



Economic Policy Reform and Competitiveness Project

MONGOLIAN MINING SECTOR COMPETITIVENESS AND THE USE OF STABILITY AGREEMENTS

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ABBREVIATIONS AND ACRONYMS

DCF	Discounted cash flow
EPRC	Economic Policy Reform and Competitiveness Project
EPSP	Economic Policy Support Project
FIL	Foreign Investment Law
GDP	Gross Domestic Product
GNI	Gross National Income
GOM	Government of Mongolia
IRR	Internal rate of return
NPV	Net present value
PSA	Production Sharing Agreement
URL	Underground Resources Law
USAID	United States Agency for International Development

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS	I
EXECUTIVE SUMMARY	I
A. Summary	i
B. Recommendations	v
SECTION I: INTRODUCTION AND BACKGROUND.....	1
A. Introduction	1
B. Scope of EPRC work	1
C. Consultant's activities	1
D. Deliverables	2
SECTION II: MONGOLIA'S LEGAL FRAMEWORK FOR MINING	1
A. Relevant laws	1
B. Application	1
C. License fees	1
D. Taxation rates	2
E. Taxation exemptions and relief	2
F. Possible revisions to laws	3
SECTION III: FACTORS IN MINING SECTOR COMPETITIVENESS.....	1
A. Characteristics of mining developments	1
B. Investor concerns	1
C. Government concerns.....	2
D. Myths and truths	2
E. Types of fiscal regimes	2
F. Uses and abuses of stability agreements	4
G. Legislative approaches	5
H. Concept of effective overall taxation rate.....	6
I. Comments on the report by Professor James Otto	6
SECTION IV: BEST AND WORST PRACTICE IN STABILITY AGREEMENTS.....	1
A. Introduction	1
B. The Russian problem	1
C. The Kyrgyz approach.....	2
D. The Peruvian approach.....	3
E. Range of fiscal provisions	4
F. Common problems and experience	4
SECTION V: IMPACT OF DIFFERENT FISCAL PROVISIONS	1
A. A typical copper mining project under Mongolian taxation provisions	1
B. Base case	1
C. Improved tax loss carry forward.....	3
D. Improved taxation exemptions.....	3
E. Impact of royalty rate changes.....	4
F. Impact of royalty changes offset by lower taxes	4
SECTION VI: GOLD AND COPPER PRICE HISTORY AND OUTLOOK.....	1
A. Copper price history	2
B. Copper price outlook	2
C. Gold price history	3
D. Gold price outlook	3
SECTION VII: DISCUSSION AND RECOMMENDATIONS.....	1
A. Working groups	1
B. Approval of stability agreements	1
C. Income taxation considerations	1
D. VAT treatment.....	1

E. Tax concessions for major capital projects	2
F. Mining royalties	2
G. Mining support industry	2
H. Separation of activities	2
I. Negotiation of stability agreements.....	3
J. Specific recommendations	3
ANNEX A: IN-COUNTRY MEETINGS AND PRESENTATIONS.....	1
A. Observations.....	i
B. Meetings held	i
ANNEX B: RELEVANT LAWS	1
ANNEX C: SLIDES OF PUBLIC PRESENTATION ON MINING SECTOR COMPETITIVENESS	1
ANNEX D: FINANCIAL MODEL, BASE CASE	1
ANNEX E: FINANCIAL MODEL, IMPROVED TAXATION EXEMPTIONS.....	1
ANNEX F: FINANCIAL MODEL, IMPACT OF ROYALTY RATE CHANGES.....	1
ANNEX G: FINANCIAL MODEL, IMPACT OF ROYALTY RATE CHANGES OFFSET BY LOWER TAXES.....	1

EXECUTIVE SUMMARY

A. Summary

Mongolia has extensive reserves of natural resources including gold, copper, molybdenum, precious and semi-precious gem stones, coal, oil and gas. It is broadly assumed that the development of these natural resources will stimulate and benefit the economy as a whole.

The Government of Mongolia (GoM) is involved in the negotiation of stability agreements in the mining sector. Such stability agreements are contemplated in Mongolian law, principally under Articles 20 of the Minerals Law. Article 21 of the same law requires license holders to submit draft agreements. Increases in mining activity have concentrated attention of policymakers on this matter.

In discussions held between USAID and EPRC, it was agreed that EPRC would provide assistance to the GOM by advising on best practice adopted by others and by preparing economic and financial models to evaluate alternative policies. A consultant specialized in these areas carried out these general objectives, gave two presentations and prepared this report.

Meetings with several government agencies, departments and ministries showed that the quality of people in the government is high. In general, the issues are understood, and several persons had a firm grasp and strong views on the long term nature of the consequences of actions related to stability agreements and large capital intensive projects.

Mongolia's mining activities are governed by a suite of laws. The principal laws bearing on and affected by stability agreements are the Minerals Law, the General Taxation Law, the Foreign Investment Law, the Economic Entity and Organization Income Tax Law, and the Customs Law. All of these are reasonable and liberal. The first three also explicitly provide for mining stability agreements. Government Resolution 46 provides a model stability agreement.

The existing laws are good examples of the kind, are liberal and require very little change. They have all been refined over time by a number of pragmatic revisions. Some areas, however, need further consideration, particularly the term of mining licenses, the thresholds for stability agreement rights, the level of license fees (need to be increased), the level of royalties (need to be increased), approval procedures for stability agreements, clarification of what activities qualify for tax exemptions, and inclusion of specific tax loss carry forward provisions in the income tax law.

Mining developments have certain characteristics that set them apart from other projects and also drive the type of fiscal system and stability framework needed for success.

Investors in mining projects will usually be large public companies. The primary concern of the management of such enterprises will be the maximization of sustainable shareholder value and return on investment. In doing this, management has an implied duty to manage risk, both actual and perceived.

Government concerns are usually with overall economic growth and any given sector will be viewed in terms of its contribution to that ideal. Attracting foreign direct investment is widely seen by governments as desirable and gaining short term benefit from that investment is a principal objective.

Two myths prevail and are promoted by the mining industry. These are that mining companies place their projects in those countries where the fiscal regime is most favorable. This engenders the associated myth that countries compete with each other for direct foreign investment on the basis of their fiscal regime. Neither myth is true as such. Of course a company will invest in a country with a more favorable fiscal regime if all else is equal and of course individual countries look at their fiscal regimes from time to time in comparison with those of other countries. Companies however invest in projects with good rates of return and acceptable risk profiles.

Fiscal regimes in natural resource development fall into two broad categories, concession agreements and contractual agreements. Contractual agreements further divide into production sharing agreements and service contracts. In the mining industry, the vast majority of the fiscal arrangements are of the concession type, whereas in oil and gas developments production sharing agreements are widely used. Some African countries have examined the use of production sharing agreements in mining projects, but they have not found favor with the mining industry. Concession agreements contain no taxation stability whereas a production sharing agreement has implicit taxation stability and stability agreements were originally designed to deal with this main difference. A concession agreement with taxation stability is very close in effect to a production sharing agreement. A stability agreement can take the form of a simple statement in an investment agreement that taxation rates will be frozen at the rates prevailing at the time of signature for a specified period, unless beneficially changed. The model Mongolian stability agreement contemplated under Resolution 46 is essentially in that form.

Companies however have steadily broadened the application of stability agreements and try to use them to control many project risks, actual and perceived, and to compensate for government vagaries and, in general, put the project outside the general legal framework of the country.

It should be remembered that mining companies have many external pressures on them from shareholders and lending banks and finance houses who seek to minimize actual and perceived risk. For this reason they will seek stability agreements, especially if they are provided for in the law as in Mongolia. In considering whether Mongolia will have stability agreements in the future, the government needs to be aware of its own stability rating as made by external bodies such as the World Bank, International Monetary Fund and the Asia Development Bank. The government also needs to keep a close eye on the number of potential investors. A long queue is the best indication that the overall balance between fiscal and other considerations is right.

The government needs to consider the general approach adopted in mining sector development. The current legal framework is acceptable and among the best of its kind. It does however embody certain assumptions namely that stability agreements will concern taxation rates only and all other provisions will be as provided in the relevant laws. Reality may be more complex and consideration needs to be given to whether in the

future mining developments will be characterized by a proliferation of individual project centered agreements or whether a single law will apply for all.

Comparative work by Professor James Otto using the concept of Effective Overall Taxation Rate shows Mongolia in an unfavorable light versus other countries. However, financial analysis elsewhere in this report suggest this may not be the case.

A comparison of the fiscal systems of Russia, Kyrgyzstan and Peru shows the elements of a good and bad system but also shows that the issue is what is stabilized, that is, the underlying fiscal regime, rather than the stability agreement itself. Common problems have been experienced by all countries with the mining sector. Capital intensive projects generate internal taxation protection through depreciation with the result that the main element of income in the early years of the project will be from royalties rather than profit taxes. Paid royalties are normally deducted from otherwise taxable income before the tax due is calculated so that portion of income paid as royalties is not taxed further. Net royalties paid are therefore the gross royalty less the tax rate, or in the case of Mongolia 70%. Royalties can therefore be considered in part at least as being an advance payment of taxes.

Several variations to the Mongolian fiscal system were modeled including improved loss carry forward provisions, improved taxation exemptions, increased royalties, and increased royalties offset by tax reductions. Because of existing tax exemptions, increasing the tax loss carry forward period from 3 years to 7 years had no impact on project returns or government revenues. Base case government revenues totaled \$2,359 million out of total sales revenues of \$19,301 million. Improving the tax exemptions from 3 years to 5 years lowered government revenues by \$287 million, increasing royalties to 5% for copper and 10% for gold increased government revenues by \$319 million, and increasing royalties by the same amount but lowering profit taxes to 25% from 30% increased government revenue by \$37 million. Comparing the government revenues for the first 10 years of operation and the next 10 years of operation shows some interesting shifts in short term revenues, favoring higher royalties with lower taxes.

An analysis of price histories and supply/demand balances formed the basis of a price forecast for both copper and gold resulting in base case prices of \$0.90 per pound for copper and \$385 per troy ounce for gold.

The Ministry of Finance has formed a Working Group on a particular Stability Agreement proposed by a leading mining company in Mongolia, rather than to consider policy more generally. The composition of the group needs to be revisited to ensure that the best available people, with decision making authority, from all concerned departments, agencies and ministries are in the working group and to ensure that all concerned department, agencies and ministries are fully represented at the appropriate level.

The law provides for stability agreements to be approved by the Minister of Finance. This arises from the supposition that stability agreements will be concerned with matters financial only whereas in fact, stability agreements for large projects can cover many aspects of the project and need wider review and possibly approval by a committee of ministers.

It is clear from economic modeling that taxation is still a major factor in project economics although taxation income is not significant until around the 10th year of operation. Taxation levels have been reduced this year and there is possibly room to reduce them further from say 30% to 25% and also to dispense with the lower bracket altogether. Taxation of low income individuals should be eliminated as a means of stimulating economic activity. The revenue impact on the government is nominal whereas the impact on the individual is substantial. Tax loss carry forward for business enterprises needs to be formally built into the Tax Law. Loss carry forward is only specified at present in the Minerals Law, where 3 years is allowed. In line with other countries, it is recommended that 5 years of loss carry forward be allowed. This looks like a significant concession, but in fact it has little impact due to its interaction with other tax exemptions.

In line with most other countries, Mongolia has an effectively neutral treatment of VAT. VAT is levied, but can be reclaimed, albeit through a slow and complex procedure. Consideration needs to be given to the handling of VAT on export orientated projects to ensure that the right drivers and incentives are in the economy to promote value added activities in Mongolia, such as smelting, refining, power generation and so on.

The legal framework of Mongolia assumes that foreign direct investment is desirable and necessary for economic activity and growth and therefore incorporates a number of concessions aimed at promoting foreign investment. These mostly center on reducing, deferring or elimination taxation. Since taxation is the main source of government revenue, a policy issue needs to be considered as to what is the purpose of foreign investment if it does not generate taxation income. The converse argument is whether or not a project that needs preferential taxation treatment to be viable is a good project to promote.

Mining royalties are payable from the start of production and are therefore a useful early source of revenue for the government in large capital intensive projects where depreciation protects income from taxes for several years. Paid royalties are normally deducted from otherwise taxable income before the tax due is calculated so that portion of income paid as royalties is not taxed further. Net royalties paid are therefore the gross royalty less the tax rate, or in the case of Mongolia 70%. Royalties can therefore be considered in part at least as being an advance payment of taxes. It is clear from the financial analysis carried out in Section VI that government revenues are biased towards the end of the project while the company enjoys the opposite scenario. Higher royalties coupled with lower taxation rates could have a neutral impact on the mining companies while improving the government's short term revenues. The financial analysis in Section VI considered raising the royalty payable on copper production to 5% from 2.5 % and on gold production to 10% from 7.5%. Even higher rates could be considered when coupled with lower income tax rates.

Like most developing countries, Mongolia has no mining support industry. Many mining activities are relatively low in technology content and could be carried out by properly equipped local companies. Areas that come to mind would be exploration drilling, haulage of mined rock and supplies and equipment for the mine, and quarrying of minerals required by the mine but not part of its core operation. Most of these activities need at least some specialized and expensive equipment. Consideration needs to be given to how such purchases could be financed. The mining companies could give long term take or pay type contracts to local companies to allow finance to be raised. However, the banking

sector or a government agency or both will need to establish suitable reserves to finance such activities against secure contracts.

Mining projects have a number of requirements that tend to promote an all inclusive attitude. Main concerns are security of tenure, water supplies, power supplies and road and rail infrastructure for bringing in equipment and exporting production. It is important that the government carefully considers the policy aspects of these areas independently of any specific project. If an all inclusive attitude is adopted, then it is probable that no taxation benefit at all will accrue to the country as all income will be exempted by offset. In mining projects, the concern is that investments in related infrastructure, such as roads, railways, power generation, social infrastructure, water resource development and so on will all be credited to the mining project as capital expenditure qualifying for taxation exemption thereby pushing the tax horizon so far into the future that the mine will be worked out before taxes are payable.

Related to this issue is a provision in the Economic Entity and Organization Income Tax Law Article 7.8 that exempts reinvested income from taxation. When this is coupled with a high withholding tax on dividends, it provides strong encouragement for investors to finance new expenditure by reinvestment of income. While encouraging foreign investment, this may also have the less desirable consequence of eliminating tax revenue for the government. A lowering of withholding tax rates coupled with eliminating the reinvested income offset provision might be prudent.

A stability agreement is first and foremost a commercial document, the main purpose of which is to secure for the project owner certain parameters that improve the financial performance of the project. The legal aspects concern mainly the compatibility of the proposed stability agreement with existing laws.

The team negotiating the stability agreement should include, or at least be supported by, legal counsel and a specialist in the mining field who is able to model the project in detail so that the government can see what each item of the stability agreement means in terms of economic and financial impact. A balance needs to be achieved between concessions to the project owner to attract his investment and securing an adequate flow of income to the government to promote economic activity as a whole.

B. Recommendations

Summarizing the above remarks, specific recommendations are:

- B1. The Terms of Reference of the Ministry of Finance Working Group need to be broadened so that policy issues concerning large scale capital intensive projects having long term impacts on the State are considered in general and not just in the context of a specific proposal.
- B2. The composition of the Ministry of Finance Working Group needs to be reviewed to ensure that all concerned ministries, departments and agencies are represented at the appropriate decision making level.

- B3. The Ministry of Finance Working Group needs to consider the handling of VAT in relation to large capital intensive projects. Current practice, which effectively removes VAT considerations from such projects, concurrently removes an important driver towards secondary value adding industries such as smelting and refining.
- B4. The Ministry of Finance Working Group needs to reconsider the full range of financial incentives for businesses and in particular foreign businesses engaged in natural resource development with the objective of ensuring that the state gets a reasonable share of revenues in the short as well as long term and that natural resource development contributes to the economy as a whole and is not subsidized in any way. Current arrangements eliminate profit taxes for the first 8-10 years of a project and attract reduced rates for 3-5 years thereafter. In the case of mining projects that means that the State income is predominantly from Royalties for a very long period (or about half the life of a typical mine). Royalty rates need to be reconsidered in the context of a review of overall tax rates and investment incentives.
- B5. The Ministry of Finance Working Group (encompassing a wide range of interests) needs to consider broad policy issues concerning infrastructure development when the need for such infrastructure is triggered by a major capital intensive project. A major mining project will need roads, railways, water supply, power and social infrastructure. It will impact the environment for 30-40 years both physically and visually. How infrastructure needs and environmental impact mitigation measures are planned, handled (in the context of incentives) and financed are a key policy considerations. The main concern is to ensure that incentives aimed at attracting productive foreign investment do not have the undesirable side effect of reducing State income from taxes for an indefinite period.
- B6. Proposed stability agreements for large projects will inevitably encompass issues other than financial arrangements. Approval of such agreements needs to include the formal consent of the ministries responsible for infrastructure, water resources, environment, minerals development, energy and foreign investment and trade.
- B7. To ensure that the state income from mining and other natural resource developments helps achieve the policy objectives of poverty reduction and economic growth, it should be used to lower taxes on low income individuals and businesses. Consequently, it is recommended that the tax on the lowest personal incomes be eliminated and that second bracket profits tax on businesses be lowered from 30% to 25% with the first, 15%, bracket being eliminated.
- B8. A government working group needs to be established under the ministry responsible for industrial development to consider the best way of establishing a fund to finance emergent mining service companies. Major mining companies considering investment in Mongolia have indicated that long term contracts could be offered to local companies and these could be used as collateral for loans if a funding agency was available.
- B9. Negotiating teams for stability agreements with major mining companies need to include appropriate legal counsel and have technical support from industry experts

who can advise on the specific impacts, financial, technical and environmental, of items proposed for inclusion in a stability agreement.

Specific revisions to some laws are recommended either for improved clarity or to redress the balance more in favor of the government:

- B10. Minerals Law Article 18.8. Most mines have an economic life of around 30 years. A mining license term of 60 years, with an option to renew for another 40 years, is too generous. It is recommended that the time periods be reduced to 40 years and 20 years respectively.
- B11. Minerals Law Article 20.1 and Foreign Investment Law Articles 19.1 and 19.3 need to be made consistent as to the amount that qualifies an investor for a 15 year stability agreement (Minerals Law says \$20 million, the Foreign Investment Law says \$10 million). Also the hurdle rates qualifying a project for a stability agreement should be raised to at least \$20 million for a 10 year agreement and to at least \$50 million for a 15 year agreement to avoid a proliferation of stability agreements for relatively modest investment commitments.
- B12. Minerals Law Articles 24.2 and 24.3 provides for the rates payable for exploration and mining license fees respectively. The rates for both are low and as part of the general policy review on incentives referred to in B5 above increases should be considered in the context of the associated royalty rates as provided for in Minerals Law Article 38.3.
- B13. The General Taxation Law Article 2.4, the Minerals Law Article 20.3 and the Foreign Investment Law Article 19.1 all provide for stability agreements to be approved by the Minister of Finance. The implementation of Recommendation B6 above would require these Articles to be appropriately revised.
- B14. Economic Entity and Organization Tax Law Article 7 in general and Articles 7.5.2 and 7.6 in particular. This article defines which enterprises will enjoy certain taxation exemptions. Article 7.5.2 refers to ‘metallurgy’ and grants generous exemptions whereas Article 7.6 grants less generous exemptions to a business that exports more than 50% of its production. Large scale mining projects could fall under both definitions. The definition of ‘engineering constructions’ under Article 7.5.1 should also be clarified. The general policy review referred to in B5 above review these provisions and clarify them as appropriate.
- B15. Minerals Law Article 63.4 specifies that mining companies can carry forward tax losses for up to 3 years. The general Tax Law, the Law on Accounting and the Economic Entity and Organization Tax Law make no reference to Tax Loss Carry Forward. The concept of Tax Loss Carry Forward should be added to all three cited laws and as part of the general policy review referred to in B5 above, consideration should be given to increasing the period of tax loss carry forward to 5 years. This is in line with recommendations by Arthur Mann in the May 2000 report under the Economic Policy Support Project.

SECTION I: INTRODUCTION AND BACKGROUND

A. Introduction

Mongolia has extensive reserves of natural resources including gold, copper, molybdenum, precious and semi-precious gem stones, coal, oil and gas. It is broadly assumed that the development of these natural resources will stimulate and benefit the economy as a whole. Whereas in many cases this may be true in the long term, financial analysis provided in Section V shows that this is not necessarily a good assumption in the short term.

The Government of Mongolia is involved in the negotiation of stability agreements in the mining sector. Such stability agreements are contemplated in Mongolian law, principally under Articles 20 of the Minerals Law. Article 21 of the same law requires license holders to submit draft agreements. Increases in mining activity have concentrated attention of policymakers on this matter.

B. Scope of EPRC work

In discussions held between GoM and USAID/EPRC, it was agreed that EPRC would provide assistance to the GoM on:

- Best practices and lessons learned from other countries in the negotiation and administration of stability agreements as a policy instrument in the mining sector
- The development of an economic and financial model that would estimate the impact over time of diverse stability agreement scenarios on fiscal revenues, employment, income, current account, capital account, and regional effects
- Long-term international market analysis and forecast (demand, prices, etc.) for the most important Mongolian mining products, competing countries and their tax policies and their effect on foreign investors' decisions to invest in Mongolia
- Development of alternative scenarios to inform policy options of the GoM in the mining sector

EPRC would advise the GoM on estimating the potential impact of diverse policy options concerning stability agreements in the mining sector but would recuse itself from participating in the negotiation of specific stability agreements. EPRC has also advised the GOM to engage a world class legal firm specialized in the mining sector to represent it during the negotiations of stability agreements.

C. Consultant's activities

Indicative activities of the consultancy included, but were not limited to, the following:

1. Comparative international analysis of best country practices and lessons learned from the use and administration of stability agreements in the mining sector.
2. Inception briefings at USAID/EPRC and GOM.

3. Development of an economic and financial model that would estimate the impact over time of diverse stability agreement scenarios on fiscal revenues, employment, income, current account, capital account, and regional effects.
4. Examination of long-term international market analysis and forecast (demand, prices, etc.) for the most important Mongolian mining products, competing countries and their tax policies and their effect on foreign investors' decisions to invest in Mongolia.
5. Development of alternative scenarios to inform policy options of the GoM in the mining sector.
6. Exit debriefings at USAID/EPRC and GoM.

D. Deliverables

Products of the consultancy included the following:

- Presentation and discussion of the economic and financial model and of the international market analysis developed under indicative activities 3 and 4, above, to selected GoM officials
- Debriefing of USAID/EPRC on summary of findings and conclusions
- Summary written report and public PowerPoint presentation on countries' best practices or successful case studies of stability agreements as instruments of mining policy

SECTION II: MONGOLIA'S LEGAL FRAMEWORK FOR MINING

A. Relevant laws

Mongolia's mining activities are governed by a suite of laws. Annex B presents a list of them. The principal laws bearing on and affected by stability agreements are the Minerals Law, the General Taxation Law, the Foreign Investment Law, the Economic Entity and Organization Income Tax Law, and the Customs Law. All of these are reasonable and liberal. The first three also explicitly provide for mining stability agreements. Government Resolution 46 provides a model stability agreement.

B. Application

The legal process requires a holder of a mining license to submit a draft stability agreement for review and approval by the Ministry of Finance. The model stability agreement assumes that only taxation will be stabilized at the rates applicable at the time of signing. The model agreement specifies the taxes to be stabilized and provides gaps in the text for entering the rates. A table of investment amounts to be made by the mining company to qualify for the stability provisions is also included.

No variations in the taxation rates and provisions are contemplated in the model stability agreement although the General Taxation Law, Article 8, contemplates special taxation provisions for the inducement of business and such inducements are provided in Article 7 of the Economic Entity and Organization Income Tax Law.

C. License fees

Exploration license fees. Article 24.2 of the Minerals Law provides the annual fees payable per hectare for an exploration license as follows:

First Year	\$ 0.05
Second and Third Year	\$ 0.10
Fourth and Fifth Year	\$ 1.00
Sixth and Seventh Year	\$ 1.50

Mining license fees. Article 24.3 of the Minerals Law provides the annual fees payable per hectare for a mining license as follows:

First Three Years	\$ 5.00
Fourth and Fifth Year	\$ 7.50
Sixth Year Onwards	\$10.00

License fees are deductible in the calculation of tax liability.

D. Taxation rates

Article 6 of the Economic Entity and Organization Income Tax Law provides the taxation rates payable by businesses active in Mongolia. The following are extracts of the key provisions as relevant to a foreign mining entity:

- Income Tax 15% on the first 100 million tugrugs (\$90,000) and 30% on the balance. The 30% rate was introduced in 2004; previously it was 40%
- Dividends and capital gains are set to 15% if paid to a local entity; 20% if paid to a non-resident entity, not deductible for income tax calculation purposes
- Royalty Income is set to 10% if paid to a local entity; 20% if paid to a non-resident entity, deductible for income tax calculation purposes
- Tax on Disposal of Fixed Assets is 2%, deductible for income tax calculation purposes.
- Tax on Interest Income is 15% if paid to a local entity; 20% if paid to a non-resident entity, not deductible for income tax calculation purposes.

Depreciation of mining equipment and computers is allowed over 5 years, straight line; buildings over 40 years straight line and all other assets over 10 years straight line.

E. Taxation exemptions and relief

To ensure that projects in Mongolia qualify for the offered exemptions, the Foreign Investment Law in Article 6.1 states that one of the ways to make foreign investments is by setting up a wholly foreign-owned business entity or local branch or subsidiary. Likewise, the Economic Entity and Organization Income Tax Law in Article 3.1.1 defines tax payers as including companies and foreign companies which are involved in all forms of ownership, situated on the territory of Mongolia. Tax exemptions as specified below therefore apply to foreign investors no matter what their specific local structure may be. The Foreign Investment Law in Article 11.1 defines a minimum foreign ownership of 25% to qualify as a ‘foreign investor’.

Article 7 of the Economic Entity and Organization Income Tax Law provides the taxation exemptions and relief available to businesses active in Mongolia. The following are extracts of the key provisions as relevant to a foreign mining entity. There is some ambiguity in the application of the exemptions:

- *Article 7.2.* Foreign partners’ share of income from a production sharing agreement will be free of taxes. This provision was added after the Law on Oil and Gas introduced the concept of production sharing agreements. Since all mining development in Mongolia is by concession agreement, it is not relevant other than to show that the provision exists, should production sharing agreements ever become a fiscal arrangement for mining projects
- *Article 7.4.* Income used for road construction and repair shall be deducted from taxable income, *i.e.*, is free of tax

- *Article 7.5.1.* A business entity with foreign investment in power and thermal plants, electricity transmission networks, highways, railways, airway, engineering constructions and telecommunications shall enjoy 10 years of tax exemption from the date it commences production activities and 50% of normal taxation rates for a further 5 years. The definition of engineering constructions is not specified but in the context would imply infrastructure-related items such as bridges.
- *Article 7.5.2.* A business entity with foreign investment in oil and coal, metallurgy, chemical production, machinery and electronics shall enjoy 5 years of tax exemption from the date it commences production activities and 50% of normal taxation rates for a further 5 years. It is not clear if mining of metals is intended to be included under ‘metallurgy’
- *Article 7.6.* A business entity with foreign investment in other areas that exports more than 50% of its production shall enjoy 3 years of tax exemption and 50% of normal taxation rates for a further 3 years. This article encourages exports of raw minerals rather than their in-country processing
- *Article 7.7.* A business entity with foreign investment not referred to in other articles may be granted preferential treatment by the State Great Hural.
- *Article 7.8.* If a foreign investor reinvests its income in its own entity, then the amount reinvested shall be deducted from taxable income. This provision is not clearly stated in the law but it is understood to mean that if a foreign investor chooses to take part of the before tax income of its local entity and reinvest it in that local entity, then that part of the income is free of tax
- *Article 7.9.* If the activities of a business with foreign investment cover more than one of the areas qualifying for preferential taxation treatment, the preferential taxation treatment shall be determined by the main area of activities of the business entity. To qualify as having foreign investment, an entity must have at least 25% foreign ownership. Tax exemptions are then set by the main activity of that entity. No percentages are specified for the ‘main activity’.

F. Possible revisions to laws

The existing laws are good examples of the kind, are liberal and require little change. They have all been refined over time by a number of pragmatic revisions. The following areas, however, need further consideration:

1. *Minerals Law - Article 18.8* provides for the granting of a mining license for 60 years. *Article 16.6* provides for a single extension of the mining license for 40 years. These terms are very generous and may be open to abuse. Consideration should be given to reducing these to 40 years and 20 years respectively
2. *Minerals Law - Article 20.1* permits a mining license holder to apply for a stability agreement provided that he will invest at least \$2 million in the first five years of the project. If a mining license holder applies for a stability agreement, then the

law states that the government must enter into the agreement. Article 20.4 further provides for the length of the stability agreement to be ten years from commencement of production unless the investment amount exceeds \$20 million in which case the length of the stability agreement shall be 15 years. The hurdle rates qualifying a mining license holder should be raised to at least \$20 million to qualify for a 10-year stability agreement and to at least \$50 million to qualify for a 15-year agreement. The current low hurdle rates may lead to a proliferation of stability agreements for relatively modest investment commitments

3. *Minerals Law - Article 24.2* provides for exploration license fees (which are never higher than \$1.50 per year per hectare) and Article 24.3 provides for mining license fees (which are never higher than \$10.00 per year per hectare). The largest exploration license area permitted under law is 400,000 hectares giving annual maximum incomes of \$600,000 from an exploration license and \$4,000,000 from a mining license. These rates are low if the present royalty rates are to remain, but would be acceptable if royalty rates were revised upwards.
4. *Minerals Law - Article 38.3* provides for royalties to be paid on mined materials at 2.5% for most minerals excluding gold, which has a 7.5% royalty. The royalty is paid on the *ex-mine* sales value. These rates are considered to be low in the context of the overall fiscal system and provision should be made to raise the rates payable.
5. *General Taxation Law – Article 2.4* provides for stability agreements to be approved by a member of Cabinet responsible for finance. This provision is acceptable if stability agreements are confined to taxation stability, but the larger mining companies tend to press for much wider ranging stability agreements. In this case, it would be appropriate for the GoM to consider that these agreements be approved by Cabinet Resolution or the Great State Hural (Parliament)
6. *Foreign Investment Law – Article 19.1 and Article 19.3* provide for stability agreements in the same general wording as the Minerals Law. The English translation of Article 19.3 contradicts Article 20.4 of the Minerals Law by stating that an investment of more than \$10 million is required to qualify for a 15 year stability agreement, rather than \$20 million. The same approval provisions are made in all three laws; hence, the same recommendation that the approval process be made at the Cabinet level or Great State Hural (Parliament) applies to all three laws .
7. *Economic Entity and Organization Income Tax Law – Articles 6 and 7* provide for taxation rates and exemptions. Article 7 in particular needs clarification. It is clear that Article 7.6 would apply to most large scale mining projects, but so could Article 7.5.2 if mining of metals is included under ‘metallurgy’
8. *Economic Entity and Organization Income Tax Law*. Although the Minerals Law in Article 63.4 provides for tax-loss carry-forward of three years, the Economic Entity and Organization Income Tax Law still does not explicitly contain provisions for tax-loss carry-forward. A report published by Arthur Mann in May

2000 on behalf of the Economic Policy Support Project (EPSP) recommended a minimum of five years.

SECTION III: FACTORS IN MINING SECTOR COMPETITIVENESS

A. Characteristics of mining developments

Mining developments have certain characteristics that set them apart from other projects and also drive the type of fiscal system and stability framework needed for their success. The main features of major mining developments are:

- They are long term projects typically spanning forty years or more and sometimes up to one-hundred years, lasting longer than governments and spanning several generations of the host country's population
- Projects are capital intensive, costing typically more than \$500 million and sometimes more than \$5 billion. Partial debt finance is widely used in such large projects
- Few jobs are created in relation to the size of the investment. A typical \$1 billion mining project might generate fewer than 1,500 jobs in total
- Mines are often developed in remote locations such as in deserts or at high altitude and can be close to national borders making the logical market another country
- The business is risky, including technical, market, political, and fiscal risks. Technical risk includes geological and production risks. Market risks include price volatility. Fiscal risks include actions by host government and political risks include civil disorder and disruption
- The majority of the products are typically exported with little or no added value activity taking place in the host country
- Specialized equipment is imported and is used by specialized sub-contractors. Most emerging economies will not have a developed mining support industry.

Consequent upon the foregoing, large scale mining projects may have only limited involvement in the local economy; they may have a large impact on Gross Domestic Product (GDP) but a small impact on Gross National Income (GNI).

B. Investor concerns

Investors in mining projects will usually be large public companies. The primary concern of the management of such enterprises will be the maximization of sustainable shareholder value and return on investment. In doing this, management has an implied duty to manage risk, both actual and perceived. Risk management is usually achieved by investing the company's money in a portfolio of projects in different countries and in different natural resources. In so doing, companies will select countries where the fiscal system and perceived fiscal stability are favorable in relation to the technical parameters of the project.

C. Government concerns

Government concerns are usually with income generation, creation of jobs and overall economic growth and any given sector will be viewed in terms of its contribution to these objectives. Attracting foreign direct investment is widely seen by governments as desirable and gaining both short-term and long-term benefits from that investment is a principal objective. A secondary objective would be to maximize the multiplier effect of projects on the economy as a whole.

In promoting current projects, a government needs to consider long-term implications and the effect of sector specific agreements on the economy as a whole. A deal done today to attract a large foreign investor may tie the hands of future governments and set precedents that impact future generations.

D. Myths and truths

Two myths prevail and are promoted by the mining industry. These are that mining companies place their projects only in those countries where the fiscal regime is most favorable. This engenders the associated myth that countries compete with each other for direct foreign investment only on the basis of their fiscal regime. Neither myth is true as such. Of course, a company will invest in a country with a more favorable fiscal regime if all else is equal and individual countries look at their fiscal regimes from time to time in comparison with those of other countries. Companies, however, invest in projects with good expected rates of return and acceptable risk profiles.

The evaluation of those projects includes the fiscal regime of the country, an assessment of the technical, fiscal, market and political risks associated with the project, the availability of alternative projects and financing restrictions.

To make the point in crude terms, let us consider two projects that are available to our mining investor. In one project, an ore body has been discovered 500 meters below the surface, 1,000 km from the nearest water and infrastructure, where the rock contains 1 gram of copper for every 500 tons of rock. The host country is at war with three neighboring countries. In the other project, pure copper nuggets have been found on the surface next to a railway that goes to a copper smelter 100 km away located in a major export port. The first project would never be economic even if the fiscal regime of the country had zero taxes and no investor would ever seriously consider it. The second project would be economic even if tax rates were effectively 90% and there would likely be many competing investors for such a project.

E. Types of fiscal regimes

Fiscal regimes in natural resource development fall into two broad categories, concession agreements and contractual agreements. Contractual agreements further divide into production sharing agreements and service contracts. Service contracts include such concepts as buy-back agreements and engineering, procurement and construction

contracts. Companies operating under a service contract have lower risks but may forego upside returns that riskier production sharing agreements may bring. Exhibit III-1 summarizes the major types of fiscal regimes.

Exhibit III-1: Major types of fiscal regimes in natural resource development

<i>Concession agreements</i>	<i>Contractual agreements</i>
	1. Service contracts: “buy-back” contracts, engineering, procurement, and construction services
	2. Production-sharing agreements

In the mining industry, the vast majority of the fiscal arrangements are of the concession type. This used to be the case in the oil and gas industry also, but the trend in that industry over the last twenty years or so has been towards production sharing agreements.

In Africa, Gabon, Equatorial Guinea and Democratic Republic of the Congo (when it was called Zaire), have examined the use of production sharing agreements in mining projects. With one small exception in Gabon, where an independent gold miner Warwick Limited signed a production sharing agreement, the mining industry has shunned this form of fiscal arrangement. On the other hand, The Philippines uses production sharing agreements extensively in the mining sector, as shown in Annex H.

In Mongolian Law, petroleum resource development assumes a production sharing agreement whereas mining is presumed to be under a concession type agreement. There are however important differences in the two agreement types.

E1. Concession agreements

The main characteristics of concession agreements are:

- The ownership of the natural resource is passed into the hands of a private developer
- Agreements are long term lasting 30-60 years and even 100 years
- The developer takes all the risk but also gets most of the rewards
- The government gets income through a variety of license fees, land rents, income and other taxes and royalties, but in reality only the royalty income is significant in the early years and governments rarely enjoy overall incomes higher than 25% of total
- The developer enjoys no inherent taxation stability
- Concession agreements fall within the existing taxation regime.

E2. Production sharing agreements

The main characteristics of production sharing agreements are:

- The government retains ownership of the natural resource. The developer contracts with the government to develop the resource and share the proceeds
- The developer takes all the exploration risks but shares in the reward from development
- Terms are shorter, with typical exploration terms of six years followed by production terms of 25-30 years

- The government shares risks and rewards with the developer and can more easily calculate its income due
- The production sharing agreement gives the developer inherent taxation stability since the agreement encompasses the two main fiscal terms of what portion of income goes to service cost recovery and what the profit shares are on the non cost recovery portion. Cost recovery pools are typically in the range of 40-70%. Costs are recovered in the order current operating costs, past exploration costs and past development costs. Any unused cost recovery goes to the profit sharing pool. Profit shares are typically in the range of 60/40 to 90/10, both in favor of the government. Over a project lifetime, shares under production sharing agreements tend to put 45-55% in the hands of the host government. To survive under a production sharing agreement, projects need to be financially robust as there are few concessions and subsidies implied in such agreements.
- Production sharing agreements are explicitly excluded from taxation regimes because the ‘taxation’ applicable is specified in the agreements themselves in the form of the cost recovery portion and the profit shares. Taxation rate stability is thus implicit in a production agreement whereas it is absent in a concession agreement unless that is accompanied by a separate stability agreement.
- Production sharing agreements can have many different forms and some governments have included some items more normally associated with concession agreements such as license fees, land rental and royalties. Some agreements also require minimal participation by the government though this is normally driven by the government concerned and not the company. Most production sharing agreements also allow for the government to take its share in cash or kind with a procedure for switching between the two being specified. However, none of these impacts on the essential difference between the two forms of agreement and that is that production sharing agreements have inherent ‘taxation rate’ stability whereas concession agreements do not.

F. Uses and abuses of stability agreements

In the mining industry, there has been a reluctance to go the production sharing route but the lack of taxation stability inherent in a concession agreement remains as a significant problem. Stability agreements were originally designed to deal with this problem. A concession agreement with taxation stability is very close in effect to a production sharing agreement from the investor’s view point. From the government’s view point, a production sharing agreement is easier to police, is inherently more transparent and has fewer opportunities for abuse through imaginative accounting than concession agreements. These are the reasons why the mining industry has resisted them so far and why governments have pressed for them predominantly in the oil and gas industry.

Furthermore, since production sharing agreements are outside of the taxation system and are negotiated deal by deal using a model form of agreement, albeit with the main commercial parameters flexible, they also avoid the need to tamper with the base taxation system on a deal by deal basis. By offering stability agreements to the mining industry, governments around the world have removed the main disadvantage of concession agreements and pushed out the day when production sharing agreements will become common in the mining industry.

A stability agreement can take the form of a simple statement in an investment agreement that taxation rates will be frozen at the rates prevailing at the time of signature for a specified period, unless beneficially changed. The model Mongolian stability agreement contemplated under Resolution 46 is essentially in that form and is similar to those used by many other countries.

Companies, however, have steadily broadened the application of stability agreements and try to use them to control many project risks, actual and perceived, and to compensate for government vagaries. Common additions to stability agreements include the following:

- Extensions of taxation holidays or exemption periods
- Further reductions in the rates of taxation payable
- Extensions of import duty exemption provisions
- Extending the scope of the current agreement to future projects
- Securing other project parameters such as water rights and environmental issues
- Varying the definitions of key trigger dates
- Limiting the applicability of other laws
- Trying to secure rights that are not granted by existing laws
- In general, putting the project outside the normal legal framework of the country.

It should be remembered that mining companies have many external pressures on them from shareholders and lending banks and finance houses who seek to minimize actual and perceived risk. For this reason they will seek stability agreements, especially if they are provided for in the law as in Mongolia. In terms of ‘best practices’, mining companies regard stability agreements as desirable even though they are often guarding against unlikely events. Many agreements in fact include a once off provision to opt out of the stability agreement in favor of the normal tax regime just in case more favorable laws are passed. It is ironic that countries such as Canada and the United States of America, where a request for a stability agreement would be regarded as a joke, have in fact been more unstable to the mining industry than many developing countries due to regulatory changes concerning the environment and health and safety issues.

In considering whether Mongolia will have stability agreements in the future, the government needs to be aware of its own stability rating as made by external bodies such as the World Bank, International Monetary Fund and Asia Development Bank. The government also needs to keep a close eye on the number of potential investors. A long queue is the best indication that the overall balance between fiscal and other considerations is beneficial for investors.

G. Legislative approaches

The government needs to consider the general approach adopted in mining sector development. The current legal framework is acceptable and among the best of its kind. It does however embody certain assumptions namely that stability agreements will concern taxation rates only and all other provisions will be as provided in the relevant laws.

Reality may be more complex and consideration needs to be given to whether in the future mining developments will be characterized by a proliferation of individual project centered agreements or whether a single law will apply for all. The GoM should give careful consideration to this issue.

H. Concept of effective overall taxation rate

Comparing individual fiscal systems is difficult due to the wide range of individual provisions to be found in each system. The concept of 'Effective Overall Taxation Rate' offers a method for making such comparisons. To apply this method one would define a typical project in a particular area such as copper mining then would evaluate this project under each fiscal system, varying only the fiscal terms. The overall effective taxation rate will be calculated by taking the total taxation paid to the government over the life of the project, no matter what form it took (direct taxes, royalty, rents, fees etc.) and dividing that by the total income over the life of the project. The resulting number expressed as a percentage is the 'Effective Overall Taxation Rate'.

This methodology is used to produce league tables for comparison. It is, however, intrinsically flawed because it ignores the timing of payments and other cost differences among countries.

By their nature, mining projects pay little or no taxes in the early years when government income is limited to license income, land rental and royalties. Later in the project life, typically after 15 to 20 years, the government will see taxation income, but taxation receipts are very much 'back end loaded'. If the discounted present value of the total taxation stream is divided by the discounted present value of the total revenue stream, then the effective overall taxation rate will be much smaller than in the un-discounted case.

I. Comments on the report by Professor James Otto

Professor Otto's report 'Competitive Position of Mongolia's Mineral Sector Fiscal System: the Case of a Model Copper Mine' was published in July 2003. It uses a model copper mine as the basis for comparison of the fiscal systems of some 28 countries by applying the method of (undiscounted) effective overall taxation rate. The most important recommendations presented in this paper are the following:

- Lower taxation rates to 25% at the margin and abolish the multi-rate structure (the rate is currently 30% at the margin, down from 40%)
- Enforce the depreciation provisions in the Minerals Law over those in the General Law on Taxation
- Increase the loss carry forward period from 3 years to at least 5 years and preferably remove the limit altogether
- Lower the rate of Withholding Tax from 20% to 10%
- Increase list of import duty exemptions
- Remove VAT on imports and exports

The Otto study shows that the effective rate of taxation varies from a low of 29% for Sweden to a high of 84% for Burkina Faso with the majority of countries in the 40%-55% range. Ironically, Sweden has a fairly low activity mining sector due to the maturity of its mining sector and a general lack of things to mine, whereas Burkina Faso has an active mining sector due to high quality gem stones near the surface. Mongolia was assessed at 63% effective overall taxation rate when the profit tax was at 40%. The profit tax is now at 30% putting Mongolia around 56% effective overall rate by Otto's methodology. Financial analysis in Section VI suggests that Otto's model gives misleading results depending on how the model project is set up.

As the main active component of Mongolian taxation is a royalty levied on the 'top line' (sales), the Otto study points out that the taxation system is regressive, meaning that as sales prices go down or operating and capital costs go up, the effective overall rate of taxation rises.

SECTION IV: BEST AND WORST PRACTICE IN STABILITY AGREEMENTS

A. Introduction

Stability agreements have generally been applied to taxation stability only. Some countries have broadened the scope a little, but the vast majority confines stability agreements to taxation. This section examines the specifics of three regimes to show the effects beneficial and otherwise of a stabilized fiscal regime on the mining sector, and the economy as a whole. We examine only three specific examples as experience across the world has been similar. The ‘Russian Problem’ is an example of a bad fiscal system that had long term detrimental effects on the country. The ‘Kyrgyz Approach’ is an example of a good system poorly applied that had both good and bad effects on the country. The ‘Peruvian Approach’ is an example of a good system well applied but which, in keeping with all incentive based fiscal systems, is giving short and medium term problems for the country.

B. The Russian problem

After the break up of the former Soviet Union in 1990, foreign investors rushed to Russia. The rush was driven by an external belief that Russia was the place to be and little attention was paid to the fiscal and legal framework in place. Russia was happy to have the foreign investment at the time but did little to encourage it. In the natural resource sector, the fiscal and legal framework evolved somewhat sporadically and did great damage to the economy as a whole and to Russia’s international reputation.

Key legislation:

Underground Resources Law (URL). Shortcomings of this law included:

- Failure to specify the licensing authority
- When granted, the license did not give rights to the property
- No specification of dispute resolution procedures
- No provision for taxation protection
- Changing of partners was not allowed.

The URL proved to be a field day for regional and local legislatures who took the opportunity to extort high fees and taxes from investors while the federal government hid behind the vagaries of the title and dispute resolution procedures.

Foreign Investment Law (FIL). It was widely hoped that this law would plug some of the glaring deficiencies of the URL but such hopes were short lived. The problems with the FIL included that it provided overlapping jurisdiction, with both federal and local government controlling tax laws, regulations, excise fees and licensing requirements. This effectively formalized *de facto* anarchy. Further problems were created by requiring land use taxes and payments to land owners but such taxes and payments were not clearly defined. The FIL was not self contained and made references to other legislation such as the National Land Code and other unspecified laws without establishing which one took

precedence. No further taxation stability was given and numerous, frequently changing taxes were levied. Exemption from export taxes was granted, but the criteria were not clear. Further confusion and anarchy ensued.

Production Sharing Agreement Law (PSA). This was heralded as the final solution but did little to solve the problems and was actively opposed by the larger Russian natural resource companies. The PSA still required licenses but did not clear up the licensing authority issue. It did limit taxes, mandatory payment burdens, royalties, bonuses and specific profit shares by type but not by rate thus leaving local and federal authorities in the driving seat as regards taxation. No taxation stability emanated from the PSA law thus eliminating the main advantage of a PSA versus a concession agreement. Other complications were introduced at the same time, including a requirement for parliamentary approval of large projects and restrictions on what type of project qualified for PSA treatment. The new PSA law was also not self-contained and made reference to the URL and FIL.

The result of this appalling set of legislation was predictable. There was no semblance of taxation stability and in fact taxes changed frequently in an upwards direction and were sometimes applied retroactively by as much as five years. Many foreign investors pulled out and entered into protracted legal battles. Some investors, usually the larger ones with more at stake, realized what was happening and became Russian by acquiring and merging with large Russian partner companies. The reason for this apparently destructive scenario was that after the initial flurry of foreign investment, the local resource companies became self sufficient and highly profitable. These powerful vested interests did not want a stabilized transparent taxation system and the near anarchy suited them very well as it allowed very low taxes to be paid. By 1996, foreign investment was much less important than it was in 1990.

The impact on the country as a whole was devastating. During the Soviet times, Russia had effectively used the natural resource income (or rent) to subsidize the rest of the economy. The new system of anarchy removed that rent from the central government into private hands and the economy suffered badly for ten years. Only recently, under the Putin government, is some semblance of fiscal responsibility returning to the larger companies and taxes are beginning to be paid at realistic rates. The Russian economy is now starting to grow satisfactorily.

C. The Kyrgyz approach

Kyrgyzstan shares many of the problems faced by Mongolia and is similar in many respects. It is predominantly an agrarian society with nomadic roots but the country has great natural resource wealth. The resource sector is governed by two main laws, the Underground Resources Law or Minerals Law and the Foreign Investment Law:

Underground Resources Law (URL). The law specifies that the central government is the licensing authority and licenses grant clear rights to the property. Dispute resolution by arbitration is provided and changes of partners are allowed. The law is otherwise comprehensive and liberal.

Foreign Investment Law 1995 (FIL). The law provided for a single jurisdiction with the central government controlling taxes, regulations, excise fees and licensing requirements. The law is self contained and clearly states which law takes precedence when there is a conflict. Taxes payable are specified and stabilized and tax exemptions and holidays are clearly stated. Tax rates and loss carry-forward provisions are clearly stated and competitively positioned. The flaw in an otherwise good law was that it applied to all foreign investment regardless of size and sector.

The result of these laws was that there was an influx of foreign investment; some in the natural resource sector, but also a lot in the service industry. Many local companies went out of business due to the higher taxes being paid versus foreign competition. There was a general outcry about preferential treatment for foreigners and the government changed the law drastically in 2000. All that was required was to limit the taxation concessions to large resource projects or other large projects having a significant impact on the economy, but parliament over reacted and removed all incentives for all foreign investors. Regulatory authorities, particularly the tax police, started a campaign of trying to reverse the past concessions and many smaller foreign investors left. New foreign investment has dried up. Perversely, the final result has been close to the original objective in that the natural resource sector has attracted and retained several large investors who have the resources and strength to resist the government onslaught on their granted rights. The economy has benefited from the natural resource development and local firms in the service sector have bounced back after the removal of unfair competition through tax breaks for small foreign companies. The lack of new investment is, however, a problem for the future.

D. The Peruvian approach

Peru has gained a reputation as a mining friendly country through the application of a liberal fiscal regime coupled with good geological conditions and high quality ores. Its mining and investment laws are clear and liberal and grant all the usual required rights. The following is a brief review of the Peruvian fiscal system as it applies to mining companies:

- Profit taxes can be stabilized at 29% versus the un-stabilized rate of 27%
- Depreciation is allowed over 5 years, straight line
- Loss carry-forward is allowed over 4 years
- Pre-production exploration expenses may be expensed in the first year of operation or amortized over the life of the mine
- Royalties are set at zero
- Import duties are 12% but can be depreciated over five years
- Value Added Tax is applied at 15% but is recoverable
- Withholding taxes are levied at 4.1%.

The effective overall rate of taxation calculates at 47%, putting Peru in the second highest tier along with the majority of other countries. The favorable geological conditions and high quality ores have allowed Peru to attract large investors such as Barrick Gold. Peru has executed over 250 taxation stability agreements.

Despite its success in attracting foreign mining investment, Peru has experienced limited impact on its overall economy and is contemplating introducing a 3% mining royalty to improve state income.

E. Range of fiscal provisions

To put the Peruvian and other fiscal systems in proper context, the following is a summary of the range of provisions made by governments with mining companies:

- Taxation stabilization is provided by some governments but not by all
- Profit tax ranges from 15% un-stabilized through to 42% stabilized. Both extremes are provided by Chile. The norm is in the range 25-30%
- Depreciation is provided over 1 to 12 years straight line. The norm is five years
- Loss carry-forward is allowed by most countries but not all. The range is from a 3 year limit to no limit. The norm is in the range 5-10 years
- Pre-production exploration expenses are either expensed in the first year of operation or amortized over the life of the mine
- Royalties for lower value minerals are set in the range 0-5% with the norm around 3%. For higher value minerals and gemstone the rates are in the range 5-15% with norm around 10%
- Import duties are levied in the range 1-12%. If they are levied they are usually depreciable. The norm is around 5%
- Value Added Tax is normally levied in the 10-20% range, but is recoverable if levied
- Withholding tax is levied in the range of 0-35% with 10% being the norm
- Taxation exemptions and tax holidays are given by some countries either to all projects meeting specified criteria or on a case by case basis.

F. Common problems and experience

All countries have shared similar problems and experience with stability agreements and fiscal regimes. A favorable fiscal regime is only part of the story; mining companies evaluate project opportunities and select the best overall projects. Debt financing requirements drive the need for early year stability agreements. Governments need to consider carefully the balance between attracting direct foreign investment and the long term benefit to the economy as a whole.

The main problem experienced by all governments with mining projects is that they generate little taxation income in the first ten years or so. Depreciation of large up-front investment amounts protects income from taxation even without taxation holidays. The main portion of the income received by the government, therefore, comes from royalties alone. The number of jobs created by a large mine is small in relation to the investment and the multiplier effect for the economy as a whole is also small. Governments have discovered the fact that high visibility mining projects may have a big impact on the Gross Domestic Product, but have a very small impact on the Gross National Income, employment levels and the economy as a whole. It is indeed quite possible a country ends up providing effective subsidies to the mining sector whereas the widely held perception is that large scale mining developments will enrich the country.

Peru is a good example. It has been widely regarded as a mining friendly country and has been enormously successful in attracting foreign direct investment in the mining sector, but the impact on the economy has been small. The situation has been exacerbated by the fact that Peru levies no royalties, the main component of government income in the early years of a project. The lack of impact on the economy as a whole has become so visible that the government is under pressure to impose a 3% mining royalty levied on sales.

Royalties always sound low when figures less than 5% are bandied about but these are royalties levied at the top line level on sales. As a percentage of net profits after the deduction of costs, they amount to figures in the 15-30% range.

The issue for all is not so much taxation stability, but what is being stabilized.

It is interesting that most host nations for mining activity do not opt for production sharing agreements even though concession agreements accompanied by stability agreements approximate that arrangement. Given the advantages of production sharing agreements for host nations, it is perhaps a tribute to the mining industry's solidarity in resisting them.

SECTION V: IMPACT OF DIFFERENT FISCAL PROVISIONS

A. A typical copper mining project under Mongolian taxation provisions

This section develops a model about a typical copper mining project to evaluate variations in fiscal policy in Mongolia. The mining project model is conceptually similar to those proposed in Mongolia, being a mix of open pit mining and underground mining, with a range of ore qualities. In defining the ore bodies and the mining, concentration and smelting thereof, the model uses common industry concepts and practices.

First is the deemed economic cutoff point at which an ore body will no longer be mined. This is usually defined as a percentage of Copper Equivalent metal content. A prudent choice would be 0.6% and that is what has been used in defining the typical mining project specified in the model. Copper Equivalent is calculated by converting other contained metals, such as gold, into copper equivalent using a value basis.

The developed model allows for four separate ore bodies of differing quality to be developed by open pit mining or by underground mining. Operating costs are provided for both types of mining. Ore is crushed within the mine area and fed to a floatation concentrator. Concentrate is trucked to a remote smelter/refiner that is not part of the project. Power for the project is assumed to be supplied by third parties.

B. Base case

The base case of the model specifies the mining of three ore bodies of differing quality by the open pit method and one by the underground method. Total ore production is set at 40,000,000 tons per year requiring total mined rock of 132,260,000 after allowing for waste. The mine has down time during the night and severe winter weather and also mines at different daily rates with stock piling, so while in operation, actual mining rates peak at 195,000,000 tons per year and mining equipment needs to be specified for this rate.

The development scheme used assumes that three open pit mines are brought into production by the end of the third year. A fourth, underground mine, comes into service at the end of the fifth year. The ore is produced on a schedule with stockpiling where differing annual production rates are evident but fairly constant processing rates are maintained. Processing continues after the cessation of mining activity to allow time for site remediation. The mines are assumed to operate for approximately 25 years.

The project was considered as a single project with all capital expenditures being treated as being part of one project. No restarting of the clock on second or subsequent phase investments was used in calculating taxation relief.

The base case assumes refined copper at \$0.90 per pound and gold at \$390 per troy ounce. The fiscal system applied in the model was as per current Mongolian Law, with royalties

at 2.5% for copper and 7.5% for gold, profit tax at 30% after a three-year holiday and three more years at 50% of normal rate. Loss carry-forward was limited to 3 years.

94137

Depreciation provisions are not entirely clear as expressed in the various laws. For purposes of taxation calculations, the following interpretation was used:

- All expenditures on exploration, preparing the mine for production, and mining machinery shall be depreciated over five years per Article 63.1 of the Minerals Law
- All immovable property, defined as buildings, infrastructure, tailings pits and the like shall be depreciated over 40 years. This category will also be used for computing the immovable property tax. As economic mine life is likely to be less than 40 years, this provision in the tax laws gives rise to a large final year write down in the event of earlier closure, a normal situation in natural resource development projects
- Site remediation costs are expensed as incurred.

Capital costs were estimated at \$2,169 million inclusive of \$135 million of capitalized operating costs in the period prior to metals production. All capital expenditures were financed on an equity basis. The exact way in which expenditures are financed is quite critical. If profits from the project are reinvested, then no tax is payable on those reinvested profits thereby extending even further the tax horizon. In the base case, taxes are not payable until the ninth year of operation.

Key indicators from the model are:

Total Investment over the life of the project	\$ 2,169 million
Gross Sales Revenue over the life of the project	\$19,301 million
Net Sales Revenue Ex Mine over the life of the project	\$15,754 million
Operating Margin over the life of the project	\$ 9,855 million
Total Government Income over the life of the project	\$ 2,359 million
Total Government Revenue over first 10 years operation	\$ 321 million
Total Government Revenue over next 10 years operation	\$ 1,195 million
Total Government Revenue over Next 20 years operation	\$ 843 million
Overall Effective Taxation Rate	23.9% of Operating Margin 15.0% of Ex Mine Sales
Job Creation, peak	2,290
Job Creation, lowest number	430
Job Creation, steady State	1,500
DCF IRR Basis 100% Equity Finance	14.2%
NPV @ 5% (over the 28 year total project life)	\$ 1,842 million
NPV @ 10% (over the 28 year total project life)	\$ 500 million

C. Improved tax-loss carry-forward

The impact of increasing tax-loss carry-forward to seven years was considered with all other items remaining the same. It was found that this change has no impact whatsoever on the project or on Government revenues due to the fact that three years of tax exemption are given after first taxable profit occurs. This is the same period as losses could be carried forward to protect against tax but since it is zero in this period, there is no impact. It follows that five years of loss carry-forward would also have no effect, but it might be advisable for the Mongolian government to allow five years of loss carry-forward to be in line with other countries, although this has no impact. It would be perceived as a concession by the mining companies.

D. Improved taxation exemptions

Article 7.2.5 of the Economic Entity and Organization Income Tax Law is not clear and it could be argued that mining qualifies for five years of tax exemption and a further five years at 50% of the normal tax rates. This case has considered the impact of such an improvement in the exemption while keeping all other assumptions the same.

Key indicators from the model are:

Total Investment over the life of the project	\$ 2,169 million	
Gross Sales Revenue over the life of the project	\$19,301 million	
Net Sales Revenue Ex Mine over the life of the project	\$15,754 million	
Operating Margin over the life of the project	\$ 9,855 million	
Total Government Income over the life of the project	\$ 2,072 million	
Total Government Revenue over first 10 years operation	\$ 233 million	
Total Government Revenue over next 10 years operation	\$ 995 million	
Overall Effective Taxation Rate	21.0% of Operating Margin	
	13.2% of Ex Mine Sales	
Job Creation, Peak	2,290	
Job Creation, Lowest number	430	
Job Creation, Steady State	1,500	
DCF IRR Basis 100% Equity Finance	14.6%	
NPV @ 5% (over the 28 year total project life)		\$ 1,979 million
NPV @ 10% (over the 28 year total project life)		\$ 568 million

The rate of return for the project increases by 0.4% while government revenues over the project life are reduced by \$287 million, \$88 million in the first ten years of operation and \$199 million in the subsequent ten years of operation.

E. Impact of royalty rate changes

Royalties, unlike taxes, are payable from the start of production. This case evaluates the effect of increasing royalties from 2.5% to 5% for copper production and from 7.5% to 10% for gold production.

Key indicators from the model are:

Total Investment over the life of the project	\$ 2,169 million	
Gross Sales Revenue over the life of the project	\$19,301 million	
Net Sales Revenue Ex Mine over the life of the project	\$15,754 million	
Operating Margin over the life of the project	\$ 9,855 million	
Total Government Income over the life of the project	\$ 2,678 million	
Total Government Revenue over first 10 years operation	\$ 468 million	
Total Government Revenue over next 10 years operation	\$ 1,307 million	
Overall Effective Taxation Rate	27.2% of Operating Margin 17.0% of Ex Mine Sales	
Job Creation, Peak	2,290	
Job Creation, Lowest number	430	
Job Creation, Steady State	1,500	
DCF IRR Basis 100% Equity Finance	13.4%	
NPV @ 5% (over the 28 year total project life)		\$ 1,681 million
NPV @ 10% (over the 28 year total project life)		\$ 407 million

The rate of return for the project reduces by 0.8% while government revenues over the project life are increased by \$319 million, \$147 million in the first ten years of operation and \$113 in the subsequent ten years of operation.

F. Impact of royalty changes offset by lower taxes

In this case, royalties were increased as in the case above, but taxes were also reduced to 25%.

Key indicators from the model are:

Total Investment over the life of the project	\$ 2,169 million	
Gross Sales Revenue over the life of the project	\$19,301 million	
Net Sales Revenue Ex Mine over the life of the project	\$15,754 million	
Operating Margin over the life of the project	\$ 9,855 million	
Total Government Income over the life of the project	\$ 2,396 million	
Total Government Revenue over first 10 years operation	\$ 454 million	
Total Government Revenue over next 10 years operation	\$ 1,155 million	

Overall Effective Taxation Rate	24.3% of Operating Margin 15.2% of Ex Mine Sales
Job Creation, Peak	2,290
Job Creation, Lowest Number	430
Job Creation, Steady State	1,500
DCF IRR Basis 100% Equity Finance	13.7%
NPV @ 5% (over the 28 year total project life)	\$1,782 million
NPV @ 10% (over the 28 year total project life)	\$ 447 million

The rate of return for the project reduces by 0.5% while government revenues over the project life are increased by \$37 million, \$133 million in the first ten years of operation and reduced by \$40 million in the next ten years of operation, a significant bias shift to the shorter term.

SECTION VI: GOLD AND COPPER PRICE HI

STORY AND OUTLOOK

A. Copper price history

Average annual copper prices computed by averaging daily prices monthly and the monthly prices annually have shown considerable volatility over the last 15 years or so. Generally, copper prices have tracked world economic activity and have dipped when the Asian economies have gone into recession. Supply/demand balances also impact the price as the industry has a tendency to stock pile rather than cut back during recessions. This slows the rate of price recovery after recessions. Annual average prices and year end prices in US dollars per pound have been as follows:

Year	Annual Average	December Average Price
1989	1.292	1.095
1990	1.207	1.130
1991	1.060	1.004
1992	1.035	1.002
1993	0.868	0.782
1994	1.047	1.354
1995	1.332	1.327
1996	1.041	1.029
1997	1.033	0.799
1998	0.750	0.668
1999	0.713	0.800
2000	0.822	0.839
2001	0.716	0.667
2002	0.707	0.724
2003	0.807	0.998
2004 (2 Months)	1.175	1.251 (February)
16 Year Mean	0.975	0.967

DATA SOURCE???

B. Copper price outlook

Supply/demand forecast show a period of near balance to slight deficit over the next ten years. This is driven by the Asian economies, particularly the growth in the Chinese economy, the main market for copper from Mongolia. Forecasters, as usual, have differing views of the future but the consensus for annual averages over the next decade is for a low of \$0.85 per pound, a mean in the range \$0.90 to \$0.95 per pound and a high in the range \$1.10 to \$1.20 per pound. The short term forecasters are favoring a continuation of the current bull market and are predicting averages for 2004 and 2005 over \$1.25 per pound. The base case price of \$0.90 per pound is considered conservative.

Total copper production in 2003 was about 13,400,000 tons with Chile being the largest producer at 4,450,000 tons. Chile is four times larger than the next largest producer, the USA. Proposed increases in production from Mongolia amount to a maximum of less than

350,000 tons per year and should not significantly impact the market in view of strong Chinese growth. DATA SOURCES ???

C. Gold price history

Gold prices over the same period have seen spectacular volatility with the crash in the price that occurred at the end of 1997 being a particular feature. The main factor in that price dip was uncoordinated selling of large holdings by the Swiss and British governments at a time of recession in the Far Eastern economies. Gold prices went over \$300 per ounce for the first time in August 1979 and, apart from a one month dip in February 1985, stayed there until December 1997. After the crash, the price did not recover on a sustained basis until April 2002. Price history for the last 15 years in \$ per troy ounce has been:

Year	Annual Average	December Average Price
1989	381.44	409.39
1990	383.51	378.16
1991	362.11	361.06
1992	343.82	334.80
1993	359.77	383.35
1994	384.00	379.29
1995	384.17	387.44
1996	387.77	369.00
1997	330.28	288.15
1998	292.84	291.07
1999	278.50	283.41
2000	280.26	271.68
2001	270.37	276.25
2002	309.12	332.43
2003	363.64	407.59
2004 (2 Months)	409.40	404.80 (February)
16 Year Mean	345.69	347.37

DATA SOURCE ???

D. Gold price outlook

Supply/demand issues are not much discussed in gold circles due to the lack of definition of what is supply. The industry is hung up on the concept of what is already out there as being the supply rather than current production being the supply which is satisfying current demand. The majority of forecasters are of the opinion that there is a tight supply scenario emerging for gold driven by demand from the booming Asian economies. The current bull market is forecast to continue for 5 to 10 years and more.

The forecast annual average low for the next decade is \$350 per troy ounce, with a mean in the range of \$375 to \$390 per troy ounce, and a high in the range \$410 to \$430 per troy ounce. Some forecasters are going for higher short term figures with short term forecast as high as \$450 per troy ounce. The base case price of \$385 per troy ounce is considered to be reasonable.

World gold production was about 2,530 tons in 2003, or 81,341,400 troy ounces. Anticipated total Mongolian production would not exceed 50 tons per year (it was 12 tons in 2002 [National Statistical Office of Mongolia]). Such production can be absorbed easily without negative impact on prices.

SECTION VII: FINDINGS AND RECOMMENDATIONS

This section summarizes the findings and recommendations of the assessment.

A. Working groups

The Ministry of Finance has formed a Working Group to examine a particular Stability Agreement proposed by a leading mining company in Mongolia. The composition of the group needs to be revisited to ensure that the most competent available people, with decision making authority, from all concerned departments, agencies and ministries are in the working group and to ensure that all concerned department, agencies and ministries are fully represented at the appropriate level.

B. Approval of stability agreements

The law provides for stability agreements to be approved by the Minister of Finance. This arises from the supposition that stability agreements will be concerned with matters financial only whereas in fact, stability agreements for large projects can cover many other aspects that require wider review and possibly approval at a minimum by a committee of ministers but preferably at Cabinet level.

C. Income taxation considerations

It is clear from the economic modeling carried out in Section VI that taxation is still a major factor in project economics although taxation income is not significant until around the tenth year of operation. General taxation levels have been reduced this year in Mongolia and there is possibly room to reduce them further and also to dispense with the lower bracket altogether. Taxation of low income individuals should be eliminated as a means of stimulating economic activity. The revenue impact on the government is nominal whereas the impact on the individual is substantial. Tax-loss carry-forward for business enterprises needs to be formally built into the Tax Law. Loss carry-forward is only specified at present in the Minerals Law, where three years is allowed. In line with other countries, it is recommended that five years of loss carry-forward be allowed. This looks like a significant concession, but in fact it has little impact due to its interaction with other tax exemptions.

D. VAT treatment

In line with most other countries, Mongolia has an effectively neutral treatment of VAT. VAT is levied but can be reclaimed, albeit through a slow and complex procedure. Consideration needs to be given to the handling of VAT on export-oriented projects to ensure that the right drives and incentives are in the economy to promote value-added activities in Mongolia, such as smelting, refining, power generation and so on.

E. Tax concessions for major capital projects

The legal framework of Mongolia assumes that foreign direct investment is desirable and necessary for economic activity and growth and therefore incorporates a number of concessions aimed at promoting foreign investment. These mostly center on reducing, deferring or eliminating taxation. Since taxation is the main source of government revenue, the GoM needs to give careful consideration to the contribution foreign investment makes to government income. A project that needs preferential taxation treatment to become viable may not be a good project to promote.

F. Mining royalties

Mining royalties are payable from the start of production and are therefore a useful early source of revenue for the government in large capital intensive projects where depreciation protects income from taxes for several years. Royalties are normally deductible for tax calculation purposes; thus, they are, in effect, an advance on taxation. It is clear from the financial analysis carried out in Section VI that government revenues are biased towards the end of the project while the company enjoys the opposite scenario. Higher royalties coupled with lower taxation rates could have a neutral impact on the mining companies (in terms of the “Effective Overall Taxation Rate”) while improving the government’s short term revenues. The financial analysis in Section VI considered raising the royalty payable on copper production to 5% from 2.5 % and on gold production to 10% from 7.5%. Even higher rates could be considered, especially when coupled with lower income tax rates.

G. Mining support industry

Like most developing countries, Mongolia has little mining support industry. Many mining activities are relatively low in technology content and could be carried out by properly equipped local companies. Areas that come to mind would be exploration drilling, haulage of mined rock and supplies and equipment for the mine, and quarrying of minerals required by the mine but not part of its core operation. Most of these activities need at least some specialized and expensive equipment. Consideration needs to be given to how such purchases could be financed. The mining companies could give long-term take or pay-type contracts to local companies to allow finance to be raised. However, a mechanism enabling financing of such activities against secure contracts would have to be established.

H. Separation of activities

Mining projects have a number of requirements that tend to promote an all-inclusive approach. Main concerns are security of tenure, water supplies, power supplies and road and rail infrastructure for bringing in equipment and exporting production. It is important that the government carefully consider the policy aspects of these areas independently of any specific project. If Mongolia adopts an all-inclusive approach to mining, then it is probable that no taxation benefit at all will accrue to the country as all income will be exempted by offset. In mining projects, the concern is that investments in related

infrastructure, such as roads, railways, power generation, social infrastructure, water resource development and so on will all be credited to the mining project as capital expenditure qualifying for taxation exemption thereby pushing the tax horizon so far into the future that the mine will be worked out or exhausted before any taxes are payable.

Related to this issue is a provision in the Economic Entity and Organization Income Tax Law, Article 7.8, that exempts reinvested income from taxation. When this is coupled with a high withholding tax on dividends, it provides strong encouragement for investors to finance new expenditure by reinvestment of income. While encouraging foreign investment, this may also have the less desirable consequence of eliminating tax revenue for the government. A lowering of withholding tax rates coupled with eliminating the reinvested income offset provision might be prudent.

I. Negotiation of stability agreements

A stability agreement is first and foremost a commercial document, the main purpose of which is to secure for the project owner certain parameters that improve the financial performance of the project. The legal aspects concern mainly the compatibility of the proposed stability agreement with existing laws.

The team negotiating the stability agreement should include, or at least be supported by, legal counsel and a specialist in the mining field who is able to model the project in detail so that the government can see what each item of the stability agreement means in terms of economic and financial impact. A balance needs to be achieved between concessions to the project owner to attract his investment and securing an adequate flow of income to the government to promote economic activity as a whole.

J. Specific recommendations

Based on the preceding discussion, specific recommendations are as follows:

1. The Terms of Reference of the Ministry of Finance Working Group need to be broadened so that policy issues concerning large scale capital intensive projects having long-term impacts on the State are considered in general and not just in the context of a specific proposal
2. The composition of the Ministry of Finance Working Group needs to be reviewed to ensure that all concerned ministries, departments and agencies are represented at the appropriate decision-making level
3. Negotiating teams for stability agreements with major mining companies need to include appropriate legal counsel and have technical support from industry experts who can advise on the specific impacts, financial, technical and environmental, of items proposed for inclusion in a stability agreement
4. The Ministry of Finance Working Group needs to consider the handling of VAT in relation to large capital intensive projects. Current practice, which effectively removes VAT considerations from such projects, concurrently removes an

important driver towards secondary value-adding industries such as smelting and refining

5. The Ministry of Finance Working Group needs to reconsider the full range of financial incentives for businesses and in particular foreign businesses engaged in natural resource development with the objective of ensuring that the state gets a reasonable share of revenues in the short as well as long term and that natural resource development contributes to the economy as a whole and is not subsidized in any way. Current arrangements eliminate profit taxes for the first 8-10 years of a project and attract reduced rates for 3-5 years thereafter. In the case of mining projects that means that the State income is predominantly from royalties for a very long period (or about half the life of a typical mine). Royalty rates need to be reconsidered in the context of a review of overall tax rates and investment incentives
6. The Ministry of Finance Working Group (encompassing a wide range of interests) needs to consider broad policy issues concerning infrastructure development when the need for such infrastructure is triggered by a major capital intensive project. A major mining project will need roads, railways, water supply, power and social infrastructure. It will impact the environment for 30-40 years both physically and visually. How infrastructure needs and environmental impact mitigation measures are planned, handled (in the context of incentives) and financed are key policy considerations. The main concern is to ensure that incentives aimed at attracting productive foreign investment do not have the undesirable side effect of reducing State income from taxes for an indefinite period
7. If a stability agreement encompasses issues other than financial arrangements, a formal consent of the relevant GoM agencies should be required (such as the ministries responsible for infrastructure, water resources, environment, minerals development, energy and foreign investment and trade)
8. To ensure that the state income from mining and other natural resource developments helps achieve the policy objectives of poverty reduction and economic growth, it should be used to lower taxes on low-income individuals and on businesses. Consequently, it is recommended that the tax on the lowest personal incomes be eliminated and that second bracket profit tax on businesses be lowered from 30% to 25% or less, with the first 15% bracket being eliminated
9. A government working group needs to be established under the ministry responsible for industrial development to consider the best way of facilitating the establishment of a fund to finance emergent mining service companies. Major mining companies considering investment in Mongolia have indicated that long-term contracts could be offered to local companies and these could be used as collateral for loans or leasing arrangements if such instruments were available.

K. Recommended revisions to laws

Specific revisions to some laws are recommended either for improved clarity or to redress the balance more in favor of the government:

1. *Minerals Law Article 18.8*. Most mines have an economic life of around thirty years. A mining license term of sixty years, with an option to renew for another forty years, is too generous. It is recommended that the time periods be reduced to forty years and twenty years respectively
2. *Minerals Law Article 20.1 and Foreign Investment Law Articles 19.1 and 19.3*. These articles need to be made consistent as to the amount that qualifies an investor for a 15-year stability agreement (Minerals Law specifies \$20 million; the Foreign Investment Law, \$10 million). Also, the hurdle rates qualifying a project for a stability agreement should be raised to at least \$20 million for a 10-year agreement and to at least \$50 million for a 15-year agreement to avoid a proliferation of stability agreements for relatively modest investment commitments
3. *Minerals Law Articles 24.2 and 24.3* provides for the rates payable for exploration and mining license fees, respectively. The rates for both are low and as part of the general policy review on incentives suggested under recommendation # 5, above, increases should be considered in the context of the associated royalty rates as provided for in Minerals Law Article 38.3
4. *The General Taxation Law Article 2.4, the Minerals Law Article 20.3 and the Foreign Investment Law Article 19.1* all provide for stability agreements to be approved by the Minister of Finance. The implementation of recommendation # 7, above, would require these articles to be appropriately revised
5. *Economic Entity and Organization Tax Law, Article 7 in general, and Articles 7.5.2 and 7.6 in particular*. Article 7 defines which enterprises will enjoy certain taxation exemptions. Article 7.5.2 refers to ‘metallurgy’ and grants generous exemptions whereas Article 7.6 grants less generous exemptions to a business that exports more than 50% of its production. Large scale mining projects could fall under both definitions. The definition of ‘engineering constructions’ under Article 7.5.1 should also be clarified. A general policy review suggested in recommendation # 7, above, should examine these provisions and clarify them as appropriate
6. *Minerals Law Article 63.4* specifies that mining companies can carry forward tax losses for up to 3 years. The general Tax Law, the Law on Accounting and the Economic Entity and Organization Tax Law make no reference to tax-loss carry-forward. The concept of tax-loss carry-forward should be added to all three cited laws and as part of the implementation of recommendation # 5 consideration should be given to increasing the period of tax-loss carry-forward to five years. This is in line with recommendations made by Arthur Mann in a report produced in May 2000 under the Economic Policy Support Project.

ANNEX A: IN-COUNTRY MEETINGS AND PRESENTATIONS

ANNEX A: IN COUNTRY MEETINGS AND PRESENTATIONS

A. Observations

The following is a brief summary of impressions gained during the meetings and presentations.

Two themes were evident in the various meetings. First, the quality of people in the government is generally higher than those in other regional countries. Many of them were well informed and had a good grasp of the issues involved in mining and mining stability agreements. Second, there is an apparent insufficient co-ordination and co-operation between the various ministries. The Ministry of Finance has formed a working group to consider a specific draft stability agreement, but some key departments and agencies claim not to be represented on that working group, even though many individuals within those departments and agencies understand the issues and hold strong views. The Ministry says they are represented. The poor co-ordination has led to a disparity of views as to the urgency of the issue of mining stability agreements. The range of views extends from the Ministry of Infrastructure's view that a draft agreement has already been approved through to Parliament's view that something that could impact the next 20 governments and 5 generations needs to be carefully thought out. The Ministry of Finance seems to be in the middle with a sense of urgency but not immediate crisis.

The two presentations made, "Mining Sector Competitiveness" and "Issues in Mining Sector Development" were wide ranging and well received. The question and answer sessions were productive and several of the questions raised good points.

A short meeting with two members of Parliament demonstrated that the issues of mining sector development and the possible impact on the long term future of the country are being considered carefully and thoroughly throughout the government.

An informal meeting with leaders in the mining industry in Mongolia resulted in some relevant comments. Principal among these was that an increase in Royalty rates (as proposed during one of the presentations) would not be well received by the mining companies, and that job opportunities in mining projects are significant. Mining leaders also said that they would be willing to give long term contracts for supply of materials to local companies to allow them to raise the necessary finance to establish themselves in the mining support sector.

B. Meetings held

Saturday 28th February, 2004

13.00: EPRC, Janusz Szyrmer. Detailed discussions on assignment, presentations and plan of action.

Monday 1st March, 2004

- 10.00: Ministry of Finance, Ch. Khurelbaatar, State Secretary (Absent) and D. Baasankhuu, Head of Fiscal Policy Department. Briefed the Ministry on the assignment and exchanged views and ideas on the issues. The Ministry has formed a working group to consider the Ivanhoe Mongolia Mines Inc. draft stability agreement.
- 11.30: Ministry of Industry and Trade, D. Ganbaatar, Director, Department of Geology and Mineral Resources. Briefed the Department on the assignment and exchanged views and ideas on the issues. Ganbaatar explained the problem that Mongolia has with information on geological surveys. All the best material is believed to be under Russian control in Russia. The department is in the midst of contracting for new geological mapping on a scale of 1:50,000.
- 14.30: General Department of National Taxation, L. Zorig, Director General. Briefed the Department on the assignment and exchanged views and ideas on the issues. Surprisingly, the Department says it is not represented on the Ministry of Finance Working Group, but was well informed on the issues.
- 15.30: Mineral Resources Authority of Mongolia, D. Jargalsaikhan, Chairman. Briefed the Authority on the assignment and exchanged views and ideas on the issues. Surprisingly, the Authority says it is not represented on the Ministry of Finance Working Group, but Jargalsaikhan was informed on the issues and held strong and well thought out views.
- 17.00: Ministry of Infrastructure, Ts. Tsengel, State Secretary. Briefed the Ministry on the assignment and exchanged views and ideas on the issues. The ministry was heavily involved in the Ivanhoe project and informed us that “the Ivanhoe Stability Agreement has been approved (at least by the Ministry of Infrastructure)”.

Tuesday 2nd March, 2004

- 10.00: Ministry of the Environment, B. Bayasgalan, Deputy Head, Department of Sustainable Development and Environment. Briefed the Ministry on the assignment and exchanged views and ideas on the issues. Surprisingly, the Ministry says it is not represented on the Ministry of Finance Working Group. The State Secretary indicated that he was under constant pressure to yield on environmental matters in the interests of investment promotion. Procedures for carrying out environmental impact assessments were sound with appropriate checks and balances in place. Enforcing laws on mining site restoration has been a problem, particularly since the upsurge in small scale prospecting and mining. Any information required was freely offered.
- 11.30: Foreign Investment and Foreign Trade Agency (FIFTA), S. Otgonbat, Vice Chairman. Briefed the Agency on the assignment and exchanged views and ideas on the issues. Surprisingly, the Agency says it is not represented on the Ministry of Finance Working Group, but was informed on the issues. In the view of S.

Otgonbat, enough consultations have been held. The issue now is to move forward with the investments.

14.00: Presentation to the Ministry of Finance Working Group on the Ivanhoe Stability Agreement. The working group seems to consist of about 10 enthusiastic young persons mostly from the Ministry. Specific introductions were not made. The presentation made “Mining Sector Competitiveness” was wide ranging and well received and was followed by a productive question and answer session. A copy of the presentation slides is provided with this report in Annex 3.

Wednesday 3rd March, 2004

15.00: USAID, Jonathan Addleton, Head of Mission, USAID, D. Sukhgerel, CTO, US Embassy, Michael Layne. Briefed project management on progress to date and discussed issues concerning the open presentation to be made later in the week.

Thursday 4th March, 2004

10.00 – Informal discussions with the EPRC team on various background issues.

Friday 5th March, 2004

11.00: Open presentation, “Issues in Mining Sector Development”. Attended by representatives of several ministries, three newspapers, Ivanhoe Mines Mongolia Inc., EPRC and USAID. The presentation was well received and was followed by a productive question and answer session. A copy of the presentation slides is provided with this report in Annex 4.

14.00: State Great Hural of Mongolia (Parliament), Ts. Damiran and N. Enkhbold, members. Briefed the parliamentarians on the assignment and main conclusions and exchanged views and ideas on the issues. The parliamentarians were very well informed on the issues and were concerned as to the long term effect on the country. They were of the view that the mining projects should not be rushed in the name of foreign investment without considering the long term issues first.

17.00: Informal meeting with Paul Chare, Operations Manager, Ivanhoe Mines Mongolia. Exchanged the usual small talk on common acquaintances and experiences in the industry. Mr. Chare was a very pragmatic and professionally sounding manager with very clear project focus. He made little comment on the presentations other than to suggest that an increase in mining royalty would not be appreciated by the mining companies. He also suggested that Ivanhoe would be happy to give long term contracts to local companies who were willing to provide services, the theory being that with contracts they could borrow the necessary funds to establish themselves.

Saturday 6th March, 2004

13.00: Capital Bank, D. Jargalsaikhan, CEO. D. Jargalsaikhan was the Chairman of FIFTA during the last government and is not related to the Jargalsaikhan at the Mineral Resources Authority. He was interested in pursuing the kind of projects

that might be open to locals in the Mining Industry Support sector. Capital Bank could provide financing of around \$2-4 million and planned to work with other banks to develop the Mining Industry Support sector.

Sunday 7th March, 2004

08.00: Nomin Holding Company, Sh. Enkhbayar, Executive Director. A chance meeting at the airport while waiting for a delayed flight. Nomin Holding Company is heavily involved in real estate and retail operations and owns the State Department Store. Nomin are significant investors in the country and Erdene was interested in the smaller scale mining support activities as a possible diversification for the company.

ANNEX B: RELEVANT LAWS

ANNEX B: RELEVANT LAWS

1. Minerals Law, June 5, 1997, amended December 27, 2001
2. Subsoil Law, November 29, 1989, as amended (various minor amendments)
3. Land Law, June 6, 2002
4. Allocation of Land to Mongolian Citizens for Ownership Law, Draft 2002
5. Environmental Protection Law, March 30, 1995, amended January 22, 1998
6. Protection from Toxic Chemicals Law (this new law is yet to be translated into English)
7. Special Permit Law (this new law is yet to be translated into English)
8. Water Law, April 13, 1995 (major amendment imminent)
9. Energy Law, enacted 2002. Yet to be amended
10. Customs Law, May 16, 1996, amended April 4, 2001, November 11, 2001 and April 19, 2002
11. Customs Tariff Law, May 25, 1996, amended June 3, 1999, January 27, 2000, November 11, 2000, and April 26, 2001
12. Excise Tax Law, January 21, 1993, amended December 3, 1993, December 12, 1994, June 2, 1995, April 17 and 18, 1997, August 28, 1998, January 22, 1999, January 6, 2000, January 27, 2000, February 3, 2000 and November 17, 2000.
13. Foreign Investment Law, July 1, 1993, amended November 30, 2001 and January 3, 2002
14. Labor Law, May 14, 1999
15. General Taxation Law, January 1, 1993, amended June 2, 1995, April 18, 1996, January 31, 1997, January 8, 1998, August 28, 1998, and November 16, 2001
16. Economic Entity and Organization Income Tax Law, December 14, 1992, amended November 23, 1993, April 17, 1997, October 31, 1997, December 5, 1997, January 9, 1998, January 15, 1998, January 22, 1999, May 12, 1999, February 3, 2000, November 17, 2000 and November 9 2001. (An amendment in 2004 reduced the top band of taxation from 40% to 30%).
17. Gasoline and Diesel Fuel Tax Law, June 6, 1995, amended November 17, 2000 and November 9, 2001
18. Personal Income Tax Law, April 17, 1997, amended June 25, 1997 and June 29, 2001
19. Value Added Tax Law, July 7, 1998, amended August 28, 1998, November 6, 1998, May 12, 1999, January 28, 2000, November 17, 2000, June 29, 2001, November 16, 2001 and December 27, 2001
20. Resolution 46, Model Stability Agreement, March 24, 2001
21. Resolution 140, Extension of Import Duty Exemptions, June 27, 2001

All the above laws except 6, 7 and 9 are available in English on the FIFTA web site at <http://www.investmongolia.com/legislation.htm>.

**ANNEX C: SLIDES OF PUBLIC PRESENTATION ON MINING
SECTOR COMPETITIVENESS**

ANNEX D: FINANCIAL MODEL, BASE CASE

**ANNEX E: FINANCIAL MODEL, IMPROVED TAXATION
EXEMPTIONS**

**ANNEX F: FINANCIAL MODEL, IMPACT OF ROYALTY RATE
CHANGES**

**ANNEX G: FINANCIAL MODEL, IMPACT OF ROYALTY RATE
CHANGES OFFSET BY LOWER TAXES**

**ANNEX H: PRODUCTION SHARING AGREEMENTS IN THE MINING
SECTOR IN THE PHILLIPINES**
