Comparative study of the mining tax regime for mineral exploitation in Kazakhstan
Final Report

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Comparative study of the mining tax regime for mineral exploitation in Kazakhstan

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Executive Summary

Introduction and background

Kazakhstan is rich in both minerals and hydrocarbons. While the hydrocarbons sector is relatively successful, the minerals sector has failed to achieve its potential. Despite large mineral reserves, very little investment has gone into the development of new mining projects and few foreign investors have been willing to invest in the sector. Almost all mines currently operating in Kazakhstan were already in operation in the 1990s, leaving a two decade gap in new mine development. Mining policy in Kazakhstan does not prioritize only revenue generation but aims at promoting employment, skills development and economic diversification. In order to achieve these goals Kazakhstan will have to attract foreign investment into the sector.

There are several elements to the current mineral legislation and fiscal regime that are unusual in an international context and act as a deterrent to foreign investment. This report carries out a comparative analysis of Kazakhstan's mineral regime and makes recommendations on changes that could be made to the existing regime to bring it in line with international good practice. Kazakhstan's fiscal regime is compared to twelve other countries and to global trends in mineral regimes.

Country context

Kazakhstan has been fairly successful for most of the post-Soviet period, experiencing rapid economic growth, significant improvements in human development and improvements in the business environment. The economy still remains fairly dependent on oil but the non-oil economy has grown at rates similar to that of the oil economy.

Kazakhstan has large reserves of copper, uranium (of which Kazakhstan is the world’s largest producer), iron ore, zinc and gold. Despite the existence of these reserves the mineral sector remains small in comparison to the oil sector, although it accounts for significant shares of both GDP and exports. Much of the sector was privatized following independence and is dominated by domestic producers. Only a few foreign companies operate in Kazakhstan and almost no new mines have been set up – most production comes from mines that have been in operation since the 1990s or the Soviet era.

Nature of the mining industry and implications for mineral regimes

The mining sector has a number of unique characteristics that distinguish it from other sectors of the economy. The life of mining projects is finite and it is a high risk, capital intensive industry faced with long lead times to production. The sector is a price-taker faced with cyclical prices and demand. Mines tend to operate in remote areas and the sector's operations have an impact on the environment and surrounding communities. These characteristics all have implications for mineral regimes and internationally competitive regimes take these factors into account.

An important objective of the fiscal regime should be to balance the needs of the government with the needs of investors. Investors have a need to generate a return on their investment. Government’s objectives are broader. An important objective for most governments is that of obtaining revenue from the sector. But governments are also interested in other areas too, such as ensuring that the sector contributes to economic growth and diversification through employment, backward and forward linkages, and skills development.

1 Argentina, Australia, Brazil, Burkina Faso, Ontario (Canada), Chile, Ghana, Guinea, Laos, Peru, Sweden and Tanzania.
In terms of generating government *revenue* from the sector, it is helpful to understand how the revenues generated by the sector are shared between beneficiaries and what the main forms of taxes are.

There are four principal beneficiaries of revenue from mining projects: suppliers, government, investors and employees. The proportion of the revenue that accrues to each of these groups is relatively stable across mining projects. Based on our experience suppliers normally receive the largest share (around 55 per cent). The second largest shares are those received by the government (around 17 -18 per cent) and by investors (also roughly 17 -18 per cent). Employees receive the final share (around 10 per cent). These shares tend to be quite stable over time and across jurisdictions, although they may of course vary by a few percentage units from one jurisdiction to another. The split between government and investors is determined by the level of taxation that the industry is faced with – higher taxation increases governments’ and reduces investors’ shares. Ensuring that the share of revenue received by government and by investors is fair is an important consideration when designing mineral fiscal regimes.

Mining projects are faced with a variety of taxes but the majority of direct revenue streams received by government are generated from five main taxes. In order of magnitude, these include profits taxes, royalties, employee income tax, customs duties, and withholding taxes. These taxes vary in importance over time. Governments initially receive revenue in the form of customs duty and employee tax during pre-production development. Once production starts, tax revenue largely consists of royalties and employee tax until the project starts to make a profit. When projects become profitable, royalties and employee tax remain the same but make up a smaller proportion of total government revenue as corporate income tax increases to become the largest proportion of government revenue. This remains the case for most of the project’s life, assuming that the mine remains profitable.

In terms of contribution to *economic growth and diversification*, it is helpful to understand what benefits the industry can generate outside of government revenue as these influence governments’ decision-making when designing mining sector policies.

An important contribution is that of *employment*. Although the industry is capital-intensive and generates relatively few direct jobs, it generates much larger levels of indirect and induced employment which together can have a substantial impact on the economy, partly through backward linkages or *local content*. This refers to the extent to which goods and services used in the mining industry are sourced in the host country. For goods in particular, the level of local
content in the supply chain depends on the competitiveness of local suppliers but even in countries with low skills levels, services tend to make up a large part of local content which has an important impact on how the benefits from the industry are spread in the economy. Further processing of mineral resources (forward linkages) can bring further benefits to the economy. This is a more contentious area, however, as further processing generally does not generate much employment, often has low profit margins and therefore low tax generation potential. Skills building is also an important consideration. A significant long term benefit generated by a modern and internationally competitive mining industry is that it raises general skills levels of those directly and indirectly connected to the industry.

**Best practices in mineral regimes**

Internationally competitive mineral regimes recognise the unique characteristics of mining (see Table 1). These regimes are stable over time, transparent, create a level playing field, are easy to understand and easy to administer. They also appropriately balance the needs of investors to generate a fair return with the needs of government to generate revenue and ensure that the sector contributes to growth and diversification. Competitive fiscal regimes apply taxes in a way that recognise the large initial upfront capital investments and long production lead times that characterise the sector.

**Table 1 – Mining sector characteristics’ implications for mineral fiscal regimes**

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**Institutional, legislative and administrative considerations**

Most countries include mining-specific tax rules (such as royalties and excess profit taxes) in the mining law. Rules concerning corporate income tax, VAT and other taxes that apply to all economic activities and not only to mining, are almost always included in the general tax legislation.

Countries have differed in terms of where conditions for the industry are specified. Some outline these in mining law and others through individual contracts negotiated with investors (referred to as Mineral Development Agreements or ‘MDAs’). Negotiated agreements can be more flexible but come at the cost of reduced transparency. The transparency and predictability of general conditions defined in mining law allows investors to evaluate future taxation effects with a high degree of confidence and are viewed as being more effective in attracting investors. Consequently most countries have preferred to establish general conditions in the mining law.

In most countries that have both petroleum and mining industries, the two industries are subject to different tax policy, rules and administration. Although the two industries have several characteristics in common (e.g. finite lives, and price takes faced with cyclicality in profits), they
also differ in important ways. In the oil sector, production costs vary significantly, capital costs and operating profits are higher, and resource rents are more important. The mining sector is characterised by higher levels of risk at all stages of mining projects. These differences mean that effective tax policy formulation and administration, especially in more mature economies, tend to require specialist knowledge of each of the sectors within government. They also impact the way in which extraction rights are allocated as bidding procedures are difficult to apply in mining industries, particularly during exploration; and the way in which revenue is shared with government as production sharing agreements are difficult to apply in the mining industry.

Where tax regimes are internationally competitive they are comprehensive, clearly translated, easy to understand and easy to administer. This reduces risk and makes the tax system more transparent. It also ensures that effective administration is easier to achieve. The importance of sound administrative practices cannot be overemphasized. One of the most common reasons why revenue streams fall short of government expectations relates to inefficient or ineffective tax administration, often coupled with a complex fiscal system. Effective tax administration requires cooperation among different departments, and adequate and industry-specific skills among tax officials.

**Fiscal considerations**

Possibly the most important fiscal consideration is that of stability in the fiscal framework. Mining projects are entered into on the basis of a feasibility study carried out before production commences and the fiscal framework is an important determinant of the financial viability of a project. Instability in the system represents a significant risk for an investor. Consequently many countries include fiscal stability provisions in their fiscal regimes. However, in principle a tax regime does not need explicit fiscal stability clauses to provide stability - if there is a tradition of not changing the rules under which existing ventures operate, this may be sufficient. Explicit stability clauses also become less important where there is a consultative process for introducing new tax rules.

A well-designed mineral fiscal regime allows for a fair return for government while also allowing investors to generate a fair return on their investment. Over recent years, a ‘rule of thumb’ has evolved in the field of fiscal policy that the ‘government share’ (the amount that government receives from the sector in terms of taxes) should be in the range of 50 per cent of pre-tax cash flow generated by the project – i.e. government and investors should share pre-tax cash flow roughly on a 50:50 basis. This does, however, vary across countries – from percentages as low as 28 per cent in Sweden to around 64 per cent in Ghana. Most of the 12 countries in the sample had government shares in the 40 – 50 per cent range.

These returns correspond with varying Internal Rates of Return (IRR) for investors (i.e. the return investors receive from investment which differs from the ‘share of the pie’ of around 50 per cent received by the industry). Today a new project in a country with relatively low country risk would need a minimum of 17 per cent IRR to attract financing. Rates below this mean that little or no investment will take place and the resources may remain unexploited, generating no revenue for government. In the sample of countries that we looked at, these rates varied from 12.9 per cent in Ghana to 18.5 per cent in Sweden, suggesting that in the current price climate several of these countries are going to find it difficult to attract new investment despite their mostly good practice fiscal regimes and mining laws.

Although most countries generate revenues from the industry only in the form of taxes, some regulatory regimes mandate that the government owns a specified percentage share of a mining project in the form of a ‘carried’ (or free) interest. This has some advantages as it provides
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government with access to information and the option to participate in decision-making. However, it can generate conflicts of interest, be a source of friction (both within government and with investors) and deter investment. It is also a high risk way for government to participate in the industry and is unlikely to generate increased earnings for government as earnings from participation tend to be cancelled out by losses in taxes (as corporate profits are lower and/or companies may require lower taxation rates to invest). Where carried interest is mandated, the international norm is 10 per cent equity participation.

The overall ‘tax package’ of a country is more important than individual taxes as together these determine the IRR faced by investors. In designing a fiscal regime for mining, it is important that the principal taxes and royalty not be considered in isolation of one another. The government needs to run models to determine what combination of taxes and royalties results in a ‘win-win’ for both the government and the investor. However, it is important to understand common features and trends for each of the major tax categories that apply to the mining sector.

Corporate income tax (CIT) is usually the largest contributor to government revenue. Tax exemptions used to be common but have been replaced by lower CIT and accelerated amortization and depreciation of capital costs. CIT is now generally in the region of 20 to 35 per cent. ‘Thin capitalisation’ rules preventing high interest rates on related party loans are common.

Mineral royalties are common but vary in terms of the basis for calculation (focusing on value, volume or profits). There are four main types - gross production, gross revenue, net smelter return and net profits royalty. There is a rule of thumb that a 2 per cent to 3 per cent gross revenue royalty, a 3 per cent to 4 per cent NSR royalty, and a 10 per cent NPI royalty have roughly the same impact on project IRR and government royalty receipts. Typically, royalty rates are in the 3 per cent to 5 per cent range for gross revenue royalties, 4 per cent to 5 per cent for NSR royalties, and 8 per cent to 10 per cent for NPI royalties. Some countries recently considered introducing ‘progressive royalties’ but few have actually applied this.

As a result of strong commodity prices in recent years, some governments have considered introducing a special tax (“windfall profit tax”) on ‘excess profits’. The theory is that these taxes are levied only on the resource rent part of taxable income by allowing the investor to recover the original capital outlay, including normal return on capital, before any windfall profit tax is paid. Where windfall taxes do not follow this rule, they can be a major obstacle to attracting investment because they may not allow investors to recover their capital, which can be a powerful deterrent to investment. Moreover, they are complicated to administer. For these reasons, few countries have introduced windfall profit taxes and several who had them have since abolished them.

Other important taxes include those that are borne by investors before the start of production when there is no positive cash flow – these include VAT and customs duties. These can represent a significant cost, especially during the construction phase of a project, although many countries allow for VAT reimbursement, particularly during construction. VAT rates and rules should be internationally competitive, and should be clear especially with respect to VAT restitution entitlements and procedures. Customs duty rules and rates should be internationally competitive.

Fiscal incentives play an important part in determining investment in the industry. Two forms of incentives are common – accelerated depreciation and amortisation; and duty free treatment of inputs. Accelerated depreciation and amortisation allows companies to write off capital costs against profits in early years of production. This reduces profit tax liability in early years of production and helps companies recover their initial capital investments more quickly. This is attractive to investors and also has no long term impact on the amount of tax that government receives. In several countries, however, the failure of governments or investors to explain the reasoning behind these incentives in terms that are understood by the general public has led to a
perception that companies pay too little taxes. This underlines the importance of taking into account long term developments when describing and analysing mining taxes. Duty free treatment of inputs is intended to lower the cost of investment, thus increasing the likelihood that projects will be developed and is usually justified on the grounds that duties on the items concerned have been established as part of broader trade policy considerations without taking into account the particular needs of the mining industry. Where items needed by the mining industry are also used in other industries there is a risk of misallocation of resources. This argues for a relatively restrictive application of duty free treatment. Most developed countries do not exclude imports of mining equipment from duty.

Non-tax benefit creation

The benefits generated by the industry extend beyond revenue generation to include employment, backward and forward linkages and skills generation. Encouraging and enhancing these impacts often forms part of government’s considerations when designing mineral regimes.

Governments are interested in ensuring that nationals and those from local areas are employed in the sector. Some developed countries create attractive environments for mining when deposits are located in disadvantaged areas to enhance employment. This is less common in developing countries where a higher priority is placed on revenue generation. Some countries have strict requirements on the percentage of nationals who have to be employed. Where skills are not available though, this can lead to adverse consequences. More effective examples include those where local employment is enhanced through a process of consultation between mining companies, local government and local communities.

A number of countries have introduced legislation intended to encourage the strengthening of backward linkages from mining. Local content legislation exists on a spectrum from setting out broad policy priorities to industry-wide 'blunt instruments'. Mandated local content is a ‘new’ area and there is limited evidence of its impact on business decisions. In some cases, aggressive government policy on local content has generated perverse effects. Many local content regulations require significant monitoring and reporting that is unlikely to be consistently enforced by weak government administrations. Kazakhstan has particularly demanding requirements when it comes to local content and although investors are able to meet the targets for local sourcing, the real cost of detailed monitoring and reporting is likely to be high. There are good examples of government initiatives that have had positive results by working together with industry to increase local content without the use of blunt instruments. Many countries are restricted from implementing local content regulations due to WTO rules though. Kazakhstan is at the final stage of negotiations for acceding to the WTO, and, therefore, local content requirements could be subject to change, in order to comply with the WTO requirements.

Some countries try to encourage downstream processing to improve trade performance and speed up structural transformation. Various methods are used, from relatively vague commitments made by investors to export taxes on unprocessed products to outright bans on exports. Generally if such activities are not taking place already, it is likely because they are unprofitable. However, it is possible that the cost to the mining company may be offset by benefits accruing to the rest of society. Analyses of these benefits and costs should be undertaken before taxes or export bans are introduced. One particular aspect is the substantial energy needs of most smelting and refining processes, which may become a constraint on the development of other economic activities in countries that lack easy access to cheap energy.
Countries differ in their treatment of social investment with some mandating certain levels of investment and others leaving this up to investors. Social investment has changed over time – until the second half of the 20th century, mining companies tended to provide a wide variety of services. With increased competition this decreased but since the 1990s social investments have been increasing again. Companies invest in infrastructure, education, health care and local business development but avoid replacing government functions.

It is highly unusual for requirements concerning Research and Development (R&D) to be included in mining legislation or Mineral Development Agreements (MDAs). Although where local research institutions exist, mining companies would be both expected to and interested in supporting them.

**Comparative review of Kazakhstan’s mineral regime**

**Institutional, legislative and administrative framework**

Kazakhstan’s mineral legislation retains characteristics from the country’s central planning heritage and is strongly influenced by its experience of oil and gas exploitation. Law No. 291 on Sub-Soil and Sub-Soil Use (introduced in July 2010) combines legislation for solid minerals and hydrocarbons under one law. This differs from the international norm where the two sectors are generally separated. The law contains most of the mining sector regulations apart from those pertaining to taxation which are instead included in the Tax Code. Mining-specific taxation is included in the tax code, which deviates from international practice. The subsoil law itself is very detailed, unclear and contradictory in places, and the only available translation in English is extremely poor. This makes it very difficult for foreign investors to interpret whether or not Kazakhstan is a good investment destination. The Tax Code prescribes contemporary rules for tax administration, including tax audit, assessment, and appeals. The Code appears to be applied in a competent manner but the complexity of parts of the Code and the lack of a clear track record of its application is a larger problem.

Although hydrocarbon and minerals are regulated under the same law, separate Ministries deal with each of the sectors: the Ministry of Oil and Gas deals with hydrocarbons and the Ministry of Investment and Development (MID, formerly the Ministry of Industry and New Technologies), specifically the Department for Sub-Soil Use, deals with mining. This is in line with international best practice. However, it is difficult to make conclusions based on practical experience of the overall legislation as a moratorium was placed on exploration and mining licenses from 2007 to 2013, and as far as we know, no new mining licences have been granted after the moratorium. Presumably, exploration companies are waiting for the new legislation, presumably more adapted to exploration companies’ needs, to come into effect.

The granting of mineral rights in Kazakhstan is in the process of transitioning from a system based on auctions of mineral rights to a more standard system based on licensing on a first-come first-served basis. Previously, rights were auctioned unless potential investors who had a national mining company as a partner negotiated contracts outlining their obligations for social investment, training, local content and R&D with the Ministry of Industry and New Technologies. Although an auction system is appropriate for the hydrocarbon sector, it is not well-suited to the mining sector in the exploration stage. The system of negotiation before exploration was also inappropriate as exploration companies are generally not the same companies that set up the actual mining projects. The planned changes to the legislation appear to go part of the way towards aligning laws in Kazakhstan with international practice. However, it still leaves a number of areas to be determined by negotiation.
Under the present system access to geological information is restricted. Companies applying for exploration licences are only given full geological information after a contract has been signed and large payments have been made to government. The information provided is generally outdated and uses Soviet Union classification systems and methods. This differs significantly from best practice where access to such information is free and of high quality. Reforms are being made to the system which should significantly increase Kazakhstan’s attractiveness for exploration.

Subject to a few exemptions, the state has a pre-emptive right where a subsurface user transfers its rights or ownership interest in a mining company to a third party. The state is entitled to acquire such rights/interests on terms no worse than those offered to other buyers. This right has yet to be exercised by government.

**Fiscal regime**

All taxes in Kazakhstan are governed by ‘The Code of the Republic of Kazakhstan on Taxes and Other Obligatory Payments to the Budget, December 10, 2008, No. 99-IV Law RK’ (the Tax Code). Mining companies are subject to a variety of general taxes including corporate income tax, VAT, import and export duty, withholding taxes, and social tax. In addition to these, taxes specific to subsurface users are applied. These include excess profits tax (EPT), mineral production tax (or royalty), signature bonuses and commercial discovery bonuses.

VAT provisions, import duty, export duty, withholding tax and social taxes are all in line with international norms but some aspects of the CIT, as well as the EPT, royalties, signature bonuses and commercial discovery bonuses are not.

Corporate Income Tax (CIT) provisions are mostly modern and comprehensive. The CIT rate is 20 per cent of taxable income and allows for amortization of exploration and development costs at a rate of 25 per cent per annum on a straight line basis. Additional capital investments can also be depreciated. Problematic areas include complex ‘thin capitalisation rules’ and transfer pricing rules that apply to third party transactions (i.e. not only a related party) which introduces an element of risk for investors.

The Excess Profits Tax (EPT) is not in line with mineral taxation elsewhere and has a negative impact on rates of return for investors. Companies are required to pay EPT if their after-tax net income exceeds 25 per cent of costs claimed in that year for CIT purposes. The rate of EPT increases progressively from 10 per cent to 60 per cent as after-tax income increases. The impacts of the EPT are somewhat moderated though by accelerated tax depreciation provisions. The negative impacts on the rate of return for investors could be dealt with either through a repeal of the EPT or through eliminating the higher rates in the progressive rate schedule.

Royalty (or MPT) rates are relatively high and this contributes to the relatively poor return faced by potential investors in Kazakhstan. Royalties are based on gross revenue from mineral sales and the rates differ by mineral, ranging from 5 per cent to 8 per cent. Rates for uranium are particularly high at 24 per cent but coal is exempt from royalties (but subject to an export tax). Apart from coal, these rates are high relative to other countries and the number of different rates is higher than in most other countries.

Signature bonuses and commercial discovery bonuses are unusual for the mining sector but are included in the Tax Code for Kazakhstan. Signature bonuses have typically been low in the past but the law merely specifies a minimum payment amount which makes the actual future payments uncertain. Commercial discovery bonuses can amount to large sums. According to the Tax Code this should be calculated as 0.1 per cent of the in-situ value of the discovery which can amount to tens of millions of dollars for an average sized reserve. Although past payments have in practice
been low, investors have no guarantee that this will remain the case and this uncertainty increases the risk faced by potential investors and acts as a deterrent to investment.

The overall tax package in Kazakhstan generates an IRR of 16.2 per cent in the estimates in this study, which is too low for a typical, medium cost mining project to consider investment in the sector. This is largely due to the relatively high royalty rates in Kazakhstan and the imposition of an Excess Profits Tax. As noted earlier, an investor would look for an IRR of at least 17 per cent in a low risk setting. This rate can be reached in Kazakhstan by reducing the royalty rates and EPT. Several combinations of alternative rates would generate this return.

Although provisions for fiscal stability were included in earlier versions of the Tax Code, these were abolished in 2009. This represents a significant deterrent to investment as it raises the expected IRR needed for investment. In addition to this, no fiscal incentives are offered in the Tax Code for mining companies apart from accelerated amortization and depreciation.

Non-tax benefit creation

Investors have to make commitments regarding the employment and training of Kazakh nationals in the contract that they sign with government. While the commitments themselves are not overly burdensome, legislated commitments are uncommon in an international context. Relatively high penalties are applied for breaches which has a deterrent effect on investment.

Kazakhstan has a highly demanding system for regulating local content. Regulations fall under the Law on Subsoil and Subsoil Use and the National Agency for Development of Local Content (NADLoC) is responsible for implementation and monitoring. All subsoil users are expected to procure all goods and services under the government's Procurement Rules, all procurement information has to be downloaded onto an online registry and all advertisements have to be placed in periodicals that are disseminated throughout Kazakhstan. Subsoil users are required to provide a 20 per cent discount to Kazakh manufacturers and need to obtain a certificate that states the percentage of local goods used in production. The government also sets targets for local content. For 2010 – 2014 this was set at 16 per cent for goods and 85 per cent for services. While the actual percentages for local content are probably not overly burdensome in themselves, the fact that mining companies have to apply a discount when evaluating the bids of local suppliers may have an undesirable impact on their costs. Moreover, the complexity of the rules and regulations makes compliance burdensome for both investors and government and are uncommon in an international context.

No legislation exists outlining specific requirements for further processing but some incentives are offered for further processing – the most important being that mining companies become manufacturing companies if they process minerals which make them eligible for other forms of government support that is available to manufacturing companies.

Contribution to local economic development and infrastructure through social investment is an important consideration in competitive bids for exploration contracts under current legislation. Legally binding commitments have to be negotiated with government which is unusual in an international context. Large mining companies in Kazakhstan provide a wider range of social services than is typical in other countries and this can also act as a deterrent to investment. The transition to a system that will be less demanding on investors is likely to be both inevitable and complicated.

As with employment, local content and social investment, investors also have to make commitments regarding support to R&D carried out by Kazak institutions of around 1 per cent of turnover. The percentage is relatively high in an international context but this is unlikely to have a
major deterrent effect on investment as long as the requirement is known upfront and the does not change.

**Conclusions and recommendations**

The stated objectives of Kazakhstan’s mining policy are to promote employment and economic diversification, build skills and maintain existing regions and towns that depend on mineral production. Maximisation of government revenues is not a priority due to the large revenues generated in the hydrocarbons sector. Kazakhstan can realistically aspire to building a world class mining industry. In order to do so, it needs to attract foreign investment, which it has so far failed to do. Changes to the way in which exploration rights are granted mark a significant improvement in Kazakhstan’s attractiveness to investors. However, for discoveries to result in investment in large scale mines, the political and regulatory framework governing mineral investment will need to be adjusted in a variety of ways to attract investment. Recommendations on the key areas in which changes could be made are outlined below.

**Institutional, administrative and legislative framework**

The regulatory framework in Kazakhstan has been heavily influenced by the oil and gas sector experience and by the legacy of the planned Soviet economy. This is problematic as mining companies have a different perception of risks to oil and gas companies and prefer regulatory regimes that leave as little as possible to government discretion. They consider detailed regulations as constraints, preferring regulation by result to regulation by methods.

Transparent, foreseeable, consistent and stable application of clear and unambiguous laws will attract companies that are willing to take on geological and technical risks while being reassured about other risks. The government should consider reducing the discretionary agreements that currently form part of mining contracts.

In terms of the overall legislation, separate legislation for the mining sector is preferable to maintaining the current ‘dual purpose’ legislation. The introduction of mining-specific regulations placed in a separate law should be considered.

The current English translation of mineral legislation in Kazakhstan is of poor quality and this should be addressed as a priority. The poor quality of the translation reduces the accessibility of the law, increases the likelihood of misunderstandings and deters investment. A clear translation of the legislation should be commissioned and field tested on mining industry professionals that are native English speakers.

**Fiscal regime**

The mining tax system has three characteristics that reduce its competitiveness and these should be addressed:

First, it is uncertain how large some of the levies applied in Kazakhstan are likely to be. This applies to the signature bonuses and the commercial discovery bonuses. The uncertainty that this introduces for investors makes project planning difficult and deters investment. The uncertainty is exacerbated by a lack of stability clauses. Government can address this by making the rules regarding these payments simple and clear. Fiscal stability could be addressed through the introduction of legislation or, at a minimum, by ensuring that any changes to tax law allow for multi-stakeholder input before changes are made.
Second, some of the taxes have to be paid upfront which is problematic for an industry with long lead times to production and has a strong preference for a 'backloaded' tax system versus a 'frontloaded' one. Again this refers mostly to the signature bonus and the commercial discovery bonuses. These taxes should be reconsidered.

Finally, the overall marginal tax rate is high relative to other countries. This will tend to push the IRR below what investors need as a minimum to justify investment. The government should consider reviewing tax rates on the basis of the total tax package. This could be done through the use of a tax model that takes into account the dynamic relationship between various taxes. Two taxes have a particularly negative impact on the IRR – the EPT and royalties. Government could consider either repealing the EPT or reducing the top marginal tax rate from the present 60 per cent. The Government could also consider reducing its royalty rates to more competitive levels and reducing the number of royalty rates to two – one rate for gold and other precious metals, and another rate for other metals. When assessing the total tax package, the impact on costs of mandatory expenditures such as training, R&D and higher costs of local suppliers should also be taken into account.

The present tax legislation is unnecessarily complicated and simplifications would raise the competitiveness of the tax package. Government should consider revising the thin capitalization rules to make them easier to understand and administer, and to make them applicable only to related party financing. Government should also consider revising the transfer pricing rules to make it clear that these rules apply only to related party transactions.

**Non-tax benefit creation**

The policy of setting targets for local content in binding agreements with monitoring and reporting based on a detailed accounting are not suited to Kazakhstan’s needs. A shift to a more flexible policy that would reduce the perceived up front risks to investors while still contributing to industrialization and growth of skills should be considered. Making the agreements on local content between government and mining companies voluntary instead of mandated by law while at the same time broadening their scope to encompass more general issues would probably not yield significantly lower results in terms of overall local content but would reduce costs to both government and mining companies.

The situation regarding social investment in Kazakhstan is unusual as companies in Kazakhstan provide a broader range of services than is typical internationally. In existing state-owned mines, it may be possible for foreign investors to take over some of these responsibilities if no viable alternative exists but investors are unlikely to assume the same level of responsibilities for green field projects. Government will need to make their expectations with regards to social investment clear and possibly distinguish between existing and green field projects.

The one per cent spending requirement for spending on R&D should be reviewed as part of a general review of the Kazakhstan mining tax package. The mining industry as a whole spends less than this and this requirement runs the risk of being perceived as a tax under another name.
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1 Introduction and background

1.1 Background to the report

Kazakhstan is a mineral and hydrocarbon rich country. The oil sector currently dominates the economy but Kazakhstan also has rich nonfuel mineral reserves - particularly of uranium, chromite, zinc, copper, gold and manganese. However the extraction of mineral reserves is well below what would be expected given the size of the reserves. Kazakhstan ranks near the bottom of the ‘Policy Potential Index’ of the Fraser Institute’s 2013 Global Mining Survey indicating that the country is viewed as an unattractive investment destination. By contrast, the same survey indicates that given its mineral reserves (and assuming a hypothetical application of ‘best practices’ in mineral policy in the country), Kazakhstan would rank in the top third of possible investment destinations.

Since 2009 Kazakhstan has undergone a series of policy changes which have had implications for the mineral sector. Two recent legislative changes are important for the mineral sector – the new Tax Code introduced in 2009 and the Subsurface Use Act introduced in 2010. The introduction of these two acts did a number of things: they altered the taxes faced by the sector which increased the tax burden (thereby decreasing returns for investors); and they removed the stability clauses that were previously allowed in mineral production contracts and introduced uncertainties concerning the administration, interpretation and enforcement of existing regulations (thereby increasing risk for investors). The result is that Kazakhstan is both a high cost destination for production and also has a high effective tax rate. In addition to this, a number of characteristics of the mineral legislation are unusual in an international context and act as a deterrent to foreign investment.

As a result of the high levels of revenue generated from the oil sector, mining policy in Kazakhstan does not prioritize maximising government revenue. Instead it focuses on promoting employment and economic diversification, building skills and maintaining existing regions and towns that depend on mineral production. In order to achieve these objectives, however, Kazakhstan will have to attract the foreign investment which is has so far failed to attract. FDI in the mining sector has been relatively low as a percentage of total FDI (equivalent to less than 7 per cent of total FDI) and very little investment has gone into the development of new mining projects. Almost no new mining projects have been set up for the last two decades - all the mines currently operating in Kazakhstan were already in existence in the 1990s.

Given this context, this report aims to carry out a comparative analysis of Kazakhstan’s mineral regime and makes recommendations on changes that could be made to the existing regime to bring it in line with international best practice. The report carries out a quantitative comparison modelling Kazakhstan’s fiscal regime in comparison to twelve other countries (Argentina, Australia, Brazil, Burkina Faso, Canada, Chile, Ghana, Guinea, Laos, Peru, Sweden and Tanzania). These countries were chosen for the diversity they bring to the analysis – representing least developed to most developed countries, countries with mining sectors that are well-established and those with newer mining sectors, and countries with large fiscal revenues from mining. A qualitative analysis is also undertaken of the non-taxation aspects of the mineral regime in Kazakhstan, comparing these to global trends in mineral regimes. A field visit was undertaken to Astana in April to interview Government, the Chamber of Mines and other relevant stakeholders.

The rest of the report is structured as follows:

- Section 2 outlines the country context, giving an overview of recent economic and social developments and briefly outlining the mineral sector in Kazakhstan.
• Section 3 gives a general introduction to the mining industry. It provides an introduction to mining taxation - outlining the unique characteristics of the mining sector and the implications that these have for fiscal regimes; and outlining typical tax collections from the sector. It provides an introduction to the way in which revenues generated from mining projects are shared between different stakeholders, outlining the importance of balancing the needs of government and investors and some of the problems commonly encountered in interpreting government revenues streams. It also gives an overview of some of the non-tax benefits that the sector generates.

• Section 4 outlines best practices in mineral regimes. Firstly, it outlines institutional, legislative and administrative considerations – including where mining taxation and conditions should be specified, whether or not petroleum and mining sectors should be governed through different systems, and how effective tax administration can be achieved. Secondly, it outlines fiscal considerations – it outlines the importance of fiscal stability, of generating fair returns for both government and investors, the ‘tax package’ concept, individual mining taxes, and fiscal incentives. Finally, it outlines what governments have done to enhance non-tax benefits from mining in terms of employment, local content, further processing and social investment.

• Section 5 provides a review of Kazakhstan’s mineral regime in comparison to best practices. Firstly, it compares the institutional, legislative and administrative framework to international best practice – outlining the legal and administrative framework in Kazakhstan, the way in which mineral rights are granted, how access to geological information is granted and state ownership rules. Secondly, it compares the fiscal regime to best practice elsewhere, outlining the overall framework, individual taxes and the overall tax package. Finally, it outlines the ways in which Kazakhstan tries to enhance non-tax benefit creation in employment, local content, further processing, social investment and research and development, highlighting problem areas.

• Section 6 outlines the key recommendations that emerge from the comparison of Kazakhstan’s mineral regime to best practice internationally. It highlights key problems in the institutional, legislative and administrative framework; the fiscal regime; and non-tax benefit creation.
2 Country context

2.1 Recent economic and social developments in Kazakhstan

Kazakhstan has grown fast during most of the post-Soviet period, with growth fueled by oil and gas exports. Figure 1 shows GDP growth since the year 2000 with IMF projections until 2019. Non-oil GDP has grown at roughly the same rate as total GDP, indicating that oil revenue is spreading through the economy.

**Figure 1** - Change in GDP 2000-2019, per cent

![GDP per cent change and forecast graph](image)

Source: IMF, 2014a

The dependence on oil is strong, however, with oil and gas accounting for about 60 per cent of total exports in recent years and between 43 and 55 per cent of tax revenues.

The current account has been in surplus most years and is forecast to remain so in future. The government runs a fiscal surplus and general government debt is around 13 per cent (IMF, 2013). In view of the substantial deterioration in the (non-oil) current account balance, concerns about competitiveness (given significant depreciation in the Russian ruble), and the fall in international reserves, the National Bank of Kazakhstan (NBK) devalued the tenge by 18 percent in February 2014. According to the IMF, risks to the near-term growth outlook are predominantly on the downside. The loss of confidence in macroeconomic stability following the devaluation and possible delays in structural reforms pose downside domestic risks to growth. Furthermore, Kazakhstan’s economy is vulnerable to additional unfavorable developments in Russia and Ukraine, given the strong trade and financial linkages with Russia (IMF, 2014b). Kazakhstan is negotiating WTO membership and is in a Customs Union with Belarus and Russia. The Customs Union enters into force in 2015.

The high rate of growth has made possible rapid improvements in development indicators. Table 2 shows trends in the elements of the Human Development Index (HDI) for Kazakhstan.
Table 2 - Kazakhstan’s human development trends

<table>
<thead>
<tr>
<th></th>
<th>Life expectancy at birth</th>
<th>Expected years of schooling</th>
<th>Mean years of schooling</th>
<th>GNI per capita (2000 PPP$)</th>
<th>HDI value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>63.9</td>
<td>11.9</td>
<td>8.8</td>
<td>4462</td>
<td>0.642</td>
</tr>
<tr>
<td>2000</td>
<td>63.5</td>
<td>12.3</td>
<td>9.9</td>
<td>5039</td>
<td>0.663</td>
</tr>
<tr>
<td>2005</td>
<td>65.2</td>
<td>14.9</td>
<td>10.2</td>
<td>7860</td>
<td>0.721</td>
</tr>
<tr>
<td>2010</td>
<td>66.7</td>
<td>15</td>
<td>10.4</td>
<td>9569</td>
<td>0.744</td>
</tr>
<tr>
<td>2011</td>
<td>67</td>
<td>15.3</td>
<td>10.4</td>
<td>9920</td>
<td>0.750</td>
</tr>
<tr>
<td>2012</td>
<td>67.4</td>
<td>15.3</td>
<td>10.4</td>
<td>10451</td>
<td>0.754</td>
</tr>
</tbody>
</table>

Source: UNDP, 2013

The country’s economic environment has also changed rapidly over the past couple of decades. Kazakhstan has implemented a programme of economic reform that has achieved considerable simplification of procedures and liberalization. On the World Bank’s ease of doing business index Kazakhstan is ranked 50th, well ahead of other countries in the region, including Belarus (63rd), Kyrgyz Republic (68th), Russia (92nd), Ukraine (112th) and Tajikistan (143rd). Kazakhstan’s rankings on the various topics are shown in Figure 2.

Figure 2 - Kazakhstan’s ranking on ease of doing business topics, 2014


2.2 Kazakhstan’s mineral sector

Not surprisingly in view of its landmass - Kazakhstan is the world’s ninth largest country – Kazakhstan is richly endowed with mineral resources, most importantly copper, uranium (Kazakhstan is the world’s largest producer), iron ore, zinc and gold. Non-fuel mineral exports account for about 14 per cent of total exports. Despite having increased sevenfold since 2000, their share has declined from about 22 per cent of the total. Uranium exports account for a further 2-3 per cent, including processed products (international trade statistics include the various products under one heading). Figure 3 shows the evolution of the main mineral exports. As in other countries with large mineral sectors, mining accounts for a relatively small portion of employment, at around 2.4 per cent according to a 2011 estimate (Engineering and Mining Journal, 2011), but
its overall importance to employment is likely to be significantly larger if linked economic activities are included.

**Figure 3 - Main non-hydrocarbon mineral exports from Kazakhstan, 2000-2012, MUSD**

Most of the mining and metals industry was privatized following independence and is dominated by domestic producers. There are three main domestic producers:

- **Eurasian Resources Group (ERG)** is a Luxembourg-based natural resources company. It incorporates the assets of former ENRC PLC (Eurasian Natural Resources Corporation), which it acquired in November 2013. ENRC delisted from the London Stock Exchange in November 2013. It produces ferroalloys, chromium and manganese concentrate, coal, iron ore, copper, cobalt, and aluminium. It operates in Kazakhstan, Russia, Brazil and several African countries (Democratic Republic of Congo, Mozambique, South Africa and Zambia).

- **Kazatomprom**, a state-owned uranium producer which operates several mines, some of which in partnerships with foreign investors. It also produces nuclear fuel for power plants and rare earth metals.

- **KAZ Minerals PLC**, name changed from Kazakhmys on 31 October 2014, a privately owned large integrated copper producer listed on the London and Hong Kong Stock Exchanges, dominates copper production in Kazakhstan. It also produces gold, silver and zinc and it owns a copper mine in Kyrgyzstan.

Relatively few foreign companies operate in Kazakhstan. Those that do include:

- **Arcelor Mittal**, which operates iron ore and coal mines and steel plants since 1995.

- **Kazzinc**, majority owned by Glencore after a partial privatization in 1997, produces zinc, copper, lead and gold.

- The French uranium miner and nuclear power plant producer Areva has a partnership with Kazatomprom, and

- **Rio Tinto** cooperates with Tau-Ken Samruk, a state-owned holding company and is exploring for copper in northern Kazakhstan.
A number of smaller companies explore for gold and exploit a few gold deposits. Almost no new mines have been set up in the last two decades – most production comes from mines that have been in operation since the 1990s.
3 Nature of the Mining Industry and Implications for Mineral Regimes

3.1 Introduction to mining taxation

Designing a mineral taxation regime is not a simple task. Ideally, a government should want the mining tax regime to:

- Provide for a fair participation by the state in the fruits of the mining enterprise;
- Encourage investment;
- Contribute to employment creation and industrial development;
- Be stable over time;
- Be transparent and provide an even playing field for all players;
- Be easy to understand;
- Be easy to administer; and
- Be internationally competitive.

As a practical matter, though, other government policies often conflict with these ideal objectives, so that the actual mining tax regime is less than optimal.

Box 1 – Mining project stages

Generally speaking, there are five basic stages in the life of a mining project as follows:

- Exploration: 5 – 10 years
- Feasibility & Financing: 2 – 3 years
- Site Development & Construction: 2 – 3 years
- Production: Several years to several decades
- Mine Closure: 2 + years

Exploration usually takes between 5 and 10 years; feasibility and financing take 2 to 3 years; and site development and construction takes 2 to 3 years. After this, production commences and this can take place over several years or several decades depending on economic viability. Once the project ends, mine closure takes two or more years.

3.1.1 Uniqueness of the mining sector and implications for the fiscal regime

An internationally competitive mining tax regime should recognise the unique characteristics of the mining industry that distinguish it from other sectors of the economy. This is why fiscal regimes often consist of tax provisions that apply exclusively to the mining industry. Mining is:

High risk

Relative to most other industries, the mining industry is characterised by high risk. This risk is present at all stages of the project’s life cycle, including the exploration, development, and production stages.

A tax regime can recognise the relatively high risk that is faced by the typical mining enterprise by:
• Permitting the mining enterprise to reap a reward that is commensurate with this risk. For example, most investors these days would require a mining project to generate a return on investment in the 17% range, depending on “country risk” and “technical risks”; and

• Provide for certainty of tax rules. Some governments that do not have a dependable track record of fiscal stability enter into fiscal stability agreements with mining enterprises, or legislate fiscal stability within the country’s tax or mining laws.

**Capital intensive**

The mining industry is capital intensive. Huge amounts must be spent annually on exploration to discover sufficient ore to replace the ore that is currently consumed. In the mid-1990s, the Prospectors and Developers Association of Canada engaged an independent mineral consulting firm to study how much needs to be spent annually on exploration in Canada in order to sustain a constant level of mineral reserves. The study estimated that approximately $800 million had to be spent each year on exploration in Canada in order to replace reserves that are consumed in that year. The cost of preparing an ore body for production also commands enormous capital investment. Today, a world class base metal mine can typically cost several billion US dollars.

A country’s mining tax regime can recognise the capital-intensive nature of the industry by allowing the enterprise to generate sufficient after-tax cash flow in the early years of production to service project debt. The reason for this is that one of the important criteria considered by those who finance mining investment is “payback”. A lender or other investor will want to minimise its exposure to project risk by being repaid as quickly as possible. In addition, a regime can minimise the imposition of customs duties, VAT, and similar up-front costs that are a function of capital investment. The imposition of a 10 per cent VAT and a 10 per cent customs duty on the importation of capital equipment can, in effect, add up to 20 per cent to the cost of a project. These charges could add $200 million to the cost of a $1 billion project, and could render the project uneconomic. This is why an internationally competitive fiscal regime ensures prompt VAT restitution\(^2\) and minimizes import duties on mining machinery, equipment, and supplies.\(^3\)

**Long lead time to start of production**

The first decision to invest in a mining project is made when exploration commences – a long time before the start of production. For example, exploration on Indonesia’s world class Weda Bay nickel project started in 1997, and the project has still not begun to produce\(^4\). When the investor makes the decision to begin exploration, the investor is committing itself based on the fiscal regime in place at the time of that decision. Changes to the fiscal regime part way through project life can affect project economics. For example, a tax increase can result in low grade ore never being mined, or can otherwise shorten project life.

As noted in connection with the discussion of risk, governments can offer stable conditions to investors in order to take into account the very long lead times in mining. Such offers often only apply to projects once a decision to invest has been taken, however.

\(^2\) Virtually all tax regimes provide for VAT paid by an enterprise on its inputs to be restituted while the enterprise pays VAT on its output. Thus, VAT is effectively levied only on the enterprise’s value added. VAT is commonly not paid on goods and services that are exported.

\(^3\) As will be discussed in the following, on the other hand, the application of special conditions with respect to conditions for import runs the risk of creating uneven conditions of competition between domestic and foreign suppliers to the industry.

**Price-taker faced with cyclical prices and demand**

The prices of mineral products are established by the interaction of supply and demand in the global marketplace. The mining enterprise does not set the price for its product – the enterprise is a “price taker”. Because the mining enterprise is a price taker, the cost of taxes cannot be passed onto the mining enterprise’s customer. The enterprise has to bear the burden of these costs, sometimes even though the enterprise may not currently be profitable.

Moreover, most metal prices show wide swings over the years, and the typical mining enterprise’s profits will reflect these price cycles. It is common that even the largest mining companies record losses for a number of consecutive years as a result of soft metal prices.

The mining tax regime can recognise the cyclicality of the industry and the fact that the mining company cannot influence the prices of its products by providing adequate loss carryover periods in the profits tax system, and possibly in the country’s mineral royalty system, too. Most countries provide for loss carryover periods in the range of five to ten years.

One of the most serious flaws of some so-called excess profits taxes (see section 3.2.1.3) is that such taxes skim off the cream in the good years, without providing for comparable relief in the lean years. In simple terms, an excess profits tax is intended to impose a higher tax on profits that the state believes, as a matter of policy, are exceptionally high. Such taxes may be intended to allow the government to share the revenues from exceptionally valuable deposits. When they are imposed in reaction to cyclically high metal prices they are borne by all mines and fail to recognise the cyclical nature of the industry.

**Operating in underdeveloped areas**

Usually, ore bodies are found in remote locations. Consequently, in some instances the mining enterprise is obliged to incur substantial infrastructure costs. The enterprise is often expected to pay for access roads, electric power facilities, port facilities, and social infrastructure such as medical clinics, school, and recreation facilities.

Also, the enterprise’s payroll costs can be relatively high in remote locations, as a result of the need to offer incentives to attract workers to the site.

A mining tax regime can recognise these higher costs as follows:

- Provide generous tax depreciation rates for infrastructure costs; and
- Make employee incentives (for example, subsidized housing and travel allowances, and hardship bonuses) tax-free for the employee.

**Finite life**

Unlike a manufacturing plant or a service business, a mining project has a finite life, because its reserves are finite. This means that the enterprise has a limited number of years over which to realise a competitive rate of return on its investment.

The feasibility study, on which the project investment decision is made, takes into account the entire life of the project, and must assume that the tax regime will not change significantly during the project’s life. A change to the tax rules part way through the life of the project could jeopardise the viability of the project and result in it being shut down.

Whether a country seeks to build fiscal stability into its mining tax regime through either legislation or contract, the important consideration is that the country honours its commitment to stability.
Unless the country has a proven track record of stability, the mining enterprise will view promises of stability with some suspicion. And, once the country has established a track record of stability, it should be careful not to damage that record.

**Environmental and social impacts**

There is a trend in the regulatory climate to charge the mining enterprise with increasingly strict responsibilities for site restoration and reclamation, and mine closure. Mining projects can have a disruptive impact on local communities. Mining companies should accept that communities must benefit from projects that affect them.

The modern mining tax regime recognises these increasing responsibilities by providing tax relief when funds are set aside or otherwise reserved for reclamation, restoration, and mine closure. Corporate social responsibility (CSR) costs incurred by the mining company can be significant and should be deductible.

**Sources of financing**

So-called “junior” exploration companies are a major source of funding for exploration programmes and account for the largest share of global exploration spending. These companies raise risk capital by issuing shares on a stock exchange such as the TSX in Toronto or the AIME in London. Mining companies that are already in production are also a source of funding for exploration programmes on properties that they own. It is important to note that a country that strives to attract maximum mining investment will have to take into account the interests and needs of the junior exploration companies in its mining legislation since it will otherwise lose access to significant exploration funds.

Generally speaking, it is not common for a junior exploration company to fund the development and construction of a mineral property following the completion of a bankable feasibility study. Normally, a proven economic property owned by a junior exploration company is purchased by an existing mineral producer that finances the mine development and construction through a combination of bank financing and existing company cash resources. Table 3 summarizes the common sources of capital for a mining project.
Table 3 – Sources of financing

<table>
<thead>
<tr>
<th>Exploration Activities</th>
<th>Feasibility Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company type</strong></td>
<td><strong>Funding</strong></td>
</tr>
<tr>
<td>Junior’ exploration company or entrepreneur</td>
<td>Raises funds on stock exchange or through private investment</td>
</tr>
<tr>
<td>Producing company</td>
<td>Uses its own existing cash resources</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mine Construction</th>
<th>Mine expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company type</strong></td>
<td><strong>Funding</strong></td>
</tr>
<tr>
<td>Bank or other lender</td>
<td>Lends money to project company; Wants fast pay-back</td>
</tr>
<tr>
<td>Junior’ exploration company or entrepreneur</td>
<td>Raises funds on stock exchange or through private investment.</td>
</tr>
<tr>
<td>Producing company</td>
<td>Uses its own existing cash resources</td>
</tr>
</tbody>
</table>

### 3.1.2 Typical tax collections over time

Most mining enterprises typically face a myriad of taxes. Studies show that most of a government’s direct revenue streams derived from the mining sector come from five main taxes, in this order of magnitude:

1. Profits taxes;
2. Royalties;
3. Employees’ income taxes
4. Customs duties; and
5. VAT

Figure 4 illustrates the timing of the collection of these taxes over the life of a typical mining project. The chart in Figure 4 is based on an actual feasibility study for a typical world class mine. This particular project is characterized by three years of pre-production development, followed by twelve years of production. As is customary, this feasibility study holds metal prices and operating expenses constant over mine life, so that metal price fluctuations, for example, do not cause year-to-year fluctuations in royalty or profits tax levels. The share accounted for by different types of taxes may vary widely depending on the mining project and the individual country’s tax regime; the incidence of the various taxes over time, particularly the order in which they make their appearance, varies little, however, from one mine to another. In the case of this particular project, VAT paid to suppliers of goods and services is promptly refunded to the mining enterprise, so that the project does not bear any net VAT.
Figure 4 – Timing of tax collections over project life

As illustrated in the figure, the government receives revenue in the form of customs duty and employee tax during pre-production development in the first few years. Once production starts, tax revenue largely consists of royalties and employee tax for several years until the project starts to make a profit. When the project starts to make a profit, payments in the form of royalties and employee tax remain the same but these contributions make up a relatively smaller proportion of total government revenue as income tax makes up the largest proportion of government revenue. This remains the case for most of the project’s life, assuming that the mine remains profitable.

**Profits tax**

It is not unusual for a project to have no liability for profits tax during the early years of production, because it is becoming increasingly common for countries to allow accelerated amortization and depreciation of capital costs as investment incentives, the reason being that while tax holidays result in the loss of tax revenue, accelerated capital allowances only changes the distribution of tax revenue over time. Alternatively, some countries historically offered tax holidays as a form of investment incentive, but there is a trend away from tax holidays towards the use of accelerated capital allowances as investment incentive. Where profitability is affected by significant variables, such as commodity price, the amount of profits tax collected tends to fluctuate from year-to-year accordingly.

Section 3.1.3.1 explains how accelerated amortization and depreciation of capital costs works.

**Royalties**

Normally, mineral royalties will start to be paid as soon as the project begins production. Some countries offer exemptions from royalty for specified periods of production (for example, the first three years of production) as an investment incentive, but such royalty exemptions are rare. Where the country’s mineral royalty is based on some measure of the volume of production, royalty collections tend to be relatively constant and predictable. However, where the royalty is based in whole or in part on significant variables, such as commodity price, then annual royalty collections can be highly variable and unpredictable. However, since they are never zero as long as the mine
is producing, unlike profits based taxes, royalties are an attractive form of tax revenue to the government. Another reason why most governments use them is that they are relatively easy to apply and to monitor.

**Employee tax**

Figure 4 also shows employee income tax as a source of government revenue streams. Generally speaking, these taxes are a function of the level of salaries and wages paid by the mining enterprise, which tend to be high during the mine development and construction phase and then fairly constant during the production phase of mine-life. These taxes can be an important part of the government revenue generated by a mining enterprise, and since they vary little they constitute a reliable source of earnings. In countries where only a small percentage of the population pays income tax, employee income tax collections from the mining sector are particularly important. Governments often overlook them in their fiscal planning, however.

**Customs duties**

Where the importation of mining machinery and equipment is subject to customs duty, most of these duties are collected during the development and construction phase of mine-life prior to the start of mineral production.

**VAT**

The chart in Figure 4 does not show VAT for this reason: If a typical VAT system is working properly, the mining enterprise should never be out-of-pocket with respect to VAT payments for longer than a matter of months, as a result of prompt government payments of VAT refunds. However, in the case of some countries, these VAT refunds are not paid promptly, and VAT can unintentionally become regarded as a source of tax revenue from the mining sector and a cash flow cost to the mining enterprise.

### 3.2 Balancing the needs of government and investors

#### 3.2.1 Sharing a mining project’s revenue stream

An important objective of the fiscal regime should be to balance the government’s needs and investors’ needs.

The government’s needs include:

- Attract investment to the mining sector;
- Optimize government revenues from mining activities; and
- Optimize the mining sector’s contribution to economic growth and diversification.

The investor’s essential need is to realize an acceptable return on investment. The project’s internal rate of return (IRR) is typically used by industry to measure the investor’s return on investment. Both domestic and foreign investors use IRR to evaluate project economics. For a country with average ‘country risk’, an investor in a mining project may require a minimum IRR in the 17 per cent range. In balancing government’s needs and investor’s needs, this IRR benchmark needs to be considered.
In general terms, there are four principal beneficiaries of the revenues generated directly by a mining project:

1. Suppliers (the suppliers of goods and services to the mining enterprise – for example, machinery and equipment manufacturers and fuel suppliers);
2. Employees of the mining enterprise;
3. Investors in the project (for example, lenders and shareholders); and

The chart in Figure 5 depicts each of these beneficiaries’ proportionate shares of the gross amount of revenues generated by a typical mining project over the project’s life. The “pie chart” represents the “size of the pie” to be shared by the project’s stakeholders, where the actual size of the pie is determined by two factors – the number of units of minerals produced, and the sales price of each unit. As seen in the figure, the largest proportion of revenue (at just over half of the total) goes to suppliers. Government and investors receive roughly equal proportions (around 17 – 18 per cent) and finally employees receive around 10 per cent of the total.

Parties who are interested in such matters are often surprised to observe that the government’s share of a project’s revenue streams (“of the pie”) is typically not higher than it is. For example, in Figure 5 the government’s share of the total “pie” is only 17 per cent. There are good reasons why this is the case, and it is important to understand these reasons.

Figure 5 – Share of project revenues

First of all, the “size of the pie” that can be generated by a mining project is finite although not invariable. It is determined simply by the number of units (for example, ounces of gold) that are in the ground, and the price at which these units can be sold. No stakeholder has any control over either of these two factors: the size and grade of the mineral reserve is based solely on ‘mother nature’, and metal prices are determined in a global market place by the interaction of supply and demand. However, for practical purposes and over time, the size of the pie is influenced by factors such as technological change and by legislation. For instance, an increase in royalties will, other

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5 For the purposes of this section, “indirect” beneficiaries of a mining project – such as employees and owners of a supplier to the mining enterprise – are not considered. It is important to acknowledge, though, that a mining project is generally thought to generate an “economic multiplier” effect which can vary from 2:1, that is, for each dollar of mining output one dollar’s worth of production is generated elsewhere in the economy, to 5:1 or even higher.

6 Based on 2012 World Gold Council data.
things equal, reduce the size of the pie since it will make all or parts of a deposit uneconomic to mine.

Second, the government’s ‘share of the pie’ is a function of the country’s tax laws. In today’s global market place, most governments recognize that the country’s tax regime must be internationally competitive. A country’s fiscal regime needs to be comparable to the regimes of other countries that are competing for investment.

3.2.2 Interpreting government revenue streams

Experience in both developed and developing countries is that government revenue streams from the mining sector often fall short of expectations. In some instances, these short-falls are real, and sometimes they are a result of incorrect perceptions. The reasons for government revenue streams not meeting expectations may be summarized as follows.

The nature of the mining sector is not well understood

The unique characteristics of the mining sector are not always well understood by government policy makers, government administration, civil society, local communities, NGO’s, the media, and some members of the business community. Consequently, misconceptions exist as to the capacity of the mining sector to contribute to enhancing government revenue streams.

In designing a fiscal regime for application to the mining sector, government faces some important constraints that are often misunderstood or unknown by parties who have high expectations about government revenue collections. For example, the importance of having a fiscal regime that is internationally competitive imposes relatively strict limitations on the size of the government’s ‘share of the pie’ generated by a successful mining project.

Misunderstandings about the bases for determining tax liabilities

It can be difficult to understand relevant tax laws and supporting regulations, financial statements and underlying accounting principles, and standard mining sector commercial contracts that serve as the bases for determining tax liabilities. For example, there are often misconceptions about the timing of collecting the main taxes imposed on a mining project over project life. It is not unusual to find that a typical world-class mining enterprise legitimately pays no profits tax until the sixth or seventh year after the start of mine development. Generally, this is due to the capital intensive nature of the sector and to particular tax deductions that are prescribed for calculating the profits tax liability.

The legal nuances of applicable tax laws, the subtleties of financial statement reporting and accounting practices, and the complexities of commercial contractual terms are generally not well understood, except by highly experienced professionals. These misunderstandings can contribute to a perceived gap between actual revenue collections and expectations. For example, one would expect that the government should collect $2.5 million in profits tax from a mining enterprise that reports $10 million in pre-tax profit and is subject to a 25% profits tax. However, the reality is often significantly different. Similarly, the trade-offs between different kinds of taxes are not always understood. For instance, royalties are normally deductible for the purpose of calculating profits tax. For this reason, a rise in the rate of royalty will automatically lead to a decline in the tax on profits.

Difficulties in administration

Common reasons for inefficient administration include: the tax laws are inadequately drafted and are therefore difficult to interpret and to administer; there are not enough tax officials and/or they
receive below standard training; systems and procedures are not appropriately designed and/or implemented; and, leadership at the political level and/or at the top level of government is not effective in ensuring cooperation among different government departments that have different responsibilities in administering revenue streams.

**Tax avoidance and tax evasion**

Some mining companies are less honest than others and while all of them can be expected to attempt to reduce their exposure to tax through legal means, some of them may resort to methods that are not legal. Often, public opinion is very suspicious of mining companies and they are accused of many types of illegal behaviour, including some that appear fairly exotic and unlikely to occur in listed companies with auditors.

Among the more common and more realistic allegations is transfer mispricing, which is claimed to occur by mining exports being under-priced or imports by mining companies being over-priced. The first type of transfer mispricing is usually simple to identify even for a tax administration with very limited resources. Since most minerals have internationally recognized price quotations, either as a result of their being traded at commodity exchanges or because benchmark prices are published by the trade press, deviations from normal pricing practices are easily caught. It is more difficult to establish mispricing of inputs, since often no recognized quotations exist and since quality and sales conditions may vary significantly. Nevertheless, diligent tax auditors will usually catch the more obvious abuses by scrutinizing transactions with related companies. A number of studies have been carried out in order to attempt to establish the extent of transfer mispricing through mirror trade statistics.\(^7\) Some of them raise serious doubts with respect to methodology and very seldom do they allow the drawing of conclusions in any specific case. However, they may serve to point tax auditors in promising directions.

Payments to related companies for management services, intellectual property rights (less common in mining) or interest on loans can prove challenging for tax auditors. Many jurisdictions apply thin capitalization rules, that is, they limit the amount of finance provided in the form of loans in order to put a ceiling on transfers to related companies in the form of interest payments.

In principle, a government’s best defense against tax evasion by mining companies, in addition to maintaining a high level of competence in tax audits, is to keep the legislation simple and clear. Exceptions, leaving decisions to the discretion of governments, and overly detailed rules, all constitute invitations to tax evasion, fraud and corruption.

**Misuse of government funds**

Finally, in some developing and transition economies, ‘leakage’ in revenue flows happens as a result of corruption of government officials or poor understanding as to the best utilization of government funds. Detailed consideration of this particular reason for the gap between expectations and reality is beyond the scope of this review, except to mention the importance of participation in powerful international programs such as the Extractive Industries Transparency Initiative (EITI) and the Kimberly Process.

### 3.3 Non-tax considerations

While the revenue generated by the sector is an important part of the contribution made by the sector, this is not the only way in which benefits are generated. Mining can contribute to economic growth in a number of ways, including:

- **Increased employment:** Mining can provide employment opportunities for local communities, which can lead to increased economic activity and improved living standards.
- **Technological advancement:** The mining industry often leads the way in technological advancements, which can be transferred to other sectors of the economy.
- **Infrastructure development:** Mining operations often require significant infrastructure development, which can benefit the country as a whole.
- **Education and training:** Mining companies often invest in education and training programs for their employees, which can also benefit the wider community.
- **Environmental remediation:** Mining activities can also contribute to addressing environmental challenges, such as land reclamation and water management.

\(^7\) Two of the best studies from the point of view of methodology are Boyce and Ndikuma, 2012, and Global Financial Integrity, 2013.
growth and diversification through employment, backward and forward linkages and skills development.

3.3.1 Employment

As seen from Figure 6, mining projects impact mainly on large macro-economic variables such as foreign exchange inflows or tax revenues. Mining’s share of overall national employment is usually counted in the low single digits. However, this does not mean that mining is without importance for employment. It is true that mining in itself, except for artisanal small scale mining, is capital-intensive and needs few employees in relation to the capital invested. However, employment varies considerably from one mine to another, even when mines producing the same mineral are compared. Copper production, for instance, varies from around 7 tonnes per employee in some older underground mines in Zambia to close to 100 tonnes in modern Chilean mines (Chamber of Mines of Zambia and ICMM, 2014).

Figure 6 – The mining sector’s contribution to macro-economic indicators

Moreover, the belief that mining has few linkages to the rest of the economy and can be thought of as an ‘enclave’ has been challenged in recent years, as the linkages between mining and other economic activities have become better understood and as it has been increasingly realized that employment effects can be influenced by company actions and government policy. One of the first attempts to document the broader employment effects across a wider geographical range was the Resource Endowment Initiative of the International Council on Mining and Metals (ICMM), which studied such effects in four case study countries (Chile, Ghana, Peru and Tanzania), including the effects of one large mine in each country. The report synthesising results of the case studies notes ‘One common characteristic of all four mines is that they employ large numbers of people. Despite the highly mechanized nature of modern industrial mining, the absolute number of people employed (either directly or indirectly) are substantial’ (ICMM, 2006, p. 34).
When analyzing the employment effect of a large mine, three types of employment are usually distinguished: **direct**, **indirect** and **induced** employment.\(^8\)

**Direct employment** refers to those that are employed by the company that owns and operates the mine. Contractors’ staff are usually included if their regular work place is at the mine. As already noted, direct employment relative to production can vary considerably between mines. An aspect that often attracts the interest of governments is the share of expatriate employees. In most cases, expatriate employees are more expensive than local ones, since they have to be compensated for living away from their home countries, often from families. There are some exceptions, mainly concerning Chinese companies that have employed Chinese workers because of cultural affinity or other reasons. In the vast majority of cases, however, mining companies strive to keep the number of expatriates low, with the main constraint on hiring nationals of the host country being skills availability.\(^9\)

**Indirect employment** concerns those working with other companies that supply goods and services to the mine in question or that uses its outputs. These employees are part of the supply chain. Indirect employment varies depending on company policies regarding outsourcing (a mining company employee repairing a truck is counted as direct employment, while a mechanic employed by another company who repairs the truck off the mine site is part of indirect employment), but also on the industrial infrastructure in the area surrounding the mine, the competitiveness of local suppliers and the regulatory framework (see below concerning local content). Usually, indirect employment in countries with relatively undiversified economies, such as most developing countries, is significantly less important than direct employment. It deserves to be noted that the employees of contractors providing services can be very numerous, but they are usually included in direct employment if their work is carried out on the mine site.

**Induced employment** includes those who are employed as a result of spending of wages by employees of the operation in question concerned and, usually, also by employees of suppliers and customers. In low income countries, where the difference between mine workers’ wages and the average wage is often very large, induced employment effects can be very large, often a high multiple of direct employment.

### 3.3.2 Local content

Local content is the term usually employed to describe the extent to which goods and services used in mining are sourced in the host country. As already noted, local procurement depends on a number of factors mainly having to do with the competitiveness of local suppliers and company practices concerning outsourcing, which can vary considerably. Since much of mining equipment is highly specialized and only produced by a handful of large international companies, not even mining companies in highly industrialized countries\(^10\) can aspire to source all or even most of their

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\(^8\) There exists no universally recognized definition of the terms, but definitions differ only very slightly between users. Here, the classification is based on the one used in the ICMM Toolkit (ICMM, 2012), which has been utilized in a number of case studies.

\(^9\) In the ICMM case studies mentioned earlier, the proportion of expatriates varied from 1-2 % in Chile and Zambia to 17 % in Tanzania (Chamber of Mines of Zambia and ICMM, 2014).

\(^10\) Canada, for example, is a world leader in mineral production, but most of the necessary heavy machinery and equipment is imported from Germany, Sweden, Japan, and the USA.
equipment locally, while items such as construction material of various kinds can almost always be economically sourced locally.\textsuperscript{11}

Services are another matter. Since it is cheaper to move goods than people, the majority of services are usually procured locally, even in countries with relatively low skill levels.\textsuperscript{12} The boundary line between goods and services may be difficult to draw, pointing also to one of the main ways by which local suppliers can achieve market penetration: a local agent for imported equipment may diversify his offering by starting to carry out maintenance, proceeding to the manufacturing of simple spare parts and eventually producing larger pieces of equipment.\textsuperscript{13}

### 3.3.3 Further processing

Just as backward linkages to suppliers may magnify the mining sector’s impact on the national and local economy by contributing to increased employment and economic diversification, forward linkages in the form of further processing may also bring positive benefits to the economy. It should be noted, however, that the importance in terms of employment and industrialization varies considerably depending on the mineral and the stage of processing. For example, refining doré (an alloy containing mainly gold and some silver that is commonly obtained as an output of gold mines) to pure 24 carat gold has only a small impact on the value and employs little labour, while producing gold jewellery from the pure gold may add considerable value and provide employment for a substantial number of people. It is difficult to generalize, but the economic benefits of further processing are often overestimated – such activities are not labour intensive, and typically low profit margins generate relatively low tax revenues for government. Decisions about downstream integration should of course be taken on the basis of the competitiveness of the products constituting the output. Two factors are important in this respect:

- the presence of all necessary inputs – for instance, it is usually uneconomic to pursue aluminium smelting if cheap electric power is not locally available, regardless of the amount of bauxite that may be locally produced, but the bauxite may be profitably processed in another country with cheap electric power (see Box 2);

- closeness to the market – many downstream products such as semi-fabrics of steel and nonferrous metals are produced in a wide range of qualities and are used by a variety of industries; it is necessary to be able to supply the needed quality to the customer at short notice, which means that geographic closeness to the market gives a competitive edge. It is not a coincidence that semi-manufacturing of nonferrous products has migrated from Europe and North America to East Asia at the same rate as production of manufactured products, as illustrated by statistics over metals use.

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**Box 2 – The importance of cheap energy**

Canada’s aluminium industry, which had its beginnings in the 1920s, started in the Province of Quebec where there was an abundance of inexpensive hydro power. Canada has no bauxite: all bauxite was imported from Africa and the Caribbean. The energy savings more than compensated for the cost of shipping bauxite long distances. In countries where energy is less easily accessible and/or more expensive, energy use in further processing, which is usually important, may push up

\textsuperscript{11} It is important to distinguish between goods that are bought from local suppliers but which have been imported, with the local company only acting as an agent, and goods that have been manufactured locally. Clearly, it is much easier to achieve impressive shares of local content in the former case.

\textsuperscript{12} In an OPM case study on Zambia (Chamber of Mines of Zambia and ICMM, 2014), it was estimated that while only 5 per cent of goods bought by the mining industry were produced in the country, 80 per cent of services were provided by Zambian nationals.

\textsuperscript{13} A study on local procurement in Zimbabwe (OPM, 2014) identified examples of this type of progress.
the price or reduce availability of energy for other sectors.

3.3.4 Skills building

One of the more significant long term benefits of a modern and internationally competitive mining industry is that it raises general skill levels, among both those directly employed in the mines and those working in sectors that are linked to mining. This improvement in skills facilitates further industrial development and may be a crucial factor for growth. Some of the more successful industrial countries owe at least part of their competitiveness to the application of skills developed in natural resource based industries to other sectors. A World Bank report notes:

‘The key elements were organizational structures, knowledge networks and aggressive human capital policies that, though developed to pursue resource processing, were transferable to high-tech industries.’ (World Bank, 2002)

Clearly, the situation and developments with respect to employment, local content and further processing all influence the development of skills. This is therefore one of the areas that tend to absorb government’s attention and it is often a focus for policies with regards to mining.
4 Best Practices in Mineral Regimes

Experience shows that an internationally competitive fiscal regime will have the following characteristics:

They are stable over time. The investor’s decision to proceed with a project is largely based on a bankable feasibility study. The feasibility study is based on important assumptions regarding metal prices, production levels and ore grade, operating costs, taxes, and other important variables. Once the project is up and running, the continued viability of the project is a function of these variables. If changes to tax rules over project life can be minimised - that is, if the tax regime is stable – then there is one less variable or risk to threaten the enterprise. One risk factor is either reduced or eliminated.

They are transparent and create a ‘level playing field’. A tax regime that is not transparent and that does not provide a level playing field (i.e. the same basic tax rules for each taxpayer) can be counterproductive: political detractors, NGOs, local communities, and competing investors, for example, become suspicious of “special deals” where the process is not transparent, and can become antagonistic to the mining enterprise and/or the government. Such antagonism can lead to conflict that consumes both time and money, and that can give the host nation a tarnished reputation. Most importantly, discretionary decisions on the part of government normally lead to suboptimal solutions and real losses to the economy, unless the decision makers benefit from perfect knowledge and foresight.

They are easy to understand and administer. The tax regime should be easy for taxpayers to understand and for the government to administer. From the taxpayer’s perspective, vagueness or ambiguities in the law will add to the risk of the investment. From the government’s perspective, ease of administration is important to avoiding long and costly disputes, to making staff training simpler and less costly, and to building and maintaining good relations with taxpayers. Unnecessarily complicated tax regulations may also raise suspicions among the general public that something is being hidden.

They allow for fair participation by government. The ‘Government Share’ in Table 7 shows the amount of taxes collected by the government as a percent of pre-tax cash flow generated by the project. When formulating tax policy, a government needs to be careful not to stray far from international norms with respect to ‘Government Share’.

They generate a fair return on investment for investors. In determining whether to bring a mineral deposit into production, a mining enterprise will attach considerable importance to the project's IRR. The IRR indicates the rate of return generated by the project for the investors, and thereby enables the investor to make choices among alternative investment options.

4.1 Institutional, legislative and administrative considerations

4.1.1 Mining taxation – mining law versus tax codes

Most countries tend to include mining tax rules in the mining law. If the mining sector is very small or economically insignificant, such taxes will consist mainly of administrative fees. However, where the mining sector is economically important, governments usually see a need for specific mining taxes such as royalties and excess profit taxes. Since such taxes only apply to the mining sector, they are usually included in the mining law rather than in the general tax law. Rules concerning corporate income tax, VAT and other taxes that apply to all economic activities and not only to mining, are almost always included in the general tax legislation.
Governments will normally want to ensure that tax matters that concern the mining industry are implemented and enforced in a consistent manner and with due regard to both the specificities of the industry and the need to avoid contradictions between different pieces of legislation. This is easier guaranteed if all the relevant rules are in the same piece of legislation. On the other hand, governments also want to maintain consistency in the treatment of different types of taxable activities and to guard against deviations from overriding principles underlying taxation. This argues in favour of keeping mining taxation in the tax code.

Possibly, the most practical way of solving the dilemma is to apply two rules:

1. Any tax rule that only concerns mining and no other industries should be kept in the mining law so as to ensure consistency with other pieces of mining legislation (the tax treatment of mine reclamation and mine closure costs, for example), while tax rules that also concern other economic activities belong in the tax code in order to maintain consistent tax treatment across sectors.

2. Special rules for taxation of the mining industry should be kept to a minimum so as not to complicate the tax situation of the industry and should only be introduced when it is clear that the provisions of the general tax code constitute an obstacle to the development of the industry or have adverse effects on tax revenue from mining.

4.1.2 Conditions - mining law versus agreements with investors

While the legislation in some countries provides for separately concluded agreements with investors, most have preferred to establish general conditions in the mining law. It is sometimes argued that specially negotiated agreements are more flexible and allow governments to adapt conditions to specific circumstances. This is no doubt true and may be very important in the case of a country with very few large mining projects that will have a substantial impact on the economy of the country. In most cases, however, the transparency and predictability of general conditions defined in the mining law that allow investors to evaluate future taxation effects with a high degree of confidence are judged to be more effective in attracting investors. While governments may not always get the best possible deal in every single case by relying on the mining law, it deserves to be noted that most governments tend to overestimate their negotiating skills and the best insurance against costly mistakes in negotiations is to not negotiate in the first place. Moreover, a system using agreements raises the risk of corruption and undue influence over conditions.

Another reason to avoid negotiated agreements is that a system with such agreements runs the risk of politicizing agreements, with every new government trying to undo the perceived mistakes of its predecessor by reopening negotiations. Such a development will rapidly lead to loss of investor confidence. A possible way out of this dilemma was provided by the Contracts of Work (CoWs) that were earlier used in Indonesia. Each CoW provided for stable conditions over the life of the mine and was approved by an Act of Parliament, thus making it relatively complicated to change them. The CoWs were standardized, although every few years the standard conditions were amended in a new "generation" of CoWs (UNCTAD, 1994). After the 1990s, however, the system was gradually abandoned.

Notwithstanding the many arguments against them, it can be argued that agreements have a useful role to play in an environment that is characterized by increasing needs of dialogue and consultation between companies, government at different levels, local communities and civil society.
society. It is true that agreements may be needed to define how a mining company will contribute to the local economy, invest in social infrastructure and manage environmental impacts. Except with respect to environmental management, however, where clear guidelines are needed in view of the potential costs of environmental mitigation, there is usually no need for legislation that defines which agreements should be concluded, although it may be useful for the purpose of clarity to have the law state that companies are expected to conclude agreements, for instance with local communities on local business development.

4.1.3 Mining taxation and petroleum taxation

The question often arises as to whether the mining and petroleum industries should be subject to the same tax policy, rules, and administration. In most countries, these two industries are subject to different tax policy, rules and administration. Although the mining and petroleum industries have several unique characteristics in common — for example, operators in both industries are price-takers and face highly cyclical prices and profits, and manage projects with finite lives (reserves) — nevertheless, there are significant differences between the economics, risk characteristics, and structures of each of these two industries.

The main difference between the two industries is in the structure of production costs. Table 4 shows typical costs in average operations producing oil, gold and copper. A striking difference is that capital costs as a share of total costs are significantly higher in the typical oil operation than in gold and copper mines. Accordingly, once capital costs have been recovered, the average oil well has a higher operating profit than the typical gold or copper mine. The other difference, which is not apparent from the table, is that production costs vary much more in oil production than in metal mining. The cost of oil at the wellhead can vary from USD 5-10 per barrel in the Middle East to about USD 80-100 in marginal Canadian tar sand operations. In metal mining, the range of costs is much narrower, with iron ore mines the only type of mines even approaching the variations found among oil wells — and the difference between iron ore mines is largely offset by differences in transport costs so that the cost of ore delivered to the consumer varies by at most a factor of two. This means that resource rents are much more important in the oil industry than in metal mining.\footnote{15 The situation with respect to natural gas is more similar to that of iron ore than oil insofar as infrastructure investment and transport costs usually account for a very large share of overall project costs. Producers in gas fields that are distant from consumers have to invest in expensive liquefaction installations in order to produce LNG which can be transported, with the cost of these installations eating into what would otherwise be resource rents.}

Taxation in the oil industry has to accommodate these very large variations in cost and the consequent importance of resource rents. A ‘one size fits all’ approach similar to that used for metal mining taxation in most jurisdictions would mean that marginal oil wells would not be developed or that the government would lose potential revenue from taxing rents — or, in a worst case, both. The solution has been bidding procedures and the production sharing system, which resembles a commercial arrangement rather than conventional taxation. The bidding procedures allow the government to capture part of the rent up front while no operator is burdened with an inequitable down payment. Under the production sharing system, the share of the host country government increases dramatically once the investment has been recovered, allowing the government to capture rents while safeguarding the operation’s commercial viability. Part of the reason for this arrangement is that oil taxation has its origins in the deals that were made between operators and landowners in the United States, where sub surface rights to mineral are held by the landowner. These deals were made between more or less equal parties and their structure is the result of bargaining processes that proved commercially viable. This is a structure well adapted to the realities of today’s oil industry, where commonly several parties are involved on both sides: members of a consortium on the operator side and governments and national oil corporations on the owner’s side.
As indicated in Section 3.1.1, the mining industry is characterized by high risk at all stages of the mine’s life cycle. With respect to exploration, the consensus is that only one out of every thousand exploration programs results in a commercial discovery. Further, it can typically take five to ten years of exploration in order to confirm the feasibility of mining a mineral deposit, or to decide to abandon the project. In the case of development, the true nature of a mineral resource often cannot be determined definitively until considerable expenditures have been incurred in building a pilot plant, sinking a mine shaft, or preparing an opencast mine for production. Mineral deposits are generally not homogenous, and often contain unforeseen contaminants or cause unexpected metallurgical (recovery) problems. These risks are present in the petroleum industry, too, but to a notably lesser degree. Therefore, bidding procedures work less well for solid minerals than for oil, unless the deposits are very well known, as in the case of a sale of an operating mine. Production sharing arrangements are also difficult to apply in the mining industry, mainly because it is less clear when capital investment has been recovered (see the preceding discussion of resource rent taxes).

For these reasons, tax policy formulation and tax administration of the petroleum and mining industries are generally the responsibilities of different, specialized government departments. There are other reasons: operating technology and terminology are different between the two industries; private sector financings and structured business deals are different; the supply chain from upstream to downstream to market is different. In essence, a specialist’s knowledge is required to efficiently and effectively make policy and to administer tax audit, collection, and enforcement.

Table 4 – Profitability of selected commodities for average cost operation

<table>
<thead>
<tr>
<th></th>
<th>Oil (per bbl)</th>
<th>Gold (per oz)</th>
<th>Copper (per lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Selling price per unit ($)</td>
<td>$105</td>
<td>$1,393</td>
</tr>
<tr>
<td>B</td>
<td>Cash operating cost per unit ($)</td>
<td>$11</td>
<td>$761</td>
</tr>
<tr>
<td>C</td>
<td>Cash operating profit per unit ($)</td>
<td>$94</td>
<td>$632</td>
</tr>
<tr>
<td>D</td>
<td>Capital cost per unit ($)</td>
<td>$16</td>
<td>$214</td>
</tr>
<tr>
<td>E</td>
<td>Net profit per unit ($)</td>
<td>$78</td>
<td>$418</td>
</tr>
<tr>
<td>F</td>
<td>Operating profit per unit (C/A) (%)</td>
<td>90%</td>
<td>45%</td>
</tr>
<tr>
<td>G</td>
<td>Net profit per unit (E/A) (%)</td>
<td>74%</td>
<td>30%</td>
</tr>
</tbody>
</table>

16 Source: U.S. Energy Information Administration
17 Source: Major multinational gold producer with mines in North America, South America, and Australasia.
18 Source: Major multinational copper producer with mines in North America, South America, and Africa.
4.1.4 Effective tax administration

One of the most common reasons why revenue streams fall short of government expectations relates to inefficient or ineffective tax administration. Common reasons for inefficient or ineffective administration include: the tax laws and supporting regulations are poorly drafted and are therefore difficult to interpret and to administer; tax officials receive inadequate training; and leadership at the political level and/or at the top of the government bureaucracy is not effective in ensuring cooperation among different departments in the administration.

The importance of sound administrative practices cannot be overemphasized. Governments should:

1. Make tax laws and regulations easy to understand and to administer;
2. Ensure that different government departments with different responsibilities understand their responsibilities and the division of duties, and that they cooperate with each other.
3. Implement appropriate revenue stream recording and reporting systems;
4. Ensure that administrative officials receive appropriate training; and
5. Implement and apply effective audit mechanisms.

The basics of an effective tax and royalty audit function include:

1. Tax and royalty laws and regulations should be comprehensive and clearly translated in order to avoid disputes;
2. The audit process should be fair and consultative in order to gain the taxpayer’s trust and encourage taxpayer compliance;
3. The appeals or arbitration process should be fair and timely;
4. Tax and royalty refunds should be prompt;
5. The government auditors should draw on various disciplines, including geological/mining specialists, accounting/finance specialists, and legal experts; and
6. Government officials should understand the nature of the mining industry and the tax and royalty audit and collection process.

Table 5 – Common allocation of government responsibilities

<table>
<thead>
<tr>
<th>Tax Policy</th>
<th>Ministry of Mines</th>
<th>Ministry of Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Primary responsibility for tax policy related to state ownership of natural resources – viz., mineral royalties, land rent (dead rent), bonus payments, permitting fees, etc.</td>
<td>1. Primary responsibility for tax policy related to taxes applicable to all taxpayers – viz., corporate profit tax, VAT, customs duties, employee income tax, withholding tax, etc.</td>
</tr>
<tr>
<td></td>
<td>2. Provide input to Ministry of Finance in developing policy for other taxes – viz., corporate profit tax, VAT, customs duties, employee income tax, withholding tax, etc.</td>
<td>2. Provide input to Ministry of Mines in developing tax policy related to state ownership of natural resources – viz., mineral royalties, land rent (dead rent), bonus payments, permitting fees, etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tax Administration</th>
<th>Ministry of Mines</th>
<th>Ministry of Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Primary responsibility for administration (tax collection, audit, advance rulings, and enforcement) related to mineral royalties, land rent (dead rent),</td>
<td>1. Primary responsibility for administration (tax collection, audit, advance rulings, and enforcement) related to taxes applicable to all taxpayers – viz., corporate profit tax, VAT, customs duties, employee income tax, withholding tax, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2 Fiscal considerations

4.2.1 Fiscal stability

Possibly the most important fiscal consideration is that of stability in the fiscal framework. Mining is a capital intensive business requiring huge up-front investment, and is a high risk business at all phases of project life. Fiscal stability reduces country risk and project risk, and therefore improves project economics for financing where the host country does not have a track record of fiscal stability.

Many countries provide fiscal stability clauses in the tax law, in mineral development agreements, or in separate legislation. Fiscal stability laws can support the government’s objective of attracting investment where the country does not have a track record of fiscal stability.

Fiscal stability provisions can deliver fiscal stability to different degrees. For example, a fiscal stability regime could:

- Freeze tax rates only;
- Freeze both tax rates and the basis for taxation;
- Protect the project from the introduction of new taxes; and/or
- Accommodate beneficial changes to existing laws.

Other considerations to be taken into account in designing a regime for fiscal stability include:

- Tax coverage
- Mechanism: in law or agreement?
- Optional or mandatory?
- Standardization across the industry
- Stand-alone or part of MDA?
- Transparency.

In principle, a tax regime does not need explicit fiscal stability clauses to provide fiscal stability. If there is a tradition of not changing the rules under which existing ventures operate, this may be sufficient since it means that an existing mine will continue applying the regulations that were in force when it obtained its license. Explicit stability clauses also become less important where there is a “consultative” process for introducing new tax rules – for example, where all stakeholders have the opportunity to provide input before proposed legislation becomes law. It should also be noted that the objective of fiscal stability may be satisfied to some extent by provisions in bilateral investment treaties. In particular, changes to fiscal regulations that in practice only concern foreign investors may be challenged under such treaties.

---

19 For example, where rule changes are subject to so-called ‘grandfathering’ rules, or are phased in over a period of years in order to allow existing operators to adapt to the new rules. ‘Grandfathering’ refers to the situation whereby the new rule does not apply to existing operators.
Where a fiscal regime includes fiscal stability provisions, the government needs to be careful to honour those provisions, otherwise the purpose of the fiscal stability provisions is nullified. See Box 3.

**Box 3 – Honouring fiscal stability provisions**

Indonesia’s Contract of Work (CoW) regime successfully delivered fiscal stability from 1967 through 1997. The country attracted massive amounts of foreign investment, and the mining industry blossomed into a world leader. In 1998, the Indonesian government started to reneg on the fiscal stability provisions, at first through spurious tax positions and assessments, and later through direct heavy handed threats including mine closure. Since then, there has been relatively little new foreign investment in Indonesia’s mining industry, and the industry is stagnating.

### 4.2.2 Fair returns for government and for investors

A well-designed mineral fiscal regime allows for a fair return for government while also allowing investors to generate a fair return on their investment. Both the IRR and the government share are therefore important considerations when designing a mining fiscal regime. As shown in Figure 5, revenues generated by a mining project are, in essence, shared by:

1. Suppliers of goods and services to the project;  
2. Employees of the mining enterprise;  
3. Investors in the project; and  
4. Government

It is the authors’ observation that, over recent years, a ‘rule of thumb’ has evolved in the field of fiscal policy that the ‘government share’ tends to be in the range of 50 per cent of pre-tax cash flow generated by the project – i.e. government and investors tend to share pre-tax cash flow roughly on a 50:50 basis.

While this 50 per cent rate for Government Share might be an idealistic goal, the reality is that the Government Share is often less than 50 per cent (see Table 7). The reasons why Government Share is often less than 50 per cent vary from country to country – for example: a country with a diversified economy such as Brazil does not rely heavily on revenue streams from the mining sector; a country with a balanced budget such as Canada does not aggressively seek revenues from the mining sector; and, a newly emerging country such as Laos PDR keeps taxes low in order to attract new investment.

Table 6 illustrates a typical calculation of Government Share. This calculation of Government Share is not the same as the term ‘effective tax rate’, which is an accounting term used in corporate financial statements. The term ‘effective tax rate’ is not an appropriate measure of Government Share for purposes of assessing the international competitiveness of a fiscal regime. Effective Tax Rate is an accounting measure using generally accepted accounting principles expressing taxes in corporate financial statements as a percent of pre-tax profits shown in the corporate financial statements. Effective Tax Rate does not report the government’s share of pre-tax cash flow. However, Government Share is the government’s share of pre-tax cash flow, as indicated in Table 6.
Comparative study of the mining tax regime for mineral exploitation in Kazakhstan

Table 6 – Comparison of ‘Government Share’ and ‘Effective Tax Rate’

<table>
<thead>
<tr>
<th></th>
<th>Project Cash Flow ($)</th>
<th>“Government Share” of Project Cash Flow ($)</th>
<th>“Effective Tax Rate” ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Sales</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>B</td>
<td>Operating costs and capital costs</td>
<td>-650</td>
<td>-650</td>
</tr>
<tr>
<td>C</td>
<td>Operating profit (A-B)</td>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>D</td>
<td>Royalty (3% of A)</td>
<td>-30</td>
<td>30</td>
</tr>
<tr>
<td>E</td>
<td>Taxable profit</td>
<td>320</td>
<td>320</td>
</tr>
<tr>
<td>F</td>
<td>Profits tax (30% of E)</td>
<td>-96</td>
<td>96</td>
</tr>
<tr>
<td>G</td>
<td>After-tax profit</td>
<td>224</td>
<td>224</td>
</tr>
<tr>
<td>H</td>
<td>Dividend paid to investors</td>
<td>224</td>
<td>224</td>
</tr>
<tr>
<td>I</td>
<td>Dividend withholding tax (10% of H)</td>
<td>-22.4</td>
<td>22.4</td>
</tr>
<tr>
<td>J</td>
<td>Net distribution to investors (H-I)</td>
<td>201.6</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Personal tax on employee wages included in B</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>Total direct government cash flow from project</td>
<td>168.4</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Government Share (L/C)</td>
<td>48%</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Effective Tax Rate (F/E)</td>
<td>30%</td>
<td></td>
</tr>
</tbody>
</table>

Mining is a capital-intensive industry. Significant amounts of capital are required to find an economic resource and bring it into production. A typical exploration program can easily cost $50 million to $75 million to determine whether an economically viable resource exists, and the cost of building a world class mine can easily run into several billions. Countries around the world are competing to attract capital to their mining sector. The demand for capital exceeds the supply of capital for mining projects. Only those projects that offer the investor a return on investment that is commensurate with risk will obtain financing. In recent years, changes to banking regulations have substantially reduced the availability of loan finance to mining projects, thus making investment capital scarcer.

Table 9 shows the IRR on a hypothetical mine in a range of countries. This hypothetical mine is a composite of project costs and metal recoveries of several actual mines in the authors’ confidential databases. The hypothetical mine used in this model is typical of the kind of mine that could be developed in any of these countries. The model is intended to produce results that are indicative of the impact of various fiscal regimes on project economics so that a government can assess in broad terms the international competitiveness of a fiscal regime. The model holds revenues and costs constant for each country, so that the only variable is the country’s tax regime (clearly, differences in wage rates, energy costs and transport costs have a large influence on project costs). Accordingly, the IRR in Table 7 is a good indicator of the relative impact of each country’s tax regime on the project’s IRR.

Table 7 – International Comparison of Government Share and Project IRR

<table>
<thead>
<tr>
<th>Country</th>
<th>Government Share of Pre-Tax Project Cash Flow (%)</th>
<th>Project Internal Rate of Return (IRR) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>52.9</td>
<td>16.2</td>
</tr>
<tr>
<td>Argentina</td>
<td>46.4</td>
<td>17.0</td>
</tr>
<tr>
<td>Australia (Western Australia)</td>
<td>50.8</td>
<td>14.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>48.2</td>
<td>15.1</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>51.4</td>
<td>13.7</td>
</tr>
<tr>
<td>Canada (Ontario)</td>
<td>43.9</td>
<td>17.8</td>
</tr>
</tbody>
</table>

20 The model is a medium-cost gold mine with a preproduction development period of three years and twelve years of production. The model uses a gold price of $1300.
Comparative study of the mining tax regime for mineral exploitation in Kazakhstan

<table>
<thead>
<tr>
<th>Country</th>
<th>Government Share</th>
<th>Investors Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>43.3</td>
<td>17.0</td>
</tr>
<tr>
<td>Ghana</td>
<td>64.7</td>
<td>12.9</td>
</tr>
<tr>
<td>Guinea</td>
<td>56.7</td>
<td>14.5</td>
</tr>
<tr>
<td>Laos</td>
<td>42.3</td>
<td>17.1</td>
</tr>
<tr>
<td>Peru</td>
<td>42.3</td>
<td>16.4</td>
</tr>
<tr>
<td>Sweden</td>
<td>28.0</td>
<td>18.5</td>
</tr>
<tr>
<td>Tanzania</td>
<td>50.9</td>
<td>16.0</td>
</tr>
</tbody>
</table>

As shown in Table 7, the government share of pre-tax project cash flow ranges from 28.0 per cent to 64.7 per cent, depending on the country where the project is located – on average, 46.4 per cent. This is consistent with the 48:52 ratio of government share and investors share shown in Table 6.

Based on the authors’ extensive experience in financing mining projects, it is observed that a new project in a country with relatively low country-risk (Canada or Chile, for example) would today likely need a minimum 17 per cent IRR to be able to attract the necessary financing. By contrast, the same project in a country with higher country-risk (Kazakhstan, for example) would need a higher IRR.

4.2.3 Government ‘free equity’ or ‘carried interest’ in mining projects

Some regulatory regimes mandate that the government owns a specified percentage share of a mining project. In some cases, such a government ownership interest is a carried (free) interest only through the exploration and feasibility study stage of the project: once development starts, the government must pay its pro rata share of capital costs and operating expenses. In some cases, the government’s ownership interest is a carried interest for the life of the mine. In the latter case, the investor views the government’s share as a form of ‘profit tax’, because the investor is required to distribute a portion of profits to the government for nil consideration. The government must be careful, then, to ensure that the government’s free carried interest, on top of other government levies, does not adversely impact the investor’s rate of return on the project.

Where the government has the right to increase its participation by paying a fair market value price for a percentage of the investor’s original equity, the law should provide clear procedural and strong arbitration rules in order to protect both the government and the investor. The same comments apply where the law provides for mandatory equity participation by domestic private interests or the local community. Before the investor commits to a costly exploration and development program, the investor needs to know the rules up-front. This means that the rules for such domestic participation should be clear up-front.21 Further, before mandating a specified percentage of domestic equity participation by country nationals, the government should ensure that local nationals have the financial and technical capabilities needed to make this participation succeed.

Government equity participation in a mining project is a controversial subject. The arguments pro and con government equity participation may be summarized as follows.

21 Recent experience in Indonesia offers an example of the negative fallout of not having clear procedural and arbitration rules. When BP PLC and Rio Tinto sought to fulfill their obligation to “Indonesianize” a specified percentage of their Kaltim Prima Coal operation, the process took many years, because the relevant provisions in the Contract of Work did not prescribe how to determine the price. This was a particularly negative experience for BP PLC and Rio Tinto, and contributed to their desire to downsize their operations in Indonesia. More recently, Newmont suffered through a similar experience in seeking to fulfill its obligations to “Indonesianize” the company’s Batu Hijau project. In Newmont’s case, not only was determination of price problematic, but also it was not clear as to who should be eligible buyers for purposes of satisfying “Indonesianization”. Newmont is unlikely to invest again in Indonesia in the foreseeable future.
Arguments in favour of government equity participation include:

- Provide an opportunity for the people to benefit directly from the wealth generated by the project;
- Provide a means whereby the government, through Board of Director membership, can participate in high level decision making and approvals at the corporate level; and
- Provide a means whereby the government can obtain project information otherwise not easily obtainable.

Arguments against government participation include:

- Where the government does not pay fair value, or pays nil, for its interest, the mining company’s return on investment is adversely affected, thus deterring investment;
- Where the government pays fair value for its interest, it is usually using scarce financial resources that can be better used in more traditional government functions such as education, healthcare, infrastructure, etc;
- Government equity participation in a mining project is a relatively high risk way of participating in the project, as compared to the collection of royalty or income tax;
- Experience shows that, where the government subsequently decides to divest itself of its interest, the process of divestment can be complex, time consuming, and costly;
- Investors tend to prefer to invest in mining projects where the government is not a co-investor. Investors find that government participation slows down the decision-making process at the enterprise level, and discourages other potential private sector investors from investing in the project;
- Government equity participation can result in conflict between the investor and the government – e.g. regarding dividend payment policy;
- Government equity participation can result in conflict of interest within government – for example, the ministry of finance may want dividends to be paid, whereas the ministry of mines may want profits to be re-invested for project expansion;
- Government already participates in the project through income tax, royalty, and other tax collections, and it is unlikely that any additional revenue is collected as a result of state ownership – what is gained through one way of raising revenue is lost in another, at least over time; and
- Where government is a part owner in an operation, a potential or real conflict exists with its responsibility to exercise oversight and regulate the industry.

In those few instances where government participates as an equity investor in a project, the international norm is 10 per cent equity participation. There is nothing particularly magical about this – the 10 per cent is probably driven by the interaction of the above pros and cons. Since 10 per cent has emerged as the norm, any percentage participation above 10 per cent would likely come under severe scrutiny by the investment community, and could send a strongly negative signal that the government is not serious about wanting to attract investment. The recent debate in the Democratic Republic of Congo (DRC), where the government proposed to raise the rate of free government participation from 5 to 35 per cent, illustrates both that the trend may be changing, but also that it is strongly resisted (Guarnieri, 2013). In the case of the DRC, it appears that the planned government share will be significantly reduced.

### 4.2.4 The ‘tax package concept’

This may be the most important concept for a government to understand in designing a fiscal regime for mining. In designing a fiscal regime for mining, it is important that the principal taxes and royalty not be considered in isolation of one another. These taxes need to be considered as a
“package” – for example, a “package” consisting of a 25 per cent profit tax rate, a 2 per cent gross revenue royalty, and a 5 per cent customs duty might have the same attraction as a “package” consisting of a 20 per cent profit tax, a 3.5 per cent NSR royalty, and a 5 per cent customs duty. But, a package consisting of a 35 per cent profit tax, a 4 per cent gross royalty, and a 10 per cent customs duty might well be an obstacle to investment, because such a package would result in the investor realizing an unacceptably low return on investment. In designing the complete fiscal regime, the government needs to run models to see what combination of taxes and royalties results in a “win-win” for both the government and the investor.

Table 8 illustrates the “Package Concept”. The major tax components of each of these tax ‘packages’ are different, but each ‘package’ results in the same project IRR when applied to the model mine.

<table>
<thead>
<tr>
<th></th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profits tax</strong></td>
<td>25%</td>
<td>30%</td>
<td>20%</td>
<td>28%</td>
</tr>
<tr>
<td><strong>Royalty</strong></td>
<td>2% gross</td>
<td>2% gross</td>
<td>3.5% NSR</td>
<td>1% gross</td>
</tr>
<tr>
<td><strong>Customs duty</strong></td>
<td>5%</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Project IRR</strong></td>
<td>18.2%</td>
<td>18.2%</td>
<td>18.2%</td>
<td>18.2%</td>
</tr>
</tbody>
</table>

Where non-tax regulations give rise to significantly higher costs, as is arguably the case in Kazakhstan, the impact of such regulations needs to be taken into account when assessing the overall tax package.

4.2.5 Individual mining taxes

While the overall tax package is important, it is also important to understand common features and trends for each of the major tax categories that apply to the mining sector.

4.2.5.1 Corporate income tax trends

Profit tax rates

Over the past decade, profit tax rates have been declining primarily due to international competition to attract and keep investment. Ten to fifteen years ago, it was common to find corporate profit tax rates in the 45 per cent to 50 per cent range. Today, corporate profit tax rates tend to be in the 20 per cent to 35 per cent range and below 20 per cent in some cases, particularly in smaller European countries such as Ireland where foreign investment is the most dynamic element of the economy.

Box 4 – Lower corporate income tax rate can be an incentive – example

In 2002, Laos replaced its four-year tax exemption, and reduced its CIT from 35 per cent to 25 per cent. The mining industry supported this change, because the four-year exempt period was attracting unwanted criticism from other industries that were envious of the mining industry’s preferential treatment, and the reduced CIT was equally attractive as an “incentive” to invest in Laos.
Profit tax base (taxable profit)

In the modern era, there has been a trend where governments in both developed countries and less developed countries have modified their profit tax regimes to replace traditional fiscal incentives (e.g. tax exemptions) with lower tax rates and accelerated amortization and depreciation of capital costs. Canada started this trend when it replaced its three-year exempt period with accelerated amortization and depreciation rates (see Box 5).

Box 5 – Replacing tax exemptions with accelerated write-offs

In 1972, Canada replaced its three-year tax exempt period with 100 per cent amortization and depreciation of capital costs as an incentive. The three-year exemption from income tax was found to be encouraging perverse operating habits. For example, mine operators were mining high grade ore during the tax exempt period, and deferring the exploitation of low grade ore to later years. Also, some taxpayers were found to be manipulating the date of “commencement of commercial production”, which was the starting point for the three-year exempt period.

Table 9 shows some of these lower tax rates and accelerated amortization and depreciation.

Profit tax rules do not need to be overly sophisticated or complex. But, they need to include the basic provisions found in contemporary fiscal regimes. For example, all expenditures should have to satisfy three requirements in order to be deductible in arriving at taxable profit: 1. The ‘purpose test’ – the expenditure must be incurred for the purpose of earning profit from the business; 2. The ‘reasonableness test’ – the expenditure must be reasonable in the circumstances; and, 3. The ‘legal obligation test’ – the expenditure must be incurred pursuant to a legal obligation of the taxpayer.

In addition, the profit tax rules should address current trends. For example, reserves for share-based compensation are generally not deductible, and the various ways of transferring mining title (for example, by way of farm-in or corporate take-over) should be addressed.

Table 9 – International Comparison of Profit Tax and Capital Allowance Rates

<table>
<thead>
<tr>
<th>Country</th>
<th>Corporate Profit Tax Rate</th>
<th>Tax Amortization of Exploration and Development Costs</th>
<th>Tax Depreciation of Fixed Asset Costs</th>
<th>Other Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>20%</td>
<td>25%</td>
<td>B – 20% DDB</td>
<td>Excess Profits Tax (up to 60%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M – 50% DDB</td>
<td></td>
</tr>
<tr>
<td>Australia (Western Australia)</td>
<td>30%</td>
<td>100%</td>
<td>B – 2.5% SL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M – 5% SL</td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>35%</td>
<td>100%</td>
<td>60%/20%/20%</td>
<td></td>
</tr>
</tbody>
</table>

22 IFRS requires the mining enterprise to expense reserves related to the issuance of stock options and similar share-based compensation. These reserves can be substantial, and can significantly erode accounting profit. Most contemporary fiscal regimes do not allow a deduction on account of share-based compensation, because the taxpayer does not make an actual expenditure – the amount of share-based compensation recorded for IFRS purposes is based on the economic principle of “opportunity cost” and can be highly subjective.
Contemporary profit tax regimes include so-called ‘thin capitalization rules’, which prevent overseas shareholders from reducing domestic taxable profit by charging unreasonably high interest expense on in-bound loans.
4.2.5.2 Mineral royalty trends

Types of royalties

There are four basic types of mineral royalty:\(^{23}\):

- Gross production royalty, which is based on some measure of production – for example, ounces, pounds, or tonnes;
- Gross revenue royalty, which is based on gross revenue (sales value of production); this is the most common form of royalty; it should normally be assessed at the mining stage in order to avoid perverse incentives;\(^{24}\)
- Net smelter return (NSR) royalty, where NSR is defined to mean gross revenue minus treatment costs, and freight and marketing expenses; and
- Net profits royalty (NPI), which is based on net profit.

Each type of royalty has a different risk profile for the government. For example, in the case of the gross production royalty, the government’s royalty revenue is affected only by volume of production. At the other end of the risk spectrum, in the case of an NPI royalty, the government’s royalty revenue is affected by changes in production volume, metal price, capital costs, and production costs.

Royalties that are based on value or volume rather than profit have the disadvantage that they reduce economic reserves (see Figure 7). There are two reasons why governments are prepared to overlook this drawback:

- Volume or value based royalties offer the government a revenue stream even when mineral prices are low, reducing the variability of tax revenues
- Volume or value based royalties are relatively easy to administer, including in countries where the tax administration is weak.

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\(^{23}\) It should be noted that the distinction between royalties and other types of taxes is not always clear, particularly since royalties may be levied in a large number of ways. In the final analysis, a royalty is a tax that the government decides to call a royalty.

\(^{24}\) In Zambia, some of the royalties applied were originally determined in MDAs. Differences in definitions between MDAs have led to some confusion, with royalties levied at different stages of production (Chamber of Mines of Zambia and ICMM, 2014).
Figure 7 – The distorting effect of royalties

![Diagram showing the distorting effect of royalties](source: Authors)

There is a rule of thumb that a 2 per cent to 3 per cent gross revenue royalty, a 3 per cent to 4 per cent NSR royalty, and a 10 per cent NPI royalty have roughly the same impact on project IRR and government royalty receipts. As Table 10 shows, Canada, Chile, and Peru have NPI royalties ranging up to 10 per cent, 14 per cent, and 13 per cent respectively, yet the project IRR in each of these countries, as shown in Table 7, is not adversely impacted. In essence, this is because the NPI royalty is based on the taxpayer’s “ability to pay” – i.e., it is based on net profit.

Royalty rates

Typically, royalty rates are in the 3 per cent to 5 per cent range for gross revenue royalties, 4 per cent to 5 per cent for NSR royalties, and 8 per cent to 10 per cent for NPI royalties. Table 10 sets out an international comparison of royalty rates.

Table 10 – International Comparison of Royalty Rates

<table>
<thead>
<tr>
<th>Country</th>
<th>Royalty</th>
<th>Other Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>2.1% to 5.7% Gross Revenue</td>
<td>Excess Profits Tax (up to 60%)</td>
</tr>
<tr>
<td>Australia (Western Australia)</td>
<td>2.5% NSR</td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>3% Gross Revenue</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Gold – 1% Gross Revenue</td>
<td>Other – 2% Gross Revenue</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Precious Metals – 3%\textsuperscript{25}</td>
<td>10% Government Carried Interest</td>
</tr>
<tr>
<td></td>
<td>Base metals – 5% Gross Revenue</td>
<td></td>
</tr>
<tr>
<td>Canada (Ontario)</td>
<td>10% NPI</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{25} Indexed for gold: 4% for gold prices between USD1,000/ounce and USD1,300/ounce, and 5% for prices above USD1,300/ounce.
Comparative study of the mining tax regime for mineral exploitation in Kazakhstan

<table>
<thead>
<tr>
<th>Country</th>
<th>Royalty</th>
<th>Other Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>0% to 14% NPI</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>5% Gross Revenue</td>
<td>10% Government Carried Interest</td>
</tr>
<tr>
<td>Guinea</td>
<td>Precious Metals – 5% Gross Revenue&lt;br&gt;Base Metals – 3.5%</td>
<td>3% Minimum Tax</td>
</tr>
<tr>
<td>Laos</td>
<td>2.5% Gross Revenue</td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td>1% to 13.12% NPI</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>0.2% Gross Revenue</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>Copper, Gold – 4% Gross Revenue&lt;br&gt;Iron, Coal – 3% Gross Revenue</td>
<td></td>
</tr>
</tbody>
</table>

**Progressive royalties**

As a result of strong commodity prices in recent years, many governments have considered the possibility of introducing ‘progressive royalties’, where the royalty rate increases as a function of increases in commodity price or profitability. There are advantages and disadvantages to progressive royalties.

The advantages include:

1. Immediate increase in royalty collections;
2. Satisfy political/societal concerns about “fair share” of wealth for government; and
3. Obtain a bigger share of project profits when commodity prices are high.

In the minds of many mine operators – and the views of mine operators are important since they make the investment decisions - the perceived disadvantages include:

1. Deter mining of lower grades at existing mines where rates are linked to prices;
2. Deter development of marginal (low profit) mines where rates are linked to prices;
3. Progressive royalty rates linked to metal price do not take into account cost increases;
4. Progressive rates linked to profitability can be complex and difficult to understand and administer;\(^{26}\)
5. Progressive royalty rates don’t allow compensation for periods of low prices/profitability;
6. Progressive royalty rates can be discriminatory where the rules do not index historical capital costs – they treat operators of comparable mines differently where the older mine has a lower capital cost; and
7. Progressive royalty rates are not common internationally and therefore can result in a country’s fiscal regime being considered internationally non-competitive.

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\(^{26}\) The South African gold tax, which could be described as a profitability based royalty, has been in force and worked well for a very long time although it could be argued that South Africa is a mature mining jurisdiction with institutions that are well able to handle complexities.
For these reasons, many governments have decided not to proceed with progressive royalties.

**Box 7 Adverse consequences of progressive royalty rates**

Probably the most important criticism of progressive royalties, progressive income taxes, excessive profits taxes, windfall profits taxes, and similar levies is that these levies do not recognize the cyclical nature of mineral prices and profits. The bankable feasibility study, on which the investment decision is based, generally assumes a constant commodity price over the life of the mine. Royalty and tax payments in the study are based on this assumption. In actuality, prices are very cyclical. High prices and profits in some years are needed to compensate for low prices and profits in other years in order to generate the IRR in the study. If progressive royalty and tax rates apply in years of high prices and profits, then these high prices and profits may fail to compensate for years of low prices and profits (unless a threshold return on capital is used to ensure that only mines that are profitable over the life of the mine are subjected to the tax), and the project’s IRR is adversely affected. Consequently, lower grade ore might be left in the ground, and even premature mine closure could ensue.

Relating royalties to profitability has been tried in some countries, in the expectation that a simpler measure of profitability than that used for the CIT would capture more revenue. However, these expectations are often not met. For instance, Ghana had a sliding royalty scale from 3 to 6 per cent. In practice, most or all companies paid the minimum rate of 3 per cent. In 2010, the sliding scale was replaced by a 5 per cent flat royalty on gross value.

### 4.2.5.3 Other taxes

The following government levies are typically borne by the investor before the start of production when there is no positive project cash flow. Government needs to be sensitive to this burden.

**Dead rent**

Rates of dead rent (annual acreage fee) should be internationally competitive – i.e. dead rents are typically relatively modest levies.

**VAT**

In a capital intensive sector such as mining, VAT can represent a significant cost, especially during the construction phase of a project. VAT rates and rules should be internationally competitive, and should be clear especially with respect to VAT restitution entitlements and procedures. (See Paragraph 4.2.6.2 for further details.)

**Customs duties**

Similarly, import duties can represent a significant cost, especially during the construction phase of a project, because most of the costly machinery and equipment for a modern mining project must be imported. Customs duty rules and rates should be internationally competitive. A 5 per cent import duty should provide the government with a reasonable source of revenue without deterring investment in the sector. Investors often argue for custom duty exemptions, but there is generally no reason for a government to grant such an exemption, particularly since this increases domestic manufacturers’ exposure to external competition on this specific market.
**Bonus payments**

In some countries, but not many, the government, using a practice borrowed from the oil and gas industry, imposes a signing bonus or similar lump sum up-front payment on issuing an exploration permit. This typically occurs in the case where the permit is issued pursuant to a bidding or auction process, and is not typical of a traditional cadastral or ‘first-come-first-serve’ permitting system. The system is common in former Soviet countries, where it is argued that the geology is well known so that an upfront payment can be justified. It was also common in the many agreements signed in the Democratic Republic of Congo (DRC) in the early 2000s, most of which concerned deposits that had been explored in detail by the state owned company Gécamines. A large signing bonus risks deterring investors and in most cases, companies will demand other concessions on taxes in return. Given the high discount rate that investors apply when calculating the present value of a project, a high upfront payment may have a dramatic effect on projected profitability.

**Windfall (excess profits) taxes**

As a result of strong commodity prices and historically high profits generated by these high prices in recent years, some governments have considered the possibility of introducing a special tax on so-called “windfall profits” or “excess profits”.

While some of these taxes are simply a reaction to high prices and perceived excess profits, a theoretical justification for taxing profits above a certain level under specific conditions exists. The argument in favour of such taxes is that they are levied only on the resource rent part of taxable income. Resource rent can be defined as the value of the product of a mineral resource minus all the costs of production, including the minimum returns on capital that are necessary to induce investment, including investment in exploration. The resource rent arises from the fact that mineral deposits vary in composition, size and location, so that the costs of extracting a certain quantity of saleable product will vary among operations, even if identical technologies are used. Thus, companies exploiting better deposits or deposits that are closer to markets will earn resource rents consisting of returns over and above the necessary compensation to production factors.

The argument for taxing the resource rent relies, from an economical point of view, on the fact that such a tax does not affect allocative efficiency; that is, it can be appropriated by the government without diverting investment funds from the mining sector to another industry (or vice versa), without altering the ranking of individual investment opportunities within the mining sector, and without changing the profit-maximizing level of production in an individual mine. Resource rent taxes are a much more prevalent practice in the oil and gas industry, where they are considered non-controversial.

In principle, a resource rent tax should be imposed only after the investment has been recovered, and only on the profits exceeding a certain predetermined rate of return, in order to ensure that the tax targets the resource rent and not necessary return to capital. Establishing the threshold rate of return is one of the most difficult issues to solve. Experience shows that windfall taxes can be a major obstacle to attracting investment, particularly when they are applied without regard to whether it is rent that is taxed or not, mainly for the following reasons:

- Windfall taxes are sometimes not linked to the taxpayer’s “ability to pay” but only to mineral prices. That is – windfall taxes are not linked to profitability where these taxes ignore project costs;

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27 For example, in June 2013, Canadian multi-national mining company Kinross Gold Corporation announced that it will not proceed with the development of the world class Fruta del Norte gold property in Ecuador, because, after more than two years of negotiation, the Ecuadorean government would not withdraw its capricious windfall profits tax.
• Windfall taxes ignore the cyclicality of metal prices. These taxes ‘skim off the cream in good years’, without compensating the taxpayer for low prices in ‘lean’ years, except when the tax specifically targets natural resource rents as defined;
• Windfall taxes may prevent marginally economic properties from being developed, since the very profitable projects may be needed to finance the development of marginal projects;
• In order to tax only resource rent it is necessary to distinguish between deposits since they generate different amounts of rent. It then becomes difficult to levy the tax on a mining company that operates several mines since this would require perfect ‘ring fencing’, that is, allocating common costs in an equitable manner to the different deposits. In practice, this can become quite complicated;
• Windfall taxes may treat different taxpayers in different ways. There is no ‘level playing field’. For example, a project brought into production ten years ago may be subject to a country’s windfall profits tax, whereas the identical project brought into production today may not be subject to the windfall profits tax due to higher capital costs;

4.2.6 Fiscal incentives

Fiscal incentives play an important part in determining investment in the industry. Two forms of incentive are common – accelerated depreciation and amortisation, and VAT incentives.

4.2.6.1 Accelerated depreciation and amortization

In assessing the international competitiveness of a profits tax regime, it is important to understand the relevance of tax depreciation and amortization. In recent years, governments have realized that accelerated tax depreciation and amortization rates can serve as an important incentive in attracting investment, due to the positive impact of accelerated depreciation and amortization rates on project cash flow and economics.

The expenditures incurred during the life of a mining project generally fall into two categories:

1. Capital costs; and
2. Operating expenses.

Operating expenses consist of those expenditures that are of a recurring nature and that relate to the current year’s operations – for example, salaries and wages, insurance premiums, fuel costs, electricity charges, etc. For both accounting purposes and profit tax purposes, operating expenses are deducted in full in the year incurred, and reduce profit.

Capital costs consist of those expenditures that benefit the project over a period of time beyond the current year. Capital costs are generally considered to fall into one of two categories:

1. Intangible costs – for example, expenditures on mineral exploration (sampling, drilling, assaying, etc.) and on property development (clearing the mine site, sinking a shaft at an underground mine, or removing overburden to gain access to the mineralized ore at an open pit mine); and
2. Tangible fixed asset costs – for example, the cost of acquiring buildings, trucks, machinery and equipment, and other tangible fixed assets.

For accounting purposes, intangible costs are generally deducted in computing accounting profit over the estimated life of the mineral property. This deduction is referred to as “amortization”. For example, $10,000,000 of overburden removal cost related to an open pit mine with an estimated life of 10 years would be amortized at the rate of $1,000,000 annually over 10 years.
For accounting purposes, the cost of a tangible fixed asset is deducted in computing accounting profit over the estimated life of the particular asset. This deduction is referred to as “depreciation”. For example, a truck with a 4 year life would be depreciated over four years – i.e. 25 per cent of the original cost of the truck would be deducted in each of the four years starting with the year of purchase.

This accounting treatment of capital costs is based on the generally accepted accounting principle called the “matching principle”, because the write-off of the expenditure “matches” the revenue generated by the expenditure.

All profit tax regimes allow the deduction of amortization and depreciation in computing taxable profit. However, the annual rates of amortization and depreciation for tax purposes are typically different from the rates used for accounting purposes. For example, whereas a machine might be depreciated over its estimated useful life (say, 10 years) for accounting purposes, the profits tax law might prescribe a depreciation rate for tax purposes of 3 years. In this case, the tax depreciation rate would be 33.3 per cent annually for 3 years. Similarly, exploration expenditures might be 100 per cent deductible in 1 year for tax purposes, even though these expenditures are amortized over the estimated life of the mineral property for accounting purposes.

Table 11 – Accounting and Tax Treatment of Capital Costs

<table>
<thead>
<tr>
<th>Description of Expenditure</th>
<th>Typical Accounting Treatment</th>
<th>Typical “Accelerated” Tax Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration (expenditure incurred in searching for minerals – e.g. prospecting, drilling, sampling, assaying)</td>
<td>Amortize over the estimated useful life of the mineral property</td>
<td>Amortize 100% in 1 year</td>
</tr>
<tr>
<td>Development (expenditure incurred in preparing a mineral deposit for production – e.g. site clearing, overburden removal, shaft sinking)</td>
<td>Amortize over the estimated useful life of the mineral property</td>
<td>Amortize 25% annually over 4 years</td>
</tr>
<tr>
<td>Tangible fixed asset cost (expenditure incurred to acquire building, office furniture and computers, machinery and equipment)</td>
<td>Depreciate over the estimated useful life of the fixed asset</td>
<td>Depreciate 33.3% annually over 3 years</td>
</tr>
</tbody>
</table>

In recent years, a trend has emerged whereby tax incentives (for example, tax exempt periods) have been replaced by accelerated tax amortization and depreciation. “Accelerated” tax amortization and depreciation refers to amortization and depreciation rates, for tax purposes, that “accelerate” the write-off of capital costs for purposes of determining taxable profit. With reference to the above examples, depreciating the cost of the machine over 3 years would be considered “accelerated” depreciation where the useful life of the machine exceeded 3 years. Also, deducting exploration expenditures 100 per cent in the year incurred would be considered ‘accelerated’ amortization, since this exploration would be amortized in the financial statements over the life of the mineral property.

Table 11 summarizes common accounting and tax treatment of capital costs.
4.2.6.2 VAT incentives

It is not unusual for mineral exploration companies to seek special VAT treatment where their purchases of goods and supplies are subject to VAT, but their output is expected to be exported and therefore zero-rated. These companies argue, for example, that their cash flow would be improved if their purchases were exempt from input VAT.

If the country’s VAT regime is working in accordance with international best practices, there should be no need for VAT exoneration. That is to say, mining enterprises should be eligible for prompt refund of VAT input payments, including at times when there are no VAT outputs – i.e. during the exploration and development phases of the project’s life before the start of production. For example, in Canada an exploration company is entitled to monthly refunds of VAT paid by the exploration company on purchases of supplies and services.

Offering VAT exoneration to one sector of the economy will attract the attention of other sectors, who may want the same treatment. The best approach is to have a properly working VAT regime that applies equally to all sectors.

4.3 Non-tax benefit creation

The benefits generated by the industry extend beyond revenue generation to include employment, backward and forward linkages and skills generation. Encouraging and enhancing these impacts often forms part of government’s considerations when designing mineral regimes.

4.3.1 Employment

Although governments are anxious to see that the number of local people employed in a mining operation be as large as possible, most jurisdictions do not have any legislation relating to total employment in mining operations. This is so mainly since governments tend to accept that the total number of employed is determined by technology and deposit characteristics and cannot be influenced without jeopardizing the viability of the mining operation. Exceptions can, however, be found in rich countries, where the creation of employment in disadvantaged regions is a high priority.28 Thus, countries in northern Europe, particularly Finland and Sweden29, have created attractive environments for mining investment precisely because mining investment tends to target parts of the countries (the northern parts in these two cases) with high unemployment. Both countries also use a spectrum of support mechanisms such as targeted training programmes to promote hiring by mining companies. The thinking behind the policies reveals an awareness of the potential for both indirect and induced employment effects and the importance of the latter in order to ensure that population does not fall below a critical level needed to maintain commercial and public infrastructure. The very low share of the Swedish government in pre-tax cash flow shown in Table 7 makes sense from this point of view.

28 The Swedish government’s mineral strategy states in its preamble “The mining industry is of great importance for the country’s growth and economy. It creates employment opportunities in surrounding areas, contributes to strengthened attraction and creates growth in parts of the country that have long had declining populations.” (Government of Sweden, 2013, author’s translation). The high value accorded to employment is not a recent phenomenon. In 1973, the Swedish parliament approved a government proposal that a mining company be given a subsidy of SEK 27 million (about USD 5 million at the time) as incentive to start mining a copper/zinc deposit in the northern part of the country. The decision was taken on the basis of a cost/benefit analysis in which the benefit of continued employment for people in the area was assigned a high value (Government of Sweden, 1973).

29 Sweden and Finland placed first and second respectively in the Fraser Institute 2013 Policy Perception Index. The ten highest ranked jurisdictions were all developed country ones.
There are of course examples of job promotion policy measures also in developing countries. However, they tend to focus on the creation of special industrialized zones or export zones, which usually exclude mining companies.

Within total direct employment governments usually attempt to influence the share of nationals. It is difficult to regulate this directly, but some governments negotiate targets for employment of nationals. It is uncertain whether such policies have positive long term benefits. If the necessary skills are not present, the company might be obliged to add non-productive jobs, possibly undermining project economy and providing little lasting benefit to the employees. Companies may also choose to circumvent the requirements. For example, in order to adjust to the requirements on local employment in Ghana, some companies have found it easier to relocate company divisions outside of Ghana than to recruit sufficient nationals to satisfy regulations.30

For this reason, most governments are content with a general recommendation that the share of expatriate labour should be as small as possible and/or that nationals of the host country should be given priority, while emphasizing training as a measure that is more productive in the long term. Government policies usually focus on providing or facilitating training and vocational education or requiring mining companies to do so. Experience seems to show that training programmes for the mining sector work best when designed and implemented in cooperation between mining companies and the government.31 While mining companies have detailed knowledge of the skills required, governments usually know more about general skills levels and have the means to directly influence school curricula for instance. The more impressive programmes of this kind have been carried out in places where the existing skill levels were very low.

One example that is of interest also to regions with higher skill levels is the Diavik Diamond Mine in Canada’s Northwest Territories, where an integrated approach to local training, employment and procurement was applied.32 The approach built on a series of agreements and policy statements, in particular a Socio-Economic Monitoring Agreement (SEMA) negotiated with the Government of the Northwest Territories and five neighbouring Aboriginal groups in 1999. The mine also signed five Participation Agreements (PAs) directly with neighbouring indigenous communities. The PAs formalise commitments for both the mine and the aboriginal signatories to work together to maximise community benefits by identifying business opportunities for Aboriginal service providers, employment and training opportunities for community residents, and support for community educational initiatives.

The mine employed about 800 people by 2008 and had met its target of having 67 per cent of its workforce comprised of Northern residents. Although the mine did not meet its Aboriginal employment commitment, reaching 34 per cent instead of the targeted 42 per cent in 2008, this was not an issue, since the absolute number of people was far higher than the original estimate.

While most Aboriginal employees are first engaged in entry-level or semi-skilled positions, the mine seeks to expand their skills through its own apprenticeship and professional development programmes, as well as with a community and government partnership that administers a series of work force development programmes. The mine has designed a leadership development programme targeting Aboriginal employees and contractors. Besides completing a customised curriculum based on Rio Tinto leadership competencies, participants are also matched with a mine manager as a mentor.

30 (SDSG, 2012. This includes the relocation of Gold Fields’ West African Head Office from Ghana to South Africa (SDSG 2012).
31 In northern Chile, for instance, a vocational school set up by a mining company was turned over to the government and has continued educating skilled staff for the local mining industry (ICMM, 2007). Other examples, particularly with respect to training programmes for local communities, are cited in OPM, 2013.
32 The description is based on ICMM, 2010.
Another example is provided by the Sepon Mining Project, a gold and copper mine located in southern Lao PDR. MMG Sepon is committed to giving preference to employing people from the communities and areas closest to its operations. Recruitment, at least in the mine’s initial stages was specifically to be based on “aptitude” rather than “formal education qualifications” – a tactic designed to by-pass the lower levels of schooling of one of the two linguistic groups in the area. Between 2004 and 2006, more than 50 per cent of job vacancies were filled by people living in the vicinity of MMG Sepon’s operation. In 2007, this rate started to decline, and seems to have stabilised at around 35 per cent in 2008 and 2009. In addition to giving priority to people from the local communities, MMG Sepon also gives priority to women, and the percentage of female employees has varied from 15 to 19 per cent, somewhat higher than normal in the industry.

MMG Sepon has also attempted to ensure that recruitment policies are understood by the local population to be fair. One example is that the company has attempted to employ one person from each household in the closest villages, but not more than one, in order to ensure that the benefits of mine employment are shared equitably. The company has also made sure that a slight preference was given to the poorer of the two local ethnic groups. As a result, household surveys carried out by the company at two year intervals show that income equality has improved, both within and between villages and ethnic groups. The lesson from the Diavik and Sepon projects is that positive employment effects are best maximized through a process of consultation between the mining company, local government and local communities. While such processes can often be cumbersome and time consuming, they reduce the risk of misunderstandings and inadequately designed training and recruitment programmes.

4.3.2 Local content

A number of countries have introduced legislation intended to encourage the establishment and strengthening of backward linkages from mining and increased local content. Most countries are, in principle, constrained by WTO commitments in terms of the requirements they can impose with respect to local content. Members of the WTO are bound by the national treatment obligation (NTO) clause under which foreign companies cannot be forced to buy from local suppliers or hire local service suppliers if a better alternative in terms of price or quality exists abroad. Under these rules, legislation can require investors not to discriminate against local suppliers and to accord them preference if their prices and quality are equal to foreign suppliers, but they cannot be given any absolute preference. Box 8 reproduces the relevant articles of the GATT.

Box 8 - Articles III.4 and III.5 of GATT

4. The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.

5. No contracting party shall establish or maintain any internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions which requires, directly or indirectly, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic sources. Moreover, no contracting party shall otherwise apply internal quantitative regulations in a manner contrary to the principles set forth in paragraph 1.*

33 The description here is mainly based on ICMM, 2011, and on personal communications from MMG Sepon officials.
Many developing countries are subject to exemptions from these rules. WTO rules include provisions for the “special and differential treatment” (SDT) of developing countries, which allow for certain exceptions. A blanket exception applies to Least Developed Countries (LDCs). In addition, provisions exist to encourage foreign suppliers to assist in technology transfers and training through so-called ‘offsets’. Therefore, local content policies that encourage offset activities in countries that benefit from SDT would not be in breach of such countries’ WTO commitments.

Some countries use legislation to express a general preference for local content, but without mandating specific requirements. This includes relatively successful mining countries, such as Chile, Peru and Australia. Other countries have more specific requirements stated in legislation or regulatory instruments – in some cases applying relatively ‘blunt’ industry-wide requirements. Such approaches may be distorting as they carry different costs of compliance for different firms, depending on the nature of the mining activity.

In other cases, industry-wide requirements are designed to increase gradually over time. Such initiatives may be most appropriate where the country is starting from a low base of industrial capacity and skills. It recognises that building skills and firm capabilities can take time, and that firms as well as government policy can support this development through their interventions.

Local content requirements can also be included in MDAs. The same issues apply as when local content requirements are set through legislation. Thus, where countries are bound by WTO commitments, the formula used in MDAs is usually close to the one suggested by the International Bar Association in the Model Mine Development Agreement.

Many countries require mining companies to submit their own plans to increase domestic content over time. This approach recognises both the time it takes to build capabilities and skills, as well as the fact that issues may vary across different types of mining company. Examples include South Africa’s requirement for companies to submit Social and Labour Plans (SLPs). In many countries legislation requires that such plans be developed in a consultative manner as part of a company’s licensing procedure (e.g. Tanzania, Brazil, Guinea and Indonesia).

In conclusion, local content legislation exists on a spectrum from setting out broad policy priorities, to industry-wide ‘blunt instruments’. In part because more aggressive mandated local content is a ‘new’ area, there is limited evidence of its impact on business decisions. Due to the limited availability of data, most of the evidence regarding how firms have responded to mandated local content initiatives is anecdotal. In some cases, aggressive government policy on local content appears to have generated perverse effects. Many local content regulations require significant monitoring and reporting that is unlikely to be consistently enforced by weak government administrations. For example, the experience in implementing the requirement for SDP in South Africa has been mixed. As the following example demonstrates, governments can, however, initiate positive developments by working together with industry.

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34 As Tordo et al. (2013) notes, “such offsets include preferential hiring and training of nationals, preferences for local sourcing, encouragement of inward investment, support to domestic suppliers to develop future competitiveness, and support of the development of operational infrastructure to be made available for public use (for example, roads, power, water supply, and so on).”

35 The suggested wording is that “The Company shall, when purchasing goods and services required with respect to Mining operations, give first preference, at comparable quality, delivery schedule and price, to goods produced in the State and services provided by the State citizens or businesses, subject to technical acceptability and availability of the relevant goods and services in the State” (International Bar Association, 2011).

36 For instance, although mining companies in Zambia procure 80 % of goods from Zambian companies, the overwhelming majority of these companies have no manufacturing activity but are simply importers (Chamber of Mines of Zambia and ICMM, 2014).
In the late 1990s, at the initiative of the government’s regional representative, a joint program by government and industry to develop a mining cluster in Chile’s Region II (Antofagasta) was established.\textsuperscript{37} The main participants in the program were the national government through its ministerial representatives in the region, the mining industry and the Industrial Association of Region II (which also organizes the mining companies). Under the program, various initiatives have been taken to foster the development of a mining cluster. The government allocated US$15 million over the period 2002 to 2006, and this sum was matched by the mining companies. The most important undertaking was a drive to assist local companies linked to the mining industry to obtain International Organization for Standardization (ISO) 9000 and 14000 certification. The number of certified companies grew from 8 in 2002 to 122 at the end of 2004. The cost of certification was shared between the Government, mining companies and the participating enterprises. It is believed that the certification will make the companies more competitive, particularly in export markets, and so far, this appears to have been the case.

### 4.3.3 Further processing

A number of jurisdictions attempt to influence mining companies with a view to increase downstream processing. Various methods are used, from relatively vague commitments by investors to give such possibilities careful consideration to export taxes on unprocessed products and outright bans on such exports. The idea underlying export taxes and bans is that it is a natural progression for a country exporting raw materials to move downstream into the processing of these materials. Therefore, it can be argued, policies encouraging such downstream processing can improve trade performance and speed up the structural transformation of the economy.

However, in practice some mining companies probably have very good reasons not to process raw materials into processed products on their own account. If companies are not already doing it, it is probably not profitable, for instance, because of missing economies of scale, because important inputs have to be procured at high cost, or because the facilities are too far from consumers and being able to deliver rapidly.

It is of course possible that the cost to the mining company may be offset by benefits accruing to the rest of society, for instance, in terms of economic diversification and an improved skills base. Export taxes or bans based on an analysis showing that the benefits outweigh the costs might thus be justified. It is, however, very rare that such analyses are carried out in order to establish a strong economic case for the introduction of export taxes. Indeed the authors know of no such case. Instead, examples abound of export taxes on unprocessed materials being introduced “on trust” and thereafter resulting in either reduced production of the raw material or the establishment of processing facilities that exist solely because the export tax pushes down the price of the raw material sufficiently that the processors can cover their costs. Such processing facilities that depend on the continuation of the tax for their survival clearly lead a fragile existence. Examples of processing operations that would probably be unprofitable under normal circumstances include the small copper smelters set up in Katanga in the DRC, which could exist because of the DRC export tax on copper concentrates and the high transport cost. Most of these smelters closed rapidly when copper prices fell in late 2008.

A recent analysis of the effects of export taxes on unprocessed minerals in Indonesia shows that large welfare losses, on the order of US$ 33 to 34 billion cumulative net value over six years could be expected, due to the loss of income from raw materials exports and high processing costs.\textsuperscript{38} While all such calculations are based on assumptions, and the reality can only be assessed ex

\textsuperscript{37} The description is based on ICMM, 2007.
\textsuperscript{38} USAID, 2013
Comparative study of the mining tax regime for mineral exploitation in Kazakhstan

post, the basic argument will commonly hold true: obliging companies to do something they will not otherwise do involves a potentially large opportunity cost for the country.

4.3.4 Social investment

Mining companies’ social investment has varied over time and still varies widely from one country to another. From a global perspective, it is possible to distinguish three phases: until the second half of the 20th century, mining companies tended to provide not only services such as health and education for their employees, but also various types of services that are normally supplied commercially. The reason for this was often that mines were located in remote areas with few public and commercial services. The most far reaching examples were found in African colonies, where the colonial powers assembled workers in mining camps and towns, sometimes by force, and in the Soviet Union, where towns were built around mines. After independence, the practice of providing comprehensive services often continued in former colonies, but in many countries under state ownership of mines. With better communications and increased competition, the system came under pressure from two directions in developing countries: mining companies began finding it difficult to justify the expenditure on social services and as providers of commercial services they faced increasing competition. As a result, social investment by mining companies declined in most countries, particularly in new mines where it became minimal. In the 1990s, however, the second phase ended, the trend turned again, and social investment came back, but now in the guise of Corporate Social Responsibility (CSR).

At present, most mining companies accept the need for a certain extent of social investment, although they would resist letting it grow so much as to risk having the company replacing government. Among the countries where the ICMM Mining Partnership for Development has been used, social investment has typically been 1 to 2 per cent of pre-tax profits. Typical areas of investment are infrastructure, education, health care and local business development.

The countries of the former Soviet Union, including Kazakhstan, represent a special case. While a system of mining towns where the mining operation also supplies social and commercial services may have been practical and rational under a planned economy, it can easily become a major burden for mining companies operating under competitive conditions. It may be difficult for local government to replace mining companies as providers of social services, but in the long run it is likely to prove necessary in order to create a level playing field.

4.3.5 Research and Development (R&D)

It is highly unusual for requirements concerning R&D to be included in mining legislation or MDAs, although where local research institutions exist, mining companies would be both expected to and interested in supporting them.

39 See Chamber of Mines of Zambia and ICMM, 2014, for a description of the phases that communities in the Copperbelt went through.
5 Comparative Review of Kazakhstan’s Mineral Regime

5.1 Institutional, legislative and administrative framework

Kazakhstan’s mineral legislation retains characteristics from the country’s central planning heritage and it also appears to have been strongly influenced by its experience of oil and gas exploitation. Salient features include a strong reliance on detailed regulations and a belief in the State’s ability to monitor and enforce these regulations, a preference for discretionary rather than rules based decision making and a broad array of implicit objectives, some of which could only with great difficulty be achieved at the same time.

5.1.1 Legislative and administrative framework

The basic piece of legislation is Law No. 291 on Sub-Soil and Sub-Soil Use which was adopted in July 2010. It replaced the Subsoil Law of 1996, the Petroleum Law of 1995, and the Offshore Petroleum Operations, PSA Law, combining legislation for solid minerals and hydrocarbons in one law. The Law on Sub-Soil and Sub-Soil Use contains most of the regulations relevant to the mining industry except for taxation matters, which are included in the Tax Code. The law has been amended several times and at the time of writing (May 2014) several additional amendments are before Parliament. It has been stated that a new law should be prepared within two to three years.

The law is very detailed and not very clear on several points, with apparent or real contradictions. An additional complication is that the only available official English translation is extremely poor. A potential investor would not be able to form even a general opinion about Kazakhstan as an investment destination on the basis of a reading of the law without consulting experts in the country.

Hydrocarbons and mining fall under separate ministries: the Ministry of Oil and Gas deals with hydrocarbons and the Ministry of Industry and New Technologies, specifically the Department for Sub-Soil Use, is responsible for matters concerning the mining industry.

Kazakhstan had a moratorium on exploration and mining licenses from 2007 to 2013. No new licenses have been granted since the moratorium was lifted. Indeed, none of the mines now operating started later than in the 1990s. Accordingly, there is no practical experience of how the legislation works. The present title holders have mainly obtained their titles in connection with privatization of state owned mineral assets. Because of the moratorium, there is little practical experience of the application of the present law with makes it difficult to draw concrete conclusions on the legislative and administrative framework.

5.1.2 Granting of mineral rights

Kazakhstan is in the process of transitioning from a system based on auctions of mineral rights to a more standard system based on licensing. To this end, amendments proposed to the Parliament will result in exploration licenses being granted on a first come first served basis. At present, such rights have been auctioned, unless the explorer works in cooperation with a ‘national’ (state owned) company, in which case direct negotiations can be opened with the Ministry. If the holder of an exploration license identifies a commercially exploitable deposit, he will have the right to negotiate a contract for exploitation with the Ministry. The outcome of this negotiation will determine the amount of the various payments as well as the company’s expenditure for social-economic development of the region and development of its infrastructure, personnel recruitment and training, local content in goods and services and research and development work. Although
the government has responded to criticisms by removing the auction requirement at the exploration stage – since it was argued that a junior exploration company would hardly be in a position to submit a credible bid containing details on, for instance, local content and training – exploring companies have no knowledge of the final conditions for exploitation.

The planned changes to the legislation would appear to go part of the way towards aligning laws in Kazakhstan with international practice. The legislation as it will stand does, however, leave uncommonly much of the conditions to be determined by negotiation. Subsequent sections will attempt to identify how greater clarity of investment conditions could be achieved.

5.1.3 Access to geological information

Under the present system, companies applying for an exploration license are given only a small part of the available geological information about the area of interest beforehand. The rest is provided once a contract has been signed, against a payment. The amounts can be important, reaching several million dollars. However, the applicant or bidder does not know either the price or the content of the available information beforehand. Moreover, since the information is usually quite old and organized according to the system used in the Soviet Union its true value may be quite low. Geological information is considered confidential and there are several rules intended to prevent its free dissemination.

In all of these respects, the Kazakhstan legislation contrasts with that of almost all other jurisdictions, in particular the most successful ones, where access to geological information is generally free since it is recognized that the free provision of high quality geological information attracts investors and that its unhindered circulation increases the probability of new discoveries. Reforms to the system are under-way and the government appears to appreciate the advantages of a more liberal approach to the provision of geological information. Improved access to geological information would be likely to significantly increase Kazakhstan’s attractiveness for exploration.

5.1.4 State ownership

Subject to a few exemptions (e.g. for intra-group transfers) the state has a pre-emptive right where a subsurface user transfers its subsurface rights or direct or indirect ownership interest in a mining company to a third party. The state is entitled to acquire such rights/interests on terms no worse than those offered to other buyers. So far, however, the right has not been exercised. A special company, Tau-Ken Samruk, manages State holdings in various projects and is said to be actively seeking investors.

In view of the lack of experience of the application of this particular part of the legislation it is difficult to assess its usefulness or practicability. Generally speaking, similar arrangements have been made in other countries (Angola, South Africa, Zambia, for instance). While no examples of state owned companies having exercised a significant stimulating influence on exploration or investment come to mind, it should also be noted that, for example, large companies such as Codelco, Chile, LAKB, Sweden, and Outokumpu Oy, Finland, do not seem have driven other companies away.

5.2 Fiscal regime

Tax legislation in Kazakhstan is governed by ‘The Code of the Republic of Kazakhstan on Taxes and Other Obligatory Payments to the Budget, December 10, 2008, No. 99-IV Law RK’ (the Tax Code), as amended from time to time. Article 55 of the Tax Code sets out a lengthy list of taxes covered by the Tax Code. It is not permitted to include tax provisions in other legislation – all Kazakhstan’s taxes, both federal and state, must be based in the Tax Code.
The main taxes of primary interest to the mining sector are covered in the Tax Code, and include:

- Corporate income tax (CIT);
- Special payments and taxes of subsurface users, including
  - Excess profits tax (EPT)
  - Mineral Production Tax (MPT), or royalty
  - Signature bonus
  - Commercial discovery bonus;
- Value added tax (VAT);
- Import duty;
- Export duty;
- Withholding taxes on payments to non-residents; and
- Social tax.

As is the case in other countries, the mining industry is subject to a myriad of other taxes and government fees, but these are the principal taxes that can affect the economics and attractiveness of a mining project. The main features of these principal taxes, as they affect the mining industry, are summarized below.

It is noted that none of these taxes are subject to fiscal stability. Provisions for fiscal stability existed earlier, but were abolished in 2009. At present, it is recognized that stability of fiscal conditions is one of the main factors influencing investor interest and therefore, the possibility of reintroducing fiscal stability provisions in some form could be looked into. Where a taxpayer carries on more than one mining project at the same time, the projects are subject to ‘ring fencing’ – i.e. the tax base and related tax liability for each project must be determined separately and each must be the subject of a separate contract.40

The only fiscal incentives in the Tax Code apply to businesses carried out in defined “special economic zones”.41 Mining is not eligible for these incentives.

**Recommendation 1**

Until Kazakhstan is able to demonstrate a track record of fiscal stability, the Government should legislate a form of fiscal stability that meets investors’ concerns. At a minimum, the Government should ensure that there is multi-stakeholder input where significant changes to the tax law are being considered or proposed.

Annex B reproduces an example of fiscal stability provisions contained in a mineral development agreement, and Annex C shows an example of fiscal stability provisions incorporated in law.

### 5.2.1 Corporate income tax (CIT)

For the most part, the CIT provisions of the Tax Code are modern and comprehensive.

The CIT rate is 20 per cent of taxable income.42 Accounting profit, as determined using International Financial Reporting Standards (IFRS), is the starting point for determining taxable income.

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40 Article 308 of the Tax Code.
41 Article 150 of the Tax Code.
42 Article 147 of the Tax Code.
Comparative study of the mining tax regime for mineral exploitation in Kazakhstan

Income. Accounting profit is then modified to exclude non-deductible expenses that are specified in the Code, and to include income that might not otherwise be reflected in accounting profit.

Exploration and development costs incurred before the start of commercial production can be amortized for CIT purposes at the rate of 25 per cent per annum on a straight line basis beginning with the first year of production. The cost of buildings can be depreciated for CIT purposes at the rate of 10 per cent on a declining balance basis starting with the first year of production, while the cost of machinery and equipment can be depreciated at 25 per cent on a declining balance basis. In the first year of production, the taxpayer can elect to depreciate these buildings, machinery, and equipment on a double declining balance basis (i.e. at 20 per cent and 50 per cent respectively), provided the taxpayer commits to use these assets for at least three years. This election applies only to fixed assets owned in the first year of production.

Tax losses can be carried forward for 10 years. Mine reclamation and closure costs are deductible in accordance with specific provisions of the Code.

Complex “thin capitalization” rules prevent the erosion of taxable income by deductions of potentially excess interest expense paid to related third parties. In most jurisdictions with thin capitalization rules, these rules apply only to debt financing by a related party (a shareholder, for example): there is a presumption that debt financing provided by a bank or other third party will reflect normal commercial terms. The thin capitalization rules in some of these jurisdictions permit the government to apply the rules to third party debt financing where there is evidence of intent to evade the thin capitalization rules – for example, through back-to-back loans involving a third party bank and a shareholder.

**Recommendation 2:**

The Government should consider revising the thin capitalization rules to make them easier to understand and administer, and to make them applicable only to related party financing. Canada’s Income Tax Act offers a good example of a simple and effective thin capitalization rule.

Annex D reproduces Canada’s thin capitalization rules.

Transfer pricing rules seek to ensure that transactions are effected at fair market value. The rules are in accordance with international standards, except that the transfer pricing rules in the Tax Code appear to apply to transactions with third parties as well as related parties. In most other jurisdictions, the transfer pricing rules apply only to related party transactions. The application of transfer pricing rules to arm’s length transactions adds an element of risk to doing business, because it gives the government the authority to override normal commercial transactions with third parties.

Annex E shows a straightforward and effective example of transfer pricing rules incorporated in income tax legislation.

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43 Article 56 of the Tax Code.
44 Article 115 of the Tax Code.
45 Article 111 of the Tax Code.
46 Article 120 of the Tax Code.
47 Article 137 of the Tax Code.
48 Article 107 of the Tax Code.
49 Article 103 of the Tax Code.
**Recommendation 3:**
The Government should consider revising the transfer pricing rules to make it clear that these rules apply only to related party transactions.

**5.2.2 Excess profits tax (EPT)**

In addition to CIT, mining profits are subject to a tax on so-called ‘excess profits’.\(^{50}\) The rules for calculating the EPT are very complex and difficult to understand. In essence, the taxpayer is in a position of having to pay EPT in a particular taxation year when after-tax net income exceeds 25 per cent of costs claimed in that year for CIT purposes. Table 12 illustrates the calculation of the EPT.

**Table 12 – Simplified Illustration of EPT**

<table>
<thead>
<tr>
<th>Gross revenue</th>
<th>$1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deductions (operating and capital costs)</td>
<td>600</td>
</tr>
<tr>
<td>Taxable income for CIT purposes</td>
<td>400</td>
</tr>
<tr>
<td>CIT (20% of $400)</td>
<td>80</td>
</tr>
<tr>
<td>“Net income” for EPT purposes</td>
<td>$320</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Maximum Amount of Net Income to Be Allocated to this Level</th>
<th>Allocate Net Income of $320</th>
<th>EPT Rate in this Level</th>
<th>EPT Payable ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25% of deductions (25% of $600)</td>
<td>$150</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>5% of deductions (5% of $600)</td>
<td>30</td>
<td>10%</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>10% of deductions (10% of $600)</td>
<td>60</td>
<td>20%</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>10% of deductions (10% of $600)</td>
<td>60</td>
<td>30%</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>10% of deductions (10% of $600)</td>
<td>20(^{51})</td>
<td>40%</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>10% of deductions (10% of $600)</td>
<td>0(^{52})</td>
<td>50%</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>70% of deductions (70% of $600)</td>
<td>0</td>
<td>60%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$320</td>
<td></td>
<td>$41</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations

It is notable that the EPT uses taxable income for income tax purposes as a starting point. By virtue of being able to claim tax depreciation at the rate of 50 per cent per annum on a declining balance basis, the operator can recover most of his capital costs before paying income tax, and therefore also before paying EPT. This is an important feature of the EPT, as this accelerated tax depreciation provision effectively obviates some of the common criticisms of excess profit tax regimes in general.

As suggested by Table 9, relatively few countries have adopted an excess profits tax. Kazakhstan’s EPT is one of the main contributing factors to the country’s relatively poor position in enabling an investor to earn an acceptable IRR on a typical mining project (see Table 7).

**Recommendation 4:**
The Government should consider either repealing the EPT or reducing the top marginal tax rate from the present 60%. (See also Recommendation 7 for a range of possible rates.)

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\(^{50}\) Article 347 of the Tax Code.

\(^{51}\) Allocate balance of Net Income ($320 minus $150 minus $30 minus $60 minus $60 = $20), not to exceed $60.

\(^{52}\) Not to exceed unallocated net income – i.e. nil, because all net income has been allocated to the first 5 brackets.
5.2.3 Mineral royalty (MPT)

Mineral production is subject to an annual royalty (the tax on production of useful minerals or Mineral Production Tax) based on gross revenue derived from the sale of minerals.\textsuperscript{53} The Tax Code lists ten categories of mineral, and applies a different rate to each mineral, with the highest being the royalty for uranium at 24 per cent.\textsuperscript{54} The royalty rates applicable to metallic minerals are shown in Table 13.

<table>
<thead>
<tr>
<th>Mineral</th>
<th>Royalty rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>5.7%</td>
</tr>
<tr>
<td>Zinc</td>
<td>7%</td>
</tr>
<tr>
<td>Lead</td>
<td>8%</td>
</tr>
<tr>
<td>Gold, silver, platinum &amp; palladium</td>
<td>5%</td>
</tr>
<tr>
<td>Tin and nickel</td>
<td>6%</td>
</tr>
</tbody>
</table>

The royalty rates must be considered relatively high compared to most other countries, particularly for the base metals (see Table 10). Kazakhstan’s royalty rates are one of the main contributing factors to the country’s relatively poor position in enabling an investor to earn an acceptable IRR on a typical mining project (see Table 7). As shown in Table 10, most countries do not impose different royalty rates on different minerals, mainly because this requires a difficult judgemental assumption about the relative profitability of different minerals.

**Recommendation 5:**

The Government should consider reducing its royalty rates to more competitive levels, and should consider reducing the number of royalty rates to two – one rate for gold and other precious metals, and another rate for other metals. (See also Recommendation 7 for a range of possible rates.)

It is notable that royalties can be waived for companies that do not make any profits. Coal production is not subject to royalty, but, as noted below, coal exports are subject to a 2.1 per cent export tax, meaning that coal production is, in effect, subject to a 2.1 per cent royalty when the coal is exported.

5.2.4 Signature bonus and commercial discovery bonus

The signature bonus\textsuperscript{55} and the commercial discovery bonus\textsuperscript{56} are payments payable on issuance of mineral rights.

Signature bonuses, which under the present legislation, now proposed to be changed, were declared to be an important factor in the award of exploration licenses, have been low in the past, normally below US$ 100,000 according to industry sources. However, there is no recent experience on which to base estimates of future signature bonuses, which will have to be

\textsuperscript{53} Article 338 of the Tax Code.
\textsuperscript{54} Article 339 of the Tax Code.
\textsuperscript{55} Article 311 of the Tax Code
\textsuperscript{56} Article 317 of the Tax Code
negotiated with the government in order to obtain a production agreement. The law specifies only a minimum amount.

The commercial discovery bonus could in theory amount to a substantial sum. According to the Tax Code it is calculated as 0.1 per cent of the value of the discovery. Thus obtaining a production license for a medium-sized copper deposit containing 5 million tonnes of copper would require a payment upfront of US$ 35 million at present copper prices. So far, bonuses have been quite modest, again, less than US$ 100,000. However, investors have no guarantee that they will remain low. In addition, the purpose of this bonus is unclear. It cannot be considered payment for access to geological information since that is paid for under another heading. Moreover, it appears somewhat strange that an exploration company should pay a discovery bonus to the State if it has found a commercial deposit through its own efforts.

In the mining industry, where mineral exploration and permitting is on a first-come-first-served basis, or a cadastral system, such bonus payments are rare.

**Recommendation 6:**

The Government should consider repealing the signature bonus and commercial discovery bonus. If these bonus requirements are retained for application to permits granted on an auction or privatization, the rules should be easy to understand and administer.

### 5.2.5 Value added tax (VAT)

The VAT provisions in the Tax Code reflect international best practices. In essence, the purchase of goods and services is subject to 12 per cent VAT (input VAT), and the sale of goods and services is subject to 12 per cent VAT (output VAT). Exports are zero rated. Also, the sale of fine gold to Kazakhstan government bodies is zero rated.

As is common in other VAT jurisdictions, when production is exported, the taxpayer is in a constant VAT refund position, because input VAT always exceeds output VAT. The Tax Code prescribes refund provisions to address VAT refunds. For large companies, a system of self-assessment is applied and VAT is usually refunded with two weeks.

### 5.2.6 Import duty

Import duties apply mainly to the import of alcohol and tobacco products, and vehicles. The importation of mining machinery and equipment is not subject to import duty, which is consistent with international practice. It should be noted, however, that the exclusion of mining equipment from import duty, although common internationally as a way of attracting investment, may conflict with other mining policy objectives. Specifically, it places domestic suppliers of equipment at a relative disadvantage. A truck manufacturer may, for instance, be protected from competition by import duties when supplying other sectors, but not the mining industry. It would seem that if a government has decided to accord protection to an industry then this protection should apply also when the industry supplies mining companies. Most developed countries do not exclude imports of mining equipment from duty.

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57 Article 268 of the Tax Code.
58 Article 242 of the Tax Code.
59 Article 244-4 of the Tax Code.
60 Article 273 of the Tax Code.
61 Article 279 of the Tax Code.
5.2.7 Export duty

As indicated above, coal exports are subject to a 2.1% export tax and oil and gas exports are subject to a special scale of export taxes. No other mineral exports are subject to export duty.\textsuperscript{62} In its effect, this export tax is a royalty on coal production that is exported. It is noted that coal production is not subject to the MPT (royalty) that is discussed in Section 5.2.3.

It would appear that the decision to subject only exported coal to royalty is a policy decision to exempt coal production from royalty where the coal is used domestically. While this policy is unusual, it is unlikely to impact investment in the coal sector either negatively or positively.

5.2.8 Withholding taxes

A number of payments to non-residents are subject to non-resident withholding tax\textsuperscript{63}. These rates are shown in Table 14.

\textbf{Table 14 – Withholding taxes}

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividends</td>
<td>15%</td>
</tr>
<tr>
<td>Interest</td>
<td>15%</td>
</tr>
<tr>
<td>Royalties</td>
<td>15%</td>
</tr>
<tr>
<td>Insurance premiums</td>
<td>20%</td>
</tr>
<tr>
<td>Other income (fees, etc.)</td>
<td>20%</td>
</tr>
</tbody>
</table>

These withholding tax rates, which are consistent with international norms, may be reduced by tax treaty. Kazakhstan is party to tax treaties with 44 other countries, and 2 treaties are awaiting ratification.

5.2.9 Social tax

The mining enterprise must pay an 11 per cent ‘social tax’ based on remuneration paid to employees.\textsuperscript{64} This tax rate is consistent with international norms and somewhat lower than in most developed countries.

5.2.10 Tax administration

The Tax Code prescribes contemporary rules for tax administration, including tax audit, assessment, and appeals.\textsuperscript{65} Although it is not uncommon for mining companies to complain about bureaucracy, generally speaking, the Code appears to be applied in a competent manner. The complexity of parts of the Code and the lack of a clear track record of its application is a larger problem.

5.2.11 The ‘tax package’ in Kazakhstan

As indicated in Table 7, Kazakhstan’s current fiscal regime allows a typical medium cost mining project to generate an IRR (16.2 per cent) that is probably less than the IRR that would ordinarily be needed in current circumstances to attract investment. As noted in Sections 5.2.3 and 5.2.2, the

\textsuperscript{62} Article 300 of the Tax Code.
\textsuperscript{63} Article 194 of the Tax Code.
\textsuperscript{64} Article 359 of the Tax Code.
\textsuperscript{65} Article 555 of the Tax Code.
main reasons for this shortfall in IRR are attributed to relatively high royalty rates and the application of the EPT. In addition, the calculations in Table 7 do not take into account the impact on returns of the other fees and requirements in the Kazakhstan legislation, such as the signature and discovery bonuses, payment for geological information, the local content requirements and the required payments for training, social investment and R&D.

The Government should consider modifying the royalty and EPT rates in order to allow a typical medium cost mining project to generate a more competitive IRR – for example, a 17.5 per cent IRR, which would likely be considered a minimum IRR in light of country risk. Table 15 illustrates this point. In all cases in Table 15, the CIT is maintained at the current 20 per cent. If the Government decided in the future to increase the current 20 per cent CIT rate, then corresponding changes to either the EPT and/or royalty rates would have to be considered in order to preserve the international competitiveness of the overall fiscal regime.

**Table 15 – Royalty and EPT rate combinations to maintain a competitive tax package**

<table>
<thead>
<tr>
<th></th>
<th>Royalty Rate</th>
<th>Maximum EPT Rate</th>
<th>Project IRR</th>
<th>Government Share of Pre-Tax Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current rates</td>
<td>5%</td>
<td>60%</td>
<td>16.20%</td>
<td>52.90%</td>
</tr>
<tr>
<td>Case A</td>
<td>3%</td>
<td>10%</td>
<td>17.60%</td>
<td>46.50%</td>
</tr>
<tr>
<td>Case B</td>
<td>3.50%</td>
<td>5%</td>
<td>17.50%</td>
<td>46.10%</td>
</tr>
<tr>
<td>Case C</td>
<td>4.00%</td>
<td>0%</td>
<td>17.50%</td>
<td>45.90%</td>
</tr>
</tbody>
</table>

From the point of view of both the government and prospective investors, any of Cases A to C would present acceptable optics and reality. The government share of pre-tax cash flow generated by the project would fall within the prevailing international range⁶⁶, and the royalty rate would be more internationally competitive than the current 5 per cent.

**Recommendation 7:**

The Government should consider adopting a combination of royalty and EPT rates along the lines shown in the example in Table 15 in order to make the country’s fiscal regime for mining more internationally competitive.

**5.3 Non-tax benefit creation**

**5.3.1 Employment and training**

In the contract that a mining investor has to conclude with the government, the investor has to make commitments concerning the employment of Kazakh nationals and their training. Legislated firm undertakings of this kind are very uncommon internationally, although they are often included in MDAs. While it does not seem that the commitments are overly burdensome or that the results are much different from what companies would do in any case, investors may be deterred by the uncertainty created by a legal commitment. Moreover, the relatively severe penalties for breaches of any of the contractual commitments add a deterring effect.

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⁶⁶ The average Government Share in Table 7 is 46.4%, and the ratio of Government Share to Investor Share in Figure 5 is 17:18.
5.3.2 Local content

Kazakhstan has a highly demanding system for regulating local content. Regulations related to local content in the procurement of goods, works and services in mining activities fall under the Law on Subsoil and Subsoil Use. The National Agency for Development of Local Content (NADLoC) is responsible for implementation.

Since 2010, all subsoil users are obliged to: (1) procure all goods, works and services under the government’s Procurement Rules; (2) download all procurement information onto an online registry (i.e. advertisement, tender documentation, results of the tenders, contractor selected); and (3) place advertisements and results in periodicals disseminated three times a week throughout Kazakhstan, in Kazakh and Russian languages.

Local content performance is monitored by NADLoC. Data is analysed to understand what is purchased, volumes purchased, and where potential exists for growth or entering other markets. The data informs development of local content action plans. Kazakhstan’s 2010 - 2014 local content programme has set a target of 16 per cent for goods and 85 per cent for services. Actual spending is close to, or exceeds targets, with 14 per cent and 92 per cent respectively in 2012 (Esteves et al., 2013).

The Kazakh Government’s Decree No. 367/2010 formalised the measurement of local content in goods, works and services, using the ‘Uniform Method of Kazakh Content Calculation’ (the ‘Uniform Method’). Subsoil users are required to provide a 20 per cent discount to Kazakh manufacturers.

The percentage of Kazakh content in goods is stated in the CT-KZ certificate. The certificate is issued by the Ministry of Industry and Trade’s Technical Regulation and Metrology Committee to a Kazakh manufacturer. CT-KZ is issued for a period of one year. It is not mandatory for manufacturers to obtain a CT-KZ certificate, however to claim local content, subsoil users need to have one.

Kazakh content in services is equal to the share of total salary expenses paid to Kazakh employees, including subcontractors. The supplier determines this share, indicated as a percentage on the official letterhead with the certified director's signature and the company's seal.

Subsoil users have to submit their annual, medium term and long term procurement program, and quarterly reports.

In March 2012, NADLoC, which is under the Kazakh Ministry of Industry and New Technologies, claimed that most of the 229 companies mining companies do not meet the legal requirements for local content in the Law on Subsoil Use. In 2011 mining companies purchased 568 billion tenge worth of goods and services but only half were made through the register that is required to be used for procurement purposes according to the Law on Subsoil Use. The violations were estimated at 212.2 billion tenge (US$ 1.38 billion). The main barriers are believed to be lack of locally produced equipment and machinery and lack of local production facilities.

The Kazakh local content rules differ from those applied in other countries lacking Kazakhstan’s Soviet past, being considerably more detailed, binding and with breaches being associated with

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severe penalties. They are likely to impose sub-optimal technical and procurement solutions compared to what would otherwise be the case. The fact that the proportion of locally sourced goods and services in Kazakhstan does not differ dramatically from that in other countries may mean that there are low additional costs. However, the requirement that companies give local suppliers a 20 per cent discount may result in considerable rent seeking and exploitation of monopoly situations. Moreover, the existence of legally binding requirements constitutes a deterrent to investment. Complying with the rules is also burdensome and labour consuming both for the government and for investors, and is unlikely to be the best use of resources.

5.3.3 Further processing

Unlike the case in several other countries, the legislation does not contain any specific requirements concerning further processing. However, other pieces of legislation carry implications that may provide incentives for a mining company to process the minerals it produces. Thus, it automatically becomes a manufacturing company, which makes it eligible for certain types of government support.

5.3.4 Social investment

The contribution to local economic development and infrastructure is an important element in the consideration of competitive bids for exploration contracts under the present legislation. Under the rules now proposed to Parliament, companies will still have to negotiate an agreement with the Ministry on these issues. From a global point of view, it is relatively unusual to require a formal legally binding agreement on these matters. In some cases, social investment has been an element of Mineral Development Agreements, but this usually reflects particular historical circumstances, as in the case of the Zambian MDAs concluded in the early 2000s, where a continuation of some of the services provided by the previous state owned company was included. The requirement has to be seen against the historical background where in Kazakhstan as in other parts of the then Soviet Union, it was taken for granted that companies supplied a wide range of social services and where state administered social safety nets have not yet fully replaced the corporate ones. Indeed, large mining companies in Kazakhstan provide these services. The transition to a system that will be less demanding on investors is likely to be both inevitable and complicated.

5.3.5 Research & Development

Similarly, the investor has to make commitments regarding support to R&D carried out by Kazakh institutions. It is expected that this support should correspond to 1 per cent of turnover. This requirement probably does not have a major deterring effect on investment. Mining companies may have some problems identifying worthwhile research projects to support, particularly since the percentage is fairly high in an international perspective, but as long as the requirement is known and does not change, investors would not be expected to balk at it.
6 Conclusions and recommendations

Judging from official policy pronouncements and interviews the objectives of Kazakhstan’s mining policy are to promote employment and economic diversification, build skills and maintain existing regions and towns that depend on mineral production. Maximization of government revenue does not appear to be the paramount objective that it often is in mineral rich countries, mainly because government revenue from hydrocarbons ensures that there are sufficient financial resources to meet development needs. The country is growing fast, resources for the improvement of the quality of life and living standards are not lacking, and it is doubtful if more could easily be absorbed, as seen from the rapid improvement in all components of the HDI. Accordingly, Kazakhstan can devote its policy making efforts to ensuring that the country is placed on a track towards transition to a diversified and more resilient economy and, among oil and gas dependent countries, Kazakhstan is in the lucky and uncommon position to have attractive alternatives to hydrocarbons, not least in the form of a generous endowment of non-fuel mineral resources. The policy and regulatory framework for mining should reflect the stated economic policy priorities and should therefore emphasize employment creation and building skills rather than the maximization of the government share of profits.

On the basis of what is known about the country’s mineral resources and its sheer size, Kazakhstan can realistically aspire to building a world class mining industry. In order to do so it needs to attract foreign investment. Today, hardly any country can build and maintain a large, technically sophisticated mining industry without investment from abroad, not even countries such as Australia or Canada. Almost no country has sufficient risk capital, technology, entrepreneurial ideas and creativity to guarantee continued, sustainable growth. It would seem therefore to be in Kazakhstan’s interest to focus on improving the strategic aspects that help to draw investors, particularly the kind of investors that can contribute not just capital but also technical innovation and a long term commitment. These are the investors that can make a lasting impact and help building skills and competence.

The changes under-way concerning the way that exploration rights are attributed mark a distinct improvement in Kazakhstan’s attractiveness to investors. Mining companies are not comfortable placing themselves in a situation where they lack a guaranteed right to exploit the mineral deposits that they have found and where they perceive themselves to be at the mercy of the government’s discretion. Thus, the application of a first come, first served rule to the allocation of mineral rights should lead to increased exploration interest in Kazakhstan. In particular, security of title and the right to trade titles would be expected to attract the junior companies that account for most mineral discoveries globally.

For those discoveries to result in projects that eventually become large scale mines, the political and regulatory framework has to accommodate investors, particularly the right type of investors already described. In the following, different aspects of the framework are reviewed from this angle.

6.1 Institutional, administrative and legislative framework

For the outside observer, it appears that the design of the regulatory framework for non-fuel mining in Kazakhstan can be traced to two factors: an influence of oil and gas industry experience, and a reliance on detailed regulation and government discretionary decision making that seems to be a legacy of the planned Soviet economy. As already noted, mining companies have a different perception of risks than oil and gas companies, they feel comfortable with a regulatory regime that leaves as little as possible to government discretion and they consider detailed regulations as constraints leading to suboptimal solutions, preferring regulation by result to regulation by methods.
6.1.1 Different legislation for oil and gas and solid minerals

As has already been argued, maintaining the current ‘dual purpose’ legislation has more drawbacks than advantages. When the time comes for a more comprehensive review of solid mineral legislation, it may therefore be appropriate to consider placing the regulations in a separate law.

6.1.2 Agreements or laws

As has already been argued, negotiating on a case by case basis invites clever stratagems on the part of companies, privileging companies with good legal advice, possibly to the detriment of the ones with good mining engineers, posturing on the part of politicians and capture of negotiations by interests external to the agreement. Transparent, foreseeable, consistent and stable application of clear and unambiguous laws will attract companies that are willing to take on geological and technical risks while being reassured about other risks. Sophisticated mining companies with long experience also know that cleverly negotiated agreements often do not stand the test of time and that arrangements based in law often have better lasting value.

6.1.3 English translation of the mining law

The international mining community uses English as its working language. Consequently, having a good and easy to understand English translation of the mining law reduces the risk of misunderstandings and constitutes an advantage when attracting investors. The translation of the Kazakhstan mining law that is currently available unfortunately leaves much to be desired. Part of the problem is the law itself, which to somebody used to current practice mining laws seems unnecessarily detailed and complicated. But the quality of the English translation also contributes to reducing the accessibility of the law. A priority measure to be taken in order to raise Kazakhstan’s attractiveness as a destination for mining investment would therefore be to commission a new translation and field test it on mining industry professionals that are native English speakers.

6.2 Fiscal regime

The mining tax system in Kazakhstan has four characteristics that reduce its competitiveness:

- The investor cannot be sure of the amount of some of the taxes that have to be negotiated, thus introducing an element of uncertainty in the investment calculation.
- Kazakhstan does not have stability clauses; which further exacerbates uncertainty.
- Some taxes have to be paid up front, which, considering the long lead time for investment and that mining companies operate under uncertainty, tends to have a disproportionate deterring effect.
- Finally, most importantly, the marginal tax rate that is generated by a combination of the EPT and the mineral royalty is high; which raises the hurdle rate that investment projects have to clear, thereby reducing the amount of investment and maintain production and employment below potential.

The first and second point concern mainly the signature bonus and the commercial discovery bonus. If these bonus requirements are retained for application to permits granted on an auction or privatization, the rules should be easy to understand and administer.

In terms of improving the competitiveness of the fiscal regime in Kazakhstan, the following recommendations can be made:
Until Kazakhstan is able to demonstrate a track record of fiscal stability, the Government should legislate a form of fiscal stability that meets investors’ concerns. At a minimum, the Government should ensure that there is multi-stakeholder input where significant changes to the tax law are being considered or proposed.

The Government should consider revising the thin capitalization rules to make them easier to understand and administer, and to make them applicable only to related party financing. Canada’s Income Tax Act offers a good example of a simple and effective thin capitalization rule.

The Government should consider revising the transfer pricing rules to make it clear that these rules apply only to related party transactions.

The Government should consider either repealing the EPT or reducing the top marginal tax rate from the present 60 per cent (see also final bullet point for a range of possible rates.)

The Government should consider reducing its royalty rates to more competitive levels, and should consider reducing the number of royalty rates to two – one rate for gold and other precious metals, and another rate for other metals (see also final bullet point for a range of possible rates).

The Government should consider repealing the signature bonus and commercial discovery bonus. If these bonus requirements are retained for application to permits granted on an auction or privatization, the rules should be easy to understand and administer.

It would appear advisable to consider reviewing tax rates on the basis of the total tax package. The Government should consider adopting a combination of royalty and EPT rates along the lines shown in the example in Table 15 (replicated below) in order to make the country’s fiscal regime for mining more internationally competitive.

<table>
<thead>
<tr>
<th>Royalty Rate</th>
<th>Maximum EPT Rate</th>
<th>Project IRR</th>
<th>Government Share of Pre-Tax Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current rates</td>
<td>5%</td>
<td>60%</td>
<td>16.20%</td>
</tr>
<tr>
<td>Case A</td>
<td>3%</td>
<td>10%</td>
<td>17.60%</td>
</tr>
<tr>
<td>Case B</td>
<td>3.50%</td>
<td>5%</td>
<td>17.50%</td>
</tr>
<tr>
<td>Case C</td>
<td>4.00%</td>
<td>0%</td>
<td>17.50%</td>
</tr>
</tbody>
</table>

Concerning the final point, this requires an in-depth understanding of the dynamic relationship between the various taxes, something that can be attained, for instance, by using a tax model, as mentioned in the Terms of Reference for the present report.68

In considering whether to emulate another country’s tax legislation in order to avoid a potentially time consuming process of “re-inventing the wheel” through trial and error, consideration should be given to:

1. The nature of the other country’s resources as compared to those of Kazakhstan, including geography, geology, climate, access to energy, social policies and sentiments, educated labour force, and so forth;
2. The maturity of the other country’s mining industry and fiscal framework; and
3. The country’s fiscal objectives and other political policies.

68 Given budgetary limitations, this is foreseen as a further project or a consultancy hired directly by the Government of Kazakhstan.
Canada may be a good example of a country for Kazakhstan to emulate. Canada’s modern income tax regime, as set out in the Income Tax Act (Canada), had its beginnings in 1951 following an extensive reform of the law. Since then, Canada’s Income Tax Act and tax policies have undergone a series of refinements that enhance effectiveness and efficiencies. For example, where taxpayers’ aggressive tax planning has sought to avoid or evade the thrust of the law, the law has been amended and improved to reinforce the spirit of the law and enforce tax collections.

Rather than reinventing the law, Kazakhstan can benefit from the experience of other countries, such as Canada, by incorporating tax provisions that have proven themselves as workable and desirable. For example, in the 1980s when Canada resolved to replace its federal sales tax with a value added tax, the Canadian government surveyed existing value added tax systems around the world, and decided to copy New Zealand’s value added tax system, which adapted well to Canada’s economy.

Annex F shows a profile of Canada’s world leading mining industry today.

6.2.1 Local content

Local content regulations are perceived to confine the industry in a straitjacket of constraining details and to burden them with onerous monitoring and reporting obligations. In a worst case, local content regulations could even become an obstacle to technical efficiency by making the introduction of best practice technology subject to the availability of offsetting local goods in other areas. The penalties for failure to meet the targets are also considered to be unduly harsh, since a company could lose its license for having missed them. Accordingly, investors tend to be critical of the present local content regulations, even when they have no particular difficulty in meeting the requirements.

In addition to the negative effect on attractiveness to investors, the local content regulations as they stand would appear to contradict WTO rules. Kazakhstan’s accession to the WTO would therefore require rather radical changes in the approach to local content. A further reason to consider changes is the planned entry into full force of the Customs Union with Belarus and Russia in 2015. Presumably, this means that Belarus and Russian companies will have to be considered as local under the legislation. There would seem to be little interest on the part of the Kazakhstan government in maintaining a legislation that would mainly benefit Russian suppliers to the mining industry.

Finally, the cost to mining companies from complying with local content regulations would be more acceptable if the regulations could be shown to have substantial positive results. However, the proportion of goods and services that are locally supplied, almost 14 per cent in the case of goods and almost 87 per cent in the case of services (Esteves et al., 2013), while well in line with what has been achieved elsewhere, do not seem to differ dramatically from the situation in other countries with more flexible regulations.

Accordingly, the present policy of setting targets for local content that are enshrined in binding agreements with monitoring and reporting based on a detailed accounting would not appear to be suited to Kazakhstan’s needs. Neither does it appear possible or desirable to retain it in view of anticipated changes to Kazakhstan’s international trade relations. Finally, it is questionable if the policy is effective enough to justify its costs.

A shift to a more flexible policy that would reduce the perceived up front risks to investors while still contributing to industrialization and growth of skills could be considered. Such a policy should recognize that it is in the interest of mining companies to build up a portfolio of reliable and qualified local suppliers. As has been the case in other countries, it could be based on consultations between government (including local ones) industry associations and mining
companies, aiming to identify promising branches of industry and the obstacles with respect to skills, logistics or capital provision that will have to be removed for those industries to realize their potential. Making the agreements on local content between government and mining companies voluntary instead of mandated by law, while at the same time broadening their scope to encompass the more general issues indicated would probably not yield significantly lower results in terms of overall local content. But the policy would reduce costs to both government and mining companies.

6.2.2 Social investment

Modern international mining companies consider their social investments as an essential element of ensuring that they retain a ‘social license to operate’. They therefore devote substantial financial resources to spending on infrastructure, social services and local business development, with the latter often being pursued jointly with efforts to orient procurement towards local suppliers. The main dilemma from a governance point of view is for companies to avoid replacing government.

Kazakhstan represents an unusual challenge to foreign investors insofar as companies there traditionally provide a much broader range of services than is common in countries not having been part of the Soviet Union. Foreign investors could in principle envisage taking over some or all of the responsibility for services performed by former state owned companies where there is no other easily identifiable entity that could assume that responsibility. This is not uncommon in other countries where public service provision through mining companies has been common. When it comes to green field projects, however, investors are unlikely to accept the same level of responsibility. Accordingly, negotiations between the government and investors would probably be more successful if the difference between new and old projects were explicitly recognized and the government made clear its expectations in this regard.

6.2.3 Research and Development and training

At present, companies are expected to contribute 1 per cent of turnover to R&D and spend the same amount on training of its employees. While companies are unlikely to object to the second requirement, which is largely in line with industry averages, the first may be more problematic. The world mining industry as a whole spends less than 1 per cent of turnover on R&D and companies may find that a requirement of the present magnitude constitutes a tax under another name. Accordingly, it would seem prudent to review this requirement in the context of an overall review of the level and composition of the Kazakhstan mining tax package.

Areas for intervention have been identified, thus potentially simplifying the task (Esteves et al., 2013).
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Annex A Terms of reference

The World Bank, with funding from the Kazakhstan Joint Economic Research Program, is supporting a program to provide input for the policy reform of the Kazakhstan mining sector. This project, the second to be undertaken, will focus on best practice in mining taxation.

Background

Kazakhstan is fortunate compared to many other mining countries in that the country does not need a rapid expansion of the sector for foreign exchange or fiscal reasons. The reasons for expanding the mining sector are more related to: (i) a desire to diversify production; (ii) increasing employment and related social development; (iii) increasing business opportunities and innovations’ potential; and (iv) given the large infrastructure needs of many mining operations, increasing opportunities for partnership in infrastructure development that can impact on all of the above.

However, under the current mining legislation, Kazakhstan is not likely to see a large increase in investment either for mining exploration or exploitation, and without this investment none of the four objectives listed above can be attained. Changing the status and raising the profile of mining legislation is extremely important for the further development of Kazakhstan’s economy and creation of a favorable investment climate that will ensure a steady flow of foreign direct investment in the mining industry.

In his Address to the People of Kazakhstan “Socio-Economic Modernization as Main Vector of Development of Kazakhstan" President- the Leader of the Nation Nursultan Nazarbayev said that “protection and support of domestic and foreign investors, predictability of legislation and transparency should be the fundamentals of business climate in Kazakhstan.” In this regard setting sound and effective legislative framework regulating mining industry operations seems very timely and appropriate. These Terms of Reference set out the framework for a research to improve country’s investment climate on mineral taxation.

Objective and Scope of Work

Analysis of and recommendations in the world’s best approaches to mineral taxation with respect to achieving a proper balance of the fiscal return to the state, benefit creation beyond tax revenues, and attractiveness to investors.

In the recent 2012/13 prestigious Fraser Institute of Canada’s Survey of Mining Companies on the attractiveness of the subsoil use legislation, Kazakhstan ranked 80st of 96 countries on the investment legislations’ policy potential index that considers elements such as taxation, stability of policies, implementation of policy, governance, trade barriers, currency restrictions, predictability of policy, etc. In important areas such as the taxation regime, Kazakhstan ranked 65th; the quality and access of the geological database - 71st; and uncertainty in mining policy and implementation-66th. With current regulations, the geological potential of Kazakhstan is ranked at 69th of 96 countries, but this would change to 32nd of 96 countries if best practice regulations are in place. This makes Kazakhstan the 16th highest in the survey on ‘room for improvement’.

There are a number of questions related to the subsoil use in Kazakhstan that could be improved:

- the current system of taxation;
- the procedure for granting rights for the subsoil use;  

70 In this assignment, mining does not include oil and gas but could include coal if relevant.
• the effectiveness of the existing system of providing contractual areas;
• local content development; and
• stimulating investment in mining and exploration.

This study would look at mineral taxation from a multi-lensed perspective, including the impact on mining investment and exploitation of non-tax benefits that are provided by companies (whether legislated or not). Subject to additional funding, the topic could include training on tax models to show the impacts of different mixes of taxes on effective tax rates, frontloading and backloading of taxes, and other matters of concern to the Government and investors in the context of improving the investment climate.

**Assignment Description**

The World Bank has committed to continue to provide technical assistance in the development of Kazakhstan's mining sector and share a wide international experience of other countries, which will be of great value in the further development and promotion of the mining sector in Kazakhstan.

The work will encompass a comparative study of the mining tax regime for mineral exploitation in Kazakhstan with a sample of important mining countries. Subject to additional funding, follow-up training would be undertaken on developing and running a simulation model of the fiscal impact of the tax regime on mining operations in various scenarios. The tax regime will be broadly defined to include other obligations of mining companies that have financial implications. The study would include: (i) comparison of tax rates (royalties, income tax, accelerated depreciation, etc.) of Kazakhstan’s mining sector with the sample countries; (ii) development of a model to calculate the effective rates of taxation for the Kazakhstan mining sector, including impacts on frontloading and backloading of taxes; (iii) comparison of the effective rates of taxation on gross revenues and net profits in Kazakhstan’s mining sector with the sample countries, focusing on two of Kazakhstan’s most important mineral commodities; (iv) a comparison of non-tax benefits that companies are mandated to provide and which impact effective rates of return; (v) a comparison of the institutional framework for administering the mining tax regime, including legal and dispute resolution procedures, in Kazakhstan and the sample countries; (vi) an analysis of the impact of the fiscal regime on investment in exploration and exploitation; (vii) analysis and provision of justification for having separate legislative basis for solid minerals and hydrocarbons with a main focus on tax obligations and differences, including lessons learned from taxation of the hydrocarbon sector in Kazakhstan; and (viii) a comparison of other issues that impact the mining fiscal take in Kazakhstan and the sample countries, such as transfer pricing, and other issues considered particularly pertinent for Kazakhstan by the Government. The final analysis of the mineral tax regime should also be conducted in the framework of recent fiscal policy changes in Kazakhstan.

The sample countries for the study would be chosen in discussion with the Government of Kazakhstan. For all countries in the sample, fiscal revenues from taxation would be an important part of the country’s fiscal revenues. At the same time, the countries will be chosen to represent diverse situations, such as countries with long-established mining sectors and recent ‘boom’ countries as well as countries where the state mining sector has an important role to play in ownership.

71 This was covered under the JERP mining program for FY13.
72 Note that the proposal should not include a detailed description of such training, nor should it include a budget to do so. However, the ability of the Consultant to undertake such work should be illustrated briefly.
73 The choice of comparator countries would to some extent depend on those for which recent calculations of effective rates of taxation have been undertaken.
The focus of the study is on the effectiveness of different tax instruments on the fiscal take and effective tax rates faced by mining companies. However, it will include an analysis of the overall impact of the fiscal system (including non-tax obligations) on investment levels.

An international consultant or firm will be selected to lead the work through international tender. The consultant/firm will work with a local consultant/firm with a deep understanding of the Kazakh mineral sector.

**Deliverables**

The Consultant is expected to submit the following outputs:

- A study of the mining sector fiscal regimes in a sample of major global mining countries;
- Based on the previous analysis, recommendations on a mining fiscal regime to the Government of Kazakhstan.

**Reporting**

The Consultants will report to Gary McMahon (Senior Mining Specialist) and Yerlan Akishev (Senior Operations Officer), both at the World Bank.
Annex B  Example of fiscal stability provisions in mineral development agreement

Indonesia’s Contract of Work (CoW) offers a very good example of fiscal stability delivered through a mineral development agreement. Indonesia introduced the CoW in 1967 to stimulate inbound foreign investment and used it for all inbound foreign investment through 1997. The CoW is the cornerstone for Indonesia’s modern mining industry, which is a world leader in terms of producing copper, nickel, gold, tin, and coal. Indonesia abandoned the use of the CoW and fiscal stability in 1998, because the Indonesian Government felt that the industry was mature enough to no longer need a mineral development agreement. The legislative provisions set out below are extracted from the template last used by Indonesia in 1997.

**Box 9 - Indonesia’s Contract of Work**

**Article 13 - TAXES AND OTHER FINANCIAL OBLIGATIONS OF THE COMPANY**

Subject to the provisions of this Agreement, the Company shall pay to the Government and fulfill its tax liabilities including its obligation as tax withholder as hereinafter provided:

(i) Deadrent in respect of the Contract Area or the Mining Area;

(ii) Royalties in respect of the Company’s production of Minerals;

(iii) Corporate Income Tax in respect of income received or accrued by the Company;

(iv) Personal income tax (Article 21/26);

(v) Obligation to withhold income tax under Article 23 and or Article 26 of Income Tax Law 1994 in respect of payment of dividends, interest, including remuneration due to loan payment warranty, rents, royalties and other income related to the utilization of property, remuneration for technical and management services as well as other services;

(vi) Value Added Tax (VAT) and Sales Tax on Luxury Goods on import and or delivery of taxable goods and or services;

(vii) Stamp Duty on documents;

(viii) Import Duty on goods imported into Indonesia;

(ix) Land and Building Tax in respect of:

a) the Contract Area or the Mining Area; and

b) the utilization of land and building in the area where the Company constructs facilities for its mining operations.

(x) Levies, taxes, charges and duties imposed by Local Government in Indonesia which have been approved by the Central Government;

(xi) General administrative fees and charges for facilities or services rendered and particular rights granted by the Government to the extent that such fees and charges have been approved by the Central Government;

(xii) Duty on registration and transfer of ownership of motorized vehicles and ships in Indonesia.

The Company shall not be subject to any other taxes, duties, levies, contributions, charges or fees now or hereafter levied or imposed or approved by the Government other than those provided for in this Article and elsewhere in this Agreement. (Bold font added by author for emphasis.)

1. Deadrent in respect of the Contract Area or the Mining Area.

The Company shall pay, in Rupiah or in such other currencies as may be mutually agreed, an annual amount of money as deadrent to be measured by the number of hectares included in the Contract Area or Mining Area respectively, calculated on January 1st and July 1st of each Year, such payments to be made in advance and in two instalments each payable within thirty (30) days after the said dates during the term of this Agreement and
payable as stipulated in Annex “D” attached hereto.

2. Royalties in respect of the Company’s production of Minerals.

(i) The Company shall pay royalties in respect of the products (as defined in Annex “F” and detailed in Annex “G”) from the Mining Area, to the extent that such products are products for which value according to general practice is paid or payable to the Company by a buyer. Royalties shall be paid in Rupiah or such other currency as may be mutually agreed and shall be paid on or before the last day of the month following each calendar quarter. Each payment shall be accompanied by a statement showing in reasonable detail the basis of computation of royalties due in respect of the production of the Company during the preceding calendar quarter.

Royalties will be computed from the rates specified in Annex “F” as follows:

a) the tonnage or quantity by weight used in the computation shall be based on the final product produced by the Company. In the case of concentrates or dore bullion, the quantity by weight of each mineral, and or metal subject to royalty shall be properly determined by internationally accepted assay methods.

b) The Government shall (upon written request by the Company) specify the royalty tariff in column 4 of Annex “F” for those minerals for which no tariff reference is given.

(ii) The Company undertakes that any mining, processing or treatment of ore prior to domestic sale or export shipment by the Company shall be conducted in accordance with such generally accepted international standards as are economically and technically feasible, and in accordance with such standards the Company undertakes to use all reasonable efforts to optimize the mining recovery of products from the ore, provided it is economically and technically feasible to do so, and shall submit evidence to the Department of compliance with this undertaking. Royalty shall be payable at the rates specified in Annex “F” on any industrial minerals separately quarried from the Contract Area by the Enterprise except for those industrial minerals (C minerals category) used for regional development. Any waste minerals moved to allow operations to proceed or extracted in the course of mining and used by the Enterprise are exempted from such royalty.

(iii) If in the opinion of the Government, the Company is failing without good cause to recover products at the recovery rate indicated in the feasibility study, it may give notice in writing to the Company. Within three (3) months of the receipt of this notice the Company shall:

a) commence work to improve its mining method, treatment and processing facilities to the reasonable satisfaction of the Government, provided that the Company shall in no event be obliged to conduct mining, processing or treatment activities otherwise than as provided in item (ii) paragraph (2) Article 13;

b) submit to the Government evidence in justification of its performance in accordance with item (ii), paragraph (2) of this Article 13. In the event that the Government remains unsatisfied with the Company’s performance in mining ore from the proven reserve and recovering products from the ore, the Government shall have the right to commission independent technical studies to determine a fair average recovery rate taking into account the nature of the proven reserve and the ore and the economic and technical feasibility of achieving increased recovery by the Company in accordance with item (ii), paragraph (2) of this Article 13. Such studies shall be carried out by internationally recognized consultants appointed by the Government and agreed to by the Company. In the event that the Government and the Company fail to agree on the appointment of the consultant, each party shall appoint one consultant. The two consultants shall then jointly appoint a third consultant. The results shall be determined by the findings of the majority in this event. The Government and the Company shall have the right to prepare submissions to the consultants. If the said consultants find that the performance of the Company’s operations is not satisfactory, then the cost shall be borne by the Company. If it is found that the performance of the Company’s obligations is satisfactory, then the cost shall be borne by the Government. If following the completion of such studies, the Company falls within a reasonable period to achieve the recovery rate indicated by the majority of such studies, the Government shall have the right if the Company is not then observing its undertaking in item (ii), paragraph (2) of this Article 13 to increase the royalty applicable to such products in proportion to the extent that recovery of such products by the Company falls short of the fair average rate indicated by such studies. But at no time shall the payment of such increased royalty free the Company from the obligation to observe its undertaking in item (ii), paragraph (2) of this Article 13.

3. Corporate Income Tax in respect of income received or accrued by the Company:

(i) The Company shall pay Income Tax on income, that is any increase in economic ability received or accrued by the Company, whether originating from within or outside Indonesia, in whatever name and
Comparative study of the mining tax regime for mineral exploitation in Kazakhstan

<table>
<thead>
<tr>
<th>Form, including but not limited to gross profit from business, dividends interest and royalties and the tax rates to be charged for the duration of this Agreement shall be as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Ten percent (10%) for taxable income up to twenty five million Rupiah (Rp 25.000.000);</td>
</tr>
<tr>
<td>b) Fifteen percent (15%) for taxable income exceeding twenty five million Rupiah (Rp 25.000.000) up to fifty million Rupiah (Rp 50.000.000);</td>
</tr>
<tr>
<td>c) Thirty percent (30%) or lower rate as set forth by Government regulations for taxable income exceeding fifty million Rupiah (Rp 50.000.000).</td>
</tr>
</tbody>
</table>

Should the income brackets be amended by the Minister of Finance, then the tax rates mentioned in a), b), and c) will be applied to the amended income brackets.

(ii) To calculate the taxable income, the rules for computation of Income Tax as provided for in Annex “H” attached to and made part of this Agreement shall apply. Except as otherwise stipulated in this Agreement, the rules as provided in Income Tax Law 1994, and its implementations regulation, shall apply.


(iv) For specific income as stipulated in paragraph (2) Article 4 of Income Tax Law 1994, shall be subject to specific tax rate in accordance with the provisions of Government Regulation.

4. Personal Income Tax (Article 21/Article 26)

(i) the Company has liability to withhold and remit Income Tax on income related to work, including severance payment and pension paid to employees of the Company as resident taxpayer according to Article 21 or Article 26 of the Income Tax Law 1994.

(ii) expatriate Individuals employed or engaged by the Company who are present in Indonesia for less than one hundred and eighty three (183) days in any twelve month period shall be subject to Income Tax through withholding tax by the Company based on Article 26 of the Income Tax Law 1994, with a rate of twenty percent (20%) or such lower rates due to the enforcement of relevant Tax Treaty on the gross income for services, activities or works in Indonesia. The income of such Expatriate Individuals, which is taxable in Indonesia includes all kinds of remuneration paid to them for services rendered in Indonesia subject to the provisions of paragraph 7 of Annex “H”.

(iii) expatriate individuals who are employed or engaged by the Company and who are present in Indonesia for more than one hundred and eighty three (183) days in any twelve month period or intending to reside in Indonesia, shall be subject to Income Tax through withholding tax by the Company based on Article 21 of the Income Tax Law 1994, from the income paid to the Company's employees with consideration being given to the regulations relating to non taxable income. The income of such Expatriate Individuals shall include all kinds of remuneration paid to them by the Company, subject to the provisions of paragraph 7 of Annex “H”.

(iv) severance payments paid to employees working in the Contract Area shall be subject to Income Tax in accordance with the prevailing regulation.


The Company in accordance with the Income Tax Law 1994 and regulation prevailing at the date of signing of this Agreement is obliged to withhold and remit Income Tax to the Government at a rate specified in this Article or such lower rate due to the enforcement of relevant Tax Treaty as follows:

(i) dividends, interest in whatever form including loan guarantee fee;
(ii) rents, royalties and other income related to the utilization of property;
(iii) compensation paid for technical services, managerial services, and other services;
(iv) grant and reward;
(v) insurance premiums which are paid to non-resident insurance company;

The rates of such withholding tax in force as from the date of signing of this Agreement are:
Comparative study of the mining tax regime for mineral exploitation in Kazakhstan

(a) fifteen percent (15%) of gross income in the case of payments of dividends, interest, and royalties, paid to resident taxpayer excluding dividend, paid to a resident company, cooperative, foundation or similar organization, state owned company or company owned by local government.

(b) seven and a half percent (7.5%) of gross income in the case of payment of dividend to a non resident founder shareholder and individual resident founder shareholder.

(c) fifteen percent (15%) of deemed net income on rents and income related to the use of property, and compensation paid for technical, management and other services in accordance with Article 23 Income Tax Law, 1994 in case of payment made to resident taxpayer.

(d) twenty percent (20%) of gross income or such lower rate due to the relevant Tax Treaty in case of income payment as stipulated in Article 26 of Income Tax Law 1994 made to non resident taxpayer.

6. Value Added Tax (VAT) and Sales Tax on Luxury Goods according to the VAT Law 1994 and its implemental regulations in effect.

With due regard to the general liability under VAT Law 1994 and all of its implemental regulations, the Company has liability

(i) to report its business and apply for registration as a Taxable Firm;

(ii) to collect, remit and report VAT on the delivery of taxable goods at the rate of ten percent (10%) or other rates in accordance with VAT Law 1994 and its implemental regulations;

(iii) to withhold remit and report VAT and or Sales Tax on Luxury Goods as VAT witholder based on the VAT Law 1994 and its implementing regulations;

(iv) the Company is subject to the VAT and or Sales Tax on Luxury Goods, on import or the purchasing of taxable goods or obtaining taxable services which are based on VAT Law 1994 and its implemental regulations, subject to VAT and or Sales Tax on Luxury Goods;

(v) in case Input Tax exceeds Output Tax in a particular tax period, overpayment of Input Tax can be compensated with Output Tax for the following tax period, excluding overpayment on Input Tax resulting from export and or delivery to the VAT witholder, which may submit a request for refund at any tax period;

(vi) taxable goods and or services related directly to the Contract of Work which were accrued by the shareholder as a part of expenses before the establishment of the Company and thereafter transferred to the Company will not be considered as delivery of taxable goods and or services for VAT purposes to the extent that such shareholder is a Taxable Firm;

(vii) the transferred Input Tax on taxable goods and or services, for VAT purposes, referred to sub-paragraph (vi) paragraph 6 of this Article, may be credited by the Company, to the extent it has not been credited yet by the shareholder.

7. Stamp Duty on Documents.

The Company will be subject to stamp Duty in accordance with the provisions stipulated in Law Number 13 Year 1985 regarding Stamp Duty and its implementing regulations.

8. Import Duty on goods imported into Indonesia

(i) exemption and tax reliefs on import duty on capital goods, equipment, and machinery and supplies are granted to the Company based on Law Number 1 Year 1967 concerning Foreign Capital Investment as amended by Law Number 11 Year 1970, as provided in Article 12 of this Agreement.

(ii) import of other goods into Indonesian customs areas, including personal effects shall be subject to the customs rule in accordance with the prevailing Law and Regulations.

(iii) excise tax on excise taxable goods are governed by prevailing legislation.

9. Land and Building Tax

The company shall pay Land and Building Tax (PBB) in Rupiah or in other currencies as may be mutually agreed, as follows:

(i) during pre-production periods (General Survey, Exploration, Feasibility Studies and Construction Periods), the Company shall pay Land and Building Tax of an amount equal to the amount of deadrent...
as stated in Article 13 paragraph (1) of this Agreement;

(ii) during the Operation Production Period, the company shall pay Land and Building Tax of an amount equal to the amount of deadrent plus an amount of 0.5% x 30% of gross revenue from the mining operations;

(iii) the Company shall also pay Land and Building Tax on land/water and building outside or inside the Contract Area/Mining Area used by the Company for its facilities which are closed to the public, an amount to be measured by the number of square metres of land/water and floor space and type of the building in accordance with the provisions of Law Number 12 Year 1985 as amended by Law Number 12 of 1994 and the classification and the amount of Sales Value of Tax Object stipulated by the Regional Tax Office of the Directorate General of Taxes and such Land and Building tax payment shall be imposed during the term of this Agreement;.

(iv) imposition and payment of Land and Building Tax for the Contact Area/Mining Area during pre-production period as stipulated in sub paragraph (i) above, shall be governed by the general payment procedure on Land and Building Tax;

(v) imposition and payment of Land and Building Tax for the Contract Area/Mining Area during the Operation Production Period and for land/water and building used by the Company, shall be governed by sub paragraph (ii) and (iii) above, and the general payment procedure on Land and Building Tax.

10. The Company shall pay levies, taxes, charges, and duties imposed by the Local Government in Indonesia pursuant to Law Number 18 of 1997 concerning Local Taxes and Charges and all of its implementing regulations.

11. The company shall pay general administrative fees and charges for facilities or services and special rights granted by the Local Government pursuant to Law Number 18 of 1997 concerning Local Taxes and Charges and all of its implementing regulations.

12. Duty on transfer of ownership.

The Company shall pay duties on transfer of ownership for:

(i) motor vehicles, which shall be levied by the Local Government where the vehicles are registered at a rate in accordance with the relevant Local Government regulations;

(ii) registration certificates and transfer of ships or sea transportation operating in Indonesia.

Tax compliance of the Company and its subsidiaries or its Affiliates, in connection with formal and material tax obligations such as Tax Identification Numbers, Tax Returns, Tax payments, reporting, etc, and rights on taxation such as appeal on tax assessment, refund, tax credit, compensation and penalties are subject to provisions provided in Law Number 6 of 1983 concerning General Tax Provisions and Procedures as amended by Law Number 9 of 1994, Income Tax Law 1994, Value Added Tax Law 1994, Law Number 12 Year 1985 concerning Land and Building Tax as amended by Law Number 13 of 1985, Law Number 13 of 1983 concerning Stamp Duty, and all of its implementing regulations. (Bold font added by author for emphasis.)

In determining the Company's net taxable income, sound, consistent and generally accepted accounting principles as usually used in the mining industry shall be employed, provided, however, that where more than one accounting practice is found by the Government to prevail with regard to particular item, the Government shall consult with the Company in relation to such particular item.

Without limiting the generality of the foregoing, for accounting purposes, the Government shall in no event be bound by the Company's characterization of any transaction with an Affiliate as stated by the Company.

In the event that the Government has determined an unreasonable situation exists, or one that is not in accordance with general practice followed by independent parties in similar transactions on a certain payment, deduction, charges for expenses or other transactions with an Affiliate for the purposes of determining the Company's income tax, the Government shall substitute the payment, deduction, charges for expenses or other transactions which would have prevailed had the transaction occurred between independent parties.

Annex “H” - RULES FOR COMPUTATION OF INCOME TAX

1. “Year”, unless otherwise agreed by the Parties, means

a) Calendar year or part thereof as from the date of the signing of this Agreement up to the first December 31st;
b) Each subsequent full calendar year from January 1st up to December 31st, inclusive during the term of this Agreement; and

c) The period from January 1 up to the date of termination of this Agreement for the calendar year or part thereof where this Agreement shall be terminated.

2. "Products” has the same meaning as set out in Article 1 of this Agreement.

3. Subject to the provisions of the Income Tax Law 1994 and its implementing regulations, “Operating Expenses” in any year means the amount paid or accrued for all expenditures attributable to the Enterprise in such year to the extent that the useful life is less than one (1) year. Operating expenses include, among others, the following expenses:

   a) expenses in respect of material, supplies, equipment and utilities;

   b) expenses for contracted service on behalf of the Enterprise;

   c) expenses for premiums for insurance (foreign and domestic) on tangible assets, inventories and for premiums against business and operational interruptions and for premiums against other parties claims, provided that where such premiums are paid to an Affiliate, the premiums shall not exceed the amount payable in arm’s length transaction to other independent parties;

   d) expenses in respect of damage or losses to the extent that they are not fully compensated for by insurance or otherwise;

   e) expenses for royalties, interest and other payments including those to Affiliates for patents, designs, technical information and services provided that such amounts and payments shall not exceed the amount paid for similar transactions with independent parties;

   f) amounts in respect to losses resulting from obsolescence, theft, or inventory damage that make them no longer useable in operations, supported by appropriate evidence with an official report witnessed by the Department. The amount to be deducted is the book value of such inventory.

   g) expenses for rental payments of tangible goods.

   h) expenses for Deadrent, Land and Building Tax, Royalties, uncredited Value Added Tax, Sales Tax on Luxury Goods, Stamp Duty, transfer of ownership tax, import duty and levies paid based on this Agreement, except the Company’s Income Tax;

   i) expenses for treatment, washing, and other processing expenses;

   j) expenses for handling, loading, storing, transporting and shipping;

   k) expenses for repairs and maintenance;

   l) expenses for commissions and discounts, including expenses paid to the Affiliates, provided that such cost and payments shall not exceed the amount should have been paid for similar transactions with independent parties;

   m) Environmental Management and Reclamation Costs, which is deducted from reserve for reclamation cost account;

   n) allowable for deductions governed by paragraph 4 though 12 below.

4. Group of Assets and rate of depreciation for tangible assets owned and used in the Contract Area and Project Area are based on Government Regulation Number 34 of 1994. If the lifetime of mine is shorter, then the remaining book value may be fully depreciated at once.
**DEPRECIATION AND AMORTIZATION TABLE**

**ACCORDING TO GOVERNMENT REGULATION NUMBER 34 OF 1994**

<table>
<thead>
<tr>
<th>Group of Assets</th>
<th>Life time</th>
<th>Rates of Depreciation and Amortization based on the method of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Direct line</td>
</tr>
<tr>
<td>I. Non Building or intangible asset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>2 years</td>
<td>50%</td>
</tr>
<tr>
<td>Group 3</td>
<td>4 years</td>
<td>25%</td>
</tr>
<tr>
<td>Group 4</td>
<td>8 years</td>
<td>12.5%</td>
</tr>
<tr>
<td></td>
<td>10 years</td>
<td>10%</td>
</tr>
<tr>
<td>II. Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent</td>
<td>20 years</td>
<td>10%</td>
</tr>
<tr>
<td>Non permanent</td>
<td>10 years</td>
<td>20%</td>
</tr>
</tbody>
</table>

Depreciable assets comprise tangible assets owned and used in the enterprise or owned to obtain, to claim and to maintain income with a useful life of more than one year including buildings, machinery, equipment, vessels, railways, vehicles, bridges, piers, roads, shipyards, and other depreciable tangible assets in accordance with generally accepted accounting principles, including facilities provided by the Company for public purposes, such as roads, schools, and hospitals together with their equipment in the Contract Area or Project Area.

For other depreciable tangible assets owned and used by the Company located outside the Contract Area or Project Area, provision as provided in Article 11 and 11A of Income Tax Law 1994 will apply.

5. Groups of assets and rate of amortization for intangible assets are based on the Government Regulation Number 34 of 1994. If the lifetime of mine is shorter then the remaining book value may all be amortized at once at the end of the lifetime in the last year of lifetime.

Expenses on amortizable intangible assets is an expense on intangible assets with a useful life of more than one (1) year, owned and used by the Company to obtain, collect or preserve income, including:

   a)  expenses on patents, rights, concessions, licences, rental contracts and other intangible assets which can be amortized in accordance with generally accepted accounting principles;

   b)  all expenses incurred prior to commencement of the Operating Period, including expenses to obtain mining or survey rights, or mining or survey information, general survey, exploration, feasibility and development, employee training, assistance for education and other deductions allowed under this Agreement and permitted under Income Tax Law 1994.

6. “Expenses incurred prior to the establishment of the Company” expended by shareholders, and directly related to this Contract of Work Agreement, can be consolidated into the Company’s account as cost element. These expenses must be audited by a public accountant and approved by the Director General of Taxes.

7. With due regard to the provisions of the Income Tax Law 1994 and all of its implementing regulations, “selling, general and administrative expenses” in any year can be deducted from gross income and include but are not limited to management expenses, compensation fees for services rendered abroad, executive salaries, communication expenses, contributions and subscriptions, advertising and other selling expenses, public relations and office expenses, marketing expenses (but limited only to reasonable expenses relating to the mining enterprise and excluding expenses for unrelated production research), legal and auditing expenses, general administration expenses, including reasonable charges from Affiliates to be allocated to the operations in Indonesia to the extent that these charges represent actual cost of services provided in such year.

The following items shall also be included in selling, general and administrative expenses of the Company:

   a)  Wages, salaries and other compensation including employee remuneration of personnel employed or engaged by the Company or any Affiliate of the Company, who are assigned to the Company on a temporary, part-time or permanent basis.

   b)  Remuneration in the form of benefit in kind given to the employee assigned to the Contract Area or Project Area in the form of:
- transportation facilities for employees and their families from the point of hire within Indonesia to the Contract Area by means of land, water, and air transport facilities on economy class fares;
- accommodation including housing for employees and their families in the Contract Area or Project Area;
- compensation or remuneration given in kind such as supply of food/drink for employees on the job location and supply of foodstuffs for their families to fulfill their daily basic necessities;
- medical services in the Contract Area or Project Area or in other areas within Indonesia to the extent that these are unavailable in the Contract Area or Project Area, including limited medical check ups and medical treatment to fulfill medical requirements of their jobs, assignment, including medicinal treatment as well as hospital treatment either in the Contract Area or Project Area or in other areas within Indonesia, to the extent that these are unavailable in the Contract Area or Project Area;
- education facilities for employees families limited to general education of Elementary School, Junior High School, Senior High School and other School at the same level in the Contract Area;
- sports facilities for employees and their families in the Contract Area, excluding golf, boating, squash, bowling, hunting, horse racing, and gliding facilities;
- domestic leave travel facility for employees, including expatriates, once a year for maximum fourteen (14) days, these limited to the round trip transportation allowance reimbursement;
- transportation facilities for employees and their families from the Contract Area or Project Area to the point of hire at the time of termination either in the case of pension or other reasons, limited only to land, water, and air transport by economy class fare;

- all facilities necessary to be provided in the Contract Area or Project Area for employees' education and training, and the facility for religious activities, and employee canteen;

- General administrative expenses for product research and development, market development and technical services, legal and accounting services of personnel employed or engaged by any of the Company’s Affiliates, who are not assigned to the Company, but such services are required for the benefit of the Enterprise, but not exceeding the amount to be paid in similar transactions with other parties not affiliated to the Company;

- All necessary travelling expenses for travelling within Indonesia, to and from Indonesia, and other countries in relation to Company business. In the case of an employee is assigned to the enterprise, such travel expenses shall include reasonable accommodation expenses to and from Indonesia and his country of residence.

- Charges for laboratory and technical services rendered to the Company by any of its Affiliates and/or sub-contractors. These expenses shall consist of the cost of the charge for such services and shall not exceed the cost payable to a non-Affiliated party for such services.

8. “Interest Expenses” paid or incurred in any year on loan capital including loan from shareholders in so far as the authorized capital of the Company has been fully paid, provided that the ratio between the loan capital over the equity capital does not exceed 5 : 1 for investment of an amount up to two hundred million United States Dollars (US$200,000,000) and 8 : 1 for investment of an amount more than two hundred million United States Dollars (US$200,000,000) and the interest on loan capital does not exceed the generally applicable market interest rate at the time of borrowing.

9. In the event of a loss incurred after gross income is deducted by the expenses mentioned in the above Articles, such a loss can be compensated with income within the following eight (8) years after the year in which the loss occurred. The first losses occurring shall be first deducted from net income in the following eight (8) succeeding years.

10. “Exploration Expenses” in any year means all amounts of expenses related to exploration or evaluation of mineral deposits, including but not limited to camp construction cost, compensation payment, land rent, drilling, development, pumping, labor, clearing, access roads, electricity connection and waterworks, service charges for erecting transmission lines, piping, project communication facilities and other similar expenses incurred in preparing the Contract Area or Project Area or Mining Area or in the Processing of Minerals.

11. “Reserve for Reclamation Cost” is an amount retained by way of calculation in the financial records of the Company in respect of management of environment and reclamation work to be carried out at the end of the mine life calculated from the commencement of the Operating Period and revised annually (subject to audit by
the public accountant and approved by the Directorate General of Taxes). Such amount retained shall be calculated in accordance with the regulations in force, and deposited in the State owned Bank. The actual cost of management of environment and reclamation incurred during the contract period shall firstly be drawn from such reserve, if the amount of actual cost exceeds such reserve then the excess is deductible as expenses.

12. “Other Expenses” in any year means expenses in respect of reasonable expenditure during each year to obtain, claim and maintain income, or for the purpose of the Enterprise in such year as stipulated in Article 6 of Income Tax Law 1994.

13. “Gross Income” means all income, other than exempt income defined under Income Tax Law 1994 and regulations which are in force at the date of signing this Agreement, paid to or accrued by the Company, comprising of and not limited to:

(a) gross income received or accrued from sale of products F.O.B. port of shipping in Indonesia based on the rule formulated in Article 11 of this Agreement.

(b) income from sale or transfer of property shall be treated in accordance with Article 4 of Income Tax Law 1994.

(c) other income of the Company other than mentioned above which is actually received or accrued.

14. “Taxable Income” in any year means Gross Income in such year after deducting expenditures, costs (including the items defined in paragraph 4 to 13 above) as permitted under Income Tax Law 1994 and prevailing regulations in force and under this Agreement.
Annex C  Example of fiscal stability provisions in legislation

The development of Chile’s mining industry in the latter part of the 20th century has been one of the great success stories in South America. Fiscal stability played an important role in this success. Following a period of political and social unrest in the late 1960s and the early 1970s, Chile’s government recognized that investors badly needed fiscal stability. The government responded to this need by introducing fiscal stability in the country’s foreign investment law, which is reproduced below. This law served Chile very well in attracting foreign investment.

Box 10 – Chile: Fiscal stability in the foreign investment law

FOREIGN INVESTMENT STATUTE

DECREE LAW 600

FOREIGN INVESTMENT COMMITTEE

REPUBLIC OF CHILE

DECREE LAW 600

FOREIGN INVESTMENT STATUTE

Restated, Coordinated and Standardized Text of Decree-law N° 600, as of 1974 of the Foreign Investment Statute (published in the Official Gazette on December 16, 1993), established by the Decree having force of law N° 523 of the Ministry of Economy, Development and Reconstruction as of September 3, 1993.

Title 1

FOREIGN INVESTMENT AND INVESTMENT CONTRACT

Article 1. The regulations of this Statute shall apply both to foreign individuals and body corporates and to Chilean individuals resident and domiciled abroad that transfer foreign capital into Chile and enter into a foreign investment contract.

(Article 2 excluded here)

Article 3. Foreign investment authorizations shall be evidenced in a contract executed by means of a public deed and subscribes, on the one part, by the President of the Foreign Investment Committee on behalf of the Chilean State should the investment require the agreement of said Committee or, should this not be applicable, by the Executive vice-president and, on the other part, by the persons contributing the foreign capital, hereinafter called "foreign investors" to all effects of this Decree Law.

The contracts shall state the term within which the foreign investor may bring in the capital. This term shall not exceed 8 years for mining investments and 3 years for all others. The Foreign Investment Committee, however, by unanimous agreement of its members, may extend this limit up to twelve years in the case of mining investments, when previous exploration is required, depending on their nature and estimated duration thereof; in the case of investments in industrial and non-mining extractive projects for amounts not less than US$ 50,000,000 - United States dollars or its equivalent in other foreign currencies - the Committee may extend the term up to eight years when the nature of the project so requires it.

(Articles 4 to 6 excluded here)

Title II

RIGHTS AND RESPONSIBILITIES

OF FOREIGN INVESTORS

Article 7. holders of foreign investments made under the terms of this Decree-Law are entitled to include in the contracts entered into a clause to the effect that, for a 10 year period from the commencement of the company's
operations, they shall be subject to an effective fixed overall tax rate of 42% on taxable income, including taxes applicable under the Income Tax Law applicable at the time the contract is executed. Even if the foreign investor has decided to claim for the invariability benefit, he may, once only, waive this right and ask for the application of ordinary tax laws, in which case he shall be under the general taxation scheme with the same rights, options and obligations as national investors consequently, forfeiting the invariability agreed upon.

The effective overall tax burden referred to in the foregoing paragraph shall be computed by applying to the net taxable income of the First Category tax, determined in accordance with the provisions of the Income Tax Law, such rate corresponding to the First Category as is set forth in the said law. Any rate differential necessary to complete the effective overall tax burden guaranteed in said paragraph shall be applied to the corresponding taxable basis, in accordance with the provisions of the Income Tax Law. To such basis it shall be added an amount equivalent to the First Category tax having been applied to taxable income.

The tax established in the third paragraph of article 21 of the Income Tax Law which by virtue of paragraph one of this article requires permanent establishments and companies receiving foreign investments to pay an effective 42% rate - shall be applied, in the case of stock corporations and joint-stock companies, to the corresponding taxable basis, pro rata the share the investors subject to this tax system may hold in the profits of the company. Any excess tax shall be exclusively borne by these shareholders and be withheld and annually paid by the corresponding company.

To the effects herein, "commencement of operations" shall mean the commencement of operations related to the project being financed by the foreign investment, once income is derived from activities within the scope of such project, in the event that the activity carried out is a new project or, should it deal with investments in ongoing activities, the calendar month next succeeding the bringing into the country of any part of the investment.

**Article 8.** Foreign investments and companies participating therein shall be subject to the general indirect taxation scheme and to customs regulations applicable to national investments. Notwithstanding the above subparagraph, holders of foreign investment brought into the country under the terms of this Decree-Law shall be entitled to include a clause in their contracts stating that for the term authorized to effect the investment agreed upon, there shall be no changes in the taxes on sales and services and customs duties in force at the time of signing the contract applicable to the import of machinery and equipment not manufactures in the country included in the list referred to in number 10, letter B, Article 12, of Decree-Law N° 825 of 1974. The same invariability shall apply to the companies receiving foreign investments, in which foreign investors participate, for the corresponding to such investment.

**Article 9.** Similarly foreign investment and companies participating therein shall also be subject to the general laws applicable to domestic investment, and shall not be discriminated against, either directly or indirectly, save for the provisions of article 11.

Legal or regulatory provisions affecting specific productive activities shall be deemed discriminatory should they become applicable to the whole or the major part of said activities in the country, to the exclusion of foreign investment. Likewise, legal or regulatory provisions which create special schemes for certain sectors of the economy or geographical areas of the country shall be deemed discriminatory if foreign investment is refused access thereto, despite their complying with the same conditions and requirements demanded from national investors. For the purposes of this article, a specific productive activity shall be that performed by companies which fall within the same definitions of internationally accepted classifications and produce goods located in the same tariff bracket in accordance with the Chilean Customs Tariff Scheme, the same tariff bracket being understood to be one in which goods do not differ by more than one unit in the last digit of the tariff applied to them.

**Article 10.** Should juridical rules deemed to be discriminatory against holders of foreign investment or companies participating therein be issued, they shall be entitled to request to removal of such discrimination, provided the relevant request is made before the lapse of one year from the date of issue of such regulations. The Foreign Investment Committee shall rule on the petition within a term not exceeding 60 days, running from the date on which the application is filed, and either refuse it or take the appropriate administrative steps to remove the discrimination or require the proper authorities to do so in the event that such steps are beyond the scope of competence of the Committee.

In the absence of a timely ruling from the Committee, or if an adverse ruling is passed, or should it not be possible to remove the discrimination administratively, the foreign investors or the companies in which they participate may resort to the ordinary courts of justice in order to obtain a ruling as to whether or not discrimination exists and, if so, that the general rule of law must be applied.

**Article 11.** Notwithstanding article 9 above, reasonable regulations may be issued limiting access to internal credit by foreign investments covered by this Decree-Law.

**Article 11 bis.** In the case of investments for amounts not under US$ 50,000,000 - United States dollars or its equivalent in other foreign currencies - the purpose of which is the development of industrial or extractive projects, including mining projects - which are brought into the country pursuant to article 2 - the following terms and rights may...
be applied:

1. The ten-year period referred to in article 7 may be extended in such terms as may be compatible with the estimated duration of the project, but under no condition shall it exceed 20 years.

2. Stipulations may be included in the respective contracts receiving contributions, as from the date of execution of such contracts and for the effective period established in the first paragraph of article 7 or to NI 1 of this article, of the legal provisions and of the resolutions or circular letters which the Internal Revenue Service may have issued, in force at the date of execution of the contract, with respect to asset depreciation regimes, carrying forward of losses and startup and organization expenses. Likewise, the resolution of the Internal Revenue Service authorizing a foreign investor or a company receiving the contribution to keep its accounting in foreign currency may also be included in the contract. The rights granted in accordance with the preceding paragraph may be waived only once, in which case an investor or company shall abide by the common regime applicable to the waived right, under the terms set forth in the final part of the first paragraph of article 7.

In any event, the waiver referred to in article 7 above shall imply the waiver of the rights mentioned in this number, save for that related to the accounting in foreign currency, for which an express waiver shall be necessary. In the event that there is more than a foreign investor party to such investment contract having claimed the tax invariability benefit prescribed by article 7 referred to above, a waiver by any one of them shall be understood as a waiver to the rights granted by such article both by the waiving party and the other foreign investors or receiving company, save for the right to keep accounting records in foreign currency, which shall be expressly waived. At any rate, there shall be no waiver to the rights granted by this paragraph should foreign investors have agreed, as evidenced in the relevant investment contract, that such a waiver shall only become effective if the foreign investors waiving their right to tax invariability hold a share exceeding a certain percentage in the total investment governed by the contract which has effectively materialized at the time of the waiver.

3. In the case of projects which consider the export of all or part of the goods produced, the Foreign Investment Committee may grant the respective investors or the companies receiving contributions, for terms not exceeding those granted under the first paragraph of article 7, or NI 1 of this article, the following rights:

a) To stipulate the invariability of the legal provisions and regulations in force at the date of execution of the corresponding contract, as regards the right to export freely.

b) To authorize special regimes with respect to the return and liquidation of part or the total value of such exports and of indemnities resulting from insurance or other sources. In accordance with such regimes, the maintenance of the corresponding foreign currency abroad may be allowed in order to pay obligations authorized by the Central Bank of Chile, to make disbursements accepted as expenses of the project for tax purposes pursuant to the provisions of the Income Tax Law, or effect remittance abroad of capital or net profits arising therefrom.

In order to authorize this special regime, the Foreign Investment Committee must previously have a favorable report of the Board of the Central Bank of Chile, which shall set forth the specific manner of operation for such special regime, as well as the regime, manner and conditions under which the access to foreign currency market shall be granted in order to remit capital and profits abroad. Furthermore, the Central Bank of Chile shall supervise the compliance with the stipulations of the contract relating to these matters.

The annual taxable profits which, according to the respective balance sheets, may be generated by the permanent establishment of foreign investors or the corresponding receiving companies, that for any reason maintain foreign currency abroad in accordance with this letter (b), shall be considered for tax purposes as having been remitted, distributed or withdrawn, as the case may be, on December 31st of each year, in the part corresponding to the foreign currency maintained abroad by investors. Income or other benefits produced by the foreign currency which, according to this provision, may be maintained abroad shall be considered, for all legal purposes as Chilean-source income.

These rights may be exercised only when the investment has reached the amount indicated in paragraph one.
Annex D  Thin-capitalization legislation

Section 18 of Canada's Income Tax Act offers a good example of legislation that is intended to limit the deduction of interest expense on loans from non-resident shareholders. As a matter of policy, this legislation does not limit the deduction of interest expense paid to non-resident third parties such as banks, unless the third party loan is part of a back-to-back loan arrangement involving a non-resident shareholder.

Box 11 - Section 18 of Canada’s Income Tax Act

Limitation on deduction of interest

(4) Notwithstanding any other provision of this Act (other than subsection (8)), in computing the income for a taxation year of a corporation or a trust from a business (other than the Canadian banking business of an authorized foreign bank) or property, no deduction shall be made in respect of that proportion of any amount otherwise deductible in computing its income for the year in respect of interest paid or payable by it on outstanding debts to specified non-residents that

- (a) the amount, if any, by which
  - (i) the average of all amounts each of which is, in respect of a calendar month that ends in the year, the greatest total amount at any time in the month of the outstanding debts to specified non-residents of the corporation or trust,

  exceeds

- (ii) 1.5 times the equity amount of the corporation or trust for the year,

is of

- (b) the amount determined under subparagraph (a)(i) in respect of the corporation or trust for the year.

Marginal note: Definitions

(5) Notwithstanding any other provision of this Act (other than subsection (5.1)), in this subsection and subsections (4) to (6).

“beneficiary”
« bénéficiaire »

“beneficiary” has the same meaning as in subsection 108(1);

“equity amount”
« montant des capitaux propres »

“equity amount”, of a corporation or trust for a taxation year, means

- (a) in the case of a corporation resident in Canada, the total of
  - (i) the retained earnings of the corporation at the beginning of the year, except to the extent that those earnings include retained earnings of any other corporation,

  - (ii) the average of all amounts each of which is the corporation’s contributed surplus (other than any portion of that contributed surplus that arose in connection with an investment, as defined in subsection 212.3(10), to which subsection 212.3(2) applies) at the beginning of a calendar month that ends in the year, to the extent that it was contributed by a specified non-resident shareholder of the corporation, and

  - (iii) the average of all amounts each of which is the corporation’s paid-up capital at the beginning of a calendar month that ends in the year, excluding the paid-up capital in respect of shares of any class of the capital stock of the corporation owned by a person other than a specified non-resident shareholder of the corporation,

- (b) in the case of a trust resident in Canada, the amount, if any, by which
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- (i) the total of
  - (A) the average of all amounts each of which is the total amount of all equity contributions to the trust made before a calendar month that ends in the year, to the extent that the contributions were made by a specified non-resident beneficiary of the trust, and
  - (B) the tax-paid earnings of the trust for the year,

exceeds

- (ii) the average of all amounts each of which is the total of all amounts that were paid or became payable by the trust to a beneficiary of the trust in respect of the beneficiary’s interest under the trust before a calendar month that ends in the year except to the extent that the amount is
  - (A) included in the beneficiary’s income for a taxation year because of subsection 104(13),
  - (B) an amount from which tax was deducted under Part XIII because of paragraph 212(1)(c), or
  - (C) paid or payable to a person other than a specified non-resident beneficiary of the trust, and

  - (c) in the case of a corporation or trust that is not resident in Canada, including a corporation or trust that files a return under this Part in accordance with subsection 216(1) in respect of the year, 40% of the amount, if any, by which
    - (i) the average of all amounts each of which is the cost of a property, other than an interest as a member of a partnership, owned by the corporation or trust at the beginning of a calendar month that ends in the year
      - (A) that is used by the corporation or trust in the year in, or held by it in the year in the course of, carrying on business in Canada, or
      - (B) that is an interest in real property, or a real right in immovables, in Canada, or an interest in, or for civil law a right in, timber resource properties and timber limits, in Canada, and in respect of which the corporation or trust files a return under this Part in accordance with subsection 216(1) in respect of the year,

exceeds

- (ii) the average of all amounts each of which is the total of all amounts outstanding, at the beginning of a calendar month that ends in the year, as or on account of a debt or other obligation to pay an amount that was payable by the corporation or trust that may reasonably be regarded as relating to a business carried on by it in Canada or to an interest or right described in clause (i)(B), other than a debt or obligation that is included in the outstanding debts to specified non-residents of the corporation or trust;

“equity contribution”
« apport de capitaux propres »

“equity contribution”, to a trust, means a transfer of property to the trust that is made

  - (a) in exchange for an interest as a beneficiary under the trust,
  - (b) in exchange for a right to acquire an interest as a beneficiary under the trust, or
  - (c) for no consideration by a person beneficially interested in the trust;

“outstanding debts to specified non-residents”
« dettes impayées envers des non-résidents déterminés »

“outstanding debts to specified non-residents”, of a corporation or trust at any particular time in a taxation year, means

  - (a) the total of all amounts each of which is an amount outstanding at that time as or on account of a debt or other obligation to pay an amount
    - (i) that was payable by the corporation or trust to a person who was, at any time in the year,
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- (A) a specified non-resident shareholder of the corporation or a specified non-resident beneficiary of the trust, or
- (B) a non-resident person who was not dealing at arm's length with a specified shareholder of the corporation or a specified beneficiary of the trust, as the case may be, and
  - (ii) on which any amount in respect of interest paid or payable by the corporation or trust is or would be, but for subsection (4), deductible in computing the income of the corporation or trust for the year,

but does not include
- (b) an amount outstanding at the particular time as or on account of a debt or other obligation to pay an amount to
  - (i) a non-resident insurance corporation to the extent that the obligation was, for the non-resident insurance corporation's taxation year that included the particular time, designated insurance property in respect of an insurance business carried on in Canada through a permanent establishment as defined by regulation, or
  - (ii) an authorized foreign bank, if the bank uses or holds the obligation at the particular time in its Canadian banking business;

"specified beneficiary"
« bénéficiaire déterminé »

"specified beneficiary", of a trust at any time, means a person who at that time, either alone or together with persons with whom that person does not deal at arm’s length, has an interest as a beneficiary under the trust with a fair market value that is not less than 25% of the fair market value of all interests as a beneficiary under the trust and for the purpose of determining whether a particular person is a specified beneficiary of a trust,

- (a) if the particular person, or a person with whom the particular person does not deal at arm’s length, has at that time a right under a contract, in equity or otherwise, either immediately or in the future and either absolutely or contingently, to, or to acquire, an interest as a beneficiary under a trust, the particular person or the person with whom the particular person does not deal at arm’s length, as the case may be, is deemed at that time to own the interest,

- (b) if the particular person, or a person with whom the particular person does not deal at arm’s length, has at that time a right under a contract, in equity or otherwise, either immediately or in the future and either absolutely or contingently to cause a trust to redeem, acquire or terminate any interest in it as a beneficiary (other than an interest held by the particular person or a person with whom the particular person does not deal at arm’s length), the trust is deemed at that time to have redeemed, acquired or terminated the interest, unless the right is not exercisable at that time because the exercise of the right is contingent on the death, bankruptcy or permanent disability of an individual, and

- (c) if the amount of income or capital of the trust that the particular person, or a person with whom the particular person does not deal at arm’s length, may receive as a beneficiary of the trust depends on the exercise by any person of, or the failure by any person to exercise, a discretionary power, that person is deemed to have fully exercised, or to have failed to exercise, the power, as the case may be;

"specified non-resident beneficiary"
« bénéficiaire non-résident déterminé »

"specified non-resident beneficiary", of a trust at any time, means a specified beneficiary of the trust who at that time is a non-resident person;

"specified non-resident shareholder"
« actionnaire non-résident déterminé »

"specified non-resident shareholder" of a corporation at any time means a specified shareholder of the corporation who was at that time a non-resident person or a non-resident-owned investment corporation;

"specified proportion"
[Repealed, 2013, c. 34, s. 427]

"specified shareholder"
« actionnaire déterminé »

"specified shareholder" of a corporation at any time means a person who at that time, either alone or together
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with persons with whom that person is not dealing at arm’s length, owns

- (a) shares of the capital stock of the corporation that give the holders thereof 25% or more of the votes that could be cast at an annual meeting of the shareholders of the corporation, or
- (b) shares of the capital stock of the corporation having a fair market value of 25% or more of the fair market value of all of the issued and outstanding shares of the capital stock of the corporation,

and for the purpose of determining whether a particular person is a specified shareholder of a corporation at any time, where the particular person or a person with whom the particular person is not dealing at arm’s length has at that time a right under a contract, in equity or otherwise, either immediately or in the future and either absolutely or contingently

- (c) to, or to acquire, shares in a corporation or to control the voting rights of shares in a corporation, or
- (d) to cause a corporation to redeem, acquire or cancel any of its shares (other than shares held by the particular person or a person with whom the particular person is not dealing at arm’s length),

the particular person or the person with whom the particular person is not dealing at arm’s length, as the case may be, shall be deemed at that time to own the shares referred to in paragraph (c) and the corporation referred to in paragraph (d) shall be deemed at that time to have redeemed, acquired or cancelled the shares referred to in paragraph (d), unless the right is not exercisable at that time because the exercise thereof is contingent on the death, bankruptcy or permanent disability of an individual.

“tax-paid earnings”
« bénéfices libérés d’impôt »

“tax-paid earnings”, of a trust resident in Canada for a taxation year, means the total of all amounts each of which is the amount in respect of a particular taxation year of the trust that ended before the year determined by the formula

\[ A - B \]

where

A is the taxable income of the trust under this Part for the particular year, and

B is the total of tax payable under this Part by the trust, and all income taxes payable by the trust under the laws of a province, for the particular year.
Annex E  Transfer pricing legislation

The following text is extracted from Canada’s Income Tax Act. This text has been in place and has worked well since 1972.

The Income Tax Act (Canada) does not define the meaning of “fair market value”, but the Canadian courts have consistently defined the term “fair market value” as used below to mean “the amount paid by a willing buyer to a willing seller in an open and free market with a full knowledge of all the facts”.

Paragraph 251(1)(c) below is of particular importance, because this allows the Canadian Revenue Agency to apply Section 69 to a transaction between two unrelated parties where there is, for example, evidence of collusion to avoid the application of Section 69.

<table>
<thead>
<tr>
<th>Box 12 - Canada’s Income Tax Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>69. (1) Except as expressly otherwise provided in this Act,</td>
</tr>
<tr>
<td>o (a) where a taxpayer has acquired anything from a person with whom the taxpayer was not dealing at arm’s length at an amount in excess of the fair market value thereof at the time the taxpayer so acquired it, the taxpayer shall be deemed to have acquired it at that fair market value;</td>
</tr>
<tr>
<td>o (b) where a taxpayer has disposed of anything</td>
</tr>
<tr>
<td>▪ (i) to a person with whom the taxpayer was not dealing at arm’s length for no proceeds or for proceeds less than the fair market value thereof at the time the taxpayer so disposed of it,</td>
</tr>
<tr>
<td>▪ (ii) to any person by way of gift <em>inter vivos</em>, or</td>
</tr>
<tr>
<td>▪ (iii) to a trust because of a disposition of a property that does not result in a change in the beneficial ownership of the property;</td>
</tr>
<tr>
<td>the taxpayer shall be deemed to have received proceeds of disposition therefor equal to that fair market value; and</td>
</tr>
<tr>
<td>o (c) where a taxpayer acquires a property by way of gift, bequest or inheritance or because of a disposition that does not result in a change in the beneficial ownership of the property, the taxpayer is deemed to acquire the property at its fair market value.</td>
</tr>
</tbody>
</table>

Arm’s length

251. (1) For the purposes of this Act,
| o (a) related persons shall be deemed not to deal with each other at arm’s length; |
| o (b) a taxpayer and a personal trust (other than a trust described in any of paragraphs (a) to (e.1) of the definition “trust” in subsection 108(1)) are deemed not to deal with each other at arm’s length if the taxpayer, or any person not dealing at arm’s length with the taxpayer, would be beneficially interested in the trust if subsection 248(25) were read without reference to subclauses 248(25)(b)(iii)(A)(II) to (IV); and |
| o (c) in any other case, it is a question of fact whether persons not related to each other are, at a particular time, dealing with each other at arm’s length. |

Definition of “related persons”

(2) For the purpose of this Act, “related persons”, or persons related to each other, are |
| o (a) individuals connected by blood relationship, marriage or common-law partnership or adoption; |
| o (b) a corporation and |
| ▪ (i) a person who controls the corporation, if it is controlled by one person, |
| ▪ (ii) a person who is a member of a related group that controls the corporation, or |
- (iii) any person related to a person described in subparagraph 251(2)(b)(i) or 251(2)(b)(ii); and
  - (c) any two corporations
    - (i) if they are controlled by the same person or group of persons,
    - (ii) if each of the corporations is controlled by one person and the person who controls one of the corporations is related to the person who controls the other corporation,
    - (iii) if one of the corporations is controlled by one person and that person is related to any member of a related group that controls the other corporation,
    - (iv) if one of the corporations is controlled by one person and that person is related to each member of an unrelated group that controls the other corporation,
    - (v) if any member of a related group that controls one of the corporations is related to each member of an unrelated group that controls the other corporation, or
    - (vi) if each member of an unrelated group that controls one of the corporations is related to at least one member of an unrelated group that controls the other corporation.

Corporations related through a third corporation

(3) Where two corporations are related to the same corporation within the meaning of subsection 251(2), they shall, for the purposes of subsections 251(1) and 251(2), be deemed to be related to each other.
Annex F  Profile of Canada’s mining industry

The Canadian mining industry is:\(^{74}\)

A major employer:

- More than 418,000 people across Canada work in the mining and mineral processing industries.
- Mining is the largest private sector employer of Aboriginal peoples in Canada on a proportional basis, and employment is poised to increase.
- Canada has one of the largest mining supply sectors globally with more than 3,200 companies supplying engineering, geotechnical, environmental, financial and other services to mining operations.
- Those who work in mining enjoy the highest wages and salaries of all industrial sectors in Canada with an average weekly pay of $1,559, surpassing the earnings of workers in finance, manufacturing, construction and forestry.

An economic engine:

- Mining contributed $52.6 billion to Canada’s Gross Domestic Product (GDP) in 2012.
- The mining industry’s payments to Canadian federal and provincial governments total $71 billion in taxes and royalties over the last decade (2003-2012).
- The industry accounted for 20.4% of the value of Canadian goods exports in 2012.
- Canada’s value of mineral production was nearly $47 billion in 2012.

A global leader:

- Thanks to its rich geology, Canada is one of the largest mining nations in the world producing more than 60 minerals and metals.
- Canada ranks in the top five countries in the global production of potash, uranium, aluminium, cobalt, titanium, tungsten, cadmium, diamonds, platinum, sulphur and nickel.
- Almost 60% of the world’s public mining companies are listed on the TSX and TSX-Venture Exchanges, and 70% of the equity capital raised globally for mining companies is raised on these exchanges.
- Canadian-headquartered mining companies accounted for nearly 37% of budgeted worldwide exploration expenditures in 2012, and Canada has been the recipient of the largest share of global exploration spending since 2004.
- Globally, Canada is recognized for its leadership in safety and sustainability. Mining companies in Canada were the first in the world to develop an externally-verified performance system for sustainable mining practices with the creation of MAC’s \textit{Towards Sustainable Mining} initiative in 2004.

\(^{74}\) Sources: Facts & Figures 2013 (Mining Association of Canada), and Natural Resources Canada