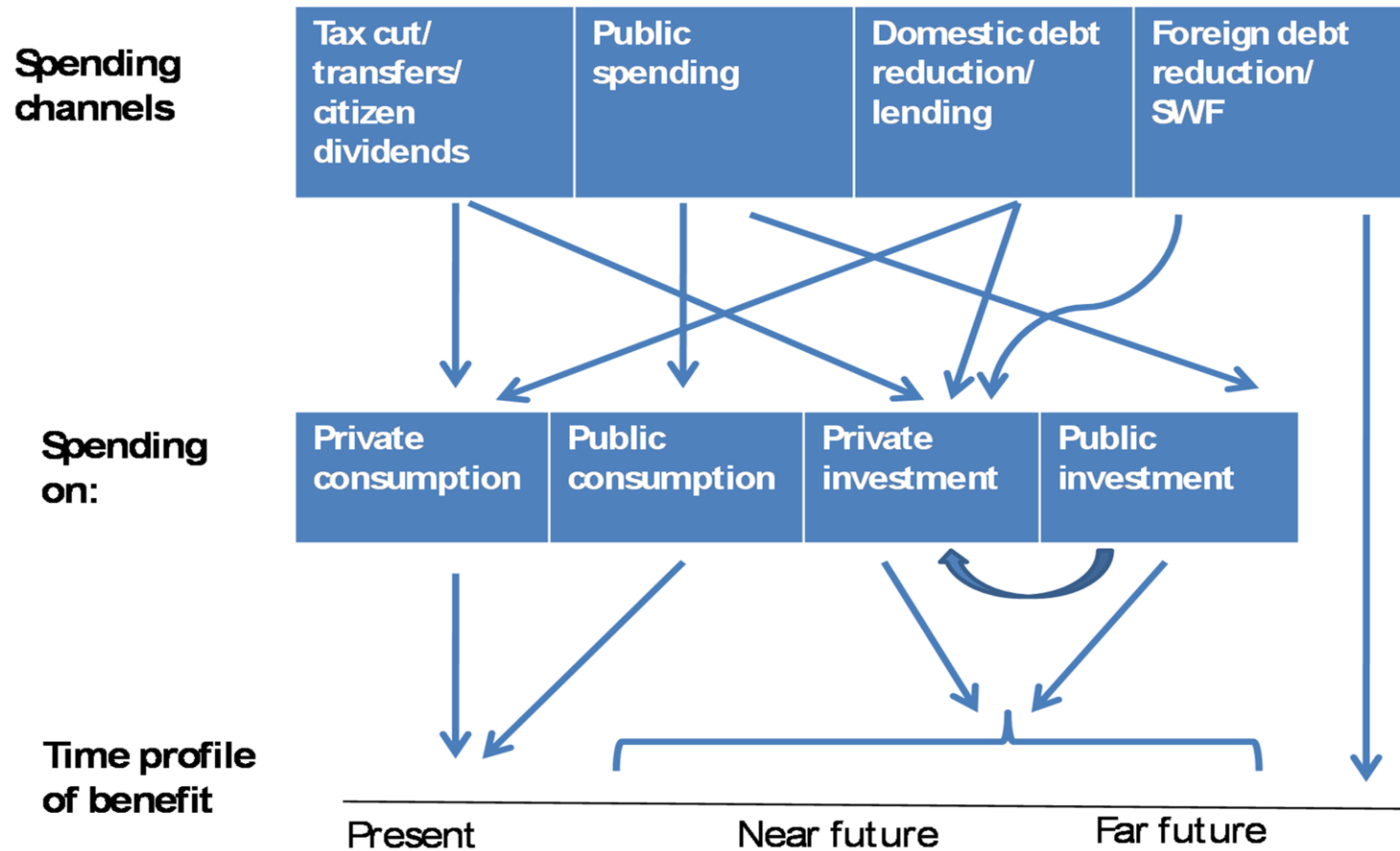
The main arguments against public domestic investment pertain to the country's ability to handle an increase in expenditure in an effective manner. Macroeconomic constraints on absorptive capacity are discussed in Precept 8. Constraints at the micro-economic level are also important. Are public expenditure systems capable of ensuring that spending is not wasted on poorly chosen and inefficiently executed projects? Do new revenue streams provide an opportunity to improve the quality of spending, or are they likely to compound and worsen governance difficulties? We return to these issues in Precept 10.

4.5 Overview

The figure below offers a schematic summary of some of the arguments made in this section. Government faces immediate choices over tax and benefit policy, public spending, and debt management (top row). It needs to understand the impact of these decisions on investment and consumption (second row). Some of these are direct, while others are indirect as they are intermediated through private sector behavior. For example, domestic debt reduction may change interest rates thereby altering private sector consumption and investment; public investment in infrastructure may raise the profitability and hence the quantity of private investment. Finally, the pattern of consumption and benefit determines the ultimate time profile of benefit (bottom row).

We have argued that the need is to avoid the extremes of too much immediate consumption, or of foreign asset accumulation that by-passes the domestic economy and pushes benefits into the far future. The strategy should seek to raise public and private investment raising growth in the domestic economy.

Framework:



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