

## Session 7. Ex-Ante Assessment of Tax Expenditures. Practical Session

### Case Study – Introduction of a corporate income tax (CIT) credit

*Based on the proposed policy change down here, and on the seven criteria discussed during Session 7, please provide a brief discussion of each of these criteria highlighting what, in your opinion, an ex-ante assessment of the proposed TE should cover.*

**Proposed Policy Change:** Introduction of a 10% CIT credit (non-refundable) to corporations in respect of expenditures incurred in Ghana for exploration in relation to the mining of traditional minerals such as gold, diamond, bauxite, and manganese.

1. **Relevance & Rationale:** The government intends to boost investment in the mining sector, which may also boost employment and earnings.

A reduced effective rate of CIT can incentivise investment by enabling businesses to retain a greater share of the income generated from the investment, which they can either pay out as dividends to shareholders or invest back into the business. In other words, a lower effective CIT rate increases the returns on investment, encouraging firms to invest more.

The net return on investment will depend on other, such as market size or costs for locally purchased inputs (including skilled labour and electricity supply) and institutional factors but, at the margin, the effective CIT rate should be a key determinant.

2. **Cost:** In this case, the tax base would be the amount deducted from the tax liability. To estimate the total revenue forgone, access to administrative data on business sector, size, etc. shall be needed. Hence, might be difficult to get an accurate figure beforehand.

For an ex-ante assessment, rough estimates, based on macro assumptions and previous existing data (if any) can be used as a proxy.

- a. Relevant behavioural effects for consideration include profit shifting and other changes in avoidance and evasion activity, changes in dividend payments (and hence in taxes on dividend payments) and changes in investment. The latter would involve changes to many other economic variables (e.g. productivity, output, wages, prices), which may not be feasible without full consideration of the macroeconomic effects of the reform.
- b. Key uncertainties include: the underlying growth of the tax base in the absence of reform; the size of the relevant behavioural elasticities included in the behavioural costing.

3. **Impact & Evidence:**

**Effectiveness/Evidence:** Since the rationale for this measure is mainly targeted at incentivising investment, it would be useful to examine the existing evidence on the relationship between effective CIT rates and investment decisions, and between investment and employment and earnings. This includes academic studies utilising cross-country data, as well as survey or consultation evidence of investor intentions and the relative importance of taxation in decisions concerning foreign investment and location.

- a. Given the particularities of the mining sector, it might be worth looking into studies assessing these issues with a focus on this specific sector.
- b. Best practices, but also experiences in comparable countries and contexts shall be particularly relevant.

**Affected Groups:** The winners (and losers) from a reduction in effective CIT rates are likely to be hard to identify accurately ex ante (and sometimes even ex post). Corporations eligible for the tax benefit, will benefit from increased after-tax profits, which could be used in different ways. In the short term, they could be distributed to shareholders, be retained by the business and/or be invested in new capital. In the longer term, any increase in FDI or domestic investment might increase productivity, and hence pre-tax profits, as well as employment and wages.

Further consequences of the policy are likely to come through their impact on government revenues. It is likely to be difficult to analyse who would be affected most by lower government revenues, unless the reduction in CIT revenue is directly linked to other policies.

#### 4. Efficiency

- a. **Alternatives:** There is a range of alternative policies that might stimulate investment in the mining sector. For example, the government could decide to lower the statutory CIT rate. This could minimise the distortions that sector-specific TEs trigger as well as the risk of lobbying and rent seeking. On the other hand, such measure would probably increase the fiscal cost of the reform since the tax benefit will apply to all firms and investment projects, including those that would have been profitable (and hence would have taken place) before the reduction of the CIT rate.

Beyond CIT, changes to other taxes could also be explored, including taxes on trade or on skilled labour (e.g. social security contributions) and other production inputs such as energy.

Other changes, beyond tax policy can also be considered. For instance, public investment in transport and energy infrastructure may be another way of stimulating investment in the mining sector by decreasing costs of production for investors. Whereas it might take longer for the impact on investment to be realised through this channel, such public investment likely has broader social benefits.

- b. **Administrative & Compliance Costs:** Changes to statutory tax rates are likely to be administratively and legislatively simpler to implement. Introducing a new sector-specific TE instead, increases the complexity of the tax system (for taxpayers) and entails a larger administrative burden for the tax administration.

On the other hand, tax deductions and tax credits are simpler to administer than a refundable tax credits since the latter entails the administration of compensation mechanisms to channel the share of the benefit that could not be claimed by taxpayers, e.g. because of profits being too low (or losses).

As mentioned before, the potential impact on compliance is not conclusive. Whereas TEs are prone to lobbying and rent seeking, lowering effective tax rates might have an effect on formalization. The net effect would probably depend on several aspects, e.g. market structure, share of informality in the sector, etc.

5. **Side effects or Externalities:** If the introduction of the tax credit succeeds in stimulating investment in the mining sector, there could be wider benefits, including but not limited to: job creation in other sectors, knowledge transfer and higher wages; technology adoption, as well as increased exports and economic growth.

As mentioned before, a lower effective CIT rate might also reduce tax evasion and avoidance by way of reducing the return to such activities.

Yet, there are also risks that can arise: the international structure of many of the companies in the mining sector might trigger profit-shifting increasing the risk of a overseas leakage of the benefits. Likewise, an aggressive strategy to import foreign labour could mitigate the potential positive effects on the local labor market.

If lower CIT revenues necessitate reductions in spending elsewhere, it might be that higher private investment is (more than) offset by lower public investment, and the net impact on investment might even be negative. Otherwise, the reduction in revenues implies a deterioration in the government's fiscal position, which might be associated with higher inflation and interest repayments on public debt, for instance.

Moreover, if the mining sector is not scrutinized properly, there might be unintended consequences on environmental and social sustainability since, mining activity can entail risks both to the environment as well as to labor market conditions, and even human rights...particularly in developing countries.

6. **Monitoring & Evaluation:** The evaluation of the effectiveness of this policy may need to be undertaken after a long period to allow for the time lag between the policy coming into effect and any changes in business investment decision-making and implementation.

Moreover, there may be several other factors influencing investment decisions and it would therefore be difficult to attribute aggregate changes in observed investment in the mining sector to the introduction of the tax credit in itself (i.e. a causal effect).

- There are different methodologies that can help to ensure causality...all of them, showing different levels of difficulty and data requirements. Just as an example, it would possible to compare trends in investment by firms (of similar characteristics) in sectors that were not affected by the policy and firms in the mining sector (the 'treated' sector). Such analysis could utilize administrative tax data (e.g. on corporations' use of capital allowances, payrolls, etc.) and/or enterprise surveys or industry reports.

Annual or more frequent monitoring of the revenue impact of this measure would also be useful to establish the extent to which the risk of revenue loss was realised. Again, any inference on the causal revenue effect of the policy would need to be extremely cautious –

particularly for such a policy that is likely to have widespread behavioural and economic effects and knock-on impacts on many other tax revenues.

7. **Policy coherence:** TE provisions are implemented to pursue different policy objectives. Thus, to ensure policy coherence, they should also be incorporated in the budget process so that a holistic assessment of spending programs can be done.

It would be important to understand if there are other direct programs or TEs trying to incentivize the mining sector. It would also be relevant to understand if the development of the mining sector is a priority for the government, e.g. included in the Budget and/or the Medium Term Revenue Strategy (or similar).

- E.g. COFOG classification or similar