

The mechanisms of taxation of natural resources and property in developing and developed nations

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Abstract: The governmental revenue essentially depends on taxation and it uses the collected tax for developmental purposes. In this paper, the mechanisms of taxation of natural resources and property in developed and developing nations are discussed in detail. The main types of tax and subsidy instruments used for natural resources and objectives of resources taxation will be analyzed in detail. Additionally, this paper will shed light on taxation of property and its criteria. Lastly, the practicality of reforms relating to property taxing and resources for effective property tax will be explained.

Keywords: Taxation, Natural Resources, Property, Mechanisms.

Introduction

The supply of natural resources is limited, and their costliness and quality varies. The prospect of economic rents is offered through intra-marginal resources and thus the ability to pay taxes. If natural resources are considered from a perspective of public finance, the economic rents possess the capacity to tax natural resources, this is particularly appealing as there is no need to introduce inefficiency in the resource use pattern in order to collect such rents. In a similar manner, the information relating to relative value of different locations and land uses becomes clear to the tiers of government as well as the community property taxation with the help of the property tax and the basis of its assessment. In this manner, the optimum land use is encouraged. Finally, the land administration systems and the public decisions on planning become well-informed due to the assessment on which tax is based.

The following section discusses the taxation and policy instruments in relation to the natural resources.

Taxation and Policy Instruments

The international and domestic shareholders involve in policy making and extraction of natural resources, there is a constant shift across value chain in the relationships between these parties. In the following figure, the two rent arenas in the value chain of natural resources are demonstrated.

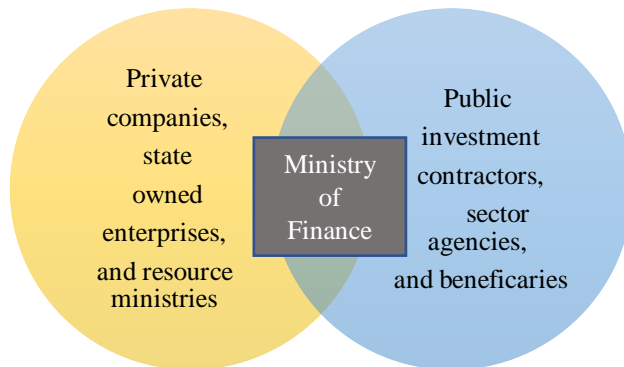


Figure 1: Two Key Rent Arenas. Source: Web (2010).

The key types of taxation instruments that are utilized for natural resources are listed as follows:

1. Taxes or Royalties based on Value of Output or Gross Volume

This category mainly comprises mineral severance taxes, forestry taxes, and landings taxes for fishes. A share of gross output or percentage royalty is the usual form in which the owner is paid in case of private ownership of the resource deposit, this is particularly true when natural gas or crude oil are considered. The production of higher cost resources and lower quality grades is restricted due to a gross reality based on the output quantity, on the other hand, the perception against lower value output is avoided due to a gross rate royalty based on value.

2. Taxes based on Hypothetical Costs

In this type of tax, high incentive for proficient factor use and management is combined with rent collection of high degree. All the cost savings are kept by the enterprise after each production unit's rate is set (similar to that of timber and forestry stumpage payments). The payments are aligned with revenues and production. The cost and quality classifications are defined and applied in different ways which is the primary issue with this type of tax.

3. Corporation Income Tax

In many developed economies, resource taxation has greatly relied on the corporation income tax as well as its provisions and exemptions. In most of the countries, historic cost appreciation, interest expense, and current expenses are allowed as deductions. Thus, it is equivalent to normal return on equity capital plus economic rent. The inflation causes capital expenditure to reduce, and it is deductible only in the specific case.

The corporation income tax has treated North America's extractive industries reasonably fair. "Percentage depletion" is the deduction use for natural gas and oil. In comparison to other types of capital expenditure, the development and exploration expenditures have also been treated fairly.

4. Direct government participation

In the developing countries, the practice of government participation in form of carried interests, partnerships, or joint-ventures is prevalent. It is also increasingly common in offshore oil (Dam, 1976).

5. Regulated Prices

When economic rents are to be transferred from government or producing firms to the consumers, regulated prices are used. The subsidies or export taxes and import taxes are required to supplement regulated domestic prices, as far as open economies are concerned. The government agency, which acts as the sole buyer, regulates resource prices (such as, natural gas in British Columbia in the UK) in some jurisdictions. The further processing can be forced or encouraged through differential taxes or export prices, however it depends on the degree of processing.

6. Quantitative Control of Development Rights

In case of The United Kingdom, Norway and other countries that are now leading in the production of oil, the development permits for the production of oil is released by the government after deciding on the scale and desired rate of development. The production level for oil chosen by Norway, considering its small population, is enough to sustain for over 100 years. However, the production level off United Kingdom is fairly rapid (Dam 1976, pp. 63, 69).

7. Quantitative Control of Exports

When the government is unable to directly control the development, it implements quantitative control of exports in order for the overall pace of development to be restricted.

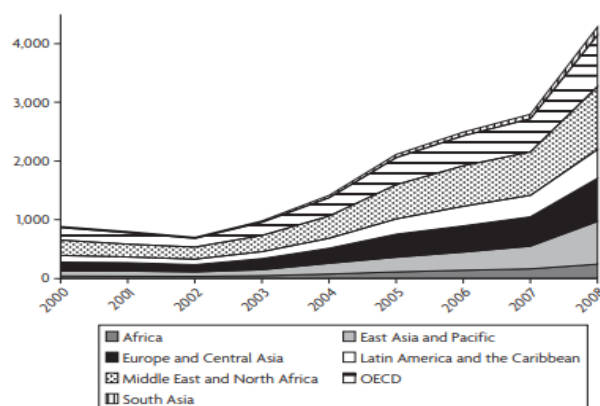


Figure 2: Extractive Industry Rents by Region 2000-2008 (US \$ Billion). Source: World Bank 2010.

Discussion Objectives of resource taxation

1. Local Employment

The number of jobs is one of the primary factors that influence the government's decision while setting subsidies and tax rates for resource development. When under-employed labor is being supplied that is enough to create a huge gap between the wage rate that reflects the next best substitute use of labor and the market wage rate, then this influence is expected to be effective. The foreign firm's tendency to hire their own citizens should be countered, particularly when local labor will need training to be used. In the choice of tax subsidies and policies, additional weight is given to the employment's growth and size (Church, 1981, pp. 19-27). The method to subsidize employment and investment, which is not expected to be analytically assessed as compared to expenditure subsidies or direct tax, is given by minor level of rent collection from projects relating to natural resources.

2. Boom-Town Problems

A temporary economic activity takes place as a result of mining projects and other resource development projects as they are usually not near populated areas. A type of boom-town problem is created because of the resource project's construction phase, this is due to the fact that when project comes on stream, the equipment and workers are relocated or idled. These costs can be mitigated through tax policy. This is because the tax policies encourage an organized sequence of projects in a district. There is another kind of boom-town problem which takes place after the ending of operation and closing of mine. The government bears the adjustment costs that the closure causes. This cost supports the expenses to maintain or relocate the unemployed workers or is put towards the continuing mining of substandard ore. The attenuation of mining projects is encouraged by tax policies as the costs for these is lesser for smaller longer-lived projects (Scott and Campbell, 1979).

3. Macroeconomic issues.

There is a possibility of macro-economic issues for economies specializing in the exploitation of natural resources. The structural adjustment issues due to the variance in international competitiveness of the non-resource sector, and national or regional inflationary pressures in the construction phase may be created if the pace of export or resource development changes severely (Ellman, 1981; Barker and Brailovsky, 1981). When the resources are exploited at a moderate pace, the adjustments relating to macroeconomic costs usually less, this is the reason why tax authorities feel inclined towards using their tax and regulatory powers to accomplish that outcome. Contrary to this, the development of export-oriented natural resources is encouraged to be accelerated in the developing nations because of the chronic balance of payment deficits.

4. Downstream Processing

Prior to exporting the resource from the producing area, achieving a higher level of further processing is the primary aim of resource taxation. In order to achieve this, export taxes or regulated prices are imposed in favor of domestic use, in addition; differential resource tax treatment on the basis of processing degree can also be used. The export taxes favoring the domestic or regulated prices are usually imposed do to this, or it can also be done through differential resource tax treatment which is based on the extent of processing. The tariff systems of importing nations (that impose high tax burden on processing country from where the resource is exported) create the “reverse preferences” and these subsidies are offered to offset them. Nevertheless, the encouragement of further processing by using tax allowances may involve loss of potential revenues, and effective subsidy rate, due to which any potential economic gain, discussed by processing activity, is outweighed (Beals et al., 1980, pp. 269-272).

5. Benefits Distribution

Most of the taxation policies focus on the distribution of benefits from natural resources. The distribution’s main margins are between foreign and domestic shareholders of the producing firm, resource companies and their host communities, the producing firms and their workers, producer profits and government revenues, and producers and consumers. The distributional grounds have been used to adopt most of the policy instruments described in the following part.

6. Competition and Industrial Structure

For the purpose of efficiency, the taxation systems related to resources are dependent on energetic competition between factors suppliers to resource projects and between the resource development firms. The nations that lack technical knowledge, needed to oversee and observe their own resource project, are the ones that greatly benefit from the reliance on industry competition. However, most of the projects of the natural resource industries are large-scale and require close monitoring, and thus there are not many companies competing for each project, irrespective of the fact that some company has not yet accomplished developmental rights or exclusive exploration. From a practical perspective, the tax authorities do not rely on decent systems and prefer simple administration of tax forms or gross royalties, this is due to lack of monitoring skills and lack potential completion. It is one of the objectives of the tax policies in some jurisdictions to foster competition, this is because of potential lack of competition. However, according to Bertrand (1981), when complex regulation and tax systems are implemented, the effect is reversed through encouraging or forcing firms for collaboration to administer the regulation.

Security of Supply

The trade regulations and resource taxation is determined through resource supply's adequacy in meeting long-term domestic needs, particularly in case of exhaustible and energy resources.

PROPERTY

According to (FIG, 2014: 13), the broad land governance (institutions, processes and policies through which natural resources, property and land is managed) comprises property taxation. In light of the findings (UN-HABITAT, 2011b), the contribution made by the property taxes to the local communities' improvement is generally predicted to be high.

Property taxation relies on a number of specific land administration processes, including an efficient property market, secure and registered legal rights to land, a profession capable of delivering reliable and justifiable property values, land use controls and a comprehensive, effective and efficient legislative code within which property taxes can be levied, collected and spent (Slack and Bird, 2015; UN-HABITAT 2011a; 2011b).

The benefits gathered from sound land administration systems and other similar systems also include the property tax. A virtuous circle of greater property values, quality services and the possibility of higher revenue is created when such revenues generally pay for environmental, social and economic benefits and services. According to Plimmer & McCluskey (2012a & 2012b), this circle is also created when such revenue is considered as an important factor of a sustainable community

The criteria for property tax is discussed in the following part.

Criteria for Property Tax

There are different perspectives from which property tax and its desirable criteria can be viewed, such as, from the viewpoint of the community, the tax payer, the assessing authority, the authority that collects tax, the spending authority, and the government. A distinct preferable outcome is obtained from each of the above.

For instance, a property tax that impedes the government's management of the national economy will not be preferred. Similarly, the one that causes conflict between tiers of government administration and existing taxes will also not be desired by the government. A tax which cannot be avoided or evaded easily will be preferred by the tax collecting authority, the one that is imposed under explicit and clear legislation. A yield that is enough to meet its financial obligations to its people, and is certain, predictable and stable will be required by the tax spending authority so that it is enough to accomplish its own objectives as well. The preferable tax collection method is the one that ensures minimal costs and losses, and high compliance rate, thus convenient, cheap, and simple collection method should be in place. (Bird and Slack, 2007; Slack, 2011). Such a tax payment culture should be developed that shows a clear connection between the taxes paid and how they benefitted the

community, so that the issues related with non-compliance can be dealt with motivation. (UN-HABITAT, 2011a).

In order to minimize the time and cost spent on the provision of reliable tax assessments, appropriate legislation, sufficient data, sufficient technological and human resources are required by the assessing authority (which should be totally independent of tax spending authorities as well as the tax collecting authorities). The perception of fairness is required by the tax payer regarding the implementation, administration and other wide-ranging tax effects; that it should be spent wisely and efficiently on the community; no anachronistic or illogical exemptions should be included in it; it should not just be a way to raise revenue; and that the methods of payment and appeal are cheap and convenient. It may very well be expected by the taxpayers that, rebates is applicable to those who have limited means. The available resources and range of needs need to be realistically evaluated in relation to the above mentioned factors. The locations that lack transparent, healthy, or active property markets do not need a property tax system that requires updated sale prices of wide-ranging real estate. In addition the jurisdictions where such skills are limited, there is no point in devising a tax system that depends on experienced property professionals.

Practicality of Reforms

An existing tax system for property is generally a consequence of:

- i. Cultural or Social Acceptability
- ii. Political Will
- iii. History

An outdated tax system is implied by political inertia, in most cases. This is true particularly in case of England, where the residential properties assessment basis have not been updated since 1993; and in France, they have not updated the basis since 1970. The shifts in relative values of different forms of real estate and locations are not recognized by such outdated assessments, even if revenue is collected.

In a similar manner, certain economic or social difficulties are reflected when exemptions from (any or all of) the tax payable are made, when any such advantage given to specific taxpayers group is not removed, there could be inequity or perceived inequity. For instance, in the United Kingdom, “personal element” is included in the Council Tax paid, through which the number of adults in occupation are reflected. This is because from 1989 and 1993, an unsuccessful Poll Tax was imposed by the government. In this type of tax, there is a reduction of 25% in the entire Council Tax bill if there is only one adult in occupation, irrespective of the wealth that individual has. There are major political and social implications of these tax bills, in addition to the explicit differences in tax bills for

two neighboring households. For instance, when a single adult occupation is rewarded, it encourages the properties' underuse; as well as contributes to the severe and chronic shortage of housing in the United Kingdom.

It takes a long time to apply major reforms to property tax system. This is because they have a potential to disrupt the property tax payers as well as affecting their revenue source. These are costly and they pose a great loss to the tax spending authorities and all the services funded by them. Financing arrangements should be modified by the businesses. Also, the financial management should be taken into reconsideration by the residential taxpayers in accordance. If the change is not accepted by the community of taxpayers on a social level, then serious political implications can occur. (Slack and Bird, 2015; Norregaard, 2013).

The duty of the government also includes setting up systems that are capable for monitoring the development of socio-economic acceptability of their property tax rule on a regular basis. This is done so that damaging and expensive reforms can be avoided. The minor legislative reforms have more advantage and chances of acceptance than the major ones when the resources specially funding are lacking. But these level of reforms may prove to be inadequate and insufficient to cope with the longstanding and fundamental criticisms. These in turn also may lack the support from the government if the gains that are made are not proven to be sufficient.

Resources

The resources that are generally predicted for an efficient and effectual property tax tend to differ with each system. In the same way, they also differ in jurisdiction. Nonetheless, some of the primary needs are usually for:

1. Technological and human resources in order to conduct analysis of such data and inculcate the tax assessment.
2. The data about the real state that is to be taxed and a basis for a tax assessment.
3. Provide data on each of the tax payer individually. Permission to access the information consisting a program of education that gives surety that they have the full knowledge about the reasons the principles of the tax. Also, they are aware of the amount of their liability of tax.
4. Support of the above points by the administration, comprising of collection, efficient and effectual billing and enforcement.

Conclusion

In this paper, the aspects related to taxation of natural resources and property were discussed. Firstly, the instruments of taxation and policy are comprehensively explained which shed light on the taxation policies of natural resources in developing and developed nations. After that there is an in-depth discussion on various objects of resource taxation. In the case of property taxes, they greatly contribute towards the enhancement of local community. There is an established criteria for property tax which varies from nation to nation, however the fundamental principle remains the same. Lastly, there is a brief discussion on the predicted resources for an efficient and effectual property tax which includes technological resources, human resources, data relating to the tax payer and supporting evidence. The varying conditions of the international market decide the tax rules. The producers and government of any nation would prefer the tax system that is stable and flexible, and through which benefits and costs can be distributed adequately depending on different price and cost conditions.

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