Application of service tax to the Mining Sector – Need for reforms

Report prepared for the Federation of Indian Mineral Industries

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Contents

Executive Summary

The mining industry is concerned about the application of the service tax to its activities. This report, commissioned by the Federation of Indian Mineral Industries, examines the application of the service tax this sector. The report also suggests ways of alleviating the negative impact of service tax on the mining industry.

The mining industry is significant for the economic development of India. The industry provides raw materials to domestic industries, and also contributes to India's export earnings. Not only that, it also offers employment opportunities in rural areas. Mining has a strong multiplier effect on the rest of the economy as every penny generated from the mining industry generates 2.4 times the direct and indirect output in the economy. States like Jharkhand, Orissa and Chhattisgarh are especially dependent on mining for their economic development.

The mining industry in India is not able to realize its full potential. As compared to 5-7% GDP contribution to other mineral rich countries such as South Africa, Australia and Brazil, the industry contributes a 1.9% to the overall GDP in India. During FY04-09, while the GDP in India grew at a CAGR of 8.5%, the mining industry registered a slower growth at 5.7%. The key limiting factor is the low thrust on exploration which accounts for a mere 0.5% of the global exploration expenditure of USD10 billion. India is not able to fully explore its reserves of minerals like iron ore, bauxite and coal. The problem is further compounded by high reliance on public sector with negligible private sector involvement. Supported by low cost advantage, strategic location and an untapped mineral base, the industry has potential for higher growth, provided it succeeds in attracting capital to the exploratory stage of mining.

Other issues that restrict the growth of the industry are infrastructure bottlenecks, and thrust on captive mining. Also, the attributes of the mining industry such as risky and uncertain nature and small scale act as limiting factors for growth. Despite of huge mineral reserves, the country has not been able to create global mining leaders. The scale of operations of Indian producers is very small by international standards. In contrast, countries like Brazil and Australia have been successful in developing global companies with large scale of operations. These companies generally dictate the price environment in the global market for key minerals.

An unfavourable service tax structure exacerbates the problems faced by the industry. The debate on service tax on the mining industry stems from the growing trend towards outsourcing of mining activities. The increased focus on improving the top line and strengthening the bottom line by curtailing costs are the key driving factors for this trend. Further, the wide-ranging services, strategic focus and expertise provided by the outsourcing partner also supports the increased focus on outsourcing. It is expected that outsourcing will continue to grow thereby making the existing topic of discussion on a more rational service tax structure more relevant.

The mining industry in India attracts:

- Indirect Taxes, including customs duties, Cenvat, Service Tax, and State VAT;
- Direct Taxes, consisting mainly of the corporate income tax and minimum alternate tax; and
- Mineral levies linked to exploration or extraction of resources

Most of these taxes are also applicable in other jurisdictions. The key concern is not the levy of these taxes but their structure, which varies from country to country. The structure of these taxes in India is not conducive to the overall growth and development of the mining sector.

For instance, in India, while the basic corporate tax system is similar to that of other countries, the deductibility of exploration and capital expenditures is quite restrictive. For example, expenditures on prospecting, extraction or production of minerals prior to the start of commercial production are eligible for amortization only if incurred in 4 years prior years. By contrast,

countries such as Canada provide a much more generous regime for them. Exploration expenditures can be deducted in full when incurred or can be carried forward indefinitely. The disadvantage of restrictive deductibility in India gets compounded by the anomalous application of the Cenvat and the service tax. Exploration expenditures attract the service tax when outsourced to third-party contractors, who, in turn, pay the excise duty on their capital equipment which is not fully creditable (especially for heavy machinery like earth moving equipment which could be classified as motor vehicles not eligible for the Cenvat credit). The overall impact of these features is to increase the cost of exploration in India. To illustrate, the example provided in the Report indicates that the net-of-tax cost of exploration expenses is 66% of pre-tax cost in Canada, versus 95% in India.

Mining is a very capital intensive and risky venture. Due to the risks and high capital requirements, mining operations have to depend on foreign capital, which is mobile and is attracted to those jurisdictions where the returns are high and the fiscal and regulatory regime is the friendliest. The punitive treatment of exploration in India discourages investment.

The mining industry cannot claim any credit for the service tax and the Cenvat paid on its inputs. In most other jurisdictions, the indirect tax is levied in the form of the Goods & Services Tax ('GST') which has no incidence on intermediate production with the tax being effectively levied only on final consumption.

In India, the service tax applies on specific services. The mining sector is not subject to service tax. However, this industry procures services from various vendors from the stage of exploration up to mineral production, handling and transportation. Since the minerals are outside the scope of the service tax as well as the Cenvat, the mine operator cannot avail credit of the service tax paid on services acquired for use as inputs to mining. The non-deductible input taxes get embedded in the cost of the mineral supply, resulting in tax cascading and other economic efficiencies.

The levy of service tax on activities at the exploration stage without allowing the mine operator input tax credit of the service tax paid increases the cost of prospecting. At a time when the Government is seeking to encourage investment in this sector, it becomes imperative for the Government to provide a competitive tax regime, and not levy punitive taxes which discourage investment.

The blockage of the service tax causes a bias against outsourcing of services to third party suppliers. In turn, this leads to an inefficient utilization of economic resources and raises the cost of procurement.

Minerals are sold in the world markets at prices on which Indian mines have little control or influence. The increased cost of production on account of the blockage of service tax cannot be passed on to the customers in the form of higher output prices. This creates competitive distortions between domestic and foreign suppliers of minerals since the domestic suppliers bear the cost of blocked input taxes, which the foreign suppliers do not incur.

The flaws in the service tax would automatically get addressed once the GST comes into effect in India since the tax paid by the mine operator on purchases of business inputs would be creditable against the output tax liability on his supply. However, pending the introduction of the GST, the Government should consider suitable remedial measures in order to provide a fillip to the mining sector. Some of the measures which the Government could consider are as follows:

- Grant exemption from the whole of the service tax on input services used by mining companies in their mining operations, similar to the exemptions granted to an SEZ. An exemption may be granted either for specific services related to mining operations or a blanket exemption for all services received by the mine.

- Grant a refund of the service tax charged to the mine operator. Under this method, mine operators can claim a refund of the service tax paid on their input services.

- Have a dual system under which certain taxable services are made non-taxable, while a refund is provided to the mine operator for the tax on other services.

The specifics of the mechanism for providing such exemptions or refunds are discussed in the main body of this report.

1 Introduction

The mining industry makes a significant contribution to the economy of India. It is a source of important raw materials to domestic industries, and contributor to India's export earnings. It offers employment opportunities in remote, non-urban areas. States like Jharkhand, Orissa and Chhattisgarh are especially dependent on mining for their economic development. However, despite the significance the industry for the economy, it has not been able to achieve its full potential. The industry continues to be impacted by low thrust on exploration. India is endowed with high reserves of iron ore, bauxite and coal, in addition to other minerals such as mica, chromite and manganese to name a few. However, the country has not been able to undertake adequate exploratory activities to access these resources. The excessive dominance of public sector and minimal private sector participation further exacerbate the problem.

There are other issues which also affect the industry. Procedural delays, infrastructural bottlenecks and the concerns regarding the application of the Indian tax and regulatory regime to mining have taken a toll on the industry. All the factors combined dilute the international competitiveness of the domestic mining industry. In contrast to countries like Brazil, South Africa and Australia, where the mining industry contributes close to 5-7% of GDP, its contribution to the GDP in India has been abysmally low at 1.9%. This calls for immediate measures to improve the competitiveness of the domestic mining industry through focus on better infrastructure, favourable policy regime and a rational tax structure.

This report has been commissioned by the FIMI to examine and evaluate certain parts of the taxation regime in India as they apply to mining. The mining sector attracts many direct and indirect taxes, including exploration fees, royalties, corporate income tax, and minimum alternate tax, customs duties, State VAT, Cenvat, and the service tax. While the industry has concerns with many of these, the focus of this report is exclusively on the service tax as it applies to mining.

The industry is especially concerned about the application of the service tax to outsourced services. In the current scenario, where revenues have taken a hit and cost pressures loom large on the industry, the miners are increasingly outsourcing mining activities in order to focus on the core functions of mining/extraction of mineral. It is expected that going forward, the trend towards outsourcing will intensify and will bring to the fore the service tax implications associated with the outsourced input services.

The report first provides an overview of the mining industry in India, and then examines the application of tax in general and of the service tax in particular to this sector It also suggests ways of mitigating the adverse impact of service tax on the mining industry.

2 Role and Importance of Mining

Background of the Indian mining industry

India produces 89 minerals, which include four fuel minerals, 11 metallic, 52 non–metallic and 22 minor minerals. The industry is characterized by a large number of small mines. The total working mines in the country were 2,874 in 2006–07 (2,994 in 2005–06). 556 of these mines were for coal and lignite, 630 for metallic minerals and 1,688 mines for non–metallic minerals. Public sector holds 755 mines while the remaining belongs to the private sector.

The eastern states – Jharkhand, Chhattisgarh and Orissa are the most mineral rich regions in the country, with huge reserves of coal and mineral ores. The contribution of mining to the GDP of these regions is between 8-13%, as against 2% for the country as a whole.

Ample mining reserves in India

India has high reserves of iron ore, bauxite and coal. It finds a place amongst the top ten countries globally for these ores. India also commands a leading position in mica (No. 1), barytes (No. 2), chromite (No. 4), kaolin (No. 4), and manganese (No. 7). Figure 1 below highlights the key mineral reserves in India.

Figure 1: Key Mineral Reserves in India

Mineral	Proven reserves in 2005 (mt)	Quality	Location
Bauxite	3,290	Reserves consist primarily of gibbsite, whose conversion to alumina is less expensive compared to the other two forms, bohemite and monohydrate	Orissa, Andhra Pradesh and Maharashtra
Copper	1,394	Low; metal content ~1.2%, as against world average of 2-3%	Rajasthan, MP, Jharkhand
Iron ore	25,249	Good; metal content ~60%, compared to world average of 40- 45%	Jharkhand, Chhatisgarh, Orissa and Karnataka
Lead-Zinc ore	523	Good; 8-10% metal content compared to world average of ~5%	Rajasthan
Manganese ore	379	Medium; ~35% metal content	Orissa

Source: IIFL

However, despite the huge reserves, the industry has seen abysmally low exploration activity and minimal private sector participation.

Mining industry dominated by captive-users

Mining in India is done mainly by captive users. The industry is controlled by the end-users. The share of standalone miners is very low, at less than 10%. Except for bauxite, iron ore and limestone, 100% of the mines for other minerals are captive. Figure 2 highlights the share of captive production of different minerals in India.

Figure 2: Landscape of India's mining industry

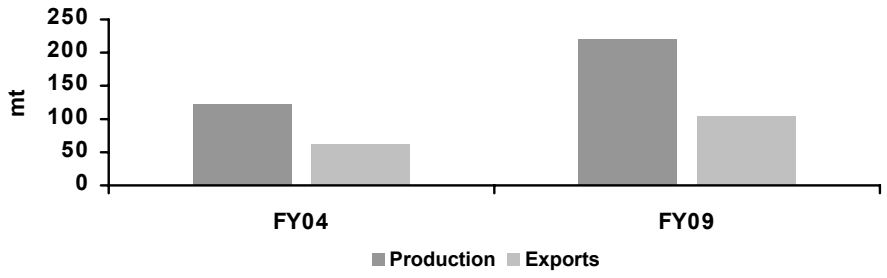
Minerals	Iron ore	Copper concentrate	Zinc concentrate	Lead concentrate	Limestone	Bauxite
Captive production share in total production (%)	60	100	100	100	93	73

Source: Indian Bureau of Mines and Edelweiss research

Provided below is the status of the mining industry with respect to key minerals:

Iron ore: Iron ore reserves stood at 25.2 billion tonnes. India is among the top five producers and exporters of iron ore in the world. During the last six years, iron ore production has witnessed a robust growth of 12% CAGR, with production increasing from approximately 120 million tones (mt) in FY04 to reach 220 mt in FY09 (Figure 3). This growth was mainly driven by higher demand from both domestic and export markets. Iron ore exports increased at a CAGR of 11% and accounted for approximately 48% of the total domestic production. The exports were driven by the robust Chinese steel industry, which accounted for approximately 85% of India's total iron ore exports. India is labeled as 'swing supplier' in the global iron ore export market as the majority of country's iron ore exports are on spot basis and used to fill the gap between the Chinese demand and the supplies from the global big three miners (Rio Tinto, BHP Billiton and Vale). The Indian supplies are mainly concentrated to small Chinese steel producers, who unlike their bigger counterparts are unable to procure long-term supply contracts. Their low bargaining power helped Indian miners in realizing better prices and profit margins. This helped in providing necessary resources for installing advanced technology. Also, Indian producers were able to ensure better utilization of domestic reserves as the demand for Chinese steel producers was for low grade iron ore (Fe content less than 55%) which was not in demand either in India or abroad.

Figure 3: India's iron ore production and exports



Source: Federation of Indian Mineral Industries, Indian Bureau of Mines

China is the largest consumer of iron ore. Its domestic iron ore supplies are insufficient to meet its ever growing demand from the steel industry. As a result, China has come to depend on imports, which now account for more than 50% of its iron ore requirement. Australia, Brazil and India collectively accounted for 85% of China's total iron ore imports. China is the key market for Indian iron ore producers. The Indian mineral producers have increased the quantity of exports, but their share of the iron ore imports by China has declined, mainly on account of export duty imposed by the Indian government, which made the domestic industry less competitive than their Australian and Brazilian counterparts. The Government of India has taken several corrective steps in terms of reducing the ad valorem duty on iron ore exports. Figure 4 highlights the trend of India's iron ore exports to China.

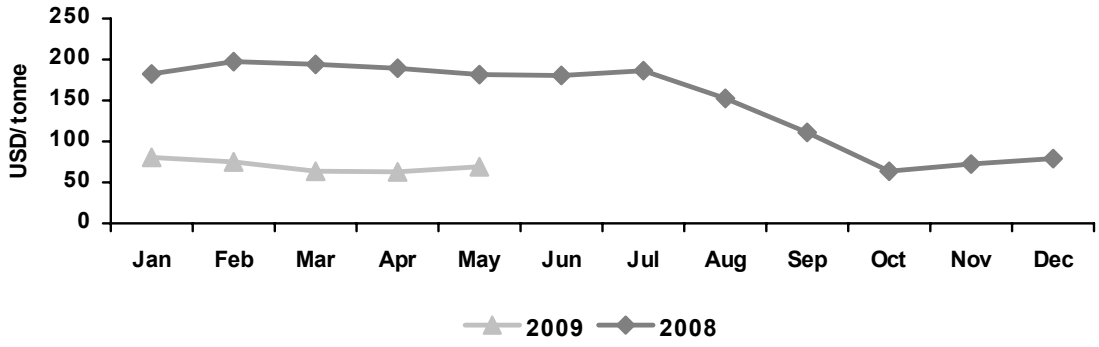
Figure 4: India's iron ore exports to China

Particulars	2004	2005	2006	2007	2008
Export quantity (mt)	50	69	75	80	92
Share in China's iron ore imports (%)	24	25	23	21	21

Source: ABARE and Angel Research

The sector enjoyed a bull run over the last four years on account of robust growth in the global steel production. The scenario turned bearish due to the global credit crisis and the resultant worldwide economic slowdown and the strengthening of the US dollar. The demand for iron ore has declined on account of substantial production cuts in the global steel industry. The spot iron ore prices have plummeted by 65% from their peak of USD197.5/tonne in February 2008 to USD69/tonne in May 2009 (Figure 5).

Figure 5: Iron ore prices in 2009



Note: Prices are Steel China Iron Ore Fines CFR main China port
Source: Metal Bulletin via Bloomberg

Copper: There has not been a significant addition to the copper inventory in the country. As per Indian Bureau of Mines, the estimated copper resources in the country stood at 1.4 billion tonnes as on 1 April 2005. The states of Jharkhand, Rajasthan

and Madhya Pradesh claim 95% of the total copper reserves, with the remaining reserves being located in Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Meghalaya, Orissa, Sikkim and Uttaranchal. There are potential reserves which are believed to be huge and can be tapped to meet the growing demand for the metal.

Globally, the construction sector is the largest consumer of copper with a share of 35%, followed by the electronic products sector (32%) and industrial machinery sector (12%). In India's copper market, the electronics and power sector is the largest consumer with 35% share, followed by the transportation segment (11%). During FY05-08, India's refined copper production increased at a CAGR of 20% on the back of higher demand from the domestic as well as from the export (Chinese) market. Share of net exports in the total production fell to 27% in FY08 from 40% in FY07 as producers concentrated on catering to the domestic demand rather than the exports market (Figure 6).

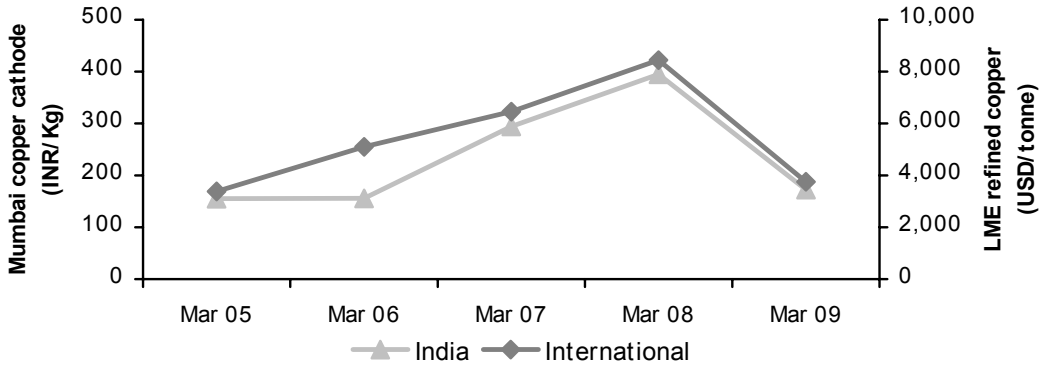
Figure 6: India's copper production, import and exports ('000 tonnes)

Particulars	FY08	FY07	FY06	FY05
Production*	705	642	519	408
Imports (A)	227	193	278	211
Exports (B)	416	450	356	289
Net exports (A-B)	188	257	77	78
Net exports share in the production (%)	27	40	15	19

** Refined copper; Source: IAS, 11 June 2009, Centre for Monitoring Indian Economy*

Declining industrial production growth in the world's fastest growing major economies (such as China and India) and recession-hit North America and Europe have led to a considerable demand reduction for copper. Copper prices (both in India and globally) have corrected sharply during 2009 and have come down almost to their March 2005 levels (Figure 7).

Figure 7: Domestic and international copper prices



Source: IAS, 11 June 2009, Centre for Monitoring Indian Economy

Bauxite: The country's Bauxite reserves were estimated at 3.3 billion tones, as on 1 April 2005. The major producers are National Aluminium Company with the largest open cast mine in India, Hindustan Aluminium Company and Bharat Aluminium

Company. Major deposits are in East Coast falling in Visakhapatnam and East Godavari districts of Andhra Pradesh and Phulbani, Sundergarh, Bolangir, Sambalpur, Kalahandi, Keonjhar and Koraput districts of Orissa. India figures among the world's top ten producers of bauxite. During the last two years, country's bauxite production has nearly doubled to 23 mt. During FY07, exports constituted one-third of country's bauxite production as all the incremental production achieved over 2006 was channelized for exports. India has high quality bauxite ores which requires less energy to produce alumina. Therefore, bauxite mining is concentrated with integrated operators, which starts from bauxite mining to smelting of alumina.

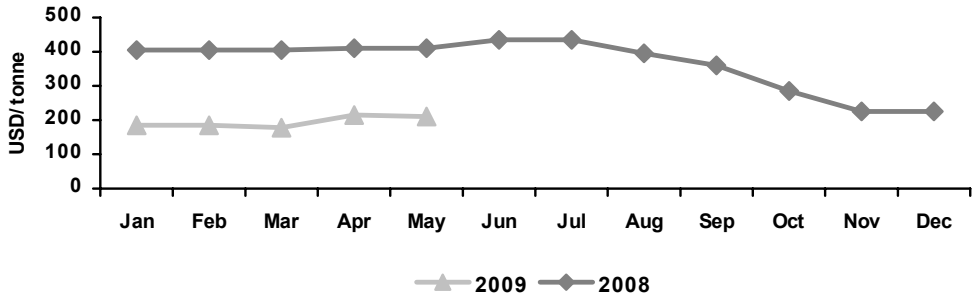
Figure 8: India's bauxite production and exports (mt)

Particulars	FY08	FY07	FY06
Production	23	15.7	12.3
Exports	NA	5	2.3
Exports share (%)	NA	32.8	18.7

Source: Indian Bureau of Mines

Demand for bauxite has been severely impacted by the softening of aluminum demand across Europe and the US. International alumina prices have fallen drastically on account of lower demand from substantial productions cuts in the aluminum smelters (Figure 9).

Figure 9: Alumina prices in 2009



Source: Metal Bulletin via Bloomberg

The demand for bauxite is primarily driven by the demand for aluminium. In FY08, India accounted for 3% of the global consumption of aluminium – consuming 1.3 million tonnes of aluminium. During FY09–13, the domestic demand for the metal is expected to register a CAGR of 8-9% on the back of growing economy, increasing disposable income and high thrust on infrastructure. This is turn will translate into higher demand for the key raw material – bauxite. As a result, it becomes imperative to provide productive environment to the miners to increase production levels in order to be able to provide uninterrupted feedstock for the aluminum production.

Lead and zinc: Lead and zinc reserves in India stood at 523 million tonnes as on 1 April 2005. Hindustan Zinc Ltd. and Sterlite Opportunities and Ventures Ltd. (SOVL) are the major producers of primary lead and zinc metals. The mining operations are spread over the states of Rajasthan, Orissa and Andhra Pradesh. Other producers include Binani Zinc limited (BZL) and Indian Lead Ltd.

India's zinc and lead production is on the rise. Data reveals that off late the majority of the domestic output is destined towards exports, which exposes the sector to the global economic downturn. Figure 10 highlights the import and export trends for zinc and lead production in India.

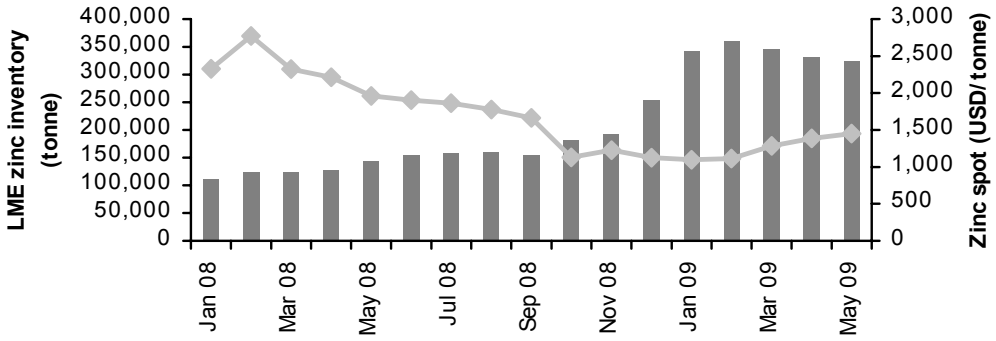
Figure 10: India's zinc and lead production, import and exports ('000 tonnes)

Particulars	FY08	FY07	FY06
Production			
Zinc and lead ores	5,817	5,139	4,795
Lead concentrate	125.7	107	96
Zinc concentrate	1,036	947	893
Exports			
Lead ores and concentrate	NA	75	9.8
Zinc ores and concentrate	NA	3,174	434

Source: Indian Bureau of Mines

After the robust growth witnessed in the first nine months of 2008, domestic and global zinc demand has declined rapidly in 4Q08. Strong supply growth and weak demand pushed down zinc prices in the second half of 2008, with prices hitting USD1,047 per tonne in December 2008, the lowest in four years. LME zinc inventories reached 253,000 tonnes at the end of 2008, as supply significantly outpaced demand in the second half of the year. The decline in 4Q08 was due to significant slowdowns in the global automotive and construction sectors, the largest consumers of zinc. Despite large-scale zinc production cuts announced in response to declining zinc prices and weakening demand, the global zinc supply in 2008 increased at a much faster pace than consumption, leading to a considerable surplus in the market. Higher production in China contributed extensively to the increase in supply. A continued weakening of demand from developed economies is expected to offset the expected rise in demand from China and India (driven by stimulus packages announced by governments) to keep the global zinc demand subdued in 2009. Figure 11 reveals the trend in zinc prices and inventories from the beginning of 2008 till date.

Figure 11: Zinc prices and inventory

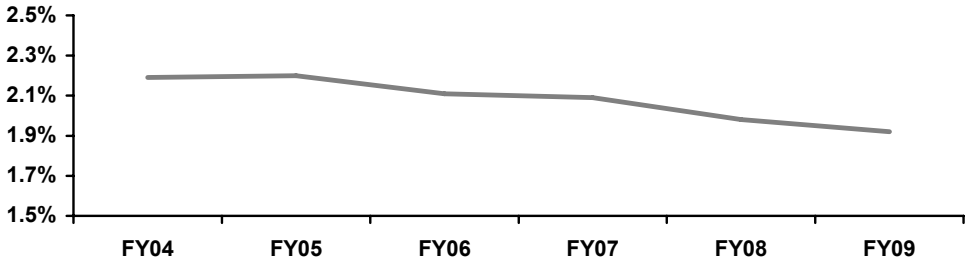


Source: Bloomberg

Contribution of Mining to Economic Development

Mining industry accounted for 1.9% of India's GDP in FY09. As compared to FY04, the industry's share has gone down by 30 basis points (Figure 12) as its growth lagged behind country's overall economic growth. Infrastructure bottleneck and use of obsolete technology are identified as some of the key factors for the low growth of this industry. In addition, the unfavorable tax structure adds to the woes of the industry. During FY04-09, India's GDP grew at a CAGR of 8.5%, while mining industry grew by 5.7%. The industry's contribution to the GDP looks modest when compared to the figures of Brazil (4.3%), South Africa (7.0%) and Australia (6.8%). Given India's strategic location, low labor and capital cost and large untapped mineral base, the mining industry has a potential for a strong growth if significant capital is attracted in the exploration of mineral and development of mines and infrastructure facilities.

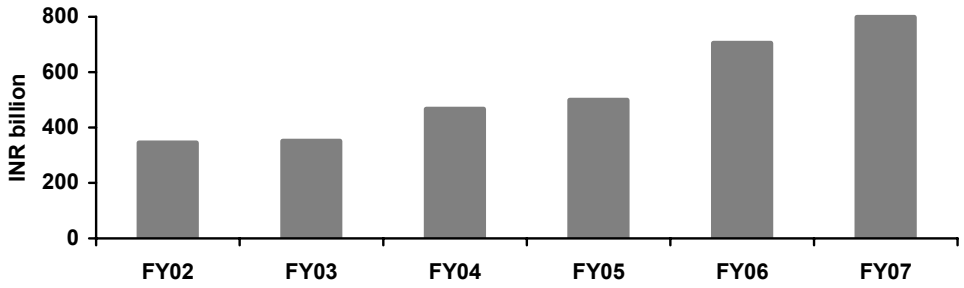
Figure 12: Mining industry's share in India's GDP



Source: Bloomberg and Ernst & Young analysis
Note: Real GDP and mining numbers were taken for the calculation

The industry is a major contributor to India's exports. During FY07, India's mining industry exported minerals worth INR798 billion. The value of mineral exports grew at CAGR of 18.3% during FY02-07 mainly on the back of higher exports of iron ore to China. Share of iron ore exports in the total mineral exports increased from approximately 5% in FY02 to 21% in FY07.

Figure 13: Value of mineral exports



Source: Ministry of Mines

The mining industry is also instrumental in the overall regional and socio-economic development through employment generation and development of ancillary industries. It is estimated that average daily employment in mining sector in 2006–07 was 537,327 people, with public sector accounting for 42% of the total employment. The industry provides both direct and indirect employment. Indirect employment is provided through ancillary activities which include overburden removal, crushing/grinding, beneficiation and upgradation of ores, sizing and washing, downstream refining, loading/unloading at mines/railway site, truck transportation, waste dump stabilization, rehabilitation, canteens, rest houses and crèches, housing for mine workers, maintenance workshops, watch and ward staff, hospitals/medical facilities, etc.

Besides being a basic input for all the other major sectors, every penny invested in the mining activity brings more investment and employment in the allied and downstream sectors. The industry has strong linkages with other industries and it provides raw materials necessary for downstream industries. A case in point is the power industry that depends on coal for power generation. Other major raw materials provided by the industry include iron ore, copper ore and bauxite.

According to the US-based National Mining Association:

- Each mining job has created an additional 2.6 jobs in the other sectors of the US economy. More than 250,000 people were employed in the US metals and non-metals mining sector and an additional 650,000 in the other sectors to support the country's mining activities.

- Revenue generated from the sector has a multiplier impact on the economic output as one dollar revenue generated from the mining sector has generated additional revenues of USD2.35 as direct and indirect output. In 2007, US mines produced metals and non-metals worth USD68.3 billion and this generated USD161 billion in direct and indirect economic output.

The relationship between the mining industry and the overall economy is intertwined. Growing economy and increasing industrialization leads to high demand for minerals. The Planning Commission projections show the demand for key minerals such as iron ore, bauxite and copper to increase considerably over next few years. Continued economic growth is expected to be a positive driver for the growth of metals and mining industry in India. Increased industrialization will boost demand for metals and thereby intensify the need to further develop the industry in the country.

Contribution of Mining to Regional Development

The mining sector has made a substantial contribution in the development of country's mineral rich states, which had otherwise fallen off the development path. These include, Chhattisgarh, Jharkhand and Orissa. Since the sector's output or produce is mainly used for captive purposes, its direct contribution to the overall growth may seem small, but there is significant contribution indirectly. The sector has laid the foundation for the development of many large industries in these

states along with the development of basic amenities (such as roads, schools, water and electricity). During the last 14 years (FY94-08), these states have witnessed a robust growth in their GDP on the back of higher **activities in the mining and quarrying and manufacturing sectors.**

- **Chhattisgarh's** overall GDP has increased by more than four times, growing at a CAGR of 13%. The mining and quarrying and manufacturing sector's contribution to the state's GDP increased by eight percentage points to reach 36%. Increase in activities in these sectors helped in improving the state's per capita GDP which grew at a CAGR of 11%.

- In the case of **Jharkhand**, the mining and quarrying and manufacturing sector's share reached 45%, which increased its overall GDP by 329% (over the period FY94-08)and its per capita GDP at a CAGR of 9%.

- **Orissa's** GDP increased by 457%, growing at a CAGR of 13% as the combined share of both sectors which improved from a modest 16% to 24%. In addition, the state's per capita GDP grew at an annualized rate of 12%.

Figure 14 highlights the key economic indicators for the main mining regions in India

Figure 14: Key economic indicators

States	Chhattisgarh		Jharkhand		Orissa	
Fiscal year	2008	1994	2008	1994	2008	1994
Share of mining and quarrying in state's GDP	8%	9%	13%	18%	8%	5%
Share of manufacturing in state's GDP	28%	20%	32%	24%	16%	11%
Combined share of mining and quarrying and manufacturing in state's GDP	36%	29%	45%	42%	24%	16%
Per capita GDP (INR)	32,591	7,619	23,162	7,125	26,014	5,608

Source: SAS, 12 June 2009, Centre for Monitoring Indian Economy

In the case of Chhattisgarh, substantial capital addition was witnessed in the mining sector during FY00-05 period. The sector also attracted investment in the metal fabrication and machinery and equipment sectors. As a result, the employment in these sectors increased cumulatively by 5%. In addition, the gross value product generated by these sectors was valued at INR250 billion in FY05, growing by 64% as compare to FY00. Figure 15 provides the employment and capital formation data for Chhattisgarh.

Figure 15: Chhattisgarh's employment and capital formation facts

Fiscal year	2005	2000
Employees (numbers)		
Basic metals	55,924	54,963
Fabricated metal products	2,942	2,158
Machinery and equipment	3,441	2,000
Total	62,307	59,121

Gross capital formation (INR million)		
Basic metals	41,497	-3,776
Fabricated metal products	155	14
Machinery and equipment	461	34
Total	42,113	-3,728

Source: SAS, 12 June 2009, Centre for Monitoring Indian Economy

However, there are impediments to the overall growth of the industry which manifest themselves in the form exploration expenditures, not commensurate with the high level of mineral reserves.

Low exploration as compared to high reserves – a dichotomy that besets the Indian industry

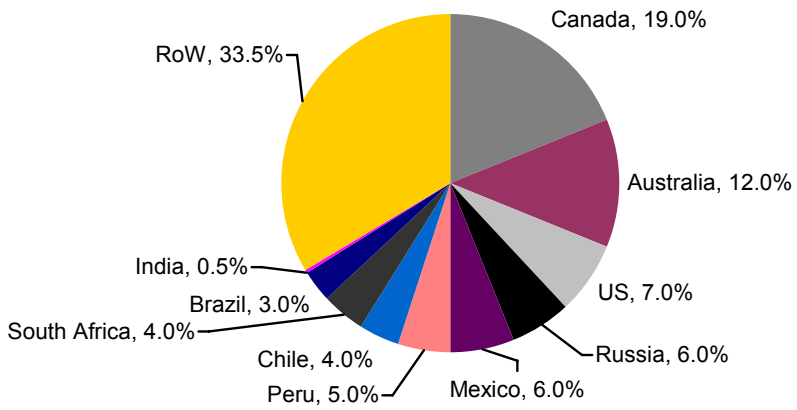
Though India boasts of huge resources of minerals such as iron ore, bauxite, stones, base metals, noble metals, and diamonds, it has not been able to fully realize it's potential. Considerable lack of exploration activity on account of several factors mars the growth of the industry. While geological mapping on a scale of 1:50,000 has been largely completed, geophysical and geochemical mapping has not been done. This has resulted in an inadequate quantification of deposits. There are a number of iron ore belts that are unexplored without proper resource assessment since early 1980s.

Out of 1.82 million sq. km of hard rock area (excluding the Deccan Trap), geophysical mapping of only 56,000 sq. km and geochemical mapping of only 73,000 sq. km has been completed. Even if the general geological environment of only Scheduled minerals, estimated at about 571,040 sq. km, is considered, proper reconnaissance or regional exploration up to P2 level of only 8–13% has been done.

The exploration expenditure in the country is abysmally low as compared to other countries. For example, Canada spends close to USD2billion followed by Australia which spends USD1.2 billion per annum on survey and exploration. As compared to these regions, India spends a mere USD50 million. Not only that, Geological Survey of India (GSI) is the only agency that undertakes exploratory activities while private sector participation is close to negligible.

Figure 16 below highlights the relative position of India in the global exploration expenditure scenario. India constituted a mere 0.5% of the total global exploration expenditure of USD10 billion in 2007 while Canada, Australia and the US accounted for 19%, 12% and 7% respectively.

Figure 16: Global exploration expenditure - USD10 billion



Source: Metals Economic Group, Canada

In the case of India, in the past five decades, GSI has spent the maximum amount on the exploration of coal deposits. Since not much investment has gone in prospecting, there exists immense potential for attracting such investment. Given the geological potential, and domestic and export markets, the Indian spending on exploration should account for about 4.5% of the global spending on mineral exploration.

The government has allowed FDI in the sector in order to encourage private sector and foreign participation. However, it has not received encouraging response. The private sector has not shown interest in prospecting and the public sector agencies such as GSI, MECL (Mineral exploration corporation ltd) etc is impacted by paucity of resources. As a result, the sector has not been able to contribute to the GDP in a big way.

The total expenditure on mineral exploration is expected at INR28 billion by 2011-12. GSI and MECL are expected to account for close to 86% of this expenditure with the balance being contributed by state government and other agencies. This highlights the sheer absence of the private sector from the overall mineral exploration efforts in the country.

It is an imperative for the government to consider mining sector as important for overall growth of the society rather than just being profit making proposition. In order to achieve this target, certain benefits need to be extended to the sector for it to be able to achieve its full growth potential.

While the country has been able to increase its mineral inventory, the time lag between discovery and extraction of minerals is long. This is mainly due to the lack of sophisticated extraction technology, fund constraints, small size of mines/leases and high costs of production. Therefore, it is imperative to improve productivity and provide a productive environment to the industry through better planning, cost control, better beneficiation methods, and recovery of byproducts. The tax system can also play an important role in this. A systematic and well structured tax regime Can encourage additional investment in the sector.

The mining activity entails a great deal of risk in terms of metal that can be extracted from the ore. What can be achieved and found is not known in the beginning of the exploration activity. Thus, exploration expenditures carry a risk of becoming dead with no future returns. These risks are compounded where the ore bodies are not rich in minerals.

Recognizing the inherent risk in the exploratory activity, governments often provide fiscal incentives for exploration expenditures that serve to partially mitigate the risks. The incentives can take the form of allowing immediate expensing of

exploration expenditures or allowed them to be flowed through to passive investors who provide capital for the expenditures. As discussed in the later sections of this report, the Indian tax regime is not conducive to exploration expenditures. To start with, the rules for deductibility of exploration expenditures are very restrictive. The woes of explorers then get compounded by the application of the service tax, which results in a substantial increase in the overall cost of exploration.

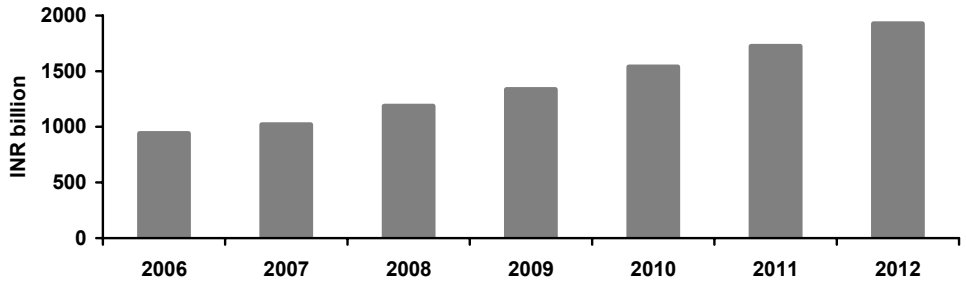
Manufacturers are able to claim a credit of the service tax paid against the excise duty (Cenvat) they pay on their output. However, mining is not subject to Cenvat as it is not considered to be manufacturing. As a result, miners are unable to claim a credit for the service tax levied on the input services consumed during mining activities. It becomes an extra cost for them.

Vision for the industry

The rapid growth of user industries such as steel, power, construction, automobiles will propel growth in the Indian mining industry. Strong long term demand from the steel industry is expected to boost iron ore industry while positive trends in power sector will catapult demand for coal. Key drivers for growth will include booming construction, automobiles and power industries which are expected to lend support to the sector.

As per Business Monitor International, the overall mining industry is expected to grow at a CAGR of 9% during 2008–12 to reach INR1.9 trillion by 2012 (Figure 17). The industry is expected to form 2.7% of GDP by 2012.

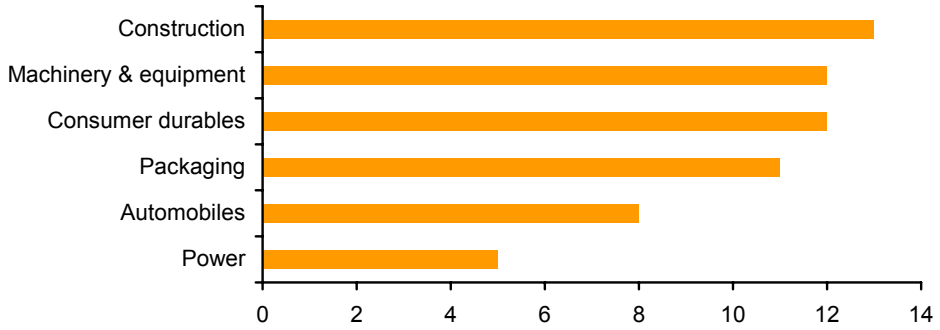
Figure 17: Value of mining industry



Source: BMI mining report, January 2009

The figure 18 below highlights the projected growth for industries in India that require steel and aluminum. This, in turn, highlights the strong demand for minerals such as iron ore and bauxite. The key end users for aluminium and steel include construction, automobiles, power and consumer durables sectors to name a few. As highlighted in the figure 18 below, these sectors are projected to record robust growth during 2008–12 driven by growth in the Indian economy.

Figure 18: End users - growth rate (%)



Source: Crisil research

Below are the key factors which are expected to drive growth in end user industries:

- **Growing urbanization: Rising population, growing urbanization, burgeoning middle class are** key propellers for upswing in the construction industry. Also, easy availability of housing loans will create more demand for new house. As a result, domestic demand for metals is poised for a high growth on the back of higher demand for steel products and cement.

- Booming automobiles industry: The automobiles industry in the country is expected to grow at a CAGR of 6% during FY08–13. The introduction of low cost cars, growing working population and rising income levels will support the growth in this segment.

- Developing power industry: India's power sector is projected for an accelerated growth as the country's growing economy would necessitate higher demand for electricity. The industry experts are of the view that the growth seen in the power sector in the past year is only the tip of the iceberg, and expect an accelerated pace of capacity addition over the Eleventh and Twelfth Plan periods as market-oriented reforms provide greater incentives for capacity addition.

Economics of mining in India

Comparison with global peers: Despite being extremely rich in metallic mineral resources, the country does not have much presence of mining companies of global scale and quality. In comparison, Australia and Brazil have seen the creation of global mining majors such as BHP Billiton, Rio Tinto, Vale, and Anglo American, which between them control a majority of global trade in minerals such as bauxite, copper, iron ore, coal, nickel, and zinc.

- Lack of adequate scale: During FY08, India produced 197 mt of iron ore from 247 mines in FY08, which implies an average production of 0.8 mt per mine. In comparison, the average production rate per mine of Vale, BHP Billiton and Rio Tinto was 51, 17 and 13, respectively.

- Dependence on external infrastructure: Indian miners are solely dependent on external infrastructure (such as railways, roadways, and ports) for carrying operations, while, the Australian and Indonesian miners own such infrastructure. Some of the large Indian miners have their own railway sidings and river barges, but the scale is smaller than the infrastructure owned by global majors.

Below are the factors that dilute the international competitiveness of India's mining industry

The mining industry in the country is plagued with certain issues and challenges.

- There are long lead times in executing activities such as mineral concessions, transfer of surface rights and obtaining environment clearances. This leads to inordinate project delays.

- Obtaining forest clearances is another issue affecting the growth of the industry. Many rich mineral deposits are located in forest areas, which as per the current regulations cannot be mined. A case in point is Jharkhand where several mining projects are awaiting clearance from the forest department.

- Poor infrastructure further mars the growth of the industry. Mining operation is such that the infrastructure needs to be developed where the operations exist and not otherwise. This means that a mine cannot be established near infrastructure; rather infrastructure should reach the mine. Countries like Australia and South Africa are better placed in terms of infrastructure availability as compared to India. This is one of the reasons behind strong growth of mining industry in these regions.

- A wide range of legislations hamper the growth of the industry. It delays the entire process of getting the mine operational and thereby acts as a hindrance in achieving the potential benefits from mining activities.

- The current taxation regime in the mining sector in India is believed to be unfavorable and does not stand at par with other countries. This is responsible for poor private sector participation in the industry, including FDI.

Outsourcing in mining

Outsourcing is becoming inevitable in the mining industry. There are many benefits attached to outsourcing so much so that it has now become the need of the hour instead of a matter of choice. Outsourcing of specialist and non-continuous services is common in the global mining industry and the Indian industry is no exception to that. Lower revenue and increasing production cost pressures has made outsourcing an imperative and a viable option. Many specialist functions, such as shaft sinking which are undertaken by specialist shaft sinking contractors, have been outsourced in the industry for a long time. In the professional services area, some activities have been outsourced, for example the design, construction and supervision of tailings dams.

The key rationales behind outsourcing include the following:

- **Cost reduction**: Contractors with better expertise in a particular area are more cost effective than the internal service departments

- **Instill expertise**: Enables companies to leverage expertise of experienced partners in an area of operation. The partners bring proven record of success and performance thereby enhancing overall effectiveness.

- **Comprehensive services:** External providers can offer a range of related activities

- **Continuous improvement:** External providers are abreast with the latest developments in their specialist technology areas. This enables them to improvise their operational performance

- **Sharpen the strategic focus:** Outsourcing enables the mine to focus its internal resources on its core business.

Outsourcing in mining is a global phenomenon and includes the following functions:

- Mine planning services, particularly for smaller mining companies

- Tailings dam design and operation
- Shaft sinking and underground development
- Tunnel support installation, and stope support installation and management
- Environmental management and design
- Mining and backfilling operations

As per experts, miners should focus more on other important areas such as managing the contractors and financing the mining operations. This emphasis enables the miners to bring efficiencies in their business operations. Outsourcing of exploration activities is also gaining ground. A case in point is the Central Mine Planning and Design Institute Ltd's decision to outsource about 10 million meters of drilling task to other companies. This will enable the company to focus more on core issues such as replacing old drilling machines and enhancing application of newer technology in order to boost the drilling capacity. Another example to support the increased trend towards outsourcing is Neyveli Lignite's decision to outsource lignite mining at its Barsinsar open cast mine in Rajasthan. The company is expected to save around INR3 billion by this move.

It is expected that outsourcing of mining operations is here to stay and is an inevitable phenomena. Going forward, miners will sharpen their focus on core activities to improve overall productivity and will therefore rely more on contractors for other mining operations.

As discussed in the later sections of this report, the irrational structure of the service tax in India discourages outsourcing in the mining sector. The application of the service tax to outsourced services increases their cost, and creates a bias for in-house supply of the services by own employees of the mine operators.

3 Current Fiscal Regime in India

The existence of a neutral and stable fiscal regime is an imperative for attracting investment and for efficient utilization of scarce resources in an economy. Given the crucial role and importance of mining in the overall economic development, and more specifically in the upliftment of the developing regions of the country, the favorable fiscal structure becomes all the more significant in this regard. While the principal objective of the tax system is to raise revenues, it must do so in a manner that is conducive to the overall growth and development of the industry.

This section describes the taxes that apply to the mining sector in India, with focus on selected features of the tax system that appear to be anomalous and detrimental to the growth of the industry. From time to time, the miners have expressed a variety concerns about the taxation regime in India. However, as noted previously, the focus of this report is on the service tax. Other concerns are not discussed in this report in any detail.

The principal taxes applicable in India to mining include the following:

- Indirect Taxes, including customs duties, Cenvat, Service Tax, and State VAT;
- Direct Taxes, consisting mainly of the corporate income tax and minimum alternate tax; and
- Taxes on extraction of resources

Direct and indirect taxes are common to all industries, and are of a kind found in other international jurisdictions. Similarly, the taxes on extraction of resources are also not unique to India. However, as discussed below, the impact of a tax on an industry in general, and mining in particular, is contingent upon the manner in which it is levied.

3.1 Indirect taxes

Indirect taxes are applicable to activities ranging from manufacturing to final consumption. Such activities include distribution, trading and imports of goods, as well as services.

In India, the principal indirect taxes are the Central excise (Cenvat), customs, the State VAT (levied by the State governments), and the service tax (levied by the Centre). Additionally, other indirect taxes such as entry tax and octroi are also levied by State governments and municipalities but their incidence on the mining sector is limited.

3.1.1 Excise duty

Excise duty or Cenvat is levied on the manufacture of goods within India and is governed by the Central Excise Act, 1944 ('Excise Act'). The rates of excise duty are as determined in the Central Excise Tariff Act, 1985 ('CETA') read with the relevant Schedules and notifications.

The general excise duty rate is 14%, which has been reduced to 8% under the fiscal stimulus package announced by the Centre earlier this year. The general rate of excise come to 8.24 % including the 3% cess.

Minerals are classified under Chapter 26 of the CETA. Minerals are generally exempt from excise duty vide specific exemption notification. This exemption is based on the fact that extraction of minerals is not considered to be a manufacturing activity, and thus beyond the purview of the central excise.

However, cess is levied on mineral ore under various legislations. For instance, cess on iron ore, manganese ore and chrome ore are levied under the 'Iron Ore Mines, Manganese Ore Mines and Chrome Ore Mines Labour Welfare Cess Act, 1976'.

However, currently, there is an exemption from cess on production of iron ore and manganese ore but production of chrome ore still attracts cess of Rs 6/- per metric tonne.

Under the Cenvat structure, a manufacturer subject to Cenvat on its output, is eligible to claim a credit for the Cenvat or the service tax paid on the inputs acquired for use in the production of taxable goods (or taxable services). If the output is exported, then there is no excise duty levied on exports under the destination principle of the Cenvat. The manufacturer is still allowed to claim a credit or refund of the taxes paid on inputs acquired for use in export production. Thus manufacturers are able to fully recover any Cenvat or service tax paid on their inputs.

This is not the case for mining. Because mining is not considered to be a taxable activity under the Cenvat, miners are not able to claim a credit for the taxes applied to their inputs, whether capital equipment, raw materials, supplies, or services. This feature increases the cost of mining in India and has a detrimental impact on their profits and investments.

3.1.2 Custom duty

Customs duty is levied on the import of goods into India. The liability to pay customs duty is on the importer, i.e., the person importing the goods into India. The levy and the rates of customs duty are as per the Customs Act, 1962 and the Customs Tariff Act, 1975 ('CTA') respectively.

The basic components of customs duty on imports are the following:

- Basic customs duty;
- Additional customs duty in lieu of excise duty;
- Special additional customs duty in lieu of sales tax/ VAT;
- Education cess; and
- Secondary and Higher Education Cess

At present the general effective customs duty rate is 24.42% on most products.

Mineral imports generally attract lower duties on two counts. First, minerals are not subject to excise duties when produced locally. As a result, the additional customs duty in lieu of excise duty is zero. Second, the basic customs duty on minerals such as iron ore, manganese and bauxite is lower than the general rate. Overall, the effective customs duty rate on iron ore, manganese and bauxite is 6.14%. it is 14.71% for limestone and dolomite.

Exports are generally exempt from customs duty. In exceptional cases, where the domestic supply is inadequate to cater to the domestic demand, the government may regulate the supply of minerals through imposition of export duties. For instance, in India, the export of chromium ores attracts export duty of Rs 3000/- per tonne. The export of iron ore fines and manganese ore also attracted the duty until recently when it was dropped to zero. The levy of such export duty on mineral export has made such exports unviable.

3.1.3 Service tax

The service tax is levied by the Centre at the rate of 10.30% (12.36% prior to the fiscal stimulus package) on specified services provided by service providers in India. This tax is unique in many ways and is not found in other jurisdictions. Here are its principal features that impact its application to a given industry or sector.

First, the tax is applied to a list of specified services, which include approximately one hundred different services, ranging from telecommunication, financial services, real estate agents services, international travel in premium class, to business support services. Determining whether a given service is taxable, and if so under which category is not easy. The scope and meaning of each specified service needs to be defined. In spite of several clarifications and circulars, the debates and controversies continue about the scope of many services.

Second, the levy is structured like a VAT, allowing a service provider to claim a credit for the service tax paid on its inputs. The credit rules for the Cenvat and the service tax are integrated, allowing a taxable service provider to claim a credit for the Cenvat as well as the service tax paid on its inputs. Likewise, a manufacturer is able to claim a credit for both the Cenvat and the service tax paid on inputs used in the manufacture of taxable products. However, in both cases, the credits are restricted to providers of taxable services or manufacturers of taxable goods. No credits are available to primary producers or miners, who are neither service providers nor manufacturers. Similarly, distributors and retailers of goods are also deprived of any credit benefits.

Third, where goods and services are sold as a composite bundle, the service tax applies to only that part of the consideration for sale that represents the value of services. This is not easy and has been a significant source of disputes and litigation. The goods portion is generally subject to the state VAT. Because of difficulties in segregating the two components, such transaction often get subjected to both taxes, even though the Supreme Court has held the dual application of tax to be unconstitutional.

Fourth, the tax is applied on the basis of the destination principle. Thus, exports of services are not subject to tax, but the tax is self-assessed by the recipient on import of services. Exporters are allowed to claim a credit or refund of the service tax or Cenvat paid on their inputs acquired for use in taxable activities. The definition of export of services has been controversial in certain instances. To ensure that exports are not encumbered by the tax, persons engaged in export of goods are allowed to claim a refund of the tax paid on specified services, where they would otherwise not be eligible to claim an input credit for the tax.

There is a wide gamut of services which are procured by the mining sector as inputs and currently attract the service tax, They include services acquired at all stages of mining, from exploration to mineral production, handling and transportation. Some of the taxable service categories that are relevant for the mining industry are as follows:

- Mining of mineral, oil or gas service;
- Survey and exploration of mineral, oil or gas service;
- Site formation and clearance, excavation and earth-moving and demolition service;
- Cargo Handling service/ transportation of goods by road service;

Given this broad framework, how does the tax impact the mining sector? Given that mining is neither manufacturing, nor rendering of services, it is outside the scope of the Cenvat as well as the service tax. However, virtually all of the inputs of a mine attract the Cenvat or the service tax. By being outside the scope of the taxes, mining is treated akin to final consumption, with no credit for the taxes paid on mining inputs.

Overall, the structure of the service tax and its application to mining is seriously flawed and is detrimental to the efficiency and growth of the sector in India. The negative impacts of the tax are discussed in detail a later section of this report.

3.1.4 Value added tax

Value Added Tax ('VAT') is levied by the States on the sale of goods in India. India means the landmass as well as the territorial waters up to 12 nautical miles. The application of VAT is limited to sale of goods within a state. Inter-state sales attract the Central Sales Tax (CST), which is in the process of being phased out. The general VAT rates are 1%, 4% and 12.5%.

As per the state VAT legislations, a dealer is entitled to avail input tax credit of the VAT paid by him on his purchases in the state and offset the same against his output VAT liability. However, a dealer is not entitled to avail input tax credit of the CST paid on inter-state purchases.

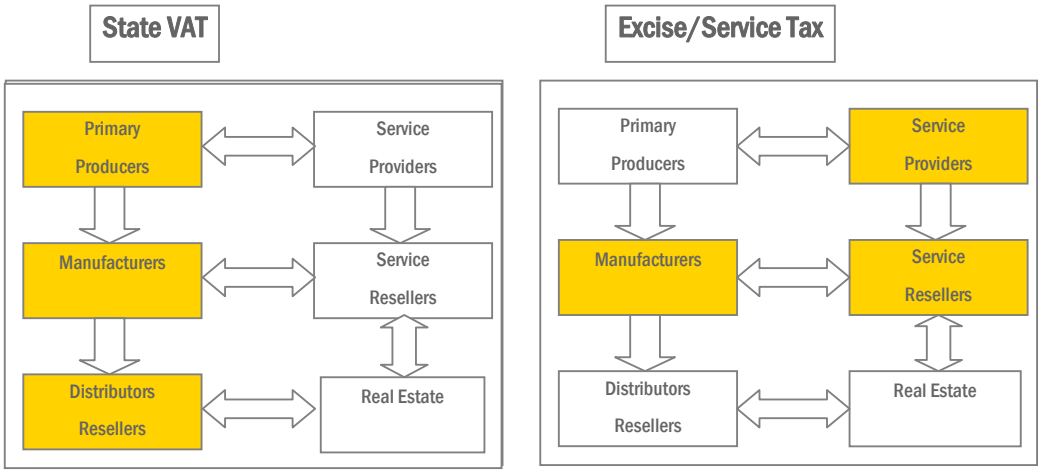
Presently, in most states minerals are liable to VAT at the rate of 4%. However, precious metals like gold and silver are taxed at the reduced rate of 1%.

Because the mine output is subject to VAT, miners are allowed to claim a credit for VAT paid on their inputs. The VAT charged by miners on their output is, in turn, creditable to the manufacturers or processors who buy the mine output as an input to further processing. Thus, the application of VAT to the mining sector is appropriate and is not anomalous since the VAT follows the general 'consumption tax' principle. The VAT cost flows through the entire chain i.e. from the mining company to the manufacturer and then from the manufacturer to the distributor and reseller.

3.1.5 Overview of the indirect tax system

The figure 19 below indicates how the indirect tax structure operates in India. The indirect tax structure in the country is broadly segregated into VAT —levied by the States and Excise duty and Service tax — levied by the Centre.

FIGURE 19: CURRENT INDIRECT TAX STRUCTURE



In chart above, yellow boxes indicate the sectors which are within the scope of the given tax. White boxes are sectors which are outside the ambit of the tax. Thus, the state VAT applies to primary producers (including mining), manufacturers, and distributors and retailers, but not to the service sector and sales of real property. The Cenvat and the Service tax applies manufacturers and service providers, respectively, with primary producers, distributors, and real property sectors falling outside the scope.

The structure of State VAT is quite appropriate as it extends to entire supply chain for goods (i.e. primary producers, manufacturers and the distributors). The VAT cost flows through the entire chain from the primary producer to manufacturer and finally to the distributor and reseller.

It is the application of excise and service tax to the supply chain which is flawed. The reason is that excise duty is not applicable on the primary producers. As a result, the primary producers cannot take cenvat credit of the duty/ service tax charged to them by their suppliers. The input tax on these services gets added to the cost of the product supplied by the primary producer, leading to tax cascading and other economic distortions. The mining sector is a primary producer which, though a part of the supply chain, is not subject to tax. Therefore, this sector is negatively impacted by this flawed indirect tax structure.

3.2 Direct taxes

Mining, like any other sector attracts corporate taxes under the Income tax Act, 1961 ('IT Act'). The specific corporate taxes levied under the IT Act are as follows:

3.2.1 Corporate income tax

Any company incorporated in India or having its management and control in India is a resident and is liable to pay taxes in India on its worldwide income. A non-resident company is taxed only on the income received in India or derived in India from Indian operations or in certain cases on income that is deemed to accrue or arise in India.

Taxable business income is computed either on a net income basis or on a deemed income basis. The tax laws provide for specific deductions and allowances in computing income on a net income basis. The effective corporate tax rate is 33.99% for domestic companies, and 42.23% for foreign companies.

3.2.2 Minimum alternative tax

If tax payable as per regular tax provisions is less than 10% of its book profits, corporations must pay 10% (plus applicable surcharge, education cess, and secondary and higher education cess) of book profits as tax. Book profits for this purpose are computed by making prescribed adjustments to net profit disclosed by corporations in their financial statements. Carry forward and set off of Minimum Alternative Tax is available in 7 subsequent tax years. Set-off is allowed to the extent of difference between tax payable on total income under normal provisions of the Act and Minimum Alternative Tax payable during the year in which set off is being claimed.

3.2.3 Fringe benefit tax

Fringe Benefit Tax is payable by an employer on benefits provided or deemed to have been provided to past and present employees. Tax is payable at an effective rate of 33.99% on value of fringe benefit as prescribed ranging from 5%, to 20% or 100% of the costs incurred on such benefits. Fringe Benefit Tax is payable irrespective of whether employer is liable to tax in India or not. FBT is not allowable as deduction to employer

3.2.4 Tax deductions

In computing the profits for taxation for mining companies the following two deductions are allowed:

- The expenditure incurred wholly and exclusively on prospecting, extraction or production of any mineral during 4 years prior to the start of commercial production is deducted once the commercial production commences.

- Depreciation on plant and machinery is 15% of the written down value. Further, an additional depreciation of 20% is allowed in the first year for any new plant and machinery.

Recognizing the risks associated with exploration and development of minerals, foreign jurisdictions, such as Canada and Australia, provide a very generous regime for exploration and development expenditures. In general, such expenditures qualify for up front accelerated deduction in computing income. Where the exploration entity does not have adequate income to fully utilize the deductibility of exploration expenditures, it my be able to make arrangements with passive investors to fund the expenditures (e.g., through drilling funds in Canada) and thereby benefit from the accelerated deduction of the expenditures.

India too provides deductions to the mining sector for such expenditures. However, as compared to other nations, the deductions granted in India are not very restrictive. Even the depreciation allowance system for capital assets in India is inadequate and not commensurate with economic depreciation. The inadequateness in the treatment of expenditure at each stage of the mining operation in comparison with other economies is discussed further in the latter part of this report.

3.3 Mining levies

The legislation governing the mining industry in India is the Mines and Minerals (Development and Regulation) Act, 1957, ('MMDR Act'). The MMDR Act lays down the legal frame-work for the regulation of mines and the development of minerals. Under the MMDR Act, various regulations and rules such as the Mineral Concession Rules, 1960 and Mineral Conservation and Development Rules 1988 have been issued. These rules regulate the grant of prospecting licenses and mineral licenses for minerals and also focus on conservation and systematic development of minerals.

There are three phases in a mining operation, i.e., prospecting, development and operation. The prospecting phase itself has two phases, i.e., reconnaissance and detailed exploration. For each stage of mining, specific licenses/ permits are granted to the prospector for undertaking the operations. The grant of the licenses/ permits is subject to payment of fees and royalties which are to be used for conservation and systematic development of minerals.

The following fees and royalties are levied under the MMDR Act at the different stages of a mining operation:

3.3.1 Reconnaissance permit fee

In order to undertake reconnaissance activity, a prospector is required to obtain a Reconnaissance Permit, which is granted for a period of three years. The prospector holding the Reconnaissance Permit is required to pay an annual permit fee at a rate as may be fixed by the State Government for the land allotted to him for reconnaissance activity. The annual fee is Rs 5 per sq km. Additionally, the permit holder is also required to pay a security deposit of Rs 20 per sq km of land allotted to him.

3.3.2 Prospecting fee

Post conclusion of the reconnaissance activity, a prospector would undertake a detailed exploration of the land. For detailed exploration, a prospector is required to obtain a Prospecting License, which is granted for a period of three years, and extendable for another two years. The prospector is required to pay annually, in advance, a prospecting fee as may be fixed by the State Government for the land allotted to him for prospecting. The fee is levied at a rate of Rs 50 for the first sq. km. and Rs 10 per sq. km. for subsequent area. Additionally, the license holder is also required to pay a security deposit of Rs 500 per sq km of land allotted to him.

3.3.3 Royalties

Once the regional exploration and the detailed exploration is concluded, the prospector undertakes the development and operation of the mine. For this activity, the prospector is required to obtain a Mining Lease which is generally granted for a period of thirty years, and extendable for a further period of twenty years.

The holder of a Mining Lease is required to pay royalty for any mineral removed or consumed from the leased area at the rate specified in the MMDR Act. Different rates are specified for different categories of minerals. Royalty on minerals is charged

either on the unit of production basis or ad-valorem basis. The ad valorem rates are generally dependant on the sale prices of ore at the pithead.

3.3.4 Dead rent

The holder of a Mining Lease is required to pay to the State Government an annual dead rent at the specified rates for all areas included in the Mining Lease. The rate varies from Rs 100/- to Rs 400/- per hectare per annum depending on the mineral produced, value of minerals and area of lease.

Dead rent is in the nature of a minimum royalty payment and is generally payable when no production is undertaken in the mine. Thus, where a holder of a mining lease becomes liable to pay royalty, he would be liable to pay royalty, or the dead rent (in respect of that area), whichever is higher.

3.3.5 Other levies

In addition to the levies under the MMDR Act, a mine operator is also required to pay other fees and levies with regard to the use of forest land for mining operations under the Forest Conservation Act 1980 and the Indian Forest Act 1927. Such other levies are briefly highlighted below:

- Forest tax which is levied on forest produce removed from forest areas. The rate varies from State to State.
- Compensatory afforestation charges which are levied in order to undertake afforestation. The charges vary from state to state.
- Other charges such as charges for clearing of jungle, development of land, replantation, etc.

The levy of royalties and fees for undertaking mining operations is quite appropriate and is not unique to Indian mining sector. The reason for levy of such fees and royalties is that mining is an economic activity which uses land and the natural resources of the state. The State, in turn, needs to be compensated for the use and depletion of its resources. Other reasons for levy of such fees are the requirement for development of the area under the mining operation and the need to balance the detrimental impact of the operations on the environment. The description of such fees may vary from country to country but the reasons for such levy are common in most countries.

While the nature, structure, and burden of these levies/ taxes on the mining industry debatable, they are beyond the scope of this report and not directly relevant to the application of service tax, which is the main focus of this report.

4 International Perspective

Most countries have accorded the mining sector a special treatment in their taxation regime. Special deductions are provided to the mining sector with respect to the expenditure incurred in the exploration and development stages, along with other incentives.

There are a number of reasons why mining activities may be treated differently than other economic activities. A mining operation is inherently a risky venture, very capital intensive and globally competitive with prices of commodities subject to fluctuations in the international markets. Some specific characteristics which warrant a differential tax treatment of the mining sector include:

- The exploration phase of a mining operation is a risky venture with no guarantee that the venture would eventually result in a commercially viable operation. Further, even if the venture does result in a commercial operation, the high costs and time involved in the exploration phase acts as a deterrent to investment in this sector.

- Development of a mine is a very capital intensive process. This operation typically requires the use of heavy machinery and specialized equipment. In many developing countries, such equipment is not available locally and needs to be imported. Similarly, the requirement to pay fees and royalties prior to the production of minerals which also leads to an increase in the costs of a mining venture.

- Due to the risks and high capital requirements, mining operations have to depend on foreign investment. The foreign capital is mobile and is attracted in those jurisdictions where the returns are high and the fiscal and regulatory jurisdiction is the friendliest. Many nations have recognized the fact that attraction of foreign investment in this sector would require the introduction of beneficial schemes and concessions.

- The capital once invested in a mining operation is immobile and captive. The process of exploration and development of a mine could take eight to ten years. Till such time that the mine is operational and results in investment returns, the capital invested in the mine would be blocked.

- The long gestation period for a mining project increases the risks associated with volatile political and economic changes. This could make a potential project commercially unviable. This is especially applicable to countries which have a long history of political instability.

- The prices of commodities are determined by international and domestic competition. The commodity prices are prone to changes on regular basis.

- Mining activities generally become more expensive as a project matures. This is because the resource becomes scarce at the easily accessible levels and additional effort and cost is required to obtain this resource.

- Unlike other sectors, significant costs and investments are required at the time of closure of the mine and reclamation of the land.

- Unlike other industries, this sector has a high impact on the environment since this activity leads to a depletion of a mineral resource.

These attributes require a special tax regime for the mining sector. The figure 20 below provides a summary of the possible tax policy responses to these and such other attributes of mining, based on a comparative study of various jurisdictions by Prof James Otto :

Figure 20: Special treatment to mining and tax policy response	
Reason for special treatment	**Tax policy responses**
A lengthy and costly exploration program will precede the start-up of a mine. During this exploration period there will be no present income against which to offset these costs	• Offset preproduction (preincome) exploration expenses against future income (loss carry-forward, amortization)
Mine development is exceptionally capital intensive, and an operation will initially need to import large quantities of diverse equipment and expertise from specialized suppliers	• Provide various means to accelerate recovery of capital costs once production commences. • Allow service costs to be carried forward and amortized after production commences • Reduce rate or exempt from import duties • Reduce rate, exempt, refund, or offset for value-added tax (VAT) on imported equipment and services
Mined product is destined for export markets	• Reduce rates or exempt from export duties • Exempt from VAT or zero rate exports
Different minerals have very different labour, cost, price, value added, environmental and social attributes	• Vary royalty rate for different groups of minerals
The scale of operations may be small or large	• Vary royalty rate by size of production • Exempt small-scale operations from some types of taxes
Mines produce raw materials that are prone to substantial price changes on a periodic basis related to the business cycle	• Waive certain types of taxes, usually royalties, from time to time for projects experiencing severe short-term financial duress • Allow losses to be carried forward
After mining ceases and there is no income, a mine will incur significant costs relating to closure and reclamation of the site	• Require a set aside of funds for closure and reclamation in advance and provide some sort of deduction for this set-aside against current income tax liability
Many mining projects will have a long life span and companies fear that once their captive investment is in place, government will change the tax law, negatively affecting their returns	• Stabilize some or all of the relevant taxes for at least part of the mine life • Stabilize taxes by statute or in the form of an agreement
Where the level of investment is particularly large (a megaproject), investment may be possible only under a severely modified tax system	• Enter into a negotiated agreement with the company and include special tax provisions that supplant the general tax law in whole or in part

A company may enjoy special tax treatment for one operation but may have ongoing exploration that may lead to other operations	• Apply ring-fencing principles (accounts from the mine may not be mixed with accounts for activities outside the mine)

Source: Otto 2004

4.1 Treatment of mining sector under GST

Most of the discussion of the special attributes and tax policy responses above relates to direct taxation. In general, there are not many issues or concerns that arise in the application of indirect taxes to mining. Mining being an intermediate industry, i.e., supplying ores that need to go through further processing to produce consumer goods, it is either not subject to indirect taxes (which are taxes on consumption of goods and services), or the taxes that are levied are fully creditable. Thus, the net incidence of indirect taxes on mining sector is close to zero.

By contrast, this cannot be said of the indirect tax regime in India, which impacts the mining sector in a significant manner. As discussed earlier, and in greater detail later, the service tax does impose a heavy burden on the mining sector in India. To aid an understanding of the negative aspects of the service tax, this section provides a brief description of the general consumption taxes in selected international jurisdictions.

In modern industrial economics, separate taxation of goods and services is not followed for the simple reason that the dividing lines between goods and services are increasing getting blurred and the value addition in the production of goods requires input of goods and services in a seamless manner. Therefore, most developed countries in the world have enacted a common goods and services tax. The way in which the system taxes the value added component is reasonably simple – registered persons charge tax on all of their output or sales revenues and are entitled to claim input tax credit for the tax paid on their purchases. This avoids the cumulative effect of adding on tax on tax i.e., cascading. This also means that no part of the GST represents a cost to business.

Thus, GST is a value added tax which operates at each stage of production and distribution of goods or services from the initial producer to the end consumer, using a credit-offset system. The tax is comprehensive, well suited to taxing consumption expenditure without the economic disadvantages inherent in other tax systems.

The general structure of a GST is as follows:

(i) Any business concern supplying goods or services is required to register for GST if the annual turnover exceeds the threshold limit. The business concern has to charge GST on the taxable supply of goods and services within the country. The business concern is required to pay GST to their supplier on purchases of goods and services. The GST suffered can be claimed back as an input tax credit.

(ii) Export of goods and services are generally zero rated, i.e. the supplier should not charge GST on the exports and is also allowed to obtain a refund on the input tax credits. When a business concern is both an exporter as well as a domestic supplier, it is allowed to recoup all its input tax, but it has to charge GST on domestic supplies.

(iii) Import of goods and services is subject to GST in the importing country.

In what follows, we provide a comparative analysis of the application of GST (or other consumption tax) on mining in selected countries.

4.1.1 New Zealand

The mining industry in New Zealand is self-sufficient in many mineral resources, and exports substantial amounts of gold, silver, iron ore and high-grade coal. The mining industry contributes to several major sectors of the economy, including agriculture, energy, construction, transport and manufacturing. The other main mineral exports are copper, zinc, gypsum, lead, magnesium, manganese, nickel and titanium oxide.

GST was introduced in New Zealand in 1986 as one of a number of reforms aimed at broadening the tax base and reducing the reliance of the tax system on personal income taxation. The GST in New Zealand has proven to be an efficient and relatively problem-free tax to administer and has been regarded as setting an international benchmark for expenditure taxes. GST is the second largest source of tax revenue for the New Zealand Government after personal income taxation, contributing 21 per cent of the total tax revenue.

In New Zealand, GST applies to transactions where a registered person supplies goods or services made in New Zealand and on the import of goods into New Zealand, irrespective of the status of the importer. The standard GST rate is 12.5% and some supplies are zero-rated. In addition, some activities are exempt from GST and the supplier of exempt goods or services does not have the right to deduct any related input tax.

A few examples of goods and services that are zero-rated from GST are exported goods, exported services and related services, services performed outside New Zealand, etc. Goods and services which are exempt are financial services (although some qualify for zero-rating), supply of precious metals, sales of donated goods by non-profit organization, certain real estate transactions etc

The supply of any fine metal (i.e., gold, silver, platinum or any other metal that the Governor General may declare) is exempt under section 14 of the New Zealand GST Act (except the first sale of refined precious metal for investment purposes which is zero rated).

The liability to pay GST lies on any business entity or individual that makes taxable supplies of goods or services in the course of doing business in New Zealand. A taxable person may recover input tax, which is GST charged on goods and services supplied to it for business purposes. GST is not recoverable for goods and services that are acquired principally for non-business purposes or principally for making exempt supplies. Input tax directly related to taxable supplies is deductible in full, while input tax directly related to non-taxable supplies in not deductible.

4.1.2 Australia

Australia is one of the top five producers of most of the world's key minerals commodities. It is the world's leading producer of bauxite, alumina, rutile, ilmenite, zircon and tantalum. It also produces other minerals such as uranium, lead, zinc, lithium, gold, diamonds, iron ore, manganese, nickel, niobium, etc.

All transactions that take place within Australia are subject to GST. The GST is applied at a standard rate of 10%, with GST-free rates for qualifying exported products and services and other transactions (i.e. zero rated supplies) and input taxed rates generally for financial services and residential housing (i.e. exempt supplies).

Both Australian resident and non resident entities engaged in mining and metals industries may be subject to GST on services and products supplied. An exception exists for supplies of precious metals. 'Precious metals' include gold of at least 99.5% fineness, silver of at least 99.9% fineness, platinum of at least 99% fineness, or any other substance of a particular fineness specified in the regulations.

A supply of precious metals is zero-rated if it is the first supply of that precious metal after its refining by the supplier, the supplier is a refiner of precious metal, and the recipient of the supply is a dealer in precious metal who acquires the precious metal for investment purposes.

Import of products and equipment into Australia is subject to GST which is payable at the time of import.

As in New Zealand, the overall incidence of Australian GST on the mining sector is nil.

4.1.3 Canada

Canada is the leading producer and exporter of potash (world's largest and richest reserves), the leading supplier of uranium and the second-largest producer of asbestos (possibly the largest deposits) and sulfur (17% of world output and 38% of world trade). Canada also produces titanium, platinum-group metals (PGMs) and mine zinc, copper, lead, silver and gold. Canada's mineral industry is primarily export oriented, with as much as 90% of some commodities going to external markets.

Canada's federal government imposes a 5% GST on the supply of goods and services within Canada. The GST is charged on imports but exports are zero rated. Zero rated supplies are groceries, most medical services and devices, prescription drugs and residential rents.

Since 1996, a single harmonized value-added tax, the HST (Harmonized Sales Tax) has replaced the provincial retail sales taxes and the federal GST in Nova Scotia, New Brunswick and Newfoundland and Labrador. It is applied at a single rate of 13% on the same categories of goods and services as the GST.

Import of goods is liable to GST in Canada and becomes due when the goods are released by the authorities for entry into Canada. Import of services and intangible property are also liable to GST. The importer is required to self-assess GST and remit the tax if these supplies are for use in Canada (unless they are to be used exclusively in a commercial activity).

Generally, GST does not apply to exported goods. Where the supplier delivers the goods outside Canada, the transaction is treated as a supply outside Canada and is generally not taxable. Where the supplier delivers the goods in Canada, the export sale is zero-rated on satisfaction of certain conditions. Most services supplied to nonresidents qualify for zero rating.

The treatment of the mining sector under the Canadian GST is similar to that in New Zealand and Australia. The GST applies to mining output, which entitles the mine operators to claim a full credit for any input taxes paid. The first sale of precious metals is zero-rated, while the second and subsequent sales are exempted from tax.

4.1.4 South Africa

South Africa boasts of abundant mineral resources, producing and owning a significant proportion of the world's minerals. Mining in South Africa has been the main driving force behind the history and development of Africa's most advanced and richest economy. South Africa's wealth has been built on the country's vast resources - nearly 90% of the platinum metals on Earth, 80% of the manganese, 73% of the chrome, 45% of the vanadium and 41% of the gold.

South Africa accounts for over 10% of world gold production, and is the leading producer of platinum, manganese, titanium, chrome, zirconium and vanadium, as well as of base metals and coal. It is the world's fourth-largest producer of diamonds.

The introduction of VAT in South Africa in 1991 was one of the most significant tax developments in the country's history. VAT replaced the previous general sales tax and is now a major pillar of the South African tax system. South African Value-Added Tax, a destination based tax, is levied on the supply of goods and services as well as the import of any goods or services.

Under the South African VAT, the tax applies generally to transactions related to goods and services. VAT is presently levied at the standard rate of 14% on all supplies and imports, unless specifically subject to tax at the zero rate or exempt.

The import of services is only subject to VAT where the importer is not a vendor, or where the services are imported for private or exempt purposes. Exports of goods and service are zero-rated in South Africa.

Again, the treatment of the mining sector under the South African VAT is neutral. Mine operators are allowed to claim credit for any VAT on their inputs.

4.1.5 Chile

Chile is the world's largest producer of cooper. It has the world's most productive mine at Chuquicamanta (in the northern region). Northern Chile also has rich, high-grade iron-ore deposits, mainly in the Coquimbo area. Most of the ore is exported, and the rest is used by the local iron and steel industry. Chile has the largest deposits of nitrate, in the Atacama Desert in the north. The mining and exporting of nitrate (used for fertilizers and for the production of high explosives) fluorished during the last quarter of the nineteenth and first quarter of the twentieth centuries.

Other minerals produced nowadays include: gold, silver, molybdenum, manganese, zinc, lead, baixite, sulfur, and potash. Uranium, cobalt, antimony, and tungsten are also mined.

VAT is Chile's main consumption tax. It is levied at a rate of 19% on sales of goods and services, (with a few exemptions for some services), and on sales of real estate property when this is owned by a construction company and was built totally by that firm or was partially built on its behalf by a third party.

VAT also applies to imports, habitual or otherwise, made by any individual or legal entity.

Exporters are exempted from VAT and are entitled to reimbursement of VAT on purchases of goods and services that they use as part of their export activity. In the month after the export has been performed, they can apply for a refund of the VAT credit incurred in the production of the exported goods. Domestic sales of minerals are taxable, with credits allowed for any input taxes.

4.1.6 Overall assessment

A number of observations can be made based on the experience in the aforesaid countries in the levy of GST.

There is no concept of a 'sticky tax' under GST. While tax is payable on purchases of the business inputs, but the purchaser gets a credit of the tax against the output tax on his supply. Therefore, the net tax on inputs is zero.

Mining companies operating in the countries discussed above would need to pay GST on their output. Mineral products are not on the list of zero rated or exempt goods, except for precious metals such as gold or silver. Therefore, the mining companies would need to account for GST on the sale of the mineral ores. Since the output would be taxable, credit of the tax paid on inputs / input services would be fully allowed.

In comparison to the international practice under GST, the Indian service tax is a 'sticky' tax. This is completely against the basic tenets of a neutral consumption tax.

India too, is proposing to shift to a GST regime from April 2010. Under the GST regime, the tax on the services consumed by the mining operators would be fully creditable against the tax on the sale of the minerals, eliminating the tax cascading that occurs under the current service tax.

4.2 Treatment of mining under corporate taxes

As discussed previously, the corporate tax regime in India provides specific deductions for the mining sector. The question is whether these deductions are comparable to the deductions provided in other countries. In the subsequent paragraphs, we briefly discuss the tax deductions and incentives provided to the mining sector in comparison to the Indian corporate tax regime.

4.2.1 Deduction of expenditure on exploration activities

Most nations accept that the mineral industry exploration and mining process is inherently more risky and capital intensive than other industries and adjust their fiscal systems to adjust for this, by providing tax incentives.

In India, under the IT Act, the expenditure incurred wholly and exclusively on prospecting, extraction or production of any mineral during 4 years prior to the start of commercial production is eligible for amortization over a period of 10 years starting from the year of commercial production[1]. However, in comparison to other countries, the deduction of expenditure provided under the IT Act appears to be quite inadequate.

For instance, in Australia, the deduction for expenditure incurred on pre-production exploration and prospecting activities and development cost is allowed in the year in which it is incurred. Such costs may be amortized over the mine life or 10 years, whichever is less.

In Argentina, the main benefits in place to attract exploration capital include: double deduction of exploration expenses and also a VAT reimbursement. Argentina allows weighted deduction for expenses incurred on feasibility studies and pre-production exploration costs (this includes prospecting, exploration, special studies, pilot plant tests, applied research and other tests) at 200 percent of the amount spent. Additionally, VAT credits on all exploration expenses are to be reimbursed after twelve months.

Canada allows all pre-production costs to be carried forward indefinitely for set off in the successive years. Any GST paid on pre-production costs can be claimed as a credit against any output GST. If there is insufficient output GST, the excess is refundable when the GST return is filed each month.

For a comparative study, assuming two mining companies India and Canada, respectively, the exploration expenses incurred by each company for a period of ten years prior to commercial production are INR 10 million each. Depending on the direct tax regime in each country the following can be inferred from figure 21 below:

[1] The time limit of 4 years was based on the specified duration of 5 years for prospecting and development phases under the MMDR Act. However, the MMDR Act has now been amended to provide for a 3-year reconnaissance period, a 5-year prospection period and a 2-year development phase, i.e. a total pre-production period of 10 years.

Figure 21: Comparison of Indian and Canadian mine		
Details	**Indian Mine (INR Million)**	**Canadian Mine (INR Million)**
Exploration expenses per year (for a period of 10 years)	10 (100 in 10 years)	10 (100 in 10 years)
GST or Service Tax on Exploration expenses, net of any input credits	1 (10 in 10 years)	0
Exploration expenses including GST/Service Tax (per year for a period of 10 years)	11 (110 in 10 years)	10 (100 in 10 years)
Deductible exploration expenses (C)	4.4 per year (totaling 44 for 10 years)	100
Cumulative tax savings from deduction of exploration (@ 34%, assumed to be the same in both countries)	14.96	34
Net cost of exploration expenses	95.04	66

The above illustration shows that even though the two companies incur the same pre-tax amount on exploration, the post-tax cost of exploration for an Indian company is almost 50% higher than that for a Canadian company (assuming the tax rate to be the same in the two countries). Canada allows deduction of exploration expenses in the same year, with an indefinite carry forward. India limits the deduction to such expenses incurred in four year prior to the commencement of commercial production. The service tax adds 10.30% to the cost of exploration in India, while the GST in Canada has no net impact on exploration expenses.

4.2.2 Depreciation on capital assets

Mining industry is a highly capital intensive industry requiring large capital outlays in exploration and development of mineral projects. Further, there are substantial costs of wear and tear of the plant and machinery used and the resale value of the depreciated machinery is negligible.

Under the IT Act, the rate of depreciation on plant and machinery is 15% of the written down value. Further, an additional depreciation of 20% is allowed in the first year for any new plant and machinery. The air and water pollution control equipments qualify for 100% depreciation. The above rates are general and no specific rates have been prescribed for the mining industry in particular.

As compared to the above, the depreciation rates in many countries are far more generous.

In Canada, the depreciation on mining equipments is allowed on an accelerated basis, the rates varying from 25% to 100% depending on the class of assets. For development expenditures, the depreciation claims can be accelerated up to the income from the mine. Also, South Africa treats expenditure on mining equipments as mining capital expenditure and the same is allowed as deduction once the mine starts generating income. Peru allows depreciation at the rate of 20% (straight line method) i.e. depreciable over five years period.

Further, plant and capital in India would attract the Cenvat, which would not be creditable. In Canada, and other countries with a general consumption tax, the tax on capital equipment is fully creditable or refundable, resulting in no increase in capital costs.

4.2.3 Overall assessment

As is evident from the above, the Indian corporate tax regime for the mining industry does not compare favorably with that in other international jurisdictions. The net-of-tax costs of exploration are substantially higher in India, discouraging risk taking and investments in this sector.

The slow and limited deductibility of exploration costs is further aggravated by the levy of service tax on the input services used for carrying out the exploration. The additional service tax cost of 10.3% gets 'loaded' onto exploration, increasing the cost of the mine operator.

5 Concerns with the Service Tax

Over the last few years, various steps have been taken to introduce indirect tax reforms in the country. The replacement of the single point state sales tax by the VAT has been the most significant reform in the indirect tax regime. Other noteworthy reforms are the rationalization and reduction of excise duty and customs duty rates to align with the international practices, removal of non-tariff barriers, introduction of a cross-credit regime between the service tax and the Cenvat. These reforms have improved the archaic and complex taxation system prevailing in India.

Despite the reforms and improvements introduced in the indirect tax regime, several issues continue to affect the system. One of the most serious flaws in the current indirect tax regime is the structure of the service tax in India. Although the service tax was introduced to expand the tax base, the manner in which the tax is levied is not conducive to the business environment.

In many sectors of the economy, burden of the service tax falls on business to business (B2B) transactions which are in the intermediate stage of production and consumption. As discussed earlier, under a neutral consumption tax regime found in other jurisdictions, effectively no tax is levied on intermediate consumption. Either no tax applies on B2B transactions, or the tax is fully credited. However, under the service tax regime, in many cases, service tax is not creditable and effectively becomes applicable on intermediate consumption also. Although the cross credit regime between the service tax and the Cenvat has reduced this impact for manufacturers and service provides, it provides no relief to the mining sector which is outside the scope of both of these taxes.

The government is taking forward the reform process by introducing the Goods & Services Tax ('GST') from 1 April 2010. Through the introduction of the GST, the government seeks to align its consumption tax structure with the best international practices. Although the modalities of the GST including the rates, structure, application, etc are still unknown, the GST would replace excise duty and service tax levied by the Centre and the VAT levied by the states.

The problems with the current service tax structure would continue to prevail until GST or such other changes are introduced to rationalize the tax structure. In what follows, we describe in further detail the problems faced by the mining industry from the application of the service tax.

5.1 Tax cascading

One of the most significant drawbacks in the levy of service tax in the mining sector is tax cascading. Tax cascading essentially occurs when there is a denial of input credits for the taxes paid on inputs acquired for use in rendering a supply. This blockage of input taxes creates tax cascading which leads to various types of economic distortions and non-neutralities in the application of tax.

Service tax cascading occurs in the mining sector since the minerals are outside the scope of the service tax as well as the Cenvat. The mine operator cannot avail credit of the service tax and excise duty paid on services and goods acquired for use as inputs to mining. The non-deductible input taxes get embedded in the cost of the mineral supply which in turn gets embedded in the cost of metals and other products manufactured through the use of such minerals, resulting in tax cascading.

The effect of cascading of service tax is very pronounced in the mining sector. This is because this sector uses a wide range of services from the stage of exploration up to mineral production, handling and transportation. The element of service tax has permeated each and every phase of a mining operation. Further, due to the increased focus on outsourcing in mining industry, the application of the service tax to contractors and services delivered by them becomes more pronounced.

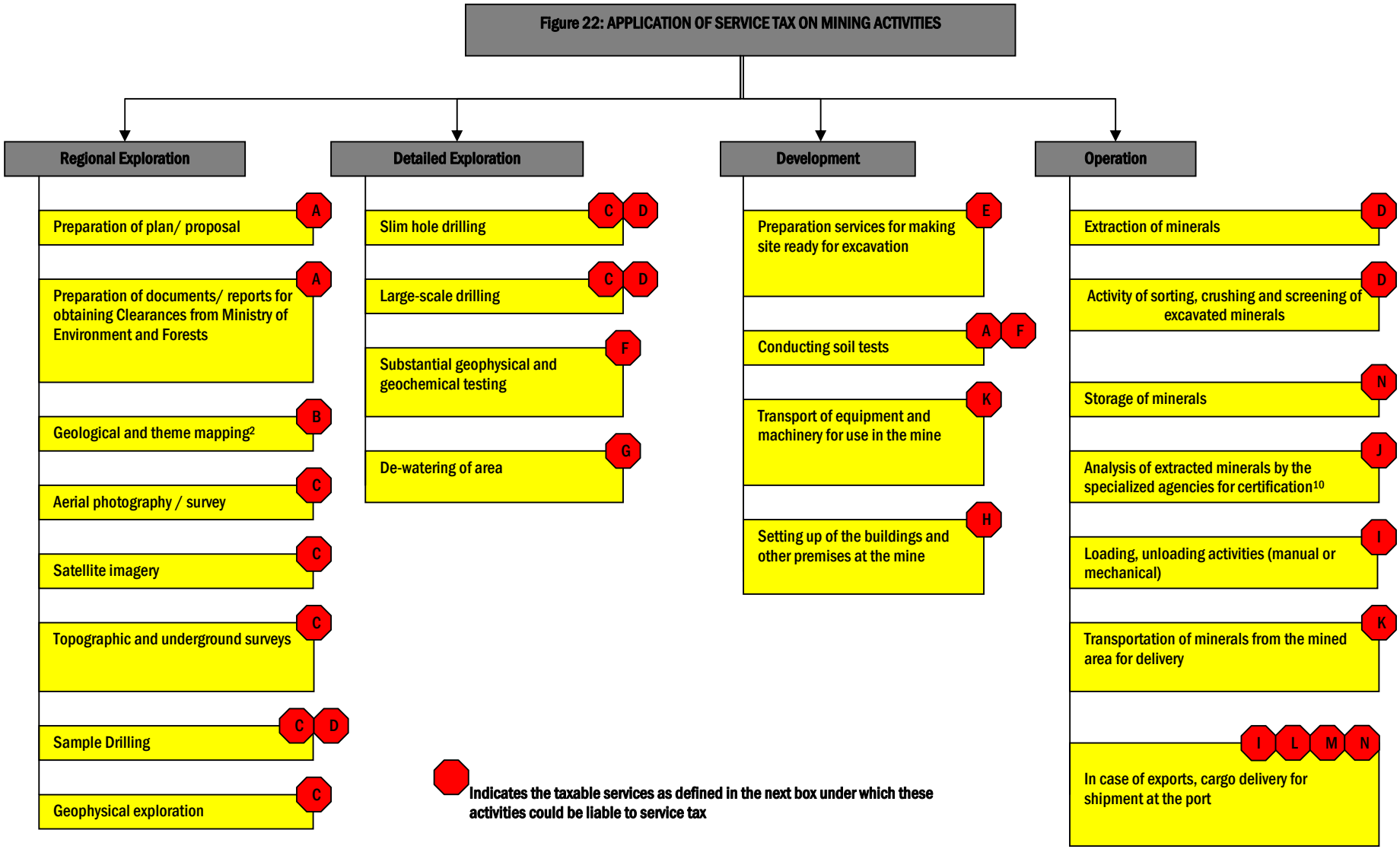
Ideally, the mining industry being an intermediate sector, should not suffer tax cost at any stage of its operation. As discussed earlier, in most of the GST regime countries, the levy of GST on the mining supplies does not result in a tax burden for the mine operator as he can take input tax credit on the tax paid on such supplies. Since the tax cost is allowed to flow through the mining process, this does not lead to blockage of taxes. Thus, the GST regime is not detrimental to the competitiveness of the mining industries, either domestically or globally.

5.2 Detrimental impact on outsourcing

The service tax applies on services performed by third-party service providers, but not services performed by employees of an entity. This creates a bias against outsourcing of services to third-party suppliers.

To have a better understanding of the impact of the service tax on outsourcing, figure 22 below highlights the various services which are consumed at the different stages of mining operations and shows the activities which could have a potential service tax impact. The service tax applicable on such activities becomes a cost of operation which is passed on to the mine operator. If the tax cannot be recovered by the mine operator from its customers, it erodes his profits and return on capital.

Figure 22: APPLICATION OF SERVICE TAX ON MINING ACTIVITIES



TAXABLE SERVICES IN MINING

A - Consulting Engineer's services

B - Survey and Map-Making service

C - Survey and Exploration of Mineral, Oil or Gas service

D - Mining of mineral, oil or gas services

E - Site formation and clearance, excavation and earthmoving and demolition services

F - Technical testing and analysis services

G - Dredging services

H - Construction service; erection, commissioning or installation services

I - Cargo handling services

J - Technical inspection and certification

K - Transport of goods in containers by rail / Transport of goods by road

L - Port Services

M - Custom house agent's service

N – Storage and warehousing services

The initial phase of the mining operation i.e. exploration (regional and detailed) commences with the process of locating the mineral deposit. During this phase the prospector uses a whole range of input services. This is because, typically, the prospector's core competency lies in mining and not in exploring. Therefore, the various activities which constitute 'exploration' or 'prospecting' are generally outsourced to various contractors who are experts in their respective fields.

Almost all the services which a prospector contracts for at the exploration stage directly fall within the ambit of the service tax. For instance, the activity of aerial photography / survey, satellite imagery, topographic and underground surveys, geophysical exploration etc. are taxable under the category of 'Survey and Exploration of Mineral, Oil or Gas service'. Similarly, drilling activities are taxable under the category of 'Mining of mineral, oil or gas services'. Testing activities could be taxable under 'technical testing and analysis service' or 'Technical inspection and certification service'. This automatically increases the cost of exploration by the element of the service tax.

Similarly, the miner consumes a whole range of services at the development and the production stages on which the service tax is applied. For instance, preparation services for making the site ready for excavation in the development stage is taxable under the category of 'Site formation and clearance, excavation and earthmoving and demolition services '. Similarly, extraction of minerals under the operation phase is taxable under 'services in relation to mining' category. Thus mining services, transport agencies services, cargo handling agencies services, custom house agent's services etc are all services which attract a service tax cost both in the development and operation stages.

The above chart lists activities which are specific to the mining process. In addition, there are various other services also (e.g., telecommunications, insurance, and business auxiliary services) which are being used in the mining process and attract the service tax.

The cascading of taxes in mining gives rise to a variety of economic distortions.

- First, the cost gets inflated by the addition of input taxes, thereby leading to an increase in the cost and prices of the mining produce.

- Second, this creates competitive distortions between domestic and foreign suppliers of minerals and ores. Domestic suppliers bear the cost of blocked input taxes, which the foreign suppliers do not incur (especially if the foreign suppliers are based in a jurisdiction which zero-rates international supplies of minerals and ores). In the current business environment where the companies are geographically diversified and operate in different economies, there is growing concern that customers in India would prefer to obtain goods and services from suppliers based outside India due to their lower prices.

- Third, it creates inefficiencies in the corporate structuring of mining businesses. Certain business structures result in additional input taxes and thus become uneconomic. For example, segregation of certain business functions into subsidiaries can result in additional supplies which attract non-creditable taxes. The same functions carried on in a separate division or branch may not be considered supply transactions (as they are considered to be part of the same legal entity) and thus not attract any taxes,.

  This could result in a vertical integration bias of mining businesses and creation of a self supply bias where an operator would prefer to undertake the work in-house as opposed to outsourcing the work to third parities. In turn, this leads to an inefficient utilization of economic resources and raise the cost of procurement.

5.3 Negative impact on exploration

The service tax punishes the very factors which are necessary for the growth and development of mining in India. As discussed earlier, one of the key factors holding back development of mining in India is inadequate investment in exploration.

The prospecting and exploration of minerals involves huge investment. While Canada and Australia spends close to USD2 billion and USD1.2 billion per annum respectively on survey and exploration, India, which has a geological setting identical to both these regions, spends, on average, only USD50 million on promotional exploration. In India, the regional exploration activities are generally undertaken by the Geological Survey of India while detailed exploration is undertaken by the Mineral Exploration Corporation Ltd. However, due to a lack of resources, equipment and technology, the prospecting activity has been negligible. This generated a pressing need to draw foreign investments in the mining sector which the government attempted to achieve by allowing 100% FDI in the sector.

However, despite the liberal policy regime, the foreign investments in the sector have not been substantial. This can be attributed to the highly risky and capital intensive nature of the mining industry.

In order to attract such heavy investment in the sector, it becomes imperative for the government to provide a competitive and favorable fiscal regime. Unfortunately, the levy of service tax on activities at the exploration stage without allowing the mine operator input tax credit of the service tax paid automatically increases the cost of prospecting in India by an additional 10%. This is in stark contrast to other GST regime countries which allow firms undertaking prospecting and exploration activities to take input tax credit of the tax paid on exploration expenses.

Similarly, the phase of development and operation of a mine is also very capital intensive and is subject to intense domestic and international competition. Engineering, procurement, and construction services, and plant and machinery for development of mine attract non-creditable Cenvat and the service tax. Since the metal prices are determined globally, the mining industry in India cannot pass on the increased costs to their customers in the form of higher output prices.

5.4 Captive mines – integrated process

A significant number of mines operating in India are captive mines, i.e. mines supplying the mineral which is used for captive consumption in the manufacture of metals. The manufacture of the metals attracts excise duty. Consequently, the manufacturer would be entitled to take tax credit of the inputs and input services used in the manufacture of the metals. The issue is whether the manufacturer would also be entitled to take input tax credit of the goods and services used in the mining operations.

What is relevant to be examined here is whether the process of mining and manufacture is an integrated process. In case the activity of mining and the activity of manufacturing are segregated functions, no credit would be allowed on the goods and services used for mining operations. In such a case, one would need to determine where the activity of mining concludes and the activity of manufacture begins. Even though commercially, the whole activity is taken as a single consolidated operation for manufacture of metals, for tax purposes these two activities are delinked.

As a consequence, inputs and services used for the mining operations are not allowed as credits to offset the output duty liability on manufacture of the metals. Since there is no output service tax or excise on the mineral produce, the non-deductible input taxes paid by the mining industry gets embedded in the cost of the mineral supply leading to tax cascading.

5.5 Service tax embedded in mineral exports

In order to augment exports, the Government has issued Notification No 41/ 2007 – ST dated 6 October 2007 and 33/2008 – ST dated 7 December 2008 allowing exporters to claim refund of the service tax paid by them on specified services which are used for such exports.

Mining industry also contributes to exports from India, with the value of mineral exports recording double digit growth in last five years. Under the current system, the exporters of the mining products are allowed to claim refund of the service tax paid by them on specified services used in relation to such exports. However, the refund of taxes is partial. The exporters are not allowed to claim refund on the entire range of services consumed by them in relation to exports of mineral products.

The figure 23 below provides a comparison of the services actually consumed in the mining process and the services in respect of which service tax refund can be claimed.

Figure 23: Input services consumed vis-à-vis services eligible for refund

Input services – Consumed during the Mining Process	Input Services – Eligible for Refund
Consulting Engineer's Service	General Insurance Service
Survey and Map-Making service	Transport of goods by air service
Technical testing and analysis services	Technical Testing and Analysis Service
Technical inspection and certification	Technical Inspection and Certification Service
Port Services	Port Service
Transport of goods in containers by rail	Transport of Goods by Road Service

Transport of goods by road	Transport of Goods in Containers by Rail Service
Construction service; erection, commissioning or installation services	Clearing and Forwarding Agent's Service
Cargo handling service	-
Mining of mineral, oil or gas services	-
Survey and Exploration of Mineral, Oil or Gas service	-
Site formation and clearance, excavation and earthmoving and demolition services	-
Custom house agent's service	-
Storage and warehousing services	-
Dredging services	-

As evident from the above table, the input services which qualify for refund are a small subset of the input services consumed during the mining process.

Further, the present system of refund of service tax paid on input services which are used for export of goods is time consuming. Despite several notifications and circulars issued by Central Board of Excise and Customs to simplify the procedure of refund, the system continues to be subject to delays, reflecting partly the reluctance of the authorities to grant refunds.

The procedures for refunds require voluminous documents to be submitted. For instance, in case of refund of service tax of custom house agent services used at port of export, the exporter is required to produce invoices of custom house agent in which following should be specified:

- number and date of shipping bill
- description of export goods
- number and date of the invoice issued by the exporter relating to the export goods
- details of all the charges, whether or not reimbursable, collected by the custom house agent.

There have been instances where the refund has been denied on the ground that documents submitted by the exporter were not complete. The rationale behind such documentation is to establish the nexus between the specified input services and the corresponding export of goods. However, such nexus can also be established through better means such as by submitting a Chartered Accountant's certificate validating the nexus and the amounts of refunds claimed.

The delays and denial of tax refunds is detrimental to the competitiveness of the Indian mining industry in the international market.

5.6 Denial of cenvat credit on 'motor vehicles'

As per the current Cenvat credit rules, the Cenvat credit of duty paid on 'motor vehicles' can only be availed (as 'capital goods') by service providers rendering specific services such as courier agencies, tour operator, cargo handling agencies, goods transporters, etc provided such vehicles are registered in their name and used for providing services.

Contractors and other businesses providing taxable services to mining companies purchase various types of motor vehicles which are used in the provision of their services. For instance, contractors providing site preparation or dredging services require the use of earthmoving and dredging equipment which technically fall in the definition of motor vehicles. As a result, such contractors are not allowed to take credit of the excise duty paid on the equipment, increasing the cost of their services. Such services suffer double tax – the input tax embedded in the cost of the service, and the additional tax on the value of the service itself.

5.7 Definitional complexities

Another problem plaguing the service tax is the lack of clarity on the definition of supplies that are subject to the tax. This problem stems from the following:

- There is a lack of clarity whether a supply is of a good (chargeable to the State VAT) or a service (chargeable to the service tax) .

- The service tax applies to specified services, as opposed to taxing all services with a negative list of non-taxable services. This approach requires a definition of each specified service.

In the following paragraphs, we have discussed some of the definitional complexities arising in the mining sector.

The problem of defining whether an activity is a supply of a service or supply of a good, while common to all sectors and industries, is acute in mining given the nature of transactions in that sector. Take for instance the supply of heavy machinery or a rig along with a crew to operate such machinery for drilling operations. Is the transaction one for supply of machinery or for provision of a service?

In case the activity is one for lease of goods, then VAT would apply since a transfer of right to use goods is treated as a sale of goods for purposes of tax. From various judicial precedents, the key principle that have evolved is that, in order for a transaction to constitute a transfer of right to use goods, there should be a transfer of control and possession of the goods from the lessor to the lessee. Where there is no transfer of control and possession of the equipment, the service tax could apply. In the case of transactions involving the use of heavy machinery, it has been difficult to determine whether there is a transfer of control and possession. Hence the confusion.

Another source of confusion is that a given service could fall in two or more taxable categories. For example, the service of drilling could be taxable either under 'mining of mineral, oil or gas service' (since the service is rendered in relation to mining activities) or under 'supply of transfer of tangible goods for use services' (which seeks to tax supply of tangible goods including machinery, equipment and appliances for use without transferring the right of possession and effective control). Different tests and criteria apply for determining whether a service falls under a given category.

Similarly, take the case of materials and consumables which are used by a service provider during the provision of a service. Are these materials liable to VAT or service tax? In brief, the technical position is that if such materials are 'consumed' during the provision of a service and there is no independent transfer of property in such materials, service tax should be applicable.

However, if there is an independent transfer of property in such consumables, VAT should be applicable. How does one determine whether these materials are consumed during the provision of a service or not?

Another example of definitional complexities would be the wireline logging activities which are undertaken to collect and record subsurface data. They involve acquisition of data in the form of measurements of various properties, and recoding and presentation of such data in the desired format. Such measurements provide the data, information or the statistical figures over which the testing is carried out against various pre-determined standards to establish confirmation towards classification of virtues or meeting of standards. Are such activities subject to service tax under the category of 'technical testing and analysis service' or are they pre-testing activities which are not liable to service tax?

Such definitional complexities not only create uncertainty and ambiguity in the application of the service tax in the mining industry, but could give rise to potential double taxation.

The Courts have held on numerous occasions that for purposes of tax, sale of goods and provision of a service are mutually exclusive and therefore, both VAT and service tax cannot be levied on a particular transaction of sale or service. The dominant intention of the parties to the contract ascertains which of the two levies is attracted. However, despite the pronouncements of the courts, there is a constant debate on applicability of VAT or service tax on a particular transaction. In the absence of clarity, taxpayers are often compelled to pay both taxes.

6 Introduction of GST in India

Over the recent years, progress has been made to improve the structure of the indirect tax regime in India by broadening the base and rationalizing the tax rates. These changes have yielded significant dividends in improved efficiency of the economy, simpler tax system, and more revenues. However, despite the reforms, the indirect tax regime in India continues to be plagued by problems. The key concern is that both the Centre and the State taxes remain partial in nature because of the limitations imposed by the current division of taxation powers under the constitution. The Centre is precluded from taxation of primary producers and distributors, and the States from the taxation of services. As noted before, the partial application of the Centre and State taxes leads to cascading, and makes tax laws and interpretations complex.

The ultimate solution for the problems is the replacement of the current indirect taxes a unified tax on all the goods & services. This is indeed objective the GST that the government has proposed to be introduced in April 2010. It would replace the service tax, Cenvat, as well as the State VATs. A comprehensive application of tax to all sectors of the economy, and all points in the supply chain would eliminate cascading, simply the tax system, lower the costs of conducting business, and ease tax compliance.

While the details of the design of the GST are still awaited, the Centre and States have indicated that their preferred model is that of dual GST, consisting of the Centre GST and the State GST. The tax would be levied concurrently by the Centre as well as the States, i.e. both goods and services would be subject to concurrent taxation by the Centre and the States. Given the experience of Australia, New Zealand, Canada, and other jurisdictions with a tax of this form, businesses should be able to claim a credit for the tax charged on their inputs. The final incidence of tax would thus rest on consumption expenditures and cascading would be eliminated.

From the perspective of the mineral industry, the proposed GST could be as follows:

- Since minerals are at the intermediate stage of consumption, the tax incidence on the mining centre should be zero. Minerals would be taxable, but the tax burden would be passed on to final consumer goods and services.
- The tax on inputs and input services should be fully creditable against output tax liability.
- There should not be any tax exemptions for any product since this would lead to cascading and inefficiencies in the cost structure;
- Exports of minerals should be zero rated with a simplified and fast process for obtaining refunds of the taxes.
- Other taxes such as octroi and entry tax should be eliminated or subsumed within the GST.

7 Way Forward

The Indian mining industry contributes significantly to the economic development of the country and more specifically to the advancement of the less developed regions. It provides both direct and indirect employment and also leads to the growth of the ancillary industries. Other industries such power industry, iron and steel industry are highly dependant on the mining industry as it provides the raw materials necessary for manufacturing process. However, despite the significance of the mining industry, the mining sector remains highly fragile in the country.

The mining industry operates in a globally competitive environment and faces competition both in terms of attracting investment for its operation and in marketing / selling its end products. The investors prefer locations where the business environment is not only hospitable but also economically viable. Therefore, countries with favorable regulatory regime are preferred destinations for investments.

The government recognizes the importance of the mining industry to the overall economic growth and is attempting to provide fillip to the industry through a more liberalized regulatory regime. A key initiative in this direction is to allow 100% FDI in exploration and mining activities. The government is also encouraging research & development (R&D) operations to enhance the competitiveness of the mining sector.

While these initiatives are a right step in the direction of attracting more investment in the sector, a favorable tax environment continues to remain a significant negative factor. The current tax regime is has features which are disadvantageous to the mining sector. Notable among them is the application of service tax to the mining sector which leads to tax cascading and economic distortions.

The tax cascading leads to increase in industrial cost and prices of the mining produce, and reduces the competitiveness of the domestic mining sector vis-à-vis foreign suppliers. This also creates a self supply bias where an operator would prefer to undertake work in-house as opposed to outsourcing the work to third parties.

The introduction of the GST in India with the objective of harmonizing the current tax system by replacing the existing excise duty, service tax, VAT and CST, will definitely have a positive effect on the mining industry. Most importantly, the GST would eliminate tax cascading which presently occurs under both Centre and State taxes.

However, as discussed in the other Chapters of this Report, till the introduction of the GST, the cascading effect of the service tax would continue to have a detrimental effect on the mining industry. It is desirable that the government adopts appropriate interim measures to lessen the negative effects of the service tax.

In what follows, we discuss some of the measures that can be explored by the Government to mitigate the increased costs pressures from the service tax

7.1 Exemption from service tax

The first option is to grant exemption from the whole of the service tax on input services used by the mining operator in their mining operations. However, for any exemption, it is imperative that the scope and extent of the exemption be carefully determined.

At this stage, it would be relevant to mention that the services received by a typical mining operation can be segregated into two types:

- Specific Services: These are services which are specifically rendered in relation to mining operations. Examples of such services include and exploration of minerals, mining of minerals, survey and map making, and handling and transportation of minerals.

- General Services: These are services which are generally used by a company irrespective of the industry to which it belongs. Services such as chartered accountant's services, consultancy services, marketing services, travel agents services, and insurance services fall in this category.

An exemption may be granted to the mining industry, either for specific services related to mining operations or a blanket exemption for all services received by the mine (as in the case of exemption granted to an SEZ unit or developer). Further, in case an exemption to the entire mining industry is not feasible, the Government could at least consider granting an exemption to EOU units which are engaged in exports similar to the exemption granted to SEZ units or developers. In case the exemption is only for specific services, the exemption would have limited effect and may not be too beneficial to the mining industry.

However, on the other side, the exemption system is not without problems. An exemption under the service tax to the services rendered by a contractor to a mine operator would lead to a blockage of cenvat credits on the services received by the contractor, thus creating the same cascading effects and distortions that are being sought to be addressed. However, the magnitude of the blockage of Cenvat credits at the contractor level would be smaller than under the current regime. In other words, this solution would reduce the inherent service tax costs built up in the mining sector but not completely eliminate them.

7.2 Refund of service tax

The other option is to grant a refund of the service tax charged to the mine operator. Under this method, mine operators can claim a refund of the service tax paid on their input services (in a manner similar to the refund mechanism provided to exporters).

As in the case of an exemption, the scope and extent of the refund should be carefully determined. It should aim at striking a balance between the interests of the mine operators and the exchequer by not only simplifying the procedure for granting the refund for the mine operators but also by protecting the revenue for the exchequer.

In comparison to exemption, a refund mechanism is superior as there is no blockage of cenvat credit under this mechanism. The suppliers down the supply chain can charge service tax and take cenvat credit under the regular credit-invoicing mechanism. Assuming that all the services down the supply chain are taxable, there would not be any cascading effect of tax. The service tax finally charged by the contractor to the mine operator can then be claimed as a refund by the mine operator.

However, practically, a refund mechanism is always a difficult and time consuming process. Even the current refund mechanisms are afflicted with practical problems despite several notifications and circulars being issued by CBEC to simplify the refund process. Secondly, this option also leads to a cash flow issue where the mine operator would first need to pay service tax on input services and then claim a refund of the same.

The figure 24 below provides a brief illustration on the potential service tax implications, the savings under the current tax scenario (where service tax is applicable on input services) and a scenario for refund and exemption. The first part of the table indicates the service tax and credit as applicable to a contractor (providing services to a mine operator) and the second part of the table indicates the effect of the service tax on the cost of the mine operator.

Figure 24: Potential service tax implication			
	Current tax regime	Service tax exemption	Service tax refund
Contractor (Service Provider)			
Amount billed to Mine Operator	11,000	10,200	11,000
- Value of services	10,000	10,200	10,000
- Service tax @ 10%	1,000		1,000
Available cenvat Credit	200	0	200
Service tax payable to Government	800	-	800
Mine Operator			
Amount billed by Contractor	11,000	10,200	11,000
- Value of services	10,000	10,200	10,000
- Service tax @ 10%	1,000		1,000
Total cost to Mine Operator	11,000	10,200	11,000
Refund claimed	-	-	1,000
Net cost to Mine Operator	11,000	10,200	10,000

As explained in the figure above, under the present scenario, the service tax charged by the contractor would be a cost of the mine operator.

In case of service tax exemption, although the services rendered by the contractor to the mine operator would be exempt from the service tax, there would be a blockage of cenvat credit on the inputs/ input services received by the contractor. This, in turn, would increase the cost of production of the contractor (to the extent of the service tax not available as credit) which the contractor would 'pass on' to the mine operator. However, since the blockage of input taxes would be far lower at the level of the contractor, the cascading effect of such blockage would be minimal as compared to the current scenario.

Under the refund scheme, there would be no blockage of cenvat credit and the service tax finally charged to the mine operator would be available as a refund to the mine operator.

Thus, from a pure tax perspective, a refund of service tax charged to a mine operator would be the most appropriate measure for addressing this issue of tax cascading. However, such a measure needs to be reviewed and compared in light of the enormous practical difficulties in filing and processing a claim for refund.

7.3 Dual option – refund and exemption

A third option which could also be explored is to have a dual system under which certain taxable services are made non-taxable, while a refund is provided to the mine operator for the tax on other services.

Under this method, a differential treatment can be accorded for the specific services which are specifically rendered in relation to mining operations (e.g. services of survey and exploration of minerals, mining of minerals, survey and map making, handling and transportation of minerals, etc) and for the general services which are commonly used in all industries.

The specific services can be made non-taxable as they are supplied only to the mining sector. It is unnecessary to first charge tax on them and then refund the tax to the mine operator. With respect to general services, the service provider would charge the service tax to the mine operator. Thereafter, the mine operator can claim a refund of service tax paid on these services.

In case a complete exemption or refund is not feasible, the Government could consider grant of refund of service tax on services used for production of minerals which is exported by the mine operator. This would be similar to the refund process which is currently in place. The difference would be that instead of allowing a refund of the specified services, the refund would be allowed on all services which are used for export of goods, irrespective of the nature of the service.

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