BEHRE DOLBEAR

BEHRE DOLBEAR GROUP INC.
founded 1911 MINERALS INDUSTRY ADVISORS

2013 Ranking of Countries for Mining Investment: "Where Not to Invest"

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Since 1999, the Behre Dolbear Group Inc. has compiled annual political risk assessments of the key players in the global mining industry. Over time, our assessment indicates a positive correlation between the growth of a nation's wealth and the prosperity of its mining industry – only when a country recognizes its critical need to adapt and restructures burdensome policy – will it truly optimize this economic potential.

While our perspective is often considered provocative, it is our intent to highlight countries whose policies and business conditions promote investment growth in the mining sector. Behre Dolbear welcomes continued feedback from our clients and industry professionals alike. Both positive and negative dialogue enables Behre Dolbear to improve its assessment.

This year's survey, as it has in the past, concentrates on specific countries, regional issues, and notable trends. Geology and mineral potential were not considered, as the fact that exploration, development, and mining activity are occurring confirms the existence of such potential. Only factors relevant to "political risk" have been considered. We do not make an effort to include mitigating factors such as economic returns or an investor's relevant experience in a particular country as part of our ranking.

The Behre Dolbear Group of companies is comprised of more than 150 professionals based out of 12 offices around the globe. The views expressed herein reflect the collective responses to our annual internal survey. Our professionals' opinions are valued as they have the unique opportunity to conduct business and evaluate investments within many different countries. In 2012, Behre Dolbear completed 220 projects in over 55 countries. Our global reach through the depth and diversity of our international involvement continuously builds our perspective on the industry. Our rankings in this annual survey are also based, in part, on confidential sources and public databases. Behre Dolbear has referred to the *Index of Economic Freedom* (a Wall Street Journal/Heritage Foundation publication), the World Economic Forum's *Global Competitiveness Report*, and publications from Transparency International. Our ranking by the nature of the factors incorporated in its determination is qualitative, not quantitative.

The 25 countries considered in this year's survey are ranked based on 7 criteria:

- the country's economic system
- the country's political system
- the degree of social issues affecting mining in the country
- delays in receiving permits due to bureaucratic and other issues
- the degree of corruption prevalent in the country
- the stability of the country's currency
- the competitiveness of the country's tax policy

Each criterion is rated on a qualitative scale from 1 (worst) to 10 (best) that reflects conditions that promote investment growth in the mining sector. Accordingly, the maximum score attainable for a country is 70 points.

Table 1 displays this year's survey results along with those of the previous 2 years.

TABLE 1 2013 RANKING OF COUNTRIES			
	2013 Average Rating	**2012 Rating**	**Difference**
Australia	56.3	57.0	-0.7
Canada	54.3	52.0	2.3
Chile	51.0	51.0	0.0
Brazil	45.6	45.0	0.6
Mexico	43.1	43.0	0.1
United States	41.7	40.0	1.7
Colombia	40.5	39.0	1.5
Botswana	36.8	37.0	-0.2
Peru	35.9	36.0	-0.1
Ghana	36.0	36.0	0.0
Mongolia	26.9	32.0	-5.1
Tanzania	31.9	32.0	-0.1
China	28.7	28.0	0.7
Namibia	33.6	33.0	0.6
Argentina	29.0	30.0	-1.0
India	27.8	29.0	-1.2
Philippines	30.4	29.0	1.4
Indonesia	27.5	27.0	0.5
Zambia	26.1	26.0	0.1
South Africa	24.4	25.0	-0.6
Kazakhstan	20.9	22.0	-1.1
Papua New Guinea	21.0	22.0	-1.0
D.R. Congo	17.7	19.0	-1.3
Mozambique	32.0	0.0	32.0
Russia	17.1	16.0	1.1

Bolivia was not considered in this year's survey and replaced by Mozambique, which is attracting investor's attention. Bolivia's unstable political climate strongly discourages foreign investment as the government continues to nationalize mining companies. Additionally, in October of last year, Evo Morales passed legislation favoring environmental initiatives, creating obstacles for current projects, and future exploration. Mozambique's mineral industry is growing steadily as both private and public sectors promote the exploration of coal, gold, and iron ore. Vale and Rio Tinto have the largest presence in Mozambique and continue to invest in new infrastructure.

Venezuela and Zimbabwe are not on the list for a sixth year even though both contain significant mineral wealth due to their inherently low ranking. Behre Dolbear advises clients to exercise notable caution when considering investments in these countries. The political and social situation in Zimbabwe continues to warrant exceptional consideration in risk mitigation while in Venezuela, Hugo Chavez's nationalization of gold mines and other mineral resource assets severely limits investment return potential. Significant political reform must occur in both countries prior to the restoration of investor confidence.

Looking beyond these countries, the minerals' markets strength is supportive of new investment. Despite the market's low activity during former recessionary cycles, there are now significant investments occurring in locations that were once deemed unviable due to the perception of high political risk. Typically, it takes 6 years or more until investors will see revenues from a green field mining project. For the inexperienced, the long lead times combined with the potential for material adverse change in business conditions can make the mining business one of the greatest destroyers of capital, as success is subject to navigation of many risks, hence, the rationale for this analysis.

State-owned enterprises (SOE) and sovereign wealth funds (*e.g.*, China, Korea, Russia, India, Singapore, Saudi Arabia, and elsewhere) continue to invest in mineral resource development and production since their parent countries consume increasing quantities of mineral products, which is correlated to economic growth. SOEs can also comprise a large portion of a country's stock market valuation. They account for 80% of the Chinese stock market capitalization, 60% of Russia's, and 35% of Brazil's. Government- sponsored investment, when compared to private investment, can entail vastly different time and strategic considerations and can have other investment criteria.

Since the start of the current commodity price cycle, market participants seeking to profit from the minerals boom have been investing globally. A relative lack of opportunity has brought attention back to older, out-of-favor mining regions (*e.g.*, Greece, Spain, and the United States) despite the perceived risks. Politically stable countries with stable regulatory environments help create viable resource bases that can provide competitive returns for investors relative to other asset classes. Conversely, mineral-rich nations with less stable or changing political environments (*e.g.*, Argentina, Mongolia, Peru, Ghana, and South Africa) can add uncertainty to the development of mining projects, ultimately resulting in downward pressure on returns due to project delays or in extreme cases, project cancellations.

THE CURRENT SITUATION

The commodity price boom that began in 2005/2006 began to level off in 2011. Mineral prices are in decline because of the continued slow economic growth of the United States, Europe, and most recently, due to moderating growth in China. Nonetheless, many countries continue to pursue non-competitive foreign investment and natural resource development and exploitation policies. Resource-rich national governments, however, continue to question foreign investment precedents at the risk of jeopardizing investor confidence. Behre Dolbear believes that a sustainable minerals industry requires a substantial amount of on-going as well as new capital investment to be successful. The opportunity cost mounting in today's environment is one underscored by waning investor interest due to increased political risk uncertainty. We believe political stability is derived from freedom of choice and quality of life. Improving the standard of living for all can strengthen global political stability and the availability of affordable mineral resources is critical to the success of meeting this goal.

2012 IN RETROSPECT – WERE WE RIGHT OR WRONG?

North America's well-defined mineral endowment continues to attract significant capital investment despite regulatory hindrances due to its competitive standing relative to the quality or its resources, the capability of its existing infrastructure enabling products to access markets, and through the capacity of its human capital resources.

In Central and South America, select countries with strong mining industries have recently received ever increasing interest and benefits from rising commodity prices. However, the recent decline in mineral prices combined with increased inflation and renewed nationalism is causing concern as producer's margins are squeezed. Many countries throughout the region are increasing mineral taxes and imposing other requirements on mining operators.

As predicted, capital available to many African projects continues to increase relative to past years. Countries that have remained stable and those that address corruption and social issues have benefited from increased investment and production. More money from mineral development is going into infrastructure, social services, and better governance. In sub-Saharan and West Africa, mineral deposits continue to attract interest from a variety of large and small listed public mining companies and private capital providers, such as private equity funds as well as SOEs and sovereign wealth funds. Sub-Saharan Africa continues to be relatively stable by avoiding despotic or totalitarian regimes. Behre Dolbear predicts that investment capital will continue to be put to work in this region, as new precedents are established increasing investor interest. As noted, Zimbabwe and South Africa prove challenging for foreign and domestic investor alike as an uncertain political atmosphere detracts from mineral development.

Asia at large and Australia have continued to attract new investment although government participation in the mining sector has increased in part through government-backed companies. In particular, China's form of neo-colonialism has resulted in a nationalistic backlash in several countries, notably Australia. China's sphere of influence on its neighbors and their resources, while initially welcomed, is coming under increasing scrutiny resulting in foreign ownership and export restrictions.

The Middle East region continues to see more mining, minerals, and metals investments as the region's nations continue to strive to diversify and expand their economies. Low-cost energy will continue to promote the development of energy intensive industries, such as fertilizer, aluminum, and steel. In turn, these sectors consume construction materials, aggregates, ferro, and specialty alloys.

The higher commodity prices have resulted in that old dog of a project (let's call it Fido) to re-emerge under a new name with new sponsorship – (now Phydeaux). It's still a dog, but a higher-class dog. Caveat Emptor!

RATING THE COUNTRY'S ECONOMIC SYSTEM

Behre Dolbear is a firm believer in the free-market system. In a free-market system, foreign and domestic commerce, combined with individual liberty and the rule of law, ultimately produces wealth, which increases employment and living standards. Adherence to free-market ideals is the major consideration in this criterion.

In supply-constrained markets, protectionist sentiments impede trade, acquisitions, and investment. The globalization of the world economy relies on cross-border free exchange of goods and capital. Federal and local governments are taking a keen interest in natural resource assets. For example, China restricts rare earth mineral exports. There is also a recent dispute between Anglo American and Chile's Codelco over the sale of an interest in Exxon Minerals old La Disputada copper property. Finally, the Smoot Hawley Tariff Act, enacted during the great depression of the United States, highlights the adverse impact of protectionist policies on economic growth.

In a free market economy, governments rarely impede foreign investment. However, sensitive issues can arise in transactions involving non-renewable resources. There was no change in the three highest rate countries and nominal change in the lowest rated countries in this survey (Papa New Guinea fell by one point). There were no improved ratings in this year's survey and the ratings for three countries (Mongolia, Argentina, and Papa New Guinea) declined.

The highest-rated countries in this criterion and their relative change since last year's survey are:

• Australia	(9) unchanged
• Canada	(9) unchanged
• Chile	(9) unchanged
• United States	(8) unchanged
• Mexico	(7) unchanged

The lowest-rated countries are:

• Russia	(1) unchanged
• D.R.C.	(3) unchanged
• Kazakhstan	(3) unchanged
• Papa New Guinea	(4) down 1 point
• South Africa	(3) unchanged

THE POLITICAL SYSTEM

Democratic countries with free elections rate highest. The fact that some countries hold elections, however, does not mean they are democratic (*viz.*, Russia and Zimbabwe). An additional factor considered in this criterion is security of tenure, *i.e.*, is title to a company's mineral concession secure based on a country's mining law and its prior history of mining operation nationalization. Sometimes complicating title to a deposit are the 'good' intentions of interested parties, including federal and local officials, indigenous peoples, or non-governmental organizations (NGOs) advocating geographic, ancestral, cultural, environmental, etc. claims about land, water, infrastructure, or other economic resources that thwart mining projects.

The higher-ranking countries are those with well-established democratic systems that possess tested mining legislation and protect against governmental or other arbitrary takings of property. Canada, Chile, and previously the United States lead in this category.

Russia was the only country that improved, however nominally, in this category (up one-half of a point) while three countries declined. India, Mongolia, and Indonesia all fell 1 point remaining in the median of the political system category.

Mongolia's ranking fell by 1 point because of the continually changing elections and subsequently uncertainty regarding mining policies. Last year's election turmoil in Mongolia has hindered further expansion of the industry.

China and Russia remained the lowest rated countries in this year's survey with the addition of Kazakhstan and the D.R.C. The highest rated countries remained the same this year.

The highest-rated political systems are:

• Canada	(9) Unchanged
• Chile	(9) Unchanged
• United States	(8) down 1 point
• Australia	(8) unchanged
• Brazil	(8) unchanged

The lowest-rated are:

- China (1) unchanged
- Russia (1) unchanged
- Kazakhstan (3) unchanged
- D.R.C. (30 unchanged

SOCIAL ISSUES

Social issues continue to be one of the highest risk factors affecting the development of mining projects all around the world. The watchwords in the mining industry have become “sustainable development,” “indigenous rights,” and “social license,” which, while sound in principle, have often been used by opponents to delay or completely halt mining development not to mention adversely impacting established operations.

Common sets of guidelines for sustainability have been developed by the financial industry (the Equator Principles led by the World Bank) and by the mining industry and manufacturers (the Cyanide Initiative) to help govern the development of mineral projects. Despite these achievements, many disparate special interest groups oppose mining projects throughout the world. Oppositional agendas are, in many cases, detrimental to the livelihoods of local stakeholders.

A persistent issue, especially in developed economies, is the “NIMBY” (Not In My Backyard) syndrome, where personal prosperity outweighs public’s necessity for minerals. Other factors considered in this criterion are the level of poverty, incidence of terrorism or guerilla activity, and disease, *e.g.*, AIDS. These issues affect the well-being and health of a country and affect mining economics in a country.

In these categories, none of the country ratings fell while several improved. The reasons for improvement stems from continued efforts of goodwill to neighbors as well as the governmental recognition of positive economic and social development. Mining development improves many social issues, which in turn fosters community support for mining.

The leading countries in this criterion remain unchanged from last year’s survey. Australia rates the highest with an 8. Chile is second with a 7. Colombia is third with a rating of 6.

Three countries (Mexico, Brazil, the United States, and Canada) ratings rose by 1 point in this year’s survey. Mexico is making progress in dealing with a *de facto* war raging between the narco-cartels and the government raising its rating by 1 point. This issue is critical and will continue to impact investment. In Canada, the issue surrounding indigenous people is becoming much less contentious.

In India, the adverse impact of regional issues, Maoists terrorism, and in places, strong local opposition to mining projects, has improved slightly. While showing signs of improvement, both India and South Africa still rank near the bottom of this year’s survey.

The countries most effective at managing social issues are:

- Australia (8) unchanged
- Chile (7) unchanged
- Colombia (6) unchanged
- Brazil (6) unchanged

Those countries least effective are:

- Papua New Guinea (1) unchanged
- India (2) unchanged
- South Africa (2) unchanged
- Zambia (3) unchanged

PERMITTING DELAYS

Most countries have environmental regulations equal, at a minimum, to the standards established by The World Bank. The issue addressed here is not the strength of the regulations but the timeframe involved in obtaining permits. Contributing to delays is the intervention by NGOs opposed to mining development; groups with legitimate concerns about the effect a project will have on a community or lifestyle; and, often, corruption on the part of bureaucrats in poorer countries.

Permitting delays are a global issue. As communication is facilitated by the internet, issues at operations in one country becomes the concerns and examples used against a completely unrelated mining project elsewhere. As this situation continues to evolve, the business environment will likely favor firms that aggressively take a proactive stance concerning societal and environmental issues. This will not guarantee success though, as corruption and other factors could still scuttle otherwise viable projects.

Permitting delays are the most significant risk to mining projects in the United States. A few mining friendly states (Nevada, Utah, Kentucky, West Virginia, and Arizona) are an exception to this rule but are negatively impacted by federal rules that they are bound to enforce resulting in a 7- to 10-year waiting period before mine development can begin.

Mongolia's rating fell by 1 point driven by its government restriction of new exploration and exploitation license issuance.

Those countries having the fewest permitting delays are:

- Australia (8) unchanged
- Tanzania (7) unchanged
- Mexico (6) down 1 point
- Chile (6) unchanged
- Colombia (6) unchanged

Those countries with the most numerous permitting delays are:

- United States (2) unchanged
- Papua New Guinea (2) unchanged

CORRUPTION

Corruption, typically, is endemic in the poorer nations and those with socialistic or controlled economies or totalitarian regimes. Corruption, frequently, extends through all strata of a society from the highest levels in government to the lower-level government officials, as well as pervading business practices.

Facilitation fees are often endemic to local business practices in many countries, being more prevalent in Africa, Asia, and Latin America. Investors must be mindful of and monitor corruption from the early stages of exploration and throughout project development and operation. While booming exports of minerals from these and other mineral-rich emerging market nations continue to boost local economies and the local standards of living, concerted due diligence is required to control and minimize corruption.

Australia and Canada continue to rate at 10, the highest in our survey in this criterion.

Those countries with the least corruption are:

- Australia (10) unchanged
- Canada (10) unchanged
- United States (9) unchanged
- Chile (8) unchanged

Those with the greatest incidence of corruption are:

- Kazakhstan (1) unchanged
- Russia (1) unchanged
- D.R. Congo (2) unchanged
- South Africa (2) unchanged
- Papua New Guinea (2) unchanged
- Mongolia (2) unchanged
- China (2) unchanged

CURRENCY STABILITY

History has shown that countries with depreciating or devalued currencies inhibit new investment in their country. Depreciating currencies generate inflation, poverty, and corruption. As investment, money has focused on mineral-rich emerging countries. This trend has led to higher inflation within these countries.

High levels of inflation have historically created political turmoil and civil unrest. Although central banks may attempt to intervene and governments may alter policies, strong global demand for commodities and rising prices can overwhelm such efforts.

Despite record government spending in 2011, the United States dollar retained its safe haven status for those seeking refuge from the European debacle. The Canadian and Australian dollars remained close to parity with the United States dollar with both countries ratings of 9. While not enough to change its rating, Australia's inflation is beginning to be a concern.

China's intervention to slow the appreciation of the Yuan is a policy that continues to be a concern of its trading partners. While its value has been allowed to appreciate, the market view is that it remains materially undervalued. In the short term, a stronger Yuan reduces the competitiveness of its export sector and puts downward pressure on job growth – a key factor impacting stability. Greater transparency in China's economy is long overdue and could be facilitated, in part, by a reduction of its currency controls.

Mexico was the only country in this year's survey to see its rating increase. For the first time in 2.5 years, Mexico saw a fall in its inflation rate. The declining rate has led to more stable economic conditions for mining activity.

The highest-rated countries for currency stability are:

- Canada (9) unchanged
- Australia (9) unchanged
- Brazil (9) unchanged
- Chile (8) unchanged
- United States (7) unchanged

The lowest-rated countries are:

- D.R.C. (1) unchanged
- Russia (2) unchanged
- Zambia (3) unchanged
- Indonesia (3) unchanged

TAX REGIME

The total taxes applicable to a mining project – duties and imposts, income taxes, royalties, and severance and excise taxes – are considered in this section. Behre Dolbear's experience is that once the total "government take" from combined taxes reaches 50%, a mining project's economic viability, during periods of normal commodity pricing, is threatened. Stable and predictable tax policies are essential in evaluating a mining project's perceived risks and viability.

The impact of increasing government debt, combined with relatively recent rising commodity prices, has inspired officials in almost every minerals-producing nation to consider raising mining-related taxes and fees. Mineral-related revenue, which a few years ago was rising in line with commodity prices, has recently decreased due to falling commodity prices, even though the amount of minerals produced has subsequently increased. The tax raising conversations have intensified in efforts to monetize mineral production.

The inspiration for these efforts may have been bolstered by Australia's actions over the past year to increase taxes, both directly and indirectly on mining operations. Such discussions can result in uncertainty, delays, and limitations on investment. The past delays at the Oyu Tolgoi copper project in Mongolia present a clear example of how such uncertainty delays mining developments.

In spite of the current climate, Behre Dolbear did not reduce the ratings of any of the countries in this year's survey as last year's survey incorporated much of the current sentiment. Meanwhile, one country (United States) rose in this year's survey. Due to the current political stalemate and its inability to raise taxes, the United States rating increased by 1 point in this year' survey

Mongolia fell 1 point due to political uncertainty and renegotiating tax agreements.

The highest-rated countries for tax regime are:

- Mexico (7) unchanged
- Canada (7) unchanged

The lowest-rated countries are:

- South Africa (3) unchanged
- Zambia (3) unchanged
- Mongolia (3) down 1 point

THE RANKINGS

Table 1, "2013 Ranking of Countries," shows Behre Dolbear's composite ranking (out of 70 points possible) of political risk.

The 5 highest-scoring countries are:

- Australia (56) down 1 point
- Canada (52) unchanged
- Chile (51) unchanged
- Brazil (45) unchanged
- Mexico (43) unchanged

The 5 lowest-scoring countries are:

- Russia (16) unchanged
- D.R.C. (18) down 1 point
- Kazakhstan (22) unchanged
- Papua New Guinea (21) down 1 point

While there was little movement at the ends of the survey, there was substantial change in the middle. The most notable change was seen in Mongolia, which dropped a total of 5 points since 2011. Mongolia's volatile political climate has taken a significant toll on mining policy and drastically affecting the level of foreign investment.

Other countries, which fell in this survey, were Argentina, India, Kazakhstan, and the D.R.C, each falling 1 point. Canada, the United States, and Colombia all saw an increase in ranking.

CONCLUDING REMARKS

Moderating mineral consumption on the back of declining government stimulus, in many major economies, led to downward trading ranges for most minerals. Producers re-evaluated capital project pipelines and re-valued assets under lengthened development time frames, increased capital budgets, and lower market price expectations. Non-traditional investors stepped up to play a larger role in financing mineral development and production and exploration activity slowed considerably. New investment was supported by governments through multi-lateral, export credit agencies, sovereign wealth funds, private equity, trading companies, and off-takers. The supply and demand fundamentals for key minerals remain strong, in particular, due to various supply constraints highlighted by declining resource quality and falling rates of new productive capacity. The competition for mineral resources will make those countries perceived to have the lowest political risk, all other things being equal, able to attract a significant portion of the global mineral investment as well as receive a premium for their resources over countries where perceived instability exists.

As austerity measures begin to take the place of government stimulus in the world's largest economies, short-term growth in the mining sector will remain highly volatile. Disconnects between supply and demand forces, caused by fast growing Asian markets, are forcing companies to increase capital costs and search for mineral deposits in difficult areas. Furthermore, an increase in regulations across all markets delays production and raises input costs. While market forces will eventually return to equilibrium, the market in 2013 will be unpredictable.

The long-term fundamentals, however, are unchanged and as economies rebound, we will re-visit the rapid ramp-up of commodity prices. It is probable that resolution on the direction prices take will occur before this year's end.