COFACE ECONOMIC PUBLICATIONS



An unequal recovery

year after the first cases of COVID-19 appeared outside China, the uncertainties linked to the pandemic are still considerable despite the announcement of the arrival of several vaccines at the end of 2020. These uncertainties can be summarised in one question: when can we expect herd immunity? This will depend on the speed at which the population is vaccinated and will condition the end of the "stop and go", i.e. successive containment processes that are harmful to economic activity. Meanwhile, the first half of 2021 should resemble 2020, which was marked by the strongest global recession since the end of the Second World War (-3.8%). Assuming that the main mature economies manage to vaccinate at least 60% of their population (the approximate threshold that theoretically achieves collective immunity) by the summer of 2021, the recovery would then be strong, with world growth reaching +4.3% on average in 2021, while world trade would increase by +6.7% in volume (after -5.2% in 2020). As for corporate insolvencies, they declined in all regions in 2020 (-22% in the Eurozone. -19% in Asia-Pacific and -3% in North America) thanks to governments' support plans, of which the continuity will condition the survival of many companies this year: without them, Coface estimates that the number of insolvencies would have increased by 36% globally last year (vs. an observed decline of 12%).

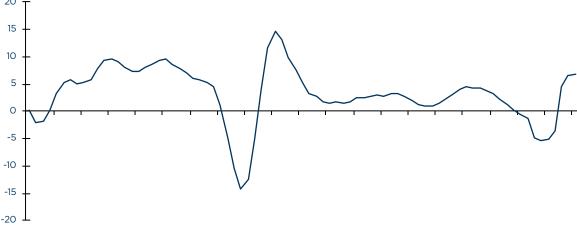
This economic recovery will not benefit all companies equally: among the 23 sector risk assessment upgrades this quarter, almost half are attributable to the automotive sector, whose growth came as a positive surprise in the second half of 2020, followed by construction and

chemicals. Unsurprisingly, many services will remain durably slowed down by the pandemic: transport is the sector most concerned by the 9 downgrades. These sectoral divergences mask other strong inequalities. Firstly, between countries: while the performance of China and other Asian economies (e.g. Taiwan, whose country assessment has been upgraded) is boosting world growth, the main mature economies will not return to their pre-crisis GDP levels this year. Among them, those that depend even more than others on services (such as Spain or the United Kingdom), or that are lagging behind in the vaccination process, will take longer to recover. For emerging economies, the access to vaccines and governments' ability to maintain fiscal policies that support businesses and households will be two major sources of inequality in 2021. Moreover, barring exceptions, they can no longer rely on their central banks to ease monetary policy, as their last cartridges were used in 2020.

Finally, the crisis should increase income inequalities within countries, which are already at a high level: last year, the least qualified workers, young people and women suffered more job losses than the rest of the population, as they are over-represented in the most penalized services. This widening inequality is expected to be long lasting, based on the experience of previous pandemics. Inequality is one of the main vectors of social unrest, which occurs on average around one year after a pandemic. As highlighted last quarter, this rise in inequality, coupled with public dissatisfaction regarding the authorities' management of the pandemic in many countries, is conducive to more frequent protests and violence in 2021.







2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Sources: CPB, Datastream, Coface

Health crisis: when will there be herd immunity and the end of "stop and go"?

Last year, we highlighted the many obstacles on the path to corporate growth that we foresaw for 2020: political and environmental risks, excessive indebtedness of many States in the emerging and developing world, to name but a few. However, we could not have imagined that the world economy would experience its deepest recession since the end of the Second World War because of a pandemic. In addition to its dramatic human consequences, this singular crisis has deeply disrupted the daily lives of people, let alone the functioning of businesses and the global economy. After a year 2020 full of surprises, 2021 should go through two phases according to our economic scenario:

1) First, governments (mainly in mature economies) will have no choice but to continue imposing containment and/or other social distancing measures until at least next summer if a vaccine is not adequately distributed to populations by then. Indeed, according to benchmark organisations (notably the WHO and Johns Hopkins University), at least 60 to 70% of the population must be vaccinated in order to achieve herd immunity. However, there is a great deal of uncertainty regarding this threshold to be reached, since it depends on the average number of people a person can infect (RO) or on the rate of vaccine effectiveness (less certain with the appearance of variants), both of which are difficult to estimate precisely. The speed at which this threshold is reached will also depend on vaccine supply constraints and the willingness of the population to be vaccinated.

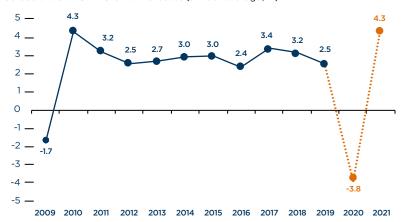
2) Then, GDP growth should be stronger from Q3 2021 onwards, as governments in the main economic areas worldwide (United States, China, European Union, Japan and the United Kingdom) will no longer need to impose social distancing measures, as a sufficient proportion of the population should have been vaccinated.

That said, significant differences had already appeared a few weeks after the first vaccines were administered. Indeed, while Israel and the United Arab Emirates had already vaccinated over 10% of their population by mid-January¹, alongside another relatively advanced group (United Kingdom, United States, Italy and Bahrain), others were struggling: China, Germany, Spain, Canada, Russia, Poland, France, the Netherlands, Austria, Belgium, Mexico, Chile and Argentina. The process had not yet begun for most other countries. Clearly, these initial gaps in accessing vaccines are not prohibitive, as countries may be able to ramp up in the coming weeks. Nevertheless, these differences already highlight inequalities and different rates of recovery for this year.

More inequalities between countries...

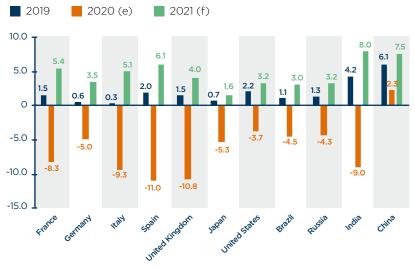
Over the 2020-2021 period overall, the 15 economies with the strongest GDP growth compared to 2019 are all in Asia or Africa, according to our forecasts. At the other end of the spectrum, half of the 15 worst performers are in Latin America. While this relative ranking by region was the same before the crisis, growth gaps have widened since then: the standard deviation of the expected annual growth rates for 2020 in 176 economies globally was twice as high as in 2018 and 2019.

Chart 2: Coface's World GDP Growth Forecast (annual average, %)



Sources: IMF, National authorities, Refinitiv Datastream, Coface

Chart 3: Coface GDP evolution forecast (selected countries, annual average, %)



Sources: IMF, National authorities, Refinitiv Datastream, Coface

Furthermore, trajectories also differ within each region, notably due to sectoral specialisations. Such is the case in Europe: the more service-oriented an economy is, the stronger the impact of COVID-19. The second quarter of 2020 was particularly bad for most European economies, followed by a rebound in the third. However, two groups emerge beneath this general trend. The first recorded between 3 and 6 percentage points of decline in GDP at the end of the third quarter compared with the end of 2019. Among these countries are the Netherlands, France, Germany, but Italy as well. In Germany, an upturn is expected in 2021 (3.5% vs.-5.0% in 2020) despite the setback caused by the restrictions imposed at the 2020-2021 junction because of the deterioration of the health situation, as well as possible upheavals. Unlike services, industries (a major part of the German economy) have been barely affected by the restrictions. Moreover, consumers have adapted their habits. Finally, exports (including automobiles), already boosted by the Chinese recovery, should benefit from the recovery in other markets (Europe, North America). Furthermore, many of the fiscal support measures for employment and income will continue in 2021. In France, the rebound should be stronger, but

from a worse situation (5.4% after -8.3%). Domestic demand will be its main driver, as it will be fuelled by the unlocking of forced household savings accumulated during lockdowns, as well as the extension of budgetary support measures and the recovery plan for both households and businesses. Conversely, exports should continue to suffer from the hardships in aeronautics and tourism. Finally, the acceleration will be gradual and subject to health-related uncertainties. In Italy (5.1% after -9.3%), the improvement will not be sufficient to return to the pre-crisis situation. Exports of manufactured products (textiles, automobiles, food) will benefit from the recovery of demand in advanced and emerging economies, while tourism will remain in great difficulty. Consumption and investment should benefit from the continuation of some support mechanisms, as well as the return of confidence, if the health situation improves thanks to the extension of vaccination coverage.

The shock for the second group of European countries is more significant, between -9 and -12 percentage points (at the end of Q3 2020 compared with end-2019). Spain and Greece, where services (including tourism) account for a significant share of GDP, are in this group. The United Kingdom, penalised until the last minute by the uncertainties concerning the modalities of exit from the European Union, is also part of it. In 2021, the UK economy would rebound by 4.0% (following a decline of 10.8% in 2020). The trade agreement with the European Union has removed a great deal of uncertainty. Household consumption, despite a slow start to the year because of the worsening health situation, should be the main channel of recovery thanks to the lifting of travel restrictions, the reopening of shops and, above all, the savings accumulated during the pandemic. Conversely, while public investment should benefit from budgetary support, business investment could be subdued due to loan repayments and tax maturities after a grace period. Spain will still be far from a return to the pre-crisis situation, as activity would increase by 6.1% after an 11.0% decline in 2020. While goods exports, such as automobiles and textiles, should benefit from the upturn in the European market, tourist activity should stagnate until at least halfway through the year. For its part, domestic demand will benefit from the extension of fiscal support measures.

In 2021, the United States would record a growth rate of 3.2% (after a decline of 3.7%). Household consumption, which accounts for two-thirds of GDP, should once again be the main driver, supported by persistently low interest rates and a wealth effect linked to the strong valuation of real estate and the stock market. The improvement of the health situation should play a major role. Furthermore, while housing construction should remain flourishing and public investment should continue to benefit from a federal infrastructure programme, business investment should be more sluggish due to the continued unfavourable situation in energy, offices and retail space. Finally, foreign trade is expected to contribute negatively, as imports should grow faster than exports.

In Japan, growth should return to slightly positive territory (1.6% after a decline of 5.3%). Indeed,

the new restrictions imposed at the beginning of January because of the deterioration of the health situation will delay the recovery in consumption and tourism. Conversely, exports of transport equipment, electronics and machinery should continue to benefit from the Chinese upturn, notwithstanding the uncertainty regarding the development of trade relations with South Korea. However, the holding of the Olympic Games in Tokyo remains uncertain.

These large disparities in growth trajectories are also observed in Asia: China, Taiwan, Vietnam and South Korea are clearly in the lead, because the local authorities there have managed the health crisis well, but also because they enjoy comparative advantages in sectors that were resilient in 2020. such as electronics. On the other end of the ladder are India, Indonesia and the Philippines, which will have experienced a deep recession in 2020. Malaysia and Thailand are between these two extremes. Despite these differences in 2020, emerging Asia is expected to grow by 6.7% in 2021 (following a decline of only 0.2% in 2020). This growth will continue to be mainly driven by China (7.5% after 2.3%), whose recovery from the second quarter of 2020 should strengthen thanks to a catch-up in domestic demand and an upturn in foreign demand, despite a still tense trade relationship with the United States.

Central Europe should grow by 3.7% in 2021 (after -4.9%) - with all the countries of the zone benefiting from it - thanks to the recovery of demand in Western Europe, notably in the automotive sector, but also by the arrival of new European funds. Russia should record a growth rate of 3.2% (after -4.3%), a modest performance consistent with that of consumption and investment. The same modesty should be observed in Ukraine (2.5% after -5.2%) and Kazakhstan (2.8% after -3.5%). Turkey should do a little better (4% after 0.5%), as exports to Europe will take over from the declining domestic demand (owing to the return to monetary orthodoxy), although tourism will still be struggling. Middle East and North Africa (3% after -6.2%), mirroring the trajectory of countries such as Saudi Arabia (2.7% after -4.3%), will struggle to take off because of the slow recovery in tourism and the restoration of budgetary order, despite the increase in hydrocarbon revenues. Latin America's performance (3.1% after -7.2%) will reflect that of its heavyweights: Argentina (3% after -11%), Brazil (3% after -4.5%), Colombia (3.7% after -7%) and Mexico (2.5% after -8.5%). In addition to the dissipation of the health crisis' effects, consumption should benefit from the better orientation of employment, still accommodative monetary policies and, lastly, an increase in expatriate remittances. Their exports should also be better geared to external demand and commodity prices. However, with the exception of Colombia, investment is expected to remain sluggish due to political uncertainties and low fiscal margins. Chile (4.5% after -6.2%) and Peru (8% after -12%), despite the political uncertainties, should benefit from the excellent orientation of metals prices, especially copper, while monetary and budgetary policies will support consumption and investment. Finally, the economy of Sub-Saharan Africa is expected to grow by only 2.5%

in 2021, after declining by 3.3% in 2021 in the wake of its major economies, Nigeria (1.5% after -3.5%) and South Africa (3% after -8%), which, despite their better export performance, will still have their domestic economy hampered by structural issues, particularly on the fiscal front. Similarly, Angola, Congo, Gabon, Mozambique, Namibia, Zambia and Zimbabwe will benefit little from higher prices for their hydrocarbons, metals or diamonds. The situation should be different for economies where agriculture (export and/or subsistence) is important - sometimes alongside gold, timber, diamonds and oil - like in Côte d'Ivoire, Ghana, Kenya or Senegal, but also in Sahel countries (despite their security problems). Less affected in 2020, they could record growth of between 4 and 6% in 2021.

Ultimately, global economic activity should post a clear rebound, with a growth rate of 4.3% in 2021 after a decline of 3.8% in 2020 (see Chart 2). With this recovery, global production should return to its pre-crisis level by the end of 2021. However, this performance will owe much to a favourable base effect, linked to the fact that the level of activity at the end of 2020 had already recovered some of the ground lost during the year. Moreover, most of this growth will be attributable to the Chinese economy, which means that other countries will not have returned to their pre-crisis levels. Finally, given the growing world population, production per head will not actually return to pre-crisis levels. This will obviously be the case in many low-income or emerging countries, which are experiencing significant demographic growth and, therefore, will have a GDP per capita lower than before the crisis. Similar to the past, growth is expected to be higher in emerging economies (5.4% after a decline of 2.3%) than in advanced economies (3.4% after -5.1%). However, this difference, favourable to the first group, will only be due to the outperformance of emerging Asia, as the other emerging regions will perform either as well or worse than the advanced economies.

...And more inequalities within each country

In addition to the inequalities between countries, income gaps are also likely to widen within each country.

Even before deepening them, the pandemic revealed growing income inequalities within countries. These have been increasing since the early 1990s in virtually all developed countries, particularly in the United States. While the situation in emerging and developing countries has been more mixed, the benefits of growth over the past three decades have also been unequally distributed overall. Broadly speaking, income inequalities (already high and much stronger than in developed countries) have increased in Latin America, but also in sub-Saharan Africa and Asia, particularly in China, India and Indonesia.

The pandemic threatens an additional sustained increase in income inequalities. The Gini coefficient, the flagship index for measuring inequality (a higher value indicates an increase in inequalities),

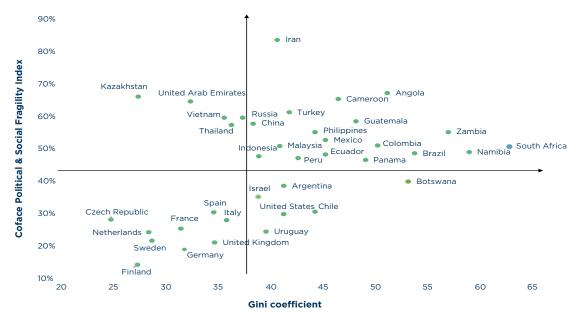
could surge by almost 6% in emerging and developing countries². It could also increase in advanced countries, particularly in Europe, by between 3.5% and 7.3% depending on the duration and intensity of restrictions3. This increase in inequalities should be persistent, as observed after the pandemics of the 21st century (SARS in 2003, H1N1 in 2009, MERS in 2012, Ebola in 2014 and Zika in 2016). Five years after the onset of a pandemic, the Gini coefficient could remain 1.25% higher on average compared to its original level⁴. The stronger the recession, the greater this effect would be due to the sustained unemployment of lower-skilled workers, raising fears of even more long-lasting inequalities in the case of the COVID-19 pandemic.

This pandemic should be no exception, acting as an accelerator of structural trends that were already distorting the distribution of income. Indeed, it should accelerate the digitalisation and automation of production and trade, side-lining the least educated and low-income individuals. These persons are more likely to lose their job and income, as they are more represented in services (qualified as essential or not) that were forced to close down (catering, tourism, etc.). In the Eurozone, while 7.4% of the least qualified workers had lost their jobs between the fourth quarter of 2019 and the third quarter of 2020, the employment of individuals with higher education grew by 1.2%⁵. Job losses among young people (15-24 years) increased twice as fast as for other age groups in the first half of

2020, and women were more affected by these iob losses than men were over the same period. While not all countries produce ethno-racial statistics, it is likely that the related inequalities have increased: in the United Kingdom, the unemployment rate for minorities increased by 2.7 percentage points in the first three quarters of 2020 vs. only 1.1 pp for whites. Moreover, a more unequal distribution of income is likely to ricochet onto the distribution of wealth, including people's properties and financial assets. In the United States, after plummeting in the first quarter of 2020 (-5.8% compared with the previous quarter), net household wealth rebounded in the second and third quarters (+7.4% and +3.2%, see Chart 5) thanks to the rise in corporate equity prices - which benefited the wealthiest - and the uninterrupted boom on the housing market ^{6,7}.

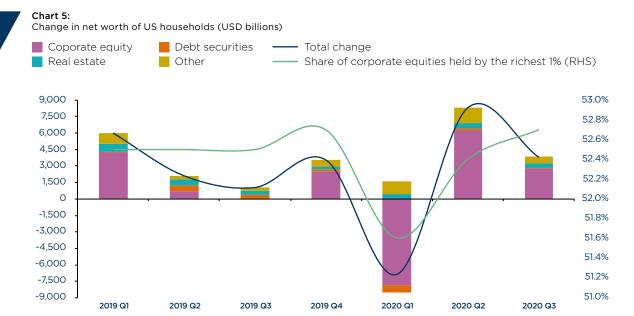
This increase in economic inequalities should in fact be even more significant given that it is not yet completely observable. Indeed, the expansionary monetary and fiscal policies implemented in response to the crisis have cushioned them in the short-term by strengthening social protection systems and safeguarding jobs (see Coface Barometer published in October 20208). However, several countries, particularly in the emerging and developing world, will not have the budgetary leeway to sustain these social expenditures, which are already lower than in advanced economies. The impacts on employment and inequalities are likely to be even stronger as the capacity to telework is lower, many jobs depend on the informal

Coface Political & Social Fragility Index and Gini coefficient



Sources: World Bank, Coface

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sector, and the institutional framework and social protection systems are fragile. This is notably the case in many countries in South and Southeast Asia (India, Malaysia, Indonesia and Philippines), as well as in Latin American countries where taxation is not very progressive.

Sources: Federal Reserve, Coface

According to World Bank estimates, 120 million people globally will have fallen below the poverty line in 2020 because of the economic consequences of the pandemic. Half of them will remain so after 2021, despite the expected recovery. This means that while countries are getting their economies back on track, they may not be able to get everyone on-board the recovery train.

The rise in economic inequalities is therefore expected to fuel the increase in social inequalities and further weaken vulnerable socio-economic groups. The hidden part of the iceberg could be a significant increase in political risks (see **Chart 4**). This rise in income inequality, coupled with public dissatisfaction with governments' handling of the pandemic, could lead to further social discontent. In fact, according to Coface's Index, the risk of political and social fragility was already at an all-time high globally before the onset of this crisis (see Coface's quarterly Country and Sector Risks Barometer of October 2020).

Inequality is one of the main vectors of social unrest, which, on average, would occur approximately one year after a pandemic and would have a significant impact on economic activity, which, after a year and a half, would remain 0.25 percentage points below its pre-crisis level ⁹.

Inequalities between sectors

During the first half of 2020, the first round of strict lockdowns affected both supply and demand globally. Therefore, only a few sectors stayed resilient¹⁰: ICT (see **BOX 3** on ICT), pharmaceuticals and, to some extent, agri-food¹¹. Several others were strongly hit by the crisis: metals, transport¹² (particularly the air transport segment) and automotive are among them.

Since then, some sectors have surprised positively in the midst of the post-first lockdown recovery and, then, during the second wave of lockdowns that started in November 2020 notably in some advanced economies (with most plants remaining open this time around). For instance, the procyclical automotive sector - characterized by global value chains - reflects well the ongoing, albeit fragile, global economic recovery. The dynamism of the Chinese economic recovery has enabled the sector to rebound primarily in the Asia-Pacific region, and then in other regions such as Europe and the U.S. In China, sales were down by 42% in Q1 2020 compared with Q1 2019. Production plants were allowed to reopen gradually in March 2020, and, as of October 2020, sales were only 2% lower than in October 2019 (in the pre-COVID-19 period). The automotive dynamic has continued to improve since then. Therefore, as of Q4 2020, automotive sales were about 10% higher than in Q4 2019. This rebound has been enabled by the fact that Chinese authorities did not have to again implement large-scale lockdown measures to control the outbreak on their territory, after a strict lockdown in Q1 2020, as previously mentioned. Moreover, Chinese state aid to the sector has

⁹ Saadi Sedik, T., & Xu, R. (2020/10) A Vicious Cycle: How Pandemics Lead to Economic Despair and Social Unrest, IMF Working Paper, WP/20/216.

¹⁰ See Coface 2020 Barometer: COVID-19: heading towards a sudden global surge in corporate insolvencies, June 2020

¹¹ See Coface global sector note on the pharmaceuticals sector, February 2021: https://www.coface.com/Economic-Studies-and-Country-Risks/Pharmaceutical

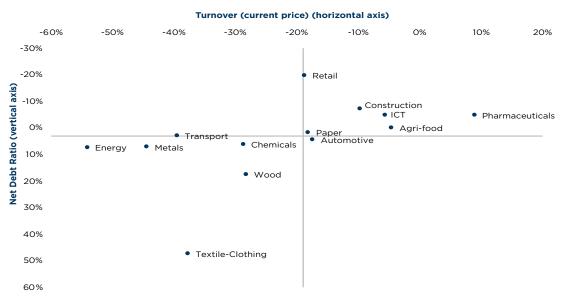
¹² According to Coface methodology, the transport sector comprises the following sub-segments: air, rail, road and maritime transport

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contributed to a strong rebound in Chinese consumers' demand. This has had a positive impact on the major markets worldwide, notably European ones. The latter have therefore benefited from a gradual catch-up recovery, despite of difficulties. As of December 2020, vehicle registrations (excluding UK) were only 8% lower than in December 2019. These are somewhat reflected by the automotive sector upgrades in Germany and in the Central and Eastern Europe region (see section on Sector Risk Assessments p.18). In the U.S., the COVID-19 pandemic had a significant negative impact on automotive sales, which declined by 17.3% in the first 10 months of 2020. However, they started to rebound last summer, recording an 84% increase in October 2020 compared with the record low of April. That said, the recovery trend remains fragile: light vehicle sales in the U.S. had decreased by 17% year-on-year at the end of October 2020. The drop was somewhat less important in the U.S. (with important disparities from one state to another) than in Europe due to less drastic measures overall during the second wave of lockdowns in Q2 2020. While registrations had hardly recovered in Europe since the lockdowns were eased in the second quarter, the rebound in infections towards the end of last year exerted pressure because of the tighter restrictions: -27% in France for November, -3% in Germany and -27% in the UK. While looking at Chart 6, which compares the impact of COVID-19 on sectors' financial trajectory (that is to say net debt ratio and turnover), the automotive sector appears to be less in difficulty compared with the ones identified as most negatively impacted by the crisis. However, both the still high level of uncertainty and the structural challenges in this sector¹³ are mirrored by the still high level of sector risk. Indeed, a majority of the automotive sector risk assessments remain at "high risk" despite the upgrades (see section on Sector Risk Assessments).

Unsurprisingly, the delivery segment of transport activity has developed further due to the successive lockdowns and mobility restrictions, combined with the closure of restaurants. This ongoing expansion has been notably illustrated by the recent successful stock market introduction of the UK multinational food delivery-app company Deliveroo, following the successful introduction of the similar U.S. app Door Dash. However, the overall impact of these delivery activities remains difficult to assess accurately for several reasons. Firstly, they are somewhat reflected in the different transport¹⁴ segment activities. Secondly, there are very different related activities with numerous complex structures (sometimes partnerships exist between retail leaders and delivery companies; in other cases, these services were integrated or recently created by the companies themselves). Maritime freight is showing clear signs of recovery (see Chart 7), reflecting more dynamism in global trade. However, the positive trend of maritime freight should not mask the difficulties. Indeed, global maritime freight has been hit by the pandemic: the container throughput index¹⁵ decreased by just over 8% year-on-year (YoY) in May 2020, and while the index did rebound afterwards (+7% in October), it remains, over the January-October 2020 period, 3% lower than in the same period of 2019.

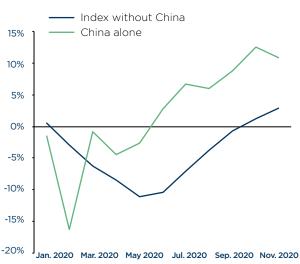
Chart 6:Preliminary turnover and net debt ratio variation (%) between Q4 2019 and Q4 2020



NB: The axis do not represent 0% but the median value. The data used here concern listed companies, therefore, they may not be fully representative of the whole set of companies within a sector.
Sources: Refinitiv Datastream, Coface

- 13 These structural challenges include the high level of investment required for companies to adapt to carbon emission reduction norms, fierce competition with the arrival of new actors, change in consumers' preferences, a still difficult global economic context with a high level of unemployment, etc. For more insights, see Coface global sector note on the automotive Sector, February 2021.
- 14 According to Coface methodology, the transport sector comprises the following sub-segments: air, rail, road and maritime transports.
- 15 A measure of the volume of maritime container transport, which accounts for 52% of the value of global sea freight





Source: RWI/ISL, Coface - Latest point: November 2020

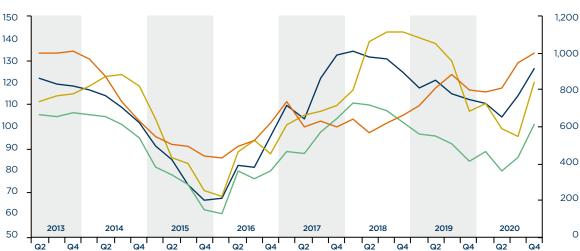
Despite some positive developments and prospects in some segments, the global transport sector overall is still struggling because of the pandemic and Coface does not expect its turnover to return to pre-crisis levels before 2022. The transport sector recorded the highest number of downgrades this quarter (four in total, see from p. 18 onwards). Transport, particularly the air segment, had indeed been identified as one of the big "losers" of the crisis¹⁶. It is worth mentioning that downgrades

in the transport sector are concentrated in Western Europe. This is due to the difficulties of the air segment in Europe, which had been facing significant structural challenges even before the COVID-19 crisis. The latter include the high indebtedness and overcapacity issues of companies in the sector, as illustrated by a significant numbers of low-cost airline bankruptcies over the past two years. The daily number of commercial flights globally decreased by 75% between 16 January and 12 April 2020 (the lowest point), and, although it increased afterwards, remained, as of 23 November, 38% lower than on 16 January.

The global metals sector also remains in difficulty because of the pandemic (see Chart 8). The economic recovery is underway, but it is disparate between countries and heavily dependent on various public investment support measures, as well as on countries' health situation with respect to the pandemic, which may, as applicable, give rise to renewed restrictions on movement in order to slow the spread of the virus. In China, where measures were eased earlier last year, the recovery in the sector was enabled by the central government's infrastructure projects. By the end of June 2020, steel production in China had returned to its pre-COVID-19 level. Between February and November 2020, the capacity utilization of steel plate plants in the country increased by around 26 percentage points, from 70.5% to 96.7%. In Europe, demand for metals (linked to the recovery) is likely to be reliant on public infrastructure investment and development, which are mainly planned in the field of digitalization of infrastructure development.

Chart 8: Steel and iron ore prices evolution

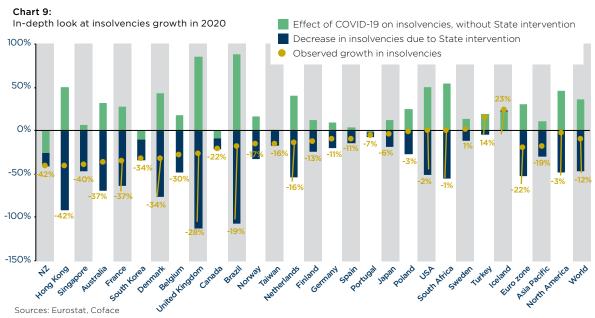




Sources: Refinitiv Datastream, SteelHome, Coface

09

Fewer corporate insolvencies thanks to state support, but could this lead to more "zombies"?



In 2020, companies benefited from many support measures in order to cope with the strongest global recession since 1946. Central banks, through both policy interest rate cuts and asset purchase programmes (including in some emerging economies, see Box 1), have facilitated the access to financing on favourable terms. Guaranteed lending facilities implemented rapidly by many governments have also played a role, as these loans, as well as other liquidity support or capital injections from governments and/or other public sector actors, accounted for 6% of global GDP by the end of the third quarter of 2020, according to the IMF. Businesses have also benefited from part of the fiscal stimulus packages introduced by governments to mitigate the effects of the crisis. Besides the decline in revenues and the increase in recession-related expenditure (automatic stabilisers), deferrals or cancellations of taxes and contributions, as well as short-time work measures, also accounted for approximately 6% of global GDP. This figure is much higher than in 2009: at that time, primary fiscal balances had widened by "only" 4.8% GDP points on average worldwide, compared with 8.8% in 2020. The support for companies is all the more strong as its structure is different: while infrastructure investment plans were favoured after the Lehman crisis, this time the focus has shifted towards direct aid to companies.

Finally, temporary amendments to corporate insolvency procedures, particularly in Europe¹⁷, have also prevented bankruptcies. Ultimately, despite the deepest global recession since 1946, corporate insolvencies declined in 2020, in most countries (see **Chart 9**) and in all regions: -22%

in the Eurozone, -19% in Asia Pacific and -3% in North America. The number of insolvencies worldwide last year was 12% lower than in 2019. Therefore, some companies, taking advantage of the windfall effect, saved themselves by borrowing on favourable terms on the bond markets and/or via traditional bank loans and state guaranteed loans, whereas they would have gone bankrupt without this crisis. We estimate that insolvencies would have increased by 36% worldwide in 2020 without these public support measures.

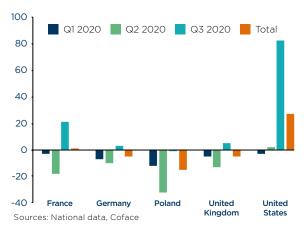
While the increased borrowing has prevented many insolvencies, this rise in corporate indebtedness, against a background of low interest rates and sluggish economic activity, has raised fears of a proliferation of "zombie" companies, i.e. those that are still alive but too indebted to invest and grow. The Bank for International Settlements (BIS)18 had already recorded 16% of zombie companies in France in 2017 vs. only 4% in 1990, and 22% vs. 3% in the United Kingdom. In Italy, it reported 15% of zombie companies vs. 2% previously, in Spain 13% vs. 6%, and in Germany 10%. The same observation can be made in the United States: 18% of companies were considered as zombie in 2017 vs. 9% in 1990. In Europe, Coface estimated three years ago that 4.6% of companies in France could be considered as zombies in 2016, 3.7% in Germany, 5.3% in Italy and 6.2% in Spain. These figures differ from those of the BIS, as the criteria used are different¹⁹. While this ratio's level depends on the chosen perimeter, existing studies agree on the fact that the number of "zombie" companies has increased in recent years. Will the current crisis accelerate this process?

¹⁷ http://coface.com/News-Publications/Publications/Focus-Corporate-insolvencies-in-Europe-temporary-framework-amendments-kick-the-can-down-the-road

¹⁸ The BIS methodology to calculate the number of zombie companies is as follows: a company with both an interest coverage ratio of under 1 and a Tobin's Q of under the median company, over 2 years, is considered a zombie company.

¹⁹ Coface's methodology to calculate the number of zombie companies is as follows: a company with both a return on investment under 1 and an interest coverage ratio under 1, over 3 years, is considered a zombie company.





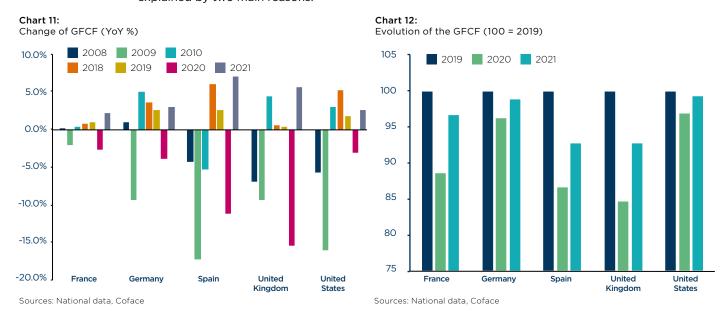
This phenomenon of zombie companies, which appeared in Japan in the 1990s, was sustained by banks, which, in the need to renew credit lines to these stagnant companies in order to avoid registering losses on their balance sheets, devoted too few resources to young, fast-growing companies, thus altering the process of creative destruction. While the low number of insolvencies, low interest rates and rising corporate indebtedness suggest that there are indeed more zombie companies and therefore an increased risk of "japanization", other indicators need to be examined in order to get a clearer picture.

As far as business births are concerned, recent figures are rather encouraging in Europe, particularly in France: after a sharp decline in the first half of 2020 (particularly in the second quarter), which undoubtedly resulted from containment measures, a strong rebound was observed in the third quarter year-on-year (see **Chart 10**).²⁰ The increase is even stronger in the United States. This upward trend in business births, despite the difficult economic context, can be explained by two main reasons:

- The increase in unemployment rates, whether partial or total, has encouraged many people to dedicate time to other activities in order to remain active and create their own opportunities. This phenomenon is particularly apparent among young graduates, who face a very tight labour market.
- Evolving needs and adapting to the context. Indeed, the pandemic has both changed our consumption habits and created new needs. In some sectors, such as parcel deliveries, there has been a sharp increase in the number of business births.

These two explanations will continue to be relevant this year, which suggests that many new companies should be created.

Investment dynamics also gauge the progress of an economy's "japanization" process, as "zombie" companies are generally too indebted to make any investments. In this regard, the outlook for 2021 seems more mitigated. While investment did contract sharply in 2020, the extent of the decline was not, according to our estimates, as strong as that observed in 2009 (see Chart 11) in the United States, Germany, Italy and Spain. In France, the magnitude of the decline in investment and that of GDP should have been closer to one another²¹. As the shock to GDP was more significant in 2020, there seems to have been no growth multiplier effect on investment, unlike in a "classic" recession. However, despite a partial recovery this year, Coface does not anticipate investment to return to its pre-crisis level in the main mature economies (see Chart 12): the continuation of social distancing measures (at least in the first half of the year) and the delayed effects of cost-cutting and project cancellations in 2020 will limit the pace of recovery. Moreover, the latter will differ from one sector to another: while investment projects linked to digitalisation, e-commerce or the sustainability of teleworking should be given priority, others will still be struggling (e.g. events and communication).



- 20 Data for France includes microenterprises
- 21 The United Kingdom is an exception, as uncertainties about the modalities of exit from the EU may have been an aggravating factor.

BOX 1

Monetary policies in emerging countries in 2021: little room for manoeuvre, except in Indonesia, Russia and Mexico

Emerging countries: monetary policies were considerably eased in 2020...

While emerging economies have to cope with the direct effects of the health crisis (lockdowns and other restrictions), they also suffer from its indirect effects originating from mature economies (in particular via trade, commodity prices, tourism and remittances)²². On the bright side, many of them were able to implement counter-cyclical economic policies like in Europe and in the United States, particularly monetary policies. A smaller number were in this situation in 2008: higher inflation rates (more often than not above the central banks' targets) had limited their ability to act at that time. Conversely, at the beginning of 2020, most emerging countries recorded inflation rates below their targets and benefited from the better credibility of their central bank, which helped stabilising inflation expectations. With the exception of some countries facing high inflation (Argentina, Turkey and Lebanon namely), emerging countries' central banks reduced their key rates by 150 basis points on average.

In addition to lowering interest rates or easing bank reserve requirements, for instance, the central banks of over 15 emerging countries have launched programmes to purchase public bonds or private securities. Such is the case in many countries in Central and Eastern Europe (notably Poland), South America (Chile, Colombia), Asia (Indonesia, Philippines) or Africa (South Africa, Ghana). While the concept of quantitative easing has been used in this respect, the scale of these easing policies in emerging economies is much smaller than in advanced economies.

They differ on several points: asset purchases are much more modest (representing a maximum of 5% of national GDP), central bank programmes do not target specific amounts of assets to be acquired and cover a much narrower range of assets. Moreover, they were not aimed at lowering the cost of credit, but at compensating the loss of foreign investors and giving domestic players the time to substitute. Thus, with the exception of Poland, their scale has remained small. Nevertheless, this monetary easing has helped to reassure and stabilise the financial markets, and has given a countercyclical role to monetary policy.

... Leaving little room for manoeuvre in 2021

In order to determine which emerging countries would still benefit from monetary leeway in 2021, Coface has selected four indicators to classify central banks' room for manoeuvre:

- A real interest rate (i.e. the central bank's key interest rate minus the inflation rate) that is positive and at least equal to 25 basis points.
- 2) Absence of external constraints:
 - a. Flexible exchange rate system;
 - b. Current account in surplus or slight deficit (less than 3% of GDP);
 - c. Adequate foreign exchange reserves (covering over 3 months of imports)

If a country meets these 4 criteria, its central bank will have enough leeway to support its economy in 2021. Ultimately, among the 23 studied countries (see **Table 1**), only three are in this case: Indonesia, Mexico and Russia.

Table 1: Monetary leeway in emerging economies

| Countries | Real interest rate | Floating exchange rate | Current account 2020 (share of GDP) | Reserves (in months of imports) | Monetary policy leeway |
|--------------------------------|----------------------|------------------------|--|---------------------------------|---------------------------|
| ARGENTINA | | | | | |
| BRAZIL | | | | | |
| CHILE | | | | | |
| CHINA | | | | | |
| COLOMBIA | | | | | |
| EGYPT | | | | | |
| INDIA | - | | | | |
| INDONESIA | | | | | |
| JORDAN | | | | | |
| KUWAIT | | | | | |
| MEXICO | | | | | |
| NIGERIA | | | | | |
| PAKISTAN | | | | | |
| PERU | | | | | |
| PHILIPPINES | | | | | |
| POLAND | | | | | |
| QATAR | | | | | |
| RUSSIA | | | | | |
| SAUDI ARABIA | | | | | |
| SOUTH AFRICA | | | | | |
| TURKEY | | | | | |
| UNITED ARAB EMIRATES | | | | | |
| VIETNAM | | | | | |
| Sources: National data, Coface | threshold : 0,25% | | threshold : -3% | threshold : 3 months | |
| 22 https://www.coface.con | n/News-Publications/ | Publications/Focus-C0 | DVID-19-swings-the-sp | otlight-back-onto-eme | raina-countries-de |

BOX 2:

Coface's sector risk assessment methodology

Coface's sector risk assessment methodology is composed of 3 pillars and 8 criteria. The statistical model attributes a relative weight to each criterion in order to reach the final risk assessment for the sector, in a selected country or region²³.

Pillar 1 - Coface's expertise and payment experience data

- Sectorial unpaid ratio: This criterion provides both a snapshot of Coface's databases regarding notification of overdue accounts and payment incidents' evolution (during the previous quarter) in companies for each sector in each country analyzed by Coface.
- Default ratio variation forecast per sector: obtained for each of the 13 sectors at the global level. Historical series are extracted from Coface's database. The use of statistical modelling techniques enable the production of these forecasts.
- Coface credit analysts' assessments: based on their expertise on the sectors they cover in the region of their portfolio.

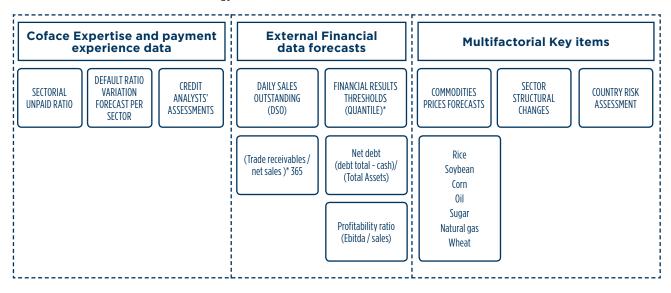
Pillar 2 - External financial data forecasts

 Daily Sales Outstanding (DSO): DSO measure the average number of days required for companies in a sector to collect payment after sales are completed. This indicator contributes to anticipate the potential pressure coming from major listed companies. • Financial results threshold: Coface produces forecasts on the net debt and profitability ratios of listed companies (see Chart 13) for each sector in each country for which sector risk assessments are published. The analysis of thresholds is obtained by separating the series into quantiles to gain greater granularity, in order to analyze the potential risks associated with the evolution of the aforementioned ratios.

Pillar 3 - Multifactorial Key Items

- Commodities price forecasts: these forecasts are obtained through statistical modelling techniques. At the time of writing, they are only available for the commodities mentioned on Chart 13, for a six-month forecasting period. They are updated every quarter.
- Sector Structural Changes: This criterion aims at capturing, via a criteria article²⁴, risks associated with structural changes that companies have to face in a given sector globally. The changes integrated in the internal criteria article, used to assess sector structural changes, include the following factors: climate change and associated regulations' impact on the sector, level of vulnerability to external shocks, level of innovation, and potential legal risks for actors in the sector.
- Coface's Country Risk Assessments (CRA) are updated every quarter (see Country Risk map) and link the sector risk assessment to a given country.

Chart 13:Coface's sector risk assessment methodology



23 Coface produces sector risk assessments for 28 countries in 6 regions worldwide, which represent about 88% of the global economy 24 The associated internal criteria article is produced by Coface's Economic Research Department

BOX 3:

ICT²⁵: The most resilient and strategic sector during the pandemic

The ICT sector's inexorable expansion: the media segment has benefited the most from the COVID-19 crisis

The profitability of ICT companies has followed a continued upward trajectory throughout the crisis and this trend is expected to remain this year (see Chart 14). In all segments, and this is quite unique among sectors for which Coface publishes Sector Risk Assessments, ICT companies' net debt levels have been on a downward trend since the beginning of the crisis. This trend is expected to last through the year (see Chart 15). The mobility crisis generated by the pandemic continues to primarily benefit the media segment, as opposed to other segments of the ICT sector. The majority of these segments have been affected by the COVID-19 crisis' double shock on demand and, to a lesser extent, on supply (during the first wave of lockdowns in Asia), depending on the region of the world and induced by containment measures. The latter were imposed by almost half of the countries worldwide, including leading economies in the second half of 2020. Supply was impacted by plant closures that led to abrupt production stoppages and supply chain disruptions. The drop in consumption of both households and businesses disrupted demand.

Consequently, individuals were forced to stay at home more. Interest in new media therefore increased, especially the supply of entertainment, resulting in an increase in demand. Because of this strong demand, supply has been vigorously stimulated and production has increased. Coface expects demand to remain dynamic, given this environment in which authorities in different countries around the world should continue to promote teleworking, whenever possible, as well as social distancing, particularly if there are renewed

periods in which the level of contamination increases to concerning levels according to the analysis of government health experts. This context, including teleworking, is likely to accelerate changes in lifestyle and work habits, which should sustain demand for these types of products in the long-term.

A continued recovery in the telecommunications, electronics and computer hardware segments are expected this year. Early signs of recovery in the abovementioned segments were already visible in the third quarter of 2020, with semiconductor shipments (which are essential components to build electronic and computer devices for instance) having increased by 3% year-on-year globally in October 2020, according to the WSTS²⁶ report. The appetite for semiconductors is notably illustrated by supply shortages, impacting the global auto sector, due to the strong pressure on demand since the beginning of the year. This is an additional example of the ICT sector's dynamism. It is indeed one of the few sectors that remains at the "medium risk" level on the main markets, like in North America and Western Europe (see section on Sector Risk Assessments).

The most innovative and profitable companies globally are from the ICT sector

This crisis has revealed the hegemonic and strategic role of ICT companies and their products. Indeed, ICT products and applications exist far beyond the traditional recourse to a media platform or the use of computers. Empirically, the boundaries are increasingly blurred between the product and service ranges offered by ICT companies and firms' traditional business activities. All sectors and activities, ranging from

Chart 14: Profitability of the different segments of ICT sector forecasts (%)

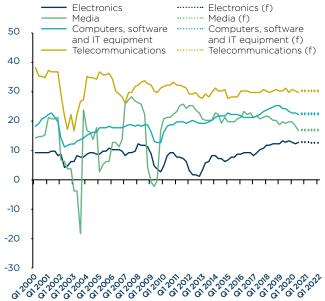
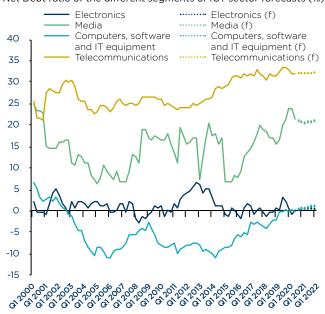


Chart 15: Net Debt ratio of the different segments of ICT sector forecasts (%)



Source: Refinitiv Datastream, Coface -Forecasts period goes from Q4 2020 to Q1 2022

- 25 Coface's sector assessment methodology for the Information and Communication Technologies (ICT) sector incorporates several segments: telecommunications, electronics, media and a final segment comprising computers, software and IT equipment.
- 26 WORLD SEMICONDUCTOR TRADE STATISTICS (WSTS): The WSTS is a professional organization, whose members are key companies in the global semiconductor industry. It is an international reference organization for the production of statistical data on the semiconductor market.

food delivery applications to automotive, are impacted by this technological revolution. There is an ongoing continued movement by which, on the one hand, ICT sector companies extend their innovations into other sectors. For instance, this is the case of Google or Amazon, who are investing in the pharmaceuticals sector. Alphabet, Google's parent company, launched two companies (in 2013 and 2015) that deal with bioelectronics medicine research notably. In late 2020, Amazon announced that it would launch an online pharmacy service in the U.S. On the other hand, ICT companies are multiplying partnerships with companies operating in other sectors. The recent partnership announcement between the leading electric vehicle company Tesla and the U.S. ICT multinational Apple illustrates this well. Their collaboration aims at building self-driven vehicles. Traditional carmakers perceive tech giants as their main competitors, as mentioned by the CEO of the multinational German company Volkswagen at the end of last year.

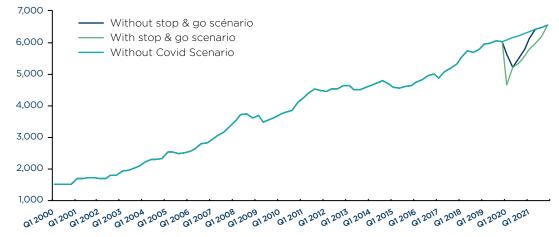
Therefore, the demand for the various ICT products is expected to remain strong in the medium- to long-term, given the context. As seen on **Chart 16**, which displays Coface's anticipation regarding the impact of the COVID-19 crisis on ICT turnover, ICT companies' overall turnover is likely to reach its pre-COVID-19 crisis level in 2021. In some cases, like in the media segment, the performance will be even stronger. The technology giants, FAANGs (Facebook, Amazon, Apple, Netflix and Google), have seen their results increase sharply last year and this trend is expected to continue.

Pre-COVID-19 challenges remain: the FAANGs will not be able to escape stricter regulations on the main markets

Aside from the continued fierce race for innovation between the U.S. and China, which has had knock-on effects on ICT companies' operations (ban of Chinese actors' operations

on the American soil, retaliated by the ban of U.S. providers' apps in China)²⁷, one of the main challenges for tech giants will be on the regulatory front. The regulatory environment for ICT companies should indeed become increasingly restrictive in the coming years, particularly regarding consumer data protection following several scandals involving American companies. Because of the COVID-19 crisis, the IT capabilities of technology companies have been called upon in several countries, particularly for the tracking of COVID-19 cases in order to trace transmission chains. These tools should be used in case of emergency and only for the common good. Once the emergency is over, this data should no longer be available. However, in order to do so, governments (particularly in advanced economies) could strengthen or implement a legal framework on private data protection to ensure transparency and privacy. The ongoing increase in data protection standards on important markets, such as Europe or North America, could affect the business models of ICT giants and contribute to market fragmentation. Indeed, data protection rules could differ significantly from one State to another in the United States, for instance, as well as from one region of the world to another, while large ICT companies operate globally. Large multinational media companies are also likely to be challenged on the regulatory front regarding freedom of speech. Following criticisms that accused technology giants of contributing to the propagation of conspiracy theories, Facebook, for instance, pre-empted the call by blocking selected hashtags that were shared to spread misinformation in the weeks that followed the 2020 U.S. presidential election period. Moreover, all leading social media (Facebook, Twitter) suspended former President Trump's accounts after his speech that triggered the assault of the U.S. Capitol by some of his supporters in last January. They proceeded with such a move in an attempt to contribute to an appeased transition of power in the country.





^{*} The data series considered are listed companies from the Datastream Refinitiv database. Source: Datastream Refinitiv, Coface - Latest point: Q4 2021

27 See Coface Global Sector trend note on the ICT sector, February 2021

BOX 4:

Renewable energies: a bright outlook despite COVID-19²⁸

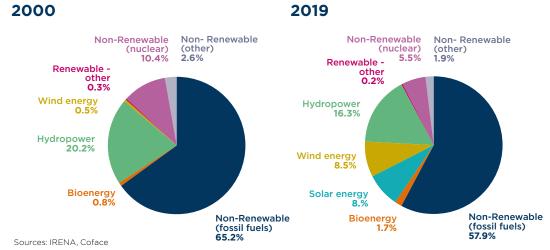
Energy majors and governments are eyeing a shift towards renewables, to the detriment of fossil fuels

Renewables have strengthened over the past 20 years (see Chart 17), particularly in the field of power generation, increasingly gaining market shares from traditional energy sources such as coal, oil, and nuclear. Indeed, renewable energies increased from 21.8% of total world installed electrical capacity in 2000 to 34.7% in 2019, according to the International Renewable Energy Agency (IRENA). China is a major producer of renewable energy and a global leader in energy transition (see Chart 18). In this context, integrating renewables into the grid is no longer optional for governments worldwide, in both advanced and emerging economies - even though they face strong headwinds in some regions. In emerging markets like Latin America, where hydropower has been the leading renewable electricity source historically, solar and wind project development is accelerating thanks to their cost effectiveness. In advanced economies, the U.S., for instance, will hasten the development of renewable energies, both at federal and state levels. For the latter, the recent signature of the largest offshore wind contract between the state of New York and the Norwegian-based company Equinor (worth USD 9 billion) is a good example. At the federal level, President J. Biden promised during his electoral campaign that he would lead the U.S. into achieving a 100% clean energy economy and net-zero emissions by 2050. With a short majority in both the House of Representatives and Senate, the Democrat majority will have the possibility

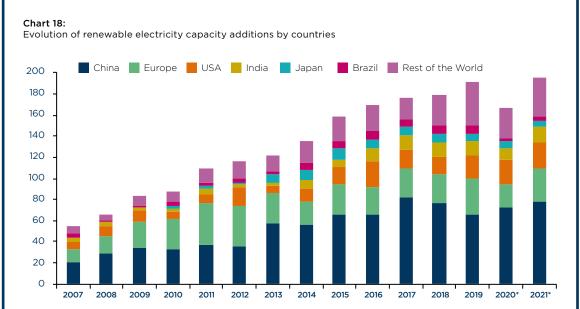
to pass ambitious reforms in this area, further boosting renewable energy development.

Concomitantly, the fossil energy industry has had to face the crisis with strong pre-existing weaknesses²⁹. The latter include structurally lower demand for several years and the polluting nature of related activities within the context of a strong public agenda to fight climate change. According to the International Energy Agency (IEA), the demand for oil in 2021 will be 3 billion barrels per day lower on average than in 2019. On the supply side, the OPEC+ countries agreed in December 2020 on a limited cut in oil production starting January 2021 and oil cuts will decrease from 7.7 million to 7.2 million barrels per day from January onwards. The gradual resumption of global economic activity after the easing of containment measures has led to a rebound in the consumption of petroleum products. Nevertheless, the drastic drop of activity in the aviation sector will probably continue to weigh on oil demand. Liquefied natural gas (LNG)30 is in a slightly better situation than hydrocarbons, but has also been hit by the COVID-19 crisis' knock-on effects. The COVID-19 crisis and the drop in demand have emphasized the problem of overcapacity that this sub-sector has been facing for several years. However, LNG has also benefited from some buffers; despite the crisis. Chinese demand is boosting LNG imports, which increased by 32% year-on-year in November 2020. Furthermore, demand from Europe and China is recovering according to the U.S. Department of Energy, notably due to the winter period in these regions.

Chart 17:
Global electricity matrix - Installed capacity (percentage of total)



- 28 See also Coface Panorama article, Global renewable energies climb despite COVID-19, by K. Ait-Yahia and P. Krause, August 2020
- 29 See Coface Global Sector Note on Energy, February 2021
- 30 See Coface Focus article, An unsure future for natural gas: How risks could derail the current boom, by K. Ait-Yahia, June 2019



Source: IEA, Renewable electricity capacity additions, 2007-2021, updated IEA forecast, IEA, Paris, *IEA forecast

Technological innovations also signal bright prospects for global renewable energies in the future

For the above-mentioned reasons, global renewable energy activity is expected to continue through the crisis. Nevertheless, the pandemic has disrupted supply chains and labour availability, particularly in the first half of 2020 in the subsegment, while also reducing access to funding. Therefore, it has caused delays in the approval of new projects because of the uncertainties. While the development of renewable energies has slowed down because of the COVID-19 crisis, Coface expects the sector to be more resilient than fossil fuels. First, as previously mentioned, renewable energy development is high on governments' strategic agendas. Moreover, they belong to the targeted sectors that will benefit from public support in stimulus packages.

Secondly, technological innovations in electricity generation are likely to continue favouring renewable energy expansion. Utilities that mainly use traditional energy sources will have to manage a "new reality", with innovations such as battery integration into renewables projects and decentralized power generation. These innovations could threaten the use of traditional energy sources in the medium- to long-term, as the increasing use of renewable energies would

then have the advantages of meeting both governments' and public opinion's will to use clean energy while ensuring affordable electricity prices.

Finally, because of the need for firms to reduce their impact on the environment, as part of their Corporate Social Responsibility (CSR) objectives and in the context of stricter regulations, companies in some sectors will have no other choice than to intensify their use of renewable energies. This is the case for those that intrinsically pollute more because of the nature of their activities, such as chemicals and metals. Others, such as companies in the paper, wood and ICT sectors (given the intense activity of data centres, which require heavy electricity consumption) will also contribute to support demand for renewable energies looking ahead. Consequently, companies in those sectors try to respond to the huge pressure of lowering the environmental impact of their operations by installing solar panels on their rooftop, for instance. They are also committed to pilot projects with electricity storage associated to battery systems. Corporate sourcing of electricity generation from renewables is indeed on the rise, notably in Europe, Asia and North America, but also in emerging countries, and this is expected to continue in the future.

Country Risk Assessment Changes

| AREA | | Previous Assessment | | Current Assessment |
|------------|-------------|------------------------|---|-----------------------|
| TAIWAN | | A3 | 7 | A2 |
| TIMOR | > | E | 7 | D |
| | | | | |
| AZERBAIJAN | C | В | 7 | С |
| MONGOLIA | | С | 7 | D |

BUSINESS DEFAULT RISK







A3 / Satisfactory



Reasonable





Very High







Downgrade

Sector Risk Assessment Changes

(Q4 2020)

REGIONAL SECTOR RISK ASSESSMENTS

| | Asia- Pacific | Central & Eastern Europe | Latin America | Middle East & Turkey | North America | Western Europe |
|------------------|------------------|-----------------------------|------------------|-------------------------|------------------|-------------------|
| Agri-food | 77 | | | | | |
| Automotive | | 77 | | | 77 | 77 |
| Chemical | | | | | | 77 |
| Construction | | | | | 77 | |
| Energy | | | | | | |
| ICT* | | | | | | |
| Metals | | | | | | |
| Paper | | | | | | |
| Pharmaceuticals | | | | | | |
| Retail | | | | | | |
| Textile-Clothing | | | | | | |
| Transport | | | | | | |
| Wood | | | | | | |

BUSINESS DEFAULT RISK

Low Risk

Marallanas Dial

Medium Risk

High Risk

Very High Risk

7 Upgrade

Nowngrade

ASIA-PACIFIC

| | Asia-Pacific | Australia | China | India | Japan | South Korea |
|------------------|--------------|-----------|-------|-------|-------|---------------------|
| Agri-food | 77 | | 777 | | | |
| Automotive | 77 | | 77 | | 77 | 77 |
| Chemical | | | | | | |
| Construction | | | | | | |
| Energy | | | | | | |
| ICT* | | | | | | |
| Metals | | | | | | |
| Paper | | | | | | |
| Pharmaceuticals | | | | | | |
| Retail | | | | | | |
| Textile-Clothing | | | | | | 7 4 7 |
| Transport | | | | | | |
| Wood | | | | | | |

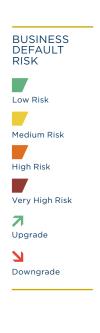
* Information and Communication Technologies Source: Coface

CENTRAL & EASTERN EUROPE

| | Central & Eastern Europe | Czechia | Poland | Romania |
|------------------|-----------------------------|---------|--------|---------|
| Agri-food | | | | |
| Automotive | 77 | 77 | 77 | |
| Chemical | | | | |
| Construction | | | | |
| Energy | | | | |
| ICT* | | | | |
| Metals | | | | |
| Paper | | | | |
| Pharmaceuticals | | | | |
| Retail | | | | |
| Textile-Clothing | | | | |
| Transport | | | | |
| Wood | | | | |

LATIN AMERICA

| | Latin America | Argentina | Brazil | Chile | Mexico |
|------------------|---------------|-----------|--------|-------|------------|
| Agri-food | | | | | |
| Automotive | | | | | |
| Chemical | | | | | 7 7 |
| Construction | | | | | |
| Energy | | | | | |
| ICT* | | | | | |
| Metals | | | | 77 | |
| Paper | | | | | |
| Pharmaceuticals | | | | | |
| Retail | | | | | |
| Textile-Clothing | | | | | |
| Transport | | | | | |
| Wood | | | | | |



* Information and Communication Technologies Source: Coface

MIDDLE EAST & TURKEY

| | M. East & Turkey | Israel | Saudi Arabia | Turkey | UAE |
|------------------|------------------|--------|--------------|--------|-----|
| Agri-food | | | | | |
| Automotive | | | | 77 | |
| Chemical | | | | 77 | |
| Construction | | | | | |
| Energy | | | | | |
| ICT* | | 77 | | | |
| Metals | | | | | |
| Paper | | | | | |
| Pharmaceuticals | | | | | |
| Retail | | | | | |
| Textile-Clothing | | | | | |
| Transport | | | | | |
| Wood | | | | | |

NORTH AMERICA

| BUSINESS DEFAULT RISK |
|-----------------------------|
| |
| Low Risk |
| |
| Medium Risk |
| |
| High Risk |
| Very High Risk |
| 7 Upgrade |
| 7 |

Downgrade

| | NORTH AMERICA | | | | | |
|------------------|---------------|--------|---------------|--|--|--|
| | North America | Canada | United States | | | |
| Agri-food | | | | | | |
| Automotive | 7 | 77 | | | | |
| Chemical | | | | | | |
| Construction | 7 | | | | | |
| Energy | | | | | | |
| CT* | | | | | | |
| Metals | | | | | | |
| Paper | | | | | | |
| Pharmaceuticals | | | | | | |
| Retail | | | | | | |
| Textile-Clothing | | | | | | |
| Transport | | | | | | |
| Wood | | | | | | |

WESTERN EUROPE

| | Western Europe | Austria | France | Germany | Italy | Netherlands (the) | Spain | Switzerland | United Kingdom |
|------------------|-------------------|---------|--------|---------|-------|----------------------|-------|-------------|-------------------|
| Agri-food | | | | | | | | | |
| Automotive | | | | 77 | | | | | |
| Chemical | 77 | | | 77 | | | | | |
| Construction | | | | | | | | | |
| Energy | | | | | | | | | |
| CT* | | | | | | | | | |
| Metals | | | | | | | | | |
| Paper | | | 7 | | | | | | |
| Pharmaceuticals | | | | | | | | | |
| Retail | | | | | | | | | |
| Textile-Clothing | | | | | | | | | |
| Transport | | | | | | | | | |
| Wood | | | 77 | | | | | 77 | |



OTHER COUNTRIES

| | Russia | South Africa |
|------------------|--------|--------------|
| Agri-food | | |
| Automotive | | |
| Chemical | | |
| Construction | | |
| Energy | | |
| ICT* | | |
| Metals | | |
| Paper | | |
| Pharmaceuticals | | |
| Retail | | |
| Textile-Clothing | | |
| Transport | | |
| Wood | | |

BUSINESS DEFAULT RISK



Low Risk



Medium Risk



High Risk



Very High Risk



Upgrade



Downgrade





COUNTRY RI

162 COUNTRIES UNDER THE MAGNIFYING GLASS

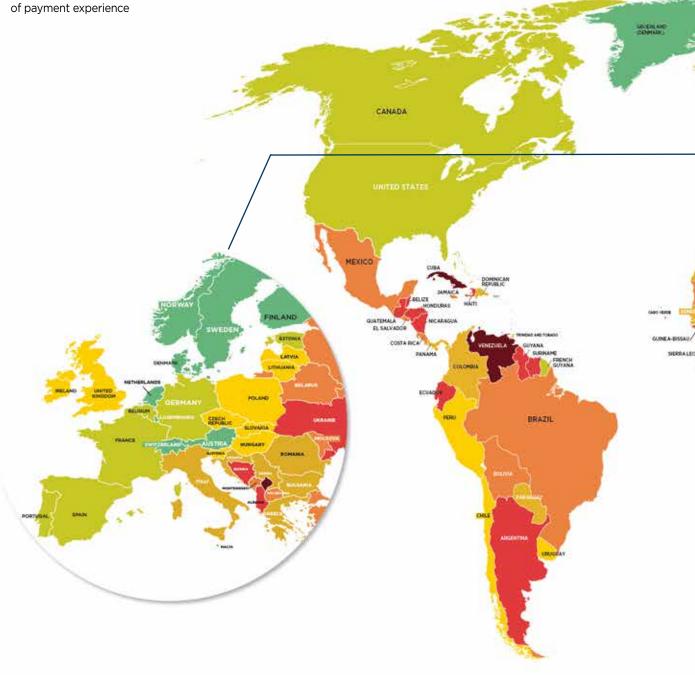
BUSINESS DEFAULTING RISK

A UNIQUE METHODOLOGY

- Macroeconomic expertise in assessing country risk
- Comprehension of the business environment
- Microeconomic data collected over 70 years of payment experience

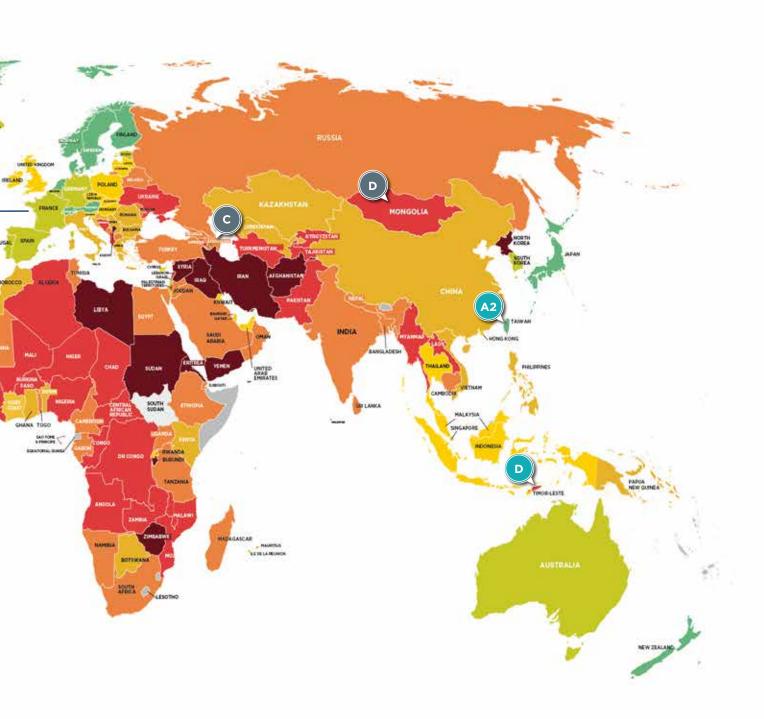






SK ASSESSMENT MAP





SECTOR RISK ASSESSMENTS 4th quarter 2020

13 MAJOR SECTORS ASSESSED **WORLDWIDE**

Coface assessments are based on 70 years of Coface expertise

A methodology based on eight criteria, integrated in three main pillars:

- Coface's expertise and payment experience data
- External financial data forecasts (quantiles)
- Multifactorial Key Items (commodities prices forecasts, structural changes, Coface country risk assessment)

WESTERN EUROPE



CENTRAL & EASTERN EUROPE













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