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June 2020

#04

Creating Sustainable Value

Understanding the markets

A bolt from the blue from Karlsruhe: EMU hit hard, but clearer message for EU

Investing Mirova is investing in players actively searching for COVID-19 solutions

Engagement Regulations and market news

Measuring Impact of our investments

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Investing in sustainability

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Coronavirus, will the alarm be enough to stop the train ?

Upcoming world

The COVID-19 health crisis is not over yet. We are still far from fully understanding its repercussions, especially its economic repercussions. In spite of this, there are many who are ready to take stock of our losses and to begin imagining what a world post-coronavirus could and should look like. This sudden burst of creativity, which Mirova has taken part in (see section on the ReCOVery initiative), may seem surprising. It is, however, a logical step. First and foremost, we acknowledge the importance of staying fully focused and alert as the COVID-19 crisis continues to unfold and we see more of its impact over the next few months. However, our current response would be incomplete if we did not take a broader perspective including the factors that caused and exacerbated this crisis as well as possible solutions to be better prepared for a potential second wave. This global approach reflects the global approach we take to our field of expertise: investment.

The origins of coronavirus remain unknown. What we do know is that the virus first appeared in the city of Wuhan, either in a market where there was contact between humans and wild animals (pangolins and bats) or due to a security breach in a virology lab. Either way, it adds weight to the theory of German philosopher, Hans Jonas, regarding a new responsibility which arises from humans' increasing impact on the environment and with it the imperative to build a more sustainable society. In other words, the COVID-19 crisis has revived one of scientists' biggest concerns: the melting permafrost. Apart from the disastrous effects of climate change, this thawing could result in the resurgence of viruses thought to be extinct and even the resurgence of giant viruses from our ancestors. The first lesson that we can draw from this crisis is the need to strengthen sustainable development policies. For this to be possible in a capitalist economy, equity holders must actively contribute. The surge in Socially Responsible Investing (SRI) is not driven by some sort of fad for political correctness, but rather by the pressing need felt by our companies to show their support.

States: the economy saviors

In light of the COVID-19 crisis' scale, government intervention is critical. The economic touchstones that are the invisible hand, rational self-interest, and the free market would not have prevented widescale economic collapse without government action. On the contrary, these outdated premises (sadly still all too popular, especially in financial markets) have managed to create a system that would have amplified the scale and spread of the economic crisis. The panic that seized financial markets would have continued were it not for the massive and unprecedented intervention of central banks coupled with extraordinary fiscal policy decisions. In doing so, all corporate financing options would have dried up substantially, hastening the pace of bankruptcy. Of course, fear of bankruptcy was the reason for panic in the first place. Moreover, these same premises drove companies to adopt a strategy of absolute financial efficiency, at the cost of their agility. In an effort to optimize costs, many activities were concentrated and made to rely on supply chains that were too tight. This weakened companies' capacity to adapt to exceptional circumstances. The second lesson to be drawn from the crisis is that we must lay to rest notions of maximizing share value and market efficiency once and for all. Self-regulation, but also "hard" regulation, is necessary. CSR (Corporate Social Responsibility) and SRI, which may be seen as forms of self-regulation, have also needed and will continue to need hard regulations to be credible and effective.

Strengthen collaboration

Faced with a global crisis, some have not failed to point out the shortcomings of multilateral governance bodies, such as the World Health Organization (WHO) and European institutions. This is valid criticism that calls for heightened cooperation rather than naysaying. How would we have managed the pandemic and medical research advances if virus-related information had not been as readily available (although admittedly not readily enough)? Won't the hardest-hit eurozone countries welcome the (admittedly late) adoption of widescale stimulus packages that are in reality disproportionately financed by the most affected countries? While subsidiarity is important and the resilience of economies can be strengthened by the existence of short circuits which can act as "circuit breakers" when the global economy gets the flu (!), the third lesson we can draw from this crisis is that multilateralism is key for better managing global crises. Though discussions between international organizations are sometimes grueling, we must remain hopeful. This also applies to SRI where the development of a common language is increasingly becoming a top priority. Consensus must be reached on this subject, as well as on how we measure an investment's environmental and social impact. Europe can and should take on a leadership role. The assets which will allow it to drive progress include: almost complete political consensus regarding sustainable development, recognized experts (many of whom operate under the American flag) and the resources to succeed since its single market is the largest. Mirova will continue its efforts to ensure that a consensus on green and sustainable finance emerges in Europe.

The three lessons mentioned corroborate Mirova's chosen investment approach:

- Our investments aim to create and illustrate environmental and social benefits in order to accelerate the transition to a more sustainable economy: the only path to delivering sustainable financial returns over the long-term.
- Our investment decisions are governed by an active and fundamental approach to asset management. While we recognize what financial models have to teach us, we feel that it would be suicidal to rely solely on these models. By taking a different tack, our approach successfully creates financial value. More specifically, long-term dynamics,

which markets have difficulty valuing appropriately, are better reflected in our strategy.
- Our business model is oriented towards our stakeholders: our employees, clients and of course shareholders. On top of that, our model is firmly focused on influencing public authorities with whom it is our duty to develop the ecosystem needed to ensure the growth of green and sustainable finance.

ReCOVery: DELIVERING A FAIR AND SUSTAINABLE RECOVERY FOR COMPANIES

Many individuals and businesses have been forced to reconsider their business models in light of the current health crisis and the unprecedented lockdown period. Moreover, the French government's adoption of a widescale support and stimulus package, which is key for avoiding economic and social backlash, gives us good reason to believe our country's financial capacity will be penalized for some time. This means it may not necessarily be in a position to usher in the socio-ecological transition that we have championed for years. We felt it necessary to create a thinktank and initiatives for companies which would allow them to take advantage of this economic downturn to transition to, or begin transitioning to business models that align economic objectives with those centered on society and the environment.

From day one of lockdown and every day after for a month, Mirova and combined their expertise to launch a large-scale corporate initiative: reCOVery. Gradually, networks[1] whose members are already active at the different levels, partnered up with the initiative with a view to rethinking the role of sustainability in their business models. The initiative led discussions on the lessons to be learned from the crisis in order to develop the economy of the future.

As part of the initiative, we analyzed lockdown-related changes, failings in existing models, the economics of various ecosystems and companies' purpose in society. Six debates between representatives from the private and public sectors as well as NGOs were held. These debates were open to the public. Hundreds of proposals were put forward using an online discussion platform, recovery.wiki. This generated thousands of reactions and comments.

Three key themes emerged from the debates and open online discussions:
- **Resilience.** The crisis challenges us to reconsider companies' resilience when faced with future crises, whether they are triggered by new pandemics or other issues, particularly environmental and social issues.
- **Sustainability.** The discussions affirmed a strong desire to undertake a drastic transformation, promoting a fair and sustainable restart in economic activity.
- **Leveraging positive change.** The lockdown and other measures put in place to combat the pandemic represent a unique social experience. Through such measures, our social interactions have been transformed, as have our attitude towards work and IT as well as our consumption and mobility habits. We must make the most of this experience by embracing positive practices that can be widely adopted.

At the end of the lockdown, a summary and list of potential avenues for creating change intended for our networks and the government were drafted. reCOVery enables various stakeholders who rarely meet to make genuine connections. The initiative appears set to become a new platform for the increasing number of companies that seek to drive forward a sustainable economy.

FOCUS

A bolt from the blue from Karlsruhe: EMU hit hard, but clearer message for EU

On May 5, in an historic ruling—on this occasion, the term is not an exaggeration—the German federal constitutional court of Karlsruhe dealt a severe blow to the initiatives of the European Central Bank (ECB) in Frankfurt—in the final analysis for the supposed supremacy of the Court of Justice of the European Union (CJEU) in Luxembourg, ensuring the sustainability of the Economic and Monetary Union of the European Union (EMU). That said, the 237 thunderous articles of the ruling include a few alarm bells necessary for continuing European construction.

1 Ashoka, B Lab France, Finance for Tomorrow, France Digitale, l'Institut National de l'économie circulaire, La communauté des entreprises à mission, la Fabrique de l'Industrie, le collège des directeurs du développement durable - C3D, Le Mouves, Make Sense, Réseau Entreprendre Paris, The Shift Project

Thunderstorms in Karlsruhe: dark clouds in Frankfurt and cold showers in Luxembourg and Brussels

The ruling stipulates that the buyback of sovereign debt by the Eurosystem led by the ECB as part of its non-standard quantitative easing (QE) program is lawful. This is due to the fact that they are traded only on secondary markets and also is because financial contributions between central banks and the holding limits (33%) of public debt by the Eurosystem and the ECB are respected. The ruling also stipulates that this QE may infringe on the proportionality rule of the impact of its intervention to the objectives set out in the Treaties. In a preliminary ruling handed down at end-2018, the CJUE had not raised the point, thereby confirming ECB's actions; the Germans Courts, dismissed the arguments.

Accordingly, the German constitutional court could require the Bundesbank (BuBa) to withdraw from the Public Sector Purchase Programme (PSPP), the driving force of the European Asset Purchase Programme (APP) started in 2015, and in Outright Monetary Transactions (OMT) decided in 2012, if the ECB were to demonstrate that it did not fulfil this proportionality requirement. The court has stated it will need three months to carry out the ruling. Once again when they have to give their opinion on a subject relating to the construction of Europe, the wise men of Karlsruhe have ensured there is a way out of the problem caused by their decision. The ECB will have to reveal under which interpretation of the treaties it felt justified in acting as it does, apparently disregarding the economic consequences of its actions. In particular, these include maintaining activity for struggling businesses affecting the competitiveness of their better performing rivals or causing savers' revenue to decrease.

They may also need to explain how working towards convergence of yield spreads on EMU Member State debt issuance is consistent with the objective of limiting inflation.

There are four key points:

- the legality of the Public Sector Purchase Programme (PSPP), which appears to be good news, but hides major obstacles to further action by the ECB;
- the doubt about compliance with the proportionality rule, which appears to be bad news but which the ECB should have no difficulty in resolving;
- the renewed affirmation of the superiority of German constitutional law (and even more so that of each Member State?) as regards the CJEU's decisions on such matters, which the German constitutional court implicitly allows for suspicion of inadequacy when it has to judge the actions of EU institutions, of which it is a part and which it has every interest in strengthening;
- the reminder that these EU institutions created by treaties signed between states do not have any right whatsoever to act outside the framework provided for in those treaties, even in a crisis. Moreover, as the only legitimate bearers of the public's sovereignty, the aforementioned states may delegate their sovereignty, but may certainly not give up rights they do not have.

A sudden strike that makes sense

The decision is unsurprising. It is fully in line with previous rulings made by the Karlsruhe court since at least 2009. Naturally, the court would not derogate. The bombshell comes in the harshness with which the German constitutional court reverses the CJUE's 2018 decision, which it describes as "incomprehensible" and "arbitrary," These are strong words that reflect the German judges' feelings of exasperation at the perceived lack of professionalism on the part of the Luxembourg-based court when it rules on European institutions. Most astute observers already recognize how little some German constitutional judges trust the CJUE's predominance, with its magistrates who carve out their own jurisprudence to continually strengthen their own prerogatives. Nonetheless, the angry refusal of the CJUE's 2018 rulings openly and publicly demonstrates the Karlsruhe court's doubts concerning the Luxembourg court's impartiality in respect of European institutions. German constitutional judges view their CJUE counterparts as pro-Europe supporters who, by definition, are incapable of stamping out wrongdoing on behalf of the European project. As a reminder, the Supreme Court of Denmark along with the Czech Constitutional Court and the French Council of State have already issued rulings that also refused the CJUE's ambition of overstepping its mandate.

Let us recall the statement made by the German court's Reporter of Decisions: *"for the first time in its history, the Federal Constitutional Court states that the decisions and actions of European institutions are not covered by the European system of powers and therefore cannot be effective in Germany."* Indeed, this is the first time such a statement has been made. However, the Karlsruhe court has issued a number of warnings over at least ten years and patience is now wearing thin.

What will soften the blow?

In any event, the markets do not seem to have paid this blow the attention it deserves. They have looked upon the reaction with contempt, probably comforted by:

- the three months given to the ECB to justify its actions;
- the likelihood that it will provide a response to the courts that is logical, well-argued and coherent—and presumably communicated via the BuBa to preserve appearances;
- the fact that if the previous scenario is deemed inappropriate, there will be lengthy deadlines that German judges appear to give to the BuBa to fully clarify their position, estimated above €530 billion at end-April if the BuBa no longer has to contribute to QE;
- the fact that the recent Pandemic Emergency Purchase Programme (PEPP) worth €750 billion does not fall within the scope of the Court's review, not for now at least;
- the long-term prospect of the ECB purchasing bonds from fallen angels (companies downgraded by rating agencies to speculative grade)—strictly speaking, the ruling would not condemn this if Frankfurt successfully dispels the Karlsruhe Court's doubts regarding the cost of running zombie companies; as it stands, the ECB says it is not planning on adopting such an approach;
- the option for European institutions to overstep this ruling, although in our opinion, this would be fatal for the entire European structure.

The above factors really do alleviate the most immediate concerns and the markets are right to consider them. Conversely, the markets have not factored in the extent of the ruling's threats nor its long-term impact:

- it marks the end of Mario Draghi's famous declaration to do "whatever it takes[2]" serving as a reminder that any action by the ECB waiving the intervention allocation bases of each Eurosystem central bank would be illegal. This reaffirms the Karlsruhe Court's stance that in such cases, following its ruling which will be impactful, it will request the BuBa's withdrawal from certain programmes led by the Eurosystem. Put simply, the PSPP would survive without the BuBa, which would gradually withdraw. However, the PEPP could not use the framework outlined since it does not comply with the abovementioned allocation bases;
- it hinders the flexibility which the European institutions grant themselves, often in an emergency, with the consent of governments that are caught up in the moment of crisis; the Karlsruhe court stands by its ruling: the sovereign states have specified the European institutions' scope of action in the treaties and these institutions have no more right to leave the scope than they have the right to act as the structural supervisory authorities of the sovereign states. The German constitutional court is right in this respect, but this involves foregoing coordination methods that are sometimes crucial, meaning that this is a serious issue. Regardless of how beneficial the ECB's current initiatives prove to be, everyone admits, much to their joy or dismay, that it derogates from the tasks assigned to it by the Treaties of Lisbon and Maastricht. In Karlsruhe, you cannot legislate on the basis of necessity.

Lastly, if the EU bodies easily circumvent the ruling—either by haughtily disregarding it or by protecting themselves under the primacy of the CJUE—it would show that they took the events of May 5 very lightly. This would overlook the role of members of the German constitutional court in German democracy, where there is a strong rule of law culture and their complete indifference to the CJUE's claims to the primacy of its rulings on national supreme courts; a primacy that the CJUE grants itself. Politically speaking, this would constitute a Pyrrhic victory. In the long run, German public opinion would shift away from the European project—which desperately needs to build public support, not the opposite.

Will Karlsruhe's act of rebellion bring the EU to a standstill?

In this respect, the ruling takes on fundamental value since it presents two challenges, one of which is the immediate challenge of the ECB. The other challenge, which is larger and more long-term, centers on the continuation of the European project. In our opinion, giving a few token pledges to the Germans who are supposedly tense about the prospect of losing control of their money supply is beside the point, paradoxically.

For the court in Karlsruhe has rocked the boat on another issue, which everyone was busy pretending not to notice: the legitimacy of the mandate which EU institutions sometimes use to play a role which is in reality political. Such institutions' actions affect the near-300 million citizens and subjects of the EMU who nevertheless do not exercise any democratic control—even indirectly—over these institutions and occur despite the fact that the treaties do not always provide for such powers. Reading between the lines, the court is critisizing

2 Whatever it takes – Speech given in July 2012 by Mario Draghi, then president of the ECB

the Monnet method, which has successfully driven the European project forward in the past. As a reminder, and as acknowledged by Jean Monnet himself, the method involves making quiet progress so as to assuage any national sensitivities. The latter are considered to be unfortunate or else a source of conflict. The goal is to create EU administrations whose initial objectives are limited to technical matters. The method then involves allowing such administrations to cover an ever-widening scope without the electorate being able to choose or dismiss those in charge by voting.

This clever, although not highly democratic, method inevitably delegitimized the European project, which weakened as it grew. This method has now come up against the Karlsruhe Court, which was founded at the end of the second world war as a counterweight to executive powers following the abuses under the Hitler regime. To complain about its inflexibility is to fail to recognize that it is simply fulfilling the role assigned to it by the German people, without stooping to any political connivance of any kind. It reminds Ms. Merkel and the German parliament of their duties to ensure the integrity of the supreme law of Germany and to respect the treaties. No German Chancellor is in a position to try and work around a ruling from Karlsruhe, not even Ms. Merkel.

Will Karlsruhe's lightning bolt ruling mean storm clouds for the EU?

While the markets seem to have underestimated the danger involved for the EMU in the medium term, we see a longer-term opportunity for the European project. The German constitutional judges have asked the right question, regarding the democratic control of EU institutions. The time has come for an answer. Admittedly, the question could not have come at a worse time. And the ECB will bear the brunt of this. That said, it was better that the question came from such a respectable Court as opposed to a reactionary electoral movement manifesting itself in an extremist vote.

Ultimately, the German judges are reminding us of the rules that must be followed: the need for real democratic control of EU institutions, which must respect both the letter and the spirit of the treaties even in a crisis situation rather than exceeding these bounds as soon as they deem it necessary or to act in their own interests. Is Montesquieu more popular in Karlsruhe than in France? He warned that *"constant experience shows us that every man invested with power is apt to abuse it, and to carry his authority as far as it will go.*[3]*"* The same applies to administrations.

This could be the start of a new era. If European institutions aspire to achieve even a rough draft of "European sovereignty," they must abandon the crooked path mapped out by Mr. Monnet in another era in favor of a straighter path, that of democracy. The choice left to them is either to continue circumventing democracy, thereby re-establishing a supposedly enlightened despotism that no European wants and which will lead to deadlock, or to unconditionally chose democracy. In short, there is no choice. Democracy undoubtedly forms the only foundation in which all Europeans firmly and unequivocally believe, whether they live in Helsinki, Valletta, Dublin or Sofia. The EU must embrace the truth: Without democracy, there is no Europe. It is enlightening that this ruling indirectly comes from a country traumatized far more by the Nazi occupation than by the past instances of hyperinflation that especially bother today's financial

3 The Spirit of the Laws

assets holders. In a sense, the May 5th ruling impels German leaders to position European discussions in the context of democracy, and to no longer let it be suppressed by the technocratic considerations which are the domain of senior EU officials.
In accepting the principle of sharing debts, albeit to a limited extent, Ms. Merkel appeared to be turning her back on the Constitutional Court of Karlsruhe. Yet her rationale is the same. First, she acknowledges that the ECB cannot be left alone to prop up the EMU in this crisis, as Christine Lagarde has already made clear. Second, she keeps the German electorate and other EU leaders informed of what is really at stake. Opponents will oppose, supporters will follow, and arguments will be put forward. In other words, democracy will work. The judges in Karlsruhe are not asking for anything more, and neither are the Europeans. Their prosperity also depends on a stable and peaceful institutional system, democracy allows for this to happen.

Macroeconomic trends

Covid 19: an unexpected external shock, causing extreme market volatility

It has been an extraordinary first half of fiscal 2020. Covid 19 has transformed our lives as well as the economy and financial markets. In just a few weeks, the coronavirus forced 3.5 billion people around the world into lockdown, plunging the global economy into a deep recession and causing one of the most violent shocks in the history of financial markets.
From February 20 through March 20, the change from trough to peak to all global equity indices was around -35% against a background of weak liquidity, forced sales and investor capitulation. Implied equity market volatility reached a historic high with a volatility index or VIX[4], at 80, and bonds, specifically high yield, were severely impacted. Oil prices collapsed, momentarily reaching negative levels, as they were victim of a sudden decline in demand and disagreements between Saudi Arabia and Russia. The financial sector was hard hit by sanctions as were cyclical industries, which fell victim to social distancing measures adopted in an effort to contain the pandemic (transport and leisure, automotive, and energy industries).
Luckily, widescale responses from public authorities including central banks and governments helped to ensure the health crisis did not escalate into a global financial one. These responses also ensured that the conditions for restarting activity will be in place once the pandemic finally abates.
Since the market low on March 21, risky assets have vigorously rebounded. They have capitalized on the comforting news from the first countries in post-lockdown phases, supplemented by a gradual recovery in countries' economies and the many monetary and fiscal stimulus plans launched across the globe. The absence of any second wave of infection, at least to date, has helped to gradually restore investor confidence. Investors have rediscovered their appetite for risk. High-yield stocks which are the most sensitive to an improved economic outlook have strongly rebounded. Their value had plummeted to all-time historic lows.

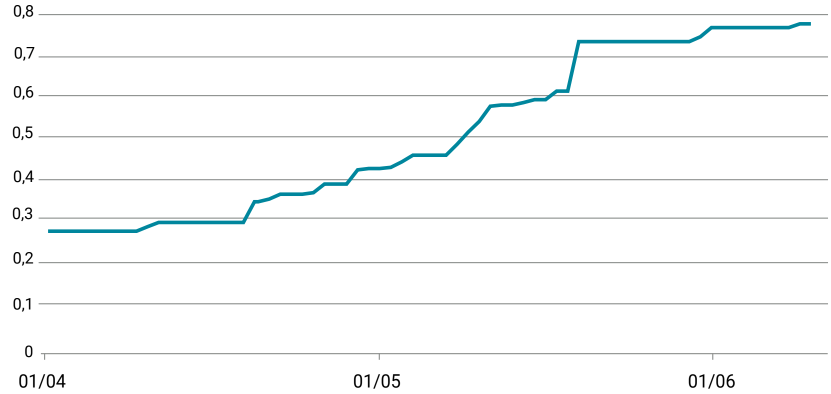
Post-lockdown and kick-starting the economy

The number of countries that have partially or fully entered a post-lockdown phase now accounts for more than half of global GDP.
And there is further evidence of improvement. It is reflected in a faster-than-expected return to normal levels in high frequency data (mobility figures, footfall in German stores, credit card transactions and hotel and restaurant activity in the United States, car sales in China, etc.) and macroeconomic indicators that are pleasantly surprising (PMI[5] manufacturing and services, jobs in the United States, consumer confidence, etc.).
We are on the road to economic recovery, automatically driven by post-lockdown measures. Business will continue to accelerate in the months ahead.
That said, the picture is not entirely rosy. The economy is expected to suffer some hard blows from this health crisis in September. Households could see rising unemployment given the potential increase in redundancy plans with an end to public subsidies.

4 Volatility Index. On a scale of 0 to 100. 100 reflects the highest volatility level, i.e. the greatest degree of investor pessimism.
5 Purchasing Manager Index

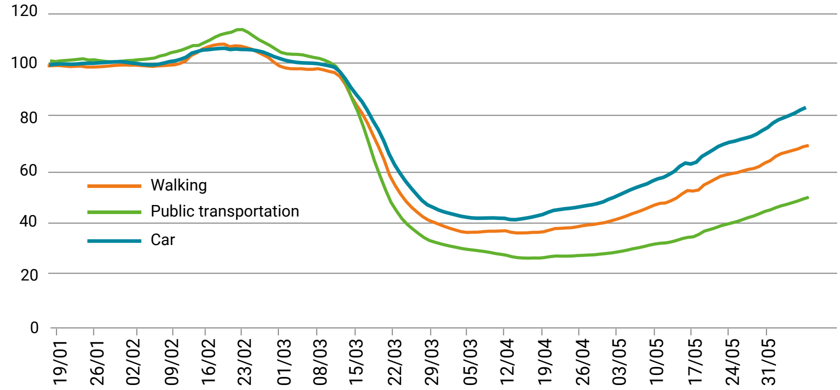
Many companies in industries hardest hit by the crisis only have a few months of liquidity left. Consumption levels may only gradually rebound with savings ratios remaining high due to economic uncertainty. For some companies, bankruptcy seems inevitable. Health protocols and restraints are already weighing on productivity, investment spend is expected to slow and some industries that rely on "social proximity," such as hotels, catering, tourism and airlines, will be adversely affected with heavy debts from the period.
The decline was also so sharp in the second quarter that time is needed to return to the business levels seen before the crisis. For many developed countries, the loss in activity during lockdown is expected to exceed 10 points of GDP, from peak to trough. At this stage, it is absolutely crucial to preserve the economy's long-term growth potential by avoiding the loss of human and production capital that company bankruptcies would cause. Delivering top-performing monetary and fiscal stimulus plans and ensuring a quick restart (related to post-lockdown and changes in consumer and company behavior) are key for returning to pre-crisis business levels.

FIG.1 GLOBAL (30 COUNTRIES): PROPORTION OF COUNTRIES PARTIALLY OR TOTALLY IN POST-LOCKDOWN AS A % OF GDP



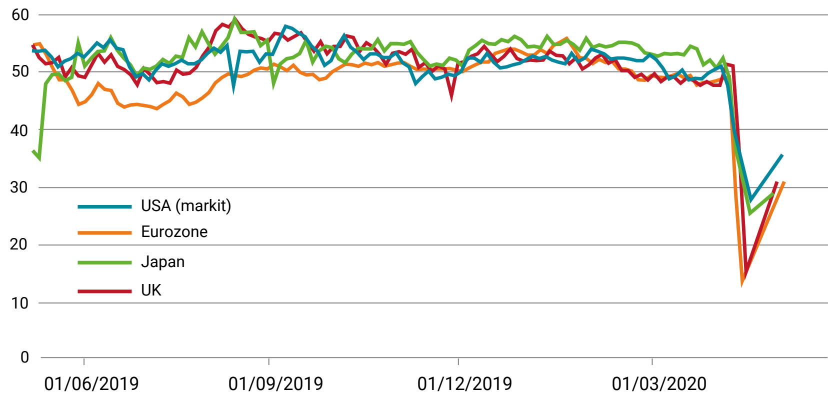
Source : Les Cahiers Verts

FIG.2 GLOBAL EXCEPT CHINA: APPLE MOBILITY INDEX WEIGHTED USING GDP AVERAGED OVER 7 DAYS



Source : Apple, Les Cahiers Verts

FIG.3 GLOBAL: COMPOSITE PMI

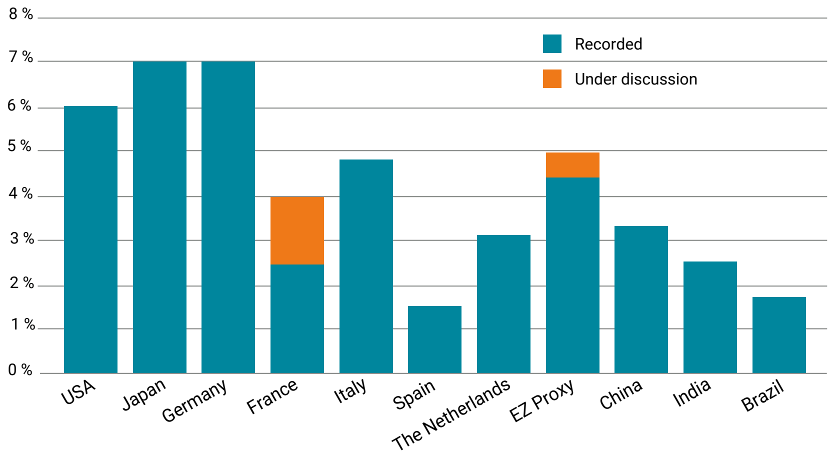


Source : Bloomberg

Unprecedented fiscal stimulus plans

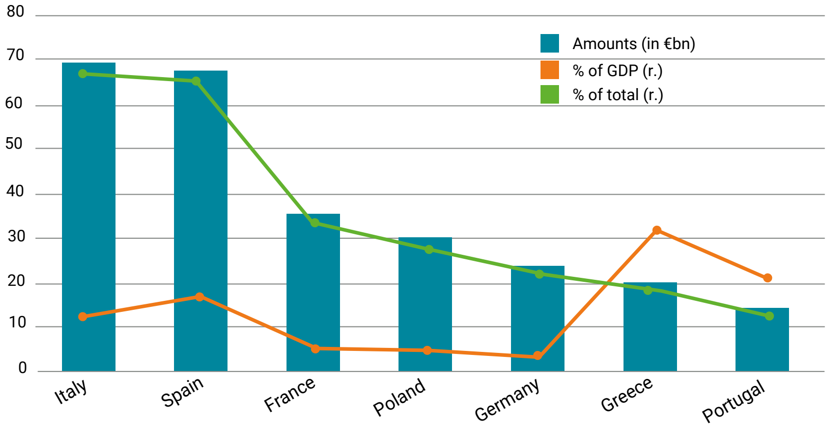
According to the International Monetary Fund (IMF), the combined measures announced (fiscal and other) account for around 9% of global GDP. It involves a broad scope, incorporating indirect stimulus to activity, which includes loans, easing of regulatory constraints, loan guarantees, and many more measures. Fiscal stimulus accounts for only a little more than 3% of global GDP. However, this is more than the effort made during the 2008 financial crisis. Major developed countries are adopting stimulus plans of around 4-6% of GDP. In the United States, stimulus measures represent around 6% of GDP. The main component is the stimulus plan known as the "CARES Act," which provides $300 bn in checks to households as well as a $280 bn carryover in businesses' social security contributions. In Europe, the European Commission unveiled a stimulus plan of €750 bn on May 27. The plan used the Franco-German proposal as a model. The plan provides European states with €500 bn in non-refundable grants (3.5% of the EU's GDP) and €250 bn in loans. The plan will be funded by commonly issued European bonds. The plan, which is still pending official approval as we write this newsletter, is the missing piece in the EU's response jigsaw to address the crisis. It carries a strong political message regarding the EU's fiscal solidarity. In the short term, the plan looks set to mitigate any risk of recession for peripheral eurozone countries, increasing the chances of a synchronized pan-European recovery next year. Over the long term, it bolsters Europe's fiscal capabilities and represents a key step in strengthening cohesion within the monetary union. It also adds credibility to the Green Deal ensuring faster execution. While political risks still exist (see our focus analysis below on the ruling of the German Constitutional Court), the plan is making good progress. Lastly, the plan complements the national stimulus packages in various European countries that have already been approved. These packages alone represent 4% of the eurozone's GDP. We are therefore progressing towards a stimulus plan of more than 7 points of GDP in the eurozone, part of which is to be applied in 2021.

FIG.4 STIMULUS PLAN (AS A % OF GDP)



Source : Les Cahiers Verts

FIG.5 RECOVERY & RESILIENCE FACILITY: DIRECT STIMULUS FUNDS (EXCLUDING LOANS) ALLOCATED TO CERTAIN COUNTRIES



Source : Commission européenne, Les Cahiers Verts

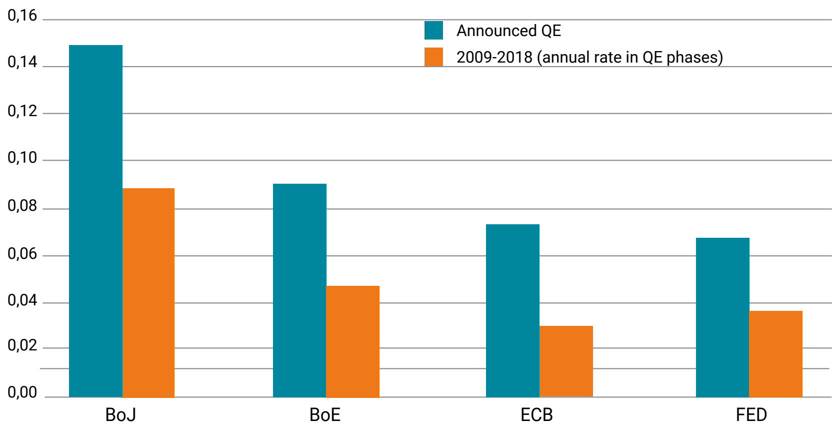
Highly accommodative monetary policies

Generally, the monetary response has been faster and more widespread than in 2008. This applies to the amount (QE[6] near 8% of GDP on average versus 4% in 2008) and the number of central banks involved. Some measures were adopted for the very first time. Among them, direct purchases of corporate bonds by the Federal Reserve in the United States, specifically High Yield bonds. In Europe, the European Central Bank (ECB) continued with its aggressive QE policy.

6 Quantitative easing

Less than three months after deploying a set of emergency measures, the ECB decided to increase its "Pandemic Emergency Purchase Programme" (PEPP) to €600 bn. The program purchases market debt with the aim of reducing financing costs for governments, companies and households. As it stands, the program amounts to €1,350 bn. The purchases seek to reduce the burden on eurozone governments, which are faced with skyrocketing unemployment and fiscal deficits and are being forced to borrow more from financial markets. The program also serves as a powerful tool for tackling fragmented peripheral yields, as seen in Italy and Spain, for instance. As a reminder, the ECB now expects the eurozone economy to contract by 8.7% this year compared with expected growth of 0.8% in March.

FIG.6 QE RECENTLY ANNOUNCED BY CENTRAL BANKS VS AVERAGE RATE OF QE, 2009-2018 (AS A % OF GDP)



Source : Les Cahiers Verts

Despite an expected rebound of 5.2% in 2021 and 3.3% in 2022, the risks related to its baseline scenario appear to be more on the downside. This is why the ECB's stimulus package and low rates will persist for some time, in our view.

Monetary orthodoxy has been abandoned by the ECB, which has implemented a mechanism that allows governments to access virtually free perpetual debt. The ECB returns its profit (including the interest received on the public debt it holds) to the governments who are its very own shareholders! In other words, the governments recoup the interest, which they pay to the ECB. Provided the ECB does not reduce its balance sheet and sell on its public debt to the financial markets by rolling over its maturity, the debt becomes free of charge. This mechanism applies to all central banks worldwide. Considering the global dimension of these measures, money creation-related risks, including hyperinflation and a loss of credibility in the eyes of international creditors, are currently minimal.

Market behavior and investment strategy

The panic that gripped the markets from mid-February through mid-March was related to what could be considered a widespread loss of control. Nevertheless, investor confidence has increased, following a number of rapid and widescale initiatives launched by governments and central banks combined with a better overall understanding of epidemiological dynamics. From our standpoint, they justify the bearish stock rally for the most part, which we have observed since the market low on March 23, especially on a long-term view.

In recent weeks, the recovery has spread to all listed markets. It specifically benefits out-of-favor stocks and industries which are now taking advantage of the recovery in business. The reopening of economies as well as a better-than-expected macroeconomic performance and more widespread stimulus measures (particularly in Europe in the form of the European Commission's €750 bn stimulus package) have fueled investors' renewed appetite for risk. In turn, trade tensions between the United States and China have been sidelined.

Our current positioning

It appears that the toughest part of the crisis is now behind us. Nevertheless, despite the significantly decreased likelihood of a second wave following fairly reassuring data from "post-lockdown" countries, the coronavirus has not yet disappeared. There are particular concerns for countries that did not impose a strict lockdown policy. This is the case for Sweden in Europe, more or less all of Latin America as well as the United States, which has been quick to initiate post-lockdown measures. There are still many unknowns in terms of how the situation will continue to develop. Trends are difficult to predict (even for doctors!).

Generally speaking, the markets have responded well to favorable coronavirus developments. the rebound in valuation levels, coupled with the reduced risk premium and the now strong appetite for risk, have weakened medium-term prospects. The outlook, however, remains favorable considering the imminent macroeconomic recovery, complemented by highly accommodative policies and better prospects in Europe driven by the stimulus plan. This explains our unchanged positive stance on risky assets.

Mirova is investing in players actively searching for COVID-19 solutions

The health crisis we have experienced in recent months reminds us how essential the health sector is to economic growth, human development and social cohesion. Within weeks, the SARS-CoV-2 virus, or Severe Acute Respiratory Syndrome, became the pandemic of the century. Not only has it disrupted the lifestyles of more than three billion people worldwide, but it has also crippled entire sectors of the economy.

The health sector is at the crossroads of the three dimensions of sustainable development. We are faced with challenges to protect the physical and mental health of individuals and to ensure a sustainable future for subsequent generations. The challenges concern: the quality of ecosystems and the mitigation of the effects of climate change; universal access to care and well-being; and the performance and economic sustainability of healthcare systems.

As such, the coronavirus pandemic can be seen as a wake-up call to the consequences of globalization, our consumption patterns and industrial agriculture. Together they increase the potential for new and more resistant diseases that we may have to learn to live with.

In spite of more advanced knowledge and medical progress, our understanding remains limited. COVID-19 has revealed our vulnerability in addressing health challenges. However, the coronavirus has also revealed the ability of economic players to pull together in an emergency, in the search for a longer-term response to develop COVID-19 vaccines and therapeutic solutions. To achieve the sustainable development objectives of health for all, the need to invest in medical and technological innovation is as important as ever. Mirova makes environmental and social innovation the core focus of its investment decisions. Logically, our portfolios include a large number of players that are actively searching for solutions to COVID-19. Through our investments, we contribute to achieving the sustainable development goals (SDGs) as laid out by the United Nations.

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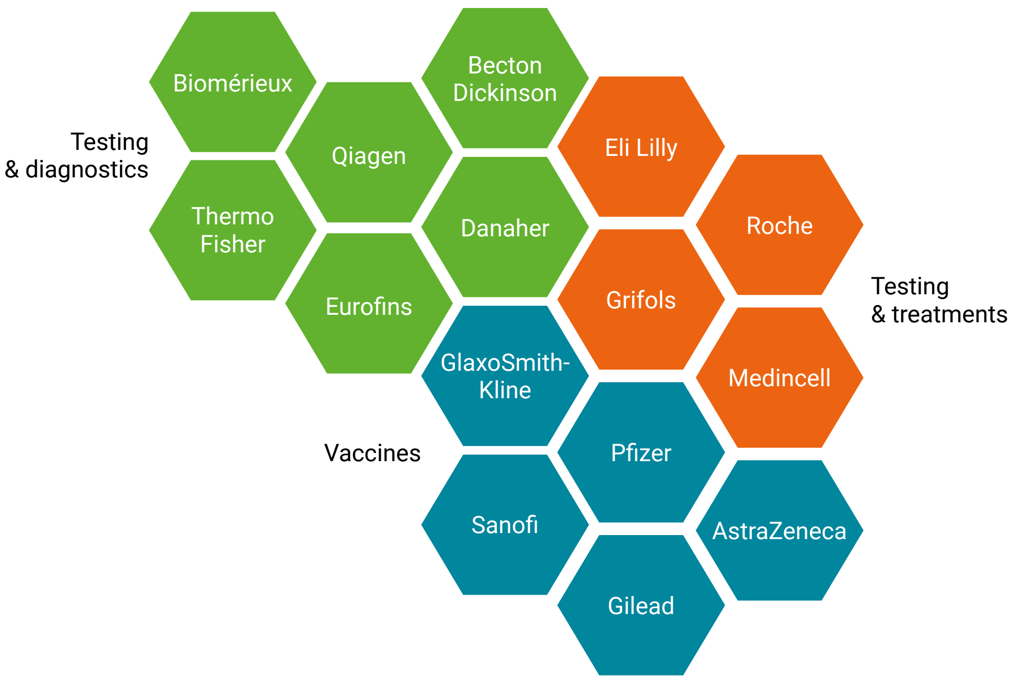
Players contributing to Research and Development in COVID-19 treatments and vaccines

Sanofi is working on two vaccine projects to treat coronavirus SARS-CoV-2. Sanofi has joined forces with Glaxosmithkline to develop a first vaccine based on recombinant proteins. The project uses previous research on SARS (Severe Acute Respiratory Syndrome) in addition

to its influenza vaccine technology platform. Sanofi has also partnered up with Translate Bio to work on a second messenger Ribonucleic Acid (mRNA) vaccine. Clinical studies are also being conducted with two treatments used in other indications.
Pfizer has launched a clinical trial in partnership with BioNTech to develop a COVID-19 mRNA vaccine.
Astrazeneca has formed a partnership to develop a candidate coronavirus vaccine. It is also testing two of its existing molecules, acalabrutinib and the anti-diabetic drug, Dapagliflozin, on severe forms of COVID-19.
Gilead is developing easy-to-use versions of the anti-viral drug, Remdesivir, to treat COVID-19. It could be administered by inhalation. To date, Remdesivir is the only drug that has proved effective in treating patients with COVID-19.
Eli Lilly is testing Olumiant for severe forms of COVID-19. This medicine from its portfolio is indicated for rheumatoid arthritis.
Roche initiated a Phase III clinical trial to assess the efficacy of RoActemra (tocilizumab) in combination with Gilead's Remdesivir. A Phase III trial is also underway to assess the efficacy of Tocilizumab as a single treatment compared with the standard care protocol.
Medincell launched two research programs for long-term injections based on the Ivermectim molecule with a view to developing a preventive agent that limits virus transmission as well as a potential treatment for COVID-19.
Grifols is conducting various studies to test the efficacy of its anti-SARS-CoV-2 hyperimmunoglobulin therapy to treat COVID-19, as well as a clinical trial with inactivated plasma from convalescent patients.

FIG.7 ACTIVE PLAYER SEARCHING FOR COVID-19 SOLUTIONS



Source : Mirova

Alfen,
A unique positioning to accelerate the energy transition

The ecological transition is a key challenge, requiring the large-scale deployment of new energy models. In our opinion, Alfen is one of the companies capable of providing such solutions, capturing the growth driven by this transformation.

Alfen is a European player, a leader in its market and ideally positioned to meet the challenge of the energy transition. It provides solutions that integrate renewable energies into electricity grids. Alfen develops and sells electrical energy products and solutions that accelerate the energy transition, while adapting to project specificities. These solutions include energy storage, network automation, the development and production of chargers for electric vehicles, prefabricated transformer stations, high and medium-voltage networks in public spaces and integrated electrical installation management and maintenance. With its Dutch origins, the company mainly operates in the Netherlands (72% of 2019 revenue), capitalizing on growth trends in European markets.

Alfen offers integrated solutions structured into three business lines:

1. **Smart grid solutions**, which account for growth of more than 23% over the 2015-2019[7] period
2. **Electric vehicle (EV)** charging equipment, representing growth of more than 46% over the 2015-2019[7] period and
3. **Energy storage systems**, which account for growth of more than 156% during the 2015-2019[7] period.

These systems ensure an energy supply/demand balance, avoiding the need for investment in power grids and their connections.

Mirova wanted to support the Alfen group by participating in its IPO (Initial Public Offering) in 2018. Since then, the Group has demonstrated its ability to achieve profitable growth, publishing excellent 2019 results. The outlook for business in 2020 remains favorable. Demand for the company's products and solutions is fueled by the transition to a greener, decentralized and digital energy world. Alten has already confirmed its forecast robust growth for 2020, with full-year revenue expected around €180-200 million. Revenue is driven by market performance, an international growth strategy, the increase in cross-selling opportunities between business lines and an expanded service offering. The Group is positioned in end markets that offer strong growth prospects in the medium and long term. In terms of medium-term outlook, we expect average annual revenue growth of 30% over 2020-2024. Growth in revenue should be propelled by a significant increase in margins, resulting from a combination of operating leverage and improved gross margin.

Through its unique positioning, Alfen operates as a pure player[8] in energy transition. Alfen has also recently aligned its corporate social responsibility program with the United Nations' Sustainable Development Goals. On this basis, a new monitoring, reporting and communication framework will be implemented as of 2020.

7 Source: Alfen – Annual Report 2019

8 Company operating in a unique business segment

Ørsted, something green is happening in Denmark!

Ørsted, one of the main players in the Danish energy sector, is one of those companies that has successfully transformed its strategy. Formerly dedicated to fossil fuels, the Group has gradually withdrawn from this sector to focus on renewable energies. Against this background, Mirova supports Ørsted.

After issuing its first green bonds in 2017, for a total of €1,250 million, Ørsted a did so again in 2019. The Group initially issued two green bonds in sterling for a total of £650 million before repeating the process, in the second half of the year, with a €600 million hybrid bond maturing in 3019, with the first call date[9] in December 2027. It was issued at around 185 basis points (bp) against swaps, before narrowing to below 130 bp, its lowest level before fears about the spread of coronavirus resulted in 10 bp spread widening.

In our opinion, this is yet another example of the growing diversification of the green bond market in terms of subordination ranks. Following Tier 2 green bond issues by Generali, CNP and Kookmin Bank, the trend continues, albeit at a fairly slow pace (see Newsletter Mirova 3, p. 10)

In addition to its success, it is this bond's integrated development strategy that seems to reflect the purpose of green bonds. The issue is perfectly in line with the decisions made by the Danish group, once again testifying to its commitment - among the most ambitious in the industry - to its relevant sustainable development objectives, namely: clean energy production and climate-focused initiatives. As a reminder, the former Dong Energy, with a mix historically based on fossil fuels, has decided to switch completely to green energy. This includes the gradual phase-out of coal until 2023. Rebranded as Ørsted in November 2017, the company is already the world's leading offshore wind energy producer[10], with 5.6 Giga Watts (GW) of installed capacity at end-September 2019. The Group has continued its expansion, with a target of 15 GW by 2025, of which 14.7 GW has been confirmed. The overall objective: Going carbon neutral in its generation activities by 2025 (scopes[11] 1 and 2), and in its supply chain and trading activities by 2040 (scope 3). The Group already cut its emissions by 86% between 2006 and 2019 and has a long-term goal of reducing them by 98%. In any case, Ørsted's performance is already in line with the target of limiting global warming to 1.5°C. Through these initiatives, the company scooped the *World's most sustainable company* award handed out by the publication, Corporate Knight last January. Looking beyond targets, the efficiency with which the development plans have been executed is admirable. The Group controls its entire value chain, from asset development to operational management through to asset construction and ownership. This provides it with know-how and skills that are still difficult

9 Buy recommendation

10 Wind farms constructed in bodies of water

11 Scope within which the greenhouse gas emissions of the organization or product in question are studied (scope 1: direct emissions; scope 2: indirect emissions related to energy consumption; scope 3: other indirect emissions)

for its competitors to replicate. It will benefit more now that the European Union has clarified its new taxonomy and its new, more ambitious decarbonization objectives. Among these, a 50-55% reduction in carbon emissions by 2030 to achieve "net zero" by 2050. This opens up clear and significant growth prospects, particularly for the offshore wind power generation market, which is expected to show the highest growth rates among all renewables. We expect growth to top the 10% mark annually over the next decade.

The icing on the cake is that this major shift in the energy mix has been carried out without threatening the Group's entire credit profile, at least so far: Ørsted maintains a net financial surplus, with a controlled debt maturity schedule and solid liquidity, considering its accessible lines of credit. The current transition, which is capital intensive, should now begin to put pressure on the company's credit ratios. Investors who help finance such a comprehensive, coherent strategy for transitioning the energy mix of a company such as Ørsted must factor it in. This is sustainable finance: the growth prospects of the market that the Danish group targets with unique resources, combined with the impact of its industrial policy, will have long-term effects. A virtually perpetual bond is in line with this approach.

Regulations and market news

From a regulations standpoint, the coronavirus crisis has sparked many debates. Would the crisis accelerate or slow down the emergence of regulations conducive to achieving the sustainable development goals (SDGs)? Europe, in spite of rather heated internal discussions, seems to be managing to maintain a somewhat decisive approach in this regard. On April 15, the President of the European Commission, Ursula von der Leyen, stated that "the Green Deal is the right response to the crisis."
Biodiversity, which was supposed to be the top global priority in 2020, has not been completely moved from the equation. Although major international conferences have been postponed until 2021, the European Commission (EC) published its 2030 biodiversity strategy in May. In particular, it aims to protect 30% of the land and seas within the European Union, versus 26% and 11% currently. This figure is consistent with the first working documents from the 15th meeting of the UN Convention on Biodiversity (COP 15) in January 2020, which call for the protection of 30% of the planet. The EC has also outlined its ambitious objective of halving the use of pesticides by 2030. These objectives help us to plan for an in-depth transformation of agricultural practices in Europe. The emergence of these new production methods will probably require innovative financing.
Regarding financial regulations, the EC is pursuing the action plan launched in March 2018. Following the creation of Technical Expert Groups (TEGs), good progress has been made on green taxonomy, low carbon indices and the development of green bond standards. In particular, reports have been published to provide insight into the new pending rules. An initial publication and consultation on the development of MiFID[12] regulations should take place in June. Investors will then be in a position to express their preferences on integrating sustainability into their investment decisions. The regulation on ESG (Environmental, Social and Governance) communication by investors is expected to take effect in March 2021. A European eco-label is also scheduled for investment funds by end-2021. To capitalize on this momentum, an EC consultation is underway to repurpose its sustainable finance strategy.
This pan-European drive for action is also present in member countries. In March, the AMF (French Financial Markets) published a doctrine regarding investor information on ESG criteria. Even if it potentially undermines the French SRI label by not making it mandatory for funds that define themselves as "responsible," the doctrine clearly seeks to ensure more consistent communication regarding on these subjects. In Germany, an advisory committee on sustainable finance, the “Sustainable Finance Beirat der Bundesregierung,” has drafted recommendations for the federal government's sustainable finance strategy.
The sudden burst in regulatory activity clearly illustrates that the overall transformation of the economy, and of finance in particular, is still in its infancy. Financial market players are driving forward increasingly robust transformation strategies, centered on ESG issues. During these transition periods, in the absence of market standards, investors and regulators will have to pay closer attention to ensure their expectations are in line with the day-to-day processes.

12 Markets in Financial Instruments Directive (MiFID)

FIG.8 SUMMARY OF THE EUROPEAN COMMISSION'S ACTION PLAN ON SUSTAINABLE FINANCE

	OBJECTIVES	MAIN ADVANCES BY END-MAY 2020
REORIENT CAPITAL FLOWS TOWARDS A SUSTAINABLE ECONOMY		
1. TAXONOMY	Set out a list of activities providing answers to sustainable development issues.	- TEG Climate Taxonomy Report published in March 2020, delegated act scheduled for December 2020; - Development, publication and delegated act on other environmental issues scheduled for December 2021.
2. STANDARDS & LABELS	Develop European standards (such as the European standard on green bonds) and labels for sustainable finance products (via the ecolabel).	- TEG report on green bond standards, published in March 2020; - Multiple working groups on the European ecolabel. Goal is to roll out label in September 2021.
3. PROMOTE INVESTMENT IN SUSTAINABLE PROJECTS	Explore measures to improve the effectiveness and impact of investment support instruments. Mapping of investment and funding gaps.	Increased involvement of the European Investment Bank (EIB) in sustainable investment issues (e.g. the EIB announced in November 2019 that it would stop financing new fossil energy projects, including gas projects, as of 2022).
4. INCORPORATE SUSTAINABILITY WHEN PROVIDING INVESTMENT ADVICE	Amend the MiFID II and SDI delegated acts to ensure that investors' sustainability preferences are taken into account.	Submit first text for consultation, publication scheduled for June.
5. DEVELOP SUSTAINABILITY BENCHMARKS.	Develop "climate" stock market indices and ESG reporting rules for traditional indices.	TEG report on climate benchmarks and ESG benchmarks, published in March 2020.
INCORPORATE SUSTAINABILITY IN RISK MANAGEMENT		
6. IMPROVE SUSTAINABILITY INTEGRATION IN RATINGS AND MARKET RESEARCH.	Explore how credit rating agencies could incorporate sustainability more explicitly into their assessments. Study sustainable development ratings and research and explore possible measures to encourage their adoption.	A sustainability consulting firm was appointed in December 2019 to conduct a study on sustainable development ratings and research.
7. ENSURE ESG TRANSPARENCY (DISCLOSURE).	Increase transparency for end investors on how financial market participants view sustainability.	New ESG reporting framework for financial market participants effective in March 2021.
8. INCORPORATE SUSTAINABILITY IN PRUDENTIAL REQUIREMENTS.	Explore the possibility of reporting on sustainability within prudential rules (if justified from a risk perspective).	Technical assessment in progress.
DRIVE TRANSPARENCY AND A LONG-TERM VISION		
9. STRENGTHEN SUSTAINABILITY REPORTING AND ACCOUNTING REGULATIONS (NON-FINANCIAL REPORTING DIRECTIVE - NFRD)	Improve corporate climate and sustainable development disclosure.	NFRD consultation underway.
10. LEVERAGE SUSTAINABLE CORPORATE GOVERNANCE	Gather evidence of excessive short-term equity market pressures on companies and consider measures to promote corporate governance that is more conducive to sustainable investment.	The EC Commission will consult with the financial community on this matter.

Source : Mirova

FOCUS Shareholders and companies in a show of solidarity amid the crisis

Mirova calls on companies within its voting scope to exercise caution, effective as the season of Annual General Meetings begins. We have always championed corporate sustainability, which creates value for all stakeholders. In light of the pandemic's impact on our society and the economy, we believe that companies must exercise caution in dividend payments and share buybacks with a view to preserving jobs and ensuring the sustainability of their business.

We sent our call to action to 457 CEOs. In doing so, we specified that in the absence of information demonstrating a shareholder compensation policy adapted to the health crisis, Mirova would oppose the resolutions concerned. More than half of the annual general meetings (AGMs) still have not been held. However, around fifty companies have already addressed the issue head-on. Dozens of other companies have expressed their views publicly. In the case of companies already contacted, the procedure is proving equally successful and complex. On the one hand, it is complex since companies must specifically assess their own position. First, they must assess the scale of the pandemic's impact on their activity and stakeholders. Second, they must examine this observation in the context of their financials. On the other, it has been a success because the message seems to have been rather well received by companies. Most of them have embraced our call to action. Apart from the lack of communication by too many companies, the main drawback still lies in short-termism. The latter is often adopted as an approach in order to assess the impact of the crisis and quantify the financial resources needed to ride it out in the long run. While it is true that we are all experiencing tunnel vision as regards the impact of this pandemic, it is highly likely that the repercussions will ripple through beyond this half-year.

Today, the challenge is to encourage as many companies as possible to provide full reporting on the economic and social results delivered by their crisis management strategy in their next publications. Such a strategy is founded upon the decision to adopt a policy that shares value in a way that ensures sustainability for the company and all stakeholders alike.

Measuring

Mirova Consolidated Equity

31/03/2020 – Index: MSCI Europe

Impact on the achievement OBJECTIFS DE DÉVELOPPEMENT DURABLE (SDGs)

EXPOSURE TO POSITIVE/FAVORABLE IMPACT TO SDG

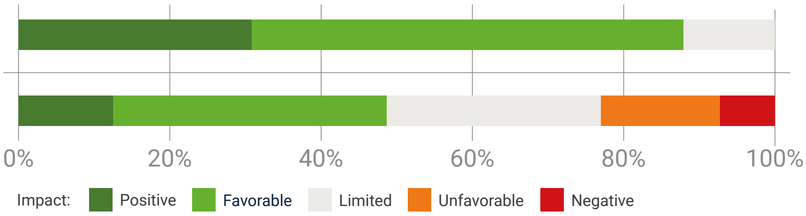
Fund 88%

VS.

Index 51%

Coverage rate for fund: 96%
Coverage rate for the index: 99%

% OF ASSETS*



*Cash and cash equivalent excluded

Source : Mirova

Key impact indicators

CLIMATE CHANGE

Climate change trajectory

Funds
+1.5°C

VS.

Index
+3.8°C

Coverage rate for fund: 98%
Coverage rate for the index: 99%

Source : Carbone4/Mirova

GENDER EQUALITY

Women in executive committees

Funds
19%

VS.

Index
16%

Coverage rate for fund: 96%
Coverage rate for the index: 98%

Source : Mirova

EMPLOYMENT

Average yearly change in workforce (2015-2018)

Funds
7%

VS.

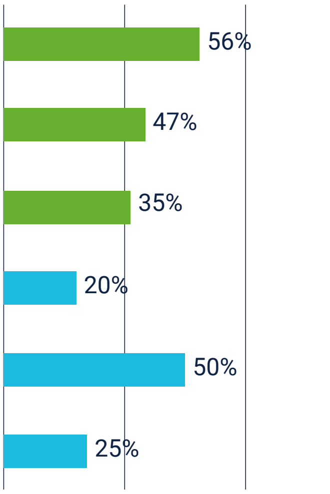
Index
4%

Coverage rate for fund: 100%
Coverage rate for the index: 100%

Source : Mirova, from company reports

Impact mapping to the SDGs

		Share of positive contributors*
ENVIRONNEMENT	CLIMATE STABILITY Limit GHG levels to stabilize global temperature rise under 2°C	56%
	HEALTHY ECO-SYSTEMS Maintain ecologically sound landscapes and seas for nature and people	47%
	RESOURCE SECURITY Preserve stocks of natural resources through efficient and circular use	35%
SOCIAL	BASIC NEEDS Basic services (Food, water, energy, shelter,health, etc.) for all	20%
	WELL BEING Enhanced health, education, justice and equality of opportunity for all	50%
	DECENT WORK Secure, socially inclusive jobs and working conditions for all	25%



Corresponding SDGs

*Sum of strategy/index holdings with Positive or Committed opinion, cash and cash equivalents excluded

Source : Mirova

Mirova Consolidated Fixed Income

31/12/2019 – Index: Barclays Euro Aggregate Corporate

This information relates to all the fixed income funds managed by Mirova

Impact on the achievement of the SUSTAINABLE DEVELOPMENT GOALS (SDGs)

EXPOSURE TO POSITIVE/FAVORABLE IMPACT TO SDG

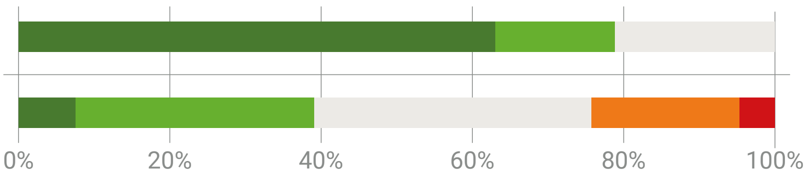
Fund 78%

VS.

Index 39%

Coverage rate for fund: 96%
Coverage rate for the index: 99%

% OF ASSETS*



Impact: Positive Favorable Limited Unfavorable Negative

*Cash and cash equivalent excluded

Source : Mirova

Key impact indicators

CLIMATE CHANGE

Climate change trajectory

Funds

+1.5°C

VS.

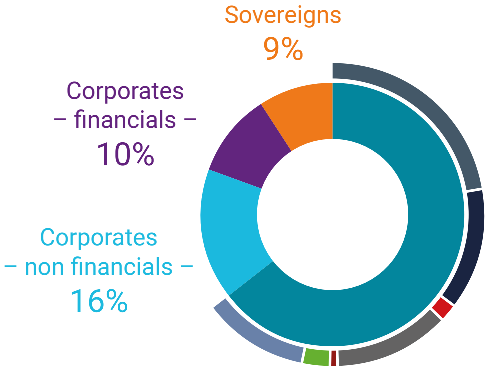
Index

+3.9°C

Coverage rate for fund: 75%
Coverage rate for the index: 88%

Source : Carbone4/Mirova

SUSTAINABILITY BONDS



Sustainability bonds 64%

22% Renewable energy
13% Energy efficiency
2% Sustainable waste & water management
12% Clean transportation
1% Other environmental
0% Affordable housing
3% Other social
11% Diversified

Source : Mirova

Impact mapping to the SDGs

		Share of positive contributors	Corresponding SDGs
ENVIRONMENT	CLIMATE STABILITY Limit GHG levels to stabilize global temperature rise under 2°C	77%	4, 13
ENVIRONMENT	HEALTHY ECO-SYSTEMS Maintain ecologically sound landscapes and seas for nature and people	54%	14, 15
ENVIRONMENT	RESOURCE SECURITY Preserve stocks of natural resources through efficient and circular use	48%	12
SOCIAL	BASIC NEEDS Basic services (Food, water, energy, shelter, health, etc.) for all	9%	1, 2, 3, 6, 7, 10
SOCIAL	WELL BEING Enhanced health, education, justice and equality of opportunity for all	15%	3, 4, 5, 10, 11, 16
SOCIAL	DECENT WORK Secure, socially inclusive jobs and working conditions for all	10%	8, 9, 10

Source : Mirova

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Investing in sustainability

June 2020
Finalized June 12, 2020

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