regulated by the amended Decree Law No. 600 of 1974, known as the *'Foreign Investment Statute'* and the Compendium of Foreign Exchange Rules, which is administered by the Central Bank of Chile. Foreign investors may own one hundred per cent of their business and they have access to the foreign currency market. However, transactions involving foreign exchange must be conducted through the Foreign Investment Committee and profits may not be repatriated in the first year of the initial investment. As far as finance for mining is concerned, the Foreign Investment Committee restricts the debt portion of the debt to equity ratio to seventy (70) per cent for mining investments (Lagos, 1997).

Foreign investors have the option of entering into a Foreign Investment Contract with the Chilean state, which provides for a fixed (all-inclusive) overall income tax rate of 42 per cent for a period of ten years. This period can be extended for up to twenty years, if the investment is more than US $ 50 million. The foreign investor's rights and guarantees are contained in a contract between the investor and the state of Chile. The contract will remain valid even if new legislation with different rules is enacted. The Chilean tax policy is friendlier to business income when profits are re-invested. Such income is subject to a 15 per cent first category tax. When profits are withdrawn, distributed or remitted abroad, it is subject to an additional 35 per cent tax. However, the taxpayer is entitled to a tax credit equivalent to the first category tax. This means that the effective rate of taxation is 35 per cent. Other applicable taxes include a value-added tax (VAT) of eighteen per cent, real estate taxes and other duty charges. Import duties are charged at an average of eleven per cent. Various capital goods imported by foreign investors are exempt from VAT, provided the items are listed with the Ministry of Economy. There is no specific tax dealing with capital gains but under certain conditions capital gains arising from the sale of shares, mining property, debentures and certain other assets, are subject to the first category tax. There is no further taxation on the distribution or remittance abroad of after tax profits. There are also no local or provincial income taxes in Chile. Exploration and development expenditures may be amortised up to six and five years respectively. When an operating mine is purchased, the purchasing costs are allowed as a deduction for the purpose of calculating taxable income. Generally, depreciation is determined pursuant to the straight-line method over the useful service life of the assets. The average is five years which results in a rate of twenty per cent.

If warranted by production conditions, a shorter period of depreciation can be granted in certain cases. In addition, newly acquired or imported assets are entitled to an accelerated depreciation method, which uses the straight-line basis but reduces the period to one-third of the normal useful life. Tax losses may be carried forward indefinitely (Valenzuela, 1995).

Although local investment is more or less subject to the same rules as foreign investment, artisan miners have a totally different tax regime. These miners are effectively paying between one and four per cent of the mineral sales price (Lagos, 1997).

5.1.2 Mineral rights administration

The 1982 Mining Law No. 18 097 regulates mining properties and concessions. The state, as the owner of mineral rights, owns all mining properties (Chile, 1991). However, it has only administrative authority and no decision-making powers as far as mine management is concerned.

Mining rights, once granted, are virtually inalienable under the constitution and are freely transferable and mortgageable (Mining Journal, 1995). The mining rights system provides for concession licences to be guaranteed for an indefinite period subject to the payment of the prescribed annual licence fees. Clay and construction materials are excluded form the mining concession regime (Lagos, 1997).

5.1.3 Mineral royalty policy

No mineral royalties are currently payable in Chile. However, provision has been made for a tax on natural resources under the general taxation regime. Very little is known about this provision and it could well be the artisan miners tax, that was mentioned earlier. Several publications explicitly state that there is no mineral royalty at all, except for the International Mining Taxation Database which mentions a royalty of between two and three per cent of net smelter return (Soja, 1995). The researcher suspects that the royalty referred to is the natural resource tax and that it is only applicable to artisanal mining.

Special legal provisions regulate the exploitation of oil and atomic materials and the President of Chile decides on an *ad hoc* basis whether contractors in these areas are subject to a royalty payment or not (Valenzuela, 1995).

Table 5.2 Minerals administration in Chile

	EXPLORATION CONCESSION	MINING CONCESSION
Explanation	**Prospecting for minerals**	**Exploitation of minerals**
Size of area	Maximum 5000 ha	Maximum 10 ha per claim
Fees payable	Prescribed	Prescribed
Period	2 years	Unlimited
Renewal	Yes, 2 years. Subject to certain relinquishment requirements	Perpetuity
Rights and obligations	Negotiate prospecting fee with land owners	Only exploration concession holders can apply for a mining concession. Environmental impact study required.
Work commitments		

5.2 ARGENTINA

Table 5.3 Summary of Argentina's investment environment

DESCRIPTION	RATE / REMARKS
Inflation (1996)	0,2%
Exchange rate (December 1996)	1,4 Peso = $1US
Nominal treasury (risk-free) rate(1996)	6%
Interest rate (1996)	11%
Foreign ownership allowed	100%
Compulsory government share	0%
Foreign exchange controls	None
Tax stability agreements	Yes, for 30 years
Corporate tax rate (national)	33%
Corporate tax on oil and gas	33 - 55%
Minimum corporate tax	0%
Additional profits tax	0%
Tax holidays (years)	0
Tax treaties	Yes
Deduct exploration/development costs	Yes, 100%
Capital/depletion allowance	0%
Ring fencing	None
Forward carry of losses	Yes, for 5 years(indexed) see par 5.2.1
Backward carry of losses	Not permitted
Depreciation	Accelerated/straight line, see par. 5.2.1
Capital gains tax	Included in corporate tax
Tax on assets	0,5% (mining exempt)
Value added tax	18%, Exports exempt, see par. 5.2.1
Fuel tax	Yes
Repatriation/dividend/withholding tax	0%
Import duties	Average 15 %(mining equipment exempt)
Export duties	0%
Payroll tax	Yes
Land tax	Provincial, typical rate = 1% of value
Provincial taxes	Mineral royalty and land tax, par. 5.2.3
Municipal taxes	Services
Mineral royalty	0 - 3% of revenue, see par 5.2.3
Oil/gas royalty	12% of revenue
Exploration fee	0
Surface rent	Included in land tax, see par. 5.2.3
Mineral ownership	State (Provincial, see par 5.2.2)
Environmental provision allowed	5% of operating costs
Allowable deductions for calculating taxable income: Feasibility study, pre-production exploration, development, capital equipment, royalties, operating costs, loan interest, value added tax, post-production exploration, withholding taxes, import duties, stamp taxes and payroll taxes.	

5.2.1 Economic and taxation policies

Argentina is a federal state and the taxing power resides with the Central government.

Revenue is shared between the central and provincial governments in terms of a stipulated provision. Argentina, similar to many other countries, revised its mining rules recently. The country prides itself on its modern and technically sophisticated (but complicated) legislation, which is frequently used as a model for other developing countries. All exchange controls were lifted in 1989 and all foreign exchange transactions are channelled through banks, authorised financial institutions or exchange houses. A foreign company may own one hundred per cent of its business. Foreign investors may remit profits and dividends without paying any withholding or other income taxes thereon.

The corporate tax rate (including capital gains) is thirty three per cent. A significant feature of the new laws is the guarantee to potential investors that the taxation rules will be kept stable for a period of 30 years from the date on which the feasibility study is submitted. In terms of the Mining Investment Regulation Law No. 24 196 [5.1], tax stability means no increase in the total tax charge for a mining operation and it includes municipal, provincial and national taxes. Other taxes include a tax on assets, value-added tax (eighteen per cent), taxes on transactions not in Argentina's currency units, fuel tax, excise taxes, customs duties, stamp duties and provincial taxes. Imports other than for mining are taxed at an average rate of fifteen per cent (Mining Journal, 1997). The provincial tax (or royalty) is levied on gross revenue while municipal taxes are minor charges for services to taxpayers. The mining industry is exempt from Provincial Gross Turnover taxes. In terms of the Mining Development Law, the mining industry enjoys exemption from value-added tax in diminishing percentages over fifteen years. Value-added tax payments on goods or services purchased which can be connected to export products (as is the case with mining) are also refundable.

5.1 Legislation applicable to mining investment are the Mining Investment Regulations (Law No. 24 196), Mining Reorganisation Law (Law No. 24 224) and the Federal Mining Agreement Law (Law No. 24 228). The Mining Investment Regulation Law promotes mining through several tax incentives.

Allowance is made for the 100 per cent deduction of of exploration and mine development costs in order to determine the taxable income for a mining project (Mining Journal, 1994). A special facility exists for amortising investment in infrastructure and machinery, and there are no restrictions or duties payable on imports of mining equipment. Depreciation for tax purposes is normally determined using either the accelerated or straight-line methods. Capital investments in civil works, roads, water systems, power lines, housing, health and other infrastructure development have a special accelerated regime. It comprises a sixty per cent write-off in the first year, twenty per cent in the second and the remaining twenty per cent in the third year. Machinery, equipment, vehicles and facilities not included in the accelerated definition, are depreciated on a three year straight-line basis (Albarracin, 1997). Other assets are depreciated at rates varying with the asset classification, and based on their probable useful lives.

The Argentinean system has many incentives to reduce the impact of the total tax burden on mining companies. For example, net-operating losses may be carried forward for a period of five years (loss carry backs are not permitted) and the tax regime is neutral with regard to inflation. The reason being that the corporate tax law allows for an index system that deals with inflationary adjustments (World Bank, 1990). The general tax rules normally apply to the exploitation of oil and gas resources, but provision is made for a special income tax rate of up to 55 per cent.

5.2.2 Mineral rights administration

Mineral rights administration is regulated by the Argentine Mining Code No. 22 259 of August 1980. The Mining Code distinguishes between first-ranked substances (e.g. gold, silver, platinum, mercury, copper, iron, etc.), second-ranked substances (e.g. metallic sands, salt, peat, etc.) and third-ranked substances (i.e. construction materials). Rights to first- and second-ranked substances are reserved to the state (national or provincial) while the ownership of industrial minerals is vested in the owner of the surface property (Mining Secretary, 1993). Oil and gas reserves belong to the state and the rights to prospect, drill and exploit these fields are reserved to the National Oil Authority. The state may grant prospecting rights to private concerns but the discovery of oil or gas does not automatically entitle them to any further operating rights.

Private property of mines is determined by legal concession in terms of section 10 of the Mining Code. Should a prospector find a mineral deposit, the granting of a mining concession is guaranteed by the Code. The holder of the concession must then comply with three conditions, that is payment of an annual fee, minimum capital spending requirements and optimal exploitation criteria. Failure to meet any of these requirements, results in the concession being forfeited and the rights reverting back to the state (Coopers & Lybrand, 1992).

5.2.3 Mineral royalty policy

Provision is made for the payment of an annual royalty. The amount is determined by the national government, but levied by the provinces. It is subject to a maximum of three per cent of the unprocessed value (or gross revenue) of the mineral extracted (Mining Journal, 1994). Primary activities such as mining were, up to 1993, subject to a one per cent royalty (Mining Secretary, 1993), but on 1 January 1994 exemption from gross revenue taxes was granted for the primary production, mining, manufacturing and construction industries (Bellani & Macek, 1995). This resolution effectively scrapped all royalties on mineral extraction. However, the Province of Catamarca, which hosts the Bajo de la Alumbrera copper-gold project, is presently the scene of a bitter royalty dispute. The provincial government did not ratify the exemption granted by the federal government and is still demanding its three per cent royalty (Mining Journal, 1997).

In the case of oil and gas resources, a twelve per cent royalty on the well head value is applicable. This royalty may be reduced, if it results in the operation not being profitable (Coopers & Lybrand, 1992).

Apart from the prescribed standard lease fees, an annual surface (or canon) tax is payable to the provinces as a type of surface rent. The rates are fixed periodically by national law. On discovery of a mineral, the discoverer is automatically exempt from the tax for a period of three years, whereafter payment will continue under a mining concession (Albarracin, 1997).

Table 5.4 Minerals administration in Argentina

	EXPLORATION PERMIT	MINING CONCESSION
Explanation	To reveal mineral substance. Three types 1. Exploration/ prospecting 2. Continuous mining 3. Undermining	Exploitation of minerals
Size of area	One unit = 500 ha 20 units max. per permit [5.2]	System of claims. Size depends on mineral type, shape and dimension of resource
Fees payable	Prescribed	Prescribed
Period	Unit 1 = 150 days Units above 1=50 days/unit Max. 5 years(for large areas)	20 Years Maximum [5.3] 30 (large areas)
Renewal	Yes, maximum 15 months subject to certain relinquishment criteria.	Yes, perpetuity
Rights and obligations	Consent of surface owner required first. Discovery information disclosed to the state.	Comply with safety and environmental laws. Mine owner responsible for property damages.
Work commitments	Minimum spending requirements	Capital spending requirement is 500 times the annual surface tax for first 5 years. Large-scale mines must work according to a programme

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5.2 Mining companies may hold concessions totalling up to 200 000 ha per province (Mining Journal, 1996). Another publication cited the maximum as 100 000 ha (Albarracin, 1997).

5.3 The total duration is 36 years, encompassing five years for exploration, one year for evaluation and 30 years for production (Mining Journal, 1996).

5.3 INDONESIA

Table 5.5 Summary of Indonesia's investment environment

DESCRIPTION	RATE / REMARKS
Inflation (1996)	8,0%
Exchange rate (1996)	2342,3 Rupiah per US$1
Nominal treasury (risk-free) rate(1996)	14,0%
Interest rate (1996)	19,2%
Foreign ownership	80 - 100%, see par. 5.3.1
Compulsory government share	0%, claim units, see par 5.3.2
Foreign exchange controls	None
Tax stability agreements	30 years (COW), see par. 5.3.1
Corporate tax rate (national)	30 - 35%, see par. 5.3.1
Corporate tax on oil and gas	Oil = 85% & gas = 65%
Minimum corporate tax	0,15 % of turnover
Additional profits tax	0%
Tax holidays (years)	0
Tax treaties	Yes
Deduct exploration/development costs	100% and.declining balance, see par. 5.3.1
Capital/depletion allowance	0%
Ring fencing	Yes
Forward carry of losses	Yes, 8 years, see par. 5.3.1
Backward carry of losses	Not permitted
Depreciation	25% declining balance & 20% straight line
Capital gains tax	Gains included in taxable income
Tax on assets	0,01 - 0,05% of capital invested
Value added/sales tax	10%, mining exports exempt
Fuel tax	None
Repatriation/dividend/withholding tax	7,5 - 15%
Import duties	20%, mining exempt, see par. 5.3.1
Export duties	0 - 10%, see par. 5.3.1
Payroll tax	None
Land tax	1 - 5%, foreign investors exempt
Provincial taxes	Share in royalty, see par. 5.3.3
Municipal taxes	Share in royalty, see par. 5.3.3
Mineral royalty	1-13,5%, negotiable, see par 5.3.2/3
Oil/gas royalty	Depends on COW or PSA
Exploration fee	US $ 0,10 - 0,35/ha/an.
Surface rent	US $ 1,50 - 3,00/ha/an.
Mineral ownership	State(national and provincial), see 5.3.2
Compulsory environmental provision	
Allowable deductions for calculating taxable income: Feasibility study, pre-production exploration, development, capital equipment, royalties and fees based on land area, operating costs, loan interest, withholding taxes, duty charges, VAT, local development costs, and stamp taxes.	

5.3.1 Economic and taxation policies

In terms of the National Development Programme in which investment is encouraged,

deregulation policies led to the enactment of the Foreign Investment Law (1967) and the Mining Law with its Contract of Work (COW) system. The COW is tailor-made legislation relating to a particular project, covering all aspects of mineral investment. COWs take precedence over any existing land rights, supersede all other government regulations and are immune to subsequent changes in legislation (Thomas, 1995) for a period of thirty years.
To obtain a COW, a foreign company must form a joint venture with an Indonesian partner. Foreign investors may start new projects with one hundred per cent ownership if capital investment exceed fifty million US dollars. However, within five years of production, five per cent of ownership must be in Indonesian hands. Foreign ownership must be reduced to at least eighty per cent within twenty years of production. A further constraint is that foreigners may not purchase land in Indonesia but can obtain rights to develop properties. There are no restrictions on international movement of capital and finance and repatriation of profits is not a problem. In terms of the Foreign Investment Law, foreign companies are free to market their commodities anywhere in the world.

The corporate tax rate is 35 per cent. However, a lower rate (30 per cent) is normally applicable to mining operations in remote areas. It is important to note that capital gains on assets are included in the definition for taxable income. A summary of Indonesian taxes appears in table 5.5. All enterprises must pay a ten per cent export tax for unprocessed materials, five per cent for semi-processed and processed exports are exempt from this tax. A withholding tax is levied at twenty per cent on patents and interest. Shareholder dividends are subject to either a 7,5 per cent (foreign investors) or fifteen per cent (other shareholders) withholding tax. Foreign investors are also exempt from all import duties and the five per cent land tax. The exemption from the land tax is because foreigners are not allowed to own Indonesian property. Apart from the education tax of US$1200 per year, which is a social tax, mines are expected to provide basic infrastructure, schooling and medical facilities for employees and their families. These expenses are deductible for income tax purposes.

Exploration expenses qualify for immediate write-off and provision is made for a twenty five per cent declining balance type of depreciation for development expenses and other capital equipment purchases. Losses incurred in the first five years of production may be carried over to the following eight succeeding years. Foreign exchange losses incurred during the financing of projects also qualify as a deduction for income tax purposes.

Petroleum companies pay 85 per cent tax and are obliged to make 25 per cent of production available at cost to the domestic market.

5.3.2 Mineral rights administration

Article 33 of the 1945 Constitution of Indonesia reserves all natural resources, including minerals, to the state. The Mining Law of 1967 and Ministerial Decrees regulate mining activities. The Mining Law provides for the appointment of contractors to carry out mining operations. These contracts give their holders all rights to search for, mine and process minerals.

The policy for hard minerals, as described in table 5.6, has developed gradually over the years as a result of several generations of COW agreements. Tin mining falls under the control of the *'State Tin Enterprise'* who has the exclusive rights to mine, process and market the metal. Coal mining takes place under Coal Co-operation Agreements. These contracts are a combination of the COW for hard minerals and the oil Production Sharing Agreement (PSA). The Indonesian State Coal Company is responsible for the management of coal operations. Mining companies are obliged to give 13,5 per cent of their total mine production to the state as a royalty payment. The management of industrial minerals, such as kaolin, quartz, dolomite, phosphate rock, gypsum and other construction materials are the responsibility of the provincial governments, who have their own permitting system (Mahmud, 1994). A state corporation (Pertamina) has the exclusive right to produce petroleum products. However, foreign enterprises may explore and exploit these products by entering into a COW or PSA with Pertamina.

5.3.3 Mineral royalty policy

Royalties are shared between the three government authorities with a substantial proportion going to provincial (49 per cent) and local governments (21 per cent) (Garnaut and Clunies Ross, 1983). Mineral royalties are only payable if its amount exceeds the export tax.

Mineral royalties rates are negotiable and depend on the type of mineral and its price. The rate is normally fixed between one and two per cent of revenue but may be higher in times of inflated prices. Otto(1997) summarised the Indonesian royalty rates as follows:

Gold:	US$225-235/kg	*(Estimated 1,9% of revenue)*
Coal:	US$0,50-0,55/ton	*(Estimated 1,3% of revenue)*
Copper:	US$0,45-0,55/ton	*(Estimated 2,4% of revenue)*
Iron:	US$2,70-2,90/ton	*(Estimated 10% of revenue)*
Nickel:	US$62-78/ton	*(Estimated 1,1% of revenue)*
Zinc:	US$12-12,50/ton	*(Estimated 5,2% of revenue)*
Diamonds:	5% of revenue	
Limestone:	US$0,14-0,16/ton	*(Estimated 1% of revenue)*

State production units in terms of a PSA, as is the case with coal (13,5 per cent of production) and petroleum products, are generally regarded as a form of royalty and must be treated as such in a cash-flow analysis.

Table 5.6 Minerals administration in Indonesia

	CONTRACT OF WORK/COAL CO-OPERATION CONTRACT
Explanation	Searching for, prospecting and exploitation of minerals.
Size of area	As stipulated in the contract. Certain relinquish requirements exist at the end of each stage.
Fees payable	Prescribed
Period	General survey stage (1 - 2 years), prospecting may start; Exploration stage (1-3 years),explore in reduced area; Feasibility stage (1 - 3 years); Construction stage (maximum 3 years), mining may start; Operation stage (maximum 30 years).
Renewal	At end of operation stage, renegotiate for a further 30 years; Coal contracts can be extended for two ten-year periods.
Rights and obligations	Reporting requirements; Adhere to contract requirements.
Work commitments	Minimum spending requirements for every stage as per programme

5.4 PERU

Table 5.7 Summary of Peru's investment environment

DESCRIPTION	RATE / REMARKS
Inflation (1996)	11.6%
Exchange rate (1996)	2,453 Nuevos Soles = US$1million
Nominal treasury(risk-free) rate (1996)	18,2%
Interest rate (1996)	26,1%
Foreign ownership allowed	100%
Compulsory government share	0%
Foreign exchange controls	None, 1% tax on dealings
Tax stability agreements	Yes, 15 years, see par 5.4.1
Corporate tax rate (national)	30%
Corporate tax on oil and gas	Administered by PERUPETRO
Minimum corporate tax	0.5% of total net worth, see par 5.4.1
Additional profits tax	0%
Tax holiday (years)	0
Tax treaties	Yes
Deduct exploration/development costs	Yes, 100% over life of mine (indexed)
Capital/depletion allowance	0%
Ring fencing	None
Forward carry of losses	Yes for 4 years, see par 5.4.1
Backward carry of losses	Not permitted
Depreciation	20% Straight line, indexed, par 5.4.1
Capital gains tax	Gains subject to 30% corporate tax
Tax on assets	See minimum corporate tax
Value added tax	16+2%,see par 5.4.1, exports exempt
Fuel tax	Yes
Repatriation/dividend/withholding tax	Av. 10%, mining dividends exempt
Import duties	Av. 15%, mining exempt, see par 5.4.1
Export duties	0%
Payroll tax	Yes
Land tax	US$2/ha/year, see par 5.4.3
Provincial taxes	None
Municipal taxes	2% already included in VAT
Mineral royalty	0%
Oil/gas royalty	Administered by PERUPETRO
Exploration fee	Not applicable
Surface rent/land tax	Negotiate with surface owner
Mineral ownership	State (national)
Environmental allowable deduction	1% of sales revenue
Allowable deductions for calculating taxable income: Feasibility study, pre-production exploration, development, capital equipment, royalties and land taxes, operating costs, loan interest, asset tax, post-production exploration, withholding taxes, import duties and payroll taxes.	

5.4.1 Economic and taxation policies

Old government policies have been replaced by a modern and dynamic economic model, which includes the liberalisation of foreign exchange transactions and privatisation of state Mining Enterprises. At present, there are no foreign exchange controls in effect but a one per cent tax is applicable on all foreign exchange dealings. A company may own one hundred per cent of its business and there is no discrimination between local and foreign investors (Mining Journal, 1997).

With a corporate tax rate of 30 per cent (Peru, 1994), Peru is among the most favoured countries from an investment point of view. However, a minimum tax of half a per cent of the company's assets at adjusted value, is payable. New machinery and equipment are not subject to the minimum income tax and the tax does not apply until after the first two years of mining production (Wexler & De-Bernardis, 1997). As with Argentina, provision is made for stabilisation agreements for mining ventures to ensure guaranteed favourable tax rates and many other benefits for a period of up to 15 years (Mining Journal, 1996). However, a minimum investment of US \$ 2 million is required before a tax stability contract can be considered. Apart from normal income taxes, a foreign exchange tax, import duties (average fifteen per cent), excise taxes on luxury goods, other levies and a value-added tax (VAT) of 16 per cent are applicable to mining. A further two per cent is charged as a municipal levy. Exports are exempt from VAT while goods imported for export production, such as mining, are exempt from import duties. There are no other local or provincial income taxes in Peru. Capital gains and branch profits are treated as company income and are taxed accordingly. Dividends are not subject to a withholding tax. Remittances, i.e. interest, royalties and technical assistance, to non-residents are subject to a withholding tax of up to 30 per cent (average 10 per cent). Investments made in public service infrastructure and contributions to health services are fully tax deductible (Coopers and Lybrand, 1991).

The tax policy provides for straight-line depreciation on capital expenditure depending on the useful life of the asset. The normal depreciation rate for mining equipment and vehicles is 20 per cent. The costs of acquiring mining rights, as well as exploration and initial development expenses, may be amortised over the estimated life of the mineral reserve. All costs qualifying for depreciation may be adjusted for inflation. Inter-company charges are deductible for income tax purposes provided they are entered into at arm's length. Losses may be carried forward for four consecutive years but are not allowed to be carried backwards. The tax authorities on request can extend the loss carry over period of four years.

5.4.2 Mineral rights administration

Article 17 of the Mining Law [5.4] states that all mineral resources belong to the state and that the ownership thereof is inalienable. In terms of the Mining Law, activities such as sampling and prospecting may be conducted freely anywhere within Peruvian territory and no concession is required for such activities. However, these activities may not be performed within existing concession areas, cultivated land, land set aside for public use, urban areas, protected areas, and land reserved for indigenous communities. One must obtain permission from the relevant authorities before prospecting operations can start in these restricted areas. All exploitation is done through the concession system summarised in table 5.8. A mining concession is a real property right over a defined area, separate and distinct from the surface estate.

5.4.3 Mineral royalty policy

No royalties are charged in Peru which, considering its mineral abundance, makes the country extremely attractive for potential investors. There is a *'mining rate'* or a land tax payable by mining companies. Article 29 of the Mining Act states that the amount will be the equivalent of US $ 2 per hectare per year.

5.4 Legislative Decree No. 708 of 1991 is the Investment Promotion Law for the Mining Sector of Peru. Supreme Decree No. 018 of 1992 Complements Decree 708 and deals with the legal proceedings to obtain mining rights. Other laws applicable to mining are Legislative Decree 662 of 1991, Supreme Decree 014 of 1992 and Decree 109 of 1981 (Gurmendi, 1994).

Table 5.8 Minerals administration in Peru

	METAL OR NON-METAL MINING CONCESSION
Explanation	Property right which grants its holder the right to explore and exploit minerals
Size of area	According to grid system: Land 100 - 1 000 ha Sea 100 - 10 000 ha
Fees payable	Prescribed
Period	Unlimited
Renewal	Perpetuity
Rights and obligations	Medium to large-scale producers may enter into (tax) stabilisation agreements; Free use of surface of uncultivated lands; Environmental impact study required.
Work commitments	According to investment programme; Must present a technical-economic feasibility study on an ongoing basis; Submit annual report on production statistics.

5.5 MEXICO

Table 5.9 Summary of Mexico's investment environment

DESCRIPTION	RATE / REMARKS
Inflation (1996)	34,4%
Exchange rate (1996)	7,5994 New pesos = US$1
Nominal treasury (risk-free) rate(1996)	30,7%
Interest rate (1996)	30,7%
Foreign ownership	Up to 100%,see par 5.1
Compulsory government share	0%,Locals have joint venture option
Foreign exchange controls	None
Tax stability agreements	None
Corporate tax rate (national)	34%
Corporate tax on oil and gas	Not available for private sector
Minimum corporate tax	1,8% of net worth, see par. 5.1
Additional profits tax	10% Profit sharing, see par. 5.1
Tax holidays (years)	0
Tax treaties	Yes
Deduct exploration/development costs	Yes, 100% over ten years, see par 5.1
Capital/depletion allowance	0%
Ring fencing	None
Forward carry of losses	Yes, 10 years, indexed
Backward carry of losses	Not permitted
Depreciation	25% straight line
Capital gains tax	0%
Tax on assets	See minimum corporate tax
Value added/sales tax	15%, mining exempt
Fuel tax	Yes
Repatriation/dividend/withholding tax	0%
Import duties	Average 11%, mining exempt
Export duties	0%
Payroll tax	Yes
Land tax	0,19% (Municipal income)
Provincial taxes	Possible
Municipal taxes	See land tax
Mineral royalty	0 - 3%, see par. 5.3
Oil/gas royalty	Not available for private sector
Exploration fee	Negotiate with government
Surface rent	Negotiate with owner/government
Mineral ownership	State (national)
Compulsory environmental provision	In process of drafting rules
Allowable deductions for calculating taxable income: Feasibility study, pre-production exploration, development, capital equipment, research and development, royalties and fees based on land area, property tax, operating costs, loan interest, post-production exploration, withholding taxes, import duties and payroll taxes.	

5.5.1 Economic and taxation policies

The Mexican investment environment has enjoyed significant reforms recently. In 1988, Mexico initiated a series of changes in mining laws and regulations to relieve the private sector from unfair state competition and controls. It continued with the passing of the Reglamentary Law of Article 27 of the Constitution on Mining Matters (Mining Law of 1990). The Mining Law was updated in 1992 in a move to make mining in Mexico more investor-friendly. These changes led to the elimination of the restraining 49 to 51 per cent limit on foreign participation (Lopez, 1994) and the privatisation of mines historically owned by the state. Although the 1990 Mining Law was a drastic change from the 1975 Mining Law, it still provided for complex finance and ownership agreements where domestic companies and foreign investors were subject to different rules. In terms of the 1990 law, domestic producers had the option of entering into a joint venture agreement with the government once the exploration and development stages had been completed. For its contribution of the mineral rights to the joint venture, the government demanded a consideration of between 2,5 to three per cent of the gross proceeds obtained from the mineral sales. The 1990 Mining Act also prohibited foreign investors from owning one hundred per cent of any business. Foreigners could own 49 per cent of Mexican operations with the remaining fifty one per cent being reserved to Mexicans through a complex series of what was termed A shares or trust options. Those foreign companies engaged in exploration, exploitation or refining were limited to a thirty four per cent stake in ownership. However, up to one hundred per cent was allowed for six-year commitments in exploration investments and twenty-year commitments in mining investments. The 1993 Foreign Investment Law partly resolved ownership problems to the extent that foreign investors may now own 100 per cent of a Mexican mining corporation but still need permission from the National Foreign Investment Commission in cases where foreign interests exceed 49 per cent (White, 1994). There are no restrictions on the repatriation of capital.

The present corporate income tax rate is thirty four per cent. An annual tax of 1,8 per cent of a corporation's net worth (or business assets) serves as a minimum corporate tax. Net worth means the average value of fixed and financial assets less average liabilities during a taxation year (Hull et al, 1995). Mining operations are exempt from the asset tax for the first three years of production. Companies showing asset losses may offset these losses against income taxes paid over the past three years or they may carry them over to the following year. In addition to this federal tax, the provincial and municipal governments may require the payment of local taxes. These take the form of property or land taxes. Other significant taxes include a retail sales tax of 15 per cent, import duties, payroll taxes, a profit sharing tax and payments related to interest, royalties for technical assistance, patents, etc. All exports, including minerals are zero-rated for value-added tax (fifteen per cent) purposes. Another benefit for mining companies is that import tariffs are not applicable to mining equipment, spare parts and chemicals required for processing. Employers must share ten per cent of the companies excess profits with their employees (compulsory employee benefit scheme). This *'tax'* is not deductible for income tax purposes.

The Mexican tax regime allows for the deduction of exploration and development expenses at a ten per cent straight-line depreciation basis. Mobile plant and other capital items qualify for twenty five per cent straight-line depreciation. Operating losses can be carried forward for ten years. These losses are allowed to be adjusted for inflation.

5.5.2 Mineral rights administration

The Mexican law follows the Spanish legal tradition, which distinguishes between ownership of mineral rights and ownership of the surface. The Mexican Constitution reserves all mineral rights to the state which, in turn, grants concessions to explore or extract the mineral resources. Mineral rights ownership cannot be transferred (White, 1994).

The 1992 Mining Law introduced a number of important policy directives and actions providing incentives and quarantees. The Act allows for exploration and exploitation concessions over all national mineral reserves, excluding salt, construction materials, radioactive minerals and petroleum products. This provision is a major improvement on the 1990 Mining Act, which reserved almost all minerals for state mining enterprises. The holder of an exploration concession has a clearly defined right to an exploitation concession subject to the condition that all the legal obligations have been adhered to. Furthermore, vast tracks of potentially productive land, previously held by the government or by inactive private individuals, were opened to exploration and mining.

A significant feature of Mexican mineral rights administration procedures is the provision for speedy decisions by government officials during the processing of licence applications. If the sixty days maximum processing period expires, a no response from the mining authorities is considered to be an approval of the application. To speed up the process, the state issues a temporary permit for sixty days. During this period, the applicant must submit a detailed mining or exploration proposal. Once government approves the proposal, a permanent concession is granted. In another step to minimise delays, all information relevant to mining and exploration applications, the necessary application forms and administrative procedures appear in a comprehensive manual [5.5] that is available from the Mexican government on request.

5.5.3 Mineral royalty policy

As mentioned already, local companies who entered into joint venture agreements with the government must pay a consideration of between 2,5 to three per cent of the sales value of the minerals. Owners of privatised corporations have to pay a *'finder's fee'* of between one and three per cent of the sales value on the minerals (or smelter returns) to the government as part of the agreement. Other mining enterprises do not need to pay any production taxes because mineral royalties were abolished in 1991.

5.5 Handbook of Services to the Public on Mining Matters

Table 5.10 Minerals administration in Mexico

	PROSPECTING CONCESSION	MINING CONCESSION
Explanation	Searching and prospecting for minerals	Exploitation of minerals
Size of area	No restriction	No restriction
Fees payable	Fees are increased annually to encourage relinquishment of unutilised areas	Prescribed
Period	Max. 6 years	Max. 50 years
Renewal	Not permitted	Once, for 50 years
Rights and obligations	Comprehensive reporting requirements; Environmental impact study.	Exploration concession holders have first option; Comprehensive reporting requirements; Environmental impact study.
Work commitments	Minimum investment requirements according to approved programme.	Minimum work and investment requirements according to approved programme.

5.6 GHANA

Table 5.11 Summary of Ghana's investment environment

DESCRIPTION	RATE / REMARKS
Inflation (1996)	34%
Exchange rate (1996)	1637,23 Cedis = US$1
Nominal treasury (risk-free) rate(1996)	41,6%
Interest rate (1996)	45%
Foreign ownership	Up to 90%
Compulsory government share	10% Free equity, see par. 5.6.1
Foreign exchange controls	None, see par. 5.6.1
Tax stability agreements	None
Corporate tax rate (national)	35%
Corporate tax on oil and gas	50%
Minimum corporate tax	None
Additional profits tax	25%, threshold = 35%, see par. 5..1
Tax holidays (years)	0
Tax treaties	Yes
Deduct exploration/development costs	100% Declining balance, see par. 5.6.1
Capital/depletion allowance	5%
Ring fencing	None
Forward carry of losses	Yes, indefinitely
Backward carry of losses	Not permitted
Depreciation	Declining balance, see par. 5.6.1
Capital gains tax	25%, see par. 5.6.1
Tax on assets	0%
Value added/sales tax	0%
Fuel tax	None
Repatriation/dividend/withholding tax	10%, Mining exempt
Import duties	Mining exempt
Export duties	0%
Payroll tax	Yes
Land tax	0%
Provincial taxes	None
Municipal taxes	Share in royalties, see par. 5.6.3
Mineral royalty	3-12%, see par. 5.6.3
Oil/gas royalty	Not available
Exploration fee	US$15000 + US$0,012/ha/an.
Surface rent	US$30000 + US$0,029/ha/an.
Mineral ownership	State (national)
Compulsory environmental provision	None
Allowable deductions for calculating taxable income: Feasibility study, pre-production exploration, development, capital equipment, post-production exploration, royalties and fees based on land area, operating costs, loan interest, duty charges, sales tax and local development costs.	

5.6.1 Economic and taxation policies

The Ghanaian government launched its Economic Recovery Programme in 1983, which led to the enactment of the Mining Code (Minerals and Mining Law of 1986). This programme opened the door for privatising state assets such as the Ashanti gold mine. Other legislation affecting mining and exploration include the Additional Profits Tax Law (1985), the Minerals Commission Law (1986) and the Minerals Royalty Regulations (1987). The government demands a ten per cent free stake in ownership of all mining operations. It also has the option to purchase a further twenty per cent under terms mutually agreed to by both parties. Capital mobility is not a problem, provided that the Bank of Ghana exchanges the profits into foreign currency. Mining export enterprises are entitled to keep 25 per cent of their foreign exchange earnings in a foreign account to pay for debt, dividends, external salaries and other foreign expenses.

The corporate tax rate for holders of mining leases is 35 per cent. Other taxes include a capital gains tax, withholding taxes, stamp duties and other levies. A summary of taxes appears in table 5.11. Mining companies are exempt from customs duty on all plant, machinery, equipment and accessories imported for use in a mining operation. All mines must pay additional profits tax. This tax is payable in addition to the corporate income tax. It is calculated at the rate of 25 per cent on the carry-forward cash balance [5.6] existing on the last day of each year of assessment. The tax is not payable when all excess profits are reinvested in the mine or elsewhere in Ghana. However, one should note that the level of the threshold rate of return (35 per cent) is such that not even the most profitable operations have come close to paying the tax up to now (Tsikata, 1997). There are no local or provincial taxes in Ghana.

Depreciation of mining capital assets (which definition includes reconnaissance-, prospecting- and development costs) is allowed at a rate of 75 per cent write-off in the first year of assessment and thereafter 50 per cent annually on a declining-balance basis (Wexler, 1995). Business losses may also be carried forward in the cash-flow calculation, provided that such losses are less than the allowable capital allowance for that year. This investment allowance is equal to five per cent of a company's overall expenditure in the year when the investment is made.

The Petroleum Law (1984) controls all petroleum-related activities. Income from mineral oil operations, in terms of the Petroleum Income Tax Law of 1987, is subject to an income tax rate of fifty per cent.

Small-scale and artisanal mining activities have their own set of rules as contained in the Small-Scale Gold Mining Law of 1989.

5.6.2 Mineral rights administration

In terms of the Minerals and Mining Law of 1986, the state is the owner of all minerals found in Ghana. The Ministry of Lands and Natural Resources oversees all aspects of the Ghanaian mineral economy and is the grantor of mineral exploration and mining leases. The policy provides for the negotiation of special conditions in order to *"...work out a package suited to the specific investment situation..."* (Sawyerr, 1987). These negotiations are with the Minerals Commission of Ghana, which is the government body responsible for regulating all aspects of mining. Negotiable aspects include royalty rates, deferment of royalty payments, work programmes, the threshold rate of additional profit tax and retention amounts. The system of rights is summarised in table 5.12.

The streamlined administrative procedure allows for a maximum processing time of six months for all applications. Ordinary applications are generally processed within three months (Mining Journal 1995).

5.6 Carry forward balance = [(Taxable income + capital allowance + unredeemed capex) - (income tax + annual capex + interest + working capital)].

5.6.3 Mineral royalty policy

The royalty policy provides for a sliding-scale type of royalty that starts at three per cent for low grade ore with a maximum of twelve per cent for high-grade ore. These percentages are based on the gross value of the minerals. The final royalty rate is subject to negotiations with the government and is determined by a mining company's Operating Ratio (OR). This ratio is based on the quotient obtained by dividing the operating margin (i.e. working profit) by the total value of minerals extracted during the relevant fiscal year (Wexler, 1995). The principles of the royalty determination is set out in the Minerals (Royalties) Regulations of 1987, LI 1349. It works as follows (Otto,1997):

Operating ratio (%)	Rate / remarks
0-30	3% (minimum)
31-70	3 + 0,225(OR), maximum=12%
71-100	12% (maximum)

The Minerals Development Fund was created to return part of government income from mining to the communities directly affected by such activities. Twenty per cent of collected mineral royalties are paid into the fund which is shared between the local government authority, the land-owning authority and other communities which are affected adversely by the mining activity.

Table 5.12 Minerals administration in Ghana

	RECONNAISSANCE LICENCE	PROSPECTING LICENCE	MINING LEASE
Explanation	Exploration by geo-physical, geochemical, photo-geological or remote sensing techniques.	Search for and determine extent and economic value of minerals.	Extraction of minerals for commercial purposes.
Size of area	Negotiable	Up to 150 km^2	Up to 50 km^2
Period (years)	1	3	30
Renewal	Yes	Yes, for 2 years at a time subject to 50% relinquishment.	Yes
Rights and obligations	No physical work permitted.	Start work within 3 months; Reveal information.	Restricted leases for construction minerals; Environmental impact study.
Work commitments	According to negotiated programme.	According to negotiated programme.	According to mining programme.

5.7 SOUTH AFRICA

Table 5.13 Summary of South Africa's investment environment

DESCRIPTION	RATE / REMARKS
Inflation (1996)	7,3%
Exchange rate (1996)	SA R4,2994 = US$1
Nominal treasury (risk-free) rate(1996)	15,0%
Interest rate (1996)	19,5%
Foreign ownership	100%
Compulsory government share	0%
Foreign exchange controls	Limited controls
Tax stability agreements	None
Corporate tax rate (national)	35 - 40%, see par. 5.7.1
Corporate tax on oil and gas	61%, see par. 5.7.1
Minimum corporate tax	0%
Additional profits tax	0%
Tax holidays (years)	0
Tax treaties	Yes
Deduct exploration/development costs	Yes, 100%. see par. 5.7.1 for ring fence
Capital/depletion allowance	0%, see par. 5.7.1 for gold mines
Ring fencing	Yes
Forward carry of losses	Yes, indefinitely
Backward carry of losses	Not permitted
Depreciation	20-100% Straight line, see par. 5.7.1
Capital gains tax	0%
Tax on assets	0%
Value added/sales tax	14%, exports exempt, see par. 5.7.1
Fuel tax	Yes
Repatriation/dividend/withholding tax	12,5% STC, see par. 5.7.1
Import duties	1%
Export duties	0%
Payroll tax	Yes, regional services levy
Land tax	0%
Provincial taxes	0%
Municipal taxes	0%
Mineral royalty	State-owned = 2,5 - 5%, see par. 5.7.3
Oil/gas royalty	Negotiable
Exploration fee	Average US$2,33/ha/annum
Surface rent	Negotiable, state land = market rates
Mineral ownership	Mixed system, see par. 5.7.2
Compulsory environmental provision	Yes, as determined during EMP stage
Allowable deductions for calculating taxable income: Feasibility study, pre-production exploration, development, capital equipment, post-production expenses in mine boundaries, royalties and fees based on land area, operating costs, loan interest, duty charges, VAT, stamp taxes and payroll taxes.	

5.7.1 Economic and taxation policy

Most foreign exchange controls have been abolished since the election of the new government in 1994. Remaining restrictions include local borrowing restrictions when more than fifty per cent of the shareholding is controlled by non-residents and Reserve Bank approval for certain foreign transactions.

The South African tax regime is regulated by the Income Tax Act No. 58 of 1962, as amended. Different rates of taxation are applicable to the different sectors of the mining industry. Gold and uranium mines are taxed according to a sliding-scale formula where the rate of taxation is determined by the degree of profitability. Although not designed as such, the formula has some features of a mineral resource rent tax because it attempts to capture excess profits in times of high gold prices. The formula takes the form of:

$$Y = a - (ab/X)$$

where: Y = tax rate expressed as a percentage of taxable income
a = marginal tax rate (constant)
b = tax-free revenue portion (constant which is currently five)
X = profit to revenue ratio

Gold mines have the option of choosing between one of the following two formulae:

$Y = 51 - (255/X)$ or, alternatively,

$Y = 43 - (215/X) + 12{,}5\%$ Secondary Tax on Companies (STC)

To date, mines were (understandably) reluctant to opt for the second option because of the additional tax on distributed profits [5.7] which is not deductible when calculating the taxable income. STC was originally meant to be an instrument to motivate the corporate sector to re-invest profits. The tax is generally not favoured by the mining industry because mining companies tend to distribute most of their profits to shareholders. Instead of re-investing profits into new ventures, the traditional financing approach is to seek fresh equity (Daniel, 1994).

The gold mining tax formula is designed in such a way that government shares in the wealth generated during periods of high profitability, but collects less tax during difficult times when profit to revenue ratios are low. In the event of the ratio falling below five per cent, the mine will operate in the '*tax-free tunnel*' which allows the mine to remain in production because it can operate at a lower pay limit. The gold sliding-scale tax formula type of taxation has proved itself over the years as a reliable and fair method of collecting mining taxes in South Africa. All other minerals, except for natural oil mines, are taxed at a rate of 35 per cent. However, local branches of foreign companies are subject to a forty per cent tax rate. The 12,5 per cent secondary tax on companies also applies to these mines. In terms of section 5(2A)(a) of the Income Tax Act, the tax rate applicable to a natural oil mine is the normal rate of tax applicable to companies (35 per cent), plus another 40 per cent of the taxable income remaining after deducting the first 35 per cent. The overall (effective) rate, excluding secondary tax on companies, is therefore:

$$Y = [35\% + (100 - 35\%) * (40\%)] = 61\%$$

It appears that the government realises that the above rate is excessive, because section 5(2A)(b) of the Act provides for a reduction thereof, if it is considered necessary by both Ministers of Finance and Minerals and Energy.

5.7 In times of low gold prices, many gold mines are operating in (or close to) the '*tax tunnel*' (b in the formula) and have therefore zero or very low effective tax rates. Shareholders expect regular dividend payouts, and mines are therefore obliged to pay dividends regularly. Although both options may result in approximately the same effective tax rate, the secondary tax on companies will still be applicable to mines that are on that scheme. It is therefore not in the best interest of gold mines to take the second option.