16 February 2012

MEMORANDUM

From: Robert Conrad

Subject: Ring Fencing

Ring fencing as I understand the concept is described in this memorandum. Justifications for the application of, and the costs associated with, applying the concept in Mozambique are also discussed. No recommendation about ring fencing is made in this memo. Rather, my intent is to help clarify the concept and its application to increase the chances for a policy decision based on informed self-interest.

1. Ring Fencing

Ring fencing is a generic tax term that is not restricted to natural resource extraction. Ring fencing is a term applied to any set of activities that are taxed, either under special rules or by segregating a particular activity, or set of activities, for separate taxation. One example of ring fencing outside the natural resource sector is the segregation of income from electricity generation between the production and transmission of electricity.

Within natural resources in general and mining in particular, ring fencing is used to segregate certain activities and tax, or at least attempt to tax, those segregated activities independently from other activities in which an investor might engage. Ring fencing might be achieved in two ways. Horizontal ring fencing is a situation where the same, or similar, activities (such as mineral extraction from two different physical locations/tracts/license areas) are taxed separately. That is, the taxpayer will compute a separate tax for each property instead of computing a single tax for the aggregation of interests. Vertical ring fencing is a situation where downstream activities, or a particular set of downstream activities, are segregated from upstream activities. This type of ring fencing might be achieved by administrative definition in some instances. For instance, concentrating, smelting, and other downstream activities might be defined as "manufacturing" as opposed to "mining" in the tax law, thus potentially separating activities for tax or other regulatory purposes.[1] Regardless of the type of ring fencing, some type of separate accounting is required to compute the tax base attributable to the

[1] This distinction is maintained in the United States and I was informed that Mozambique has a similar policy. This could have implications for policy applications in Mozambique. For instance, the law on fiscal incentives for mining and petroleum contains mineral incentives, while general investment tax credits and other incentives apply to manufacturing under the general tax law.

different activities when ring fencing is imposed. Thus, one important practical issue is the ability to measure the tax base attributable to segregated activities.[2]

An example will illustrate the point. Suppose an organization has three mines in different parts of the country, two concentrators, and one smelter. All smelter output is exported. All production from Mine 1 goes to Concentrator 1 for processing while production from Mines 2 and 3 goes to Concentrator 2 for processing. All output from Concentrators 1 and 2 goes to the smelter for processing and the smelter does not use throughput from any source other than Concentrators 1 and 2.

There are a number of ways this organization can be ring fenced, including:

a. Vertical Ring Fencing between Mining and Processing. Mines 1, 2, and 3 would be treated as one group, while the two concentrators and the smelter would be taxed together as a separate unit.

b. Horizontal Ring Fencing for Mining and Vertical Ring Fencing for Mining and Processing. In this case, Mines 1, 2, and 3 would be treated as separate units under horizontal ring fencing, while the two concentrators and the smelter would be taxed as in Part 1.

c. Complete Horizontal and Vertical Ring Fencing: Each mine, each concentrator, and the smelter would be taxed as separate units in this case.

These three examples are not exhaustive for the assumed facts but illustrate the different combinations of activities that might or might not be aggregated into one unit.[3]

2. Taxes and Charges to which Ring Fencing Might Apply

Ring fencing can be applied to a number of taxes and charges:

a. Profits and Income Tax: Ring fencing is most commonly applied to income taxes where separate accounting by ring-fenced activities is required. In

---

[2] It might be thought that the whole should be equal to the summation of the particular parts. For instance, if the total profit from two deposits is 100 then one might expect that separate accounting for each project separately should be equal 100, perhaps -10 to Property A and 110 to Property B. Such a result might not be achieved in practice however because the rules applied to the computation of each separate property may different from the rules applied to the aggregate (or to consolidated) profit in addition to the differential costs of maintaining different accounting regimes. Such limitations should be kept in mind when evaluating different ring fencing schemes.

[3] Ring fencing may be the result of corporate structures, either required or allowed. For instance, one investor might be allowed, or required, to establish separate special purpose entities by tract or activity. The creation of subsidiaries and reporting on a separate company basis can be equivalent to ring fencing.

effect, the intent is to treat each separate activity as a distinct, independent taxpayer even though one investor owns all of the activities.

b. Value Added Tax (VAT): Ring fencing might apply to VAT and in this case each separate activity is effectively a separate VAT taxpayer. In general, ring fencing for VAT purposes might be inefficient or ineffective because trade between the separate segments will cancel out (no revenue effect) and the total VAT on trade with third parties should be independent of whether the investor's activities are ring fenced or combined, at least other things equal. Situations, however, where ring fencing might be justified for VAT purposes include:

   i. If VAT revenues are allocated from the central government to local or regional governments;

   ii. If firms produce both taxed and exempt activities (a firm could produce both taxed and exempt supplies in different locations or in different operations); and

   iii. If investors engage in different types of activity (one investor could engage in both leasing and other financial transactions and production of goods like autos).

c. Royalty: Ring fencing may be a de facto outcome of the payment's function, which is to compensate the resource owner (the government) for the sale of reserves when they are extracted. If the royalty is based on production of ore and the rate is either per unit or ad valorem, then there is ring fencing by definition. Ring fencing may not be the result, however, if the royalty is imposed on sale of concentrate from more than one deposit. Even in the case were royalty is imposed on concentrate sales from a single deposit vertical ring fencing is absent.

d. Excess Profits Tax: An excess profits tax might be ring fenced by property if the policy intent is to capture some proportion of excess profits, however defined, attributable to a particular property. The property might be a lease, an aggregation of adjacent leases, or a single mine (or well) depending on the legislation and regulations.

3. Gains and Losses from Ring Fencing

Two advantages are noted for ring fencing (either horizontal or vertical). First, tax losses from exploration, development, and other start-up expenses cannot be used to offset income from either other production operations or downstream activities. Second, and related to the first, is that the ability to offset income with losses from another set of activities might create a competitive advantage for preexisting profitable firms relative to new entrants. The revenue loss and competitive advantage implications from aggregation of interests results in mining in part because exploration and development expenses are either immediately expensed or benefit from accelerated amortization. The need for ring fencing in this case can be reduced by replacing expensing with capitalization and amortization more in accord with economic principles. Exploration and development are capital expenditures and income accounting should reflect the capital nature of the expenditure by treating the expenditures like other expenditures on capital goods (either tangible or intangible).[4]

There are also costs to ring fencing. The most obvious cost is the administrative need to separately account for net income (or cash flow) or other measure of the base attributable to the separate activities.[5] Attributions of revenue (in cases where there are transfers from upstream to downstream activities, both of which operate domestically) and expenses must be made when an investor has two activities that are segregated, either horizontally or vertically. Transfer pricing rules may have to be applied or formulary methods used to attribute expenses and sales in such cases. Absent reasonable administration, an investor can use transfer pricing to offset, at least in part, the expected revenue gain created by the inability to use losses more rapidly. For instance, the investor might reduce losses attributable to a mine by shifting some expense otherwise attributable to a loss making mine to a profitable upstream processing operation. In effect, transfer pricing may become a domestic as well as a cross border issue.

4. Deciding the Best Policy for Mozambique

In my view, there is no best practice for ring fencing. As noted, the need for ring fencing can be reduced significantly if exploration and development expenses are capitalized in more in accord with economic principles. That said there are still tradeoffs between administering ring-fenced systems relative to systems with aggregated interests, even when significant upfront capital expenditures are expensed. Some

[4] It might be claimed that expensing exploration and development expenses is beneficial to the investor risks are offset, at least to some degree. There is an economic question about whether expensing such costs are efficient.
[5] For discussion purposes, I am assuming that ring fencing is used to measure income.

important issues to consider before Mozambique can make an informed decision include:

a. To what extent will ring fencing is a practical issue? For instance, if Mozambique might maintain a policy under which separate deposits are held by separate unrelated parties making, the issue irrelevant. On the other hand, if the same foreign or domestic investor is able to hold more than one mining license as well as engage in downstream and even unrelated activities, then policymakers will need to make an informed judgment about the need for ring fencing.

b. How will ring fencing be administered? If ring fencing is adopted, then clear administrative guidelines will be necessary to segregate the interests to be taxed separately. For instance, there might be an issue of ring fencing adjacent licenses or determining at what point in the chain of value added to separate upstream and downstream activities.

c. What methods will be used to separately account for income between ring-fenced activities? In addition, what accounting rules (both tax and financial) might be necessary to measure the tax base when interests are aggregated? There is no practical standard for determining certain attributions. For instance, two separate properties might share a purchasing office for inputs. Cost of the purchasing office could be attributed to each separate property based on the ratio of input values supplied to each property, by the proportion of orders of each separate entity or other, reasonable method.

d. What are the revenue effects? Potential revenue effects relative to changes in administrative costs should also be considered.

The information contained in this memorandum has been largely descriptive and I will be happy to supply technical detail about options should the Government express an interest.

Thank you.