

Industrials

Introduction

The Industrials sector has certainly been one of the backbones of the world economy. It is composed of three industry groups: Capital Goods, Commercial & Professional Services, and Transportation. As of now, Industrials is the sixth largest of the 11 GICS sectors in the U.S. market and accounts for approximately 7.8% of the weight of the S&P 500, with an estimated market cap of \$5.70tn. With its five largest companies representing only 29.3% of the sector, it is also by far the least concentrated one. Moreover, the Industrials sector has higher foreign revenue exposure than the broader market benchmarks. In general, its performance tends to be sensitive to the overall economy and economic cycles, performing best in the early-to-middle stages. Additionally, the US Industrials sector has varying correlations with different sectors and countries, with highest correlations to the Consumer Discretionary sector and Germany, respectively.

Industry groups

Within the sector, Capital goods is by far the biggest of the three industry groups, being responsible for up to 70.18% of the sector in the US. This industry group is composed of seven industries: Aerospace & Defence, Building Products, Construction & Engineering, Electrical Equipment, Industrial Conglomerates, Machinery, and Trading Companies & Distributors. In fact, the industrial sector's three biggest industries – Aerospace & Defence (27.8%), Machinery (16.7%), and Industrial Conglomerates (15.6%) – are part of this group. Regarding the sub-industries, the two most notable ones are Aerospace & Defence, and Industrial Conglomerates. The first one is concerned with the manufacturing of civil or military aerospace and products, Raytheon Technology Corporation [NASDAQ: RTX] being the biggest company. The latter, to which also 3M Co. [NYSE: MMM] belongs, is made up of diversified industrial companies with business activities in three or more sectors.

The Transportation group is, as the name suggests, concerned with transportation and related management and maintenance services. Its five industries – Air Freight & Logistics, Airlines, Marine, Road & Rail, and Transportation Infrastructure – represent 7.48% of the industrial sector's market capitalization. The Air Freight & Logistics, with companies such as UPS [NYSE: UPS], is the biggest of the five. It is followed by Road & Rail, in which Union Pacific Corporation [NYSE: UNP] is the highlight, and Airlines, with its biggest players being Southwest [NYSE: LUV] and Delta [NYSE: DAL].

Companies in the Commercial and Professional Services group deal with business support services, which can be divided in two industries with rather stable demand: Commercial Services & Supplies, which represents 4.54% of the sector, and Professional Services, which accounts for 1.92% of the sector. Companies in the Commercial Services & Supplies industry, like Johnson Controls [NYSE: JCI] and Cintas [NASDAQ: CTAS], provide printing services for the media industry, data processing services, waste and pollution control management. On the other hand, those in Professional services, such as Equifax [NYSE: EFX], provide employment services, market testing, and research.

United States

UPS [NYSE: UPS]: The United Parcel Service is an USA-based package delivery and logistics company. It is currently the world's second largest industrial company. With approximately around 543,000 employees, the company delivers around 6bn packages per year. In FY 2021, the company generated over \$97.3bn of total revenue. Currently, UPS has a market cap of \$171.1bn. Since its foundation, UPS has expanded to deliver packages both in

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the US and internationally and further offers supply chain and air freight services with UPS Airlines, trucks with UPS Freight, and drones with UPS Flight Forward.

Union Pacific Corporation [NYSE: UNP]: Union Pacific is a freight-hauling and passenger railroad transportation company. Since its foundation in 1862, it has expanded its operations through M&A, and currently consists of 8,300 locomotives and more than 32,000 route miles of railroads across 23 states in the western US. The Company's railroad hauls a variety of goods, including agricultural, automotive, and chemical products. With a market cap of \$158.42bn it is America's second largest Industrial company after UPS, having generated a total revenue of \$21.8bn last year.

Raytheon Technology Corporation [NASDAQ: RTX]: The American company is the world's largest Aerospace & Defense manufacturer in the world, with a market cap at \$147.3bn. The company is the result of the merger between United Technologies and Raytheon Company, which was successfully completed in April 2020. In FY2021 it generated a total revenue of \$64.38bn. Currently the firm produces aircraft engines, avionics, aerostructures, cybersecurity products, guided missiles, air defence systems, satellites, and drones.

Honeywell International Inc [NASDAQ: HON]: Honeywell is an American based multinational industrial conglomerate. Since its start as a heating company, it has diversified its operations through many acquisitions on a global scale. Currently, the company's four key business areas are: aerospace, building technologies, performance materials and technologies, and safety and productivity solutions. With a market cap of \$132.7bn, it is the world's largest industrial conglomerate, with an annual total revenue at \$34.39bn.

Europe

Siemens [ETR: SIE]: The German company is currently the largest industrial company in Europe, and eighth largest worldwide, with a market cap as big as 107.15bn. It has generated a total revenue of \$68.6bn in FY 2021, which is still below pre-pandemic levels, which in FY2019 was around \$86.85bn. The main reason for this lies in the supply chain disruptions and material shortages during the pandemic. Particularly the current chip shortage eats into the company's profits. Siemens is a multinational conglomerate company and the largest industrial manufacturing company in Europe. It currently has over 300,000 employees and its headquarters are in Munich, Germany.

Airbus [EPA: AIR]: Having generated a total revenue of \$57.47bn, the French company, currently based in the Netherlands, has a market cap of \$91.41bn. The multinational aerospace corporation designs, manufactures, and sells both civil and military products worldwide. The company was hard hit by the pandemic, but has recovered since and, according to analysts, further growth is expected. More details on this below.

Deutsche Post AG [ETR: DTW]: The German multinational package delivery and supply chain management company is one of the world's largest courier companies. It is headquartered in Bonn, Germany and has over 571,00 employees. It currently boasts a market cap of around \$55.78bn and in FY2021 generated a relatively high total revenue of \$90.01bn due to increases in package volumes. For reference, this is 42.1% more than pre-Covid in FY2019, where the company generated \$63.34bn in total revenue.

Industry outlook & trends

As one of the most segmented industries in the market, the Industrials sector is undergoing pressures and changes of different natures to keep up with the recent market developments. Aerospace & Defence has historically been the biggest industry and a major driver of returns in the Industrials sector. However, after overperforming the S&P 500 Industrials Sector rather consistently until late 2020, as the graph of S&P 500-20 against the iShares US

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Aerospace and Defence (ITA) index shows, the Aerospace & Defence industry took a major downturn when the pandemic left thousands of aircrafts on the ground and many others flying empty. And while it is true that the Industrials sector is a rather cyclical one and that the whole market experienced a crash at that time, what interests us is the inversion of trend that sees Aerospace & Defence underperforming with respect to its sector. The graph, however, also shows that this inversion seems to be on the verge of being turned back again. The Aerospace industry has entered 2022 in much better shape than post-Covid expectations predicted, and the Defence industry is riding the wave of political tensions.

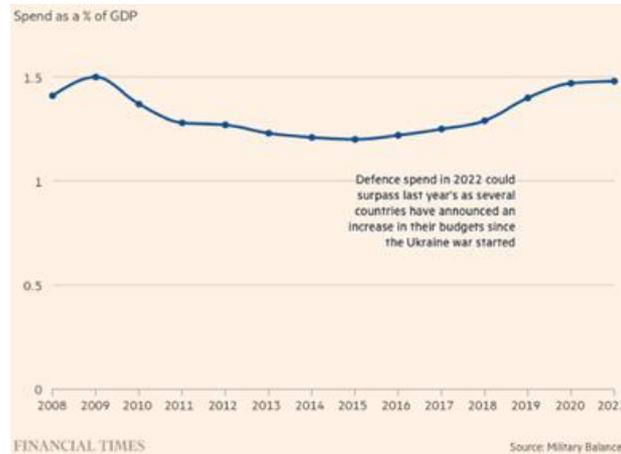


For what concerns Aerospace, as global distribution of vaccines contributed to open up borders again and boosted commercial flight routes, giants like Boeing and Airbus jumped back on business. Indeed, while demand is still expected to remain subdued for the first months of 2022 due to surges of Covid variants, current macroeconomic trends indicate that it shouldn't be too long before demand for small and medium sized aircrafts picks up and returns to pre-Covid levels. One important element worthy of note when examining aircraft demand, however, is the role of sanctions posed on Russia for invading Ukraine. Both Boeing and Airbus were due to deliver aircrafts to Russian companies this year and, as most of the money is paid upon delivery, sanctions could mean losing millions of dollars for the two aerospace giants. That said, sales outside Russia seem promising. Along the same lines of demand, also aftermarket revenues show good prospects. Often overlooked, they are a fundamental element of the business model of aerospace firms and are at the core of the innovation process that the companies are undertaking to capture more value. The direction is that of investing in digital technologies that improve customer experience by refining proactive and predictive maintenance capabilities of their software. In other words, the faster companies can detect when and how an aircraft will need support and new components, the better it will be for them.

Nevertheless, commercial flights reopening alone could hardly be the only underlying reason behind the progressive tightening of the gap between the S&P 500-20 and ITA that we have seen since the beginning of 2022. Indeed, not only has the Defense industry been much more insulated from the global impact of Covid than that of Aerospace, mainly thanks to its tight connection to governments, but it is undergoing an important expansion. Indeed, the invasion of Ukraine by Russia alerted the world and shoved military spending to the front line for the first time in decades. The most dramatic stance was taken by Germany, which promised to push military spending above 2% of GDP, an unseen level for more than thirty years. Part of its plan is to replace its Tornado fleet with a brand new one composed of F-35 fighter jets made by US defence group Lockheed Martin. Germany, however,

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was not alone: European defence spending as % of GDP in 2022 is expected to surpass last year's as several countries have announced increases in their military budgets since the Ukraine war started. Along the same lines, the US, UK, and Australia announced a cooperation to produce hypersonic weapons to counter China's expanding military and Australia declared it will spend A\$3.5bn to renew its missile capability. Hence, it wouldn't be too surprising to see a reversion and Aerospace & Defense regaining its spot as the dragger of the S&P 500 Industrials sector.



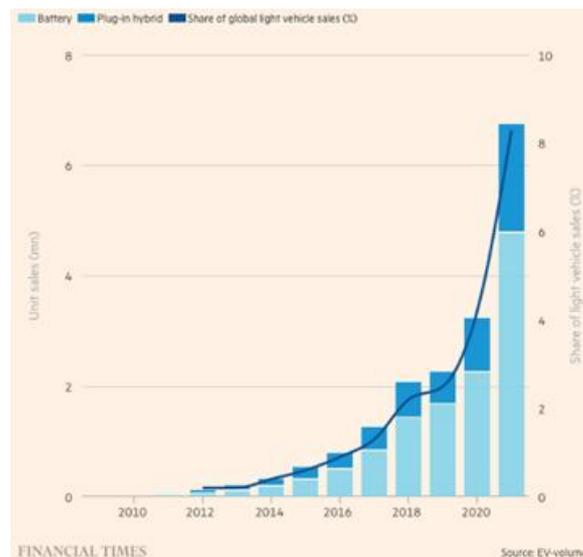
After analysing trends within capital goods, it is interesting to look at what's happening in the transportation subsector. The rather promising outlook we outlined for Aerospace & Defense can't be depicted for Airline companies, which have been struck again and again from the beginning of 2020. Companies with already very low profit margins due to their business model have been pushed to the brink because of the pandemic and geopolitical tensions. The soaring cost of oil resulting from sanctions imposed on Russia is threatening the industry just when it was kicking back. As Jet fuel prices have risen by a third to over \$150 dollars per barrel, managers are trying to come up with solutions that are able to both keep the company profitable and retain the customer base. While airlines all agree on a degree of cost sharing with customers, they are individually evaluating the risks of increasing ticket prices. US airlines have decided to entirely pass on the cost to consumers while they strongly reduce the number of routes, Air France and KLM will focus on increasing ticket prices on long-haul flights, and Lufthansa has highlighted the importance of sticking to their business model while trying to minimise costs. The roaring prices are particularly problematic for low-cost companies as their business models rely on price competition and fuel costs can account for up to 37% of their operating costs. As a way to respond to the troubling market situation, Ryanair has hedged 80% of its fuel requirements for the next 12 months.

The tremendous increase in oil and fuel prices is however not the only consequence of tensions between Russia and Ukraine. The conflict is indeed one that is touching countries all over the world and has contributed to reduced communication and travel, both because of sanctions and safety. Russian airlines, within matters of a week, were banned access to several sky routes, were denied maintenance and spare parts, were stripped of insurance, and were refused delivery of aircraft orders (30 from Boeing alone). Both Aerflot and the second largest airline in Russia stopped all international flights other than to Belarus. But Russia is not alone, as Japan's two largest airlines cancel flights to Europe because of worries of flying over Russian airspace and Finnair was banned access to the skies by Russia itself via punitive bans. While it is impossible to predict how long these bans will stay in place and how much it will take for the industry to recover, it is safe to assume that some more rough months are to come for airline companies.

While Automotive is not part of the Industrials sector as defined within the scope of the S&P 500 Industrials it is usually included within the Consumer Discretionary one, because, and, as mentioned above, the two are highly

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correlated. The stars in the face of inaccessible fuel prices and shifts toward sustainable transportation are undoubtedly electric cars. Companies like Honda have declared all their vehicles will be zero emission by 2040, more cautious ones like GM aim to eliminate emissions from some of their trucks by 2035. The trend is however clear: more and more companies are joining forces to spread out the high costs of producing electric cars and consumers are there for it. GM and Honda have declared they will jointly produce millions of electric vehicles for North America and China, Volkswagen and Ford formed an alliance to build electric vehicles through VW's infrastructure, and Renault and Nissan are planning to develop their cars on the same systems. Polestar, backed by Volvo and Chinese company Geely, is currently producing its electric models in China, and has struck a deal worth twice its sales last year with rental group Hertz. In Europe, electric car sales overtook those from diesel last year and in Norway over 80% of new cars sold are electric vehicles.



It is precisely in Norway that Chinese start-up Nio is planning to expand. Its goal is to sell its battery-swapping system to other groups and to make the technology more popular despite the abandoned attempts of Tesla to exploit the strategy. Nevertheless, the real concern is not which method is best, but whether companies producing electric vehicles will be able to keep up with demand. Oil prices almost touching \$120 per barrel due to the Ukraine war have pushed an increasingly higher number of drivers to look for more fuel-efficient options like electric vehicles: online vehicle marketplace Cars.com reported searches for electric vehicles up by 112% on March 8th compared to before the war on February 24. However, because of the chip shortage and production capacities that are not yet big enough, the inventory of electric vehicles is not sufficient to cope with the demand. Coupled with record inflation this is the perfect recipe for extraordinarily high prices. In addition, as the war in Ukraine also threatens fundamental production commodities like nickel, lithium, and cobalt, all used for battery cells, prices can be expected to increase even more. The price for the three metals required for a 60KWh battery has skyrocketed from \$1395 a year ago to \$7400 in early March. The fundamental problem is that the electric vehicle industry was built on the very premise that batteries would carry on getting cheaper, and for years the industry was proved right, but the current halt could cause the industry important slowdowns. Nevertheless, the prevalent impression is that electric cars' momentum is big enough to face the upcoming increases in prices.

Valuation Primer

When performing valuations of companies in the Industrials sector, the two most commonly used multiples are the EV/EBITDA and the P/E. The latter, however, tends to be used less for comparative analysis as it is affected by capital structure, accounting practices for depreciation, and tax rates.

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The EV/EBITDA multiples for Large Cap US companies in the last 3 years has varied quite largely. As we can see from the table, which shows historical averages, EV/EBITDA has ranged between around 13x to 25x. Digging deeper, we see that it was rather low during the first part of 2020 and was particularly high in the first part of 2021, indicating that firms which are part of the sector were possibly undervalued in 2020 and overvalued in 2021. However, going back to the sub sectors that we know define the Industrials, we can uncover more details and variations.

GICS Sector	Industrials
12/31/2021	17.62
6/30/2021	25.12
12/31/2020	20.61
6/30/2020	12.80
12/31/2019	13.45

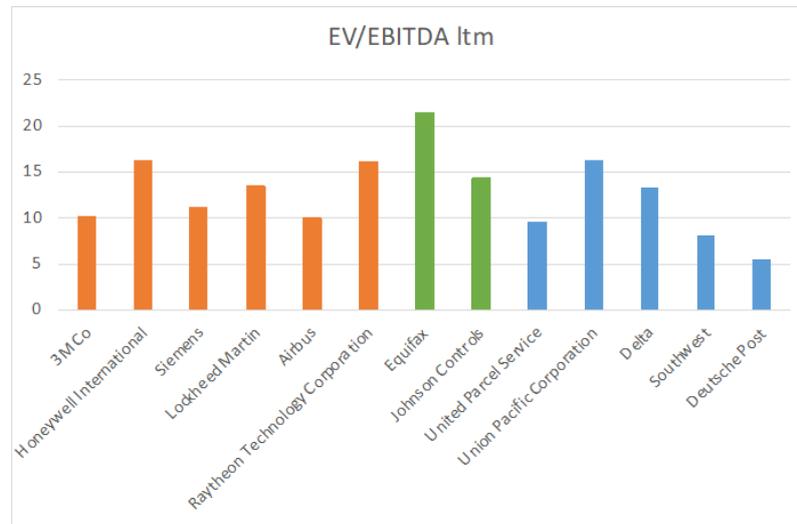
Indeed, the sector EV/EBITDA multiple is nothing but the average of the various EV/EBITDA multiples of the industries that build the Industrials Sector. As we have seen above, however, the underlying industries can be rather different and hence characterised by multiples that can vary a lot from the average. For example, Professor Damodaran from NYU helps us summarise the following values as of January 2022:

Industry	EV/ EBITDA January 2022
Aerospace & Defense	13x
Air Transport	18x
Auto & Truck	39x
Building Materials	14x
Business & Consumer Services	16x
Construction supplies	14x
Diversified	8x
Electrical Equipment	17x
Engineering/Construction	13x
Environmental & Waste Services	16x
Farming /Agriculture	13x
Machinery	16x
Office Equipment & Services	12x
Retail (Distributors)	15x
Shipbuilding & Marine	6x
Transportation	11x
Transportation (Railroads)	16x
Trucking	10x

Roughly, the Capital Goods subsector shows an EV/EBITDA multiple of 13x, Commercial and Professional Services show a multiple of 16x, and Transportation shows one of 14x.

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As we can see in the bar chart, which shows Capital Goods firms in orange, Commercial & Professional Services ones in green, and Transportation ones in blue, variation in the multiple is present even within subsectors. In each subsector, however, US firms have on average higher multiples than European firms do, and the trend is particularly evident for Transportation companies.



With a particularly high multiple with respect to its competitors, Honeywell International shows an EV/EBITDA multiple of 16.31x, the highest among Capital Goods. Indeed, while inflation, rising interest rates and the Russia-Ukraine war have hindered its stock price and mechanically also its EV/EBITDA multiple, the conglomerate is focusing on growth and has announced plans to spend \$25bn in capital for growth over the next few years. To keep up with the increasing demand for automation equipment in warehouses, a division in which Honeywell increased revenues by 14% to \$2bn last year, the company is planning on expanding in that direction as well. As Thomas Evans, robotics chief technology officer for Honeywell said, “it’s a complete upward trend” and it’s setting the company apart from competition.

Equifax, within the Commercial and Professional Services sector, boasts an EV/EBITDA multiple of 21.39x. The stellar value is likely the result of the acquisition spree the company has been on over the past couple of years. Equifax acquired ID & Fraud solutions company Kount at the start of 2021, getting access to 32bn digital interactions, 17bn devices, and 5bn annual transactions across 200 countries and territories. It also acquired HireTECH and i2Verify to provide stronger HR and tax solutions for small and medium businesses, with the aim of saving them time to focus on growth. In March 2022 it announced the acquisition of Data-Crédito, the largest consumer credit reporting agency in the Dominican Republic. Overall, it completed 11 acquisitions totaling more than \$3bn in the past 18 months.

Union Pacific Corporation, while hit by the geopolitical tensions like other firms in the industry, shows a strong EV/EBITDA multiple of 16.25x and confirmed and continuous support from the market. Since 2009, the company has invested more than \$2.8bn in its 6310mile rail network in Texas and is preparing to respond to the expected increase in freight, projected to double between 2014 and 2040. The biggest project, announced in January, secures an entrance that secures 24/7 operation in Laredo Customs District, the main port of entry along the US Mexico border which accounts for about \$280bn in trade. Union Pacific Corporation is also planning to double the size of the facility and, in turn, to double also the number of truckloads it can handle in Laredo.

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