

Commodity supercycles are extended periods of price gains and losses where a broad range of commodities follow similar paths. Commodities are particularly prone to extended cycles because supply can take some time to respond to changing demand given the lead times in exploration and mine development.

Commodity cycles have typically lasted 15-20 years. There have been six such cycles over the past 200 years and four since 1990.

Demand normally drives supercycles

An analysis of previous commodity supercycles suggests that major changes in demand due to wars or major waves of economic development are the typical drivers. Wars can have a major impact because supply tends to be disrupted at the same time as demand rises. The major waves of economic development include the initial industrial revolution, subsequent industrialisations in the US and China and reconstruction after WWII. Looking in more detail at the past six cycles:

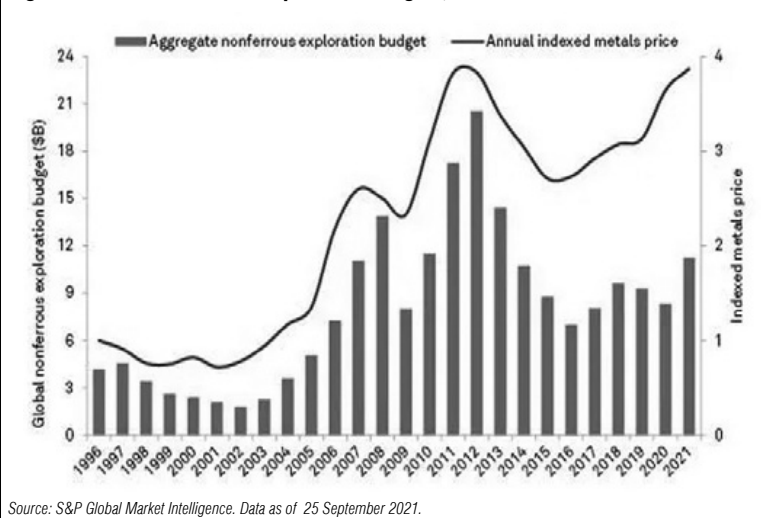
- The industrial revolution led to strong price gains in the later part of the 18th century and there was an additional spike as the Napoleonic wars occurred in the early 19th century.
- The US civil war played a major role in the boom in the mid-19th century.
- There was a double spike in prices in the early decades of the 20th century. The initial cause was rapid industrialisation in the US around this time, but these pressures were then exacerbated by the first World War.
- The biggest boom in real terms was associated with World War II and the reconstruction of Europe and Asia in its aftermath.
- The boom through the 1970s was slightly different. Rising demand from the conflicts in Vietnam and the Middle East played a role. However, part of it was also the supply pressure imposed by the Organisation of the Petroleum Exporting Countries (OPEC) on oil and the generalised cost pressures that pushed all production costs higher.
- The last boom began in 1998 and was driven by China's incredibly rapid industrialisation and urbanisation. It appeared to peak around 2012 when China attempted to rein in its economy and start a reform agenda that is ongoing.

But supply is playing a bigger role

While demand is the main driver of commodity supercycles, supply issues can also play a role and there is some evidence that is becoming more important. One thing that distinguishes commodities is that there is a long lead time for new supply given the time it takes for new projects to come online. This is less of an issue with parts of agriculture, however the lead times for metals and bulks can be close to a decade.

The increasing evidence of supply issues in cycles is evident in the three recent episodes:

Figure 3. Annual nonferrous exploration budgets, 1996-2021



Source: S&P Global Market Intelligence. Data as of 25 September 2021.

- The forming of OPEC in 1960 and the oil embargo of the 1970s demonstrated the impact that supply constraints can have on prices.
- A new era of supply discipline appeared to start in the early 1990s. There was a wave of company consolidations and a major shift in management of mining companies from geologists to accountants. The accountants needed more convincing to start new projects. This was also the period of the tech boom which led to many other sectors being starved of capital.
- Shareholder activism around ESG issues has emerged as another factor over the past 10 years. Companies have been encouraged to place greater emphasis on soil, water and air contamination as well as limiting carbon usage. This has created additional hurdles, precluded some projects, and increased the cost of those that have proceeded.

More generally, projects have become larger and more capital intensive over time and that means greater start-up costs and even longer lead times. Firms need to be more convinced of the sustainability of a cycle before they act. This can reinforce the upward pressure on prices in the shorter-term. Start-up costs are generally highest for oil and bulks and lowest for most agricultural products.

The radical change in supply behaviour, and the potential for this to contribute to a new supercycle is evident from recent trends in exploration and capex. Figure 3 shows how metals exploration budgets have moved over time. There has been a significant decline over the past eight years that will constrain output over the years ahead. In the past higher prices have led to more exploration, but the chart shows a divergence in recent years.

The decline in investment in energy is even more extreme as is shown in Figure 4 on the next page. Shareholder activism has played a major role here with many large companies stopping development of fos-



The quote

Commodities are particularly prone to extended cycles because supply can take some time to respond to changing demand given the lead times in exploration and mine development.



Tim Rocks, E&P

Tim is chief investment officer and has more than 25 years' experience as an investment strategist, head of research and fund manager in Australia and Asia.



Peter Dragicevich, E&P

Peter joined E&P as a macro strategist. He undertakes in-depth thematic research and empirical analysis on domestic and global economic developments.

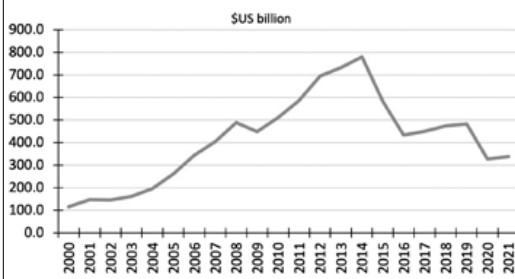


Max Casey, E&P

Max is an associate director - portfolio strategist specialising in portfolio construction and asset allocation, having initially joined the business in 2014.

oil fuel projects in favour of renewables. However, this potentially creates a major problem because fossil fuel demand will remain high for decades and, without any new investments, there is the risk of supply shortages and price spikes. By some estimates oil will still be the largest energy source in 2050.

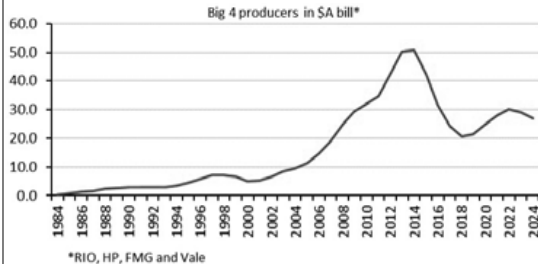
Figure 4. Global upstream investment in oil and gas



Source: US Energy Information Administration, Evans & Partners.

Some of the same factors are playing out in iron ore. Capex has been constrained in recent years despite higher prices as can be seen in Figure 5. In the short-term there has been additional supply pressure from production problems in Brazil and COVID-19 effects. One difference, however, is that demand growth is likely to be less over the next 5-10 years than it has for the past 20 years since the Chinese property surge has passed its peak.

Figure 5. Iron ore capex



*RIO, HP, FMG and Vale
Source: Refinitiv, Evans & Partners

The green metal supercycle

The case for a supercycle now is based on surging demand from decarbonisation combined with significant inertia on the supply side. Even if capex began to pick up now prices could stay high for several years due to the substantial and growing lead time for new projects to come online.

Decarbonisation is one of a number of factors that seem set to create a corporate and government investment boom over the next two decades that will be positive for a broad range of industrial commodities. In fact, there is a confluence of factors that point to a radical change in the composition of global GDP. The past generation has been dominated by consumption.

The next generation could see a return of capex driven growth via:

- **Decarbonisation.** The International Energy Association (IEA) estimates that \$50 trillion will need to be spent by 2050 to achieve the net zero emission target. This will be spent on such projects as transforming electrical networks to accommodate renewables, infrastructure to facilitate electric vehicles and retro-fitting buildings to improve carbon efficiency.
- **Redesigning manufacturing sectors** to address issues exposed by COVID-19 and to reflect a world of greater geopolitical risk. This will include onshoring and building buffers into production processes.
- **Automation and robotics** will continue to rise driven by the added motivation of rising labour costs and declining labour availability.
- **Defence spending** seems set to jump in response to rising geopolitical tensions. The Russian invasion of Ukraine seems set to precipitate a step change in military spending over coming years. Germany has already announced a radical change in approach and has committed to spending 100 billion euros.
- **Healthcare.** COVID-19 exposed deficiencies in the hospital systems of many countries, particularly China. Many countries will now spend aggressively to be ready for future pandemics.

Decarbonisation was already going to be a compelling driver of demand but the desire by Europe to reduce dependence on Russian energy seems set to cause a dramatic acceleration of goals for growth in renewable energy. The EU Commission has already outlined a plan under which the flow of gas from Russia to the EU by 2023 could be cut by two thirds. Part of this includes an even faster transition to solar and wind. There is mounting pressure for such changes to happen even faster. This might be a political necessity but its implications for commodity markets could be substantial.

Better for some commodities than others

Given the unique demand drivers in this cycle, some commodities are expected to benefit more than others. E&P's broad ordering of beneficiaries is as follows:

- **Metals** have the most to gain particularly the 'green metals' like copper, nickel, aluminium, lithium and platinum. These will all be heavily used in rebuilding electric networks, batteries and electric vehicles. Of these, copper is the most interesting given the small number of finds in recent years and the huge increase in demand needed to facilitate electric vehicles and wind/solar generation. Lithium will also see substantial growth in demand although there is a greater supply response here.
- **Oil and gas** appear set to stay elevated because of the enormous mismatch between demand and supply for the next couple of decades.
- **Iron ore** should also benefit, but it will not have the same scale of increase in demand as the green metals given the changing dynamics of the Chinese economy. **FS**

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