Precept 10. Encouraging private investment

Technical Guide

1. Introduction: Objectives, Tradeoffs and General Principles

The strategy of using resource revenues to increase the growth of the domestic economy requires that private sector investment—from large-scale projects through to improvements on small-holder farms—increases significantly. As discussed under Precept 7, investment in accelerating a country's economic growth can be expected to dominate virtually all other investments in terms of social returns. However, high sustainable increments in growth require massive investment. Fast-growing economies have had investment rates of 30 percent of GDP (over 40 percent in some cases), well above those of most resource-rich countries\(^1\).

Engagement of the private sector is essential if the desired level of investment is to be achieved. The government can facilitate this through its own investment. The leverage associated with investment of this kind is very high. Any such growth-enabling public sector investment should have high priority claims on resource revenues. A sustained increment in growth will dominate natural resource revenues in the long run.

These incremental investment strategies are not dependent on there being natural resource wealth. But the evidence, as well as political economy research and social choice considerations, suggest that in poor countries it is difficult to achieve the initial increase in public investment. Natural resource revenues make the choice easier, in part because they avert the need for a corresponding initial reduction in consumption. Resource wealth has the additional advantage in this context of bringing sector-specific opportunities for growth and development. Of course, it also brings challenges in terms of increased economic volatility and a possible narrowing of economic diversity.

\(^1\) Commission on Growth and Development (2008).
Objectives

These considerations suggest three broad objectives for government.

Make ‘general purpose’ investments. The first, and most important, is to make the ‘general purpose’ reforms and investments that improve the business environment and productivity of the private sector as a whole. These include reforms to improve the functioning of markets (for capital, land and labor), infrastructure policies to improve the provision of utilities and public goods, and social policies to raise the stock of human capital. ‘General purpose’ means policies or actions that are not specifically targeted to favor one sector over another2. Such policies, which include reforms to contract enforcement, the financial sector and business regulation, are covered in Section 2.

Diversify economy. The second role is to promote the diversification in the economy. Excessive dependence on natural resources exposes the economy to volatility and may discourage investments in potentially fast-growing sectors. Diversification away from natural resources will improve the robustness of the economy and should be facilitated, first by general purpose investments and, second, by removing bottlenecks and market failures. Direct government investment in private sector activities should be linked to commercial success with a time horizon for eventual transfer to the private sector. Section 3 discusses the role that government can play in fostering investment in sectors that diversify the economy away from natural resources.

Support resource-linked development. The third role is to support resource-linked development. The resource sector creates new demands--for labor, services and intermediate or investment goods--which can be met either from imports or from local sources. It also creates a new source of supply--of the resource itself--which might be subject to further processing before being exported. There are frequent calls for government to enact policies to support local participation and value added in these activities, and they are discussed in Section 4. In general it is desirable to restrict encouragement for investments in the natural resource value chain by highly selective criteria, with rigorous evaluation of policies to support supply of goods and services to the sector by local companies alone or in international joint ventures.

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2 This is a useful distinction to make, although one that can be difficult to maintain precisely since, for example, a road in a particular place is likely to favor one sector over another.
Trade-offs

Achieving these objectives requires making difficult decisions over how and where to invest.

Firstly, government must take particular care in its involvement in the private sector. As with all government support to private investments there are grave dangers of funding projects that would have been done anyway (in which case the policy merely transfers public funds to private shareholders), or supporting projects which never become competitive (in which case they provide a continuing drain on public resources and do not provide a basis for growth). Design of such policies must therefore be subject to rigorous ex ante and ex post tests. Ex ante, the methodology is to diagnose situations or projects where there is a positive social return which goes beyond just the private returns received by investors. This is to identify situations of market failure, where some barrier means that private and social returns diverge. Ex post, the policymaker must be willing and able to identify failures and withdraw support, thus curtailing public losses and reducing moral hazard, the risk that the managers of public projects will not work hard knowing that they will be protected by the government. Learning-by-doing, including mistakes, is an essential part of the process of identifying optimal government investment strategies.

Secondly, governments may face the choice between using revenues to diversify away from its extractive industry, or, in effect, encouraging further concentration via resource-linked investment. Again, rigorous analysis of the social costs and benefits should be undertaken if possible. In general, a less diversified economy is likely to be the greater risk to a low-income country. However, in some cases there may be robust commercial reasons for investment that supports private-led initiatives in the resource industry.

Thirdly, the task of project selection may involve choosing between labour- or capital-intensive projects. A conflict may arise between supporting capital-intensive projects that may be more profitable against labour-intensive projects that can contribute to employment. Political pressures are likely to be particularly strong in this regard: as much as possible, the decision should rest on a sound judgment of the social- rather than political return of the project.

General Principles

To achieve the three objectives outlined above, this Precept shows that countries can follow two guiding principles:
Resource revenues should fund public expenditure that reduces the cost of doing business. This should focus on improving infrastructure, the quality of the labour force, business regulation.

Diversify the economy away from the resource industry. Revenues can be used to encourage this process either in a general manner, or in some cases, targeted to specific industries.

Finally, it is important to involve the private sector, and other key stakeholders, e.g., locally affected groups, in the decision making process. Doing so should encourage all parties to contribute to joint objectives and can greatly increase the chances of success. This partnership concept is discussed further in Section 5.

2. General Purpose Investments and Reform of the Business Environment

The cost of doing business is high in many developing countries. There may be poor quality infrastructure, irregular supply of electricity and other utilities, and low labor productivity. Sometimes, excessive regulation and rent-seeking behavior make the economy inflexible and unresponsive to new opportunities. These are general problems that affect many sectors and are present regardless of resource wealth. However, natural resources provide both an opportunity and an increasingly urgent need to address these problems. The opportunity arises as funds are available to make public and social capital investments; the need arises because, as a resource-rich economy must adapt to considerable structural change, governments can expect higher levels of volatility, and often face greater governance challenges.

Improvements can be focused in three areas:

- Investment in infrastructure and public capital
- Investment in human capital; and
- Investment in the business environment

2.1 Infrastructure and Public Capital

The high return on well-designed and implemented infrastructure projects in developing countries has been widely documented. According to the Commission on Growth and Development the fastest growing developing countries have investment
in public infrastructure running at a level of around 5 to 7 percent of GDP, while in many other developing countries the rate is less than 2 percent of GDP.

The design and selection of infrastructure projects should be subject to the broad principles of public expenditure management outlined in Precept 9. This should include paying attention to the likely impact of the project on removing bottlenecks that inhibit private sector investment.

Some infrastructure projects will be directly related to the resource sector, such as the construction of transport links that serve the project, and such projects should be funded primarily by the investor. However, these investments should be designed according to cost-benefit principles for society as a whole, not just the project sponsor. For example, this may mean designing a rail network for passenger and general traffic in addition to mineral shipments. Government should be actively engaged to ensure that investments are designed in this way and be willing to meet incremental costs that are incurred. Countries should also be aware of the impact that infrastructure-use agreements can have on government relationships with operators and the fiscal returns from the sector. It is important to develop clear, administrable guidelines on prioritization of user rights (for example, how to determine when a railroad is reserved for a mining company and when it can be used by others), and to empower a public or independent body to enforce those guidelines. To the degree that adapting the infrastructure for shared use imposes additional costs on operating companies, government should recall that the state will ultimately be paying for most or all of those costs, via reduced taxes and/or the public share of cash calls (if the state is an equity participant). Thus a project should only be pursued if it produces genuine value-added over what could be achieved by other public-sector initiatives.

2.2 Human Capital

Improvements in health, education and training are of intrinsic value and also benefit society by raising labor productivity. Here too, resource revenues provide an opportunity for significant expansion and improvement in services. While formally counted as current expenditures, there is a case for counting such expenditures as investment in so far as they raise the stock of human capital in the economy.

Other public expenditures can also have significant impact on raising household capital. Social protection schemes can take the form of conditional cash transfers in which payments are made in return for attendance at schools or clinics. The social insurance component of such schemes can also be important in allowing households
to maintain their assets during downturns; for example, not having to sell or
slaughter livestock during periods of drought.

2.3 Flexibility and the Business Environment

Private sector investment is facilitated by an economic environment in which
resources are able to move from low return or declining sectors to high rate of
return or growing sectors. This is particularly important during a period of
structural change or in an environment with a high degree of volatility.

There are many different elements to creating a responsive and flexible
environment. One is that firms are not impeded by excessive regulation; Collier and
Goderis (2009) establish that economic shocks (such as changes in the prices of
export goods) have a worse effect if there are regulatory barriers to firms leaving
negatively affected industries. Another is in the labor market, where flexibility
requires that barriers to hiring and firing workers are not excessive. A well-
functioning capital market is also important as a means of channeling funds to new
activities. Van der Ploeg and Poelhekke (2009) show how countries with well-
developed capital markets are significantly less likely to be adversely affected by a
resource curse than are countries with shallow capital markets, even controlling for
other factors such as initial income level.

Resource wealth can provide the means for ensuring flexibility. For instance,
resource revenues may be used to finance social protection schemes, which can then
provide political cover to remove ad hoc and inefficient measures such as price
controls, subsidies, and job protection measures.

Table 1 shows that most resource rich countries have a long way to go in terms of
establishing an attractive business environment, underscoring the need for
investments in this area. The table, compiled by the International Finance
Corporation and the World Bank, gives the summary ranking of resource-rich
economies out of 183 countries, measured against indicators bearing on the ease of
doing business, e.g., starting a business, permitting, contracting, access to electricity,
availability of credit, etc.\textsuperscript{3}

\textit{Table 1 Business Environment Rankings, and movement from 2011 to 2012 of
Resource-Rich Countries}

\textsuperscript{3} See the Doing Business Project. Available at: http://www.doingbusiness.org
### Petroleum-rich

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### Notes

- Uses the annual ‘Ease of Doing Business’ indicator for the available years, 2011 and 2012.

3. **Industrial Policy and Diversification**

Resource-rich economies may become excessively dependent on their resource sector, thus exposing them to a high degree of volatility and also restricting opportunities for job creation in other sectors. The *Dutch disease effect*, which is discussed in Precept 8, arises when resource-induced appreciation of the exchange rate crowds out activity in export of import-competitive activities. The first response
to this is the sort of general purpose investments and reforms discussed in the previous section. Is there also a case for more targeted policies to promote the development of new sectors? Many of the fastest growing economies in the world have had growth led by new sectors, often export-oriented. In many cases these have had some form of government support, ranging from direct subsidies through to clustering in special economic zones.

The economic case for targeted support is that private firms cannot capture all the benefits of their activities, so will systematically under-invest. Two main reasons are typically put forward for this. The first is that there are *positive spillovers* or *externalities*. For example, new activities generate learning, and this knowledge will benefit others as well as the firm producing the knowledge. This may take the form of training labor, which will then change jobs. It may involve R&D expenditures. Or it may simply be a *demonstration effect*; the first firm to operate in a particular sector/country demonstrates that it is profitable and this attracts other firms.

The second reason is that there may be coordination failures; a producer of garments may be more profitable if there is a local supplier of textiles, and vice versa. This is a problem in which no single firm will become established unless it knows that others will too. Government can then play a coordinating role, seeking to develop linked activities in parallel. Note that both these arguments primarily pertain to the early stages of establishing new activities and the long-run objective remains sustainable commercial viability.

The case against targeted support is, of course, that government is unlikely to know what to target. For every successful use of industrial policy there are many more unsuccessful cases in which firms and industries have failed to attain long-run commercial viability. Policymakers will be aware of the numerous projects with no clear purpose. There is no recipe for guaranteed success in this area, but there are a number of useful guidelines.  

The first is that risk is reduced by interventions that are, as far as possible, general purpose rather than sector-specific. Training programs may be designed for a particular set of activities, but should also provide transferable skills. Finance can be made available for a wide range of venture capital, not just for a particular sector. Support for R&D can focus on building mechanisms through which firms in all sectors of the economy can transfer knowledge from abroad. A strategy that has worked well in many Asian countries (but not in Africa) is the development of

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4 See Rodrik (2004) further elaboration of these arguments.
special economic zones. While not economy-wide, such zones need not be tied to a particular sector.

The second guideline is that policies should be designed to reward success, not failure. Assistance should therefore be subject to performance requirements, with clear benchmarks established for success and failure. An example is the linking of assistance to exports, or the use export subsidies. To be able to export at all (even with subsidies) firms must have reached a relatively high level of quality and reliability. Export subsidies only cost money when exports occur and only attract investments by firms that are confident of their ability to cross the thresholds to export. Importantly, government must be able to withdraw support from policies and sectors that are turning out to be failures. Some failures are inevitable, so processes must be in place to anticipate this and have a way of shutting off support. And even for successes there should be an automatic sunset clause, stating clearly the maximum period for which support should be offered.

The third guideline relates to the institutional structure and process for making industrial policy. There is a tension between the need for government to work closely with business on the one hand, and the need to be separate on the other. Working closely is necessary in order to gain information about what activities are likely to be viable, about the likely spillover benefits of the activity, and about the design of effective policies to maximize these spillovers. While, at the same time, government and business need to be separate in order to minimize the risks of corruption, rent-seeking and cronyism. Rodrik (2004) argues that the best way to resolve the tension is to have political leadership from the very top of the government, with transparent and clear channels of accountability. Implementing agencies should have demonstrated competence and clear monitoring from high level authority.

4. Resource-Linked Development

Beyond the revenues it generates, the resource sector itself creates new demands (for labor, services, and other inputs) and sources of supply (the resource itself, or by-products of the resource or extraction process). These may provide a stimulus to domestic activities, meeting demand or using new supplies. To what extent should government play an active role, and how should any such role be implemented?

Two broad arguments suggest a case for government policy to promote local involvement, over and above that which would be supported by a purely private market outcome. The first is the political imperative, in many countries, for local
participation. This applies primarily to workers in the resource sector, but extends to domestic content provisions in a wider range of inputs. The second is the possibility that there are positive spillover effects from local participation. But, of course, there are tradeoffs. Obligations placed on the investor will reduce profits, tax payments, and willingness to bid for resource rights. In some cases, they may also cause costly delays in project implementation.

Meeting Project Demands: The Upstream Link

The resource sector creates demands for labor and for various sorts of inputs, ranging from capital equipment through construction to material inputs and services. The text below deals first with labor and the case for local participation requirements, and then turns to other inputs.

There are three important arguments for promoting the employment of nationals in resource projects. One is the political importance of ensuring that local citizens are engaged and are drawing incomes from the project. The second derives from the likelihood that there is un- or under-employment in the economy, so there will be an abundant supply of cheap domestic labour. The third is based on the fact that workers will acquire skills which can then be used in other sectors of the economy. This argument is applicable to skills that are of value outside the resource sector. Perhaps particularly important are business and management skills. The research literature on spillovers from foreign direct investment (in all sectors, not just resource), suggests that a major source of new business start-ups is workers who have acquired skills in foreign-owned plants.

However, there is a trade-off, as employment of nationals may impose high training costs on the investor. A strategy needs to be developed in conjunction with investors to phase in local training and employment at a rate that does not slow down project development or disrupt the core business of resource extraction.

In addition, when speaking of employment policies in the resource sectors it needs to be kept in mind that these sectors, especially petroleum, are capital, not labor intensive. They simply do not offer many employment opportunities. Further, the labor they do employ is typically highly skilled, so are likely to be in short supply in developing countries, and internationally mobile – so those domestics workers that are employed in high skilled positions are less likely to remain in the country.

Governments will also seek to increase the share of local firms in the supply of inputs to the resource sector. In a few cases this has provided the springboard to an
internationally competitive supply industry, such as the Norwegian offshore oil supply sector. More generally, when properly managed, it has provided an opportunity for developing the local private sector, creating jobs and increasing the share of local value added.

There are five objectives governments can pursue in designing local content policies.

First, government should ensure that barriers to local participation are removed. This involves making information about contracts and about local firms widely available, ensuring that local firms can respond rapidly to opportunities, e.g. by removing obstacles to obtaining land or capital, and also, in some cases, making sure that contracts are unbundled, so that small firms with narrow capabilities are not disadvantaged. In some countries the host country tax regime may actually discriminate against local firms, e.g., by requiring that they pay tax, while exempting the foreign investor from VAT on imports.

Second, government needs to formulate a local value-added strategy with investors. This is likely to take the form of staged targets for domestic content and participation. It must be grounded in realistic assessments of investors’ needs and of local capability to meet them, and will typically require the establishment of an independent agency that can have a dialogue with investors. Mutually agreed long term content targets are generally to be preferred to top-down percentage targets. As one observer has noted: “maximizing the benefits of local content does not equate to maximizing local content (in percentage terms)” (Olsen, 2011). These targets will vary widely across different types of input required by the international operating companies. Clarity on what the contractor is expected to deliver on local content, outside of a percentage number, is extremely important and is too often missing. This clarity can be provided in policy statements, regulations, legislation or licensing. As an example, Nigeria’s ambitious agenda is summarized in the Annex to this precept.

Third, a strategy for developing host country capacity needs to be put in place. This will involve education and training in colleges and universities, and on-the-job training by firms. Once again, collaboration between international investors, local firms and government in designing this strategy is needed. A successful strategy will be based on a rigorous diagnosis of the bottlenecks that are likely to occur as a sector develops. It should be designed recognizing that it is more desirable to build a high level of capability in a few areas rather than weak capability in many. Technical disciplines are often emphasized, but other skills can prove critical as well. For example, collaboration between BP, a national university and the Angolan
government, led to establishment of a highly valued masters program in petroleum law. With respect to technical skills, high-end capacity building should look towards international certification which the international companies require of most of their suppliers.

Fourth, there is a risk that local suppliers that fail to reach high efficiency levels are protected by local value added requirements. This is costly and blunts the incentives to raise efficiency. Some attempts to develop local value added in some areas will fail, and this will necessitate a means of removing/relaxing targets where appropriate.

Finally, procurement procedures must be competitive and transparent. Favoring one set of suppliers over another is a recipe for over-charging, corruption and cronyism, and affords weak incentives to raise efficiency. The procurement process must be open to as wide a range of firms as possible. It must credibly retain the possibility of using foreign suppliers if local firms are unable to offer satisfactory prices, quality or timely delivery. Suppliers are critical to building local content. They are big spenders and typically do most of the work (on behalf of the investor). They need to be involved in discussion of local content and procurement strategies. As noted above, the packages they bid on should be sufficiently unbundled to leave space for local participation where there is likely to be a match with local competencies.

With respect to all of the above it is of paramount importance to start as early as possible whether this is with respect to opening up of the resource sector, or to the design of local participation around a single major project. The Annex contains an illustration of local content “mapping” around a petroleum project.

Using Project Supplies: The Downstream Link

Resource-related developments may also be based on using the resource itself. Should a supply of hydrocarbons or minerals be exported directly or used in downstream activities to add further value?

In some cases, local use or further processing is more or less dictated by location of the deposit, the volume of output produced, and the bulk or weight of the product--its 'tradability'. Thus some minerals almost invariably undergo some processing

\[\text{5 Cost increases associated with over-charging can be significant} \text{ – as high as 25 to 35 percent in some countries. In the end it is the host country ministry of finance, not the investor, that suffers, since the investor will deduct these costs in calculating taxable income.}\]
prior to export (e.g. smelting of copper ore). The most interesting commodity that falls into this category at present is natural gas from fields that are too small for liquefaction or pipeline export technology to be viable. The main uses of such gas are as feedstock for local fertilizer production or electricity generation, both of which may have major implications for other sectors of the economy and for the comparative advantage of the country as a whole.

In all such local use cases the government should ensure that there is a pricing and regulatory framework in place such that the large and long-run investments required can be planned in an efficient manner. Coordination is also required, for example on the timing of gas supply from the field and of demand for it in downstream facilities. Such a framework and planning role will typically be undertaken by a government ministry. However, the investments will need to be subject to tests of commercial viability and will typically be undertaken by private investors, although public-private partnerships on selected infrastructure may merit consideration.

The more common case is where the resource can be readily exported at a well-defined market price. What is the case for further processing domestically rather than export? In economic history, it has undoubtedly been the case that supply and local use of natural resources has been a force for development. The best examples are the industrial revolution in Britain, and then the development of parts of Germany, France, Russia and the United States, built on coal, iron ore, and later on petroleum. Yet in the postwar period there are few examples of developing countries building successful economies on further processing of local hydrocarbons or minerals for export. A key contributing factor is that the technologies in these sectors have changed to the point where they are highly capital and skill intensive, no longer matching the capabilities of developing countries. Furthermore, there are unlikely to be large spillover benefits from activities such as petro-chemicals or mineral refining. These activities are capital intensive and large scale, and are not fertile ground for the sort of new business start-up discussed previously.

These observations point to the importance and usefulness of using strict commercial criteria for the development of downstream activities. There are many examples of failed strategies to develop local downstream activities and such policies are probably best avoided in general.
5. Working with the Private Sector and Other Stakeholders

The conventional approach to identifying opportunities for the government to catalyze private investment has been to list perceived market or regulatory failures (obstacles to investment), target them for policy intervention and move on to consideration of the administrative and fiscal or financial requirements for implementation. Rodrik (2004) argues that identification of these opportunities is highly uncertain, and that “the task of industrial policy is as much about eliciting information from the private sector on significant externalities and their remedies as it is about implementing appropriate policies” (see Box 1).

**Box 1 Industrial Policy**

“The right model for industrial policy is not that of an autonomous government applying Pigovian taxes or subsidies, but of strategic collaboration between the private sector and the government with the aim of uncovering where the most significant obstacles to restructuring lie and what type of interventions are most likely to remove them. Correspondingly, the analysis of industrial policy needs to focus not on the policy outcomes—which are inherently unknowable ex ante—but on getting the policy process right. We need to worry about how we design a setting in which private and public actors come together to solve problems in the productive sphere, each side learning about the opportunities and constraints faced by the other, and not about whether the right tool for industrial policy is, say, directed credit or R&D subsidies or whether it is the steel industry that ought to be promoted or the software industry.

Hence the right way of thinking of industrial policy is as a discovery process—one where firms and the government learn about underlying costs and opportunities and engage in strategic coordination.”


There is growing evidence that this partnership approach, subject always to the caveats noted above (see Section 3) on the need to maintain a certain separation, can be very effective not only in general, but in the resource sectors specifically. Several areas where the approach can be beneficial are listed below:
Constructive government-industry dialogue can result in fiscal legal, contractual and regulatory frameworks which, without prejudice to government’s interests, promote new investment. Timor-Leste took an intensively consultative approach to the design of the investment framework for its new petroleum sector and has attracted significant investor interest.

Government-industry dialogue may help define appropriate public–private roles with respect to provision of infrastructure. Certainly, while not without tensions, it has had a positive impact on the design of a Gas Master Plan for Nigeria.

It is of growing importance to the design of training and capacity building programs for the resource sectors, whether funded by government or industry.

As suggested above (Section 4) it is essential to progress on supply chain participation and other local content issues.

Finally, it is not just government and industry that need to be involved in this process. Other interested stakeholders and affected groups should be part of it as well, including civil society more broadly. In the mining sector the engagement of local communities has proved critical. It is at that level that negative disruptions to investment are the most severe. Tripartite consultation around mining projects in Lao and in Chile at the local level have informed both local content and economic diversification strategies creating a positive atmosphere.

Key References


