

Where New Zealand fits internationally

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Abstract

New Zealand depends on foreign investment for economic development. This fact is important to the development of New Zealand's mineral resources. For this foreign investment to happen there must be incentives to attract the investment. While prospectivity is the dominant parameter considered by investors it is not a variable that can be changed. Only the perception of New Zealand's prospectivity can be enhanced. Other parameters likely to be considered are sovereign risk, red tape, green tape, land access, civil unrest, land claims, social risk, labour relations, infrastructure and natural disasters. Given the political will, regulators can vary some of these parameters.

Where New Zealand fits internationally can be measured by investors' perceptions of these parameters. Following on from these perceptions New Zealand can be seen to have advantages in some areas and be disadvantaged in others. How to deal with the disadvantages to give investors confidence is not easy in the New Zealand environment where the development of mineral resources plays a small part in an economy dominated by agriculture. Added to this is the current global state of the minerals industry which offers even more of a challenge to attract foreign investment to develop New Zealand's mineral resources.

Introduction

This paper attempts to examine where New Zealand fits internationally and is done in a global environment in which there is no reliable source that reports the sum of money spent globally on exploration and mining. In particular the industrial minerals sector is not well reported or analysed; yet it may well present the largest mineral sector growth potential. Coal, like industrial minerals, also lacks reliable worldwide investment data. Coal, however, does have a recognised increasing international focus on its viability as an energy source given the concerns about global warming and the possible implementation of the Kyoto protocols. Countering that focus is that New Zealand's coal production is increasingly of coking coal for export. In contrast to industrial minerals and coal, the base and precious metals sectors do have global investment data. Records show increased exploration expenditure in the 1980s through to the early and mid-1990s but then a dramatic decline in the late 1990s. New Zealand also saw an increase in exploration that directly led to the Golden Cross, Martha Hill and Macraes Flat gold mines being developed as well as several large alluvial gold mines.

In 1992 Otto undertook a United Nations sponsored survey to establish better information on what factors international mining companies take into account in their investment decision making process. Table 1 represents the ranked criteria that companies rated as "very important."

Given these priorities, I have attempted to compare New Zealand globally in two distinct areas. They are:

1. prospectivity; and
2. operating environment.

Geological prospectivity

The driving force behind a country's ability to attract foreign exploration investment is geology. Superb geology can overcome many other investment obstacles. Virtually every survey that asks private sector mining companies about what makes a country competitive ranks geology at the top of the list. While almost all countries believe they possess a rich "treasure chest" of undiscovered minerals, and New Zealand is no exception, the reality is that some countries have a higher proven mineral potential than other countries.

Exploration managers are attracted by good geology and it is in a country's interest to make known just how good that geology is. The expectation is that this is done through the generation of basic geological maps and the collection and dissemination of geological information gathered by exploration companies and reported to government. The more information that is available in a useful format, the easier, and more risk-free, it is for companies to move forward with exploration target identification.

- two exploration highly publicised milestones that fuelled investment and imagination in the minerals industry prior to 1997 were BreX and Voisey's Bay;
- current preference for investment in dot.com as opposed to junior exploration companies for whom it is now very difficult to raise capital;
- green-fields exploration is increasingly being undertaken by large mining companies looking for large deposits; and
- current exploration is concentrating on known deposits.

Given this global background it is not hard to infer that exploration, in New Zealand too, has fallen on hard times. It has! While all the above factors apply and have compounded to impact heavily on exploration in New Zealand, it is not possible to attribute figures to expenditure or activities as the ability to collect data has only recently been sanctioned under the new reporting regulations. Most is on hearsay.

Using production as a tool for measuring prospectivity gives a much more healthy New Zealand perspective. Production

has increased, across the whole minerals industry, at 1.5 million tonnes per year for the last five years to 37.5 million tonnes in 1999. In terms of production, between 1998 and 1999 New Zealand saw a 3% increase in industrial mineral production, a 6% increase in coal production and a 9% increase in the production of metallic minerals. If the potential of the new Spring Creek coal mine and the proposed developments of Pike River coal field and Reefton gold mine are considered, New Zealand can be considered highly prospective.

As a comparison with Australia and Canada, with respect to gold production per km², New Zealand is very prospective and equal to that of Australia with a production rate of 1.25 oz per km² (Figure 1).

The volatility of the New Zealand graph is a function of New Zealand's small number of large-scale producers.

In essence New Zealand is proven to be prospective even if not perceived to be so. The more quality information that is made available the more that perception will be improved.

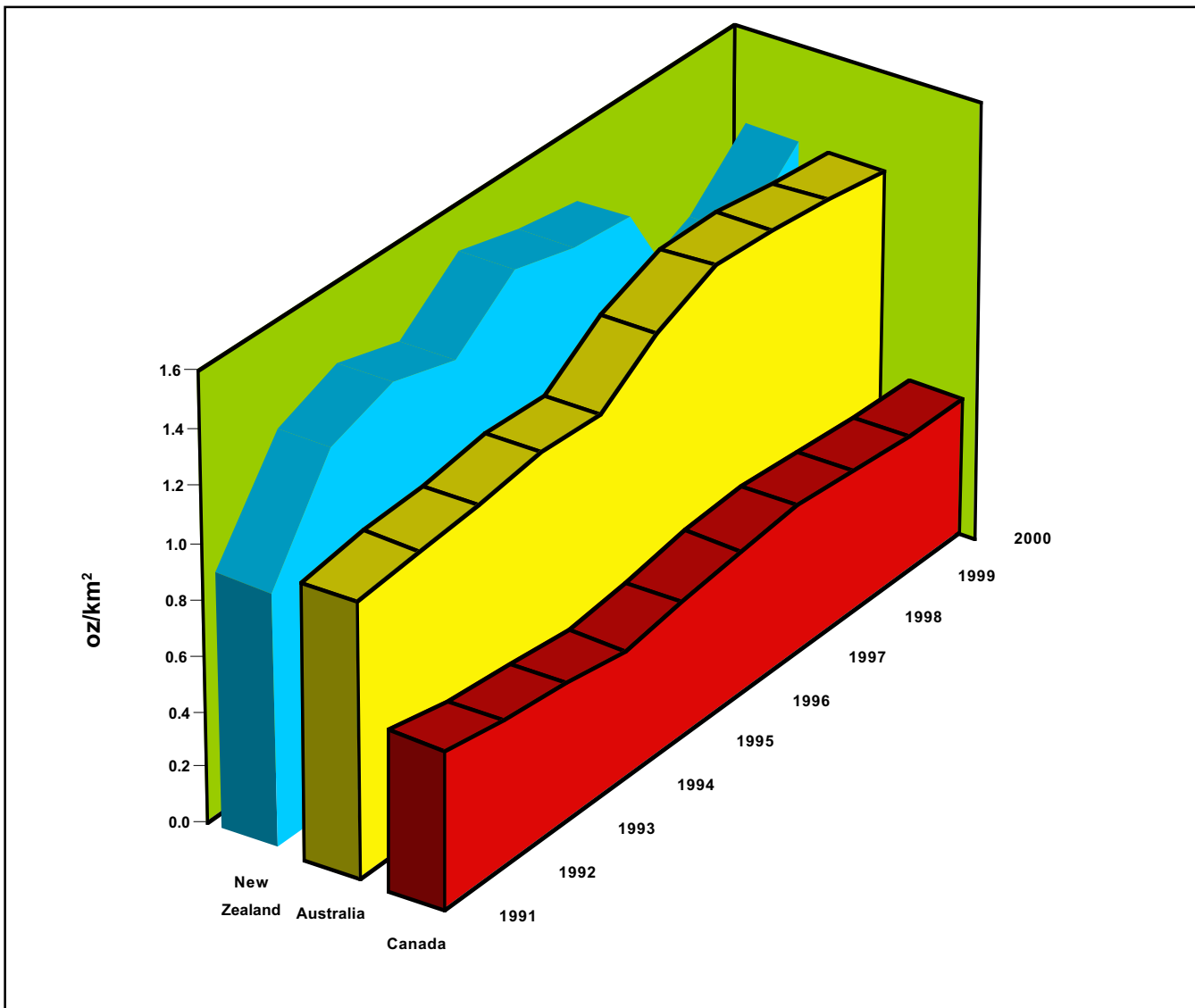


Figure 1. Gold production in relation to country size.

This is critical given that prospectivity ranks as the first consideration on an exploration company's checklist when making an investment decision. This is even more important given New Zealand's geographical isolation.

Sherwood (1999) found in his Competitiveness with Australian States Report that the range of metals for which New Zealand is realistically prospective is far smaller than any Australian State. New Zealand has high prospectivity for gold, silver as a by-product from gold mining, platinum group metals, titanium, iron and coal. Development of titanium, iron ore and coal mining is market-limited rather than resource limited, essentially leaving gold and PGM as strong exploration targets, especially in the current commodity market. With the exception of the very large Western Australia gold industry, New Zealand is competitive with any Australian state for these metals. Non-metallics make an important contribution to New Zealand mineral production and there is strong potential for further development.

Operating environment

World Risk Survey – 1999

The Australian Mining Monthly (AMM) completed an annual world risk survey based on the perceptions of Australian miners and explorers of each country. AIG Global Trade & Political Risk Insurance conducted the survey. Unfortunately New Zealand was not included in this survey. The investment risk categories surveyed were *sovereign risk, land access, green tape, land claims, red tape, social risk, infrastructure, civil unrest, natural disasters and labour relations*. Weightings are assigned to each category and totals compiled to give each country an overall ranking. Sovereign risk is the most heavily weighted category with infrastructure and natural disasters the least (Table 2).

The overall results of the 1999 survey ranked Canada, Australia, Ghana and Chile respectively as the top four

Category	Weighting
Sovereign Risk	5
Civil Unrest	4
Land Access	4
Green Tape	3
Labour Relations	3
Land Claims	3
Red Tape	3
Social Risk	3
Infrastructure	2
Natural Disasters	2

Table 2. Weighting of investment risk categories by Australian Mining Monthly.

countries, while PNG, India, Peru and Russia, the last four in the survey ranking being 17th, 18th, 19th and 20th. Stephen Bell, Deputy Editor of AMM, noted that the final weighted totals had increased over the past three years indicating that the world is a riskier place for mining investment. Compared to Canada's top score of 11.4 in 1999, in the 1997 survey Chile scored best with 7.1. Hence, while Canada is ranked top it may well only be the best of a bad bunch! Also of note is the comparison with previous surveys in which the Latin American countries scored highly but which are now spread through the table and in particular with Peru moving from 5th to 19th position. This perception of Peru is a surprise given that Canadian investment houses are recommending and undertaking significant amounts of investment in Peru.

Countries that score poorly in the risk survey may well be the focus of investment capital based on higher prospectivity - as presumably with Peru. PricewaterhouseCoopers have found that Australian miners and explorers are now spending 40% of their exploration budgets offshore and when analysed further, showed that the exploration budgets offshore are almost totally devoted to greenfield exploration while the Australian portion is spent mostly on existing mines. Consequently while Australia scores well in the risk survey, prospectivity in other countries is more attractive.

As New Zealand was not included in the survey, Australian miners and explorers were contacted and requested to score New Zealand on the same criteria used in the original survey. Of the 80 miners and explorers contacted 30 responded. Using the mean scores New Zealand ranks 6th between Chile and Argentina with a weighted total of 13.1.

In the individual categories New Zealand has scored extremely well in sovereign risk, social risk, infrastructure, civil unrest and labour relations (Table 3). The risk associated with natural disasters was a factor but, surprisingly, land access is perceived to be the same as for other countries. This perception of land access is unexpected as Crown Minerals continually receives complaints from the industry concerning difficulty over trying to obtain land access and in particular with land managed by the Crown.

Noted is that the perception of risk associated with green tape and red tape is marked high, to the extent that the perception of risk associated with green tape in New Zealand is, along with the United States, the highest of any country. This may be a consequence of the Resource Management Act. The Resource Management Act (RMA) has suffered heavy criticism because of its implementation as opposed to its intention as effects based legislation. The RMA is New Zealand's mechanism for addressing the internationally quoted triple bottom line of social contribution, economic growth and environmental responsibility. The triple bottom line incorporates such issues as the often referred to *social licence to operate* and *sustainable development*. Rio Algom's CEO, Patrick James, found that communities, no matter where in the world, have the same expectations of mining companies when it comes to the triple bottom line. Moreover, according to Stephen Bell,

companies that do not factor in the triple bottom line into their planning may well find it breaks a project. A good test of where a company is at on this issue is whether they report on the triple bottom line in their annual report.

Of interest on the issue of land claims New Zealand is perceived to have a high land claim risk although not as high as that associated with Australia and native title. Claims made under the Treaty of Waitangi involve only grievances between the Crown and Maori and do not affect the granting of mineral permits. This insulates private investments and presents less risk than was perhaps perceived.

Given there is a new Government in New Zealand since the survey was undertaken there may be changed perception brought about because of new government policies. While the new Government has stated that a review of the Crown Minerals Act and Resource Management Act is not high on its agenda, there may be increased nervousness resulting from its ACC policy initiatives and the repealing of the Employment

Contracts Act. Countering this however, the government does have an agenda of forming partnerships, liaising with industry and regional development as key initiatives. At worst the perception of sovereign risk could increase and New Zealand would move to 9th rank in the survey.

Legislation

New Zealand's legislation specific to minerals and coal is the Crown Minerals Act. The Act is very narrow in its focus in that it only covers allocation of mineral rights and provisions for royalties. There is no other specific legislation. The minerals industry is considered to be just another industry in New Zealand that must comply with other general pieces of legislation.

There are several aspects of this legislative structure that are of interest. On the positive side mining is not singled out for special treatment and is subject to the same legislation as any other industry within New Zealand's industrial spectrum (perhaps reflecting New Zealand's egalitarian culture?). On

		INVESTMENT RISK CATEGORIES										
		Sovereign Risk	Land Access	Green Tape	Land Claims	Red Tape	Social Risk	Infrastructure	Civil Unrest	Natural Disasters	Labour Relations	WEIGHTED TOTALS
RISK WEIGHTING		5	4	3	3	3	3	2	4	2	3	
(1: unimportant, 5 most important)												
RANK												
1	Canada	1	3	3	3	2	2	1	0	1	2	11.4
2	Australia	1	3	3	4	2	2	1	0	1	2	12.0
3	Ghana-	2	2	1	1	2	2	3	2	2	2	12.0
4	United States	1	3	4	2	3	2	1	0	1	2	12.0
5	Chile	2	2	2	1.5	2	2	2	2	2	2	12.5
6	New Zealand	1	3	4	3	3	2	1	0	2	2	13.1
7	Argentina	2	2	2	2	3	2	2	2	1.5	2	13.2
8	Philippines	2	2	2	2	2	2	3	2	2.5	2	13.4
9	Mexico	2	2	2	2	3	2	3	2	2	2	13.8
10	Tanzania	3	2	2	2	3	2	3	2	2	2	14.8
11	Brazil	3	2	2	2	3	3	3	2	2.1	2	15.4
12	Zimbabwe	3	2	2	2	3	2	3	3	2	2	15.6
13	South Africa	2.5	3	2	2	3	3	2	3	2	2	16.1
14	Malaysia	3	3	2	2	3	3	3	3	2	2	17.0
15	China	4	3	1	1	4	3	4	2	2.5	2	17.2
16	Vietnam	4	3	2	2	3	3	4	2	2	2	17.6
17	Indonesia	3	3	2	2	3	3	3	4	2.5	2	18.0
18	PNG	3	3	2	3	3	3	3	3	3	2	18.0
19	India	3	3	2	2	4	3	3	3	2	3	18.2
20	Peru	4	3	2	3	2	3	4	3.5	3	2	19.2
21	Russia	4	3.5	2	2	4	3	4	3	2	3	20.0

Table 3. New Zealand compared with Australian Mining Monthly World Risk Survey 1999.

the negative side there are no legislative provisions for requirements peculiar to the mining industry and in particular land access, (or access to minerals) as in Australia and Canada to name but a few. Land access arrangements are negotiated between the permit holder and the landowner with the landowner having total power of veto. When the landowner is the Crown, the permit holder must still negotiate with the Crown agency that manages that land.

Land access on to the majority of Crown land owned land is a given in Australia and Canada as it is provided for in legislation. When looking at the proportions of Crown owned land in Australian States little is held for conservation purposes as opposed to the majority of Crown owned land in New Zealand (Table 4). While Manitoba in Canada is setting aside up to 20% of its land as conservation parks it is being done in negotiation with the minerals industry. This is in contrast to New Zealand where land access onto Crown land is required for a Crown owned mineral. No account is taken of the important economic value of the mineral resource. At best it is left to good will on both sides.

Tax

Objectives of tax system design

Government objectives are critical elements of the design of a tax system. Accordingly, they should be defined as the basic criteria upon which to evaluate results. Most common objectives are as follows:

1. maintaining existing production capacity and fostering new investment, to achieve economic growth and long-term job creation based on the existence of mineral resources in the jurisdiction;
2. “fair” sharing of resource revenues, over the life of mining projects, between company/investor and government;
3. steady flow of tax revenues; and
4. simplicity and a high degree of compliance

Setting tax rates

Once tax policy planners have determined the types of tax instruments they want to implement, the next critical step is to set out the tax rates. The setting of tax rates will determine the relative weight of the tax instruments in place. It is also

the most important and visible means by which a government can send signals to prospective investors about its willingness to do business.

Before setting out the tax instrument mix and the corresponding tax rates, reference to current international practices can provide helpful guidelines. With respect to mining taxation, a majority of jurisdictions are currently using a mix of a broadly applied income tax system that also may be in conjunction with a production royalty regime that focuses on mining activity. Tax rates are mostly set to give a dominant weight to income tax revenues. Income tax rates range from 15% to 45% with a concentration of jurisdictions in the area of 30% to 35%. Production tax rates range from 0% to 15%, but most jurisdictions have rates that are below 5% (2% to 3% is the norm).

New Zealand falls well within these ranges with a business tax rate of 33% and a royalty regime of 1% ad valorem and 5% accounting profits. New Zealand’s business environment is continually ranked as being highly competitive, least corrupt and open by OECD studies. Sherwood (1999) stated that the difference in tax regimes between New Zealand and Australian states was little, and unlikely influence investment decisions.

The public

No where in the world does mining receive acceptance by the public at large. It is always ironic and frustrating to the mining industry that the public’s expectation of high standards of living is fundamentally dependent on minerals. New Zealand is no exception, particularly with its agricultural, horticultural and tourism based economy.

In order to address the negative public perceptions in Victoria, the industry provides trained teachers to take minerals focussed lessons in schools. In particular they look at taking classes at the primary school level. New Zealand’s industry has been innovative in providing educational information on websites. The NZMIA and Martha Mine should be congratulated on their efforts. I am happy to say that Crown Minerals has also long provided material used by the public and now we are enlarging our activities to include educating our youth and the public at large of the importance and contribution of minerals to the well being of New Zealanders. To this end we are revisiting our communication strategy and have sought advice on how best to work with the New Zealand educational curriculum structure.

Ownership	WA	NT	SA	QLD	NSW	VIC	TAS	NZ ²
Crown land ¹	79 (42)	60 (50)	65 (42)	61 (54)	49 (38)	32 (0)	60 (0)	52
Private land	8	0.5	16	36	50	68	40	36
Indigenous ³	13	40	19	2.4	0.2	0	0	4.5

Table 4. Comparison of land ownership in Australian states. ¹ figures in brackets refer to proportion of Crown leasehold as a percentage of total land. ² there is additional land area in other categories. ³ does not include land claimed under Native Title Act or Treaty of Waitangi. Source for Australian figures: Competitive Victoria Report, 1998 (except WA) using 1997 figures.

Summary

To emphasise points that I have made:

- New Zealand is prospective as an exploration destination;
- New Zealand's legislation is neutral towards mining;
- New Zealand rates favourably in terms of risk; and
- New Zealand offers an excellent business-operating environment.

Come Explore New Zealand.

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