

Tax Regimes on Mining in Latin America

This policy brief examines the different types of taxes applied to large scale mining in Latin America, the region where Canadian firms are most active around the world, and elaborates on their positive and negative effects on host-countries, their governments and foreign investors

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Two fundamental issues underlie mining taxation regimes in developing countries. One is that mining targets finite, non-renewable resources and therefore, taxation has the exceptional role of compensating for the de-capitalization a country endures when those resources are extracted and sold, in most cases, abroad. Related to this fact is that large scale mining most often leaves permanent damage to the environment that also requires compensation.

The second underlying issue is that the firms extracting the minerals or metals are most often foreign-owned. The difference between foreign tax payers and national tax beneficiaries – voting citizens of a mine-hosting country - elevates the risk of conflict since foreigners are inherently likely to see no direct benefit in paying taxes (except to avoid expropriation) and consequently seek to minimize them. Meanwhile, voting citizens naturally seek to get their governments to obtain the maximum amount of taxes as that translates into better services, larger public investments and income transfers to compensate for the exported non-renewable resources and the lasting environmental costs. This situation is further aggravated by the fact that in this industry the tax payers are very few in number, normally a handful of foreign firms or even just a couple, while the tax beneficiaries are much more numerous.

With these considerations in mind, the following section details the two main types of tax instruments applied to the mining industry in Latin American countries: royalties and corporate income tax. It traces the current regimes from their origin in the 1980s and 1990s and discusses some of their recent updates.

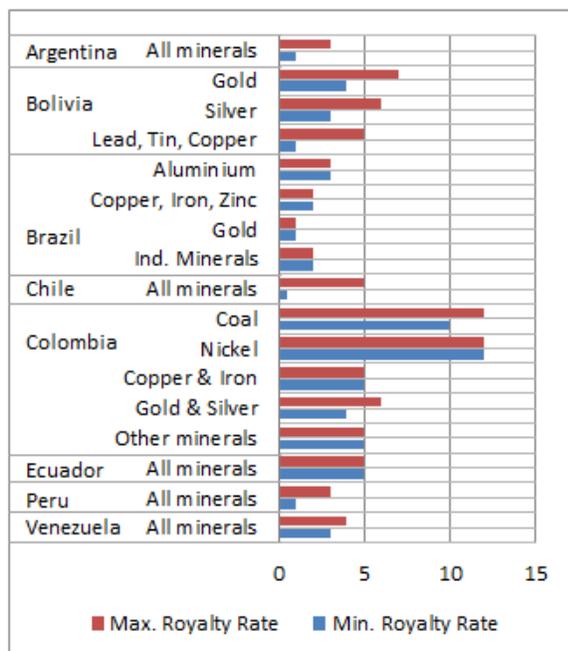
Royalties

Royalties are the most common type of tribute applied to the mining industry in Latin America and around the world. They are technically “rents” and not taxes, as their logic follows the notion of a firm paying a state (government) for the right to extract the non-renewable natural resources that the latter owns.

Nonetheless, royalties have become the backbone of the tax regimes on mining from the point of view of revenue generation for host-countries around the world.

In most of Latin America, the rates at which royalties are applied to the mining industry were significantly lowered during the 1980s and 1990s with the establishment of new mining codes. In most countries, royalties went from 10-15% of revenues to 1-5% of revenues or even those same rates applied to just profits, with these calculated as the revenues minus all production costs, including capital and even freight in some cases.

Royalty Rates in Selected Latin American Countries (2013)



Source: Summarized by author based on national legislation.

The drastic reduction in rates was done during the peak of the Washington Consensus period, when governments held a widespread view that developing countries should reduce taxes on firms in order to attract foreign direct investment as the main way to develop economically. The specific advice of lowering mining royalties to these levels was provided by the World Bank (WB) and the International Monetary Fund (IMF), often as part of structural adjustment programmes that also included the rapid sale of state properties and firms, including significant assets in the extractive industries of Mexico, Peru, Brazil and Argentina.

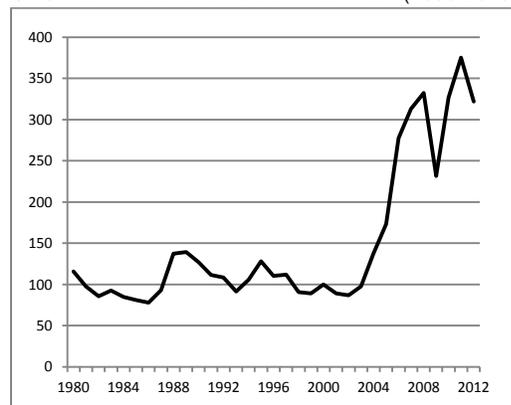
When these policies were being implemented international mining prices were extremely depressed. Gold and silver were approximately US\$ 300 and US\$ 5 per ounce respectively during the 1990s, compared to US\$ 1,670 and US\$ 32 in 2012. Thus, mining was not expected to be a significant source of fiscal revenues but envisioned as an instrument to diversify types of foreign investment received and/or to attain more geographically balanced patterns of growth.

The persistence of low international mining prices during the 1990s also convinced Latin American countries that higher royalties would make many, if not most, mines in operation unprofitable and likely to close. This was because high rates in royalties can lead mining companies to only exploit the best veins, thus shortening the potential life of mining projects.

This shortened and often abrupt end of mining projects in turn increases instability in local economies, by first absorbing labour and capital for direct jobs and indirect business opportunities to open a mine during times of high international prices, to later dismissing those workers and producing widespread

bankruptcies in mine-related local businesses when international prices fall. On those grounds, leading mining nations such as Chile and Peru initially accepted the WB-IMF recommendation of only having royalties or other taxes on profits and not on revenues.

UNCTAD Mineral and Metals Price Index (1980-2013)



Source: UNCTAD Statistics (<http://unctadstat.unctad.org/>)
Price Year 2000 = 100

However, as mineral prices grew since 2003 by over 300%, large-scale mines became extremely profitable and foreign direct investment in Latin American mining grew exponentially. In the case of Canadian firms, they went from owning only 2 mines in the mid-1990s to 86 mines in 2012, with revenues growing from less than US\$100 million to US\$19 billion in 2012. However, tax revenues for the host countries where they operate have remained at much lower levels. The asymmetry between the gains for mining companies and those of governments is consistently observed as a source of conflict between local groups, national governments and multinational corporations.

A partial solution to this problem seems to be variable royalty rates, which are already employed to some extent (see chart detailing the minimum and maximum royalty rate for various minerals in Latin America). So far, this variation in rates has been insufficient to guarantee a proportional increase in state's

revenue in the increased profitability of mines when prices climb, as they have this last decade.

Regardless of their incomplete application, royalty rates also have other significant influences on natural resources-based development. If rates are fixed at a high level, there may be fewer mines in a given country or region, thus the aggregate environmental impacts will be reduced. As such, conservation circles support the application of higher royalty rates for nations where mining competes with other economic activities for land and water, or where it has particularly high environmental costs. In terms of the firm structure in the mining industry, royalties are a "regressive" tax in that larger scale, highly efficient (most often, foreign) firms can better afford to pay it than smaller scale (local or national) miners. Therefore, the higher the royalty rate, the more efficient and capital intensive a mine will have to be in order to be economical. As large foreign firms are the most technologically advanced they end up thriving in this climate at the expense of midsize local firms and artisanal miners. Evidence of this is already evident in Brazil, Colombia, Mexico and Peru, where mining production has become increasingly concentrated in the largest firms. Since 2008, the policy response to this phenomenon has been to apply different rates according to the scale of production.

An important fiscal consideration is that, compared to other revenues, royalties are much easier to collect as that can be assisted by on the ground or border inspections rather than supported by sophisticated financial audits to calculate the amounts to pay. For the same reason, they are less difficult to forecast because fewer factors are involved in their calculation compared to corporate income tax, for example. On these grounds, revenues

from royalties are often recommended by the WB and the IMF to be earmarked for long term projects such as education funding or physical infrastructure. For the same reason, royalties have frequently been left for the smaller, less prepared bureaucracies of the subnational or provincial governments to collect. In that case, their direct territorial control can actually make them more effective than the national, but far-away placed tax agencies.

The following table summarizes the pros and cons of different royalty rates:

Rate or mode for royalties	Positive effects	Negative effects
High rates	<p>Guarantee a significant income for state over the lifetime of a mine.</p> <p>Royalties are more difficult to avoid or minimize than corporate income tax. Collection is also more transparent.</p>	<p>Can render mines uneconomic when prices collapse.</p> <p>Pushes mining companies to exploit only most profitable deposits, thus multiplying projects instead of thoroughly working on a smaller number of mines.</p>
Low rates	<p>Guarantee a flow of income for host-country even when prices are very volatile.</p>	<p>As royalty income is too low, dividing it between national and local authorities makes resulting fractions insignificant amounts to invest on local or national development.</p>
Variable or on profits	<p>Similar to corporate income tax, however levied differently. Can potentially help to capture windfall profits when global price spikes occur.</p>	<p>Just as corporate income taxes, very vulnerable to tax avoidance or cheating through transfer pricing, fake licencing, etc.</p>

Corporate Income Tax

Mining, as any other part of the economy, is subjected in Latin America to corporate income taxes (CIT). This tax seeks to capture for the state a percentage of the profits (named income here) that firms make from their commercial activities. The CIT is calculated on the surplus that comes from subtracting all operational costs plus the depreciation of assets involved in production from the revenues obtained in a given period of time. On the advice of the WB and IMF to developing nations, CIT has long been the preferred mechanism to collect revenues from natural resources, being originally envisioned to bring the bulk of the revenue from mining (in fact, royalties might have been more important in the 2000s in Latin America). The argument for preferring CIT is that, unlike royalties, it does not “discriminate” against extractive industries over other industries. Besides, CIT is also progressive in the sense that larger, more profitable firms pay more than smaller firms which are most often less profitable. In most countries in Latin America, CIT is applied at rates that vary from 18.5% in the case of Chile to over 30% in Argentina, Brazil and most other countries.

In comparison with royalties, CIT has the fiscal advantage that as the profits of a mining company increases, due to for example growing international prices, so does the take the government receives through this tax. The downside is that CIT is very pro-cyclical, meaning that as international prices fluctuate, the monies received from mining by a state follow that same trend because the profits of the mining firms shrink or grow accordingly. This is a significant problem since government expenditures are needed more in times of economic downturns than when going through economic booms. Therefore, developing countries which are fiscally dependent on the

mining industry need to have mechanisms to save revenues, guarding for the cyclical nature of their governments' incomes.

Reversing this logic, countries without adequate institutions to save income from boom periods to be used in crises times, increase their vulnerability to international price changes when implementing tax systems for mining based around CIT without a strong component of royalties. For that same reason, CIT is not a suitable source of revenue when earmarked for long-term developmental goal, such as infrastructure provision, industrialization or education.

Another well-known weakness of CIT is that it is much harder for developing countries to collect, compared to royalties or most other types of taxes (such as property or personal income), since its subject tends to be large multinational firms which can afford sophisticated legal and accounting services that reduce their tax burden by exaggerating costs and artificially reducing taxable profits. Besides that, CIT is also vulnerable to tax evasion through the use of transfer pricing, off-shore subsidiaries and fake licencing.

Tax regimes for mining in Latin America also include, at the suggestion of international development agencies, a series of credits that can be used to reduce what is to be paid for CIT. These are depreciation credits to account for the value of the reserves extracted, and the machinery and buildings used in the process of extraction and refining.

The amount of credit offered for depreciation varies from country to country, with most of them allowing for systematic reductions in taxable profits for 4 to 10 years, and permitting reductions of taxes from 30% up to the full amount. In addition to that, the import duty paid on machinery and production inputs is deductible against CIT as well. Considering that

modern large-scale mining is a capital intensive industry with substantial investments in imported machinery and spare parts, this deduction can be fiscally onerous, too.

Country	Rate	Deductions allowed for	
		Depreciation of ores, buildings & machinery	Import taxes
Argentina	35.00	applicable to tax paid for first 5 years	yes
Brazil	34.00	applicable up to 30% of all taxes paid	yes
Chile	18.50	allowed over life of mine, no limit of tax %	yes
Colombia	33.00	applicable to tax paid in following 5 years	yes
Mexico	30.00	applicable to tax paid in following 10 years	yes
Peru	30.00	applicable to tax paid in 4 years up to 50%	yes

Source: Elaborated by author based on PWC Corporate Income Taxes, Royalties and Other Taxes (2012).

The substantive political complication brought along by these credits is that companies can recover their investment before governments can start receiving any substantial tax income from the CIT. The governments faced due to this scheme very high political cost of allowing often controversial mines to start and operate for several years before seeing any direct tax income from these projects. This political cost is aggravated by stimulating the import of machinery and inputs with tax credits instead of fostering the creation of linkages with local industries to support those investments.

The aggregate fiscal effect of the above is that while the nominal rate for CIT for a 20-year-long mining project is usually between 18.5% and 35% of all the profits obtained, the effective paid rate is only 10% to 15%. These credit clauses were envisioned in the 1990s to incentivize the installation of expensive cutting-edge technology as a way to modernize that industry. Their application, however, in a context of high international prices in the 2000s has meant that companies get most of these tax discounts for mining

expensive minerals and metals and much less so for the technology they brought with their investment.

Suggestions to Increase Developmental Impact

When considering tax regimes in Latin America it is important to remember that these were designed in a period of strong neoliberal influence and low commodity prices. These are essential factors to consider going forward since there is now a very different reality there and in the rest of the developing world.

To improve tax regimes in countries with significant mining industries, principles such as flexibility and progressiveness to maximize the long term tax revenue of the mine and keep a not-overly concentrated mining sector must be observed.

In other countries where mining is a less significant part of the economy and/or have higher levels of controversy and environmental impacts, taxation should instead focus on maximizing the short-term tax income of states. This approach will also reduce the number of new mines to a more manageable pace.

In both types of host nations, the complexity of tax systems should be minimized for countries or sub-national governments with less administrative capacity to guard against tax evasion. Lastly, transparency is paramount in the application of tax regimes to guarantee for citizens, corporations, and government officials the possibility of having informed discussions.

In the coming years, periodic and negotiated re-assessment of tax regimes between governments and corporations will continue to bring taxation strategies in line with current reality. If that is not possible, more one-sided

processes (i.e. government-imposed reforms) might happen as well.

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