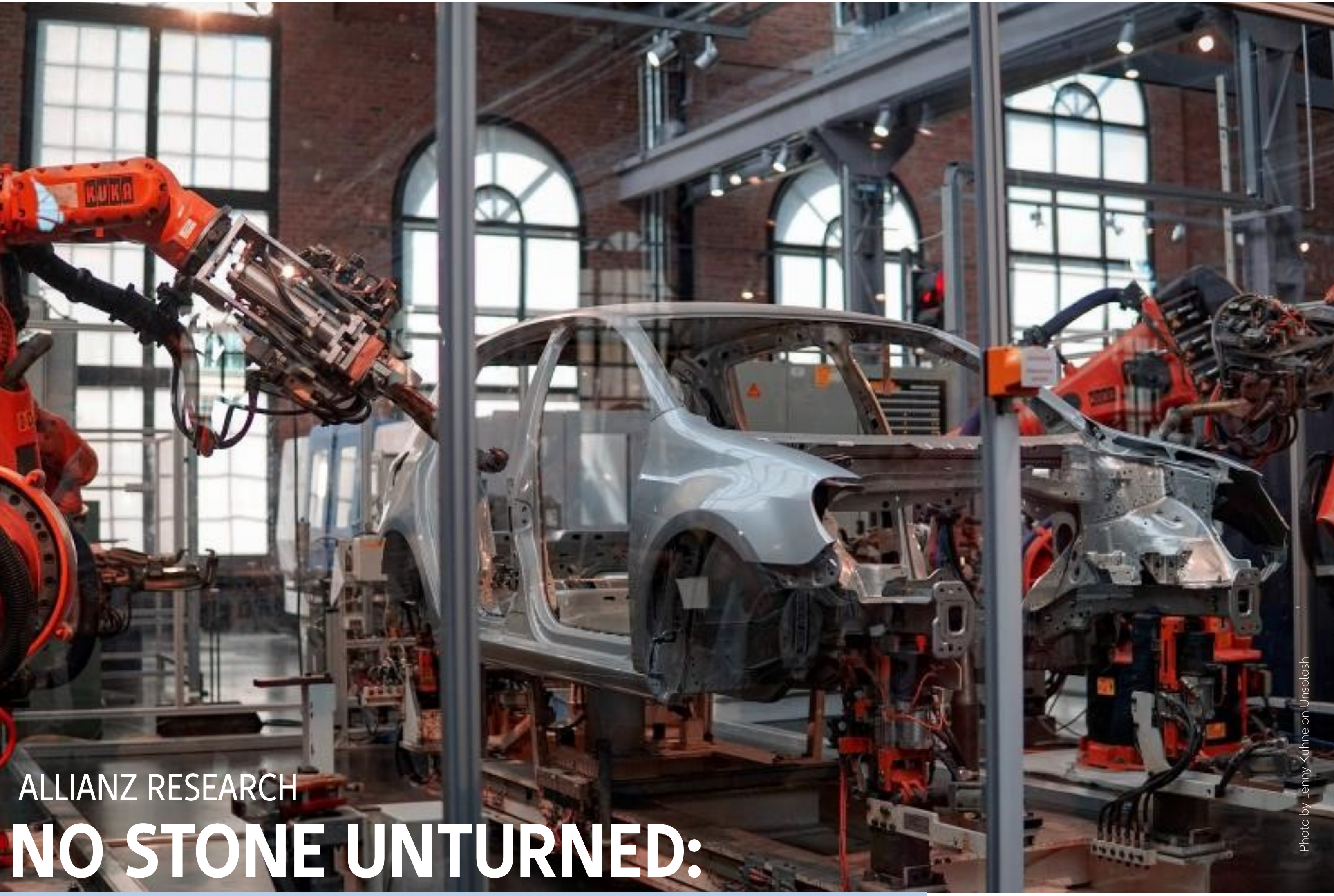


Photo by Lenny Kühne on Unsplash

ALLIANZ RESEARCH

NO STONE UNTURNED: HOW COVID-19 IS DISRUPTING EVERY INDUSTRY

03 April 2020

EULER HERMES

Allianz

EXECUTIVE SUMMARY

- **As the Covid-19 pandemic accelerates, hardly any global industry will be spared, according to our analysis. For Q1 2020, we register a record level of 126 sector risk-rating[1] downgrades, the highest since we began monitoring in 2012.** All these downgrades come from the direct and indirect impacts of Covid-19 on demand (5 out of 10 downgrades), profitability (4 out of 10) and liquidity (1 out of 10). In 6 out of 10 cases, downgrades are from 'medium' to 'sensitive' level of risk.
- **Which sectors are most at risk? Transportation, automotive, electronics and retail.** Global lockdowns are wreaking havoc on airlines, with the RPK or Revenue Passenger Kilometers for top air carriers plummeting by -30% since last December. Collapsing stock prices are also jeopardizing indebted and unprofitable (low-cost) airlines. Meanwhile, the pandemic is exacerbating problems for the automotive sector, already struggling with existing structural challenges. The global market is facing a slump of over -10% in 2020 (after -4% in 2019). Retailers/ wholesalers are on the front line, but suppliers are not immune, in particular to cross-country supply-chain risks. The electronics sector is battling a demand-driven deterioration in Europe, with expectations of much weaker electronics sales to local industries. And within the retail sector, Asia-Pacific discretionary retailers have been hurt badly by prolonged store closures and the collapse of Chinese tourist flows.
- **Overall, Western Europe and Asia are the hardest hit.** The bulk of downgrades occurred in Western Europe (52) – the region with the highest number of countries (17) ahead of Asia and Central & Eastern Europe (29 and 14, respectively). However, North America is not immune with three downgrades in the U.S.
- **Here are the main findings by sector:** The lockdown of one third of world population is wreaking havoc on **transportation**, especially the air transport segment, which could receive public support. In **automotive**, the strong dependency on the top three markets is aggravating ongoing structural challenges. The impact in the **electronics** sector is most felt in APAC, with low value-added players at risk across all regions. Lockdowns will hit sales badly in non-food **retail** and squeeze margins of already vulnerable companies. In **energy** we find significant risk ahead for U.S. shale and solar. **Metals** is already weak, with structural challenges. **Machinery** faces challenges from a fragile global backdrop in many end markets due to the weak economic environment, and we identify potential insolvency risk across APAC in **construction**, primarily in China.

Maxime Lemerle, Head of Sector and Insolvency Research

+33 184 11 5401

Maxime.Lemerle@eulerhermes.com

Marc Livinec, Sector advisor

+ 33 184 11 6198

Marc.livinec@eulerhermes.com

Catharina Hillenbrand-Saponar,

Sector Advisor for Energy, Metals, and Machinery and Equipment

+33 (0) 1 84 11 41 29

Catharina.Hillenbrand-Saponar@eulerhermes.com

Aurélien DUTHOIT, Sector Advisor for Retail, Technology and Household equipment

+33.1.84.11.45. 04

Aurelien.DUTHOIT@eulerhermes.com

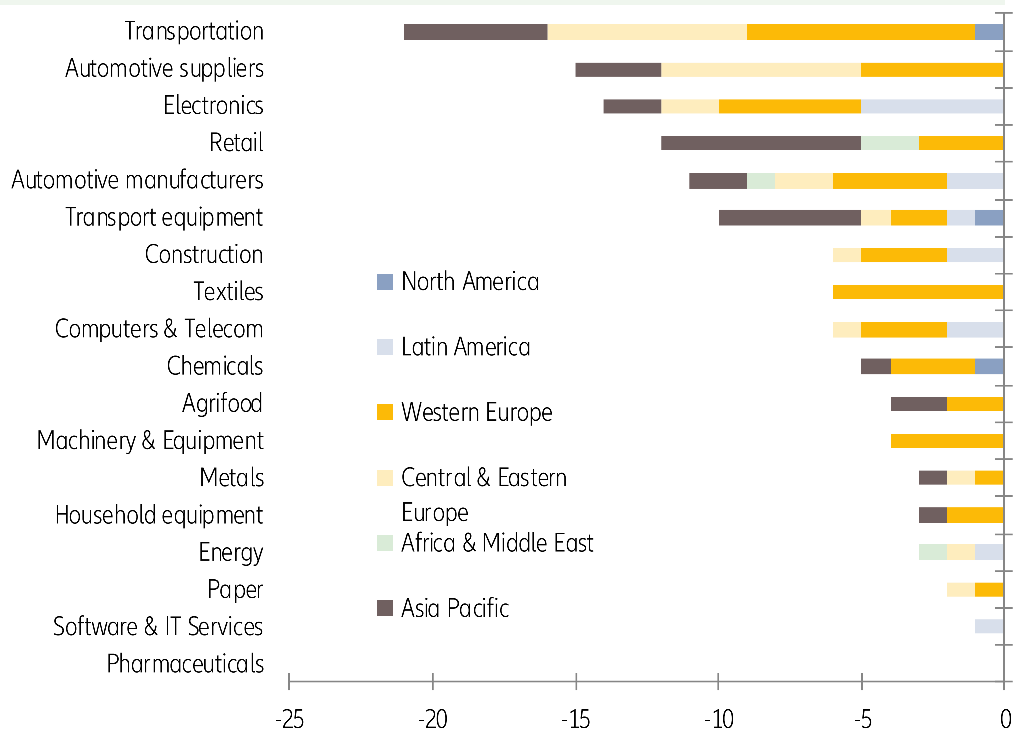
[1] *Click here to read the full sector risk rating methodology on our website.*

HARDLY ANY INDUSTRY WILL BE SPARED FROM THE IMPACT OF COVID-19

Since the beginning of the Covid-19 outbreak, global sectors have been facing mounting challenges. The first round of impacts arrived via China's drastic containment measures, which shut down several large cities, triggering a freeze in production, retail and trade activity in the country. Travels to and from China also grinded to a halt. Then, as other economies (South Korea, Italy) started to implement China-style measures to contain the spread, a strong adjustment in stock indices followed. Now, with large swathes of the global economy under lockdown, especially in Europe and North America, local consumption has taken a strong hit, on top of production and trade. Lower demand in these regions will also take a toll on products (typically consumer durables) manufactured in and imported from emerging economies.

For Q1 2020, we register a record level of 126 sector risk-rating downgrades, the highest since we began monitoring in 2012. All these downgrades come from the direct and indirect impacts of Covid-19 on demand (5 out of 10 downgrades), profitability (4 out of 10) and liquidity (1 out of 10).

Figure 1: Changes in sector risk ratings by sector and region (Q4 2019 vs Q3 2019)



Sources: Euler Hermes, Allianz Research

SECTOR FOCUS

Transportation: Covid-19 fallout to wreak havoc on the sector, which could receive public support

Transportation is one of the sectors most impacted by the Covid-19 pandemic, given its high dependence on China and activity closely linked to travel and international trade. Since the initial shock in China, all the subsectors of transportation have struggled amid collapsing demand: air, sea, road and railways. RPK or Revenue Passenger Kilometers for top air carriers has plummeted by -30% since last December and airlines now expect revenues to tumble by at least USD100bn over 2020, which won't be compensated by falling fuel costs. A liquidity shock is further compounding difficulties; the global stock index in transportation has already fallen by -15% and should proceed this way.

All companies have to be very closely monitored, in particular those either highly leveraged or poorly profitable, such as low-cost airlines and shipping companies that do not belong to any state-owned groups.

<u>Q1 2020 downgrades:</u>

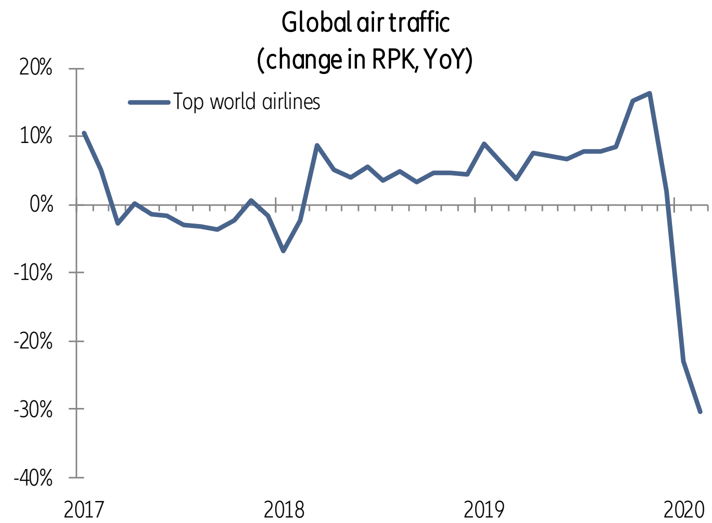
- From Low to **Medium** level of risk: Malaysia, Philippines, Singapore and Vietnam
- From Medium to **Sensitive** level of risk: US, Belgium, Finland, Ireland, Luxemburg, Norway, Portugal, Sweden, Czech Rep., Estonia, Lithuania, Romania and Slovakia,
- From Sensitive to **High** level of risk: China, UK, Poland and Turkey

Automotive: Strong dependency on the top three markets is aggravating ongoing structural challenges

The automotive industry is highly exposed to China, which is both the world's largest auto market and auto production center. It represents roughly 30% of the total for both indicators, with more than 25mn new vehicles per year. The drop in sales resulting from containment measures is expected to be massive in the first quarter: February recorded an 80% y/y drop, after a double-digit decline in January. The impact is significant firstly for local retailers and wholesalers, and follows two consecutive years of declining volume of new registrations. The next most impacted are domestic carmakers, notably the most fragile ones operating in the EV segment. Yet, the impact is also significant for global carmakers since most of them manufacture the vehicles sold in China locally with domestic partners through joint ventures. De facto, the supply side is hit hard because Wuhan, the epicenter of the Covid-19 outbreak, not only accounts for 10% of the vehicles made in the country but also gathers hundreds of car-parts suppliers, which cater to local operators and export to the rest of the world. Indeed, the latter represent most of the Chinese exports of the automotive industry. Prolonged closure of factories is increasing the risk of shortages and supply-chain disruptions at a global level. The countries most reliant on imports from China are located first in APAC (on average 13% of imports) - notably India (25%) - and Latam (9%), and then in Eastern Europe (4%) and Western Europe (2%). However, this average picture does not capture the potential shortage of crucial components that can be produced only in China.

The automotive sector posted a noticeable drop of its market capitalization, with a decline exceeding -15% for car makers and -20% for automotive suppliers, for the six weeks following the beginning of the outbreak. The Covid-19 related shock is a major additional headwind for the sector, which was already – and remains - challenged by declining top markets and the need for massive investments in electric vehicles, connected cars and mobility services. Established manufacturers have accumulated buffers, thanks to a decade of increasing sales and profits, but they need to multiply measures to protect their financial metrics, notably mid-range passenger vehicle brands – most exposed to price competition – and smaller EV producers – notably in China where overcapacities necessitate consolidation. In any case, small and independent retailers and wholesalers are the most at risk, even if the shock were to be temporary.

Figure 2: Worldwide air traffic (change in RPK, YoY)



Sources: Bloomberg, Euler Hermes, Allianz Research

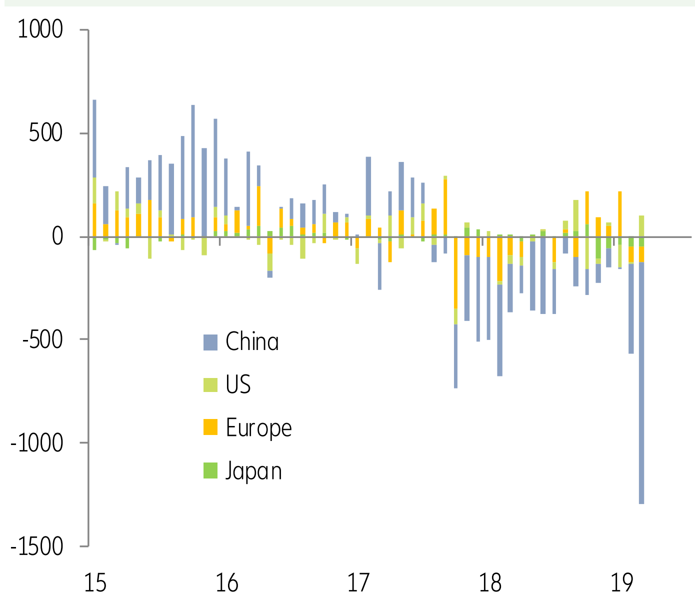
The spread of Covid-19 outside China, with China-style lockdowns in Europe and the U.S., is a major threat, firstly because they represent the second and third largest markets (with a share of 23% and 19%, respectively) and centers of production (24% and 12%, respectively) – i.e. 2/3 of the global market together with China. The shock on demand will exceed the one expected at a macro-level, since a car purchase is a typical durable good that consumers would postpone buying, focusing instead on 'necessary' products. Automotive industries are strongly and negatively reacting to economic recessions - and often forcing authorities to implement supportive measures to limit the social impact.

<u>Q1 2020 downgrades</u>

- From Low to **Medium** level of risk: Korea (M+S), Philippines (S), Singapore (M+S), Hungary (M) and Romania (M)
- From Medium to **Sensitive** level of risk: Belgium (M+S), Germany (S), Ireland (M+S), Portugal (M+S), Bulgaria (S), Czech Rep. (S), Hungary (S), Lithuania (S), Poland (S), Romania (S), Slovakia (S), Morocco (M), Chile (M) and Peru (M)
- From Sensitive to **High** level of risk: the UK (M+S)

(M: Automotive manufacturers and retailers; S: Automotive suppliers)

Figure 3: Monthly registrations of new vehicles (y/y changes, number of units)



Sources: IHS, Bloomberg, Euler Hermes, Allianz Research

Electronics: Impact most felt in APAC, low value-added players at risk across all regions

The prolonged closure of Chinese assembly factories sent a chill in new components orders addressed to electronic component manufacturers (semiconductors, active and passive components), particularly in countries manufacturing the most advanced memory, computing and telecommunications chips found in consumer electronics devices. South Korea (19% of global electronic component value added), Taiwan (13%) and Japan (12%) appeared the most at risk, as well as Chinese manufacturers themselves (19%). Because they cater mostly to regional clients, foundries and integrated players based in Europe and the U.S. were initially spared the impact of China's containment measures.

The sector's global market capitalization has fallen by more than 10% since the beginning of the outbreak, suggesting reduced liquidity for vulnerable players. This shock comes at a time when our proprietary sector risk assessment points to a deterioration in the sector across many Asian countries in past quarters, in line with decelerating global industrial production and a collapse in memory semiconductor prices. In 2019, Asia-Pacific saw a clear surge in large insolvencies.

Much like intermediate goods industries, electronics reacts strongly to periods of economic recessions. With the outbreak intensifying, European and American manufacturers would be hit hard by a drop in local industry production, while Asian manufacturers, hit by a supply-shock by Chinese containment measures, would see falling demand with more widespread global lockdowns.

Q1 2020 downgrades

- From Low to **Medium** level of risk: Czech Rep., Denmark, Estonia, Ireland, Panama and Vietnam
- From Medium to **Sensitive** level of risk: Belgium, Costa Rica, Guatemala, Indonesia, Luxembourg, Mexico and the UK.
- From Sensitive to **High** level of risk: Colombia

Non-food retail: Lockdown to hit sales badly and squeeze margins of already vulnerable companies.

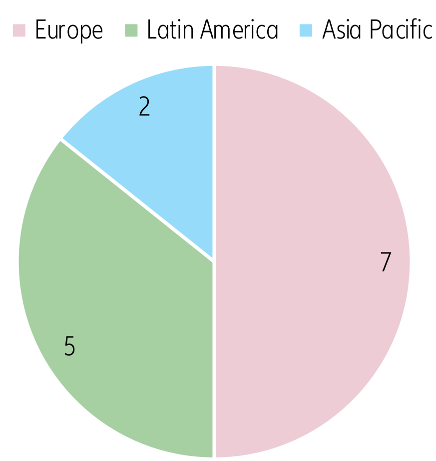
Many retailers and consumer goods companies have warned over the possibility of lost sales due to shortages of popular smartphones and video game consoles arising from the lockdown of Chinese assembly factories. Systemic shortages, however, were ruled out, thanks to inventories standing at 2-3 months of activity across the main segments of the sector (electronics, appliances, textiles). Luxury companies are feeling the most dramatic impact of the Covid-19 outbreak because Chinese consumers account for about a third of global demand. Covid-19 has also weighed heavily on those Asian countries where Chinese tourists account for a sizeable share of retail sales, such as South Korea, Taiwan, Vietnam, Thailand and Singapore.

The discretionary retail industry has seen a well-documented surge in large insolvencies in the past few years. The -12% drop in sector market capitalization hides a clear divide between a few large e-commerce companies slightly in the red and a vast majority of traditional players seeing their market capitalization falling by as much as 25%.
Non-food retail sales are sensitive to the economic environment and restrictions hitting store footfall will trigger a collapse in Q1. Companies that sell through department stores and malls would be even more at risk. Recent periods of retail disruption have shown that e-commerce alone does not compensate for lower store footfall, and that the shift to e-commerce only benefits a handful of large companies.

Q1 2020 downgrades

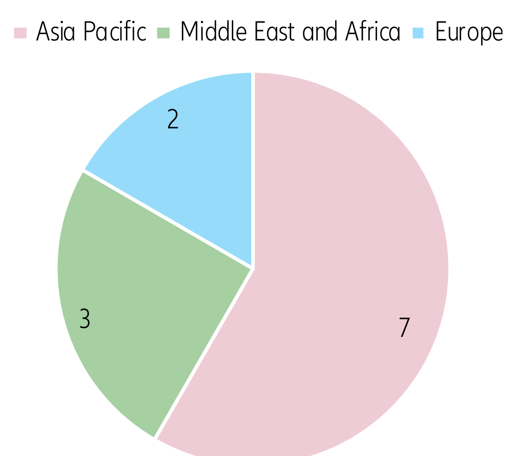
- From Low to **Medium** level of risk: China, Korea, Taiwan and Vietnam
- From Medium to **Sensitive** level of risk: Japan, Israel, Ireland, Netherlands, Portugal, Singapore, South Africa and Thailand

Figure 4: Sector rating change by region for electronics, Q1 2020



Sources: Euler Hermes, Allianz Research

Figure 5: Sector rating change by region for retail, Q1 2020



Sources: Euler Hermes, Allianz Research

Energy: Significant risk for U.S. shale and solar

Oil producers are facing a circular double hit from demand destruction and the declining oil price deck, as China and Asia are among the most important offtakers of Middle Eastern and global oil & gas. Forward markets are in deep contango, which is reflective of severe excess supply. Inventory build may exceed storage capacities. Oil prices are now at levels where large amounts of reserves are uneconomical to produce. The impact has been reflected through a 20% reduction in the energy sector's global market capitalization, even before accounting for any impact of the fallout from the Opec+ meeting debacle.

Prior to the outbreak, oil & gas was already struggling with headwinds from commodities and patchy demand. Companies reported between -5% and -49% y/y earnings declines for 2019. The largest integrated majors are financially resilient enough to withstand the storm, with an average net debt to Ebitda ratio of just 2x. However, corporates are still seeking to deleverage, and with lean capex and not in all cases flexibility in buyback programs, the weakest link are gearing targets which will likely slip. The most vulnerable sector is U.S. shale. Our representative sample of relevant quoted companies shows an average cash conversion of just 11% in 2019 but 100% gearing. These numbers mask much worse ratios at the margin. The sector is being starved of finance while burning cash. While on average the sector has used 40% of available credit lines, a number of companies have exhausted much more than that. Low oil prices stymy growth from existing assets while providing an unattractive backdrop for new capital. At the same time, refinancing becomes more difficult as low oil prices reduce reserve valuations, the basis upon which credit is extended. If prolonged, there could be an impact upon midstream assets. Because of the normally stable nature of cash flows, these companies tend to be highly leveraged, to the tune of 75-80%. If reduction in throughput was material, it could put cash flows for debt service coverage in danger. Refining operations will also be impacted if there is prolonged reduction in fuel demand.

Power, utilities and electricity networks are pretty much unaffected. Besides some industrial volume loss, these sectors are defensive.

Renewables are affected through the impact of supply-chain disruption. The wind turbine sector sources about 20% of its components from China while the solar sector does a much higher proportion. Asia and China are the prime manufacturing centers for the solar value chain and the affected regions in the core manufacturing provinces are home to fabs of the largest global solar manufacturers, alongside their component suppliers. The result of China's containment measures is inventory draw, supply shortages and end-product price increases, likely to be seen from H2 19.

Q1 2020 downgrades

- From Low to **Medium** level of risk: Qatar
- From Medium to **Sensitive** level of risk: Estonia
- From Sensitive to **High** level of risk: Ecuador

Machinery: Challenges from a fragile global backdrop in many end markets due to weak economic environment

The sector has exposure to China in the region of 20-30% of revenues. Aerospace and aviation equipment are particularly concerned, as they are one of the major export sectors for Europe and the U.S. As China is an important supplier, accounting for 35% of global value added, there is a high degree of linkage with regard to intermediate products.

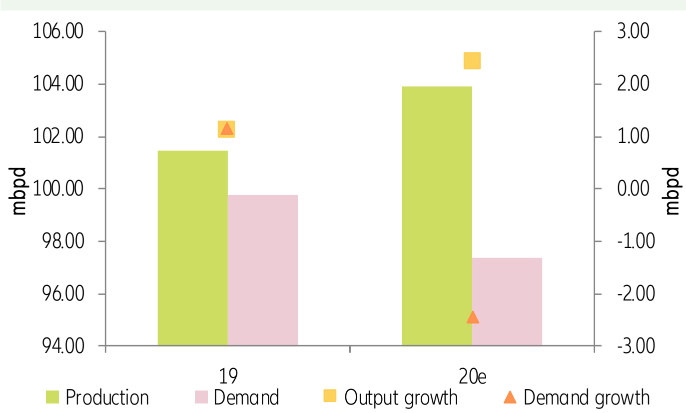
Before the Covid-19 outbreak, end markets were fragile as the machinery sector struggled with slow growth in automotive but also agricultural and mining equipment. The sector was expecting low levels of growth in 2020. These end markets are now being further weakened as a result of lockdowns.

China's containment measures will decimate revenues while at the same time causing supply-chain disruption, mostly in components. In a sector that is highly integrated in some cases and characterized by complex supply networks, disruption is easily multiplied. With tightening financial conditions and the spread to larger economies, the machinery sector might see payment delays from struggling end customers. Companies are already facing project delays and widespread lockdowns reinforce that dynamic and create very significant supply disruption.

Q1 2020 downgrades

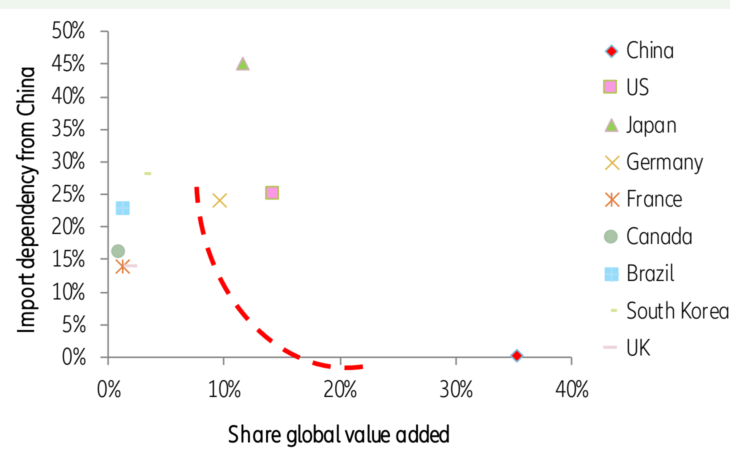
- From Medium to **Sensitive** level of risk: Germany, Ireland and Italy

Figure 6: Rising supply vs downward revision to demand



Sources: Source: BP, OPEC, EIA, Euler Hermes, Allianz Research

Figure 7: Rising supply vs downward revision to demand



Source: IHS

Metals: Already weak, with structural challenges

China's containment measures sparked a significant dislocation of metals demand. The LME index has declined by 20% since the outbreak and some commodities, notably copper, currently trade below cost. The market capitalization of the global metals and mining sector has declined by 15% even before a number of the current lockdown measures were announced, making it the second worst-performing sector alongside auto and transport.

Before the Covid-19 outbreak, the sector was already struggling with a slowdown in a number of end markets and weak commodities, with earnings declines in the order of 3-6% y/y forecast for 2020, particularly in the mining sub-sector (source: Bloomberg consensus). The basic materials sub-sector saw its average interest cover fall below 1x in Q4 19 (source: Company data/Bloomberg), despite a decline in net gearing to 20%. The sub-sector has come out of a difficult year after the U.S.-China trade war. Steel manufacturers' Ebitda margins declined by 140bps in Q4 19, while net debt rose above 3x Ebitda. Potential lockdowns due to the Covid-19 outbreak could derail a bottoming out for the steel sector.
Some corporates expect a full recovery from the impact of China's containment measures, but markets are doubtful. Intensifying lockdowns, however, are altering the picture as they would mean severe volume loss across major locations. Some pockets may see positive impact, e.g. steel where the production shutdowns resulting from containment in China could tighten an otherwise oversupplied market elsewhere. China accounts for 30% of global value added in the metals sector. Import dependency from China is high, 6.5% in Europe and 15% in the U.S. and as much as 45% in Brazil. These numbers show recent tariff-induced flow diversions into Latin America and are evidence of Chinese overproduction that is eradicated due to the drastic containment measures. Flat steel prices have been reflective of that. At the same time, demand weakness loosens the market balance for a number of metals. Copper is now balanced while zinc and aluminum are in minor inventory excess. Demand loss entails the risk of excess inventories.

The metals sector is also a recipient of end-market weakness trickling through from all mature end and intermediate customers, including auto, machinery, and construction.

Q1 2020 downgrades

- From Medium to Sensitive level of risk: Ireland and Philippines
- From Sensitive to High level of risk: Russia

Construction: Potential insolvency risk across APAC, primarily China

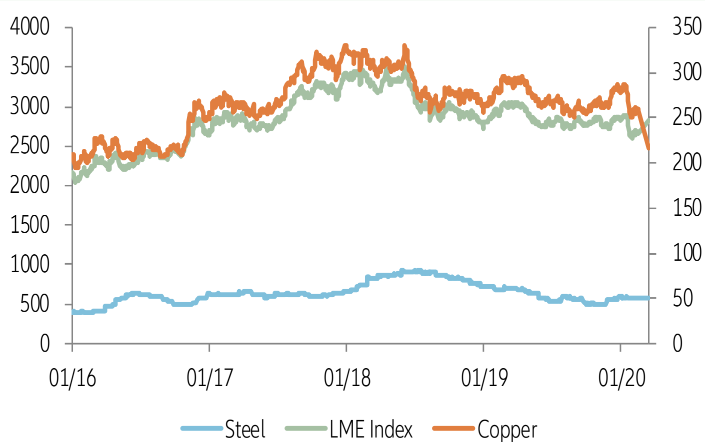
Containment is already affecting China's property sector. Property developers are getting cash-strained as they cannot offload large inventory amid slowing property sales. USD 20bn of bond issuances mature this year (source: Dealogic). In addition to that, there are large issuance volumes outstanding in Hong Kong: Total HK bond issuance USD 185bn. There is risk of companies defaulting on bond coupons or other payments if property sales are delayed and corresponding cash flows take longer to realise. Local governments are supporting the sector by accepting delayed land and tax payments but this is unlikely to be sufficient in terms of cash saving for some companies.

The escalation of the outbreak could be fatal for some companies, particularly those sensitive to project completion timings and highly geared, the disturbance of which could put entire business models into question. Wider lockdowns around the world might replicate the Chinese issue in other localities. The counterbalancing factor could be stimulus in the form of infrastructure spend.

Q1 2020 downgrades

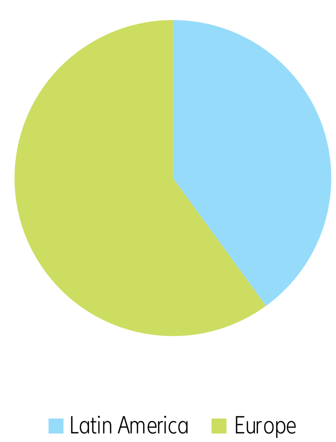
- From Medium to Sensitive level of risk: Costa Rica, Ireland and Lithuania
- From Sensitive to High level of risk: Chile, Italy and Spain

Figure 8: Commodity prices



Sources: Bloomberg, LME, Euler Hermes, Allianz Research

Figure 9: Sector rating change by region for construction, Q1 2020



Sources: Euler Hermes, Allianz Research

APPENDIX 1: Heat map of downgrades

Change of sector risk in a given country (the color of the arrow gives the **final** risk level):

▽ Deterioration

△ Improvement

Regional risk level:

Low | Medium | Sensitive | High

	Chemicals	Pharma	IT Services	Agrifood	Computer Telecom	Textile	Household Equipment	Transport Equipment	Paper	Transportation	Energy	Machinery	Construction	Metals	Retail	Electronics	Automotive Manufacturers	Automotive suppliers
North America	▽US							▽US		▽US								
ASIA	▼Singapore			▼Malaysia ▼Vietnam			▽Taiwan	▽Korea ▽Hong-Kong ▼China ▼Philipines ▼Vietnam		▽Malaysia ▽Philippines ▽Singapore ▽Vietnam ▼China				▽Philippines	▽China ▽Korea ▽Taiwan ▽Vietnam ▼Japan ▼Singapore ▼Thailand	▽Vietnam ▼Indonesia	▽Korea ▽Singapore	▽Korea ▽Philippines ▽Singapore
Western Europe	▼Luxembourg ▼Ireland ▼Italy			▽Ireland ▽Italy	▽Sweden ▼Belgium ▼Luxembourg	▽Belgium ▽Ireland ▽Italy ▽Luxembourg ▽Netherlands ▽UK	▼Netherlands ▼Spain	▼Ireland ▼Portugal	▼Ireland	▽Belgium ▽Finland ▽Ireland ▽Luxembourg ▽Norway ▽Portugal ▽Sweden ▼UK		▼Germany ▼Ireland ▼Portugal	▽Ireland ▼Italy ▼Spain	▽Ireland	▽Ireland ▽Netherlands ▽Portugal	▽Denmark ▽Ireland ▼Belgium ▼Luxembourg ▼UK	▼Belgium ▼Ireland ▼Portugal ▼UK	▼Belgium ▼Germany ▼Ireland ▼Portugal ▼UK
Central & Eastern Europe					▽Czech Rep			▼Estonia	▼Russia	▽Czech Rep ▽Estonia ▽Lithuania ▽Romania ▽Slovakia ▼Poland ▼Turkey	▼Estonia		▽Lithuania	▼Russia		▽Czech Rep ▽Estonia	▽Hungary ▽Romania	▽Bulgaria ▽Czech Rep ▽Hungary ▽Lithuania ▽Poland ▽Romania ▽Slovakia
Africa & Middle East											▽Qatar				▼Israel ▼South Africa		▽Morocco	
Latin America			▽Chile		▽Costa Rica ▼Chile			▽Mexico			▼Ecuador		▼Costa Rica ▽Chile			▼Panama ▽Costa Rica ▽Guatemala ▽Mexico ▼Colombia	▽Chile ▽Peru	

Sources: Euler Hermes, Allianz Research

APPENDIX 2: Risk of insolvencies due to sourcing issues with China*

	US	Canada	Brazil	Mexico	Argentina	Colombia	Chile	Germany	France	Italy	Spain	Belgium	Netherlands	UK	Poland	Czechia	Russia	Turkey	Saudi Arabia	South Africa	Morocco	Egypt	UAE	Algeria	Japan	India	Korea	Indonesia	Singapore	Australia	Malaysia	Taipei	Total
Agrifood	10	7	9	5	2	3	3	4	2	2	6	2	6	6	4	1	13	6	3	14	5	2	6	3	12	1	12	13	8	13	11	7	7
Automotive	7	3	18	18	25	16	22	4	4	6	4	3	7	5	6	4	32	14	17	13	5	30	6	22	18	76	10	25	3	13	37	22	18
Chemicals	18	9	49	30	54	45	38	11	6	6	13	6	13	18	11	5	32	36	25	36	14	30	22	27	25	25	56	22	9	53	37	35	27
Construction	45	38	98	62	57	107	100	19	22	23	33	22	25	56	42	9	106	75	90	99	18	36	73	58	49	45	112	115	50	113	108	50	63
Electronics	24	18	49	38	56	48	28	18	25	32	19	7	8	16	46	3	50	55	28	42	31	50	39	40	35	34	30	42	27	24	33	27	32
Energy	0	1	1	5	2	1	1	0	1	0	0	0	0	0	0	0	13	1	6	3	0	1	5	8	1	1	1	5	14	19	10	1	6
Household Equipment	79	71	148	109	206	108	159	48	54	64	45	29	48	88	65	44	143	106	138	152	57	101	133	107	97	90	89	97	41	110	51	33	92
Machinery & Equipment	50	48	70	48	70	89	70	35	27	13	18	12	36	43	36	32	55	36	59	60	28	47	79	94	45	63	57	109	39	66	67	48	52
Metals	29	23	47	32	58	77	135	17	18	18	21	12	17	10	28	10	64	14	54	98	25	42	18	98	30	17	64	74	27	52	67	49	45
Paper	45	28	62	15	30	15	31	8	12	6	13	5	11	45	7	3	22	30	30	14	4	11	34	13	57	18	34	23	24	96	45	55	28
Pharmaceuticals	3	2	4	4	3	8	2	1	2	1	1	1	0	1	2	0	1	2	2	2	1	2	1	3	1	7	3	5	1	2	4	1	2
Textile	110	96	198	79	152	88	200	68	68	35	56	39	36	40	49	15	146	81	132	139	68	179	98	110	104	76	69	121	44	109	76	73	91
Transport Equipment	7	14	108	9	na	5	25	8	5	7	9	4	3	7	3	5	50	2	na	12	1	126	19	14	5	23	11	37	10	29	16	4	23
Total (incl. Others)	39	27	57	47	62	53	54	22	21	16	19	8	21	26	29	18	63	30	50	54	20	37	41	50	39	28	39	52	26	55	42	38	38

(*) by combining for each sector in a given country the imports' dependency to China with the latest level of sector risk (Q4 2019 sector risk ratings)

Source: ITC, Euler Hermes, Allianz Research

APPENDIX 3: Risk of insolvencies due to sourcing issues with Italy*

	US	Canada	Brazil	Mexico	Argentina	Colombia	Chile	Germany	France	Spain	Belgium	Netherlands	Portugal	Greece	UK	Poland	Czechia	Russia	Turkey	Saudi Arabia	South Africa	Morrocco	Egypt	UAE	Algeria	China	Japan	India	Korea	Indonesia	Singapore	Australia	Malaysia	Taipei	Total
Agrifood	11	2	5	1	2	1	1	16	16	9	7	7	4	15	18	2	4	7	8	3	7	1	1	4	2	1	4	0	1	0	1	8	1	1	4
Automotive	2	9	3	3	4	1	1	13	16	16	6	14	12	16	11	10	4	4	2	2	4	6	5	3	8	4	4	7	2	1	1	3	1	3	7
Chemicals	2	1	5	4	5	4	3	16	8	15	4	3	19	10	8	10	12	9	15	6	5	11	9	8	16	2	2	1	2	1	4	4	1	3	7
Construction	7	3	17	10	11	6	5	12	35	26	10	9	21	40	15	23	6	17	32	16	12	14	11	15	18	4	1	4	4	3	3	12	1	3	13
Electronics	4	5	9	4	10	10	7	5	17	20	4	9	22	35	6	18	3	10	29	15	9	14	22	19	19	2	2	4	3	3	51	4	2	2	11
Energy	1	15	2	0	0	0	0	1	4	8	0	25	5	27	1	14	13	2	9	9	5	13	9	2	44	0	0	0	0	0	1	0	0	0	6
Household Equipment	2	4	4	2	7	2	5	6	12	13	6	8	24	32	8	12	9	8	29	9	6	9	9	6	17	1	1	1	1	1	2	3	1	1	8
Machinery & Equipment	6	12	16	6	20	14	18	12	17	22	12	2	7	33	14	11	8	15	12	27	11	18	32	13	50	8	2	8	4	8	2	8	4	2	13
Metals	5	4	6	5	10	5	6	23	33	27	6	14	14	33	6	19	18	12	16	11	10	15	25	8	52	2	1	2	2	2	4	4	2	1	12
Paper	3	16	12	4	6	6	13	17	39	28	6	10	14	40	19	30	7	8	22	5	4	14	9	8	16	3	2	3	2	4	2	5	1	2	10
Pharmaceuticals	13	1	13	9	22	10	3	6	6	10	12	1	20	16	6	2	5	12	2	9	6	7	5	5	10	7	3	4	4	3	1	4	4	5	7
Textile	10	5	9	10	5	3	3	23	35	25	7	5	19	14	17	12	9	32	16	11	7	30	11	28	11	26	11	5	19	3	3	9	6	12	13
Transport Equipment	11	7	3	1	-	0	3	2	7	8	7	5	30	40	6	16	20	3	15	-	9	2	23	3	5	2	3	12	0	1	2	6	8	4	8
Total (incl. Others)	5	3	7	4	8	4	4	12	17	17	7	6	13	20	10	12	8	13	14	9	7	11	11	7	22	3	3	2	2	2	2	5	2	2	8

(*) by combining for each sector in a given country the imports' dependency to Italy with the latest level of sector risk (Q4 2019 sector risk ratings)

Source: ITC, Euler Hermes, Allianz Research

OUR TEAM

Chief Economist of Allianz and Euler Hermes

Ludovic Subran
Chief Economist
ludovic.subran@allianz.com

Head of Economic Research, Euler Hermes

Alexis Garatti
alexis.garatti@eulerhermes.com

Head of Capital Markets Research

Eric Barthalon
eric.barthalon@allianz.com

Head of Insurance, Wealth and Trend Research

Arne Holzhausen
arne.holzhausen@allianz.com

Macroeconomic Research

Ana Boata
Head of Macroeconomic Research
ana.boata@eulerhermes.com

Françoise Huang
Senior Economist for APAC
francoise.huang@eulerhermes.com

Georges Dib
Economist for Latin America, Spain, Portugal and Trade
georges.dib@eulerhermes.com

Katharina Utermöhl
Senior Economist for Europe
katharina.utermoehl@allianz.com

Manfred Stamer
Senior Economist for Middle East and Emerging Europe
manfred.stamer@eulerhermes.com

Dan North
Senior Economist for North America
dan.north@eulerhermes.com

Capital Markets Research

Jordi Basco Carrera
Fixed Income Strategist
jordi.basco_carrera@allianz.com

Lina Manthey
Equities Strategist
lina.manthey@allianz.com

Patrick Krizan
Senior Economist for Italy and Greece, Fixed Income
patrick.krizan@allianz.com

Insurance, Wealth and Trends Research

Michaela Grimm
Senior Expert, Demographics
michaela.grimm@allianz.com

Patricia Pelayo Romero
Expert, Insurance
patricia.pelayo-romero@allianz.com

Sector Research

Maxime Lemerle
Head of Sector Research
maxime.lemerle@eulerhermes.com

Marc Livinec
Sector Advisor for Chemicals, Pharmaceuticals, Transportation, Agrifood and Transport Equipment
marc.livinec@eulerhermes.com

Catharina Hillenbrand-Saponar
Sector Advisor for Energy, Metals, Machinery and Equipment
catharina.hillenbrand-saponar@eulerhermes.com

Aurélien Duthoit
Sector Advisor for Retail, Technology and Household Equipment
aurelien.duthoit@eulerhermes.com

RECENT PUBLICATIONS

02/04/2020	Emerging markets: How to fight Covid-19 without "whatever it takes"
31/03/2020	Germany: The calm before the labor market storm
26/03/2020	Covid-19 crisis in Europe to put 13,000 corporates at risk
23/03/2020	Covid-19: Quarantined economics
23/03/2020	The Fed goes unlimited. Really?
19/03/2020	ECB: From 'whatever it takes' to 'bring it on'
11/03/2020	Covid-19: A timid "whatever it takes" from policy makers across Europe
10/03/2020	Covid-19: After a lost quarter, 75% of the Chinese economy is back
09/03/2020	Low for longer oil prices: Who is at risk?
05/03/2020	Quarantined trade: Covid-19 to cost USD320bn of trade losses every quarter
04/03/2020	U.S. primary elections: Super Tuesday, and the winner is… public debt in America
03/03/2020	Federal Reserve: Tylenol monetary policy
27/02/2020	U.S.: Housing to remain strong, confirming an internal/external divide
20/02/2020	Agrifood: New risks looming ahead
20/02/2020	In or out? Measuring the Euro break-up risk
19/02/2020	Turkey: Another rate cut raises the risk of a sharp exchange rate correction in 2020
14/02/2020	Is Germany a "stranded" economy?
13/02/2020	EU-Vietnam FTA: EUR3.7bn of additional trade per year
10/02/2020	Global insolvencies: Record high failures of major companies
07/02/2020	Coronavirus outbreak: USD26bn weekly in trade spillovers

Discover all our publications on our websites: Allianz Research and Euler Hermes Economic Research

Director of Publications: Ludovic Subran, Chief Economist
Allianz and Euler Hermes
Phone +33 1 84 11 35 64

Allianz Research
https://www.allianz.com/en/economic_research

Königinstraße 28 | 80802 Munich | Germany

allianz.research@allianz.com

allianz

@allianz

Euler Hermes Economic Research
http://www.eulerhermes.com/economic-research

1 Place des Saisons | 92048 Paris-La-Défense Cedex | France

research@eulerhermes.com

euler-hermes

@eulerhermes

FORWARD-LOOKING STATEMENTS

The statements contained herein may include prospects, statements of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those expressed or implied in such forward-looking statements.

Such deviations may arise due to, without limitation, (i) changes of the general economic conditions and competitive situation, particularly in the Allianz Group's core business and core markets, (ii) performance of financial markets (particularly market volatility, liquidity and credit events), (iii) frequency and severity of insured loss events, including from natural catastrophes, and the development of loss expenses, (iv) mortality and morbidity levels and trends, (v) persistency levels, (vi) particularly in the banking business, the extent of credit defaults, (vii) interest rate levels, (viii) currency exchange rates including the EUR/USD exchange rate, (ix) changes in laws and regulations, including tax regulations, (x) the impact of acquisitions, including related integration issues, and reorganization measures, and (xi) general competitive factors, in each case on a local, regional, national and/or global basis. Many of these factors may be more likely to occur, or more pronounced, as a result of terrorist activities and their consequences.

NO DUTY TO UPDATE

The company assumes no obligation to update any information or forward-looking statement contained herein, save for any information required to be disclosed by law.