Yukon Mineral Development Strategy

Financial Incentives Analysis

Submitted to:

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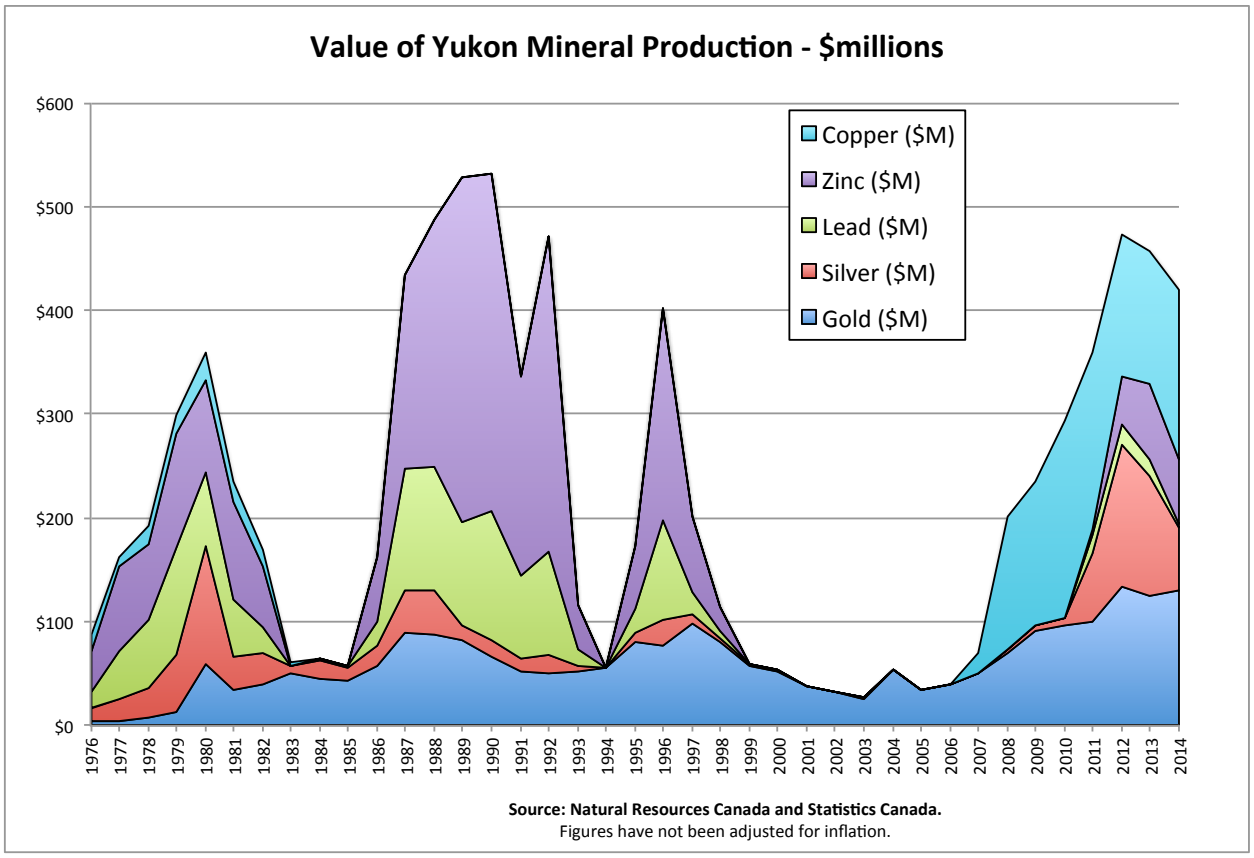
1. Introduction

The Government of Yukon is developing a Mineral Development Strategy to ensure that Yukon is well-positioned to capitalize on investment and mine development opportunities when minerals markets next turn around. The Strategy will help guide the Yukon government, in collaboration with Yukoners, Yukon First Nations and industry, in building a productive mineral industry in Yukon.

A potential feature of the Mineral Development Strategy will be one or more financial incentives designed to encourage mineral development in the Yukon. An assessment of current incentive measures is required to ensure that any such financial incentives provide an optimal level of support to the Yukon exploration industry, while at the same time delivering value-for-money to the Yukon government. This paper presents the findings of our research to identify and assess potential mineral development incentives which could be implemented in Yukon.

2. Current Yukon Mineral Industry Circumstances

The Yukon mineral industry operates in a highly competitive and global environment in terms of both markets for investment capital and markets for extracted mineral products. The resulting ebbs and flows in the availability of mineral project investment capital and fluctuating metal prices means that mineral industry activity in the Yukon is highly cyclical in nature.

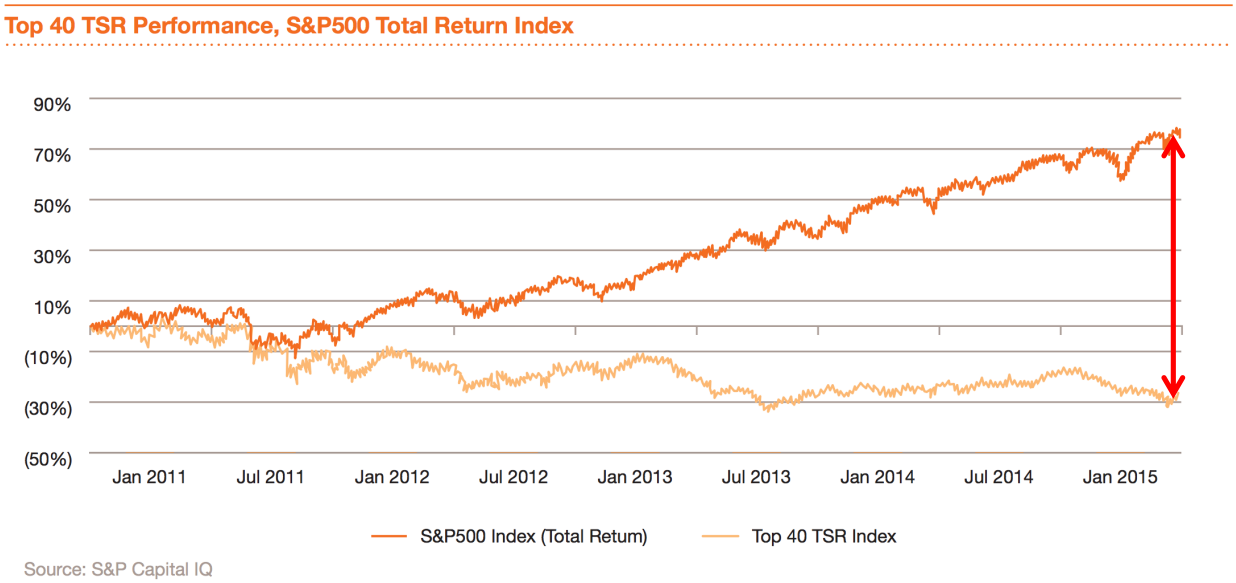


As illustrated in the chart above, the value of copper, zinc, lead silver and gold produced in the Yukon has been highly variable over the period 1976 to 2014.

Over the 1976 to 2014 period, the aggregate value of mineral production (in nominal terms) has ranged between a high of $532 million in 1990 and a low of $26.5 million in 2003. Mineral industry upswings were experienced from 1976 to 1982, between 1986 and 1993, between 1995 and 1998 and most recently between 2007 and 2015. Downswings in the Yukon mineral industry occurred between 1983 and 1985, in 1994 and between 1999 and 2006. Gold production from Yukon placer mines has been a steady contributor to mining industry output over the last 25 years.

The Yukon mineral industry is currently experiencing a downturn precipitated by a decline in metal prices that began in 2011. As history has shown many times before, mineral prices will rebound at some point in the future. The timing of the next expansion in Yukon mineral production may, however, be constrained by the difficulty in attracting investment capital to the Yukon mineral industry. As noted in the PricewaterhouseCoopers publication *Mine 2015: The gloves are off* (the 2015 Review of Global Trends in the Mining Industry), "traditional sources of capital are exiting the sector, as stakeholders lose confidence in the ability of miners to deliver adequate returns". (P. 36).

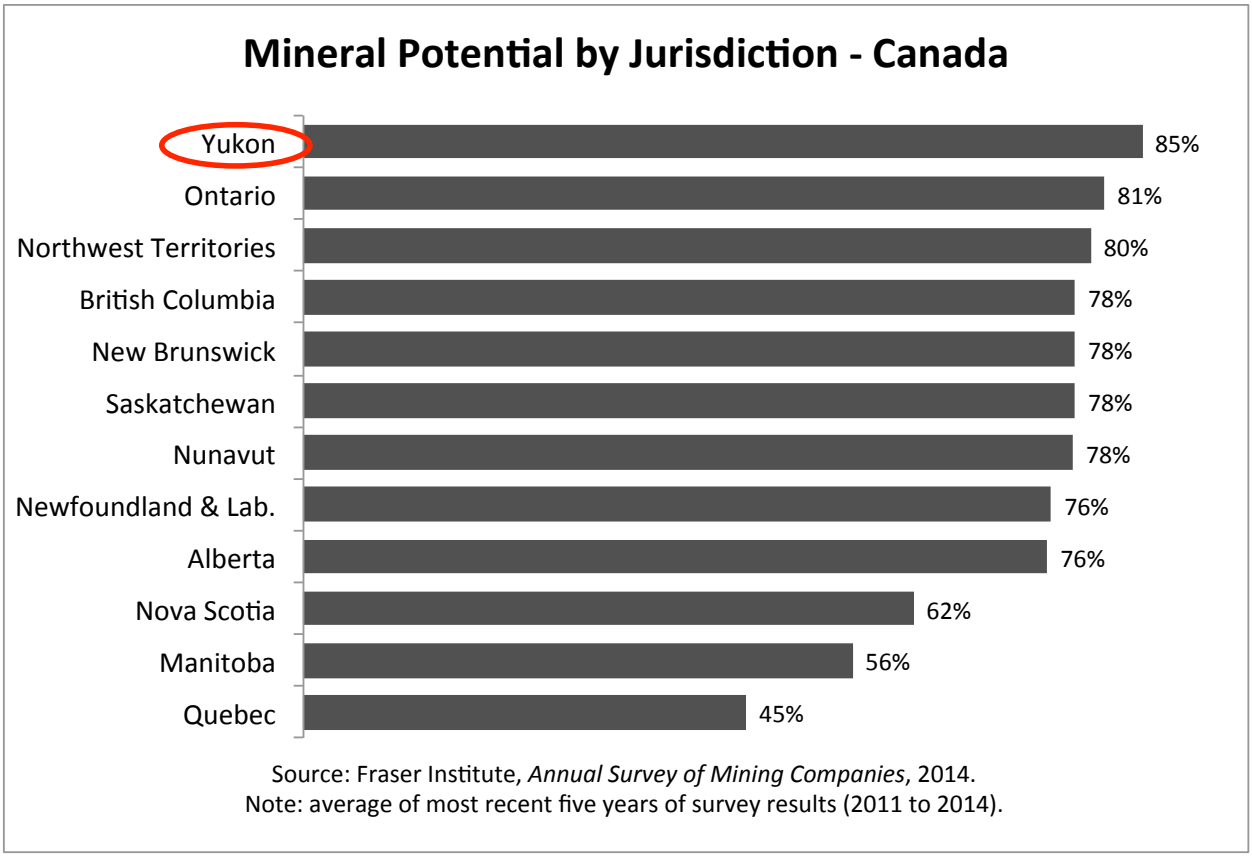
The chart below, reproduced from *Mine 2015: The gloves are off*, illustrates the conundrum currently faced by the mineral industry, not only in the Yukon but worldwide. The chart presents indices for total shareholder return for the Top 40 global mining companies (market capitalisation basis) compared to total shareholder return for the 500 companies which are included in the Standard and Poor's 500 large-cap stock market index. The total shareholder return (TSR) measure captures both the value of share price appreciation as well as dividends paid. With the differential between the two TSR indices exceeding 100% earlier in 2015, it is not difficult to see why the mineral industry in Yukon has been struggling to attract investment capital.



Source: PricewaterhouseCoopers. *Mine 2015: The gloves are off.*

Looking to the future, the PricewaterhouseCoopers analysts note that "outside of the Top 40, we believe that smaller mining focused private equity funds will play a greater role in providing capital to smaller and mid-sized players who are facing difficulty accessing traditional capital markets." (P. 38).

While mineral prices and access to capital may be highly variable over time, one constant in the Yukon's mineral industry is the agreed-upon quality of mineral potential within the territory. The chart below presents a ranking of mineral potential derived from the Fraser Institute's *Annual Survey of Mining Companies.* The ranking is based on the percentage of survey respondents who perceive that the mineral geology of a the jurisdiction encourages investment in that jurisdiction's mineral sector. Respondents are asked to consider the mineral potential of a jurisdiction net of policy influences such as regulatory environment, taxation regime and political stability.

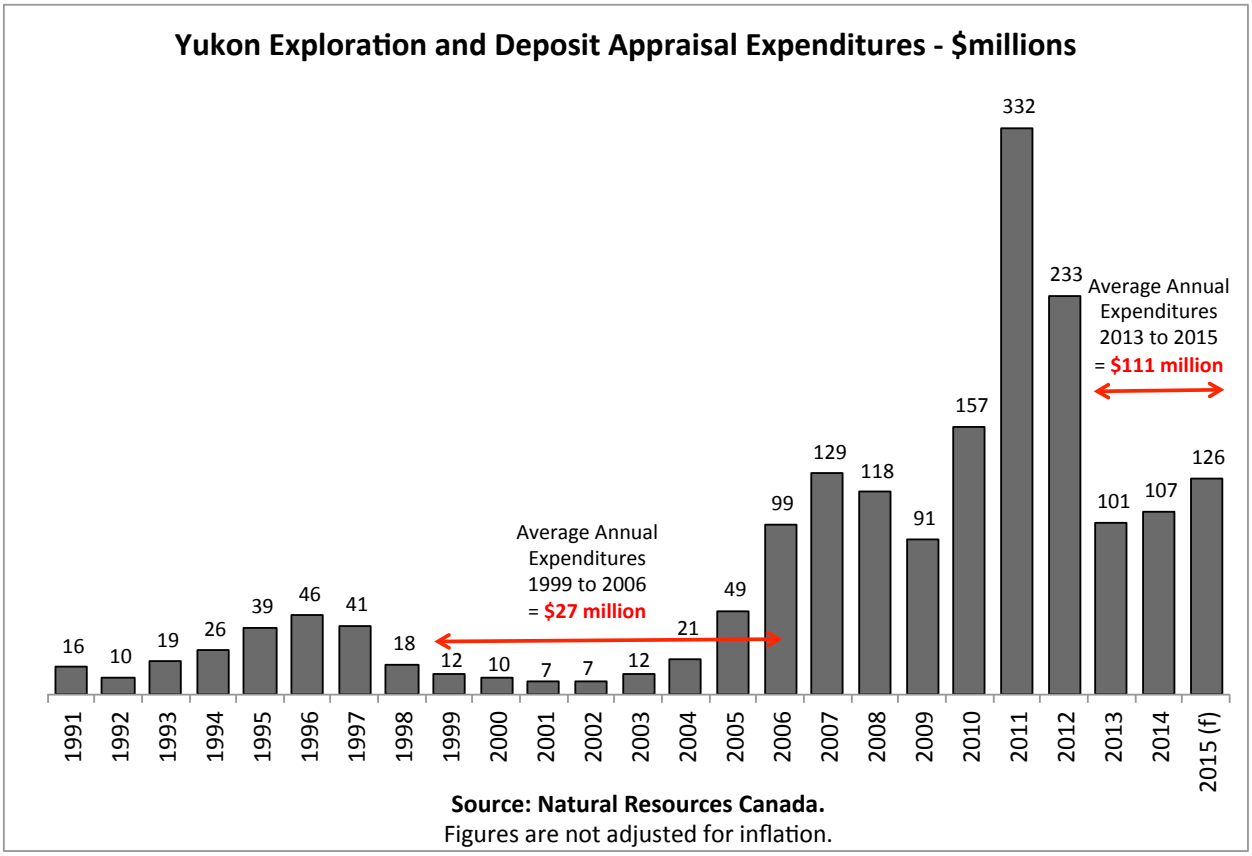


Source: Fraser Institute, *Annual Survey of Mining Companies*, 2014.
Note: average of most recent five years of survey results (2011 to 2014).

Not only is Yukon ranked first within Canada based on the average of the five most recent years of *Annual Survey of Mining Companies* results, but Yukon mineral potential is viewed to be favourable on the global stage. Indeed, Yukon was ranked number one world-wide in the Fraser Institute's 2014 *Annual Survey of Mining Companies* "Best Practices Mineral Potential" index. The "Best Practices Mineral Potential" index ranks 122 jurisdictions worldwide on the basis of the perceptions survey respondents of whether a region's geology "encourages exploration investment" or is "not a deterrent to investment."

Despite the decline in mineral prices and scarcity of mining sector investment capital, exploration interest in Yukon has remained strong in recent years. As illustrated in the chart on the following page, the value of exploration and deposit appraisal expenditures is forecast to climb to $126 million in 2015 from $107 million in 2014. Since the current mineral industry downturn began in 2012, exploration and deposit appraisal expenditures in Yukon have averaged $111 million per year. The 2012 to 2015 average

of $111 million stands in stark contrast to the average expenditure level of $27 million per year experienced during the previous mining sector downturn that ran from 1999 to 2006.



Source: Natural Resources Canada.
Figures are not adjusted for inflation.

In summary, while two key fundamentals in the Yukon mineral industry – perceptions of the quality of Yukon's mineral resources and the level of exploration and development expenditures – remain strong, continued low mineral prices and limited access to investment capital may serve to delay the next upswing in mineral sector activity in the Yukon.

3. Conceptual Foundation for Mineral Development Incentives

Government support for the mineral sector in Canada is comprised of complex mix of tax measures and investment incentives. The complexity of the mix of measures and incentives results in part from Canada's federal system of government. As a federal state, responsibility for lawmaking in Canada is shared among federal, provincial and territorial governments. Responsibility for management and development of mineral resources is clearly within the scope of sub-federal authorities under sections 92 and 92A of the Canada's constitution in the case of provinces and under the 2003 amendments to the *Yukon Act* in the case of Yukon. However, as both the federal and provincial/ territorial levels of government may impose income taxes, federal and provincial/ territorial governments all use tax measures to encourage development in the mineral sector.

All 10 provinces, as well as Yukon and the Northwest Territories, may also impose royalties on mining operations within their respective borders. As provinces and territories are essentially in competition

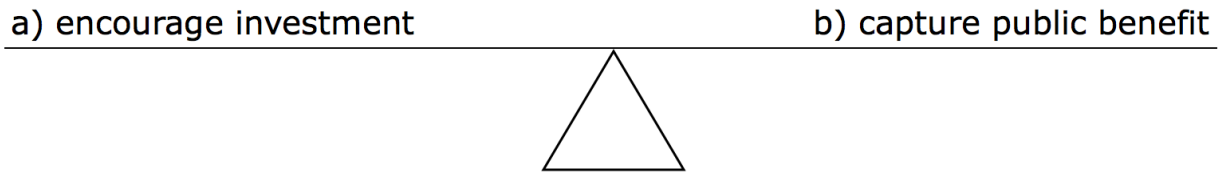
with one another for resource development investment capital, Canada's mining tax system at the provincial and territorial level features array of tax measures and investment incentives specific to each jurisdiction. Indeed, as noted by PricewaterhouseCoopers in their publication *Mining Taxation in Canada,* "mining taxation in Canada is not easy to understand, partly because each province and territory imposes its own mining tax, under systems that vary significantly." (PricewaterhouseCoopers (a), 2015; 1).

To better understand the various financial incentives currently part of the mineral development landscape in Canada, let's first take a look at the conceptual underpinnings of the Canada's system of financial incentives for mineral development. Federal, provincial and territorial governments intervene in the mineral development arena with the conceptual objective of balancing the twin goals of:

a) encouraging investment and production in the mineral industry, and

b) ensuring, as ultimate owner of Canada's non-renewable resources, that a reasonable amount of public benefit is captured by governments on behalf of its citizens.

The balance which governments are trying to achieve on behalf of mining sector participants and their constituents is illustrated in the picture below:



Mining Incentive System - Conceptual Objective

Encouraging investment is necessary in light of several risks faced by companies operating in the mineral sector. In brief, the risks (drawn from Paul Mitchell's chapter on "The Structure of the Global Mining" in *Advancing the Extractive Industries Transparency Initiative in the Mining Sector)* faced by companies participating in the mineral sector include:

Fixed location of resources: financially viable mining can only occur at the location of suitable geology. In consequence, mining project proponents must take as a given the infrastructure that exists in a particular location (roads, energy supply, labour supply). Because mining assets are correspondingly immobile, mining companies are exposed to local socio-political risks.

Lengthy project horizons: mineral resource investments are long-term, extending through exploration, development, operations and rehabilitation phases. Each phase brings with it specific risks, for example, chances of exploration failure, variability of resource quality during operations, and extended post-closure liabilities such as unforeseen acid rock drainage.

Large project scales: mining investments are typically large, especially in the early stages of development when transportation and processing infrastructure is being constructed. In consequence,

mining investments often have long pay-back periods and require fiscal stability for success to be achieved.

Environmental and safety risks: by its very nature, mining must cause some environmental disruption and is accompanied by inherent safety risks. While such impacts can be responsibly managed, the potential risks can never be completely removed.

Companies operating in Yukon also face several challenges specific to operating in a remote northern region with a small population base. The challenges include:

Undeveloped Basic Infrastructure: while many parts of Yukon are accessible by tote roads and trails, most mineral discoveries are located significant distances away from existing highway corridors. For example, at the Minto mine (Yukon's only currently operating mine), copper ore cannot be transported to port year round. Trucks transporting ore to port in Skagway must await the formation of an ice road in the fall and ice breakup in the spring before the river barge can be launched. Industrial railroad service, at no point in time available further north than Whitehorse, is not an transport option for mine operators in Yukon.

Isolated Energy Supply: Yukon's electricity generation and transmission system is isolated from the North American grid. As a result, deliberations by the Yukon's public utility to connect mining projects to the grid involve multi-decade capital investment decisions. At the same time, mine customers typically exhibit highly variable electricity load demands that correspond to the commodity price cycle. In consequence, responsibility for the supply of on-site electricity often falls to mining companies who cannot tap into the same economies of scale enjoyed by the regulated electrical utility to deliver cost-effective energy inputs to mine operations.

Limited Availability of Skilled Labour: in the not too distant past, mining companies and governments would work together to establish communities in remote locations to ensure the ready and stable supply of skilled labour for mine operations. The switch to a fly-in fly-out (FIFO) approach has brought with it the phenomenon of mine workers commuting vast distances on a rotating shift basis. Indeed, a study prepared for Yukon Economic Development in 2013 found that 417 of 624 (67%) of positions in the Yukon mining industry were filled by labour based outside of the Yukon. (Herkes, 2013-71). The transport of such a significant proportion of mine labour has significant cost implications for companies operating in the Yukon mineral sector.

On the public benefit side of the balance, governments must be aware that a jurisdiction's mineral resources often comprise a significant proportion of their non-renewable natural resource capital. Citizens expect that natural resources will be extracted only when it is obvious that tangible benefits will accrue to affected communities. Disquiet can be expected when communities see little benefit especially when operations are conducted by international companies and generate significant profits.

Governments, on behalf of their citizens, are also faced by macro-economic risks that accompany mineral sector development. Large resource projects can hinder economic competitiveness by causing the movement of capital and labour away from other productive sectors. And while less of a concern in Yukon, where the territorial government is three-quarters funded by federal transfers, cyclical changes

in commodity prices can spawn swings in government revenue streams comprised of mining taxes and royalty revenues.

So, given the risks faced by companies operating in the mineral sector in general, the specific challenges faced by companies operating in the Yukon's mineral sector and the need to ensure that tangible benefits accrue to Yukon communities, a government strategy to guide the mineral sector is clearly warranted.

Before looking at the array of incentives and measures currently used to attempt to create a balance between encouraging investment and capturing public benefit, let's have a brief look at where governments could start if they had opportunity to completely redesign their mining tax and incentive systems: the cash-flow tax.

Present in the economic literature as early as 1948 (Boadway, 2015; 11), the cash-flow tax presents a "conceptually pure" approach to capturing the maximum share of natural resource rents as efficiently as possible. With a cash-flow tax, a rate of tax, say 15%, is applied to the difference between a company's cash revenues and its cash expenditures (including investment purchases). If the difference between cash revenues and cash expenditures is negative, the company receives a tax refund. If the difference between cash revenues and cash expenditures is positive, the company must make a tax payment to government. Negative cash flows are treated symmetrically with positive cash flows.

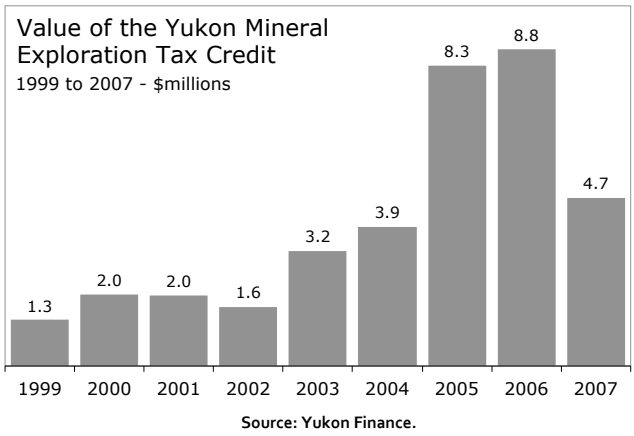
"In resource industries, cash-flow taxes typically generate negative revenues for government during the exploration and development stages and, later, positive revenues when cash flows become positive." (Boadway, 2015; 15). By way of example, assuming a 15% rate of tax, a company with negative revenues (i.e., a loss) of $1 million in Year 1 of business would receive a tax refund of $150,000. In Year 2, if the company experienced positive cash flow and had income of $1 million, it would be required to pay $150,000 in taxes.

Thus, a cash-flow tax is equivalent to a combined tax on returns to a) risk (i.e., profit) and b) resource rents (i.e., capture of public benefit) since governments cannot distinguish between cash flows attributed to a risk-free return on capital and cash flows attributed to risk. Through the assumption of a fixed share of both negative and positive cash flows, governments effectively share risks with mining companies and as a result encourages risk taking on the part of companies operating in risky sectors of the economy.

While conceptually attractive and economically efficient, tax measures that incorporate full loss refundability are politically awkward. As pointed out in the *Report of the Technical Committee on Business Taxation* (aka the Mintz Report), "unrestrained refundability [can] result in an unacceptable loss of revenue to government." (Mintz, 1997; 4.15) As further noted by Mintz, the use of refundable tax measures rewards the efforts of underperforming businesses and increases the scope for tax evasion by providing greater opportunity for businesses to make refund applications in respect of losses the business has not actually suffered. Boadway also recognizes a potential pitfall of the cash-flow tax stating that "a particular problem with resource-tax compliance is that tax authorities are better able to observe production or sales than to observe costs". (Boadway, 2015; 16).

Thus, present tax practice in Canada as it applies to the mineral sector can be characterized as providing *implied refundability* in respect of losses during the exploration and development phases subject to restrictions on the transfer of losses between companies and individuals.

Between 1999 and 2007, Yukon's tax code featured a refundable loss measure targeted at the mineral exploration sector. The Yukon Mineral Exploration Tax Credit was a refundable corporate and personal income tax credit of 25% of eligible exploration expenses for off-mine site exploration including:



- prospecting,
- carrying out geological, geophysical or geochemical surveys,
- drilling by rotary, diamond, percussion or other methods, or
- trenching, digging test pits and preliminary sampling.

Initially, the YMETC was an open-ended measure with no limit on the total loss amount that could be claimed by a corporation or an individual. A cap of $300,000 per company was introduced in 2006 as activity in the Yukon's mineral sector rebounded; the measure was terminated for years after 2007. The tax expenditure value of the YMETC is presented in the chart above. The total tax expenditure over the life of the YMETC was $35.7 million.

4. Existing Measures and Incentives to Encourage Investment

As noted earlier, the current assortment of tax measures and incentives targeted at the mineral sector in Canada is complex. The summary of the measures and incentives currently in use presented below maps to the Mining Incentive System balance diagram introduced earlier on page 5 of this paper. Measures and incentives designed to encourage investment in the mineral sector are presented first and are organized into one of three categories: income tax measures, loss transfer measures and investment incentives. Measures and incentives designed to ensure the capture of public benefits from resource development projects are next presented.

Note that with one federal government, 10 provincial governments and 3 territorial governments all exercising their stakes in the mineral sector tax and incentive fields, some amount of detail has been sacrificed in the interests of clarity of presentation. Measures that apply generally to corporations (e.g., Successor Corporation Rules) and/or which have been or are being phased out (e.g., Resource Allowances and Investment Tax Credits) or are foreign-focused (e.g., Foreign Resource Expense) are not discussed here. The KPMG and PricewaterhouseCoopers publications, *A Guide to Canadian Mining Taxation* and *Canadian Mining Taxation*, clocking in at 95 pages and 83 pages, respectively, remain the go-to sources for the granular details on jurisdiction-specific measures and incentives.

Selected Mining Sector-Specific Income Tax Measures

Canadian Exploration Expenses (CEE): costs incurred during the exploration stage of the mining cycle for the purpose of determining the existence, location, extent or quality of an oil, gas or mineral resource in Canada. The CEE measure is being narrowed to exclude expenses related to mine development and expanded to include certain costs of environmental studies and community consultations. One hundred percent of CEE can be deducted in the year incurred, any amount of CEE not deducted in the current year can be carried forward indefinitely and deducted in future years.

Canadian Development Expenses (CDE): costs to acquire Canadian mining properties, costs to develop mining properties and costs incurred after a mine has come into production are all considered to be CDE. Costs for depreciable property such as machinery and equipment may not be included in CDE. Only 30% of CDE may be deducted in a given year, the balance may be carried forward indefinitely and deducted in future years.

Capital Cost Allowance (CCA): the costs of depreciable property (e.g., machinery and equipment) may not be expensed in the year of purchase as the useful life typically extends over several years. In an attempt to match the expensing of costs with the useful life of the asset, each depreciable property purchased in the year is allocated to a "class" of CCA. Most mining property is included in Class 41 to which a CCA (depreciation) rate of up to 25% may be applied. CCA provisions which are relevant to the mining industry are sometimes tweaked to provide additional tax relief or incentives to the mineral sector by:

- Creating special CCA classes or sub-classes to which different CCA rules may be applied (e.g., Class 41(a.1)); and,
- Allowing claims for capital cost allowance at an accelerated rate (up to 100%) for mining-specific depreciable property (currently being phased out).

Qualified Environmental Trust (QET): as noted earlier, the life cycle of a mine is comprised of four distinct stages: exploration, development, production and reclamation. To ensure that mining properties are properly returned to their pre-mining condition through reclamation, mining companies are encouraged to set aside funds for reclamation through use of the Qualified Environmental Trust tax mechanism. A QET allows a mining company to set aside funds for future reclamation obligations and in the corresponding time period receive a tax deduction for the amount set aside.

Investment Measures

Flow-Through Shares (FTS): believed to be a uniquely Canadian approach until the introduction of a similar measure by the Government of Australia earlier in 2015, flow-through shares allow companies to pass over (flow through) to investors eligible Canadian Exploration Expenses (described above) in exchange for ownership of common shares. Mining companies gain access to investment capital and investors are able to reduce their taxable income by the amount of the aggregate share purchase price in the near-term. Taxpayers may also gain from the FTS transaction if over the longer term the share price appreciates in value (though the investor is liable for capital gains tax on the full disposition value of the shares as the Adjusted Cost Base for the flow-through shares is re-calibrated to zero).

While the basic flow-through share mechanism is a federal measure, several provincial jurisdictions – and even the federal government itself – piggy-back enhancements on the FTS provision. Such piggy-backing tasks the federal government with the "heavy lifting" in terms of monitoring the integrity of claims made for Canadian Exploration Expenses while enabling the fine-tuning or enhancement of mining sector measures by other jurisdictions. By advancing the timing of the conversion of exploration-related expenses into cash, the FTS measure serves to mimic the economic efficiency intent of the cash-flow approach to taxing natural resource rents. FTS enhancements are currently under offer in three sub-national jurisdictions:

British Columbia: a non-refundable credit equal to 20% of flow-through mining expenditures incurred in the province. Credits may be carried back for 3 years and forward for 10 years.

Saskatchewan: a non-refundable credit equal to 10% of flow-through mining expenditures incurred in the province. Credits may be carried back for 3 years and forward for 10 years.

Manitoba: a non-refundable credit equal to 30% of flow-through mining expenditures incurred in the province. Credits may be carried back for 3 years and forward for 10 years.

The federal government also currently offers a so-called "super" FTS measure in the form of a 15% non-refundable tax credit. The tax credit is deductible from federal income taxes payable and is in addition to the existing 100% deduction of eligible exploration expenditures through the regular FTS mechanism. It was proposed during the recent federal election campaign that the non-refundable credit be increased to 25% for projects located in remote and northern regions.

Loss Transfer Measures

British Columbia and Ontario are the currently the only jurisdictions in Canada to have a refundable loss measure in place. The BC Mining Exploration Tax Credit is a refundable tax credit of 20% of qualified mining exploration expenses incurred in excess of any assistance received. The refundable credit is increased to 30% in certain areas affected by the mountain pine beetle infestation. Ontario offers a refundable credit equal to 5% of flow-through mining expenditures incurred in the province.

Mineral Sector Grant and Exemption Measures Offered by the Yukon Government

Yukon Mining Exploration Program (YMEP)

Grassroots Prospecting: up to $15,000 per year to cover basic operating expenses while searching for new mineral occurrences (grant of 100% of approved eligible expenses).

Focused Regional: up to $25,000 per year to re-evaluate potential in under-explored areas (grant of 75% of approved eligible expenses).

Target Evaluation: up to $40,000 a year to appraise the potential of under-evaluated occurrences (grant of 50% of approved eligible expenses).

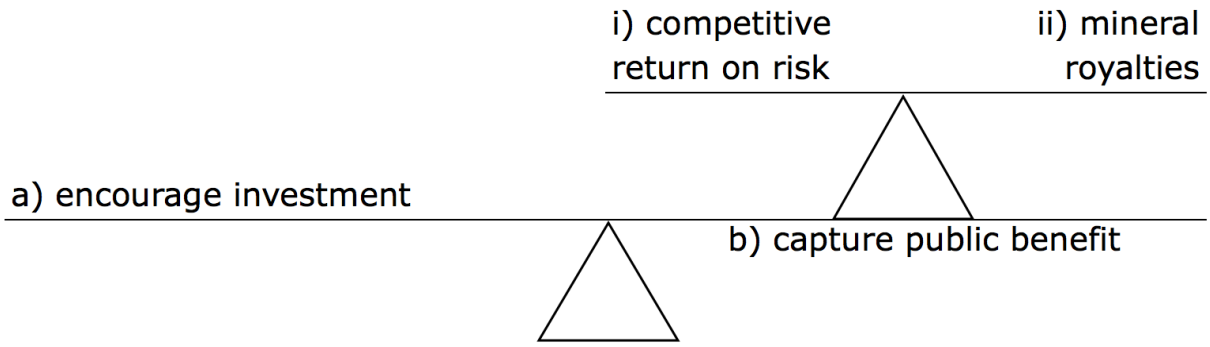
Yukon Fuel Tax Exemption

Fuel exempt of Yukon Fuel Oil Tax ($.062 / litre for gasoline and $0.72 per litre for diesel) is available for authorized off-road commercial purposes including mining. An exempt number allows users to buy tax-exempt fuel at any authorized agent.

5. Measures to Capture Public Benefit

This section considers the goal of ensuring that a reasonable amount of public benefit is captured by governments on behalf of its citizens. In economic terms, the same goal can be described as implementing a resource taxation system designed to "…capture the maximum share of resource rents as efficiently as possible." (Boadway, 2015; 11). While resource taxes obviously serve as a financial disincentive to explore for, develop and operate mineral properties, modifications to existing resource tax measures can and are used to create incentives for mineral development. For example, Manitoba currently offers a tax holiday for new mines.

Thus, as illustrated in the graphic below, the efficient capture of public benefit requires the striking of a balance between i) collecting an adequate amount of revenues on behalf of the public owners of the resource and ii) allowing companies to earn a competitive return on invested capital given the level of risk faced by firms operating in the mining sector.



Mining Tax System - Conceptual Objective (refined)

Governments attempt to capture resource rents (i.e., collect royalties) with measures that apply to one of two types of bases. Revenue instruments that are applied to *units of mineral production* are known as production royalties. Revenue instruments that are applied to a measure of *company profitability* are known as profits-based royalties.

Tradeoffs exist within and between both production royalties and profits-based royalties. From a company perspective, "taxes based on units of production irrespective of profitability may create economic inefficiencies by discouraging the exploitation of lower grade ore and shortening the life span of some mines." (Mitchell (b), 2009; 27). From a government perspective, a production royalty results in a more reliable revenue stream as the production royalty is payable on all output whether the mine is profitable or not. In circumstances of "above-normal" return on risk (i.e., high mine profitability), however, production royalties do not allow governments to share the extraordinary returns on investment accruing to the mining company.

Profits-based taxes are seen to be more efficient as they "recognize the inherent risks in mining operation, particularly wide fluctuations in international minerals prices and the difficulty in anticipating all geological, technical and political factors over a mine's lifetime". (Mitchell (b), 2009; 27).

However, as noted above, if the financial position of a mining company indicates that no profits have been earned, the revenue capture by government on behalf of the public is nil.

Tax measures used by provincial and territorial governments in Canada to obtain a reasonable share of resource rents on behalf of their constituents are typically based on some notion of profits. (Boadway 2015; 5). In other words, governments in Canada typically levy profits-based royalties rather than production royalties on operating mines.

Of contrasting note is the approach used at Yukon's Minto Mine, which is located on the Category A Settlement Land of the Selkirk First Nation where both a production royalty and a profits-based royalty are levied. The Selkirk First Nation's profits-based royalty is necessarily the same mining royalty levied by the Government of Yukon on other mines operating in the Yukon. The Yukon government is responsible for collecting royalties from the owner of the Minto Mine, the Capstone Mining Corporation.

While a redesign of Yukon's mining royalty scheme is outside the scope of the analysis at hand, it is perhaps worth noting that a move is afoot in the policy literature to consider replacing existing resource royalty regimes with cash-flow taxes (see Mintz, 2013 and Boadway, 2015). British Columbia's two-tier approach is being touted as a leading example of how to improve the efficiency of mining taxation in Canada. Under the B.C. approach, two separate taxes are levied, a 2% annual minimum tax on revenues less operating costs (net current proceeds) as well as a 13% tax on mine cash-flows (but with no loss refundability). Any tax paid on net current proceeds is creditable against future mining taxes.

6. Summary of Mineral Development Measures and Incentives in Current Use

The table below superimposes, on the four-phase life cycle of a mine, the range of mineral sector incentives and measures in current use in Canada.

Mine Phase	a) Investment incentive	b) Public benefit capture
1\ Exploration	• Canadian Exploration Expense • Flow-through Share Cost Deduction • Flow-through Share Tax Credit (non-refundable) • Exploration Loss Refund (B.C. and Ontario)	n/a
2\ Development	• Canadian Development Expense	n/a
3\ Production	• Capital Cost Allowance • Accelerated Capital Cost Allowance	• Production Royalty • Profits-based Royalty • BC Cash-flow Tax
4\ Reclamation	• Qualifying Environmental Trust	n/a

7. A Note on the Taxation Powers of Self-Governing Yukon First Nations

Self-governing Yukon First Nations have been granted taxation powers of the same scope as provinces and territories in Canada which enjoy the power of direct taxation. Chapter 14 of each of the self-government agreements provide that Yukon First Nations may impose, in addition to property taxes, "other modes of direct taxation…within Settlement Land to raise revenue for First Nation…purposes."

Provincial and territorial governments in Canada use their direct taxation powers to levy sales taxes, personal income tax, corporate income tax, property tax and commodity taxes on tobacco, alcohol and fuel. Self-governing Yukon First Nations currently use their direct taxation powers to receive shares of personal income tax and goods and services tax.

8. Potential Yukon Mineral Development Financial Incentives

The paper concludes in this section with a description of a series of potential financial incentives that could be introduced by the Yukon government, either on its own or in partnership with the federal government and / or self-governing Yukon First Nation governments. Selection of the potential financial incentives was informed by the analysis contained in earlier section of this paper on Existing Measures and Incentives to Encourage Development (section 4) and Measures to Capture Public Benefit (section 5).

Three of the incentives described below were suggested by individuals participating in the early engagement activities for the Yukon Mineral Development Strategy and are indicated with a ❖. The selected measures and incentives also reflect current Yukon mineral industry circumstances described in section 2 and the risks faced by mining companies, including specific challenges described in section 3. Measures which are recommended for further discussion are indicated with a ✔.

1\ Infrastructure Royalty Credit: a non-refundable 15% royalty credit that can be used to offset mineral royalties payable to the Yukon government in respect of expenditures made by a mining company on road and electricity infrastructure (e.g., new generation capacity and transmission grid extensions) that facilitates the development of two or more resource development projects (i.e., contributes to the creation of pubic infrastructure).

- ✔ Under this measure, public benefits in the form of mineral royalties will be swapped for public benefits in the form of infrastructure that supports a broader span of resource development projects.

2\ Yukon Education Expense Credit: a refundable corporate income tax credit equivalent to 25% of the aggregate of qualified education expenses (education amount, tuition amount and textbook amount) claimed by Yukon-educated students on their individual tax returns. The credit would be payable for each year that the company issues a T4 slip to the employee, up to a maximum of five years.

- ✔ The measure would provide a direct incentive to mining companies operating in the Yukon to hire graduates of the Centre for Northern Innovation in Mining at Yukon College.

3\ Yukon Flow-through Share Tax Credit: a non-refundable 25% FTS tax credit for investors applied to the recently-expanded definition of Canadian Exploration Expenses (i.e., including community consultation and permitting costs).

✔ The measure will piggy-back on existing federal tax administration for flow-through shares and will bring Yukon in line with several jurisdictions competing with Yukon for mineral sector investment (e.g., B.C., Saskatchewan and Manitoba). The measure will help address the severe difficulty currently faced by companies trying to raise investment capital to develop Yukon mineral properties.

4\ Re-establish the Negotiating Mandate for Corporate Income Tax Sharing: compel the federal government, in collaboration with Yukon First Nations, to re-establish a negotiating mandate to create Yukon First Nation access to the corporate income tax base (similar to access already in place for the personal income tax base). Access to the CIT base will potentially open the door for Yukon First Nations to share in corporate income tax revenues generated by mining companies with 'permanent establishments' located on Settlement Land.

✔ Corporate income tax sharing would be revenue neutral for the Government of Yukon and will increase revenues for self-governing First Nations.

5\ Revive the Yukon Mineral Exploration Tax Credit (❖): in force between 1999 and 2007, the YMETC provided a refundable 25% tax credit to individuals and companies undertaking exploration activities in Yukon. A revived version of the credit could be applied to the recently-broadened definition of Canadian Exploration Expenses which includes community consultation and permitting costs.

✖ As illustrated in the chart on page 4 (Yukon Exploration and Deposit Appraisal Expenditures), the level of exploration and development activity in the Yukon has remained strong during the current industry downturn with expenditures averaging $111 million per year. The total shareholder return gap illustrated in the chart on page 2 (Top 40 TSR Performance, S&P500 Total Return Index) suggests that financial incentives are better targeted at investors than at exploration companies.

6\ New Mine Royalty Holiday (❖): a time-limited (e.g. first five years) exemption from mineral royalties payable to the Yukon government by companies that open new mines in Yukon.

✖ While implementation of a new mine royalty holiday may be politically compelling and possibly encourage investment in the mineral sector, it does not help maintain a balance between encouraging investment and the capture of public benefits from resource development.

7\ Yukon Residents Deduction (❖): supplement the existing Northern Residents Deduction for eligible mining industry workers by adding $2.50 per day to claims for both the basic residency amount and the additional residency amount (currently $8.25 per day each).

✔ Supplementing the existing Northern Residents Deduction with a Yukon Residents Deduction will help the Yukon mineral industry recruit and retain a Yukon-based workforce that will in turn improve the cost-efficiency of Yukon mining operations.

8\ Enhanced Yukon Research and Development Tax Credit: further enhance the R&D tax credit for Yukon College-affiliated projects from 20% to 30% for projects that have direct application to the Yukon mineral sector.

- ✔ Currently, the Yukon R&D Tax Credit is increased from 15% to 20% for eligible research and development activity carried out under contractual arrangement with Yukon College. Doubling the credit to 30% for mining-related research will signal to investors that mineral development projects will be supported by made-in-Yukon solutions for technical challenges that may be encountered in the development of Yukon's exceptional resource wealth.

9\ Updated Qualifying Environmental Trust Income Treatment: implement a Qualifying Environmental Trust provision similar to the measure enacted in Alberta in 2014 that would allow QETs to use funds from within the trust to pay Yukon corporate income tax on trust income.

- ✔ Adoption of this measure will bring Yukon in line with several jurisdictions competing with Yukon for mineral sector investment (e.g., B.C., Alberta and Saskatchewan).

10\ Joint Venture Royalty Tax Credit: A non-refundable royalty credit that can be used to offset mineral royalties payable to the Yukon government in respect of expenditures made by a mining company that enters into a joint venture arrangement with one or more Yukon First Nation Development Corporations. The royalty offset could be calculated as 0.5% of the value of labour, materials and inputs supplied by the development corporation.

- ✔ Under this measure, public benefits in the form of mineral royalties would be swapped for an incentive for mining companies to do business with Yukon First Nation Development Corporations.

11\ Investigate Cash-flow Tax Approach for Yukon Mineral Royalties: using the current British Columbia regime as a starting point, investigate the adoption of a mineral royalty regime in Yukon that results in the more efficient capture of natural resource rents.

- ✔ Efforts to get ahead of the curve in the royalty policy arena could contribute to Yukon's attractiveness to investors if additional competing jurisdictions begin to move to a cash-flow tax approach. As the cash-flow tax approach also brings with it potential for harmonization of natural resource tax bases between governments, the investigation could include consideration for the integration of Yukon First Nation resource tax bases with federal and Yukon tax bases.

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