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\$5 trillion Indian GDP by 2024 - Significance of Resources Sector in Indian GDP An opportunity for Australia's Resources Sector?

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Presentation Layout

- 1. Indian GDP – current status**
- 2. India GDP \$5 trillion by 2024 – is it achievable? An analysis**
- 3. Role of Mineral sector in India GDP**
- 4. Impact of reformed Indian mineral sector**
- 5. Opportunities for Australian Mining industry**
- 6. Conclusions**



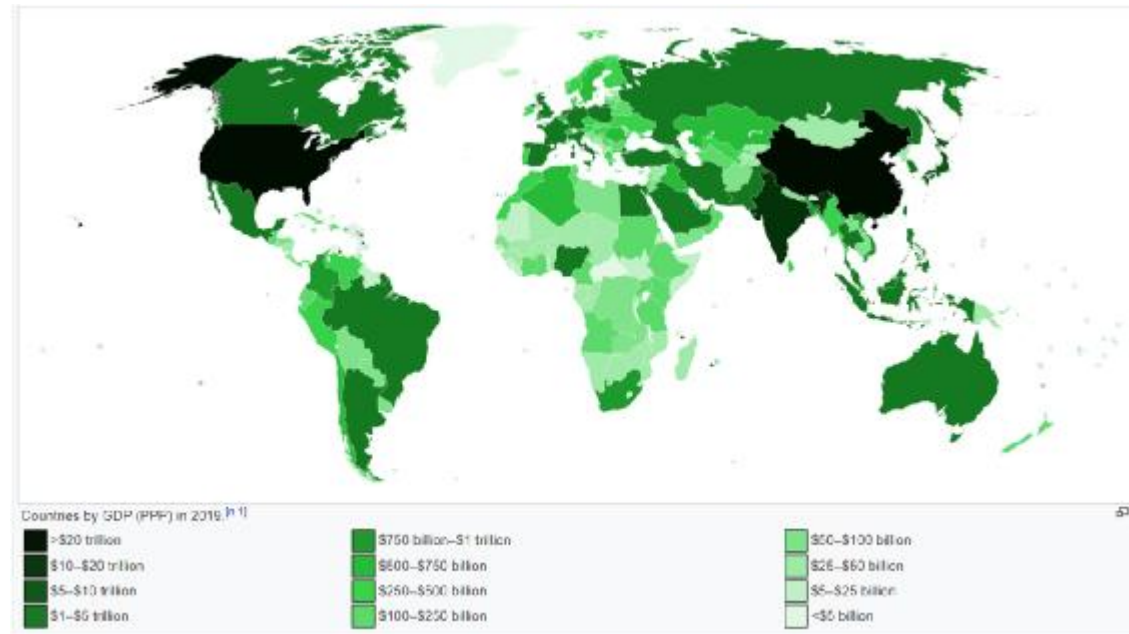
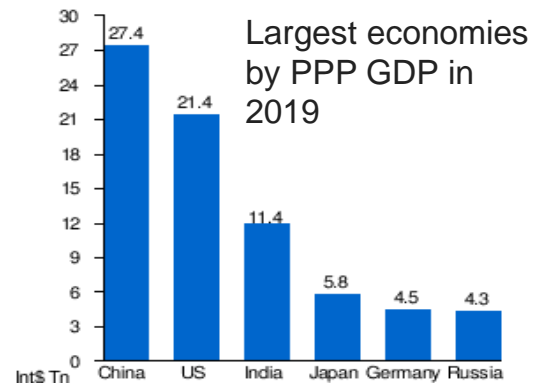
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1. Indian GDP – current status

Indian GDP – current status

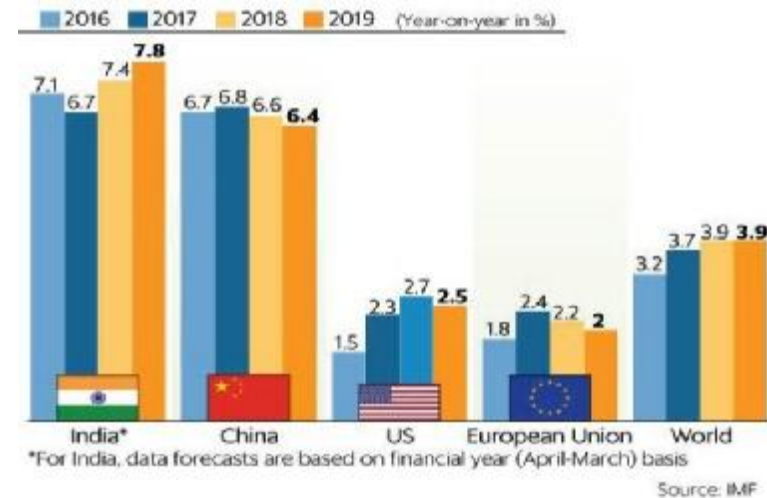
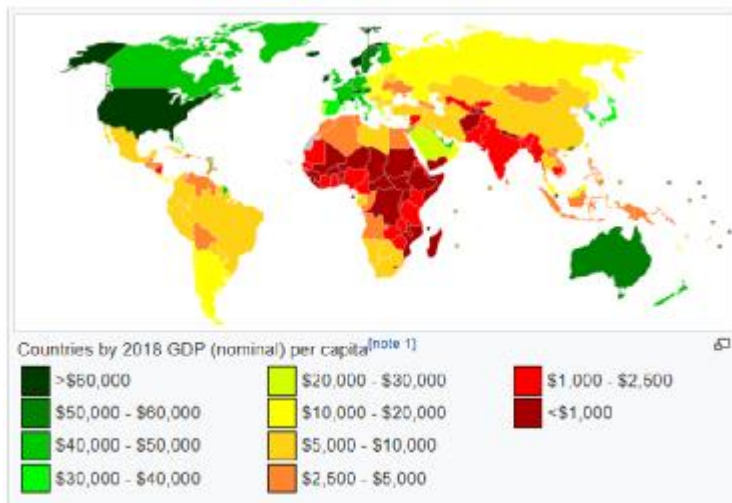
- The economy of India is characterized as a developing market economy.
- It is the world's fifth-largest economy by nominal GDP and the third-largest by purchasing power parity (PPP).



Source: [https://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(PPP\)](https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP))

Indian GDP – current status

- According to the IMF, on a per capita income basis, India ranked 142nd by GDP (nominal) and 119th by GDP (PPP) per capita in 2018.
- Post 1991 economic liberalization, the free market oriented reforms propelled India to achieve 6% to 7% annual average GDP growth.
- From 2014 to 2019, India's economy was the world's fastest growing major economy, surpassing China.



Source: [https://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(nominal\)_per_capita](https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal)_per_capita)

Indian GDP – current status

- Population Increase 1.353 billion (2018)
- GDP \$2.972 trillion (nominal; 2019)
\$11.468 trillion (PPP; 2019 est.)
- Inflation (CPI) 3.05% (May 2019)
- Labour force 509,945,440
- Unemployment 6.1%
- Ease-of-doing-business rank - 77th Significant improvement in last five years.



Source: [https://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(nominal\)_per_capita](https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal)_per_capita)



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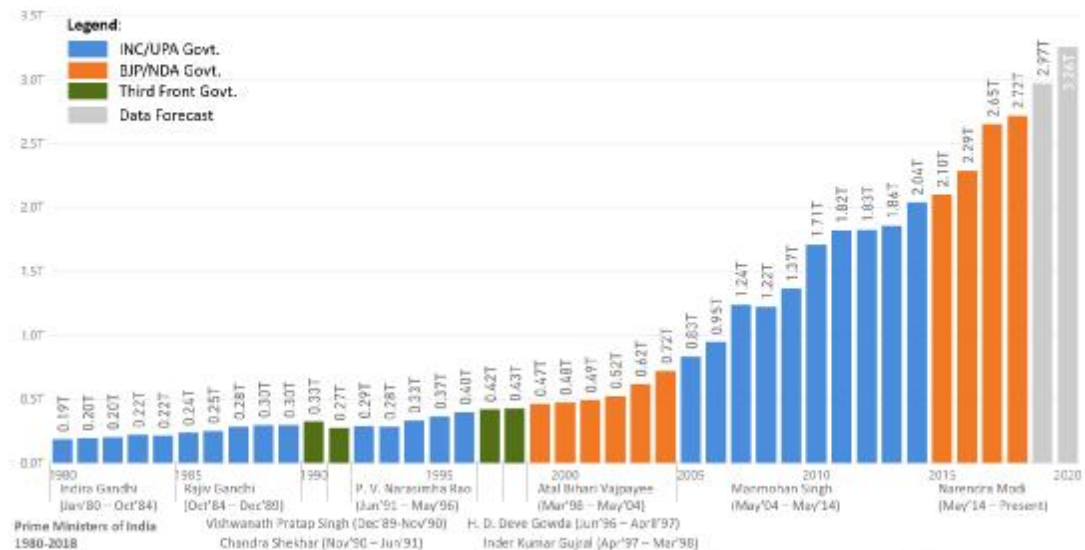
2. India GDP \$5 trillion by 2024 – is it achievable? An analysis

India GDP 1980-2020

- India GDP increased most during the 10-year tenure of Dr. Manmohan Singh. India GDP nearly tripled from \$0.7 trillion to \$2.1 trillion from 2004 to 2014.
- As per IMF, India GDP would reach \$3.0 trillion in 2019.

India GDP 1980-2020

GDP in current prices (trillions of US dollars)



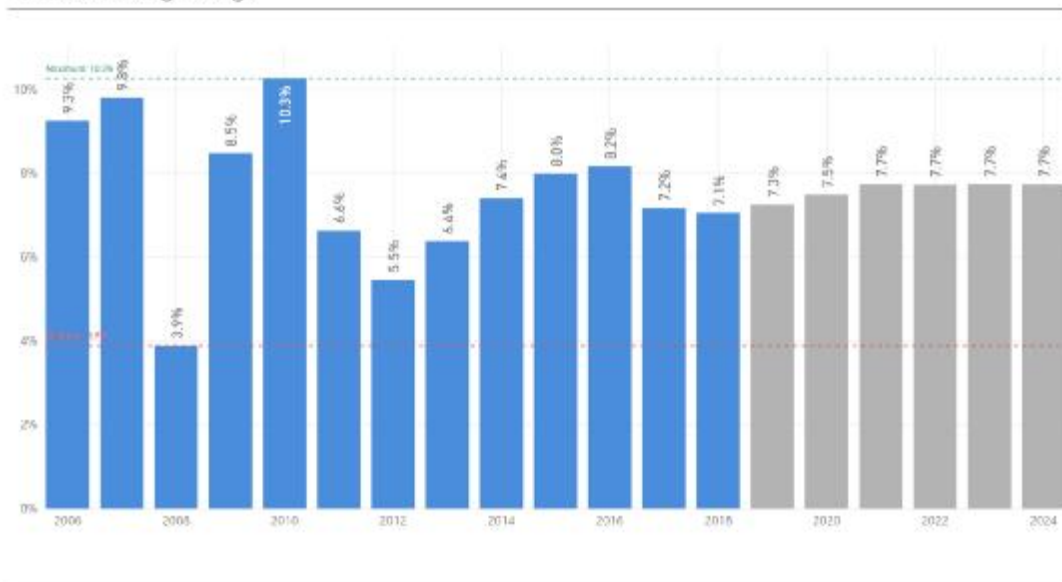
Data Source: IMF World Economic Outlook, April 2019

Data Analysis by: MGM Research

India GDP Forecast Growth Rate

- As per the IMF forecast, India GDP would need to grow between 7% and 8% for the next five years in order to reach \$4.7 trillion by 2024.
- The chart provides India real GDP growth forecast for the next five years. In case a global recession strikes during the next five years (and there is a strong probability that it will), these real GDP growth numbers would be very difficult to achieve.

India Real GDP Growth Forecast 2019-2024
Annual Percentage Change



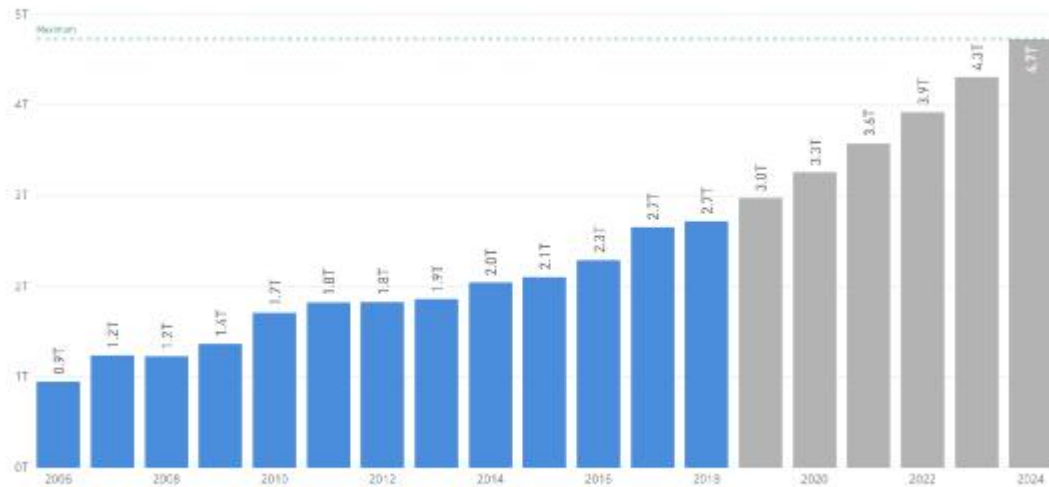
Data Source: IMF World Economic Outlook, April 2019

Data Analysis by: MGM Research

India GDP Forecast 2019-2024

As per the IMF forecast, India GDP would reach \$4.7 trillion by 2024. The chart below provides the India GDP forecast for the next five years.

India GDP Forecast 2019-2024
GDP in current prices (trillions of US dollars)



Data Source: IMF World Economic Outlook, April 2019

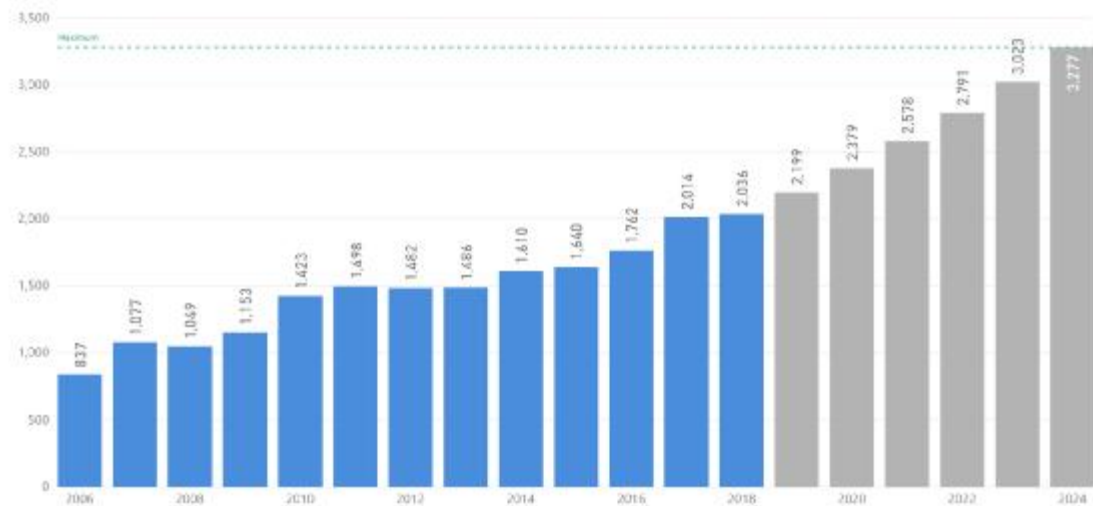
Data Analysis by: MGM Research

India GDP Per Capita

As per the IMF forecast, India GDP per capita would reach \$3,277 by 2024.

India GDP Per Capita Forecast 2019-2024

GDP per capita in current prices (US dollars per capita)



Data Source: IMF World Economic Outlook, April 2019

Data Analysis by: MGM Research

How does India compare with the others?

- India is a mega economy – the fifth largest in the world in terms of GDP.
- Third largest by 2030, or even 2035.
- GDP per capita rank in the world,
 - 145 during 2019.
 - 137 by 2024

World Top-20 Countries by GDP during 2019 and 2024 and their GDP per capita (GDP PC) rankings

| GDP Rank | Country Name | GDP 2019 | GDP PC Rank 2019 | GDP PC 2019 | GDP Rank | Country Name | GDP 2024 | GDP PC Rank 2024 | GDP PC 2024 |
|----------|----------------|----------|------------------|-------------|----------|----------------|----------|------------------|-------------|
| 1 | United States | 21,343 | 9 | 54,767 | 1 | United States | 25,722 | 9 | 75,456 |
| 2 | China | 14,217 | 70 | 10,153 | 2 | China | 21,310 | 65 | 15,102 |
| 3 | Japan | 5,176 | 25 | 41,021 | 3 | Japan | 6,849 | 19 | 55,407 |
| 4 | Germany | 3,964 | 18 | 47,786 | 4 | Germany | 4,912 | 17 | 59,405 |
| 5 | India | 2,972 | 145 | 2,199 | 5 | India | 4,729 | 137 | 3,277 |
| 6 | United Kingdom | 2,829 | 22 | 42,310 | 6 | United Kingdom | 3,899 | 25 | 49,569 |
| 7 | France | 2,762 | 21 | 42,473 | 7 | France | 3,354 | 24 | 50,420 |
| 8 | Italy | 2,026 | 26 | 33,353 | 8 | Brazil | 2,468 | 79 | 11,411 |
| 9 | Brazil | 1,900 | 74 | 9,344 | 9 | Italy | 2,323 | 30 | 38,345 |
| 10 | Canada | 1,739 | 19 | 46,419 | 10 | Canada | 2,242 | 18 | 57,151 |
| 11 | Korea | 1,657 | 31 | 31,937 | 11 | Korea | 2,151 | 28 | 40,631 |
| 12 | Russia | 1,610 | 67 | 11,191 | 12 | Russia | 1,921 | 71 | 13,440 |
| 13 | Spain | 1,429 | 32 | 30,631 | 13 | Australia | 1,801 | 12 | 55,106 |
| 14 | Australia | 1,417 | 11 | 55,421 | 14 | Spain | 1,766 | 32 | 37,067 |
| 15 | Mexico | 1,241 | 71 | 9,858 | 15 | Indonesia | 1,607 | 112 | 5,705 |
| 16 | Indonesia | 1,101 | 118 | 4,123 | 16 | Mexico | 1,570 | 77 | 11,936 |
| 17 | Netherlands | 914 | 12 | 53,016 | 17 | Netherlands | 1,120 | 13 | 54,019 |
| 18 | Saudi Arabia | 762 | 43 | 22,507 | 18 | Turkey | 1,106 | 74 | 12,559 |
| 19 | Switzerland | 708 | 3 | 82,412 | 19 | Saudi Arabia | 920 | 47 | 24,596 |
| 20 | Turkey | 706 | 79 | 8,507 | 20 | Switzerland | 884 | 3 | 97,041 |

Data Source: IMF World Economic Outlook, April 2019

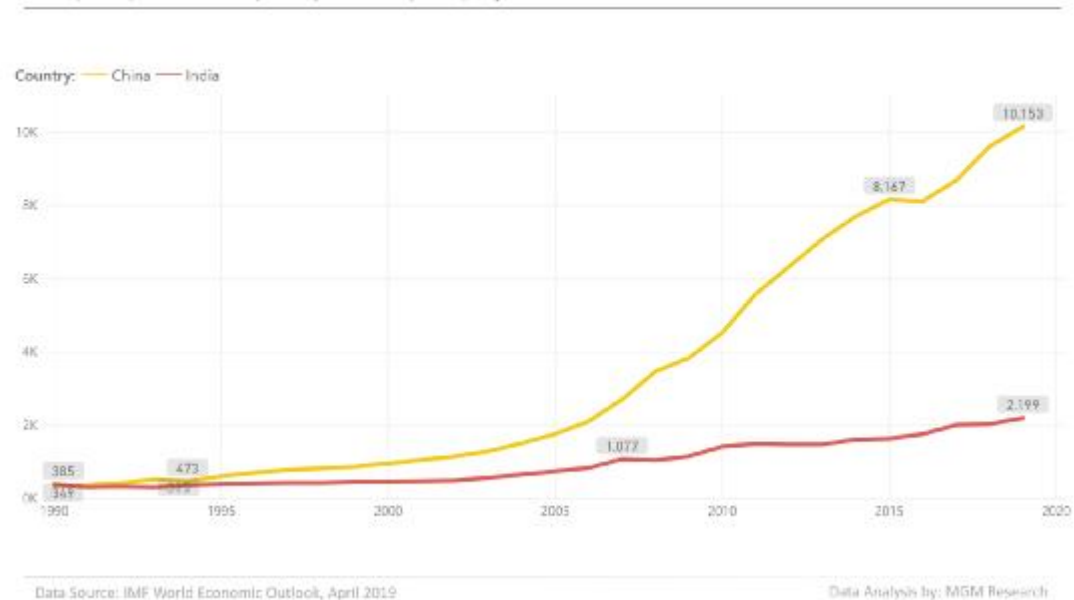
Data Analysis by: MGM Research

Comparing China and India by Economy -GDP Per capita

- India population would exceed that of China over the next 10 years.
- During 1990, India GDP per capita was \$385. It was higher than China GDP per capita of \$349.
- In 2019, China GDP per capita would be nearly five-times that of the India GDP per capita.

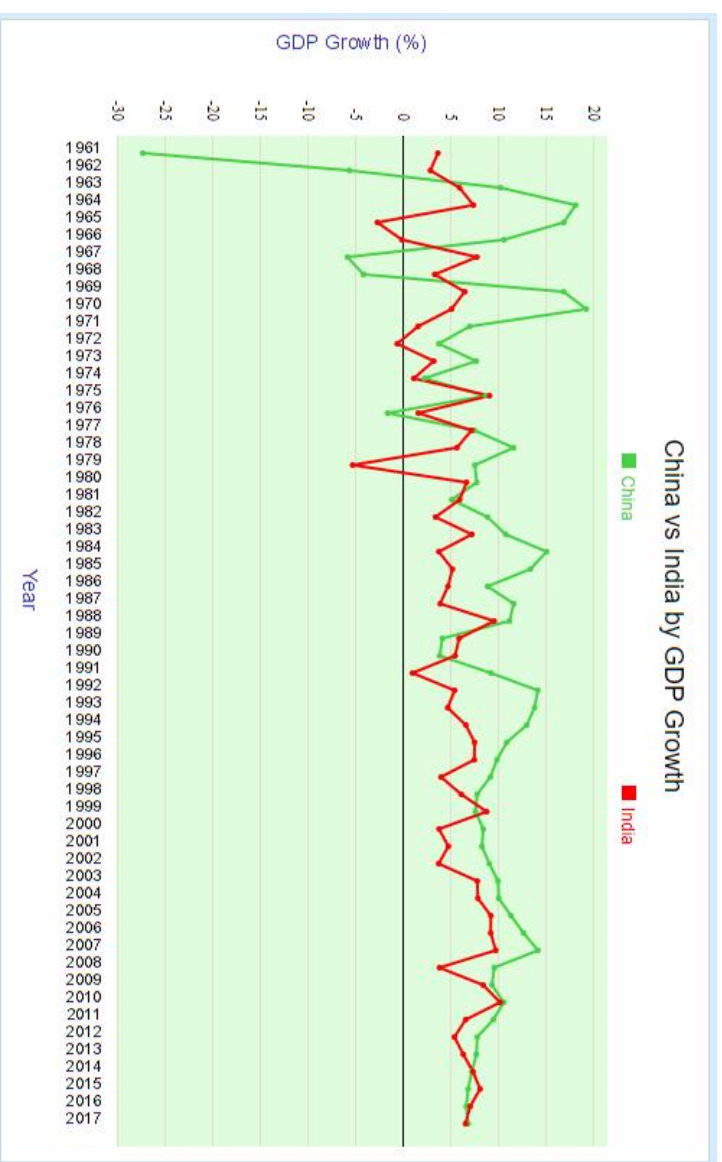
China vs India GDP per capita 1990-2019

GDP per capita in current prices (US dollars per capita)



Comparing China and India by Economy – GDP Growth Rates

During period 1961 to 2018, China grew by more than 10% in 22 years while India never. GDP growth rate was negative in five and four years for China and India, respectively. (World bank)





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3. Role of Mineral sector in India GDP

4. Impact of reformed Indian mineral sector

“Mines are the source of wealth; from wealth comes the power of the State”

(Arthashastra, 2.12.37; 7.14.25)

The Arthashastra is the title of a handbook for running an empire, written by Kautilya (also known as Chanakya, c. 350-275 BCE) an Indian statesman and philosopher, chief advisor and Prime Minister of the Indian Emperor Chandragupta, the first ruler of the Mauryan Empire.

Journey Of Indian Mineral Sector

1947

Mining sector received boost post Independence under the impact of successive five year plan

1956

- § Central Govt formulated Industrial policy resolution
- § Exploration of Minerals were intensified and Geological Survey of India was strengthened.
- § IBM was established.

1972

- § Mineral Exploration Corporation was established to conduct exploration with focus on Coal, iron ore, lime stone, dolomite & manganese Ore.
- § Indian mineral sector was opened to FDI in 1993

2014

- § India became the largest producer of sheet mica,, fourth largest producer of iron ore and has seventh largest reserve of bauxite

2015
onwards

- § Steel Production of India touched 90 Million Ton mark and India stood as 3rd largest crude steel producer in world.
- § Airborne geophysical survey of the obvious Geological potential area was inaugurated in April 2017. its one of the most efficient and cost effective methods of resource exploration world wide.

Journey Of Indian Mineral Sector

Third Largest
Coal Producer

Fourth Largest
Iron Ore Producer

Third Largest
Steel Producer

Seventh Largest
Bauxite Producer

India produce 88 Minerals – 4 fuel related, 10, metallic, 50 non metallic & 24 minor minerals

MoS aims to increase steel production to 300 MT by 2030-31

100% FDI allowed in mining sector and exploration of metal and non-metal ores under the automatic route.

Favourable Policies for Supporting The Growth

The mines and minerals (Development and Regulation)

The MMDR Act of 1957, witnessed amendments in 2015 for the promotion and development of the Mining industry in India, that includes making auctions the sole method for the allotment of mineral concessions and mandating the establishment of District Mineral Foundation (DMF)

Relaxed FDI norms

FDI of upto 100 percent is permitted under the Automatic Route to explore and exploit all non-fuel and non-atomic minerals and process all metals as well as for metallurgy

FDI caps for coal and lignite has been increased to 100 percent under the automatic route.

Allowing private ownership

Government of India is encouraging private ownership for steel operations and other high priority industry

Profits of companies producing specified metals are given tax concession under the Income Tax Act.

Investment incentives

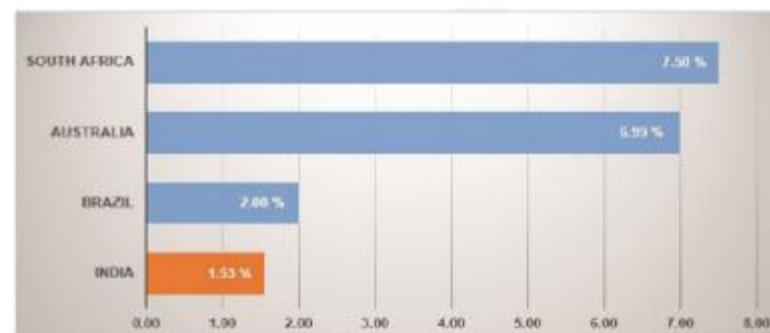
Low custom duty on the capital equipment used for minerals

Companies who do mining in backward districts are eligible for complete tax holiday for a period of 5 years from the commencement of production and 30 percent tax holiday for 5 years thereafter.

- Mineral sector contribution to GDP

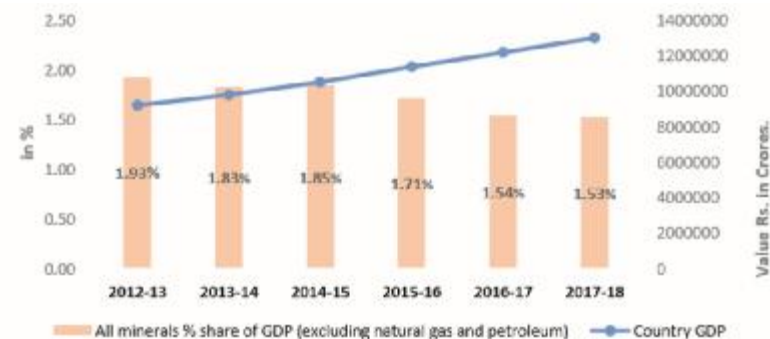
Smaller contribution of minerals to country's GDP (2017-18)

India vs. mineral-rich countries (excludes petroleum and natural gas)



Source: India: Indian Bureau of Mines (IBM); Ministry of Mines; Central Statistical Office (CSO); World Bank; Australia: Australian Bureau of Statistics; South Africa: Minerals Council South Africa; Brazil: IBRAM (Brazilian Mining Association)

Declining contribution of minerals sector to country's GDP (excluding petroleum and natural gas)

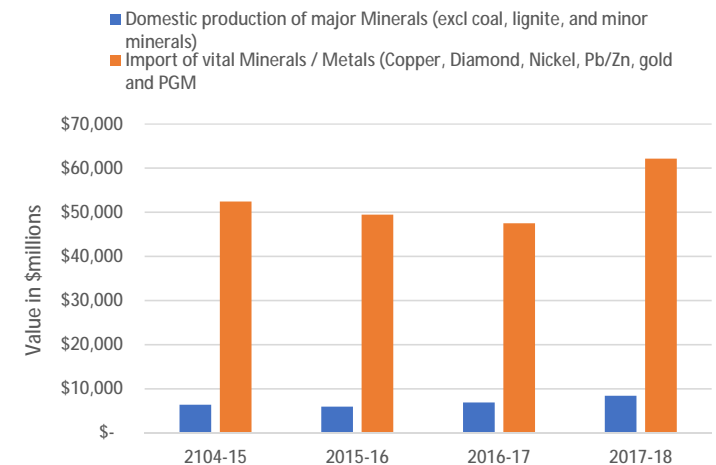


Source: Reserve Bank of India (RBI); Central Statistics Office (CSO); Ministry of Mines; Indian Bureau of Mines (IBM)

Current government reforms are expected to turn this around.

Import dependent – likely to increase

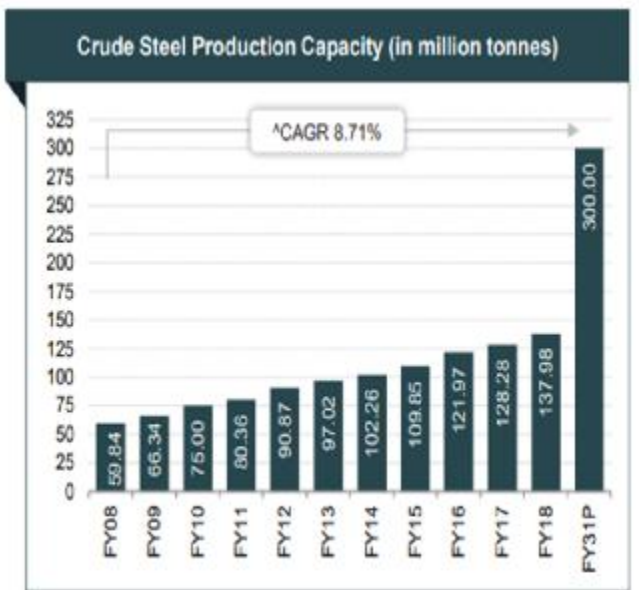
- India's mineral imports are 6-7 times compared to in-country production
- India's middle class to grow from up to 80 million today to 580 million people by 2025.
- This will drive demand for the minerals
- India's demand for metallurgical coal and iron ore – both essential in making steel – is projected to double from 52 and 154 million tonnes in 2016 to over 90 and 290 million tonnes respectively in 2030.
- Copper demand is expected to grow from 511,000 tonnes in 2016 to between 1 million and 1.2 million tonnes in 2030.
- India will need reforms and also significant investment in exploration and mineral development – An opportunity for Australia



Source: Indian Bureau of Mines (IBM) for domestic production of major minerals; Ministry of Commerce and Industry for imports of minerals / metals

Import dependent – likely to increase

- Steel



Source: Joint Plant Committee, Ministry of Steel, Aranak Research

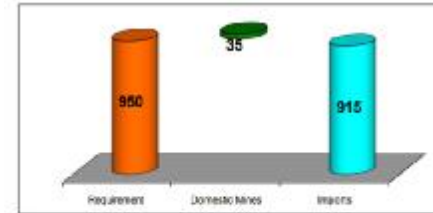
- Iron Ore



E=Estimated, Source: IBM, ICRA Research.

- Copper

Copper Concentrates : Dependent on imports



Global majors are key supplier to Indian smelters

Refined Copper Consumption Growth

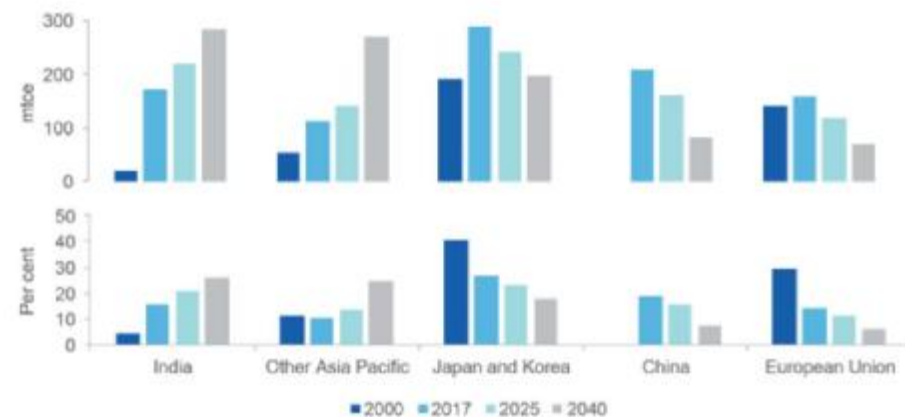


- Gold

- India's gold: India's 2019 gold demand forecast at 750-850 T: WGC
- Indian demand has averaged 838 tonnes over the last 10 years.
- India's Gold production at <3 t per year
- With increase in GDP, more will be imported to due increase in demand by the burgeoning middle class.

These large looming demand and supply gaps bodes for mineral exporting countries like Australia

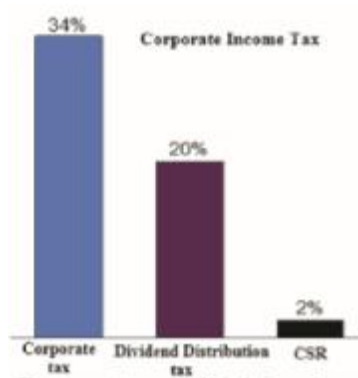
- **India's coal consumption and imports will grow significantly**
- Under the IEA's New Policies Scenario, India overtakes China as the world's largest coal importer by 2025.
- Consumption will be driven by the country's rapidly growing steel sector and coal-fired power generation requirements.
- In the New Policies Scenario, India's share of world trade in coal is projected to increase from 4 per cent in 2000 to over a quarter in 2040



Note: The IEA does not provide projections for coal production for the Sustainable Development or Current Policies Scenarios Source: IEA (2018) World Energy Outlook 2018, International Energy Agency

Australia is well positioned to supply hard coking coal and steaming coal to expanding Indian steel and power sector

- Further Reforms under consideration to boost investment
- Higher taxes and Royalty

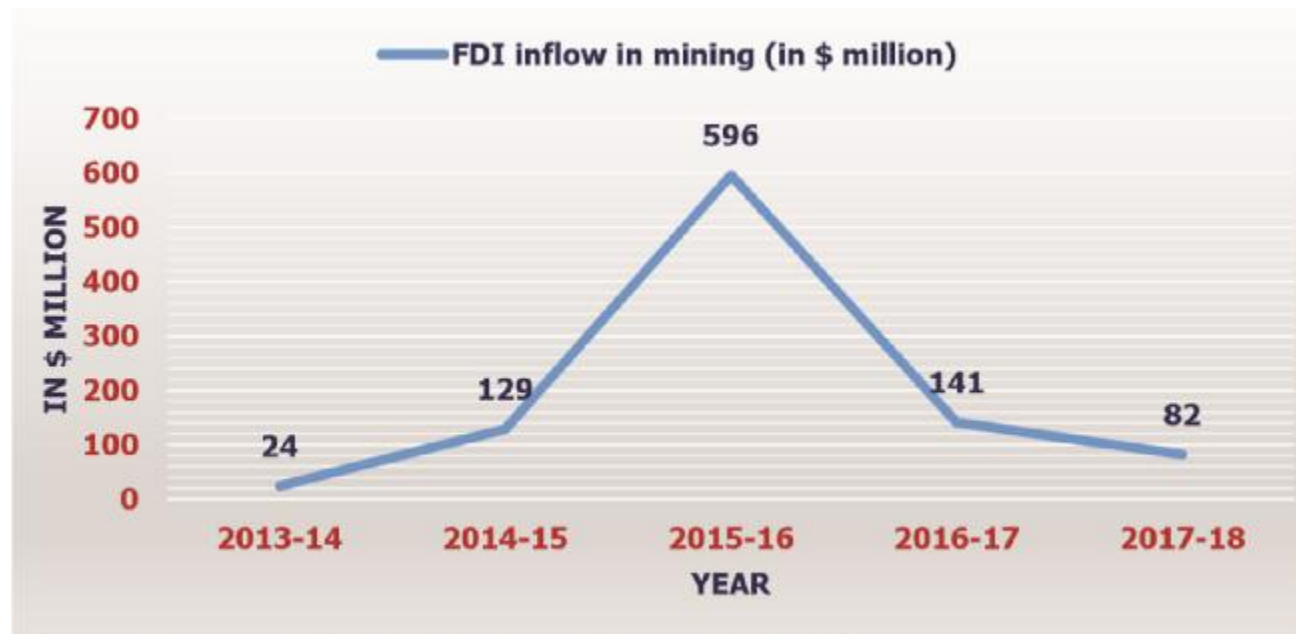


Typical case of iron ore and includes the following components of taxes which are specific to mining as per MMDR Amendment Act, 2015, besides common components like corporate tax, CSR etc. □ Royalty on minerals – Section 9 and Schedule II (royalty on iron ore @ 15%). □ Dead rent on mining leases – Section 9A and Schedule III. □ Contribution to District Mineral Foundation (DMF)

- In its recent reform Government of India has reduced corporate tax by 10%
- Further announcements are expected to reduce tax and royalty

Current tax rates are high but Government is reforming sector to boost investment.

- Slated reforms will boost much needed investment in mining sector



Source: Reserve Bank of India Annual Report 2017-18¹⁶



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5. Opportunities for Australian Mining industry

6. Conclusions

Australia–India Mining: The Potential for Synergy

- Mining services enhancing productivity and sector modernization
 - geo-mining consultancy, especially where new and high productive technologies would be deployed
 - mining it and mine management systems
 - Safety, including safety systems and equipment
- Mapping and the generation of baseline data
- Skill and training - human capital in mining
- Help in the area of sustainable environmental management
- Underground mining equipment
- Niche mining Equipment, such as special pumps, valves, electricals
- Mineral beneficiation systems and components
- Mineral analysis and weighing, particularly for in motion situations
- Simulation and training, including vr.

Australia–India Mining: Joint initiatives

- FDI investment both ways.
 - Some examples from India to Australia
 - Adani Coal
 - Legacy Iron
 - Some examples from Australia to India
 - BHP
 - RIO TINTO
 - Deccan Gold / Geomysore Gold
- Other joint initiatives
 - CSIRO – NMDC collaboration in Zero Waste mining
 - Australia IIT Dhanbad collaboration in coal technology

Conclusions

- Australia can continue to position itself as strong, reliable supplier of resource commodities and METS services to India.
- Australia and India should forge a mineral research, exploration and development alliance to improve the latter's relatively inefficient mining practices, as well as mine safety and rehabilitation.
- Australia can help India to modernise mining, improve the quality of products and develop trained human capital.
- These are the areas where both India's challenge and possible future synergies with Australia lie.



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Thank You

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