www.eurofi.net

EUROFI
REGULATORY UPDATE

FEBRUARY 2022

INSIDE

- MACRO-ECONOMIC CHALLENGES
- CAPITAL MARKETS UNION
- BANKING REGULATION
- SUSTAINABLE FINANCE
- DECENTRALIZED FINANCE (DEFI)

eurofi

VISIT OUR WEBSITE

WWW.EUROFI.NET

for our latest publications
on the actions for relaunching
growth post-Covid and on-going
trends and policy developments
in the financial sector

EUROFI POLICY NOTES

PUBLIC AND PRIVATE SECTOR VIEWS

CONTENT

The Regulatory updates in the following pages were drafted by Didier Cahen, Marc Truchet and Jean- Marie Andrès as a background to the discussions of the Eurofi Paris High-Level Seminar and do not engage in any way the French authorities or the speakers taking part in this event.

1

MACRO-ECONOMIC CHALLENGES

ECB NEEDS TO CHANGE GEAR

Note written by Didier Cahen & Jacques de Larosière

During the Lehmann Brothers, EU sovereign debt and Covid crises, central banks and fiscal policies played a crucial role and intervened on an unprecedented scale to keep financial markets liquid and stabilize the financial system.

Meanwhile central banks have been overly involved during the past years. No well-functioning economy should operate with real interest rates that remain negative for too long: capital is then misallocated and growth impaired.

Can money creation indefinitely outpace the pace of economic growth? Can we ignore the financial vulnerabilities created by zero interest rates, the inexorable rise in global debt and the "search for yield" when productive investment has performed poorly over the past 15 years? Does the resumption of activity in Europe require the extremely accommodative stance of monetary policy? Can we stop inflation in Europe with increasingly negative real interest rates and continued QE programmes? Is the priority mission of central banks to protect States from fiscal difficulties by financing their deficits rather than to protect the purchasing power of citizens by fighting inflation, even if it means risking a social crisis to avoid a financial crisis?

The continuation of very low interest rates in the euro area would intensify already negative consequences for financial stability, growth and employment. As the Eurofi monetary scoreboard (February 2022) demonstrates, pushing too hard and too long on the monetary pedal has severe negative consequences: the lasting excessively accommodative monetary policy enhances incentives to borrow more and increase financial leverage, disincentives governments to undertake structural reforms since borrowing "no longer costs anything". Persistent low or negative interest rates induce a fatalistic mindset that lowers, not raises, propensity to invest. Under what J.M. Keynes called the "liquidity trap", investors play safe by placing savings in very short-term instruments rather than deploying them longer term when low interest rates bring them inadequate returns for higher risks.

The social significance of persistent very accommodative monetary policies should not be underplayed. Did they help reduce societal inequalities? In fact, the opposite is true; they tend to make societal disequilibria worse because the beneficiaries have been those who have the income and capital to profit from inflated financial and asset markets. Not poor people.

Thinking that monetary creation can notably solve the problems arising from excessive debt is an illusion. Yet this is what has been too often tried by pursuing lax fiscal, monetary and political policies that will inevitably pose systemic risks to financial stability and therefore to future growth. Actually, the huge monetary and fiscal stances of the last decades have not led to investment or higher growth. In other words, supply-side obstacles cannot be resolved by throwing conjunctural money at problems.

Monetary policy can erase spread differentials in the euro area but cannot relaunch capital flows from the North to the South. Indeed, since the EU sovereign debt crisis, Member States with excess savings (Germany and the Netherlands in particular) no longer finance investment projects in lower per-capita-capital countries (Spain, Italy, Portugal, Greece). This is notably due to the interest rate differential between the US and Europe (the risk is better remunerated in the US than in Europe), the limited financial flows between the eurozone countries and the insufficient number of investment projects. These limited cross-border capital flows in the euro area reflect the persistent doubts of investors in Northern Europe about the solvency of states and companies in other countries, as well as the lack of a genuine Banking Union and integrated financial markets.

Policy makers need to rebuild safety margins. As stated by the BIS in its Annual Economic Report (June 2021), "an economy that operates with thin safety margins is vulnerable to both unexpected events and future recessions which inevitably come. These margins have been narrowing over time. Rebuilding them means re-normalising policy".

Inflation has risen sharply in recent months and could be more persistent than thought which would endanger the economic rebound: indeed, inflation is lowering notably real revenues and the earnings of companies with negative consequences not only for consumption, but also for investment.

Easy money policies have become even more accommodative because of rising inflation, which has caused negative real rates to fall still further. It is rational to believe that wage-earners will react substantially to higher prices. Trade unions will insist on some form of compensation or indexation to adjust wages. In theory if inflation abates, price adjustments should disappear. But experience shows that it takes a long time to get rid of indexation, because it comes a habit and even a social right.

Central banks are behind the curve and need to move more quickly. In such a context, Federal Reserve Chairman Jerome Powell has announced an accelerated ending to the Fed's quantitative easing through massive government bond purchases. This delivers an urgent message worldwide. If central banks fail to act now, the economic rebound could be running into severe problems. Inflation will lower real revenues, prompting destabilizing wage demands, from income-pressed workers.

The world should move gradually and cautiously towards monetary normalisation, in order to avoid a cliff effect. Central banks should pursue without compromise their primary objective of monetary stability, especially without taking governments' funding costs into consideration as well as the kind of addiction and dominance of markets that is hard to give up, markets regularly challenging central banks with instability and the threat of correction as an — even modest — tightening in monetary conditions approaches in the end acting as inhibitors.

As W. White stated, "until now, central banks have been lured into a "debt trap" where they refrain from tightening, to avoid triggering the crisis that they wish to avoid, but that restraint only makes the underlying problems worse".

Normally, central banks policies should tighten when inflation threatens, and overheating is apparent. Instead, we see the opposite: a significant de facto loosening. The climbing of inflation from 1% to 5% in Europe with still no significant upward adjustment in interest rates results in a huge further monetary stimulus. Responding this with assurances that price pressures are 'transient' is not sufficient.

Waiting too long will not make life easier: neither for central banks nor for the economy. Indeed, the risk is that hesitation could force central banks to tighten credit far more abruptly later on, causing more pain than if they acted in timely fashion. Preparing for European interest rates to return to more normal levels would not only be a signal of central bank independence on both states and markets, but also be the first step to a more productive post-pandemic period of higher growth and productive investment.

Fostering a sustainable path to stronger growth is essential, notably in the current indebtedness environment. Raising long term potential growth requires structural reforms, an appropriate remuneration of risky investments and sustainable fiscal policies designed to deliver a flexible and competitive economy. Lost competitiveness due to postponed reforms in many EU countries, has led to the deterioration of the potential growth which cannot be improved by cyclical policies. Monetary policy cannot do everything; and more productive investment does not require more redistribution by budgets: only domestic structural — supply side oriented — reforms can resolve structural issues and foster productivity and growth. The Next Generation EU package, if well implemented, should be useful in this respect.

In over-indebted countries, governments must take corrective actions to ensure a path of primary fiscal balances and reduce unproductive and inefficient public spending. Reforming the Stability and Growth Pact is an urgent necessity.

Only productivity enhancing, and productive investment can create sustainable increases in productivity, neither negative rates, nor QE.

ENSURING GROWTH AND FINANCIAL STABILITY IN EUROPE WITH OVER PUBLIC INDEBTEDNESS AND THE RESURGENCE OF INFLATION

Note written by Didier Cahen & Jacques de Larosière

Even before the Covid crisis, global debt was at an all-peacetime record due to over accommodative monetary policies in advanced countries over the past 20 years. The debt situation has been worsening with the Covid crisis. In the current environment characterised by the return of inflation, the continuation of a monetary policy of very low interest rates in the euro area would intensify its negative consequences on growth, employment and financial stability.

The increase in public debt and unlimited money creation are a dangerous spiral for our economies. Increasing public spending and debt in over-indebted European economies inevitably leads to economic underperformance and to the questioning of the existence of the euro. Thinking that monetary creation can solve the problems arising from excessive debt is an illusion. Structural issues can only be resolved by structural policies: it is economic growth that eventually solves indebtedness issues.

Even before the Covid crisis, global debt was at an all-peacetime record due to over accommodative monetary policies in advanced countries over the past 20 years.

Global debt has reached record high levels. The continuation of very low interest rates during the past two decades has pushed many countries to implement active fiscal policies and economics agents to borrow more. This has driven global debt to records in peacetime, even before the Covid crisis. According to statistics issued by the IIF, global debt reached a record high of 360% of GDP in June 2021, up from 320% in 2019 and 200% in 2011. Public deficits have been booming and the public debt-to-GDP ratio has risen from 100% to 120% in the advanced countries within five years (2015-2020).

The very accommodative monetary policy in the euro area over the last 20 years explains to a large extent this public debt overhang. In fact, with lasting interest rates at ultra-low levels, debt service costs are at post war troughs. The debt burden has never felt so light. Thus, governments are under no pressure to reduce their debts. Negative interest rates encourage them to borrow more and has disincentivised fiscal discipline.

In Europe, the fiscal rules of the Stability and Growth Pact have not been obeyed by many large economies of the EU (France, Italy, Spain..., [1]) which has contributed to their over-indebtedness.

Furthermore, in the EU, the rules of the Stability and Growth Pact have, most of the time, not been respected by many large economies of the EU (e.g. France, Spain, Italy, Belgium) since their implementation in 2002. In those countries, gross public debt has continued to rise since the EU sovereign debt crisis (2011-2012). Such a dynamic is due to the accumulation of yearly large public deficits. Indeed, between 2014 and 2019, their average public deficit amounted to 3.2% of GDP (France), 2.3% (Italy) and 3.9% (Spain). Moreover, France, Italy and Spain entered the crisis with debt-to-GDP close or above 100%.

By contrast, Germany and the Netherlands entered the Covid crisis with healthy public finances, ensuring an average surplus of 1.2% and 0.04% of their GDP over the same period. Such fiscal efforts over 2014-2019 allowed them to gradually reduce and stabilise their public debt at respectively 60% and 48% of their GDP in 2019, to be in line with EU fiscal rules.

The debt situation has been worsening with the Covid crisis.

Following the Covid crisis, monetary and fiscal policies have been more active than before, widely contributing to the shock absorption.

Debt differences in the Eurozone have widened during the past two years, not converged (*see below*). The volume of French debt increased by 400 billion between March 2020 and September 2021, while those of Germany and Italy increased by 343 and 273 billion euros (ECB data). Sooner or later speculators will decide that such debt levels are unsustainable and drive Eurozone debt spreads much wider. Hence the need to establish disciplined and monitored medium-term debt reduction policies that convince international financial markets, or else a new Eurozone crisis is inevitable.

Central banks substantially eased the monetary policy stance over the course of 2020 to counter the negative impact of the Covid-19 pandemic on economies. According to the IMF, between March 2020 and July 2021 global central banks have increased their balance sheets by a combined $7.5 trillion and governments have spent $16trillion providing fiscal support amid the pandemic. Public deficits are the highest they have been since World War II and central banks have provided more liquidity in the past year than in the past 10 years combined.

1. In 2019, 16 of the EU members (including Germany and the Netherlands) had a public debt/GDP ratio below.

Can such persistent accommodating monetary and fiscal policies continue in Europe in particular?

The Annual Economic Report of the BIS (June 2021) states that "no well-functioning economy should operate with real interest rates that remain negative for too long: capital is misallocated and growth impaired" and adds that once the Covid pandemic is left behind and the economy has recovered, policy makers need to rebuild safety margins for both monetary and fiscal policy. "An economy that operates with thin safety margins is vulnerable to both unexpected events and future recessions which inevitably come. These margins have been narrowing over time. Rebuilding them means re-normalising policy".

The continuation of a monetary policy of very low interest rates would intensify its negative consequences on growth, employment and financial stability.

It is simplistic to believe that monetary financing and low interest rates will fundamentally take care of debt problems. As we have learned over the last years' experience, abundant liquidity and low rates do not result in higher productive investment but in liquidity hoarding.

Since 2008, M0 in major advanced countries (i.e., banknotes in circulation and bank reserves held at central banks) has increased by 13.50% per year, which is 4 times faster than nominal growth in the real economy. Between December 2007 and January 2020, M0 in the euro area increased by 13.6% per year on average[2], which is 5.4 times faster than nominal GDP growth. These figures show that the excess of liquidity has not been passed on the real economy.

The growth of M3 has also continuously exceeded real GDP growth both in the US and in the eurozone during the past decade. This gap has produced an excess quantity of money in the economies compared to effective economic growth. This excess money has not led to higher prices of goods and services until 2021 but has fuelled the rise in real estate and financial asset prices.

Furthermore, lasting ultra-loose monetary conditions are reducing economic dynamism. Lasting low interest rates do not foster by themselves, more productive investment. The facts are undisputable: non-residential tangible investment in advanced economies has significantly declined over the past ten years of zero interest rates (from 14.4% in 2000 to 11.5% in 2019 of GDP), according to IMF calculations. The rise in intangible investment[3] over the same period was less than the decline in tangible non-residential investment.

Interest rates that remain at zero for an indefinite period discourage investors from investing in risky projects and instead move into yielding and speculative assets. Household savings have shifted to liquid and non-risky assets, as investments no longer yield any return, in Europe in particular. In addition, low or negative interest rates induce a fatalistic mindset that lowers, not raises, propensity to invest. Under what John Maynard Keynes[4] called the 'liquidity trap', investors play safe by placing savings in very short-term instruments rather than deploying them on longer term, where low interest rates bring them inadequate returns for higher risks.

Thus, the liquid share of financial assets held by households and non-financial corporations increased from 10.2% in 2007 to 19.4% in 2019 in Germany and from 5.3% in 2007 to 7.4% in 2019 in France. The increase was also important in Spain and Italy over the same period of time (respectively +7.7 percentage points and +5.9 percentage points). Following the Covid-19 crisis, the figure reached 20.6% in Germany as of June 2021, 8.4% in France, 23.1% in Spain and 23.5% in Italy.

'Too low for too long' policies have also fuelled the survival of weak firms, increasing a misallocation of capital. Indeed, such prolonged monetary policy easing contributes to consolidate zombie firms (over-indebted and uncompetitive) that are only surviving because of the interest rate subsidy provided to them by monetary policy and incentivise companies to take on cheap debt rather than invest in long term projects.

The pursuit of such a loose monetary policy — "as if nothing had changed" — would be likely to eventually trigger a financial crisis with all its negative economic and social consequences. Indeed, the persistence of very low interest rates has led to overleverage and search for yield which has fueled asset bubbles and contributed to a weak profitability of the EU banking and life insurance sectors[5].

Lasting loose monetary policies have significantly increased wealth inequalities

The social significance of persistent low interest rates should not be underplayed. Did they help reduce societal inequalities? In fact, the opposite is true; they tend to make societal disequilibria worse because the beneficiaries have been those who have the income and capital to profit from inflated financial and asset markets. Not poor people.

2. Quarterly data.

3. Non-residential intangible investments that include patent, brand, trademark, copyright or software, have stagnated or increased slightly over the past two decades, reflecting the digitalisation of advanced economies. In AEs, it has increased from 4.3% of GDP in 2000 to 5% in 2019. But this dynamic did not compensate for the decline of total non-residential investment, that went from 19% of GDP in 2000 to 16.5% in 2019.

4. Keynes was in favour of low interest rates, but he specified not too low interest rates. Indeed, when they are too low, they deter savers from investing in long-term bonds and encourage them to either keep their savings in liquid forms, which they are doing, or in assets remunerated only because they are risky. On the other hand, entrepreneurs, discouraged by the prospect of no growth emanating from zero interest rates for a long time, are turning away from productive investment in favour of things like share buybacks and speculative opportunities. A European study from the prior year that showed over the last 10 years a massive and spectacular increase.

5. See the Eurofi Monetary Scoreboard – February 2022.

A report issued by the McKinsey Global Institute[6], notes that globally, net worth has tripled since 2000; but the increase mainly reflects valuation gains in real assets — especially real estate — rather than investment in productive assets that drive our economies. Rising asset prices and two decades of relatively low interest rates have helped expand the world's "balance sheet" to high levels, far outpacing underlying economic growth and raising questions over whether this can endure. Moreover, "asset values are now nearly 50 per cent higher than the long-run average relative to income", the report continues. "Not only is the sustainability of the expanded balance sheet in question; so too is its desirability, given some of the drivers and potential consequences of the expansion. For example, is it healthy for the economy that high house prices rather than investment in productive assets are the engine of growth, and that wealth is mostly built from price increases on existing wealth?".

The increase in public debt and unlimited money creation are a dangerous spiral for our economies. Increasing public spending and debt in over-indebted European economies inevitably leads to economic underperformance and to the questioning of the existence of the euro.

Large deficits and high levels of debt and deficit have not been conducive to growth, especially in Europe. Indeed, the most indebted countries, (e.g. France, Italy, Spain) have achieved the lowest growth performance of the eurozone since 2013[7]. The most indebted countries on the eve of the Covid-19 crisis have been the most severely hit in terms of output shortfall in 2020. Likewise, the most indebted EU Members have experienced close to double-digit level of unemployment rate since 2007, as Spain (14.5% in 2019), Italy (9.9%) and France (8.5%). Despite their significant deficit, the three countries are among those with the highest share of long-term and young unemployment rate.

By contrast, the EU countries that have best managed their public finances after the Global Financial Crisis and the EU Sovereign crisis (e.g. Germany, the Netherlands, Austria) are those that have suffered the least from the Covid-19 shock. At 4.2% of GDP (Germany) and 4.3% (the Netherlands), their 2020 public deficit has remained mainly below the Eurozone average of 7.2%. Those countries also record among the lowest unemployment rate within the euro area, with 3.2% for the Netherlands and 3.5% Germany as of June 2021[8].

As long as it is not sufficiently understood, notably in indebted countries (France, Italy, Spain etc.), that excessive debt is a source of under competitiveness, the economic situation in these countries will continue to deteriorate.

The economic consequences of the Covid-19 crisis are worsening the situation. They are increasing the heterogeneity of fiscal performance across euro area Member States. The aggregate government debt-to-GDP ratio rose by around 15 percentage points between 2019 and 2021, reaching respectively 92.1% and 100% in the EU/EA in 2021, according to forecasts from the European Commission. Italian and Spanish debts have jumped by more than 20 percentage points between 2019 and 2021 to reach respectively 154.4% and 120.6% in 2021. In France, it increased by 17 pp, to reach 114.6% of GDP in 2021.
By contrast, the public debt-to-GDP prudently increased during the same period by 9 percentage points in the Netherlands and 12.5 percentage points Germany respectively to 57.5% and 71.4%.

Fiscal coordination is needed in a monetary union. The reason stems from the fact that the Union European is not a state and that negative externalities — stemming from questionable national policies — should be taken into account and avoided. The European Monetary Union has a single monetary policy but no common fiscal and economic policy. Therefore the need for fiscal coordination. Some may think that fiscal discipline is no more indispensable because of the persistence of low interest rates. This is a profound misconception: interest rates will not stay at zero level for ever and the markets are already showing this. And to base a fiscal framework on the assumption of indefinite low interest rates and monetisation of public debt is not consistent with the functioning of our monetary union.

What we need is more long-term investment to cope with the challenges of reduced labour and the green and digital transition. This will not be achieved with more distribution through budgets or more money creation. It will only be possible if structural — supply side oriented — reforms as well as a normal remuneration of risky investments are made possible. This combination requires a reining in of excessive current public expenditure (i.e. fiscal normalisation), alongside a qualitative shift towards reasonable public investment.

If we continue to live on the illusion that fiscal stimulus can "replace" monetary stimulus, we will have two negative results:

- Fiscal dominance because fiscal stimulus cannot co-exist with high rates;
- A financial crisis because excessive leverage always leads to it.

Furthermore, if this fiscal drift were to continue, we would end up making the virtuous countries pay for the slippage. This is the definition of a non-cooperative game where most players try to avoid their obligations by shifting the cost to those who observe them. If this were the case, the logical result would be an inevitable, major, new crisis of the euro zone.

6. McKinsey Global Institute, "The rise and rise of the global balance sheet", November 2021.

7. See the Eurofi Macroeconomic scoreboard – February 2022.

8. According to Moody's Analytics Economic Indicators (can be found at https://www.economy.com/indicators).

Thinking that monetary creation can solve the problems arising from excessive debt is an illusion.

Since March 2020, central banks have been carrying a primary role in public debt monetisation, as they purchase a large share of new public debt issuances[9]. In sight of the massive debt purchases, central banks have de facto become the agents of fiscal policies. This "fiscal dominance" that is presently taking place puts in question the independence of central banks and is a major disincentive for governments to engage in structural reforms.

Moreover, the idea that States can compensate for everything by exposing their balance sheets is unfortunately a fantasy. Indeed, it is not because budget deficits are monetised that they disappear. Despite the QE and its possible magnitude, the budget constraint remains. Analysts and rating agencies continue to examine ratios and make judgments about the quality and sustainability of public debt. This point should not be taken lightly: rating changes are an important element of an issuer's "signature" and a key factor in the decision to buy securities by private investors, especially non-residents. As they are very sensitive to the rating, they still play a decisive role in the demand for public securities offered for issue.

Considering that these judgments voiced by the markets actually do not matter, because the central bank will always be there to buy, is doubly inaccurate: the central bank will not always be able to buy everything, as we shall see below, and the quality of a state's signature is an essential element of confidence that must be preserved at all costs for the country's future.

The continuation of the monetisation of an increasing share of public debt stock and new issues would eventually promote financial instabilities and lead to a loss of confidence in the currency. The ECB cannot absorb all public debt forever. If some national central banks are theoretically free to monetise the entirety of their states' public debt, the same cannot be said of the ECB, which is governed by an international treaty that prohibits the monetisation of public debt. Similarly, the idea that central banks purchasing public securities could cancel their assets in order to reduce their states' debt to zero is, in the European case, legally impossible. The subsidy to the states that would be implied by the cancellation of public debts is not compatible with the Maastricht Treaty, which prohibits the monetary financing of Treasuries.

We cannot pretend that money creation can exempt our societies indefinitely from having to face the question: "who will pay?". Do we seriously believe that unlimited issuance of sovereign securities will never come up against a fundamental questioning of the markets as to the solvency of States?

If inflation is not quickly addressed by central banks, economies, notably in Europe, may soon face the risk of stagflation.

Moreover, inflation has been rising in many countries for several months. Bottlenecks and energy prices have played a role. However, the current inflation spike is driven by structural factors and could last longer than expected[10], which would endanger the economic rebound.

In a recent paper[11], Mervin King noted that money has disappeared from modern models of inflation and explained that it would be a mistake to pretend that money has nothing to do with inflation and to believe that monetary stimulus is an appropriate response to all economic problems. When monetary policy is too tight, it slows aggregate demand. When monetary policy is too loose, it damages aggregate supply. The current period of high inflation has been coinciding with a substantial increase in the quantity of money emanating from aggressive central banks' interventions since March 2020.

This coincidence may be reviving the monetarist view, considering "inflation as always and everywhere a monetary phenomenon" in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output. In other words, the amount of 'excess money' resulting from a mix of highly expansionary fiscal and monetary policies may have led inflation to be a monetary phenomenon. If this is true, the inertia of central banks in withdrawing extraordinary policy would be the proximate cause of surging prices.

Central banks are behind the inflation curve. In such a context, Federal Reserve Chairman Jerome Powell has announced an accelerated ending to the Fed's quantitative easing through massive government bond purchases. This delivers an urgent message worldwide. If central banks fail to act now, the economic rebound could be running into severe problems. Inflation will lower real revenues — prompting distorting wage demands, from income-pressed workers — with negative consequences not only for consumption, but also for saving and investment (inflation is lowering the earnings of companies).

Therefore, central banks need to move more quickly; they should pursue without compromise their primary objective of monetary stability, especially without taking governments' funding costs into consideration as well as the kind of addiction and dominance of markets.

It is economic growth that eventually solves indebtedness issues.

A monetary union does not by itself create economic convergence. The eurozone is a currency area comprising heterogeneous countries (their productivity levels,

9. Refer to the Eurofi Monetary Scoreboard: 64% of French debt issuances have been bought by the Eurosystem in 2020. The figure reaches 79.8% in Germany, 70.1% in Spain, 74.5% in Austria, 101.3% in Italy, 98.5% in the Netherlands.

10. See, J. de Larosière, D. Cahen and E. Krief, Eurofi Monetary Scoreboard, February 2022.

11. M. King, "Monetary policy is a world of radical uncertainty", Institute of International Monetary, research annual public lecture, 23 November, 2021.

their productive specialisation, the level of fiscal deficits and indebtedness, the level of labour force skills are different) with a low level of federalism. The Covid-19 crisis has exacerbated these existing heterogeneities across EU Member States[12].

Monetary policy can erase spread differentials in the euro area but cannot relaunch capital flows from the North to the South. Indeed, since the EU sovereign debt crisis, Member States with excess savings (Germany and the Netherlands in particular) no longer finance investment projects in lower per-capita-capital countries (Spain, Italy, Portugal, Greece). This is notably due to the interest rate differential between the US and Europe (the risk is better remunerated in the US than in Europe), the limited financial flows between eurozone countries and the insufficient number of investment projects. These limited cross-border capital flows in the euro area reflect the persistent doubts of investors in Northern Europe about the solvency of states and companies in other countries, as well as the lack of a genuine Banking Union and integrated financial markets.

Adequate remuneration of risk, implementation of structural, supply side-oriented reforms and sustainable fiscal policies are essential to promote a return to healthy growth in overindebted countries.

The world should move gradually and cautiously towards monetary normalisation, in order to avoid cliff effect. Preparing for European interest rates to return to more normal levels would also be the first step to a more productive post-pandemic period of higher growth and investment. A key condition will be ample cooperation between the monetary authorities in the leading countries, in line with standard practice not just in the 1980s and 1990s but also during the 2008 crisis.

Fostering a sustainable path to stronger growth is essential. Raising long term potential growth is of the essence to solve the indebtedness issue. This requires structural reforms and sustainable fiscal policies designed to deliver a flexible and competitive economy. Lost competitiveness due to postponed reforms in many EU countries in particular has led to the deterioration of the potential growth which cannot be improved by cyclical policies. Monetary policy cannot do everything: only domestic structural reforms can resolve structural issues and increase productivity and growth. The Next Generation EU package, if well implemented, should be useful in this respect.

In over indebted countries, governments must take corrective actions to ensure a path to primary fiscal balances and reduce unproductive and inefficient public spending. In Europe, reforming the Stability and Growth Pact is an urgent necessity[13]. Only productivity enhancing, and productive investment can create sustainable increases in productivity, neither negative rates, nor QE.

* *

*

12. See J. de Larosière, D. Cahen & E. Krief, Eurofi Economic Scoreboard, February 2022.

13. J. de Larosière & D. Cahen, "Reforming the Stability and Growth Pact" – February 2022 (available in the Eurofi Regulatory Update – February 2022).

REFORMING THE STABILITY AND GROWTH PACT

Note written by Didier Cahen & Jacques de Larosière

European fiscal rules, as enshrined in the Stability and Growth Pact, are currently suspended to allow governments to fight the economic fallout from the pandemic. Under current plans, these fiscal rules will be enacted again in 2023 and the EU Commission should put forward its SGP reform proposals this summer.

This subject is far from simple. The rules of the Stability and Growth Pact have become difficult to interpret let alone implement.

Behind this difficulty, it must be understood that the subject is complex, not least because of the heterogeneity of the economic and financial situations of the Member States which has been increased by the Covid crisis.

The purpose of this note is to propose principles for the revision of the Stability and Growth Pact and in particular more individualized rules for each Member State, less dependent on abstract figures and at the same time more rigorous so that the new EU fiscal framework becomes more effective

1. AN EU AND ADAPTED FRAMEWORK FOR A COMMON DISCIPLINE

1.1 Why do we need fiscal discipline in a Monetary Union?

Fiscal coordination is needed in a monetary union The reason stems from the fact that the Union European is not a state and that negative externalities — stemming from questionable national policies — should be taken into account and avoided. The European Monetary Union has a single monetary policy but no common fiscal and economic policy. Therefore, the need for fiscal coordination.

The purpose of EU fiscal rules should be to reduce the risk of debt crisis related spillovers across Member States, by making sure that each country's debt remains sustainable. In the event of a crisis, no responsible state should ever accept financing current public deficits generated by other members of the Union that do not follow the rules of the Union. If all countries ensure the sustainability of public debt, national debt crises that threaten the existence of the euro would be avoided and confidence among Member States would be boosted.

In addition, sound public finances are essential for growing out of debt. They represent an important safeguard to the single monetary policy and keep away monetary policy makers from being under pressure to guarantee government solvency.

Some may think that fiscal discipline is no more indispensable because of low interest rates. This is a profound misconception: interest rates will not stay at zero level for ever and the markets are already showing this. And to base a fiscal framework on the assumption of indefinite low interest rates and monetization of public debt is not consistent with the functioning of our monetary union.

1.2 The increased heterogeneity of the economic and financial situations of the Member States

In the euro area, between 2007 and 2019, the aggregate government debt-to-GDP ratio rose from 65.9 % to 85.9% — one-third more debt compared to the pre-crisis level. In France, the public debt ratio compared to GDP has increased even more from 64.5% to 97.5% of GDP between 2007 and 2019. In Italy the public debt ratio has grown from 103.9% to 134.7% and in Spain from 35.6% to 95.5%. However, by contrast, in Germany public debt has decreased from 64.1% in 2007 to 59.2% in 2019.
Except for very few countries, the fiscal rules of the SGP have not been obeyed.

The economic consequences of the current Covid-19 crisis are worsening the situation. They are increasing the heterogeneity of fiscal performance across euro area member states. The aggregate government debt-to-GDP ratio rose by around 15 percentage points between 2019 and 2021, reaching respectively 92.1% and 100% in the EU/EA in 2021, according to forecasts from the European Commission.

Between 2019 and 2021, fiscal divergences rose further in terms of public debt-to-GDP ratio (+14% in standard deviation[1]). Indeed, six EU Member States still saw their public debt exceeding 110% of GDP in 2021: Greece (202.9%), Italy (154.4%), Portugal (128.1%), Spain (120.6%), France (114.6%) and Belgium (112.7%). By contrast, sixteen EU countries kept their ratio below 75% of GDP in 2021. Among them, Germany, the Netherlands, and Finland had their public debt compared to GDP hovering respectively at 69.2% of GDP, 56.8% and 71.2% in 2021.

After the Covid-19 crisis, the public debt-to-GDP ratio is projected to stabilize at elevated levels in EU Member States. For 2022, the ratio would fall marginally in France from 114.6% of GDP in 2021 to 113.7%. It would drop by 2.4 pp in Spain (from 120.6% to 118.2%) and by 3 pp in Italy (from 154.4% to 151.4%), according to the EU Commission[2].

In such a context, it would be rational to propose that each member country should outline a specific path for

1. Standard deviation of debt-to-GDP ratios, computed for the European Union with ECB data on government debt.

2. Forecast released in November 2021.

reducing its public debt which would take account of specific local parameters (level of savings, economic potential...) and debt sustainability but it should be up to EU Institutions to discuss and formally validate these plans notably to avoid any asymmetry of treatment between small and large countries.

1.3 Structural problems need to be addressed by structural reforms; a qualitative change in budget expenditure is also required: from unproductive to productive goals

A proactive fiscal policy to "substitute" for a dwindling monetary policy would be a great mistake. Fiscal or monetary stimulus will not necessarily enhance potential growth. Indeed, the huge monetary and fiscal stances of the last decades have not led to investment or higher growth. There is no automatic substitution effect: less monetary expansion offset by more fiscal deficits.

Fiscal deficits — if they are increased above their huge present levels — will only be possible if monetary policy and interest rates remain accommodative. One of the most concerning consequences of accommodative and low rates for long policies has been precisely the marked reduction in real terms of global productive investment over the last 15 years: lasting low interest rates do not foster, by themselves, more productive investment[3]. What they do — notably in the EU — is to encourage savers to keep their financial assets in liquid instruments and not to channel them in securities geared to long term investments[4].

What we need is more long-term investment to cope with the challenges of reduced labour and ecology. This will not be achieved though more distribution through budgets or more money creation. It will only be possible if structural — supply side oriented — reforms as well as a normal remuneration of risky investments are made possible. This combination requires a reining in of excessive current public expenditure (ie fiscal normalization), alongside a qualitative shift towards reasonable public investment.

If we continue to live on the illusion that fiscal stimulus can "replace" monetary stimulus, we will have two negative results:

- Fiscal dominance because fiscal stimulus cannot co-exist with high rates;
- A financial crisis because excessive leverage always leads to it.

1.4 Distinguish between legitimate and abnormal fiscal heterogeneity

A rule adapted to certain circumstances may not make sense in another context. Over the years, attempts to pre-program all possible contingencies have led to excessive complexity while Member States have not wished to give the Commission effective powers to adapt the rules to specific situations.

To work on this complexity, first it is critical to understand what could be called the "legitimate heterogeneity". If Greece is on one side and Germany the other, the structures, histories and capabilities are different. Homogeneity will not be attained because of a 3% rule or a 60% rule. It is thus important to distinguish between legitimate heterogeneity, which is, in many cases, the product of history, and "abnormal" heterogeneity, which is the incremental heterogeneity that has been created by public action or inaction. This has to be analysed carefully. If abnormal heterogeneity is detected, it can be worked on, not necessarily to erase it in a couple of years but to start working gradually on that element.

1.5 Better internalize the European framework in domestic systems

We need to recognize that the present system of sanctions has not been observed because the figures and norms were considered as externally imposed. As Tuomas Saarenheimo, President of the EU's Economic and Financial Committee, pointed out during an exchange of views at a Eurofi Seminar in April 2021, it would not make much sense to go back to a disciplinary system based on sanctions. The purpose should be to introduce into the European mechanisms an intelligent view of the priorities to be implemented on a State-by-State basis. That is the real challenge.

The framework seems more important than the precise rules, if 'rules' means a set of numbers. A set of numbers in itself is not going to solve the credibility problem for the framework. What will be helpful is finding ways for countries to better internalise the framework in their domestic systems. This by definition would be better than pretending to apply sanctions.

Promoting transparent discussions on fiscal issues between an independent EU fiscal authority and each Member State is a right approach. Having a dialogue like the one at the IMF for article IV would certainly be a progress. Socratic discussion leads to a quantum of realism and is a better approach than having a few arithmetical rules that will never be applied.

A fiscal-stabilisation facility should also be added to this new EU fiscal framework so that, in exceptional circumstances — when, for instance, the Commission declares that a country is in exceptional circumstances and there is a reason to activate the escape clause — additional fiscal space from the European side is made available to the country. These are all elements where it will not be easy to find a consensus in the Eurogroup.

2. THE GIST OF A COMMON FRAMEWORK

The approach would be to achieve a mechanism that is sufficiently adapted to the problems — by definition different — of each of the Member States, by establishing common standards under European

3. See Eurofi Economic and Monetary Scoreboards, February 2022.
4. Long-term investments do not produce returns consistent with the risks involved in such projects. So, savers act rationally and prefer to keep liquid banking accounts that are easily mobilizable. This is the "liquidity trap" feared by Keynes which is particularly severe in European countries that do not have the risk appetite for equity that characterizes US markets.

supervision in order to achieve credible and realistic debt-reduction trajectories and build fiscal buffers to face new unexpected challenges.

2.1 A case-by-case framework

Macroeconomic circumstances and the debt dynamics are different for every country. Sustainability of public finance very much depends on country specific factors (level of potential growth of savings and taxes, type of government...) and equal treatment of EU Member States does not necessarily mean "one-size-fits-all" rules.

The revised common framework should define, on a State-by-State basis and in a medium-term perspective, the realistic budgetary guidelines which best reflect the particular national and Community interests.

Each state would have to explain its orientation by focusing on its own priorities. The European authorities (European Commission, ESM) should regularly monitor the implementation of what would reflect the common understanding on these issues.
This is important because the markets are guided more by dynamics than by absolute numbers in determining country spreads. Because monetary policy will not always be there to buy all the new sovereign issues, it will be imperative to reassure the markets by gradual fiscal normalization policy.

From this point of view, the updated fiscal rules should include special monitoring of the primary balance by prohibiting primary deficits for over indebtedness countries with lasting excessive fiscal deficits (*see below*).

2.2 A set of rules adapted to each problem (expenditure, primary balances, debt)

Some countries rely too much on public expenditure, which then deteriorates all their fiscal situation. A precise rule **on the reduction of public expenditure** — and not on the growth of public expenditure — is therefore necessary. Otherwise, the overburdening of taxes and contributions on businesses will continue to penalize those countries because they will remain above the threshold of competitiveness gap.

It should be suggested that countries with excessive government spending compared with average of the euro area, will need to focus on significantly **reducing** this particularity — and not just increase them in line with potential growth — with a well-established and monitored nominal spending rule. Such a rule could be the following: "Any country that exceeds "the average normal" of public expenditure to GDP in the eurozone would have to eliminate the difference in a period of 5 years or less". This would be a specific constraint to be monitored at the EU level.

It is indeed problematic to reach 55% of public expenditure on GDP (before Covid) when the European average is 8 to 10 percentage points lower. In this respect, a country like France, which holds all records of public spending relative to GDP, devotes only a small amount of resources to productive public investment. Absorbing 55% of GDP to finance the "end of the month" is much more dangerous than if much of it were spent on public investment. Such a situation is incompatible with future growth and requires more active treatment. The new European mechanism will have to take this into account.

A ceiling on public expenditure growth, in such situations, would be inappropriate and contribute to maintain — and even increase — fiscal and competitiveness heterogeneities across Member States.

2.3 Primary fiscal balances

The countries with large fiscal deficits (>3% for instance) and over indebtedness (>100% of GDP for example) should achieve and maintain a primary surplus to be defined and monitored by the EU Commission or the independent EU fiscal authority (*see 2.8*).

2.4 Keeping the 3% of GDP deficit rule — a minimum ratio in normal times — is a reasonable option

The 3% deficit rule is already very tolerant. It is a hard-to-challenge safeguard in "Normal" periods. It is sufficient to stabilize the economy during downturn. It has proven to be a good fiscal anchor and should be kept.
This is a minimum ratio not to be exceeded: in the case of a country's nominal growth of 3% per annum, with a deficit of 3%, the public debt of that country is stabilized.

2.5 The 60% of GDP debt rule: toward a country specific debt adjustment speed

A recent ESM paper[5] states that "Keeping the 60% reference value and assuming a 20-year horizon to achieve it would necessitate unrealistically high fiscal surpluses for several countries. For example, Portugal would need a primary surplus of close to 2.5% of GDP on average for the next 20 years despite a significant decline in debt service costs since the 1990s[6]. The required primary surplus would be even higher for some other countries, which risks causing countries to adopt inappropriately tight and unsustainable policies". This paper also proposes to raise the debt limit to 100%.

As already explained above, the debt ratio compared to GDP varies greatly from one Member State to another. We think that it should be "personalised" on a case-by-case basis, depending on available margins and debt sustainability. Recently, Mr P. Gentiloni followed this same logic when he said that the proposed reform of the Stability and Growth Pact by the Commission would set individual debt goals for each country,

5. O. Francová, E. Hitaj, J. Goossen, R. Kraemer, A. Lenarčič, and G. Palaiodimos, "EU fiscal rules: reform considerations", ESM Discussion Paper 17, October 2021.
6. "This is an illustrative exercise, and the surplus quoted is different from that implied by the existing debt rule. Debt dynamics could evidently vary over time and for example, require higher consolidation efforts, at the start with higher debt levels. Structural measures of the primary surplus may lead to different outcomes, and possibly showing even higher adjustment needs".

adding that the Commission should be given more effective instruments to enforce budget rules.

In any event, if the proposed new rule on reducing public expenditure for countries that deviate from the euro area average were adopted and implemented, and if primary surpluses were also respected, the 60% debt-to-GDP rule would become less important.

2.6 Public investments should not be excluded from a country's s deficit and debt calculations

There are huge public spending needs, given new investments for the green and digital transitions, education, healthcare[7]. But a special treatment for growth-enhancing expenditure would not be helpful. It comes from the illusion that public financial means are not scarce. Actually, it is a matter of refocusing the priorities. Unproductive public spending needs to be replaced by productive public spending.

It would be a grave mistake to push the extreme fiscal limits in the present situation. Investment-friendly rules — such as a golden rule to protect public investment implying a separate capital account — can lead to excessive borrowing and weaken the link between fiscal targets and debt dynamics, fostering potential risks to debt sustainability. In addition, as stated by the ESM paper, "creative accounting and the reclassification of unproductive expenditures as investments to circumvent rules could challenge monitoring and enforcement, alienate the targets from the numbers and reduce transparency".

We need strong fiscal positions to face the challenge of infrastructure investments and ecological policies. The last thing we need would be to deteriorate current imbalances budgets. The future depends on

- a consolidation of present week fiscal positions (primary surpluses) and;
- a shift toward quality of expenditure and investment.

With the amount of liquidity created in the past years, we do not need more redistributive expenses. We must rein them in and allow adequate space for public investment.

2.7 The quality of public spending and composition on public finances must be given more importance than its quantity.

Fiscal policy should ensure a composition of public finances that is both growth-friendly and sustainable. We have to recognize that the shift towards more productive investment will require substantial political effort because presently public investment only accounts for some 4% of GDP while current — nonproductive expenditure — represent almost all public expenditure.

In this perspective, putting in place early warning mechanisms to prevent unsustainable public finance trajectories would be required. Indeed, a country whose share of public expenditure reaches record levels in relation to the European average should be subject to special discipline.

2.8 An effective fiscal surveillance and enforcement process

The specific rules that would emanate through each country from the discussion undertaken at the EU level must be internalized in domestic frameworks and these rules should be a condition for the presentation of the national budget to the national parliament.

As mentioned in 1.5, promoting transparent discussions on fiscal issues between an independent EU fiscal authority and each Member State is a right approach. Having a dialogue like the one at the IMF for article IV would certainly be a progress. Socratic discussion leads to a quantum of realism and is a better approach than having a few arithmetical rules that will never be applied.

An independent fiscal authority, comprised of economists of good economic and academic backgrounds, would therefore add credibility. The proposals to entrust an independent European Budget Committee with responsibility for defining the concept of sustainability as well as the debt target and growth assumptions seem excellent. It could help each country top fix its personalized standards; it would be free to establish the fundamental macroeconomic assumptions behind the national budgets with the assistance of academics.

In this perspective, each Member State would define a specific path for reducing its public debt and this politically independent EU institution should discuss and validate these plans. A dialogue would be needed between the economists of this impartial EU institution and the national authorities. If the country understands that the measures are reasonable, enacting those prescriptions becomes easier. Increased confidence and trust between the economists in charge of this supervision and the national authorities would improve enactment and application of the system.

Political difficulties could interfere there: Domestic fiscal choices are domestic and political issues. But, if political factors make comprehensive fiscal action at the level of the Union impossible, the problem is a lack of belief in a true European Union (*see 1.5*).

The Union is based on a cooperative game of all its members. If a country decides to ignore the EU fiscal framework and continue to sink into debt and deficit — which it believes to be its national interest, then it is deliberately out of the game. The sanction is that it can no longer be taken seriously by the Union because it has turned a blind eye to the negative externalities it creates.

In other words, the penalty is the loss of credibility and its ability to participate actively in the Union and its modes of cooperation and of course, a country that

7. The Commission estimates that the additional private and public needs related to the green and digital transitions will be nearly 650 billion per year until 2030. The green transition alone accounts for €520 billion per year.

embarked on this type of path would be labelled as ***such*** (name and shame).

Transitional aspects

In 2023, there will not be many countries with a deficit below 3%. Several will have deficits close to 5% and will need and should have a number of years, for economic reasons, to reduce them.

A transition period could be envisaged, where something like Jean Pisani-Ferry's recommendations is used[8] : country-specific adjustment or consolidation plans proposed by the Commission, discussed in the Eurogroup and agreed in the Council, in order to bridge the time until a new common framework is reached, perhaps after two or three years.

* *

*

As long as it is not sufficiently understood, notably in indebted countries (France, etc.), that excessive debt is a source of under competitiveness, the economic situation in these countries will continue to deteriorate. Only domestic structural reforms can resolve structural issues and increase productivity and growth. It is an illusion to try to solve the structural problems of our economies by prolonged increases in public or private debt or by using money creation. Yet this is what has been too often tried by pursuing lax fiscal, monetary and political policies that inevitably pose systemic risks to financial stability and therefore to future growth.

Experience has shown that many states had not complied with the Pact. The following lessons must be learned:

- Rules are needed;
- They must be "personalized" (country by country);
- The methodology used must be indisputable.

Of course, all of the above could be completely unimplemented, as was the case with the old rules of Stability and Growth Pact. The sanctions originally provided for were never implemented. If this drift were to continue, we would end up making the virtuous countries pay for the slippage. This is the definition of a non-cooperative game where most players try to avoid their obligations by shifting the cost to those who observe them.

If this were the case, the logical result would be an inevitable, major, new crisis of the euro zone.

8. P. Martina, J. Pisani-Ferry and X. Ragot, Reforming the European Fiscal Framework, French Council of Economic Analysis, April 2021.

2

CAPITAL MARKETS UNION

CAPITAL MARKETS UNION: WHERE ARE WE?

Note written by Marc Truchet, EUROFI

1. OBJECTIVES OF THE CAPITAL MARKETS UNION (CMU)

The Capital Markets Union (CMU) initiative was launched in 2015 with the objective of developing and further integrating capital markets in the EU in order to (i) diversify the financing of EU enterprises, particularly the most innovative and fastest growing ones, and (ii) provide savers with improved long-term investment opportunities while better connecting savings to investment across the Union. An additional, more macro-level objective, is to enhance the resilience of the EU economy with a diversification of funding sources and a development of cross-border capital markets (contributing in particular to private risk sharing across the EU).

Further developing and integrating EU capital markets remains a key objective in the post-Covid context to support the economic recovery and the green and digital transition objectives of the EU. Capital markets are indeed essential to finance fast-growing and innovative businesses, channel private investments towards climate and environmental targets and support the digital transformation due to their capacity to finance immaterial assets and projects and their longer term perspective.

The latest Communication on CMU (November 2021) also stresses the significant role that the CMU may play, together with the Banking Union, for enhancing the open strategic autonomy[1] of the EU and strengthening confidence in the euro. Developing deep and liquid EU capital markets and reducing the overreliance of the EU on critical third-country financial services providers is indeed crucial for securing the financing of innovative and fast-growing companies in the EU, particularly in the post-Brexit context.

2. CAPITAL MARKETS REMAIN UNDER-DEVELOPED AND FRAGMENTED IN THE EU

EU capital markets remain quite under-developed compared to those of other major economies such as the US[2] or the UK. The EU-27 average stock market capitalisation[3] amounted to 58% of GDP in EU-27 in 2019, compared to 115% in the UK and close to 150% in the US[4]. Following the Covid-19 crisis, the gap has widened further, with the EU market capitalisation reaching 74% of GDP as of December 2020, against 194% for the US. Also, the development of capital markets is very heterogenous across EU Member States, with market capitalization-to-GDP ratios ranging from 150% in the NL and 114% in Sweden in 2020 to less than 10% in certain Central and Eastern Europe countries such as Slovakia (5.1%), Romania (9.6%), Lithuania (7.5%) and Latvia (2.8%). Of the 27 EU Member States, 12 had a stock market capitalisation not greater than 30% of GDP in 2020. As a result capital market activity in the EU is concentrated at present in a small number of countries, with France, Germany and the NL representing 55% of total EU capital markets for example.

At the micro level, equity remains limited in the funding structure of EU non-financial corporates and the share of savings held by EU households in capital market instruments remains insufficient for ensuring adequate retirement revenues. The share of listed securities remains limited in the funding structure of EU non-financial companies (28% in the EU compared to 47% in the UK and 69% in the US[5]). In addition, according to data from the Banque de France[6], at the beginning of 2021, equity financing only represented 91% of euro area GDP, versus 220% in the United States. And the biggest EU venture capital firm is 3 times smaller than the 10th US venture capital firm, by money raised over a decade. As for EU households, on average in 2019 they held less than a third of their financial savings (32%) in securities (i.e. stocks, bonds and mutual funds), which is 20 percentage-point lower than in the US[7] and 10 to 20 percentage points lower than the EU countries that have the most developed capital markets (e.g. Nordic countries).

In addition, there is a persistent fragmentation of the EU capital markets, with a limited proportion of cross-border securities transactions and issuances and fragmented trading and post-trading infrastructure. This reduces the liquidity and depth of EU capital markets and leads to differences in the cost of capital and access to capital market instruments across the Union. There moreover seems to be a certain stagnation of cross-border flows over the last few years

1. The concept of open strategic autonomy, meaning in effect non-dependence on foreign jurisdictions or players, has progressively expanded from the security and defense dimension to many other areas, such as energy, healthcare and, with the UK exiting the EU, to the financial services.
2. Although structural differences (e.g. in the pension systems between the EU and US and in the way capital markets and banks have evolved historically in each region) mean that the US cannot be considered as a direct benchmark for the EU, the comparison with the US shows that the development potential of EU capital markets is still significant, particularly in the retail space and for the financing of SMEs.
3. Capitalisation represented by the outstanding listed shares issued by domestic firms.
4. Source The EU Capital Markets Union : Turning the tide – S&P Global – February 2020.
5. Source IMF staff discussion note "A Capital Market Union for Europe" September 2019.
6. Capital Markets Union: unleashing Europe's potential | Banque de France (banque-france.fr).
7. Source OECD, Eurostat and Federal Reserve data – See Eurofi Regulatory Update February 2022 "Retail investment: opportunities, challenges and policy proposals".

in the EU despite the implementation of harmonised securities legislations such as MiFID, EMIR and CSDR and TARGET2Securities harmonisation efforts[8].

3. PROGRESS MADE WITH THE CMU INITIATIVE

Two CMU action plans, including legislative and non-legislative measures, were adopted successively in 2015 and 2017 and have now been mostly implemented. With these two action plans, the Commission has chosen an evolutionary approach addressing a broad range of drivers and building on the pre-existing EU securities legislations such as MiFID, EMIR, CSDR, UCITS, AIFMD etc.. Measures tackling market fundamentals, such as insolvency, tax and securities ownership laws, common supervision or market structure issues, on which a political consensus is more difficult to obtain, are considered to be longer term objectives and have largely been left out so far.

The initial CMU Action Plan published in September 2015 set out 33 actions concerning securitisation, investment funds, prudential calibrations, prospectuses, etc[9]. Following the mid-term review of the CMU, a new set of measures was proposed by the Commission in 2017, covering additional objectives such as the strengthening of the powers of the European Supervisory Authorities (ESAs), the development of fintech, the promotion of sustainable finance, the facilitation of SME listing, private pensions (with the Pan European Pension Product (PEPP) framework) and support for the growth of local capital markets.

Despite this significant enhancement of the EU capital market framework, the general feeling among market stakeholders is that much remains to be done to achieve the CMU. This perception was expressed in particular by the High Level Forum group (HLF) set up by the Commission to make proposals for relaunching the CMU, which published a report in June 2020 proposing a new set of measures considered to be potential ‘game-changers’ for the CMU and which have since been integrated by the Commission in the new CMU action plan published in September 2020.

A first reason for this perception is that EU capital markets have not significantly grown over the last few years, except non-bank funding through debt securities, as shown by the figures above.

Secondly, there is frustration among many market stakeholders with the CMU process due to a mix of reasons that include the protracted implementation of the two first action plans, the lowering of the initial ambitions of certain proposals such as those concerning the ESAs’ operations, the shortcomings of certain new rules or instruments (e.g. securitisation, ELTIF or PEPP) and the lack of clearly identifiable priorities around which a stronger dynamic may be built. There is also the perception of a gap between the strong political commitment to CMU in general and to the objectives of the actions plans (e.g. expressed by the Council at the December 2020 Ecofin meeting) and the slow speed at which the initiative has progressed so far and also the reluctance of certain member states to support certain CMU-related legislative proposals.

The HLF suggested that a tripartite institutional agreement between the Commission, the Council and the Parliament on the main components of the CMU action plan, as well as a strict monitoring of the overall CMU implementation timetable, would be needed for building stronger momentum around the CMU going forward. Progress has been made in terms of monitoring and the Council endorsed a large part of the September 2020 action plan in December the same year. But the need to build a stronger political commitment among EU political leaders around a set of more concrete objectives and some key priorities (related e.g. to the cost and diversity of financing, the scaling up potential of EU corporates and the financial prospects for EU citizens or the necessary degree of harmonisation of rules) has been regularly put forward by public authority and financial industry representatives since then, notably at recent Eurofi meetings.

4. OBJECTIVES AND LEGISLATIVE MEASURES OF THE NEW CMU ACTION PLAN PUBLISHED IN NOVEMBER 2021

The Commission published in September 2020 a new action plan for completing the Capital Markets Union (CMU) based on the recommendations of the HLF report. This new plan has a more specific focus on developing retail investment. It also puts forward stronger ambitions than previous ones in terms of EU capital market integration (e.g. addressing controversial fragmentation issues such as insolvency regimes or withholding tax, which hamper cross-border investment), although these latter actions were considered to be more a ‘medium term’ objective by the Ecofin in December 2020. There is also the objective of correcting some existing measures with the improvement of instruments that have not delivered all the benefits expected in the previous stages of the CMU, such as ELTIF funds and STS (simple, transparent and standardised) securitisation and a review of insurance and banking prudential requirements impacting long term investment.

4.1. Legislative proposals published in November 2021

In November 2021, the Commission subsequently put forward **a set of four legislative proposals** for implementing the September 2020 action plan:

8. See Eurofi Summary High Level Seminar 2021 Lisbon. The ECB’s high-level indicators suggest that in quantitative terms the increase of cross-border transactions in the EU has not been significant over the last few years. T2S cross-CSD settlement data as a proxy seems to be stagnating at around 3% of T2S’s total turnover recently. Data on CSD links shows a similar picture to general ECB security settlements. Holdings via CSD links seem stable at around 21% of securities outstanding with no increase since the Central Securities Depositories Regulation’s (CSDR) introduction or the T2S go-live. When looking at the cross-border issuance of securities, quantitative data from the eligible asset database suggests that securities’ cross-border issuance across national CSDs is stable at relatively low absolute levels.

9. These include measures to develop securitization and covered bonds, improve Solvency II calibrations, prospectus and investment fund rules, facilitate the cross-border distribution of funds and also some non-binding measures regarding withholding tax and insolvency proceedings.

- **Setting up of a European Single Access Point (ESAP)** to financial and sustainability-related information on EU companies and financial products in a digitally useable format, aiming to make SMEs in particular more easily accessible and visible to both EU and international investors such as business angels, venture capital and private equity funds. The ESAP will build on existing information channels and be developed, operated and governed by ESMA.

- **Improving the European Long Term Investment Funds (ELTIF) framework** aiming to channel long-term financing to SMEs and infrastructure projects in order to make ELTIFs more attractive for investors and easier for asset managers to operate and market. A broadening of the scope of eligible assets and investments and a reduction of certain fund rule limitations were proposed to allow fund managers to benefit from greater flexibility in the design of ELTIF investment strategies and portfolio compositions. A reduction of the investment threshold and the introduction of an additional liquidity window redemption mechanism were also proposed for retail investors.

- **Enhancing the Alternative Investment Fund Managers Directive (AIFMD)** in order to better integrate the EU Alternative Investment Funds (AIFs) market, improve investor protection and better monitor the risks to financial stability posed by AIFs. The changes proposed include: the introduction of common minimal rules regarding loan-originating funds (i.e. the direct lending by AIFs to companies) allowing them to operate cross-border and addressing potential risks related to this type of lending; a harmonisation of liquidity management tools (LMT) in order to facilitate the management of liquidity risks posed by open-ended AIFs; a clarification of the rules on portfolio management delegation to support a more coherent approach to these activities by AIFMs and to facilitate their supervision; the possibility for National Competent Authorities to allow AIFs to appoint a depositary situated in another Member State; measures to allow depositaries to obtain the necessary information for their oversight duties when fund assets are safekept by a CSD; and measures to remove reporting duplications and to facilitate access to relevant data by national and EU authorities. In addition the UCITS directive will be updated to reflect the changes made to the AIFMD where necessary, for instance on LMTs, delegation and reporting.

- **Reviewing the MiFIR regulation** in order to tackle the main transparency and level playing field issues posed by current rules and enhance the competitiveness of EU capital markets at the international level. A major objective of the MiFIR review is the introduction of an EU-wide consolidated tape for shares, bonds, exchange-traded funds (ETFs) and derivatives based on close to real-time data that would be available to all market participants including retail investors. Secondly, the proposal aims to improve EU trading rules to enhance transparency and ensure a level playing field between execution platforms by banning the execution of small trades on dark pools, reviewing waiver and deferral rules, introducing obligations for systematic internalisers relating to the publication of firm quotes and the matching at midpoint, and banning payment for order flow[10]. The MiFIR review proposals also aim to increase the competitiveness of EU financial markets by removing the open access obligation for exchange traded derivatives (in order to improve legal certainty and suppress disincentives for exchanges to create innovative financial products)[11] and also by adjusting the scope of the EU share and derivative trading obligations[12] and aligning trading and clearing obligations for derivatives.

These legislative proposals were completed by the publication in January 2022 of a **financial competence framework** for adults elaborated by the European Commission and the OECD, and due to be supplemented by a framework for young people. The aim of this framework, which defines the competences that individuals need for making sensible decisions about their personal finances and savings, is to support financial literacy initiatives to be conducted at domestic level (such as the development of national financial literacy strategies, the design of financial education programmes and tools, and the assessment of financial literacy levels). These two frameworks will also support the exchange of best practices on financial education among Member States and private stakeholders.

4.2. Proposals planned for 2022

In its November 2021 CMU Communication, the Commission moreover mentions 3 other proposals due to be published in 2022:

- **A Listing Review** aiming to simplify rules for companies, particularly SMEs, wanting to raise funds on public markets. This proposal due to be published in the second half of 2022 intends to cut the red tape for companies going through a listing process or already listed on EU public markets, while preserving market integrity and investor protection. It will build on the existing SME Listing Act that focuses mainly on the use of SME growth markets.

- **An Open Finance framework** aiming to allow data to be shared and re-used by financial institutions for the creation of new service[13]. This proposal intends

10. Whereby retail brokers forward the orders from their clients to a limited number of traders in exchange for compensation.
11. Open access provisions for exchange-traded derivatives indeed reduce the attractiveness for exchanges to invest in new products as competitors may be able to get access without the upfront investment, according to the Commission.
12. The proposal would refine the perimeter of the share trading obligation (STO), which requires that the majority of trading in shares takes place on trading venues or systematic internalisers, to clearly limit it to EEA ISINs. This would clarify that the exemption to the STO for shares which are infrequent, irregular or ad hoc applies to EEA shares. In addition the proposal would introduce a possibility to suspend the derivatives trading obligation (DTO) for certain investment firms that would be subject to overlapping obligations when interacting with non-EU counterparties on non-EU platforms.
13. Provided that customers agree to it and subject to data protection rules and clear security safeguards.

to provide a level playing field for existing and new entrants and will build on the work undertaken in the context of the upcoming Data Act and the on-going evaluation of the Payment Services Directive II (PSD II). In addition, the Commission will propose a supervisory data strategy to improve data standardisation and sharing in order to enable supervisors to efficiently collect and use the data they need to perform their tasks, which involves a modernisation of EU supervisory reporting.

- **Initiative to harmonise targeted aspects of the corporate insolvency framework and procedures**. The Commission intends to propose by Q3 2022 an initiative aiming to make corporate insolvency laws more similar throughout the EU, subject to an impact assessment and to further discussion with the Member States and the European Parliament.

4.3. Other on-going initiatives to encourage long term investment in capital markets

In parallel, changes have been proposed by the Commission to Solvency II and CRR/CRD rules aiming to encourage more long-term and equity financing from institutional investors and progress is also being made in the area of pensions:

- As part of the **review of Solvency II**, the Commission has made proposals to amend the insurance legal framework in order to further promote long-term investment by insurance companies, without harming financial stability and policy holder protection. These proposals concern notably the appropriateness of the eligibility criteria for the long-term equity asset class, the risk margin calculation, and the valuation of insurers' liabilities, with the aim of both avoiding undue pro-cyclical behaviours and better reflecting the long-term nature of the insurance business.

- In the context of the **CRR/CRD review**, the Commission moreover made proposals in terms of prudential treatment for banks aiming to avoid undue impacts from the implementation of Basel III on long-term SME equity investments by banks and on banks' and investment firms' market-making activity.

- The Commission is also developing **tools to improve pension provision and retirement savings in the EU**. A first step was the publication in November 2021 of a report on best practices in the area of pension auto-enrolment, which is a mechanism that automatically enrols individuals into a supplementary retirement savings scheme unless they explicitly opt-out, in order to ensure more adequate retirement income. In addition, the Commission is working on the development of pension dashboards[14] aiming to support Member States in the improvement of their pension systems and on the identification of best practices for the implementation of individual pension tracking systems at domestic level[15], aiming to provide citizens with an overview of their future retirement income.

14. Complementing the existing monitoring tools with more detailed information on occupational pension schemes, pension dashboards will provide Member States with a more comprehensive view of the adequacy of their pension systems, encouraging them to address shortcomings and share best practices.
15. Individual pension tracking systems will provide citizens with an overview of their future retirement income, based on their entitlements in all the pension schemes they participate in or the expected return of long-term products they invest in.

RETAIL INVESTMENT: OPPORTUNITIES, CHALLENGES AND EU POLICY PROPOSALS

Note written by Marc Truchet, EUROFI with the support of Elias Krief

1. RETAIL INVESTMENT IN CAPITAL MARKETS REMAINS LIMITED IN THE EU

Developing long term retail investment in capital markets is one of the main objectives of the new Capital Markets Union (CMU) action plan published in September 2020, which aims to put capital markets "at the service of people". This was confirmed by the Ecofin of December 2020 which identified the development of investment by EU citizens as one of the short term priorities for the CMU.

Retail investment is indeed essential for the funding of the EU economy, with a significant part of the potential long-term funding of the EU economy coming directly or indirectly (i.e. via funds or pension products) from households. Retail investors also tend to have a longer term investment horizon than institutional investors, who are usually assessed and remunerated on a shorter-time horizon. In addition, favouring long-term investment is also essential for the future well-being of EU citizens, notably for the preparation of their retirement. At present, more than 18% of EU citizens are indeed at risk of poverty or social exclusion in older age and many others face potential revenue shortages during their retirement, making pension adequacy and coverage a priority for the Union and its governments[1].

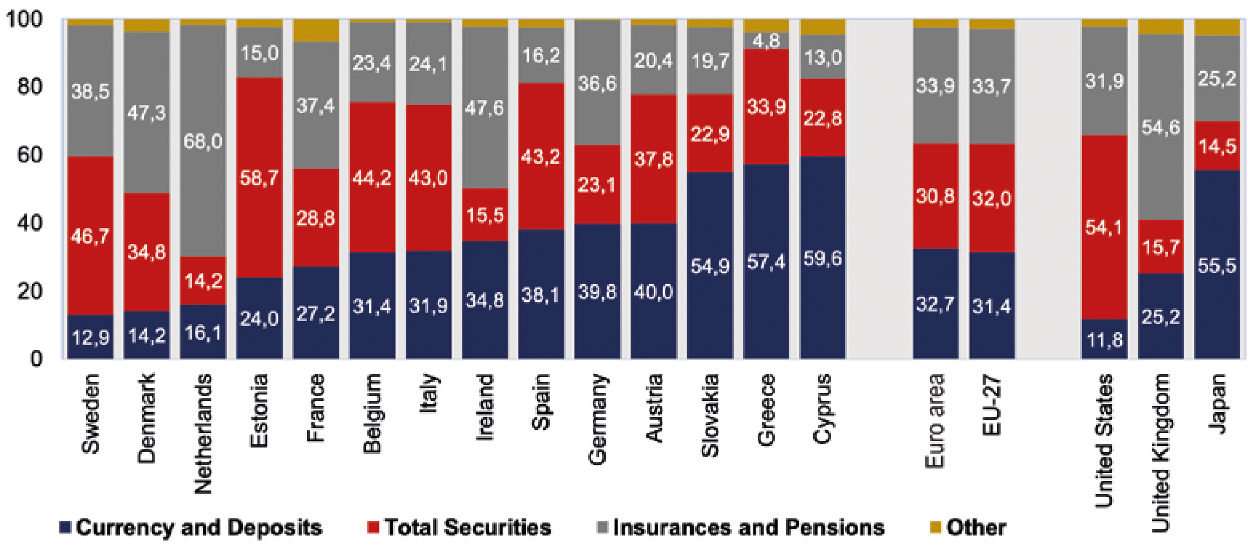
Europe has one of the highest individual savings rates[2] in the world, with households from Eurozone Member States[3] setting aside 12.4% of their gross disposable income every year on average between 2013 and 2019, against 7.2% in the United States[4].

However, the rate of retail investor participation in capital markets remains low in the EU on average compared to other major economies such as the US and the UK (*see Chart 1 below*). In 2019, about 32% of EU27 household financial assets were held in securities either directly or via mutual funds[5]. In comparison in

CHART 1. Composition of Households' Financial Savings in Selected EU and non-EU Countries in 2019, %

Source: OECD

Note: "Total securities" include all existing market-based instruments held directly or indirectly, in the form of bonds, equity, mutual funds and money market funds; "Other" includes loans and other accounts receivable/payable in the sense of Eurostat definition

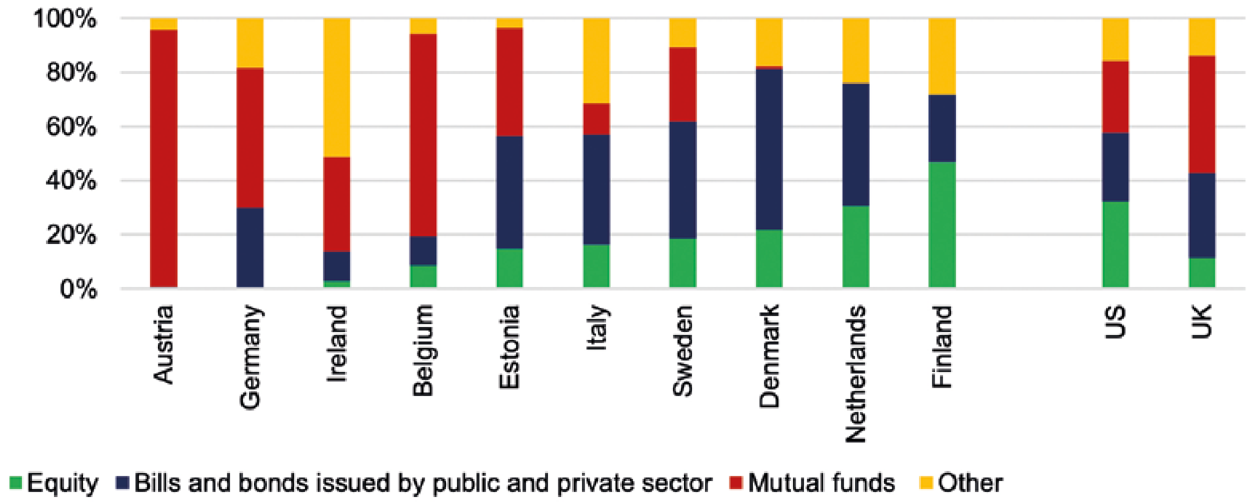


1. Source CMU High Level Forum report June 2020.
2. Defined by gross saving divided by gross disposable income, with the latter being adjusted for the change in the net equity of households in pension funds reserves. Gross saving is the part of the gross disposable income which is not spent as final consumption expenditure.
3. Eurostat, "Quarterly sector accounts – households", October 2021 (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Quarterly_sector_accounts__households#Household_saving_rate_down_in_both_the_euro_area_and_the_EU).
4. Federal Reserve (https://fred.stlouisfed.org/series/A072RC1Q156SBEA).
5. Eurostat figures show that 29% of EU27 household financial assets were held in equity and investment fund shares in 2019, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Households_-_statistics_on_financial_assets_and_liabilities#Value_of_assets_and_liabilities
Some estimates however also show that the percentage of assets held by households in securities is closer to 15% (12% of household assets held in listed equity and investment funds, 2% in debt securities) when taking out securities held by family offices, holding companies, etc.. See Eurofi Regulatory Update September 2021.

CHART 2. Pension Funds Breakdown by assets (2019)

Source: OECD Global Pensions Statistics, Bank of Ireland

Note: Other = Loans, Unallocated Insurance Contracts, Land and Buildings, Hedge Funds, Private Equity Funds, Structured Products



the US approximately 54% of retail financial assets are held in securities. In addition in the US about 20% of retail financial assets are held in direct corporate equity ownership compared to 4% in the EU.

Consequently, the proportion of assets held in bank deposits and traditional savings accounts is much higher in the EU (31.4% of household financial assets) than in the US (approximately 12%[6]). This high amount of savings held in bank deposits and traditional savings reduces long-term financing options for enterprises and potential long-term returns for EU savers. As for the third main component of household assets (insurance-based products and pensions), the share in total savings is similar in the EU (33.7%) and in the US (31.9%). However, when considering the breakdown of assets held in these pension products (*see Chart 2*), it appears that in the US the proportion of pension fund assets held in equity and mutual funds is higher than in most EU countries: nearly 60% of assets in the US compared to an average of 20 to 40% in the EU, the remaining part being held in bonds, short term debt and real estate.

The composition of household financial savings is also very heterogeneous across EU member states, as shown by the statistics above, particularly with regard to the share of currency and deposits. While the savers of Nordic countries and the NL have less than 20% of their assets in deposits, this proportion is higher than 50% in several Eastern and Southern Europe countries. The split of the remaining savings between securities and insurance / pension products is also variable, depending in particular on the presence of pension funds. Among the countries where the proportion of assets held by households in deposits is lower than the EU average, those which have significant pension funds, such as in the NL, Ireland and the UK, have a stronger proportion of household assets in insurance / pension savings compared to securities. But, as shown in Chart 2, 50 to 80% of the assets held in pension funds are invested in securities (equities, bonds and mutual funds).

2. MAIN DRIVERS OF RETAIL INVESTMENT IN THE EU

In terms of drivers, the pension system, the maturity of capital markets and the financial literacy of citizens appear to be the three main factors that explain the structure of retail assets.

Starting with the pension system, countries with a pension system where capitalisation plays a strong role (with pension funds or mandatory or auto-enrolment defined contribution pension schemes[7]) tend to have a greater retail participation rate in capital markets, either directly or indirectly, than those where pay-as-you-go systems[8] are the main source of retirement revenue. This is apparent in Charts 1 and 2 above. OECD figures moreover show that in several Northern European countries (namely Denmark, Estonia, Finland, Netherlands, Latvia and Sweden), nearly all the working-age population participates in a mandatory retirement savings plan (invested in fixed income and equity instruments mainly) and in these countries, savings remaining in deposit accounts are relatively limited (less than 25% of total assets). Since a significant share of pension fund assets is held in securities in these countries (between 50 and 80%), the total proportion of assets held

6. Source BIS Household wealth in the main advanced countries - 2019.

7. A defined contribution (DC) pension plan uses contributions (from the employee, employer and/or government) to buy assets with the purpose of financing future retirement benefits. The benefits received depend on the value of contributions paid and the value of the assets upon retirement. The beneficiary bears the investment risk in the case of DC plans, (though in some cases the plan may provide a minimum return guarantee).

8. Pension schemes where current contributions and/or tax revenue finance current pension expenditure.

in securities is as high as 70 to 80% when considering securities held directly and those held indirectly in pension funds (with a proportion held in equities reaching 30 to 40%).

The second factor that influences retail participation rates in capital markets is the maturity of capital market development. For example Sweden, Finland and Belgium, where savers have a significantly higher proportion of their assets in securities also have more developed capital markets. The market capitalisation of domestic listed shares in these countries compared to GDP amounted to respectively 114%, 98% and 61% in 2019 compared to an EU average of 58%, whereas in countries where the participation of retail savers in capital markets is low, such as many Central and Eastern Europe countries, the ratio of market capitalisation to GDP is significantly lower (below 20%).

The third main factor is the level of financial literacy of citizens. Most of the countries where the proportion of assets invested is securities is above the EU average are also characterized by a relatively high level of financial education. In Sweden and Finland, respectively 71% and 63% of adults are financially literate according to evaluations made by Standards & Poor's[9], corresponding to the highest levels in the EU. This is also the case of 54% of the population in Estonia and Hungary, and 55% in Belgium. Some countries such as Spain and Italy with relatively developed capital markets escape this rule, with less than 40% of their population obtaining appropriate scores in terms of financial education, possibly related to a higher concentration of securities holding in these countries in the hands of the most financially literate.

3. SOME POSITIVE TRENDS HAVE BEEN OBSERVED SINCE THE BEGINNING OF THE COVID-19 CRISIS

Two positive trends for the development of retail investment in capital markets have been observed since the beginning of the Covid crisis: first, an accumulation of excess savings that can potentially be re-invested in financial markets and secondly an increasing participation in capital markets, particularly of the younger population.

The first factor observed since the outset of the Covid crisis is an increase of the savings of households due to restrained consumption in time of lockdowns and the preservation in many European countries of a stable income thanks to government support. The saving rate grew to 19% in the EU in 2020, up from 12% at the end of 2019[10], and to approximately 14% in the US[11] compared to 7% on average in previous years. Since then, it has declined to 9.5% in the US as of 2021-Q3 but remains markedly high compared to the pre-crisis trend and the average has remained high in the Eurozone also at 18.9%. This has led to the accumulation of significant excess savings, corresponding to the amount of saving households would have normally spent in the absence of the pandemic, but that is held in cash or assets instead. Some reports estimate that the "excess savings" accumulated since the beginning of the Covid crisis exceeded € 450bn in the euro area as of April 2021, corresponding to more than 4% of GDP[12]. Two thirds of these household excess savings ended up in bank accounts, while the remaining third was invested in capital markets, mainly in equity, indicating a new interest in risky financial assets among households during the pandemic.

A second positive trend observed since the beginning of the Covid crisis is a significant increase in the number of new openings of securities accounts, particularly among the younger population (18-35)[13], an increase in stock buying and volumes traded by retail investors[14] and a move from guaranteed products to unit-linked products within life insurance contacts. Evidence of greater household participation in capital markets since the beginning of the Covid crisis has been found[15] in several major European Member states including France[16], Italy[17], Germany[18] and Belgium[19]. These changes were triggered in particular by the opportunities for gains created by the market downfall at the outset of the Covid crisis and the search for higher yields in a context of very low interest rates and was also supported by the greater availability of online brokers and the spare time freed up by lockdowns. Still, there is no strong evidence yet that this increase in retail investor participation, particularly in equity markets, is driven by long-term investment motives and that it will last in the post-pandemic world.

9. Financial literacy is measured using questions assessing basic knowledge of four fundamental concepts in financial decision-making: knowledge of interest rates, interest compounding, inflation, and risk diversification. The survey was conducted in 2014 by the S&P – for further details, see 3313-Finlit_Report_FINAL-5.11.16.pdf (gflec.org).

10. Source Eurostat.

11. Source FRED – St Louis Fed December 2020.

12. Source European households: the double dividend of excess savings (eulerhermes.com).

13. For example, statistics from a major French e-broker indicate that new client accounts increased by +120% in 2020 and that 39% of all new clients are between 28 and 35 years old – Source Eurofi April 2021 seminar "Developing equity funding".

14. Source ESMA Report on Trends, Risks and Vulnerabilities, March 2021.

15. "Individual investor behaviour during the COVID-19 crisis in selected jurisdictions", https://betterfinance.eu/wp-content/uploads/BETTER-FINANCE-Response-EC-Strategy-for-Retail-Investors-03082021-Annex-2.pdf

16. In France, the share of 18-35 investing in capital markets increased by 7 ppts to 18%, bringing the median age of French individuals investing in capital markets from 58 years-old to 46, according to a study from the AMF (AMF France, *La Lettre de l'Observatoire de l'Epargne de l'AMF* (43) July 2021). Although 79% of the additional savings are held in the form of liquid assets (currency, current account and term deposits), 6.3% have been allocated to equity, according to the Banque de France according to figures from the Banque de France, *Présentation Trimestrielle de l'Epargne des Ménages* (2020 Q4), June 2021.

17. In Italy, the retail participation rate increased by 4ppts, from 30% in 2019 to 34% in 2020.

18. In Germany, the number of non-professional investors owning individual stocks or equity-based investments funds (including ETFs) grew by 27% in 2019, to 12.3m. Looking at age groups, the 14-29 population registered the strongest rise (+67% in 2020 compared to 2019), followed by the 30-39 group (+34%).

19. In Belgium the number of private investors has almost doubled as of the first quarter of 2021, compared to 2019 Source: Presentation of the President of the Belgian FSMA, Webinaire Investisseurs de détail sur la bourse (21 June 2021).

4. REVIEWING THE EU POLICY FRAMEWORK TO FOSTER MORE RETAIL INVESTMENT IS A KEY PRIORITY GOING FORWARD

4.1. A significant policy framework already exists in the EU for retail investment but its effectiveness has been questioned in several areas

Retail investor protection rules are set out in a number of sector-specific EU legislations addressing different aspects of investor protection at the product, distribution and order execution levels. These rules are completed by general consumer protection frameworks under domestic rules and also supervision that remains largely domestic in this field, although actions are being undertaken at ESMA level to enhance supervisory convergence. Educational aspects are also managed at national level.

Concerning EU frameworks, MiFID (Markets in Financial Instruments Directive) and IDD (Insurance Distribution Directive) provide rules for the distribution respectively of securities and insurance-based products covering issues such as investor classification, product suitability and appropriateness assessment, advice and information at the point of sale and also restrictions on the use of inducements. MiFIR and other securities market regulations[20] also regulate the execution of securities transactions.

These distribution and securities market rules are completed by the PRIIPs regulation (Packaged Retail and Insurance-based Investment Products) which aims to enhance the consistency of investor disclosure across comparable investment products and to make it easier for retail investors to understand and compare the key features, risks, rewards and costs of different investment products[21] through the provision of the pre-contractual Key Investor Document (KID) prior to the conclusion of any transaction. Product frameworks such as the UCITS Directive, the ELTIF regulation and PEPP moreover contain measures for ensuring the protection of retail customers investing in these products, and cover in part similar ground to the legislations previously mentioned. UCITS for example, includes eligible asset and liquidity rules and also investor disclosure rules designed for the protection of retail investors.

The effectiveness of these distribution and product frameworks in terms of investor protection and capacity to foster increased retail investment is called into question. Several of these frameworks are currently being reviewed, which will provide the opportunity to tackle these different issues. A first issue is that these EU frameworks, which all aim to enhance investor protection in different areas differ and overlap to a certain extent. This makes investment decisions across comparable products potentially more difficult for consumers and increases the complexity for producers and distributors of marketing investment products to the retail market. Secondly, the relevance or adequacy of certain rules has been questioned including: MiFID suitability assessments, which are considered to be too cumbersome particularly for the more sophisticated investors[22], PRIIPs disclosures regarding cost and performance, MiFID inducement rules regarding their capacity to eliminate biased advice[23]. The need to adapt investor protection rules and disclosure requirements to the increasing digitalisation of retail investment activities is moreover emphasized by many stakeholders[24].

4.2. Developing retail investment is a key objective of the new CMU action plan

According to the EU Commission's assessments[25], the current low level of retail investor participation in capital markets deprives EU companies and more generally the EU economy of long-term funding and it also means that retail investors do not benefit sufficiently from the investment opportunities offered by capital markets and cannot address adequately their retirement needs.

Developing retail investment was thus put forward as a key objective of the new CMU action plan published in September 2020 to relaunch the CMU. Three legislative proposals published in November 2021 to implement the September 2020 action plan should contribute to fostering more retail investment. The proposals made in the context of the ELTIF review should help to make these funds more accessible to retail investors, with a reduction of the investment thresholds applicable to these funds and the introduction of an additional liquidity window redemption mechanism, thus allowing more retail long-term investment in infrastructure projects and SMEs. The ESAP project (European Single Access Point) should also provide all investors, including retail investors, with an easier access to financial and

20. Other market regulations such as MiFIR, the Market Abuse Regulation (MAR) and post-trading regulations (EMIR, CSDR).

21. The following products are in the scope of PRIIPs: Investment funds (UCITS have exemption until June 2022); Life insurance-based investment products (such as unit-linked or with-profits policies); Retail structured securities (including instruments issued by securitisation institutions and corporate bonds); Structured term deposits; Derivatives; Convertible bonds and other structured securities with embedded derivatives; Pension products and annuities not recognised by the national law.

22. The current client categorisation in MiFID is criticized as it may lead to unnecessary precautions and burdensome suitability verification processes particularly for the more sophisticated retail investors.

23. The general inducements MiFID II rule prohibits firms from paying benefits to or receiving benefits from third parties, unless the benefits are designed to enhance the quality of the relevant service to the client, and do not impair compliance with the firm's duty to act honestly, fairly, and professionally in accordance with the best interests of its clients. These rules give rise to heated debates. While some stakeholders consider that the current restrictions on inducements are not sufficient for eliminating biased advice, others argue that a stricter ban of inducements would be detrimental for investors, potentially increasing the price of advice and reducing its availability for non-high net worth clients.

24. Digitalisation, which is becoming an increasingly important feature for retail investment with the development of investment apps, robo-advice platforms and social media needs to be appropriately taken into account in legislation. Investor protection rules need to be adapted to the new digital environment in order to allow investors to benefit from the new opportunities offered by digitalisation (e.g. in terms of easier access to investment products and information, improved comparability, lower costs) and also to mitigate related risks (e.g. related to an easier access to risky products or to possible gamification).

25. Communication – A CMU for people and businesses – new action plan 24 September 2020.

sustainability information on EU companies. Finally the measures proposed in the MiFIR review to enhance transparency, in particular the implementation of an EU consolidated tape, should contribute to improving the information available to retail investors among others.

Actions initiated by the Commission in the area of pensions and financial literacy should also support greater retail engagement in capital markets. A first step in this regard was the publication in November 2021 of a report on pension auto-enrolment best practices, which is a mechanism that automatically enrols individuals into a supplementary retirement savings scheme unless they explicitly opt-out, in order to ensure more adequate retirement income. The Commission is also working on the development of pension dashboards[26] aiming to support Member States in the improvement of their pension systems and of best practices for the implementation of individual pension tracking systems at domestic level[27] for providing citizens with an overview of their future retirement income. Concerning financial literacy, the Commission published in January 2022 a financial competence framework for adults developed with the OECD, which is due to be completed by a framework for children and youths. The objective of this framework, which defines the competences that individuals need for making sensible decisions about their personal finances including savings, investment and preparing for retirement, is to support actions at the domestic level (such as the development of national financial literacy strategies, the design of financial education programmes and tools and the assessment of financial literacy levels).

Additional actions proposed in the CMU action plan and due to be implemented at a later stage (notably in the context of the MiFID II review) may have further implications for retail investors. First, measures proposed to improve the level of professional qualifications of financial advisors in the EU possibly with the setting up of a pan-EU competence certificate. And secondly, measures to improve applicable rules concerning inducements in order to foster unbiased advice and to reduce information overload for experienced retail investors with an improved investor categorisation[28].

The work on inducements builds on the advice published in April 2020 by ESMA on inducements and costs and charges disclosures under MiFID II. ESMA did not recommend a ban of inducements for retail products, but encouraged the European Commission to conduct further analysis on their impact and on the possible implications of a ban and proposed some changes to the regime (notably in terms of client information about inducements). In terms of disclosure, ESMA advised the Commission to scale back certain disclosure obligations on costs and charges for eligible counterparties and professional investors. The Commission subsequently launched at the end of 2020 an extensive study[29] of the different disclosure regimes in the EU, of current practices in terms of advice provision and of the impact of inducements and related rules in order to investigate how far the current legal framework empowers customers to participate in the market and make informed investment decisions, while providing adequate investor protection.

Other on-going areas of assessment include the value for money of retail investment products, based on an annual monitoring of the performance and costs of retail investment products conducted by ESMA and EIOPA. In its third annual report (2021) ESMA emphasized the high impact of costs on the final returns of retail investors: over the period of 2009-18, a hypothetical 10 year retail investment has generated a net return of +61% with costs amounting to 17%, according to ESMA's calculations and costs tend to be significantly higher for retail investors than for institutional ones[30]. In addition the gross outperformance of active funds compared to passive ones such as ETFs was not high enough to compensate for the higher costs. Concerning life insurance products, EIOPA also underlined the need to put consumer outcomes at the heart of product design and distribution, following observations that unit-linked products provide on average higher returns despite the higher costs, but also expose policyholders to market shocks and volatility, which may generate a lower return in some periods than profit participation products which lower risk profiles. EIOPA subsequently launched a consultation[31] on a framework to assess whether unit-linked products offer value for money, taking into account the needs, objectives and characteristics of the target market. The principles put forward include that the value offered by these products should be assessed by considering the product as a whole, as well as each of its components. In addition, product features and characteristics including costs and the reward profile of the products should be tested to ensure that no undue costs are charged to consumers and efforts should be made to make products easier to understand by retail customers.

4.3. A Retail Investment Strategy has been announced for 2022

In the new CMU action plan proposed in September 2020, the Commission announced its intention to publish a comprehensive strategy for retail investment in Europe in the first half of 2022, aiming to ensure that retail investors can take full advantage of capital markets and improve the coherence of rules across

26. Complementing the existing monitoring tools with more detailed information on occupational pension schemes, pension dashboards will provide Member States with a more comprehensive view of the adequacy of their pension systems, encouraging them to address shortcomings and share best practices.
27. Individual pension tracking systems will provide citizens with an overview of their future retirement income, based on their entitlements in all the pension schemes they participate in or the expected return of long-term products they invest in.
28. See actions proposed in the CMU September 2020 action plan: Amendments to applicable rules in the area of inducements in order to ensure that retail investors receive fair and adequate advice (Q1 2022). Introduction of a new category of qualified investors in MiFID II and reduction of the current information and administrative overload for these investors (Q1 2022).
29. Disclosure, inducements and suitability rules for retail investors study.
30. Source: Performance and costs of retail investment products in the EU – ESMA – 14 April 2021.
31. Consultation on a framework to address value for money risk in the EU unit-linked market – EIOPA – April 2021.

different investment products. The objective of the upcoming Retail Investment Strategy is to ensure that retail investors benefit from (i) adequate protection, (ii) bias-free advice and fair treatment, (iii) open markets with a variety of competitive and cost-efficient financial services and products and (iv) transparent, comparable and understandable product information. In addition, EU legislation is this area should be forward-looking and should reflect on-going developments in digitalisation and sustainability, according to the Commission, as well as the increasing need for retirement savings.

A consultation for preparing a proposal for an EU Retail Investment Strategy and reviewing MiFID II rules was conducted by the Commission between May and August 2021. This consultation covered the main topics that have been identified as potential areas of improvement for encouraging more retail investment in the context of the CMU initiative and also of the reviews of existing regulations such as MiFID II, IDD or PRIIPs. These include: financial literacy, digital innovation, disclosure requirements, suitability and appropriateness assessment, investor categorisation, inducements and quality of advice, product complexity, redress and complaints, intervention powers and sustainable investing.

ESMA moreover conducted a call for evidence at the end of 2021 to provide the Commission by April 2022 with input on three key aspects of investor protection: (i) investor disclosures, assessing whether current rules allow consumers to make informed choices and whether the information provided is adequate; (ii) digital disclosures, in order to define how regulatory disclosures can work best for consumers in the digital age; and (iii) digital tools and channels to assess the risks and opportunities associated with the use of digital tools and the increasing levels of direct investor participation via online trading platforms and robo-advisors[32]. In addition, this call for evidence also explored the topic of open finance (i.e. how far value chains should be opened up by sharing specific investor data among investment firms and third-party providers) and the potential effects in terms of innovation, competition and improvements for retail investors.

32. Call for evidence on certain aspects relating to retail investor protection – ESMA – 1 October 2021.

THE EUROPEAN SINGLE ACCESS POINT: A GAME-CHANGER FOR ESG DATA?

Note written by Jean-François Pons, ALPHALEX – CONSULT GEIE

The European Commission published its proposal for the creation of the European Single Access Point (ESAP) on 25 November 2021, following a consultation which took place between January and March 2021. The ESAP will be an EU-wide platform aimed at providing investors with seamless access to financial and sustainability-related information disclosed to the public by companies, including financial firms.

This project had already been proposed by a number of representatives from the financial sector in consultations on a Capital Market Union (CMU) in 2020 (notably by all the European banking associations) and by the High-Level Forum on CMU in July 2020.

This widespread support is linked to the project's objectives, which are fully aligned with the development of the CMU aims and respond to the needs for increased efforts on transparency for ESG (Environmental, Social and Governance) data.

However, the creation of the ESAP will not be an easy task, as shown by the modalities of the project released last November.

1. PROJECT FULLY IN LINE WITH THE DEVELOPMENT OF A CMU AND WITH THE INCREASED EFFORTS ON TRANSPARENCY FOR ESG DATA

Some background elements are required to understand the objectives behind the creation of the ESAP.

1. Firstly, this measure is included in the scope of the European Commission's agenda to **foster a digital and ecological transition**. In its European *Green Deal Investment Plan* from January 2020[1], the Commission presented sustainable finance, the efficiency of which very much requires effective transparency, as a precondition to foster sustainable growth. Alongside this, the *European Data Strategy* launched in February 2020[2] set out the Commission's intention to increase data availability for use in the economy, notably through the creation of a common financial data space.

2. Secondly, the European **capital markets have a crucial role to play in the post-Covid economy**. The crisis has indebted the corporate sector. To ensure a dynamic recovery, companies will depend on sufficient access to funding and to equity in particular. However, the latter remains limited. Thus, transparency on financial and sustainable data will also facilitate equity financing.

In this context, accelerating the creation of the CMU, which can bring more investments and savings flowing across the EU, appears necessary to sustain the green and digital economic recovery. In particular, **investors' access to comparable and easily available data on companies has been identified by the Commission as a key factor to increase financing.**

Nonetheless, today, the data market has two main structural weaknesses:

1. Firstly, **although financial data should already be available to users, they remain — for now — fragmented**. Among the many causes for this are the lack of a specific dissemination channel other than the companies' own websites; the lack of a single digital format for the public disclosure of data; the lack of machine readability, complex data retrieval; etc. The absence of integrated data management at EU level is damaging, as it increases search costs for users and undermines their ability to scale their investment strategies on an EU-wide basis. This is particularly detrimental to SMEs (3) and to companies with less-developed capital markets, as they lack visibility and struggle to find investors. Moreover, the lack of a homogeneous framework hinders market integration and innovation in the EU and constitutes a competitive disadvantage for the EU capital markets in terms of attractiveness, compared with foreign capital markets, such as the US.

2. Secondly, **ESG (Environmental, Social and Governance) data or sustainability-linked data are not yet sufficiently available despite growing demand for the disclosure of such data.** The resulting "data gap" impedes the financing of ESG activities, notably for climate-related actions. This data gap is particularly challenging for SMEs (3). In a context where the Sustainable Finance Disclosure Regulation (SFDR), published in March 2021, requires investors to ensure transparency in order to incentivise them to make greener investment decisions, it has become necessary to have complete access to companies' ESG information. The Corporate Sustainability Reporting Directive (CSRD), tabled by the Commission in April 2021, will also improve and expand the information published by entities regarding ESG matters.

According to the Commission's orientations, the ESAP should be implemented by 2024 and will consist of an EU-wide platform that will bring the following benefits:

- **Improve access to financial data**. This will reduce

1. European Commission (2020), European Green Deal Investment Plan. Link: EUR-Lex - 52020DC0021 - EN - EUR-Lex (europa.eu).
2. European Commission (2020), A European Strategy for data. Link: https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy

the search and processing costs for both data users and companies subject to disclosure requirements and facilitate the findability of SMEs' data and therefore their financing.

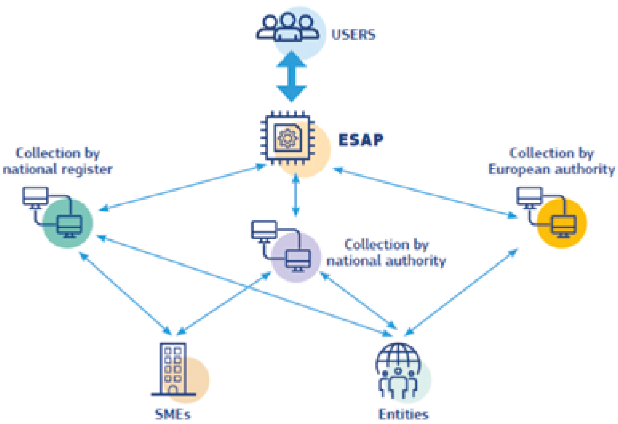
- **Disclose sustainability-linked data**.
- **Require the harmonisation and standardisation of formats of information that companies disclose to the public and increase the availability of machine-readable data**. This will ease the comparability of data by investors.
- **Enable big data and AI-based services** through increased use of structured data.
- In the longer term, this seamless access to financial and ESG data will **facilitate the integration of EU capital markets, as well as a more efficient allocation of capital across the EU**.
- Lastly, it will **indirectly strengthen the resilience of the EU's economy through broader private risk-sharing across the EU.**

2. THE CONCRETE MODALITIES AND CHALLENGES FOR THE CREATION OF THE ESAP

The ESAP's modalities for implementation were set out in the package proposal released by the European Commission on 25 November following the publication of the results of the public consultation, which took place between 20 January and 12 March 2021 (4).

The package comprises:

- a regulation proposal establishing the ESAP (5);
- a proposal for a Directive amending certain Directives (6); and
- a proposal for a Regulation amending certain Regulations (7).



2.1. The ESAP will be established and designed by ESMA

ESMA's monitoring of the ESAP will be achieved in close cooperation with the European Banking Authority (EBA) and the European Insurance and Occupational Pensions Authority (EIOPA), based on qualitative and quantitative indicators. These will comprise: the number of visitors and searches; the percentage of searches that lead to a view or download; the number and percentage of machine-readable information accessible on the ESAP and the number and percentage of machine-readable views and downloads; the proportion of notifications pursuant to the automated validations referred to in Article 10 of the regulation proposal; any significant malfunction or incident; an assessment of the accessibility, quality, usability and timeliness of the information in the ESAP; an assessment of whether the ESAP meets its objectives, taking into account the evolution of its use and the information flows within the Union; an assessment of end-user satisfaction; a comparison with similar systems in third countries. ESMA will also publish an annual report on the functioning of the ESAP.

2.2. Data collection and storage will be performed by "collection bodies"

Such bodies are Union or national level authorities or registers. A list of collection bodies will be published by ESMA on a dedicated web portal. In the absence of a collection body already established under Union law, Member States will appoint one of the Officially Appointed Mechanisms (OAMs) established under Directive 2004/109/EC[3] and notify ESMA of their choice.

2.3. Disclosure of data related to financial services, capital markets, sustainability and falling under the scope of the EU regulatory framework (*see Appendix*) will be mandatory

It will be possible for entities, on a voluntary basis, to disclose ESAP data exceeding the scope of the data whose disclosure is compulsory. This is particularly relevant for SMEs, which have an interest in being more visible to potential investors. These data will have to be in an extractable format (*Article 2 of the Regulation proposal*) or, where required by EU law, in a machine-readable format.

Entities will be held responsible for the accuracy of the information that they send to collection bodies and will have to accompany the data submitted with a qualified electronic seal.
Data collected on the ESAP will undergo **quality checks by collection bodies**. These checks will involve automated validations to verify that data have been submitted using the appropriate format, that they are available and complete, and that they contain a qualified electronic seal. Moreover, collection bodies will have to ensure that data is not manifestly inappropriate, abusive or clearly outside the scope of the information. When data does not comply with these requirements, collection bodies will reject them.

3. Directive 2004/109/EC of the European Parliament and of the Council of 15 December 2004 on the harmonisation of transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market and amending Directive 2001/34/EC (OJ L 390, 31.12.2004, p. 38).

ESMA will implement a **cybersecurity policy** for ESAP in dialogue with collection bodies, and will ensure appropriate levels of authenticity, availability, integrity and non-repudiation for the information made accessible on ESAP. On the specific issue of personal data, ESMA will not store such information unless storage is strictly necessary for automatic, intermediate and transient processing.

2.4. Full and free access to data

Collection bodies should make data **available to all entities** without discrimination. Data publication will be achieved by collection bodies in automated ways through **single application programming interfaces** (APIs). Access to data will be facilitated by a download service, a search engine and a notification service to inform users when new data have been published. The web portal and its search function will be in all the official EU languages and a machine translation service will be implemented for the data retrieved.

The principle is based on **free access**. However, taking into account the need to protect ESMA from an excessive financial burden in relation to the costs incurred for intensive use, **exceptional fees for searches for significant volumes of data or for frequently updated information will be charged.**

2.5. ESAP costs and financing

The Commission estimates that **the total financial resources required for the implementation of the proposal in 2022-2027 will be up to €16.5 million**. This includes: €2.3 million of administrative costs and up to €14.2 million of operational spending, with €9.6 million to be covered by the EU under the current Multiannual Financial Framework (2022-2027) and €6.9 million by national authorities. This initiative is expected to require a total of three full-time employees at ESMA to oversee and manage the ESAP's development and operations.

2.6. The creation of the ESAP is therefore a complex and challenging project

The Commission's project is largely inspired by existing data systems in large third countries:

- In the United States, the Securities and Exchange Commission implemented the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system in the 1990's. EDGAR performs automated collection, validation, indexing, acceptance and forwarding of submissions by regulated entities and others who are required by law to file forms. EDGAR offers a Federal level access point to users for information that can often be machine-readable. Information is freely available on an itemised basis online.

- Japan and Canada also have electronic corporate disclosure systems.

Although the creation of the ESAP will be able to follow these examples, there are EU specificities which will be challenging:

- For ESMA, this will be a new role.

- The landscape of collecting bodies will need to be clarified.

- The publication of ESG data will be a new challenge compared with the US, Japanese and Canadian systems, which only publish financial data.

- And, as always in the EU, it is not always easy to ensure the proper funding of the project with EU and national public funding.

CONCLUSION

APPENDIX: LIST OF UNION LEGISLATION IN THE SCOPE OF THE EUROPEAN SINGLE ACCESS POINT

Regulation (EC) No 1060/2009 on credit rating agencies

Regulation (EU) No 236/2012 on short selling and certain aspects of credit default swaps

Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories

Regulation (EU) No 345/2013 on European venture capital fund

Regulation (EU) No 346/2013 on European social entrepreneurship funds

Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment

Regulation (EU) No 537/2014 on specific requirements regarding statutory audit of public-interest entities

Regulation (EU) No 596/2014 on market abuse (market abuse regulation)8 9.

Regulation (EU) No 600/2014 on markets in financial instruments

Regulation (EU) No 909/2014 on improving securities settlement in the European Union and on central securities depositories

Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs)

Regulation (EU) 2015/760 on European long-term investment funds

Regulation (EU) 2015/2365 on transparency of securities financing transactions and of reuse

Regulation (EU) 2016/1011 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment

Regulation (EU) 2017/1129 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market

Regulation (EU) 2017/1131 on money market funds

Regulation (EU) 2019/1238 on a pan-European Personal Pension Product (PEPP)

Regulation (EU) 2019/2033 on the prudential requirements of investment

Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector

Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment

Regulation (EU) 2021/23 on a framework for the recovery and resolution of central counterparties

Directive 2002/87/EC on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate

3

BANKING REGULATION

IMPROVING THE EU BANK CRISIS MANAGEMENT FRAMEWORK FOR SMALL AND MEDIUM SIZED BANKS AND D-SIBs[1]

Note written by Didier Cahen, EUROFI

Having an effective and integrated framework for managing crises, is essential for preserving the trust of depositors and the public at large in the financial system, in order to avoid financial fragmentation and to safeguard financial stability.

The EU bank crisis management framework lays out the rules for handling bank failures. The framework was established in 2014 after the global financial crisis and in reaction to the EU sovereign debt crisis. It consists of three EU legislative texts that will be reviewed later this year: the Bank Recovery and Resolution Directive (BRRD), the Single Resolution Mechanism Regulation (SRMR) and the Deposit Guarantee Schemes Directive (DGSD) that all contain review clauses.

The experience of these first years of the Banking Union was perceived to show some flaws in the current framework. Although the number of bank failures remained limited in recent years, in many of them national resolution authorities used specific clauses in the crisis framework which led to an impression that "bail out" solutions for failing banks with a negative Public Interest Assessment were used rather than minimizing taxpayer losses. By doing so, these authorities applied more favorable burden-sharing requirements than would have been requested in resolution or liquidation. Such decisions are often related to potential losses for retail investors and small firms resulting from insufficient or inappropriate loss absorbing capacity, which put political pressure on the national authorities.

Furthermore, differences between the resolution framework and the State aid rules create incentives to apply the latter instead of resolution, which is negative given that the resolution framework was precisely developed to avoid the involvement of taxpayers. Indeed, State aid rules (Banking Communication 2013) have not been updated since they were published and are not well aligned with the current BRRD, SRMR and DGSD, which came into force at a later stage. This draws attention to misalignment and consistency issues between the various components of the crisis management framework.

In addition, there are significant differences in national insolvency regimes applicable to banks that do not satisfy the Public Interest Assessment. This generates level playing field concerns that hinder banking market integration and they stand in the way of a smooth exit from the market for the weakest players[2]. These differences also create additional drawbacks in the Public Interest Assessment (as banks in a similar position but under different national insolvency proceedings may have a very different fate) and when applying the no-creditor-worse-off (NCWO) principle. Although, it is essential to address the structural issue of overcapacity of the banking system. An efficient crisis management framework, which allows for an orderly exit of the weakest players from the banking market, can support this and thus strengthen the overall capacity of the banking system to finance the recovery and transformation of the European economy as well as reliability from the investors' point of view.

Against this backdrop, a targeted review of the EU crisis management framework would be welcome.
This note presents the main characteristics and weaknesses of the EU banking crisis regime and proposes a way forward for improving the EU crisis management framework for small and medium sized banks under the remit of the Single Supervisory Mechanism (SSM) and the Single Resolution Board (SRB), but also for domestic systemically important banks (D-SIBs).

115 banks are currently under the remit of the SSM and the SRB and around 110 banks have been classified in the euro area as systemically important for the domestic market by national authorities (DSIBs), representing 68% of total assets for the entire banking sector[3].

1. THE EU CRISIS MANAGEMENT FRAMEWORK: FEATURES & WEAKNESSES

1.1 Main features of the current EU crisis management framework

The EU bank crisis management lays down the rules for handling bank failures. In the Banking Union, unlike in some other jurisdictions, there is a clear distinction between the resolution regime[4] and the insolvency regime. The former is a single EU framework, applying to all banks that are failing or likely to fail and meeting public interest criteria. This framework and the ensuing extraordinary powers are justified by the overriding interest of the public in preserving financial stability

1. This note is focusing on the specific issues of small and medium sized banks under the remit of the SSM and the SRB and domestically systemically important banks (DSIBs), which are directly supervised by their National Competent Authority.
2. A. Enria, Crisis management for medium-sized banks: the case for a European approach, Keynote speech by Andrea Enria, Keynote speech at the Banca d'Italia workshop on the crisis management framework for banks in the EU, 15 January 2021.
3. 20 D-SIBs are not under the remit of the SSM and are directly supervised by their National Competent Authority.
4. The idea of resolution is, put simply, to ensure that a bank that runs into trouble can be dealt with effectively, having the smallest possible impact on the taxpayer — in other words, no more bail-outs — and at the same time, causing the least amount of damage to the wider economy.

everywhere in the European Union. Failing banks that do not meet these criteria should be liquidated through domestic insolvency regimes.

The EU Resolution is for the few, not the many, if we consider all banks in the Banking Union. Most banks will continue to fall under normal national insolvency proceedings in the same manner as any other failing business. However, for 'systemically important' banks — whose failure would have a ripple effect on the rest of the economy — the EU resolution framework applies potentially and irrespective of their size, business model, complexity or interconnectedness. In particular, this regards most banks under the direct remit of the SRB (122[5] banks) and D-SIBs that are expected to meet the "Public Interest Assessment".

But to date, the application of the European resolution framework is limited[6], also, due to some constraints on the management of bank failures. Indeed, it not only substantially constrains any possibility of providing public funds for failing institutions, but also imposes a minimum amount of shareholders' and creditors' bail-in — 8% of total liabilities including own funds (TLOF) — as a precondition for the use of the Single Resolution Fund (SRF) for capital support. Accordingly, all entities that could possibly be subject to resolution must issue a sizeable amount of bail-in-able securities (minimum requirement for own funds and eligible liabilities (MREL)) almost doubling the capital requirements.

By contrast, state aid rules impose somewhat less stringent restrictions on precautionary recapitalizations. In addition, there is a growing uncertainty on whether preventive interventions by Deposit Guarantee Schemes (DGS) are subject to State Aid conditionality or escape from such conditionality. The Tercas decision by the European Court of Justice actually relaxes the rules and adds additional complexity to the framework.

In the EU, the bail-in tool could be applied to any credit institution[7] in order to avoid the use of public funds. For that purpose, the BRRD requires banks to comply with MREL requirements that are determined by resolution authorities on a bank-by-bank basis[8] and generally includes, for banks expected to be resolved and not liquidated, a subordination requirement. The banks that should go into liquidation are subject to an MREL level covering loss absorption only, usually equal to capital requirements. If those banks incur important losses, someone has to absorb them: the shareholders and junior creditors (up to uncovered depositors) and not national taxpayers (bail out) in a standard case.

In addition, the use of public funds is permitted under article 37.10 of the BRRD in exceptional circumstances of a systemic crisis after the bail-in of 8% of TLOF only (and subject to State Aid rules). MREL is therefore a cornerstone of the EU resolution regime and the solvency support.

1. 2. The weaknesses of the EU crisis management framework are well known

The key impediments are summarized at the beginning of the EC Consultation on the EU bank crisis management and deposit insurance framework (January 2021).

- One of the cornerstones of the current framework is the objective of shielding public money from the effects of bank failures. Nevertheless, this has only been partially achieved. This has to do with the fact that the current framework creates incentives for national authorities to deal with failing or likely to fail (FOLTF) banks through solutions that do not necessarily ensure an optimal outcome in terms of consistency and minimisation in the use of public funds. These incentives are partly generated by the misalignment between the conditions for accessing the Single Resolution Fund (SRF) and certain (less stringent) conditions for accessing other forms of financial support (State, DGS) under existing EU State aid rules and the DGSD, as well as the availability of tools in certain national insolvency proceedings (NIP), which are in practice similar to those available in resolution.

- The procedures available in insolvency also differ widely across Member States, ranging from purely judicial procedures to administrative ones, which may entail tools and powers akin to those provided in the BRRD/SRMR. These differences become relevant when solutions to manage failing banks are sought in insolvency, as they prevent an overall consistent approach across Member States.

- The predictability of the current framework is impacted by various elements, such as divergence in the application of the Public Interest Assessment (PIA)[9] by the SRB compared to National Resolution Authorities (NRA) within the Banking Union. In addition, differences in the hierarchy of liabilities in insolvency across Member States complicate the handling of banking crises in a cross-border context.

- Additional complexity comes from the fact that similar sources of funding may qualify as State Aid or not and that this depends on the circumstances of

5. https://srb.europa.eu/en/content/banks-under-srbs-remit 122 Banks in January 2021.
6. The choice of resolution tools depends on the specific circumstances of each case and builds on options laid out in the resolution plan prepared for the bank. The EU Regulation allows the application of four resolution tools They consist of powers to: (i) effect private sector acquisitions (parts of the bank can be sold to one or more purchasers without the consent of shareholders); (ii) transfer business to a temporary structure (such as a "bridge bank") to preserve essential banking functions or facilitate continuous access to deposits; (iii) separate clean and toxic assets between "good" and "bad" banks through a partial transfer of assets and liabilities; and/or (iv) bail in creditors (mechanism to cancel or reduce the liabilities of a failing bank, or to convert debt to equity, as a means of restoring the institution's capital position).
7. The main aim of bail-in is to stabilise a failing bank so that its essential services can continue, without the need for bail-out by public funds. The tool enables authorities to recapitalise a failing bank through the write-down of liabilities and/or their conversion to equity so that the bank can continue as a going concern.
8. For setting the MREL, the 8% is a benchmark, not a floor.
9. As also explained in detail later, the PIA is carried out by a resolution authority to decide whether a failing bank should be managed under resolution or insolvency according to national law.

the case. As a result, it may not be straightforward to entirely predict ex ante, if certain financial support is going to trigger a FOLTF determination or not. The Tercas ruling by the European Court of Justice, against the Commission's decision, is a good example.

- The rules and decision-making processes for supervision and resolution as well as the funding from the SRF, have now been centralised in the Banking Union for a number of years, although in both areas the centralized functions cannot act in sole discretion or without the support and interaction with their relevant national counterparts, due to the legal environment which is different in each member state.

- DGSs remain at national level, with differences in their functioning and ability to handle adverse situations. Notwithstanding the fact that harmonization has been advancing, there are some practical complexities (e.g., when a bank transfers its activities to another Member State and/or changes the affiliation to a DGS). The different transpositions of the DGSD among Member States, with 22 different options and national discretions (ONDs) including relevant aspects such as preventive (*Article 11(3) DGSD*) and alternative measures (*Article 11(6) DGSD*), create further concerns with regard to a potential unlevel playing field and fragmentation.

- Discrepancies in depositor protection across Member States in terms of the scope of protection, such as specific categories of depositors, and payout processes result in inconsistencies in access to financial safety nets for EU depositors[10].

2. KEY PRINCIPLES AND PRIORITY AREAS OF IMPROVEMENT FOR ONE EU CRISIS MANAGEMENT SYSTEM ACROSS EUROPE

Any reform of the EU bank crisis management framework must ensure that there is always an alignment between preserving financial stability and ensuring that taxpayers' money is not at risk. An EU crisis management with a continuum of solutions is needed, irrespective the size, business model and situation of the bank.

2.1 Key principles

- The principle that **the SRF or public money can be accessed only in resolution and only after a bail-in of at least 8% of the bank's total liabilities and own funds remains essential to reduce moral hazard and achieve a level playing field.**

  Access to public or mutualized funds should always remain subordinated to this key condition: the burden sharing by shareholders and subordinated creditors first, and by other creditors if necessary, only. To reduce the burden on other banks, minimize moral hazard and avoid competition distortions, burden sharing must be imposed on any failing banks' shareholders and creditors, whenever an authority or a DGS deploys preventive or alternative measures. Accordingly access to Single Resolution Fund for any IPS member should be subject to the bail-in of 8% of total liabilities and own funds (TLOF).

  This key principle of burden sharing must also apply to Failing or likely to fail (FOLF) depositor-funded banks whatever their size. Equity and debt holders of such banks must be clearly informed about the risks attached to their investments, in line with MiFID, and protection rules for depositors should be reinforced as appropriate.

  Similarly, there should be no discrimination between IPS and DGS. Preventive or alternative measures are allowed under the EU legislative framework and IPSs should not be prevented from using them. Though recourse by an IPS protected bank to external funds outside its IPS must be subject to the same rules as any other bank.

- **To be resolvable, banks must build-up the necessary MREL levels** to support the implementation of the resolution strategy. The same principle should apply to all DSIBs.

- **Nearly all the banks under the remit of the SSM/ SRB and D-SIBs should be resolvable**. The reason is simple: safeguard financial stability without taxpayers being expected to foot the bill.

- **FOLTF banks with a negative Public Interest Assessment should exit from the market in an orderly manner**, noting that non-covered deposits may suffer losses if more junior liability levels are insufficient to absorb losses. This should be explicitly stated in the EU legislative framework.

- **A crisis management with a continuum of solutions is needed in Europe, allowing to address all banks under the SRB and D-SIBs** irrespective of the size, business model and situation of the bank. **A double system**, with an expensive system for large banks and a system at a discount for smaller banks **should be avoided**.

- The diversity of the business models of banks must be preserved since it fosters the resilience of the banking system in Europe. In this perspective for instance, well-functioning systems like institutional protection schemes (IPS) as in Germany or Austria, are protecting the credit institutions as such and are ensuring the liquidity and solvency of their members. They should be maintained[11]. Since they are subject to the EU state aid framework and the DGSD — and

10. While the protection of standard banking deposits by DGSs has been harmonised, exceptions excluding certain deposits (for instance those of public authorities) or extending the protection above the EUR 100 000-threshold are defined on a national basis.

11. Such systems guarantee a different level of protection for depositors in comparison to the protection provided by a standard DGS. If, due to the support of an IPS, a bank does not fail and its services continue to be provided, which is a big advantage from the perspective of the clients, it is not necessary to reimburse depositors. About 50% of credit institutions in the euro area are members of an IPS, representing around 10% of the total assets of the euro area banking system. The two main sectors covered by IPSs in the three relevant euro area countries (Germany, Austria and Spain) are cooperative and savings banks.

- notably to the need to fulfill the same funding requirements as DGS — they should not harm the level playing field.

2.2 Area of improvements

- **Defining the public interest criteria in a single way** is an area for improvement. Indeed, this would help to achieve a better predictability of the outcome of a resolution process especially for those banks that are "mid-sized" in terms of their balance sheet and therefore do not seem to have many alternatives to re-enter profitability by altering their business model once they have lost confidence of investors or lenders.

- **Transfer strategies seem to be an appropriate tool for the resolution of medium sized banks, but access to public or mutualized (DGS or SRF) funds to support resolution should remain subject to clear and consistent conditions** (*see 4.*). Under this approach, viable parts of an insolvent bank are matched with a thriving acquirer, ideally located in another member state, thereby allowing medium sized banks to reap the benefits of the EU internal market. However, economies of scale across borders are only possible with a true Banking Union where capital and liquidity move freely and where market practices as well as products are comparable.

  DGS — subject a least cost test due to be harmonized as far as possible at the EU level for those banks for which resolution is the intended strategy — could support the resolution of such failed banks' assets, ensuring that the failure of medium sized banks (including DSIBs) is handled in an orderly and effective manner that guarantees a smooth market exit and only a small impact on local financial stability.

- Framework(s) for the provision of **liquidity in resolution** remains nevertheless an important challenge to increase the credibility of the EU resolution framework. To address this issue is crucial since lack of liquidity can jeopardise any resolution strategy and lead to an uncontrollable situation within only a few days.

- One area for improvement concerns **the point at which a bank is considered to be "failing or likely to fail" (FOLF)**. This decision involves a difficult trade off: if the decision to declare a bank FOLF is taken too late, the available loss-absorbing and recapitalization capacity might not be sufficient anymore. However, taking the decision prematurely may prevent a successful recovery. The availability of collateral to obtain funding could serve as a formal criterion[12].

In the remainder of this note, we propose to focus on ways to define the public interest criteria in a single way to make the crisis management framework more predictable and make proposals to enhance the funding options available in resolution.

3. DEFINING THE PUBLIC INTEREST CRITERIA IN A SINGLE WAY WOULD MAKE THE RESOLVABILITY OF FAILING BANKS UNDER THE REMIT OF THE SSM/SRB OR DSIBS[13] MORE PREDICTABLE

If a bank does not qualify for the precautionary recapitalization and is declared failing or likely to fail by the supervisory/resolution authority, the choice is between liquidation or resolution. This decision is a prerogative of the SRB for the banks under its remit and it hinges on an assessment of the existence of public interest. In other words, European resolution decisions are strictly binary: the SRB acts only when banks satisfy a strict European public interest test. All other cases are invariably handled at the national level, enabling divergent courses of action to be pursued along national lines.

But resolution and liquidation differ substantially when it comes to the scope of legislation that is applicable to the use of public or mutualized funds. While resolution is governed by the BRRD, liquidation is regulated by national insolvency laws and will be managed by national authorities[14]. While the use of public funds in resolution would be subject to both BRRD scope and State Aid scope — thus requiring a preliminary bail-in up to at least 8% of total liabilities (for capital support), the use of public funds in liquidation is only subject to State Aid burden sharing requirements.

Consequently, since the scope of EU law regulating the use of public money in resolution and liquidation is different, a substantially similar operation conducted under these two different frameworks can lead for similar banks to very different outcomes. This affects (i) the acquiring bank if a transfer strategy is implemented, (ii) the banks' creditors and (iii) taxpayers.

Unfortunately, public interest criteria are only vaguely defined in European law and there are currently two definitions of "public interest ": one at the SRB level, and several by national authorities. Indeed, the question of whether the resolution of a bank deemed failing or likely to fail is of "public interest" or whether such a bank should be liquidated in the absence of public interest has been assessed differently at the EU and at the national levels. Some ailing banks whose resolution did not seem to trigger a public interest on the European level were subsequently found to be of public interest by national authorities, albeit on a smaller scale, i.e. on the level of the member state or a region of the member state. Moreover, there is a difference between "public interest" in the sense of BRRD to choose between resolution and liquidation, and the justification of State aid to allow public support.

12. C. Buch, "Bank resolution: delivering for financial stability", SRB Annual conference, 2021.

13. When this note refers to D-SIBs, it refers to those who are not subject to the direct supervision of the SSM but to their national competent authority.

14. In the US, the FDIC will be the managing authority in charge of the insolvency process.

The Veneto banks[15] cases have made it clear that, depending on national insolvency law, resolution tools may be used at the national level using specific provisions of the BRRD framework, despite the absence of a 'public interest' determined at the EU level by the SRB. Such actions remain subject to the EU State Aid framework while avoiding more restrictive conditions under the BRRD when applying the public interest provisions. This is what Andrea Enria, previous chair of the European Banking Authority (EBA) called "two different definitions of "public interest" [...] one at the EU level and another one by national authorities".

While the definition of critical functions seems clear as regards the SRB's assessment of the existence of public interest, it is not equally clear what role it plays in the EU discipline on liquidation aid, as the 2013 Banking Communication does not include guidelines on how the local effect of liquidation should be evaluated. In the absence of clarity on what constitutes a serious impact on the regional economy, the rules on liquidation State Aid leave room for governments to effectively re-instate at the regional or local level the public interest that the SRB had denied at the national or European level.

To overcome these issues, taking into account that the harmonisation of national insolvency proceedings (NIPs) remains a political challenge in the short and medium term, we suggest the following:

- All these banks under the remit of the SSM and D-SIBs — with a minimum balance size, e.g. €15 billion would be deemed susceptible of a positive public interest assessment a priori. They should be subject to MREL requirements, including a recapitalization amount, and would have access to the SRF at the same conditions (i.e. prior bail-in equivalent to at least 8% of TLOF).

- For smaller banks below the threshold (under the remit of the SSM and D-SIBs), a way to foster consistency would be to give the SRB a final say in the PIA.

- Ailing banks under the remit of the SSM and SRB or D-SIBs with negative PIA (with no specific financial stability impact on national or regional economic systems) should exit the market without necessarily going directly into liquidation (*see 4*).

- It is the task of the National Resolution Authorities (NRA) and the SRB to define a common interpretation of the existing PIA definition and implement it in a consistent way in all member states.

4. TRANSFER STRATEGIES SEEM TO BE THE BEST TOOL FOR SMALLER BANKS UNDER THE REMIT OF THE SSM AND SRB, BUT STRICT ACCESS CONDITIONS SHOULD BE DEFINED TO GET ACCESS TO DGS FUNDS TO SUPPORT RESOLUTION.

Allowing mid-sized banks under the remit of the SRB not to have MREL above minimum capital requirements would raise level playing field issues and hinder wind-ups across the Banking Union. Losses need to be allocated; there is no cost-free solution.

If creditors and depositors of banks under the remit of the SRB with a negative PIA are totally exempted from the consequences of resolution, this would contradict the principles of BRRD. Taxpayers and the DGS (i.e. essentially healthy and relatively large banks within the sector) might be subsidizing ailing banks that do not issue sufficient MREL. Therefore, it appears mandatory to avoid the moral hazard issue caused by "free-riders" sailing between the two positions, claiming not to have the means to raise MREL, but claiming to be too important locally or nationally to go into insolvency.

Furthermore, it can be argued that such "free-riders", sometimes smaller banks or banks with one sided business models attracting depositors with off-market deposit interest rates, affect the profitability of the entire EU banking system: not only can they sell their financial products and services at a lower price because they do not currently have to charge for the cost of MREL, but they can also force other banks to contribute more to the SRF or DGS to pay for their potential failure. These banks must exit the market in an orderly fashion in the event of failure. It is in everybody's interest.

In such a context, we propose that **MREL requirements must be specified for smaller banks under the remit of the SRB (and small DSIBs as the case may be) even with a credible sale of business as preferred resolution strategy.**

Currently, the MREL market — also due to the low interest rate environment that fuels a search for yield — is wide open for small medium sized banks. In such a context, we propose that:

- **MREL requirements must be specified for smaller banks under the remit of the SRB (and DSIBs as the case may be) even with a credible sale of business as preferred resolution strategy**. There might not be a real need to set MREL at a level that allows the full recapitalization of the bank. MREL requirements could be lower, based on the likelihood of transfer strategies being reliably implementable but in any case they should be higher than the mere capital requirements.

- Access to the Single Resolution Fund would also remain subject to prior bail-in of at least 8% of total liabilities and own funds (TLOF): taxpayers and DGSs should not subsidize banks that do not have sufficient MREL, and the moral hazard issue caused by "free riders" must be avoided.

In addition, the toolkit available to the SRB could be expanded with a centralized liquidation tool:
- The SRB would be equipped with the administrative

15. The Veneto banks — which did not pass the SRB's 'public interest test' that is required for a bank to be 'resolved' at the EU-level — have been liquidated through a special insolvency procedure under Italian law. That special insolvency procedure involved resolution tools and state aid. Albeit the SRB concluded that the resolution was not warranted in the 'public interest', the Commission indicated that EU state aid rules foresee the possibility to grant State aid to mitigate any economic disturbance at the regional level. Consequently, BRRD bail-in rules were not enforced, the Italian government made available 17 billion euros, and creditors were "in fine" better off than in a resolution which would have entailed a more stringent bail-in of creditors than this liquidation.

power to wind up a bank in particular by transferring some of its assets and liabilities to another bank within the Banking Union.

- The allocation of these powers to a centralized European Authority (the SRB) would ensure consistency in the treatment of banks, could lead to efficient gains and enable the transfer of assets and liabilities to interested bidders of other Member States. Where there is no immediate buyer, assets and liabilities may be transferred to a temporary entity, i.e. a bridge bank. The SRB's toolbox should foresee a possibility to acquire funding in resolution and thus allowing the application of resolution tools over a longer period of time to save the good part of a bank without entering into forced liquidation at depressed asset prices, or without requiring a specific liquidation regime at the European level"[16].

DGS funds could support early or alternative intervention but within strict pre-established safeguards in order to limit moral hazard:

- DGSs have reached the target of 0.8% (or 0.5% in concentrated markets) of covered deposits and that the amount available for use in such circumstances be capped at a certain level (e.g. 0.2% of covered deposits)

- If these DGS resources are insufficient to address a small ailing bank under the remit of the SRB, the SRB should liquidate this bank and the DGS should borrow the necessary liquidity funding from other DGS.

- Increasing the capacity of DGS to fund alternative tools must not come at the cost of deteriorating a DGS's general position. This is why such an approach must strictly respect the 'least-cost' principle.

- This least cost test (LCT) should be harmonised at the EU level to allow for consistent application to banks under the remit of the SRB (or the SSM for early intervention measures) and ideally across the whole banking union.

- The LCT should be subject to three conditions that must be fulfilled for the DGS to provide funding for alternative measures:

  1. The gross cost of alternative measures does not exceed the gross cost of payout for covered deposits. As for the cash flow analysis, it disregards reimbursements and recoveries and limits the gross amount used for alternative measures.

  2. The hypothetical loss resulting from the alternative measures (cost of alternative measures, including indirect costs, net of funds that would be subsequently recovered, i.e. reimbursement of loans, reimbursement or sale of an equity stake in a bridge bank) does not exceed the hypothetical ultimate loss borne by the DGS in case of pay-out after deducting funds recovered in the insolvency proceeding and adding indirect costs. As reminder, alternative measures should anyway lead to market exit.

  3. The indirect cost assumed in case of a pay-out does not exceed a cap determined in terms of the covered deposits.

In addition, any early intervention that aim at preventing failure and at keeping a bank alive should also be subject to SSM (or SRB) approval, which should only be granted to banks with a credible and sustainable business plan.

A recent work conducted by the Financial Stability Institute (FSI) suggests that "replacing the existing super-preference of covered deposits by a general depositor preference — or, more specifically, to replace the seniority of covered over uncovered deposits by a general depositor preference rule — would have a material impact on available funding. In particular, for banks holding large amounts of non-covered deposits, removing the super-preference would substantially amplify the support that the DGS could provide, thereby making the transfer transactions much more feasible under either resolution or insolvency"[17].

However, reviewing the deposits or the DGS positioning in creditor hierarchies present significant drawbacks: bank liquidity issues, increased of volatility of bank deposit financing, potentially weakened depositors' confidence and this would inevitably introduce moral hazard. Raising all deposits to the same level in creditor hierarchies would de facto reduce the bail-in-able instrument base. This would force healthy banks to "bail out", i.e. replenish, DGSs much more often. Corporate behaviour would change to the detriment of bond assets and to the benefit of bank deposits. Such an approach would relieve corporate treasurers of their risk analysis duties who would seek then the best possible return for their deposits, which is often offered by the weakest banks (which need these deposits).

For DSIBs, in the case that some would remain under the direct supervision and resolution of national authorities:

- It is the task of the National Resolution Authorities (NRA) and the SRB to define a common interpretation of the existing PIA definition and implement it in a consistent way in all Member States. A way to foster consistency would be to precisely define the PIA in the EU legislative framework.

16. E. König, Europe and the Covid-19 crisis, EBI Conference, 5 November 2020.

17. See F. Restoy, "How to improve funding of bank resolution in the Banking Union: the role of deposit insurance", BIS, 11 May 2021.

These issues related to the crisis management framework are part of the wider agenda on enhancing the Banking Union. The Banking Union (BU) remains fragmented, which weakens the global competitiveness of European banks, hamper the financial sovereignty of Europe and raises the risk of dysfunction in the event of a future shock.

The European Deposit Insurance Scheme (EDIS), third pillar of the Banking Union, is still missing. EDIS is expected to promote a more uniform level of depositor confidence, although a widely harmonised legal framework in the form of the DGSD already exists.

Creating a new system or institution such as EDIS may not be the right way to progress since there still exist many obvious differences with regard to the legal framework and the quality of balance sheet of banks in different member states, potentially aggravated after the ending of the support measures necessary in view of the pandemic. As first steps, a harmonization of insolvency practices across the BU would be necessary. As mentioned above, existing rules and principles are not applied consistently, among other because the crisis management framework is more in the form of Directives than Regulations.

- Applying the Public Interest Assessment (PIA) in the same way would help to avoid such discrepancies.

- DGS preventive or alternative interventions should also be harmonized. To that, effect the Least Cost Test (LCT) should be applied consistently throughout the Banking Union at a minimum for all the banks under the remit of the SRB and all the D-SIBs.

One way to advance on this way is to define the PIA clearly and precisely in the level 1 texts. Further, as much as possible, a harmonization of the type of interventions that DGSs are allowed to make, would be welcome too. Without such type of effective harmonisation, no further step towards a European Deposit Guarantee scheme can be realistically expected. Only then could the second step, i.e. mutual liquidity support between DGSs, be put in place, possibly combined with an hybrid EDIS that would provide liquidity in the systems. A fine balance has to be struck though between full harmonisation of the legal framework and the risks of moral hazard. While a uniform crisis management and deposit insurance framework could increase the predictability of the outcomes of measures it must be avoided that banks with riskier business models collect deposits at off-market rates for clients with the argument that large funds at the European level will help to cover depositors in case of bank failure.

But we should not believe that the subject is purely technical and can be only resolved by technical measures. EDIS will not miraculously eliminate the following remaining fragmentation issues within the Banking Union that need to be addressed:

- For banks, the Single Market is still fragmented along national lines. There is little progress in cross border lending, especially in retail markets, i.e. lending to households and firms.

- Discrepancies in the regulatory framework reduce the economies of scale for banks operating across borders and the ever-increasing regulations are cumbersome, especially for smaller banks.

- The "sovereign-bank doom loop" has not disappeared and it will increase in certain EU Countries following the Covid crisis.

- Ring-fencing policies (capital, liquidity, bail-in instruments…) by host authorities, applied to subsidiaries of transnational banking groups located in their countries, are still persistent; they discourage and make it even impossible for large EU banks to reinforce and increase the number of their subsidiaries in the EU.
  Such ring-fencing practices prevent cross-border integration and synergies, although the legal framework for applying capital and liquidity waivers is already there and only needs to be used. This is obviously hindering prospects of cross-border mergers and consolidation of the banking sector at European level, called for among others by EU authorities, required to reduce EU dependence on third country banks and necessary for reducing the overcapacity in the system as well as the increase of profitability of large banking groups.

- Generalised gold-plating at EU level further reinforced by most host member states further prevent cross-border consolidation and hamper international competitiveness of EU banks.

- One of the objectives of a true Banking Union should also be to ensure the development of a resilient and profitable banking sector where diverse business models co-exist, since risk diversification adds to overall resilience in the sector.

- Finally, the Banking Union area is suffering from a lack of economic and fiscal convergence and the Covid crisis is increasing economic discrepancies across member states. This will make the paradigm of risk reduction before risk sharing even more important in the coming years.

- This deprives Europe from a well-needed banking autonomy and sovereignty that is necessary to meet the huge financing requirements of the climate and digital transition of its whole economy… making a large part if it dependent on third country banks.

It is essential that these well-known fragilities be addressed by EU and national decision makers independently from EDIS.

4

SUSTAINABLE FINANCE

DEFINING THE TRANSITION PATHWAYS TOWARDS A SUSTAINABLE ECONOMY MATTERS

Note written by Jean-Marie Andrès, EUROFI

1. THE NEED FOR FORWARD-LOOKING INFORMATION, NOTABLY REGARDING LONGER-TERM HORIZON ISSUES, HAS LONG BEEN RECOGNISED ALTHOUGH ITS ABSENCE WAS MAINLY ATTRIBUTED TO A LACK OF DISCLOSURE REGULATION

A TCFD 2017 study by the 2° Investing Initiative[1] observed that poor forecasting and long-term risk disclosure is pervasive across all types of companies, owing to a lack of forward-looking disclosure requirements. Reviewing the case of 10 major jurisdictions, the study identified forward-looking requirements in only a very limited number of jurisdictions. In the United States, for example, the Securities and Exchange Commission — which rules on risk reporting — does not have a timeframe and only asks for specific forward-looking goals around inflation risk and contractual obligations.

2. ACCORDING TO THE NGFS, IN THE ABSENCE OF WELL-ORGANISED AND EXPLICIT TRANSITION SCENARIOS, MAJOR NEGATIVE IMPACTS ON THE ECONOMY AND THE FINANCIAL SECTOR ARE EXPECTED

The NGFS anticipates major negative impacts from economies staying inactive faced with the rapid rise in climate-related threats. The main outcome of such inaction is a disorderly transition.

To assess the consequences of poor transition planning for economies, the NGFS sets out at least three possible highly adverse scenarios[2]. Some of these passive scenarios lead to high physical risks (i.e. nationally determined contributions, the current limited level of transition policies), while others imply high transition risks (sector divergent policies, delayed transition).

According to the NGFS assessments, the magnitude of the passive scenario's macroeconomic effects highlights the stakes for the economy, such as a 5.5% reduction in GDP in 2050 and cumulative losses mainly resulting from physical risks representing 13% of GDP in 2100.

With such a passive approach, the transition risk impacts are lower than physical ones, at 2.5% of GDP in 2100.

In such a passive approach, transition risk impacts are lower than physical ones, at 2.5% of GDP in 2100.

The financial sector is obviously impacted. The probability of default of most of the economic sectors exposed might be up to six times the current levels threatening the regulatory ratios and profitability of banks.

3. REPUTATIONAL RISK IN THE FINANCIAL SPHERE IS MAGNIFIED BY THE ABSENCE OF EXPLICIT TRANSITION SCENARIOS TO REFER TO. THIS WEIGHS ON THE FINANCIAL SECTOR AND RISKS MULTIPLYING TRANSITION COSTS FOR ECONOMIES

On many occasions, we have seen NGOs stressing that banks or asset managers have increased their financing for fossil energy players compared with previous years, despite the commitment made by these financial organisations to align their business with climate goals.

For instance, a report by Friends of the Earth France and Oxfam France highlights that between January 2020 and March 2021, the major French banks financed $100 billion for companies operating in the coal, oil and gas sectors. Between 2019 and 2020, the four major French banks all increased this financing, by an average of 22.5%! These NGOs also assert that the continued growth in financing for fossil fuels, including shale oil and gas, accounts for the warming trajectory of more than 4°C by 2100 that French banks are positioned on.

This example demonstrates that in the absence of a transition scenario to refer to in order to legitimise all their current financing operations, financial institutions face repeated accusations of brown funding, putting them at the forefront of those responsible for climate change.

The effect of these repeated reputational shocks is difficult to assess and is probably non-linear. It will depend on many context elements. However, these effects are multi-pronged. Reputational shocks may eventually increase the liquidity risk and even trigger forms of runs. Such a shock could also erode the customer base and weigh on sales. In turn, it could negatively affect the stock prices of the financial institutions concerned. It could undermine employee retention and make it harder to recruit new talent. Lastly, these reputational risks could also be combined with physical and transition risks.

All in all, for financial players to effectively limit the reputational risk linked to the absence of explicit transition scenarios, this would require them to withdraw from any funding that is even remotely related to coal, gas, and oil or to any industrial sector releasing GHGs, etc.

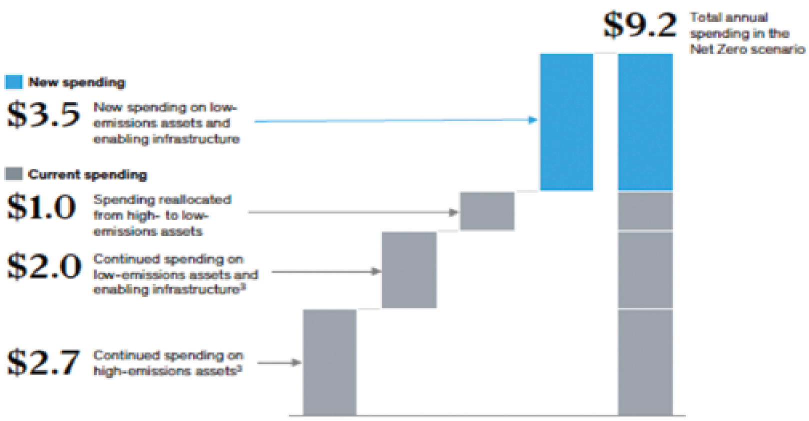
The consequences of such a radical approach, which corresponds to insufficient investments in both carbon intensive and renewables energies, since the symmetric investment in renewables should be still lagging, may well contribute highly to triggering one of these unwanted disorderly transition scenarios. According to a McKinsey study out of the $9.2 trillion total spending in the net zero scenario, $2.7 should be dedicated to high emissions assets (near 30%!)[3]...

1. https://2degrees-investing.org/wp-content/uploads/2017/03/Hit-and-Miss-about-TCFD-disclosure-guidance-for-financial-institutions.pdf
2. https://www.ngfs.net/sites/default/files/medias/documents/820184_ngfs_scenarios_final_version_v6.pdf
3. McKinsey: The net-zero transition - January 2022.

CHART 1.

Whatever the transition scenario around 30% of investments will necessary be dedicated to high-emission assets

Source: McKinsey: The net-zero transition, January 2022



4. VERY DIVERSE TRANSITION PATHWAYS ARE COMPATIBLE WITH THE CARBON TARGETS AGREED ON WITH COP21. HOWEVER, THE UNDERLYING TECHNOLOGICAL AND POLITICAL STAKES AND CHALLENGES ARE OFTEN STAGGERING.

The four scenarios set out by the ADEME[4] in November 2021 illustrate how diverse and fragile transition scenarios that are compatible with the Paris Agreement can be, as they all involve significant technological and political stakes.

Each of these scenarios sets a specific level of natural resource intensity for the economy. Similarly, each of them requires specific levels of technological innovation to be achieved: carbon capture and storage, circular economy, use of soils, etc.

More importantly, each scenario sets a very different level of energy consumption (ranging from a 23% reduction to a 55% reduction), with major political consequences due to the subsequent effects on national industries and economic performance. Furthermore, the deeper the changes required from citizens in each transition scenario regarding customs and ways of life, the higher the risk of instability and discontinuity with the transition path.

5. TRANSITION PLANNING IS NECESSARY IN ORDER TO BETTER ASSESS AND MITIGATE CLIMATE-RELATED RISKS IN THE FINANCIAL SECTOR

According to Frank Elderson, ECB Executive Board Member: "There is a need to start thinking about the next important step in risk management, which will require banks to **look at the thirty years ahead and devise intermediate targets for their risk exposures** that can render them fit for a carbon-neutral economy by 2050"[5].

However, such enabling scenarios, which define intermediate targets, still need to be clarified and stabilised. F. Elderson concludes that: "The next important step in risk management — transition planning — and what banks, as well as supervisors and other competent authorities, need to do in order to make it work [...] is to look at the thirty years ahead and devise intermediate targets for their risk exposures that can render them fit for a carbon-neutral economy by 2050 [...]".

However, defining these intermediate and final targets requires technological and political options and priorities to be available and continuously updated (energy mix, energy intensity of economies, alternative technologies for producing or storing energy, etc.) at national, regional and global level.
This also makes it necessary to continuously calculate their expected and observed impacts on climate-related physical risks.

6. TRANSITION PLANNING IN ADDITION TO "MERELY" IMPROVING THE MANAGEMENT OF CLIMATE-RELATED RISKS IS ALSO A PREREQUISITE TO ENABLE THE FINANCIAL SECTOR TO DETERMINE, ON A DAY-TO-DAY BASIS, WHETHER EACH INDIVIDUAL FINANCING APPLICATION IS CONSISTENT WITH PREDEFINED, ORDERLY AND SWIFT TRANSITION PATHWAYS

While a central goal of any participant in the financial sector is to manage (i.e. have a **forward-looking strategic and concrete approach to identify, quantify, mitigate and, ultimately, suppress)** any possible build-up of "climate-related risks", they must also contribute to an optimal transition for the economy.

For an economic player, the transition challenges go far beyond simply the decarbonisation of their production (supply chain changes, reduced energy intensity, refocus on sustainable energy, increased use of recycled raw materials, etc.) and mitigating climate-related threats. The biggest challenge for economic actors (i.e. financier counterparts) is to transform themselves while adapting to profound changes in demand that are very dependent on the actual transition scenario: lower production volumes, sustainability requirements, etc.

4. Prospective – Transition(s) 2050 - ADEME.

5. Overcoming the tragedy of the horizon: requiring banks to translate 2050 targets into milestones, Elderson, 20 October 2021.

Consequently, finance providers need to specifically look at each of these strategic shifts.
From the financial sector standpoint, this means making it possible to finance new sustainable energy sources and related distribution and storage facilities, adapting levels of demand, and assessing the transition and physical risks.

The financial sector also needs to efficiently assess the levels of technological and economic-related risks, while providing ongoing financial support to effectively transition corporates that are not yet carbon neutral. Before ultimately providing financing exclusively for carbon neutral economic actors beyond 2050.

Lastly, given that the energy transition cannot be achieved by turning off the carbon tap overnight (see the economic and political impacts of the sudden rise in oil and gas prices at the end of 2021), and that GHG-intensive activities need to be maintained at a limited level until renewable energy substitutes are available, the financial sector needs to provide sufficient access to financing for carbon-intensive activities based on a reasonable cost and risk during the transition. This also requires tailored and explicit transition pathways.

Otherwise, Nouriel Roubini may well be right[6] : "Making matters worse, the aggressive push to decarbonise the economy is leading to underinvestment in fossil-fuel capacity before there is a sufficient supply of renewable energy. This dynamic will generate much higher energy prices over time."

We should also learn from the wise comments made regarding the EU taxonomy in November 2021 by the World Economic Forum[7], which stressed the need to **provide positive incentives towards investing and developing technologies contributing to an effective transition**, such as electrical equipment and industrial automation. This suggests that an explicit transition pathway definition should also help prevent these numerous technologies, which are vital for improving energy efficiency and successfully transitioning to a sustainable economy, from remaining "under the radar".

7. PRECISE TRANSITION PLANNING IS ALSO AN ESSENTIAL CONTRIBUTING FACTOR TO REDUCE THE BURDEN OF DISORDERLY TRANSITIONS AND EXPAND THE FINANCIAL SECTOR'S CONTRIBUTION TOWARDS ACCELERATING THE EMERGENCE OF CARBON REDUCTION INNOVATIONS, AS WELL AS THE TRANSFORMATION TO A SUFFICIENTLY SUSTAINABLE ECONOMY

In the absence of internationally agreed transition pathways, any forward-looking strategic approaches outlined by financial institutions would be constantly challenged, whenever the "Hot House World" scenario set out by the NGFS (i.e. the 'no explicit transition pathway' scenario) materialises. Indeed, such a disorderly transition scenario is ever evolving, progressively moving from current general, lenient and fuzzy targets towards uncoordinated divergent and abrupt national ones.

In the end, the likely outcome would combine the consequences of high physical risks stemming from taking too little action too late and all the impacts of disorderly radical, inconsistent, unstable, late and aggressive guidelines. Lastly, without internationally agreed transition pathways, the only option is for supervisors and financial institutions to mitigate all the NGFS adverse scenarios as early as possible, further contributing to increased transition costs (e.g., cutting lending, amassing additional capital, etc.).

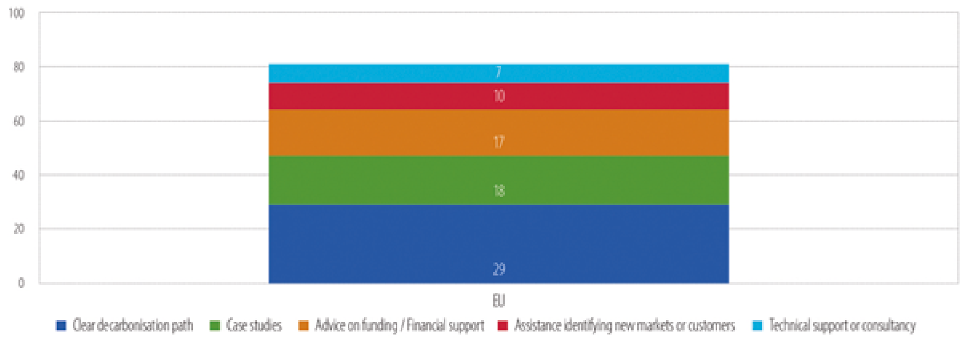
Lastly, insufficient transition planning is equivalent to focusing the financial sector on just financing for green assets. This is not a credible option, since suddenly withdrawing access to finance for non-green economic players — brown industries, households, SMEs, etc. — is likely to be one of the key features of any disorderly transition scenarios to be avoided.

CHART 2.

For small businesses, policy support needs to be multifaceted

Note: EU firms to benefit from clarity on the pathway to carbon-neutrality, in %

Source: EIB 2021 investment survey



Source: EIBIS 2021 add-on module (AOM) – sample of EU SMEs in manufacturing and services.
Base: All firms (data not shown for those who said don't know/refused to answer).
Question: When thinking about investments or actions to tackle the impact of weather events and carbon emissions reduction, which of the following would you find most helpful?

6. https://www.channelnewsasia.com/commentary/omicron-variant-ukraine-russia-vladimir-putin-joe-biden-inflation-interest-rates-finance-2022-2407316
7. https://www.weforum.org/agenda/2021/11/3-ways-expand-eu-taxonomy-accelerate-green-transition/

8. OPTIMISING THE BENEFITS OF DOUBLE MATERIALITY INFORMATION ADDS TO THE NEED FOR MORE PRECISE TRANSITION PLANNING IN MANY AREAS

Appropriate non-financial reporting, in terms of EU regulations, requires all EU firms to assess and explain why the issues reported are material from an "impact" perspective, in addition to the firm's "financial and risk" perspective. In other words, companies also need to report their decisions' material negative impacts — actual and potential — for individuals, society and the environment.

However, the form and content of such reporting will be different if companies and financial institutions have access to agreed transition pathways. In this case, sustainability reporting should help clarify whether these companies contribute to such a transition pathway, i.e. the optimal pathway, rather than whether they contribute to the fastest possible withdrawal from brown activities and ensure an exclusive focus on greener activities. In other words, from an impact perspective, it is a more intelligent approach to set out the positive contribution made by any company to a politically agreed transition pathway, rather than forcing this through the requirement to show the greenest possible non-financial disclosures. Doing the latter would in turn contribute to non-linear disorderly transition scenarios due to sudden shifts in the focus of financing from brown to green-only assets, as well as to the potential political rejection of green targets.

9. A HOLISTIC VIEW IS ALSO NECESSARY AND REQUIRES MAINLY PUBLIC SECTOR POLICY CLARIFICATIONS

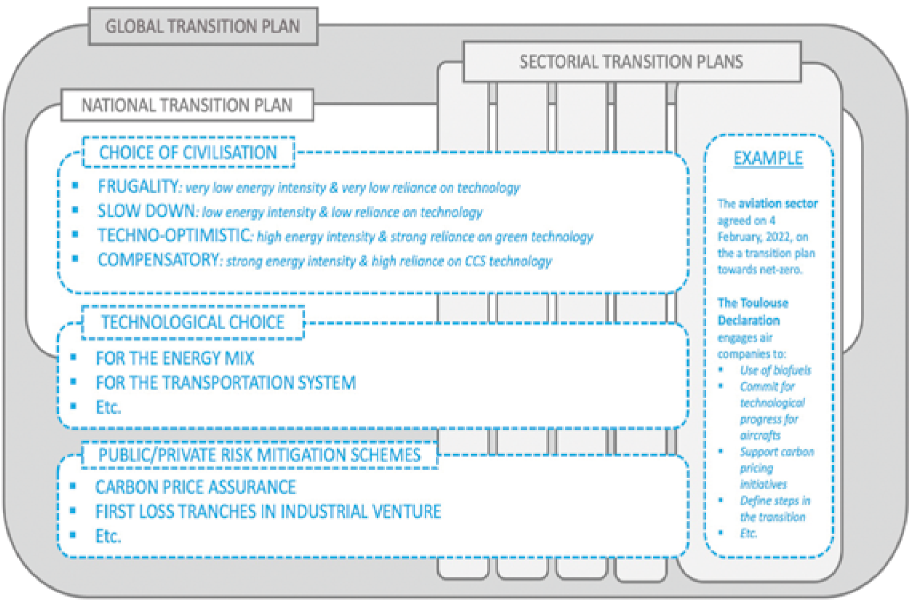
Pilita Clark reports[8] that "some bankers acknowledge the risk of sticking with companies determined to keep generating a lot of emissions, but little bank revenue, especially if rival lenders start staking out profitable green turf. Others say it is risky to be a first mover in the absence of meaningful carbon pricing or other government policies to level the financing playing field." In addition, she appropriately stresses that "Private equity firms — which face less scrutiny — are estimated to have invested more than $1tn in the energy industry since 2010, mostly in fossil fuels, which underlines where the net zero financing battle is heading next."

A Bruegel analysis[9] illustrates the magnitude of clarifications that policymakers are expected to bring about, as well as the subsequent risk faced notably by the financial sector if these clarifications are not made. Overall, the Bruegel report found that "the current national energy and climate plans (NECPs) of EU countries are insufficient to achieve a cost-efficient pathway to EU-wide climate neutrality by 2050." The think tank adds that "it is not possible today to determine tomorrow's optimal clean energy system, largely because the cost, limitations and capability developments of competing technologies cannot be predicted. Energy systems with widely diverging shares of 'green fuels', in the form of electricity, hydrogen and synthetic hydrocarbons, remain conceivable." The think tank finds "the overall cost of these systems to be of the same order of magnitude, but they involve larger investments at different stages of value chains."

The clarification imperative is not first needed for the financial sector. Indeed[10], a clear decarbonation pathway is the main enabler notably for smaller entities to invest in a climate-related transition:

CHART 3.

The consistency of corporates' transition plans with global, national, and sectoral ones is a priority



8. FT "Banks risk becoming new fossil fuel villains in 2022".
9. https://www.bruegel.org/2022/01/decarbonisation-of-the-energy-system/
10. EIB Investment Report 2021-2022

CONCLUSION

One cannot agree more with the first key insight summarising the December 2021 Eionet Report[11] which states that "sustainability is a systemic vision at the conceptual level and a macro-dynamic process in the real world. Then it belongs to the upper macro-level of public policies."

Policy makers have to make many essential choices, e.g., behavioural, technological, …

Each sector critical for achieving the net zero objective, also must clarify its own choices and check their consistency with national and global ones.

In addition, public and private schemes and partnerships should develop to mitigate the high degree of uncertainty specific to the transition to a net zero economy. Uncertainty notably stems from the many technologic bets (extent of use of hydrogen, evolution of the efficiency of renewables storage, carbon capture efficiency, …) necessary to roll out many of the possible transition plans. Such bets make the extent of investment and related returns uncertain, and ultimately hinder the predictability of carbon price on the short, medium and long terms.

These choices, projections, risk mitigation approaches and consistency checks, are key success factors to reduce transition uncertainties, optimise its cost. One cannot just rely on either green investment attractiveness or reputation risk, which have contributed so far to the involvement of the financial sector thanks to ever demanding sustainability disclosures.

11. Sustainability transition and the European Green Deal: a macro-dynamic perspective.

CONVERGENCE OF SUSTAINABILITY REPORTING STANDARDS: CHALLENGES FOR EUROPE

Note written by Patrice Morot, PwC

YES TO A CONVERGENCE OF SUSTAINABILITY REPORTING STANDARDS, RECOGNIZING PIONEERING EUROPE'S CONTRIBUTION

Sustainability issues are at the forefront in today's world. The pandemic, growing awareness of the climate emergency and stakeholders' increased sensitivity to environmental and social issues have called into question the relevance and viability of our economic models.

These new circumstances also underline the need to develop a long-term vision. Businesses cannot win in a world that is losing. A fundamental environmental and social transformation must be achieved over the next decade.

Sustainability reporting (formerly non-financial reporting) has a central role to play in the transition at hand. Corporate performance disclosures need to evolve to assess performance beyond financial results alone.

SHAPING THE RIGHT SUSTAINABILITY REPORTING STANDARDS

Driven by these developments, the process of standardising sustainability reporting is under way. Stakeholders across the board agree on the need to develop sustainability reporting standards that are of equal quality to financial reporting standards.

A number of initiatives are moving in this direction:

- With its Green Deal, the European Union has set highly ambitious sustainable development and sustainability reporting targets. The European Commission has been particularly active since the 2018 launch of its Sustainable Finance Action Plan, which includes an objective of reorienting capital flows towards activities that are considered sustainable. Notably, it has tasked the European Financial Reporting Advisory Group (EFRAG) with developing European Sustainability Reporting Standards.

- In November 2021, the IFRS Foundation announced the formation of the International Sustainability Standards Board (ISSB) to develop high-quality sustainability disclosure standards that meet investors' needs for information. The appointment of Danone's former chief executive Emmanuel Faber as head of the ISSB sends a strong signal given his vision and commitment to sustainability issues.

- In the United States, the Securities and Exchange Commission (SEC) published its strategic intentions on environmental, social and governance (ESG) issues in May 2020, confirming that firm guidelines on the subject would be of major interest to the US economy. The US government and the SEC in particular have been moving quickly on these issues since Joe Biden's election as president.

- Similar, though less advanced, trends are also developing in Asia, especially in China and Singapore.

The deployment of competing initiatives indicates the level of importance that governments are now placing on sustainability reporting and its regulation. However, there is much debate as to whether certain sustainability reporting standards should be prioritised, or even whether one single global standard should be applied.

A NECESSARY CONVERGENCE OF SUSTAINABILITY REPORTING STANDARDS DRAWING ON EUROPE'S EXPERIENCE AND INTEGRATING ITS SPECIFICITIES

International standards are needed because ESG issues are global, and companies need consistency – and therefore a common set of sustainability reporting standards – to operate internationally. The ISSB's initiative aims to develop global standards, in the perspective of financial materiality of sustainability risks, including climate risks, that could affect investors.

Meeting the challenges of transition set out by the European Green Deal does however require implementing public policies, including sector-based regulations.

Sustainability reporting should then not only be a reporting on absolute sustainability performance but also on the alignment with these regulations in order to help Europe to monitor the contribution of businesses to the EU's transition pathway. Companies can then communicate to stakeholders about their related levels of compliance and performance. The level of alignment is likely to be among the factors that have the highest financial materiality and will therefore have increased importance in the future as these policies are further deployed and implemented. It should also be noted that these regulations are highly technical and reflect the ambitions and priorities of the various authorities, so the technical inputs from the local jurisdictions will be very important in any global standard setting process.

This means that compatible standards are needed at the global, European and other regions levels to ensure both international consistency and alignment

THE APPLICATION OF THE STANDARDS REQUIRES THE IDENTIFICATION OF EQUIVALENCES AND COMPARABILITY AS ILLUSTRATED BELOW :

- There are already many references to jurisdictional regulations in current proposals. The TRWG (Technical Readiness Working Group - IFRS Foundation) recommendation to the ISSB, formalised in the climate reporting prototype was built on TCFD (Task Force on Climate-Related Financial Disclosures) but also industry SASB (Sustainability Accounting Standards Board) standards. It includes at this stage hundreds references to US norms and regulations and very limited references to EU regulations. This will certainly evolve over time so that equivalent EU regulations and norms are incorporated, which should require the inputs and collaboration of EU standard setters.
- The use of multiple references raises the issue of comparability, since one will have to ensure that equivalent norms are indeed equivalent, and do not provide misleading information about companies' relative performances. The same issue already exists within the EU where a directive can be transposed differently in the various EU countries. The Energy Performance of Building Directive for instance has led to non-homogenous, Energy Performance Certificates across EU countries reflecting different realities. To illustrate this further, the French transposition of an EPC relies on both an energy efficiency and Co2 emission measurement, while the US Home Energy Rating System index mentioned in the ISSB climate prototype relies on the sole energy efficiency indicator. A mechanism for equivalence recognition would be therefore needed as part of the global architecture, it would also ease the implementation of standards for global companies that will have to deal with multiple jurisdictions specificities or extra-territorial requirements.
- Jurisdictional regulation can require the production and the monitoring of specific indicators depending on their ambitions and priorities, this will require precise specifications on the jurisdictional level and also clarity on how they differ from global levels indicators. The double materiality approach and the European Taxonomy reporting requirement are two examples that illustrate these issues.

  - In Europe, the goal is for companies to report to a wide range of stakeholders based on the principle of double materiality: considering on the one hand their impact on society and the environment, and on the other hand, the impact of sustainability factors on the company. It will be necessary to articulate the double materiality approach of the EU and the financial materiality approach of the ISSB to provide clarity for the readers since in practice there might be a significant amount of judgement to draw the line between the two approaches.

  - The reporting requirements on the European Taxonomy alignment is currently generating multiple outstanding interpretation questions related to its practical implementation. Although the European Commission issued FAQs to address some of these questions, many remain open which ultimately might hinder the comparability of taxonomy alignment reportings, a specific standard designed to address this reporting in a more complete manner, is currently missing and could be developed by the European Standard Setter.

with regional public policies. In particular this requires co construction and standard setting capacities to define common concepts, take account of differing priorities and establish equivalences that allow for interoperability among standards.

ADAPTING GOVERNANCE AND RESOURCES TO THE CHALLENGE OF INTEROPERABILITY

Working together to build interoperable standards is the main challenge (ie operate and coordinate the standards in conjunction with each other). Given its ambitions and the significance of its existing and draft regulations, Europe must be in a position to contribute substantially to international standards. The right conditions must be created to make this possible, in particular through a governance system and an organisational model that foster interactive collaboration both at the operational level and the decision-making level.

The process of standardising sustainability reporting also requires mobilising financial and human resources to meet the ambition of developing internationally recognised standards of high quality. It is essential for Europe to allocate resources that are compatible with its targets and comparable to the resources that will be implemented at the international level.

INVOLVING COMPANIES IN THE STANDARDISATION OF SUSTAINABILITY REPORTING

The private sector must also play a part in the transformation of sustainability reporting. Standardisation aims to improve the quality of sustainability disclosures and make them as reliable as financial disclosures. But the quality of these disclosures will not solely depend on the standardisation processes; it will also require an investment on the part of the companies that will have to produce the information.

To achieve high-quality sustainability disclosures, related reporting requirements must be included in governance, management and supervisory bodies' scope of responsibility. The European proposal for a Corporate Sustainability Reporting Directive (CSRD) emphasises this point. The proposal also provides for the development of an internal control system for sustainability data, extended responsibility of the audit committee beyond financial reporting to include sustainability reporting, and the role of the auditor as a trusted third party.

Current regulatory discussions clearly indicate that financial and non-financial information will converge and become increasingly intertwined, as will the systems used to produce and verify that information. Regulators emphasise that companies must improve the consistency of the information presented in their financial statements and sustainability reporting.

Beyond the current standardisation initiatives, we can also anticipate that in the future corporate performance reporting will come to be defined by a concept of overall performance. This expanded scope will give new meaning to the words "corporate" and "performance", ultimately leading to a radical reform of historical accounting.

As we come ever closer to this new "big bang" for sustainability reporting, Europe has to take its rightful place in the global standardisation process, which will have significant consequences for its economy and businesses and the success of its transition path.

So, yes to a convergence of sustainability reporting standards — recognizing pioneering Europe's contribution.

ADDRESSING ESG CONFUSION TO AVOID GREENWASHING IN ASSET MANAGEMENT

Note written by Matteo Le Hérissé

The urgency of climate change mitigation presents the unprecedented challenge of the transformation of our economies — and, by extension, of the global financial system — moving towards sustainability. However, holding green assets does not automatically ensure an impact, often measured based on the reduction in GHG emissions or CO2 equivalents. Furthermore, as we will demonstrate, there are concerns around the qualification and reporting of this green characteristic (i.e. the existence of greenwashing) that hamper sustainable investing.

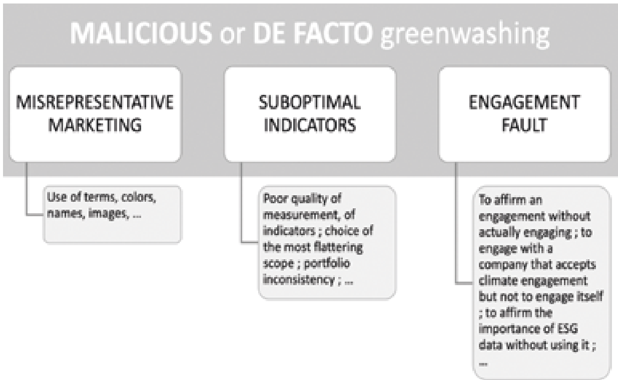
GREENWASHING TYPOLOGY

Greenwashing practices can arise from two kinds of stakeholders: at corporate level, or from banks and asset managers.
The most recognised and widely criticised form of greenwashing corresponds to the malicious aim of misrepresenting the reality of the situation so that it seems ‘greener’ than it truly is. However, this malicious aim would account for a minor part of the effective greenwashing carried out. It appears that greenwashing often takes place as the result of suboptimal methods and practices only, without stakeholders intending to mislead others. ESG confusion may therefore be the primary factor behind this.

We will then distinguish between different forms of greenwashing practices among these two drivers (that we will designate as *malicious* and *de facto*).

CHART 1. Greenwashing Typology

Source: Eurofi



Firstly, greenwashing practices may be due to **misrepresentative marketing**, which involves presenting products or funds in a way that would suggest ESG performances that do not prove to be true or are less significant. Different methods may lead to this result, such as the use of colours (mostly green), names and expressions evoking nature or by image association. This type of practice is mainly found in corporate activities (see example below for Bayer) and is the most visible form of greenwashing.

CHART 2.

Illustration of Misrepresentative Marketing Greenwashing

Source: Eurofi

Note: The harming nature of pesticides (on the environment and human health) has been extensively demonstrated by scientific analysis and reconised worldwide. Such products are thus inherently ‘brown’ and do not comply with ESG criteria.

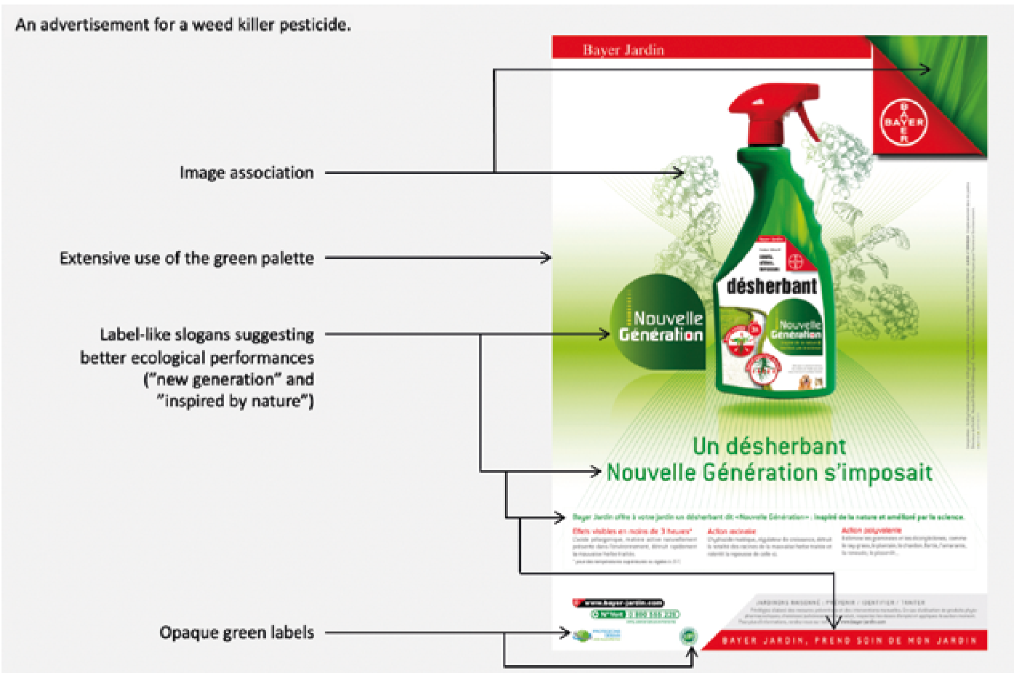


CHART 3.

Illustration of Suboptimal Indicators Greenwashing

McDonald's Corp. MSCI's sustainability score improvement (2015-2019); evidence of suboptimal indicator use.

McDonald's Corp. is a large GHG emitter. According to Bloomberg, the company is "one of the world's largest beef purchasers [and] generated more greenhouse gas emissions in 2019 than Portugal or Hungary, because of the company's supply chain". That is 54 million tons of emissions for 2019.
Despite this poor environmental performance and increasing emissions, MSCI has upgraded McDonald's sustainability rating (on April 2019). MSCI considered good the "companies' environmental practices" after it dropped carbon emissions from its rating calculation.

This MSCI rating on environmental practices then fails to depict the sustainability degree of McDonald's Corp. operations.

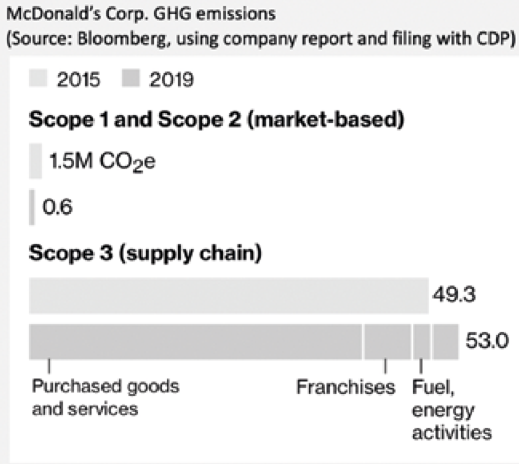
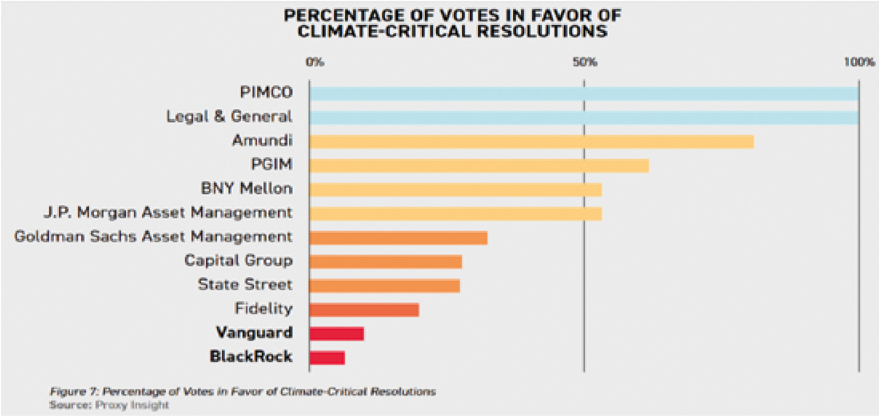


CHART 4. Illustration of Engagement Fault Greenwashing

Note: BlackRock was vocal on its engagements but its assets managers voted in f avour of about 10% of climate-critical resolutions in 2020 (according to EDHEC research with Proxy Insight data).



Secondly, greenwashing may arise from the use of **suboptimal indicators**. The latter may refer to different situations;

- When ESG claims are based on an indicator that measures an irrelevant criterion or focuses on the most flattering scope (*see example above*);
- When ESG claims do not hold up because of portfolio inconsistency (e.g. an 'ESG' fund that does not promote environmental impact);
- When ESG claims are based on an indicator that poorly measures its criteria (e.g. missing data, proxies issue, etc.).

Thirdly, greenwashing may occur due to an **engagement fault**. This corresponds to different situations in which there is a gap between the stakeholder's engagement and the engagement that is actually observed:

- When affirming engagement without actually engaging (*see example above*);
- When affirming engagement supported by effective collaboration with a partner that is truly engaged, but without engaging itself;
- When affirming the importance of ESG data without using it.

1. DEFICIENCIES IN COMMON QUALIFICATION OF WHAT'S GREEN GENERATES RISKS OF GREENWASHING SENTIMENT

The way sustainability is measured and reported lifts concerns so much so it is presented as the main impediment to ESG integration in investment decisions[1].

1.1. Clear ESG metrics are a missing key element

1.1.1 Data availability is limited

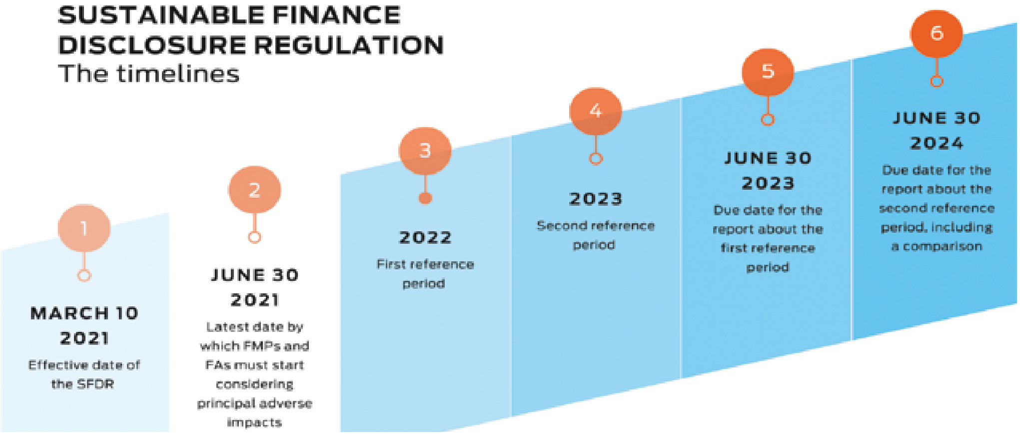
EU regulations are still recent and not fully operational: the first elements of sustainability-related disclosures have been required since 10 March 2021, while extended disclosure requirements will be in place from 1 January, 2022. The biggest players are already publishing their data, so they should be well positioned for the extension of the disclosures required from January 2022. However, the EU Taxonomy and disclosure requirements set a more comprehensive selection of data, with ESG criteria in their scope, that are forcing them to rethink how they collect their data. Other smaller stakeholders may face difficulties with collecting and processing their data due to their limited resources.

1. A. Amel-Zadeh and G. Serafeim, "Why and How Investors Use ESG Information: Evidence from a Global Survey.", Harvard Working Paper, 2017.

CHART 5.

Most of the Non-Financial Reporting Architecture Is Not Operational Yet

Source: BIQH



Data availability may also be limited by timeline constraints: financial market participants need the disclosure of investee companies' data in order to produce their own. As a result, the first reports can only be expected in the course of 2023, for the 2022 financial year (if the disclosure by investee companies happens during the first few months of 2022).

To overcome the lack of available data, important stakeholders have formed partnerships with fintech firms that use innovative methods to collect and process data (such as the use of AI). Although promising, these practices do not foster data availability. First of all, they support a system of privately-owned data, rather than a *perfect information* principle. The European Single Access Point (ESAP) project, expected to be launched in 2024, should address this concern. Secondly, the ability of fintechs to deal with data is itself limited by poor data availability. Data gaps are filled with proxies, making estimates less rigorous and sometimes even false.

One serious limitation with data availability appears to be a lack of standards regarding what to measure. If corporates and financial market participants do not agree on the same ESG factors that would be material to all long-term investors, they end up not measuring and considering the same things. In this case, data may be published, if it does not correspond to data users' observed metrics, is equivalent to missing data for them.

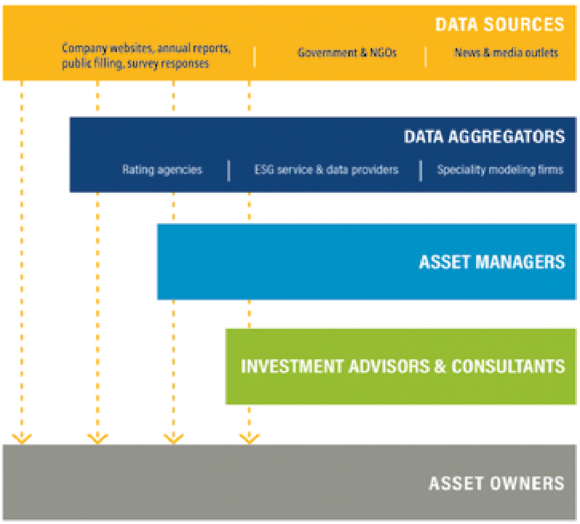
Many stakeholders already provide ESG metrics. However, GHG emissions are often the only indicators chosen for 'how green' assets and practices are. More comprehensive metrics considerations are then needed to provide resourceful measures for data users (e.g. including physical risks stemming from climate change[2]).

1.1.2 Reporting is heterogeneous and unreliable

While data to be reported appear to involve significant limitations, there are also concerns about how it is reported.

CHART 6. Flow of Sustainability Data Across Market Players

Source: World Resources Institute



Due to a lack of reporting standards, financial market participants and corporates have put in place their own reporting methods.
This results in standards that are either too sector-specific, or too broad to be practical as they are trying to meet the demands of too many parties. Bespoke standards result in heterogeneous global reporting, which limits comparability. Unverified reports, or reports that are self-audited but with opaque methodologies, fail to ensure trust, as they would invariably present sustainability metrics in the best possible light. Nevertheless, it appears that it is preferable to have audited reports — even with the limitations we discussed — than to not audit reports at all[3].

2. Fulton and Weber, "Carbon Asset Risk: Discussion Framework", World Resources Institute, 2015.

3. Del Giudice and Rigamonti, "Does Audit Improve the Quality of ESG Scores? Evidence from Corporate Misconduct.", 2020.

CHART 7.

Most Common Standard-Setting and Reporting Initiatives

Source: Deloitte

	Year founded	Type	Audience	Form of report	Focus
CDP	2000	Reporting and rating	Investors and other stakeholders	CDP questionnaire	Provide investors with climate change, water, and carbon data
DJSI	1999	Rating	Investors	RobecoSAM questionaire	Evaluate the sustainability performance of the largest 2,500 S&P firms through a family of indices
GISR	2011	Rating	Investors and other stakeholders	Center of Ratings Excellence (CORE) program	Steward an ESG ratings standard to accelerate the contribution of organizations worldwide to sustainable development
GRI	1997	Reporting	Broad set of stakeholders	Sustainability report	Empower sustainable decisions through established standards and a global, multi-stakeholder network
IIRC	2010	Reporting	Providers of financial captial	Integrated annual report or standalone report	Establish integrated reporting and thinking within mainstream business practice for both public and private sectors
SASB	2012	Reporting	Investors in US public companies	SEC 10-K, 20-F filings	Establish and improve industry-specific metrics for investors in the US

Data inconsistency is explained by the lack of disclosure standards, but stakeholders do not agree on the materiality of sustainability disclosures. Thus, and if not qualified as such, reports are not regulated by the Securities and Exchange Commission (SEC).

Existing sustainability standard-setting and initiatives are available to frame reporting practices *(see Chart 7)*. However, these standards to be extended to include deeper ESG considerations that would be in line with net-zero objectives.

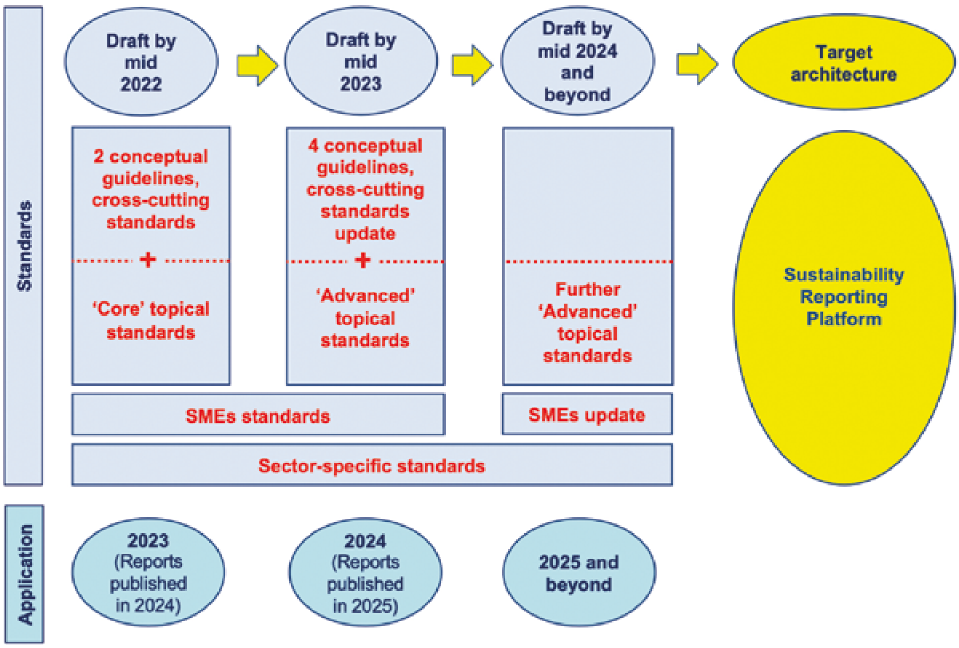
Work on further disclosure standardisation is ongoing. European Supervisory Authorities submitted a final report on draft Regulatory Technical Standards on disclosures under SFDR[4], but as long as the Commission doesn't state on reporting standards in a regulatory publication, financial market participants and corporates will not have a common standard ensuring the integrity, quality and transparency of their metrics.

To respond to substantial doubts concerning the quality of the data reported, report auditing is a proposed solution the CSRD aims to implement in the EU. The principle would be to require an EU-wide audit similar to the one already required for financial information.
For financial information, statutory audits are carried out for public interest entities (PIEs) in the EU[5] and other developed economies, such the US[6]. Statutory auditing is estimated to be required for around

CHART 8.

Standard-Setting Roadmap

Source: EFRAG



4. Final Report on Draft Regulatory Technical Standards, ESMA, 2 February, 2021.
5. Directive 2014/56/EU of the European Parliament and of the Council.
6. Securities Exchange Act of 1934 / Sarbanes-Oxley Act of 2002 / U.S. GAAP, PCAOB and SEC.

CHART 9.

Ranking of World's Stock Exchanges on Sustainability Disclosure

Source: Corporate Knights (2017)

1	Helsinki Stock Exchange	46	Qatar Stock Exchange
2	Stockholm Stock Exchange	47	Saudi Stock Exchange
3	Euronext Paris	48	Frankfurt Stock Exchange
4	London Stock Exchange	49	Lima Stock Exchange
5	Olso Stock Exchange	50	OTC Markets
6	Euronext Amsterdam	51	Pakistan Stock Exchange
7	Australian Stock Exchange	52	KOSDAQ
8	Copenhagen Stock Exchange	53	Hochiminh Stock Exchange
9	Johannesburg Stock Exchange	54	Egyptian Stock Exchange
10	Stock Exchange of Thailand	55	Caracas Stock Exchange

300 000 companies in the EU[7]. For other non-public companies, there is no statutory auditing and, barring exceptions, only tax audits are applied.
Due to the difficulties of implementing such audit requirements for small corporates (particularly for SMEs), the European Commission's approach is progressive. Following the financial information requirements example, mandatory ESG data audits may be implemented for PIEs first.

These new audit requirements on sustainability information nonetheless raise the question of the entity in charge of the audit. Several actors may perform this task: line ministries (that are already exerting control and differ regionally), national or supranational agencies (existing or to be created), external auditors, or rating agencies. The Commission's proposal for the CSRD would allow the recourse to "independent assurance service providers"; "Member States could choose to allow firms other than the usual auditors of financial information to assure sustainability information"[8].

1.1.3 Lack of consistency worldwide

Data consistency is crucial to allow for comparison across firms, banks or asset managers, but geographic issues also arise.

Sustainability disclosure regulation is heterogeneous between countries and regions. In 2020, 90% of N100 companies reported on sustainability in the US. That is the highest percentage of all regions, and 31 pp more than for the Middle East and Africa. Eighty percent of N100 companies worldwide now report on sustainability, and global sustainability disclosure rates have seen rapid growth over the last 20 to 30 years (from 12% in 1993 to 80% in 2020 for N100). Despite that, some countries are still green reporting laggards: New Zealand (69%), Iceland (52%), Turkey (56%) or Saudi Arabia (36%) based on 2020 data[9].

Overall, it appears that there is notably greater data availability in developed countries. For instance, this is shown in a 2017 ranking of the world's stock exchanges on sustainability disclosure (*see above*[10]): the top 10 is composed of developed countries and concentrated in Northern and Western Europe. The bottom 10 countries are concentrated in developing countries (and oil-producers). This can be explained by both the facts that developed economies happen to have more important companies that are required to disclose sustainability information, and that developing economies often present a less comprehensive and efficient regulatory environment.

The European Union is deeply involved in the sustainability reporting agenda thanks to the Commission's work on the EU Taxonomy and SFDR regulation. While North America has a large number of companies reporting on sustainability, the EU regulation landscape is currently the most advanced for sustainability matters.
However, the new European regulation scheme is not the only reason for the EU's head start; there appear to be significant differences in terms of investment decision making and practices. A 2020 Harvard survey[11] reported statistically significant differences between the number of senior investment professionals surveyed considering certain ESG criteria to be material in their investment decisions, in the US versus the EU. European senior investment professionals were more (by 16.5 pp) to consider ESG criteria such as biodiversity to be material in their investment decisions, compared with their US peers (*see Table 1 below*).
Overall, European companies appear to be more engaged in climate mitigation and social responsibility with their strategies: 50% of European companies have outlined the United Nations Sustainable Development Goals (UN SDGs) on Climate Action as a priority; this is twice as many as in the United States[12]. In addition, 21% of US companies have explicitly identified the UN SDG on Gender Equality as an objective, compared with 58% of European companies.

7. Deloitte estimates (2015).
8. Questions and Answers: Corporate Sustainability Reporting Directive proposal, EC website, 21 April, 2021.
9. Figures from "The KPMG Survey of Sustainability Reporting 2020.", KPMG Impact, December 2020.
10. "Measuring Sustainability Disclosure", Corporate Knights, September 2017.
11. Amel-Zadeh, Amir, and George Serafeim. "Why and How Investors Use ESG Information: Evidence from a Global Survey." Harvard Business School Working Paper, No. 17-079, February 2017.
12. "Data Shows Broad Differences in ESG Reporting Between Europe and the US", Environmental Leaders, June 2021.

TABLE 1. Senior European Investment Professionals' Opinion on ESG Criteria Materiality

Source: Eurofi, with figures from cited Harvard survey
Note: Significance at the 1%-level

	Declared material by senior investment professional		
ESG criteria considered	In the US (1)	In the EU (2)	Difference (2)-(1)
Energy and fuel management	47.3%	63.7%	16.4 pp
Biodiversity	16.1%	32.6%	16.5 pp
Employee health, safety, well-being	40.2%	60.7%	20.5 pp

The global inconsistency with reporting disclosures is clear when looking at the number of different regulations on this matter worldwide *(see table below)*. Europe's head start in sustainable regulation translates is nearly five times more ESG-inclusive reporting instruments for the continent compared with North America. Asia-Pacific comes second, with 77 less instruments than Europe.

TABLE 2. Geographical Discrepancies of Sustainability Reporting Regulation

Source: Eurofi, with Carrots&Sticks data

Number of mandatory/voluntary reporting instruments by regions, currently in place, and including ESG criteria	
Africa & Middle East	53
Asia Pacific	131
Europe	208
North America	44
South America	40
International	0

Geographical biases in reporting directly impact stakeholder ratings. For instance, considering ESG criteria, we would fairly easily conclude that Tesla should be ranked higher than BMW. The latter has been pointed out in ecological scandals and accused of more severe and numerous violations[13]. On the other hand, Tesla has been leading the electrification of the automotive fleet, making the company one of the best among the various automotive producers. However, a positive bias for Europe ranks Tesla far behind European auto manufacturers (*see infographic below*[14]). As European regulations require significantly more ESG disclosure, the BMW Group reports more ESG data than Tesla (which is under US regulations). This may be falsely interpreted as greater efforts made by BMW, so ratings that fail to catch geographical biases may yield counterintuitive results, such as ranking Tesla behind all European car manufacturers in terms of its ESG rating. The score divergence between BMW and Tesla is a telling example that reflects a global bias; a study by Sustainalytics ESG ratings[15] found that average ESG ratings in Europe are 32% higher than in the US.

CHART 10. Sustainalytics Score for the BMW Group and Tesla

Source: T.M. Doyle, "Ratings that don't rate: the subjective world of ESG ratings agencies", American Council for Capital Formation, July 2018

While sustainability reporting is now adopted almost universally in terms of its principles, the misalignment of reporting practices is a serious limitation for global comparisons and may spur the risk of greenwashing practices occurring.

1.1.4 Aggregation distortions may lead to a green window dressing

Portfolio-level information inevitably presents aggregation distortions. Indeed, aggregation fails to account for differences between "greenness" strata.

Let's consider Green Asset Ratios as:

$$GARs = \frac{\sum green\ asset}{total\ assets}$$

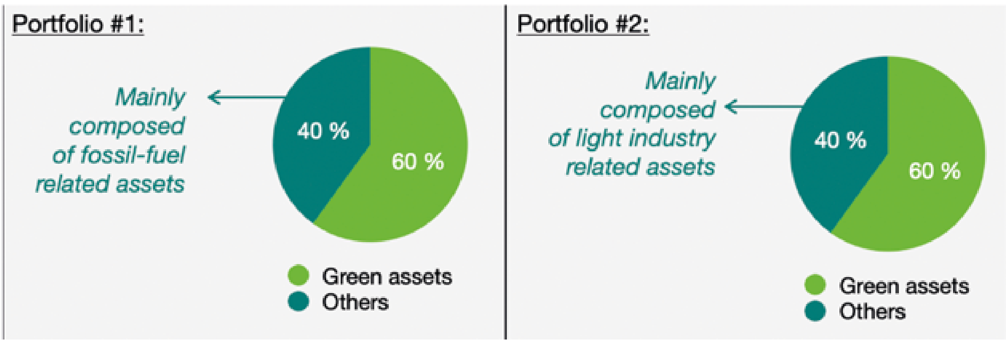
It is possible that two asset managers present the exact same GAR for their portfolio (e.g. 0.6 which indicates 60% of their assets are 'green'). By itself, and being a mean, this GAR does not provide any more information. The remaining 'not-green' 40% of the total assets may vary considerably between the two stakeholders (e.g. comprising assets in light industries versus assets in oil companies). Aggregation can therefore be misleading and, by omitting details, result in greenwashing.

13. "Violation Tracker", Corporate Research Project.
14. Extracted from T. M.Doyle, "Ratings that don't rate", American Council for Capital Formation, 2018.
15. Idem.

CHART 11.

GARs' Aggregation Misleading Picture

Source: Eurofi



The solution to this lack of detail in portfolio-level composition would be to scrutinise portfolios at stock level. Asset managers would then have the key metrics to decide how green a portfolio really is and if it complies with their (climate-positive) investment strategy. To do so, a great amount of data and significant data processing capabilities are nonetheless required.

Another (non-excluding) solution would be rigorous standards for defining what is 'green' and how to report data.

As we discussed earlier, these are major limitations.

1.2 Labels are not completely trustworthy

In order to be referenced as a 'green' stakeholder and to entice financial flows, financial market participants and corporates that have committed to incorporating ESG standards into their practices often display green labels. As demand for ESG financial products has grown significantly in the past few years, and in the absence of a well-defined denomination framework at regional and global level, a plethora of labels and terms has appeared in the market to earmark sustainability-focused financial products. Nevertheless, they seem to fail to ensure trust in true ESG commitments and contribute to the global confusion surrounding ESG assets. First seen as a powerful and low-cost market-based instrument to ensure ESG alignment (see for instance the first OECD analysis of ecolabeling in 1991), they rapidly faced greenwashing concerns that are still seen today.

In 2020, an EC study tested the draft Criterion I for UCITS equity funds[16] and concluded that 3% of their sample was eligible for the EU Ecolabel. Despite this, 51 of the 101 funds were awarded national labels and 50 were marketed as "green" without a label. These results highlight the severe limitations involved with the current use of 'green labels' for finance.

CHART 12.

Main European Sustainable Labels for Financial Products

Source: Novethic

	Label	Governance	Attribution	Type of label	Annual cost
ESG	**SRI Label** (France)	Standalone stakeholder committee, supported by the Ministry of Finances	Accredited auditors	SRI/ESG investment process	Fee including the audit and promotion costs
ESG	**FNG-Siegel** (Germany, Austria & Switzerland)	Expert committee under the stewardship of FNG[1]	GNG (FNG's labelling entity) & Uni. Hamburg	SRI/ESG investment process with climate exclusions. Point system	€3500
ESG	**LuxFLAG ESG** (Luxembourg)	LuxFLAG[2]	LuxFLAG	SRI/ESG investment process	€3000
ESG	**Febelfin QS** (Belgium)	Febelfin[3]	External auditor	Quality standard combining requirements on the investment process and exclusions	-
«Green» labels	**Umweltzeichen** (Austria)	Austrian Federal Ministry for the Environment	Ministry	SRI/ESG investment process with climate exclusions. Point system	Variable annual fee
«Green» labels	**Nordic Swan Ecolabel** (Nordic countries)	Nordic Ecolabelling Board[4], on a mandate from Nordic governments	Nordic Swan	SRI/ESG investment process with climate exclusions & green reporting. Point system	€3000 + fixed charge
«Green» labels	**LuxFLAG Environment** (Luxembourg)	LuxFLAG[2]	LuxFLAG	Thematic investments and ESG criteria	3000€
«Green» labels	**LuxFLAG Climate Finance** (Luxembourg)	LuxFLAG[2]	LuxFLAG	Thematic investments and ESG criteria. Climate exclusions	3000€
«Green» labels	**Greenfin Label** (France)	Standalone stakeholder committee, chaired by the Ministry for the Ecological and Fair Transition	Accredited auditors	Thematic investments and ESG criteria. Climate exclusions	Depending on auditor

Source: Novethic

[1] Sustainable investment forum (German-speaking countries)
[2] Standalone labelling agency for the financial sector in Luxembourg
[3] Belgian Financial Sector Federation
[4] *Nordic Ecolabel* is a voluntary label created by the Nordic Council of Ministers in 1989 and available for about sixty categories of retail products. The "Financial Products" category was introduced in 2017.

16. "Testing draft EU ecolabel criteria on UCITS equity funds", EC, 2020.

1.2.1 Many "green" labels exist

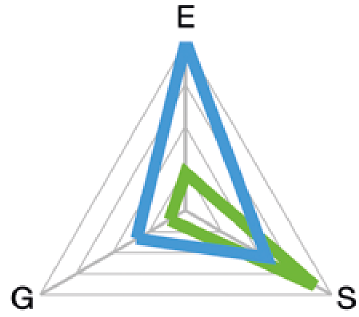
The asymmetric information issue, between asset managers and investors, particularly applies for ESG financial products. Indeed, asset managers not only have to provide financial information regarding their 'green' products, but also have to address concerns about the level of integration of ESG criteria, i.e. how green their products really are. The same asymmetry of information exists for producers of goods and services, with their customers and in their relationship with financial market participants.
In order to respond to this lack of complete transparency, labels have been developed and used as signals. These are often awarded by third-party stakeholders to mitigate scepticism. Nevertheless, the multiplication of labels in place seems to increase confusion and erode their credibility.

As of January 2021, "more than 400 sustainable labels exist around the world"[17] for all types of products. Consumers and investors are now used to their use. All of them are unique and may fall under different categories regarding their characteristics. They may be voluntary or compulsory, single or multi-product focused, socially or environmentally oriented, etc. For financial products, the same discrepancies in label characteristics apply.
In Europe, nine ESG-related labels lead the 'green' landscape in finance. These labels are issued by different emitters: financial markets, ministries, professional associations, or specialist organisations.

In addition to the growing number of green labels for financial products, the divergences among the criteria applied seem to be a key factor behind the ESG confusion that is partly responsible for greenwashing concerns.

CHART 13. A Kiviat Diagram for Comparing ESG-Oriented Labels

Source: Eurofi



1.2.2 Sustainable labels present important divergences

Under the sustainability dome, financial product labels may coexist despite major discrepancies in terms of their intrinsic characteristics.
While 'sustainability' usually refers to compliance with environmental, social and governance criteria, there are no proportions imposed between these three criteria. Then, a label focused almost exclusively on environmental issues is as legitimate in its ESG denomination as a social-oriented label. One could argue this may not *per se* be an issue given that investors are aware of this triple orientation. Nevertheless, to avoid contributing to any confusion, investors should be able to compare sustainability labels for financial products based on the extent to which they focus on "E", "S" or "G". As we highlight, this comparison — which may make it possible to produce Kiviat diagrams such as the one above — cannot realistically be carried out by investors due to information transparency limitations.

CHART 14. Comparison of ESG Labels' Exclusion Policies

Source: Novethic

		Greenfin label[1]	Nordic Swan Ecolabel[2]	LuxFLAG Climate Finance	Umweltzeichen	FNG Siegel	Febelfin QS[2]
Exploration & extraction	Coal	Yes (5%)	Yes (5%)	Yes (30%)	Yes (5%)	Yes (5%)	Yes (10%), with expansion criteria[3]
	Non-conventional O&G	Yes (5%)	Yes (5%)	Yes, internal criteria apply	Yes (5%)	Yes (5%)	Yes (10%), with expansion criteria[3]
	Conventional O&G	Yes (5%)	Yes (5%)	Exploration only (30%)	No	No	Oil only (60%)
Electricity generation	Fossil fuels	Yes (5%)	Yes (5%)	No	No	No	Based on carbon intensity of the energy mix (gCO2/kWh)[5]
	Coal			Yes (30%), with expansion criteria[3]		Oui (30%)	
	Nuclear energy[4]	Yes (5%)	Yes (5%)	New projects only	Yes (5%)	Oui (5%)	

[1] Additional partial exclusion criteria apply to activities listed in this chart. Service companies and companies involved in the distribution / transportation and the production of equipment and services are excluded in so far as 33% or more of their turnover comes from clients from excluded sectors.
[2] Exceptions apply to companies that can demonstrate an ambitious low-carbon transition strategy (see below).
[3] A specific exclusion criterion targets companies which have announced "expansion plans". Assessment is based on physical assets (building or modernizing coal plants, in the case of LuxFLAG) or on corresponding revenue growth (Febelfin).
[4] Besides the generation of nuclear energy, FNG & Umweltzeichnen labels also exclude companies who supply components to nuclear plants, while Nordic Swan excludes uranium extraction. The Greenfin label excludes all the related value chain.
[5] Criterion based on energy mix projections as per the Energy Technology Perspectives 2017 scenario of the IEA. If data in gCO2/kWh is not available, thresholds of 30% fossil fuels, 10% coal and 30% nuclear energy apply.

17. As highlighted in Megaeva, Karina and Engelen, "A Comparative Study of European Sustainable Finance Labels", January, 2021.

An eloquent example of the discrepancies lies in exclusion lists. ESG labels intend to offer a guarantee of not investing in sectors that are detrimental to the environment, social or governance conjunctures. On the negative screening side, this approach involves excluding sectors that do not comply with sustainability criteria (often regarding the DNSH criterion). These sectors usually comprise fossil fuels — coal in particular — or sectors such as the arms industry. However, exclusion lists are not identical for all sustainable labels. For instance, the Greenfin label allows a portfolio to comprise coal-related assets, under a 5% maximum threshold, while LuxFLAG's coal threshold is 30%, that is six times more.

Moreover, label providers do not apply the same methodologies to assess a portfolio's adequacy. Criteria are commonly process-oriented, focused on verifying whether ESG analysis is applied to select assets in the portfolio and ensuring that complete and comprehensible reporting is available to clients. Some ESG labels use a points system, either to ensure that minimum requirements are met (e.g. Nordic Swan or Umweltzeichen), or to distinguish funds whose ESG practices are more holistic (e.g. FNG).
Labels also differ on the extent of the assets contained in a portfolio that are screened in the compliance analysis (e.g. SRI operates a screening for over 90% of the considered portfolio).

Lastly, the terms used in the name or description of labels also appear to be a factor behind ESG confusion. The proliferation of sustainability labels despite a strict framework has led to semantic dispersion. The following infographic highlights this: for example, a C&E-focused fund might correspond to different denominations of labels, such as "green", "sustainable", "ESG", "climate", "impact", etc.

1.2.3 Case study on the CAC40 ESG Index

Launched by Euronext on 22 March 2021, the CAC40 ESG Index is a selection of the 40 'greenest' companies from the CAC Large 60. This index was designed to spur ESG adoption by investors, creating a benchmark among the various green indexes, with a carbon footprint that is 43% less than the regular CAC 40 Index.

Despite being an index and not a label, it may be used as one. Indeed, it appears that, to include a company in the index may be perceived as a form of sustainability assurance for investors. This corresponds to the signal function of labels.
It is therefore interesting to wonder what the index selection methodology is and whether this can truly be used as an assurance of sustainability.

Selection has been made following a ranking based on 38 ESG criteria of the CAC Large 60, using the Equitics methodology developed by Vigeo Eiris. Some CAC40 companies present an ESG score that is too low or have been excluded: *Airbus, Alstom, ArcelorMittal, Dassault-Systèmes, EssilorLuxottica, Hermès, Saint-Gobain, Thales, Total*. Some non-CAC40 companies were selected to fill the gap: *Accor, Arkema, EDF, Gecina, Klépierre, Sodexo, Solvay, Suez, Valeo*. The composition of the index is revised quarterly by an independent committee.
To account for sectoral heterogeneities, the 38 generic ESG criteria are assigned a weighting, from "not relevant" to "highly material". The latter is used to compute a global ESG score as a weighted average. Selection is then made with an exclusion list (for companies in the tobacco, coal, arms sectors, etc.). The index methodology is aligned with the SRI label (from the French Ministry of Finance) and the UN Global Compact Principles for exclusion lists.

Some might say the CAC40 ESG Index promotes a greenwashing of the CAC large 60 and accuse the index not to engage enough is green practices with a selection process too lenient. For instance, its exclusion list includes only 20% of the total investment universe (that is the minimum criterion to be qualified as 'ESG'). Also, critics highlight that it fails to induce a credible change in investment practices as it is still secondary to the regular CAC 40.

1. 3 The reliability of climate ratings is also questionable

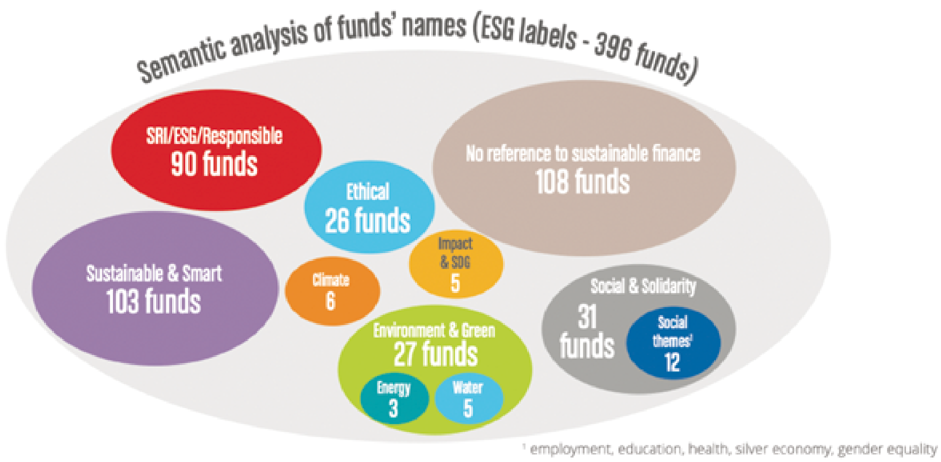
1.3.1 Climate ratings may be more effective than labels

One solution to label discrepancies could be the use of climate scores. The latter have various advantages that might reduce ESG confusion and related greenwashing concerns.

CHART 15.

Semantic Dispersion of Funds' Names

Source: Novethic



While labels are obtained on the initiative of fund managers, fund ratings can be assigned to all funds, regardless of whether or not they have a dedicated ESG strategy. This therefore makes it possible to identify not only the funds that comply with a defined sustainable framework, but also those that do not: so-called *brown funds*. Funds can then be compared with one another and *best-in-class* funds can be defined.

The sustainability of assets may be scored based on an evaluation of the exposure to C&E risks, or an assessment of the impact of the activities financed with ESG criteria. These imply the use of either qualitative or quantitative indicators.

1.3.2 The methodologies used are also a concern and largely impact their power to define green

As highlighted in a 2020 OECD report[18], "every provider ranks different aspects of the sustainability of the companies it assesses". The chosen sub-metrics, once aggregated in broader metrics that enable the specificities of the rated corporate to be measured, are therefore specific to the score provider. The difference between two ratings (a and b) consists of their three components: scope, measurement and weights $\Delta_{fa,b} = R_{fa} - R_{fb} = \Delta_{scope} + \Delta_{meas} + \Delta_{weights}$[19]. What stands for labels applies to scores too; it is obvious that measuring sustainability with different methods and criteria yields divergent results. Berg et Al. (2019) estimate that 50% of ESG ratings is explained by the scope selected. The table below lists the main ESG criteria used by market-leading ESG index providers, and we can clearly see the differences in the metrics considered.

Scoring methodologies should remain consistent throughout corporates and funds when they are made by the same provider. For investors, this would be positive as it allows for comparison.

Scoring methodologies should remain consistent across corporates and funds, when they are carried out by the same provider. For investors, this would be positive as it allows for comparison.
Nonetheless, it appears that scores are not consistent between providers. Correlations between ESG normalised scores on 823 companies were, in 2020, on average 0.54 (i.e. 54% of them were correlated)[20]. For comparison, credit ratings from Moody's Investors Service and S&P Global Ratings were correlated at 0.99. According to the study, measurement differences are the main factor behind this, followed by social metrics and differences in scope. Rater-specific bias is also a factor.

TABLE 3. ESG Criteria Used by Major Index Providers

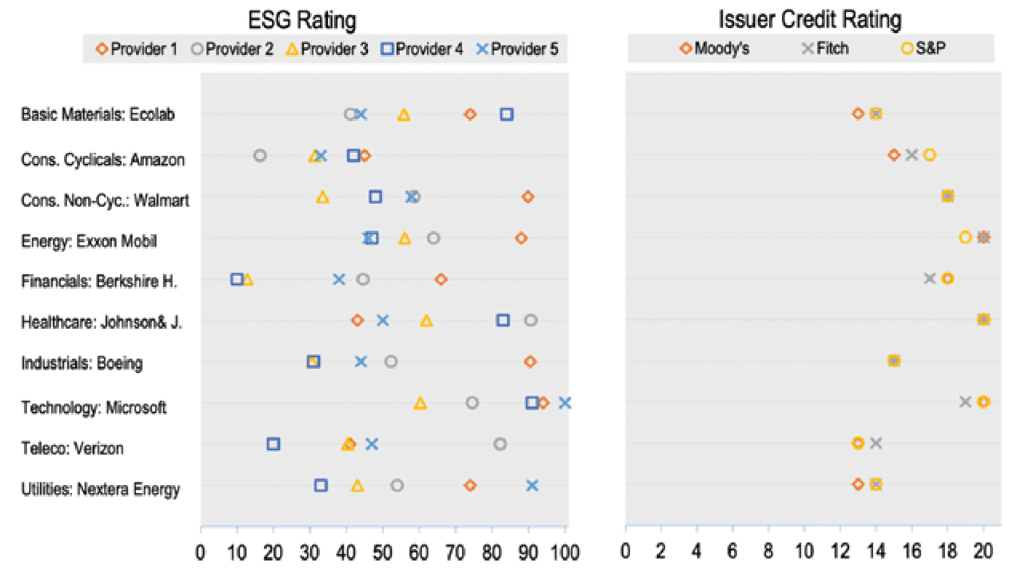
Source: OECD with Refinitiv, Bloomberg, FTSE data

Pillar	Thomson Reuters	MSCI	Bloomberg
Environmental	Resource Use	Climate Change	Carbon Emissions
	Emissions	Natural resources	Climate change effects
	Innovation	Pollution & waste	Pollution
		Environmental opportunities	Waste disposal
			Renewable energy
			Resource depletion
Social	Workforce	Human capital	Supply chain
	Human Rights	Product liability	Discrimination
	Community	Stakeholder opposition	Political contributions
	Product Responsibility	Social opportunities	Diversity
			Human rights
			Community relations
Governance	Management	Corporate governance	Cumulative voting
	Shareholders	Corporate behaviour	Executive compensation
	CSR strategy		Shareholders' rights
			Takeover defence
			Staggered boards
			Independent directors
Key metrics and submetrics	186	34	>120

18. R. Boffo, and R. Patalano, "ESG Investing: Practices, Progress and Challenges", OECD Paris, 2020.
19. F. Berg, J. F. Koelbel, R. Rigobon, "Aggregate Confusion: The Divergence of ESG Ratings", MIT Sloan and University of Zurich, December 2020.
20. Idem

CHART 16. ESG Ratings and Issuer Credit Ratings (2019)

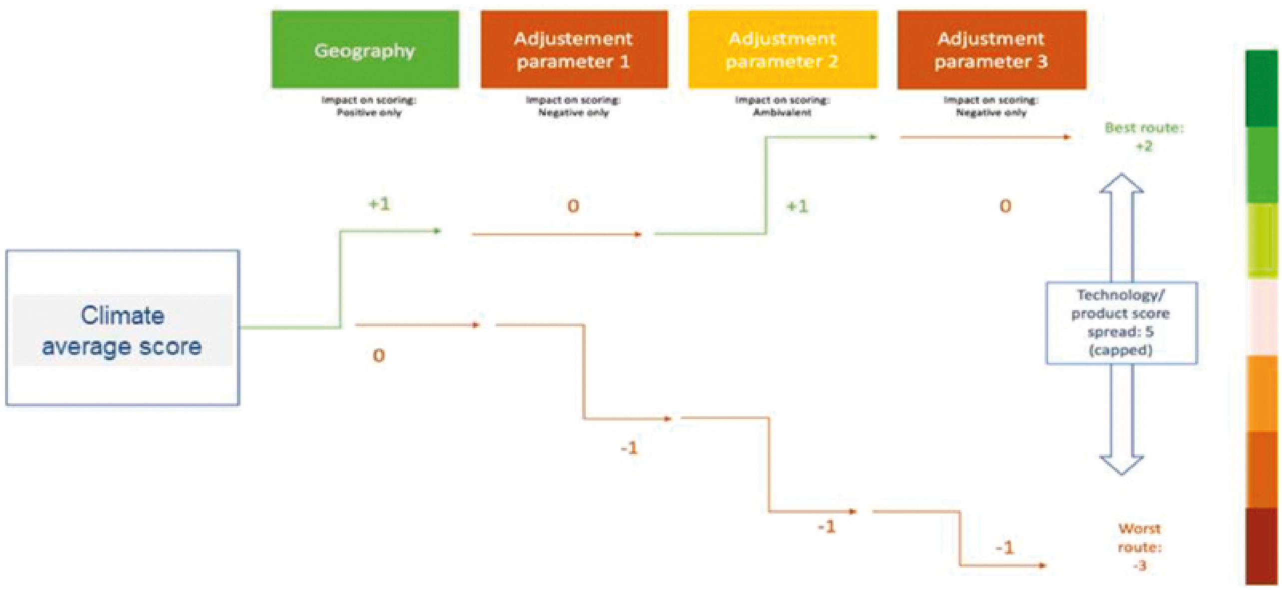
Source: OECD with Refinitiv, Bloomberg, MSCI, Yahoo Finance, Moody's Fitch, OECD data



Note: Sample of public companies selected by largest market capitalisation as to represent different industries in the United States. The issuer credit ratings are transformed using a projection to the scale from 0 to 20, where 0 represents the lowest rating (C/D) and 20 the highest rating (Aaa/AAA).

CHART 16.bis: Natixis Uses a Decision Tree to Score Assets (GWF, 2019)

Source: Natixis



If scores may be more efficient than labels to account for corporate heterogeneities, a bias for larger companies exists. Indeed, the latter tend to obtain higher ESG scores as highlighted by a study of more than 4 000 Sustainalytics ESG ratings[21]. According to the study, there is a correlation between market cap and the average ESG rating: mega-cap firms present an average ESG score that is around 1.4 times the level of micro-cap firms (64 versus 46). Possible explanations for this competitive disadvantage for small and mid-sized firms are that larger companies are able to invest more, to adjust to scoring criteria, and to dedicate more resources to non-financial disclosures.

The limitations with ESG scores may be illustrated by the following two examples:

- First, Bank of America's ESG ratings by RepRisk on the one hand, and Sustainalytics on the other, expose an instance of rating inconsistency. We can see that, even though two raters may factor in similar matters, they can end up with conflicting scores and contribute to ESG confusion.

21. Study of 4 150 ratings, reported in T. M. Doyle, "Ratings that don't rate", American Council for Capital Formation, 2018.

CHART 17.

Sustain analytics Versus RepRisk ESG Score

Source: F. Berg, J. F. Koelbel, R. Rigobon, Aggregate Confusion: The Divergence of ESG Ratings", MIT Sloan and University of Zurich, December 2020

- Then, considering the case of *Adani Power Limited*, it appears that 'dark brown' companies could be rated green. Indeed, the latter is part of the Adani conglomerate and was India's largest publicly traded private coal utility company in 2020 (before being delisted). As of July 2020, the company displayed a CSR/ESG score of 94%. Even though *Adani GreenEnergy Ltd* is now the world's largest solar power developer, the sister entity *Adani Power Ltd*'s activities rely heavily on coal. Its generation capacity is 99.7% coal-based[22]. The company should therefore not be able to score an almost perfect ESG metric and be best-in-class: "as a comparison, the Danish utility Orsted (ORSTED) which only ranks in the 85th percentile in the aggregator has 85% renewables capacity". Also, *Adani Power Ltd* appears not to be affected by exclusion lists given the conglomerate structure of Adani.

Standards heterogeneity has tangible consequences as it can lead to inconsistent ratings. In this regard, like labels do, climate scores fail to address ESG confusion and may foster greenwashing concerns.

2. GREENWASHING CONCERNS OCCUR WHEN STAKEHOLDERS LACK ENGAGEMENT IN GREEN TRANSITION

2.1 Corporate transition plans adequacy in question

While labels and scores have an important role to play in fostering access to information on sustainability for financial market participants, they remain metrics of corporates' activities. Greenwashing risks then arise when these metrics set standards in an unchanged economic world. In other words, as corporates face growing ESG disclosure requirements, they will be pushed to produce data on sustainability and transition plans. Under these conditions, some corporates may present ambitious plans that are not built on a realistic and credible basis.

Ambitious transition plans are drivers of ESG rating improvements, but this should not eclipse their primary goal: engaging a corporate in the mutation of its activities towards being carbon-free. Greenwashing (either *malicious* or *de facto*) does occur, if these goals are reversed.

Chart 18. Adani Power's ESG Rating

Source: "Top coal, top ESG?", Anthropocene Fixed Income Institute (2020)
Note: As displayed on Adani Power's website on 20 January, 2020

22. See Ulf Erlandsson, "Top coal, top ESG?", Anthropocene Fixed Income Institute, July 2020.

Transition plans are particularly important for brown corporates. In order to align with the Paris Agreement goals, these firms have to embark on an often radical transformation of their activities. To ensure they are included in this mutation process — and not only cut from financing sources, which would lead them to shut down their activities without mobilising their extensive resources to spur the transition — is primordial. Transition scenarios are thus a key monitoring tool to ensure that the transformation is planned in a credible, sufficiently ambitious and realistic fashion.

Nevertheless, in the absence of common ground frameworks for data production, reporting and ratings, it is complex and cost-inducing for investors and asset managers to assess corporates' heterogeneous transition plans.

Example: Greenwashing concerns around fossil fuel producers' transition plans

In January 2022, ExxonMobil (one the world's largest fossil fuel companies) published its ambitions[23] to cut its GHG emissions to net zero for its oil, gas and chemical operations by 2050. On the surface, this seems to indicate the transition from *brown* to *sustainable activities* has been initiated and that investors engaging with Exxon are financing the transformation of its business to clean energies. However, this announcement has been widely criticised and associated with greenwashing. First and foremost, analytical reports[24] note Exxon's 2030 and 2050 plans only consider Scopes 1 and 2, which are negligible compared with its massive Scope 3 emissions (730 million tonnes of CO_2 equivalent in 2019). NGOs such as ClientEarth also highlight misleading figures and statements on green investment that qualify for greenwashing: a declared important investment in green energy that is not (representing 0.2% of its capital expenditure between 2010 and 2018), "CCS distraction" techniques, etc. The company's 2018 "$210 billion investment plan, which would […] increase its Scope 1 and 2 emissions by 17%, adding 21 million tons of CO_2 emissions annually (more than the CO_2 output of Kenya)" is also pointed out.

2.2 True climate-positive stewardship is needed

Stewardship is an inherent part of Asset Management. With growing environmental concerns, AM stewardship guidelines — that encourage financial market participants to act as long-term and responsible stakeholders — have been enhanced with a sustainability mission. Along with voluntary internal guideline updates, climate considerations have been incorporated into the Principles for Responsible Investment and specific regulations: in the EU, the UK, France or OECD countries[25]. Asset managers are then due to respond to these new stewardship principles in hard and soft laws by explaining how they incorporate ESG criteria into their decision processes. Pressure is also coming from their clients' growing interest in climate investment. Conversely, asset managers have the power to themselves promote ESG factors in business and investment decisions. Other motivations than regulatory and fiduciary duties to clients are also pushing asset managers to undertake stewardship: universal ownership ("universal owners are incentivised to look beyond the interests of their individual investees to engage on systemic issues" — UNPRI) or traditional risk management.

Asset managers have indeed significant leverage when it comes to the inclusion of climate criteria, primarily through the "active ownership" of the companies that they are invested in. Influence over other stakeholders can be expressed in a variety of ways: by engaging with investors / issuers, engaging in public discourse and research, voting at shareholder meetings, filing shareholder resolutions / proposals, or litigating.

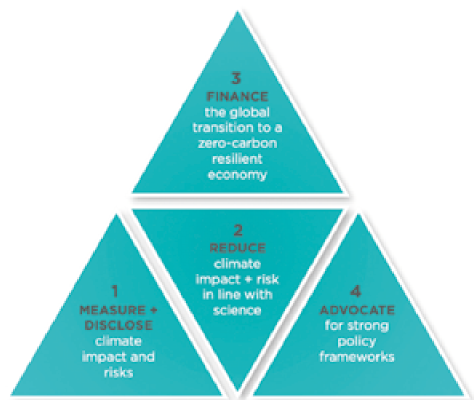
For climate stewardship to be complete and efficient within the green transition, four pillars on which it should rest upon may be identified.

(i) First, asset managers should ensure that their own emissions and exposure are measured and disclosed properly.
(ii) Second, a science-based reduction target should be defined along with a transition plan to reach it; guidelines for practices should be aligned with this transition plan.
(iii) Third, asset managers should effectively mobilise financial flows towards green and transformative activities.
(iv) Fourth, and finally, they should be advocates for the green transition in engaging with partners, contributing to research and promoting action.

However, considering these pillars exposes that stewardship is itself constrained by the abovementioned limitations on sustainability measurement and disclosure. As long as ESG confusion persists, the first pillar of climate stewardship will remain limited, restricting possibilities to adequately implement the other pillars.

CHART 19. The Four Pillars of Corporate Climate Stewardship

Source: Gold Standard, 2018



23. "The Advancing Climate Solutions 2022 Progress Report", Exxon, January 2022.
24. See for instance "ExxonMobil aims to cut oil and gas emissions to net zero by 2050", Financial Times, January 2022. And "Greenwashing Files: ExxonMobil", ClientEarth.
25. Respectively: EU SRD II (2017): Ib.3g.1a; UK Stewardship Code (2020): Principle 7; *Décret* n° 2021-663 (27 September, 2021); G20/OECD Principles of Corporate Governance (2015): V.A.2 (non-binding).

This also raises questions concerning corporate purpose within the AM industry. As companies' stakeholders seek to understand more about how the company defines and executes its purpose, it is likely that this purpose will be inextricably aligned with the company's ESG measurement and disclosure strategy. "Shareholders don't just want a formal statement pasted on the wall. They really want the corporate purpose to drive strategy, to drive value, policy decisions, culture: all of it" said John Wilcox (Morrow Sodali). However, some asset managers stress that while they embrace their important role in the transition towards a carbon-free economy, they do not want to include activism in their core purpose: they can promote their clients' sustainable practices and apply ESG criteria in their own day-to-day business, but will not oppose a client's reluctance to embrace ESG missions. Larry Fink (Blackrock) shared these insights on the matter, in its annual 2022 letter to CEOs: "We focus on sustainability not because we're environmentalists, but because we are capitalists and fiduciaries to our clients". As a side note, we should remark the important influence of this flourishing activist branch of asset management, which is contributing to a broader adoption of ESG practices among the AM industry (e.g. the implementation of a "say on climate" or support from leading institutional investors for the case of Engine No. 1 versus ExxonMobil).

There are other concerns surrounding stewardship best practices. For instance, regarding how to effectively practice "active ownership": some asset managers consider that to vote against resolutions that do not sufficiently include ESG criteria is more efficient than to vote for green resolutions (38% of the investors surveyed preferred to vote *against*)[26]. The same survey highlighted that a majority of asset managers (62% of those surveyed) would welcome a separate vote on sustainability at annual meetings.

Nonetheless, these limitations should not restrict asset managers' engagement in climate stewardship; it is important that sustainable practices and guidelines are implemented rapidly. When the ESG data confusion is cleared, the sustainable positioning of financial market participants should be established and efficient.

Not to engage in this ESG stewardship exposes the AM industry to charges of greenwashing. For instance, BlackRock was vocal about its engagements, but its assets managers voted in favour of about 10% of climate-critical resolutions only, in 2020[27].

3. RESOLVING ESG CONFUSION TO LIMIT GREENWASHING RISKS AND ENSURE TRUST IN GREEN FINANCE: KEY RECOMMENDATIONS

As we have highlighted in this paper, significant limitations persist regarding the incorporation of ESG criteria into the activities of financial market participants. This results in confusion on ESG criteria and related practices, which may account for most of the greenwashing concerns expressed in relation to the asset management industry. In order to mitigate this *de facto* greenwashing, as well as the existence of *malicious* greenwashing practices, several levers exist and should be implemented.

3.1 For data

- It is critical to **define standards**. For financial market participants to be able to make efficient use of ESG data, they must adopt a common language on how to produce, channel, process and report these data. It is now up to standard-setters and regulatory entities to agree on this.

- They should also **define common universal baselines** around which to build regional standards. The latter would make it possible to consider regional heterogeneities, while ensuring that minimum standards are respected and a minimum level of global consistency is achieved.

- ESG scores and labels should be transparent concerning their positioning and incorporation of 'E', 'S' and 'G' factors.

- It is difficult to imagine strict standards that would apply for ESG scores. Nonetheless, the clarification brought by data standardisation and enhanced sustainable regulation may spur a repositioning of ESG scores and reduce discrepancies. ESG ratings should include new and improved metrics to consider geographic, company size and sector heterogeneities and biases.

- The implementation of a **European ESG label** may provide a reference point in the ESG label landscape, and be a sign of confidence for investors.

- **Enhancing the green assessment toolbox**, to complete GARs and other metrics, would make it possible to better include transitioning assets. A new label might be useful in this respect.

3.2 For practices

- Stewardship guidelines and the day-to-day practices of asset managers should guide investors' perspective towards long-term products, and foster the inclusion of non-pecuniary criteria in the investment decision process.

- Portfolio construction standards should be revised to ensure that they align with the engagement of asset managers and investors.

- The AM industry should promote and implement education on green practices and climate change for financial market participants and corporate partners.

26. "Institutional Investor Survey 2021", Morrow Sodali, 2021. Survey of 42 international asset managers.

27. EDHEC research with Proxy Insight data.

BIODIVERSITY: A NEW CHALLENGE FOR SUSTAINABLE FINANCE

Note written by Jean-François Pons, ALPHALEX – CONSULT GEIE

INTRODUCTION

The reduction in the number of living species on Earth, deforestation, the degradation of the oceans and overfishing are examples of the degradation of biodiversity and ecosystems.

Protecting and restoring biodiversity is one of the 17 United Nations Sustainable Development Goals published in 2015. It is also one of the six goals from the European Union Green Deal, alongside the climate and other environmental objectives (circular economy, fight against pollution, etc).

For the financial sector, this represents a new challenge that will need to be met despite its specific difficulties.

1. BIODIVERSITY CONSERVATION IS AN INCREASINGLY PROMINENT POLITICAL PRIORITY

The preservation and restoration of biodiversity was the theme of two major international events last year:

- The International Union for Conservation of Nature (IUCN) World Conservation Congress, which was held last September in Marseille (France) and was attended by many political leaders from across Europe;
- COP 15 in November 2021, which brought together the United Nations members in Kunming under the Chinese Presidency in an attempt to make joint progress, similar to the consecutive COPs on the climate (such as COP 21, which led to the Paris Agreement, or COP 26 in Glasgow).

These two gatherings presented a worrisome picture of the biodiversity situation around the world and underlined the economic and social risks involved.

The first event gave rise to interesting statements describing the issues at hand and outlined possible solutions, particularly for businesses. They included the development of tools for business impact assessments on biodiversity in order to set targets and define relevant policies.

The Kunming conference resulted in a statement committing to halt the degradation of biodiversity and to begin restoring it by 2030. It also defined 17 general objectives to be included in the new World Conservation Code. These 17 objectives will be further discussed in the second part of the Kunming Conference — which was scheduled for April-May 2022, but has been deferred to another date that has not yet been set.

2. BIODIVERSITY DEGRADATION HAS IMPORTANT ECONOMIC AND FINANCIAL CONSEQUENCES

At a microeconomic level, we understand that certain activities are adversely affected by biodiversity degradation. For example, the extinction of an essential plant in perfume production, the disappearance of wild animals in regions where this was a source of tourism, the reduction of fish stocks, the pollution of a coastal tourist site, etc.

The Dasgupta Report (1), commissioned by the UK government in the run-up to COP 26 in Glasgow, describes an alarming situation that includes macroeconomic and financial considerations:

- "Nature [...] is an asset, and we have failed to manage our natural capital in a manner that maintains resilience and productivity."
- The value of this asset is declining, which means that instead of generating income, it will increasingly generate additional costs.
- This trend must be reversed: "The quantity and quality of our stocks of natural assets need to increase significantly."
- Finally, biodiversity loss also contributes to global warming: deforestation and ocean degradation, for example, reduce their carbon storage capacity.

A recent study (2) by Swiss Re, one of the world's largest reinsurance groups, estimated the value of biodiversity at $33 trillion per year — slightly less than the combined GNP of both the United States and China. Another worrying figure is that 20% of countries have fragile ecosystems affecting at least 30% of their surface area.

The Dasgupta Report's recommendations include transparency in production chains, accurate measurement of the direct and indirect costs of degradation, and increased funding to protect and restore biodiversity.

Funding for biodiversity conservation and restoration needs to increase significantly:

- **It is currently around $100 billion per year**, or 0.1% of global GNP, primarily from the public sector.
- But just 30% of protected areas on land and at sea would require $140 billion each year.
- In a report published in April 2020 (3), the OECD estimates that **the annual funding requirements linked to the preservation and restoration of biodiversity range from $722 billion to $967 billion.**

3. FOR THE FINANCIAL SECTOR, THIS REPRESENTS A NOVEL CHALLENGE WITH DISTINCT DIFFICULTIES, BUT ONE THAT INSPIRES AN INCIPIENT MOBILIZATION

Faced with the growing economic and financial risks of biodiversity loss, the financial sector has a role to play — in much the same way as it is increasingly doing for climate and other environmental and social objectives.

3.1 Firstly, it should include biodiversity as a regular reporting topic

The financial sector is increasingly doing so for climate or other ESG (Environmental, Social and Governance) objectives, but not without difficulties.

Policymakers and financial regulators will ask financial institutions to assess their financial risks relating to nature and their own impacts on nature. Central banks and financial supervisors are starting to assess these risks, although they have so far focused on climate change.

It should be recalled that **financial investors in the European Union already have to publish data on the sustainable aspects of their assets**, starting with those relating to climate change. This is required by the Sustainable Finance Disclosure Regulation (SFDR) (4) since March 2021. That said, investors find it difficult to collect the necessary data from companies that they finance (particularly SMEs) and suffer from a lack of harmonization in standards and methodologies, including for assessing portfolio alignment with the Paris Agreement objectives. It is likely that there will also be difficulties with collecting and processing meaningful data in the field of biodiversity.

In France, financial investors — who had already initiated climate-related reporting — will have to do the same in the field of biodiversity. In fact, the French government's decree of 27 May 2021 (5) includes biodiversity in the annual report to be published by investors in accordance with the 1975 energy transition act (Article 173), in addition to the information that is already compulsory with regard to the climate. From 2022, financial investors will have to measure their alignment with the objectives of the Convention on Biological Diversity, analyse their portfolio's impact (positive and negative) on biodiversity, and publish the resulting biodiversity footprint.

At EU level, **biodiversity is the 6th objective from the Taxonomy on Sustainable Finance**. The Platform on Sustainable Finance, which is advising the European Commission, published a first document on the four objectives not related to the climate in August 2021 for consultation (6). This document recalls the objectives of the EU Biodiversity Strategy and, to give guidance on the significant contributions linked to this Strategy, provides a questionnaire to be applied to the economic activities that will be considered.

3.2 An increase in private funding is also necessary, but will need to have a specific modus operandi

The funding of projects to preserve and restore biodiversity is more complicated than for conventional investment financing:

- For example, the regeneration of a marine protected area — unlike a traditional investment project — does not involve a private owner of the asset in question; the sea is a public good and therefore requires the involvement of public authorities.
- This regeneration must also be accompanied by the further development of profitable activities to attract private capital, alongside public or NGO funds which are of a limited nature.
- It should also result in job creations to compensate for the inevitable job losses in sectors linked to polluting activities, over-exploitation of the seabed, etc. Opportunities for job creations include areas such as recycling, efficient resource exploitation (e.g. algae) and responsible tourism.
- To guarantee the environmental, social and financial security of such complex projects, it is ideal to build public-private partnerships that also involve NGOs and specialists in the field.
- There is also often a need to support small and highly localised projects, which should be clustered to make their financing easier. The World Bank's intervention in Seychelles in 2018 involving a $15 million private finance package is one such example.

3.3 Financial actors are beginning to mobilise on the theme of biodiversity

The Finance for Biodiversity Pledge (6) was launched in September 2020 at the UN Nature for Life Conference. In one year, this commitment saw the number of signatories double to 55 financial institutions, with a combined USD 9 trillion of assets under management.
In March 2021, some thirty of these institutions created the **Finance for Biodiversity Foundation** to strengthen their collective work. It concerns the pooling of different methodologies for measuring biodiversity among investors. In addition, investors must adopt a policy for proactive dialogue with the companies in which they are shareholders so as to reduce their negative impacts. Signatories must also assess the biodiversity impacts of their portfolios and set targets to both increase positive impacts and decrease negative ones.

There are also **some interesting examples of targeted financing**:

- Specialised funds launched by numerous financial players (World Bank and other public development banks, private banks, asset managers), such as the Global Fund for Coral Reefs;
- Green bonds linked to biodiversity, "blue bonds" which follow the same rules as "green bonds" but for positive impact investments in the maritime sector, etc.

Several financial actors already publish information on their biodiversity actions alongside their annual reports.

Quantitative indicators for measuring the biodiversity footprint of investments are starting to be tested. For example, several French financial investors use MSA. km2 as a unit of measurement, which is equivalent to one km of fully developed land (without any biodiversity present).

Many financial players are refusing investments that would result in the degradation of biodiversity. A Novethic Market Data study (7) examined such exclusions by the 429 European green funds. As a result, some 100 funds exclude one or more themes due to environmental damage, representing a total of €85 billion in assets: for instance, 59 funds exclude palm oil on the grounds of deforestation, destruction of animal habitats and human rights violations, while 46 funds exclude GMO cultivation. Some European banks also refuse to finance activities linked to soja or beef in Brazil because of deforestation.
Several banks and asset managers have entered into regular dialogue with their clients (notably the agro-industry) over biodiversity.

Financial actors and some non-financial corporates are also involved in **the development of an ecosystem of high-tech firms, startups and specialist consultants, as well as investment in Research and Development**, notably for ensuring traceability and reducing the negative impact on biodiversity.

Lastly, **the creation of the Taskforce on Nature-related Financial Disclosures (TNFD)**, which — similarly to the Taskforce on Climate-related Financial Disclosures (TCFD) — **will provide financial and non-financial companies with a reporting framework** to assess, manage and report their dependencies and impacts on nature, identify their risks, and thus contribute to the redirection of financial flows in a manner that ensures positive outcomes for nature. The Taskforce includes many representatives from the financial sector.

CONCLUSION

The inclusion of biodiversity in sustainable finance stems from the severity of its situation in the world and the need to actively preserve and restore it, as recognised not only by scientists, but also by economists and financiers alike.

This is a new challenge for the financial sector, which already faces the issue of integrating climate change along with the difficulties of collecting data and assessing impacts and trajectories.

Major financial players are starting to mobilise through a number of concrete actions: increase in funding (with innovative public-private partnership), in dialogue with non-financial corporates, in regular reporting and collective commitments, such as the Finance for Biodiversity Pledge and the Taskforce on Nature-related Financial Disclosures.

For this mobilisation to succeed, it will have to be integrated within a partnership with public authorities (particularly for forests and for marine and coastal activities) and local stakeholders, as well as NGOs and development banks in the Global South.

It will be essential to exchange data, methods and good practices as widely as possible between financial actors and non-financial companies, as well as with the public sector. An essential element will be to identify common measurement and evaluation methods. Given that the field is particularly broad, it will be necessary for the public and private sector to agree on progressive priorities and agendas in order to avoid fragmentation and wasted efforts.

BIBLIOGRAPHY

(1) "The Economics of Biodiversity: The Dasgupta Review", February 2021, p. 1.

(2) Patrick Raaflaub, "Do we know the true value of biodiversity – and the cost of losing it?": Swiss Re. October 2021.

(3) OECD, A Comprehensive Overview of Global Biodiversity Finance, April 2020

(4) Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector

(5) Decree no.2021-663 of 27 May 2021

(6) Platform on Sustainable Finance Technical Working Group: Taxonomy pack for feedback, August 2021

(7) Finance for Biodiversity Pledge, 2021.

(8) CP Novethic "Une centaine de fonds durables appliquent des exclusions liées à la biodiversité", September 2021.

5

DECENTRALIZED FINANCE

DECENTRALIZED FINANCE (DeFi): OPPORTUNITIES, CHALLENGES AND POLICY IMPLICATIONS

Note written by Marc Truchet, EUROFI with input from Jeff Bandman, Bandman Advisors

1. OVERVIEW OF DEFI CHARACTERISTICS AND APPLICATIONS

1.1 Main characteristics of DeFi

Decentralised finance (DeFi)[1] refers to financial applications which are run on a permissionless blockchain[2] and use smart contracts automating the provision of financial services without the need for intermediaries. The use of smart contracts and the decentralised nature of the operation and governance of the platform are the two main features that distinguish DeFi from centralised blockchain systems[3].

Smart contracts are self-executing programs which are stored on a blockchain and run when predetermined conditions are met. They are used to automate the execution of transactions and agreements among anonymous parties and to implement pre-determined events such as interest or dividend payments without the need for an intermediary or central institution. The fact that they are executed automatically and can be publicly verified on a permissionless blockchain means that smart contracts can provide a high level of security when they are appropriately coded and set up. Resulting transactions are also irreversible and easily trackable on the blockchain.

Decentralisation is the second key characteristic of the DeFi environment. This refers both to the absence of central institution or intermediary for implementing financial services on a DeFi platform, thanks to the use of smart contracts, and to the use of decentralised or community-based governance mechanisms, usually based on voting schemes, for making decisions concerning the protocols and the operation of the platform. Such decisions can concern for example interest rates or collateral requirements, the services offered on the platform or the resolution of possible conflicts and operational issues. While the initial design and implementation of DeFi platforms is centralised with developers creating the architecture of the platform and the codes and making the main initial policy choices regarding the administration of the system[4], platforms are due to evolve towards more decentralisation, as they are progressively deployed and their user base increases. The degree of decentralisation therefore varies from one DeFi project to another, depending in particular on the stage of development of the platform (*see Figure 1 below*). Governance tokens are attributed to the users of the platform, allowing them to vote on changes to DeFi protocols or applications, which are either directly implemented in the protocols (in a fully decentralised model) or implemented via a group of developers holding admin keys[5] who follow the instructions of token holder votes (in a partially decentralised model)[6].

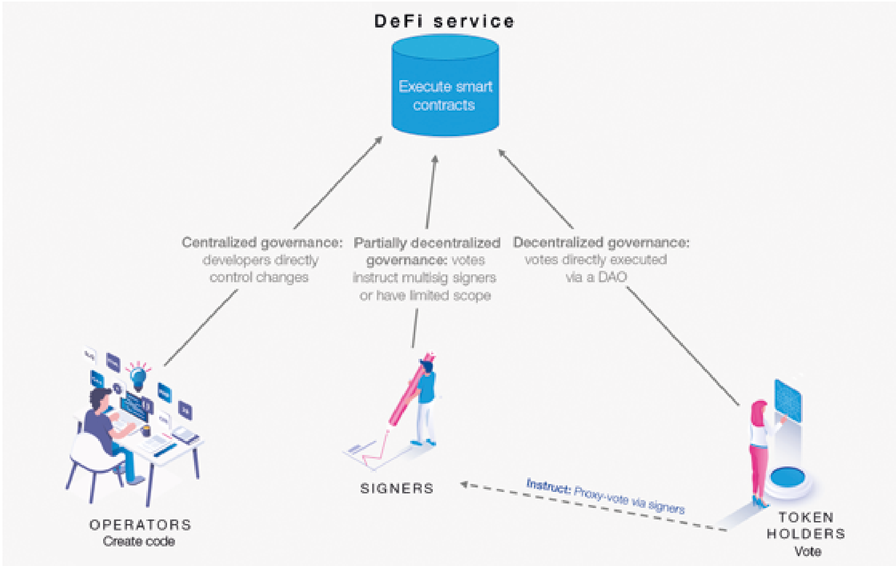
However, some regulators such as the BIS, have considered in recent papers[7] that decentralisation is not a reality for most DeFi platforms, because their administration and governance remains in the hands of a limited group of individuals, who are also predefined to a certain extent, and decisions are guided by central governance frameworks in many cases[8]. While decentralisation depends on the level of maturity of the platform to a certain extent, as previously mentioned, the BIS emphasizes that several factors drive a concentration of decisions whatever the development stage of the platform. These factors include the attribution of a substantial part of the initial coins to the team involved in the creation and funding of the project

1. This description is based on several recent papers and reports on DeFi including: The DeFi policy-maker toolkit WEF White Paper June 2021; Decentralized finance: on blockchain and contract-based financial markets Federal Reserve Bank of St Louis Second Quarter 2021; DeFi risks and the decentralisation illusion BIS Quarterly Review December 2021; Why DeFi matters and the policy implications OECD January 2022.
2. Permissionless or public blockchains such as the Ethereum blockchain (and also alternative blockchains such as Solana, Avalanche which are increasingly being used), allow anyone to transact and join as a validator. The data on these blockchains is publicly available, and complete copies of the ledgers are stored across the globe. This type of blockchain does not have any central entity who controls it, and users can remain relatively anonymous as there is no need for identifying themselves in order to perform transactions.
3. Centralised systems rely on the recording of contractual and transactional details by intermediaries, a pre-selected group of participants or a central infrastructure.
4. Core software development teams, generally funded by VCs in exchange for tokens issued by the protocol, start off the project holding the admin keys of the protocol and the power to make the most important decisions around the design of the protocol. Such decisions reflect not only technical decisions about the operation of the system, but also policy choices about the level of fees, the voting thresholds and other decisive starting points, all written in code. Source OECD Why DeFi matters and the policy implications – January 2022.
5. Admin keys allow the project core team to e.g. upgrade smart contracts on which protocols are based, perform emergency shutdowns if needed.
6. In a partially decentralised model, token holders may also only have power over certain parameters or the initial core team of developers may retain veto power.
7. DeFi risks and the decentralisation illusion – BIS Quarterly Review, December 2021.
8. Most platforms use central governance frameworks to guide decisions, outlining how to set strategic and operational priorities (e.g. regarding new business lines).

FIGURE 1.

Main forms of DeFi governance : initial centralised governance, partially decentralized governance and fully decentralized governance

Source: World Economic Forum – DeFi policy-maker toolkit – June 2021



and incentive schemes which aim to increase the scale of platforms[9]. As a result, the holding of coins and also of governance tokens tends to be quite concentrated in the hands of a small group of people comprising (e.g. platform core developers[10], major transaction validators, early investors in the project). Governance tokens are also tradeable in most cases, which allows holders to increase their positions. The BIS also points out that smart contracts cannot take into account all situations and contingencies, meaning that human decisions (made in a centralised way) will always be needed at some point.

A third specificity of DeFi platforms, beyond smart contracts and decentralization, is the importance of stablecoins for their operations (i.e. cryptoassets that maintain a fixed face value vis-à-vis fiat currencies such as the US dollar)[11]. Stablecoins are used as collateral or for the payment of interest in DeFi protocols and are therefore essential to the functioning of DeFi markets facilitating fund transfers between users and across platforms. Stablecoins avoid multiple conversions to and from fiat money for DeFi market participants and also act as a bridge between crypto and traditional financial systems.

1.2 Main DeFi services and current market trends

The types of financial services that are provided by DeFi applications are similar to those offered by traditional financial players, what differs is how these services are delivered (via smart contracts and in a decentralised way) and the fact that they are based on crypto-assets. These services include the purchase of fungible and non-fungible crypto-assets issued on DeFi blockchains, the trading of crypto-assets on decentralised exchanges (DEXs), crypto-asset based lending which is mostly collateralised similarly to securities lending or repos, asset management and payment activities and the provision of derivative and insurance products (*see Appendix for a more detailed description of these services*).

Some activities and services are however specific to DeFi systems. These include automated market-making which is used on DEXs to price transactions in a continuous way[12] and uncollateralised "flash loans" which allow assets to be borrowed and repaid with interest within the same blockchain transaction and are used in particular to support arbitrage activities[13].

Although DeFi is an emerging sector of finance and still represents a small portion of cryptocurrency transactions, a sudden surge of activity was observed in 2020 and 2021. The total value of crypto-assets locked in[14] DeFi applications built on Ethereum blockchains reached $86 Bio at the end of 2021[15] (down from a record $110 Bio in November 2021) compared to $10 Bio at the beginning of 2020[16]. Some estimates published by the BIS also show that the total value locked in DeFi across all cryptoassets was higher than $160 Bio at the end of 2021 (*see Graphs below*). This means that the growth of DeFi was faster than that of overall cryptocurrency

9. Many DeFi systems propose financial incentives in order to promote the creation of liquidity (for trading) or the increase of locked-up collateral (for credit) leading to a concentration of coins or tokens in the hands of the main users of the platform. For example some blockchains based on proof-of-stake allow validators, who are selected randomly, to stake more of their coins (as collateral) so that they have a higher chance of winning the next block and receiving compensation.

10. in charge of managing and upgrading protocols.

11. Stablecoins used on DeFi platforms are mostly USD denominated tokens that are backed by financial assets held as reserves. Tether, USD Circle and Binance USD are the three main stablecoins used on DeFi platforms, representing nearly 90% of volumes.

12. Automated market making (AMM) protocols use algorithms that continuously price transactions based on orders and available liquidity using mathematical formulas. On DEXs using AMM protocols, users are not matched with a counterparty via an orderbook, but they receive the requested token nearly instantaneously from an underlying liquidity pool.

13. Arbitrage opportunities between different crypto-assets and related to price disparities of such assets between DEXs.

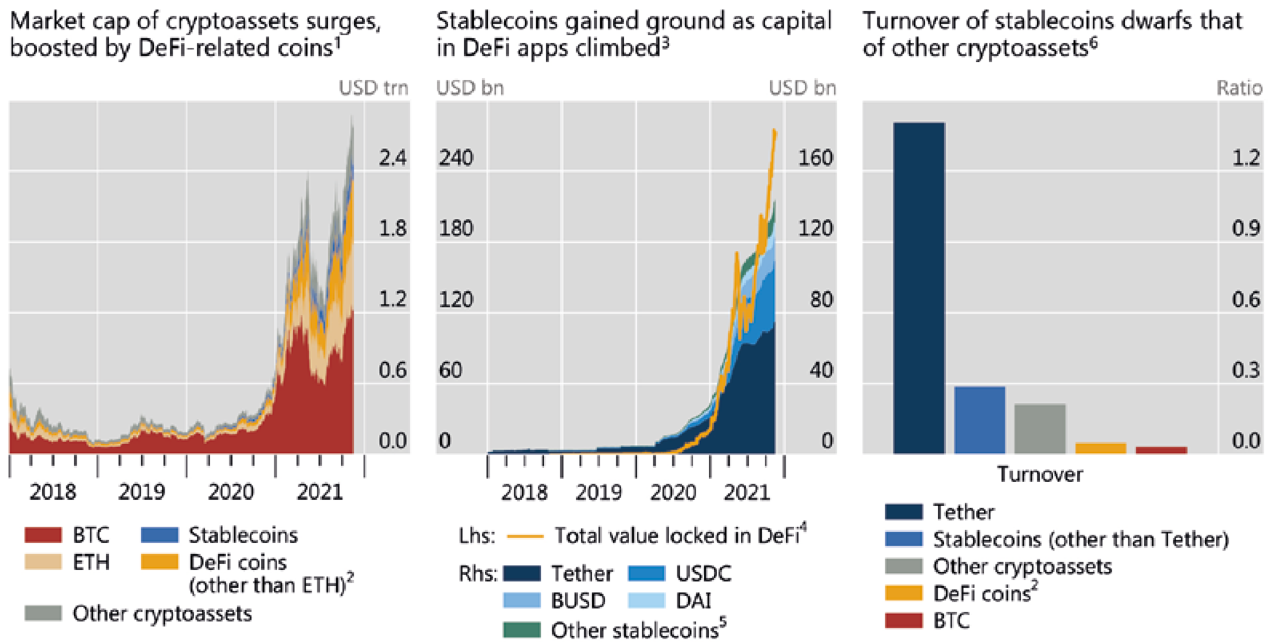
14. « Locked » refers to the amount subject to or held by the smart contracts of the DeFi applications and protocols.

15. Source defipulse.com

16. The WEF report (DeFi policy-maker toolkit – June 2021) also estimates that between mid-2020 and mid-2021 the number of user wallets was multiplied by 11 reaching 1.2 million and the number of DeFi applications reached more than 200.

GRAPHS. Development of DeFi activities underpinned by the growth of locked-in stablecoins

Source: BIS Quarterly Review - December 2021 (data sources CoinGecko, Defi Llama, BIS calculations)



BTC = Bitcoin; BUSD = Binance USD; ETH = Ether; USDC = USD Coin.

[1] Market capitalisation of top 100 cryptoassets as of 15 November 2021 (seven stablecoins, 36 DeFi coins and 55 other cryptoassets). [2] Cryptoassets issued by DeFi platforms. [3] Stacked areas plot stablecoins' value in circulation. The selected stablecoins are those ranked as the top four by market capitalisation as of 15 November 2021. [4] Total value locked refers to the size of capital pools underpinning DeFi protocols. The sample includes 679 protocols. [5] Includes 57 other stablecoins. [6] Based on the top 20 cryptoassets by market capitalisation as of 15 November 2021 (three stablecoins, 10 DeFi coins and seven other cryptoassets). Turnover is the monthly average of the daily volume-to-market capitalisation ratio from 15 October to 15 November 2021.

usage in 2021, which was multiplied by 5 with a total transaction volume reaching $15.8 trillion[17].

Lending was the largest DeFi segment in 2021, representing more than half of the value of crypto-assets locked in DeFi applications and DEXs were the second largest activity representing about one third of the value[18].

DeFi, as a basis for a more decentralised and permissionless approach to finance, provides new functionalities and opportunities that may be beneficial to the wider financial ecosystem in the future.

However, the growth of DeFi systems is mainly driven at present by the speculation on crypto-assets issued and used on DeFi platforms, the recycling of profits made from other cryptoasset activities and arbitrage across different cryptoassets and also by the additional leverage opportunities offered by DeFi to professional investors,

DeFi moreover faces significant challenges in terms of scalability of the underlying blockchain-based settlement layer and its uptake, beyond speculative crypto-asset trading and arbitrage, is also dependent on the development of asset tokenisation and available liquidity. There is moreover a particular scalability challenge for DeFi due to the decentralised nature of the platforms, which increases the challenge to keep up with demand for block space and may lead to higher transaction fees and longer confirmation times than with more centralised systems.

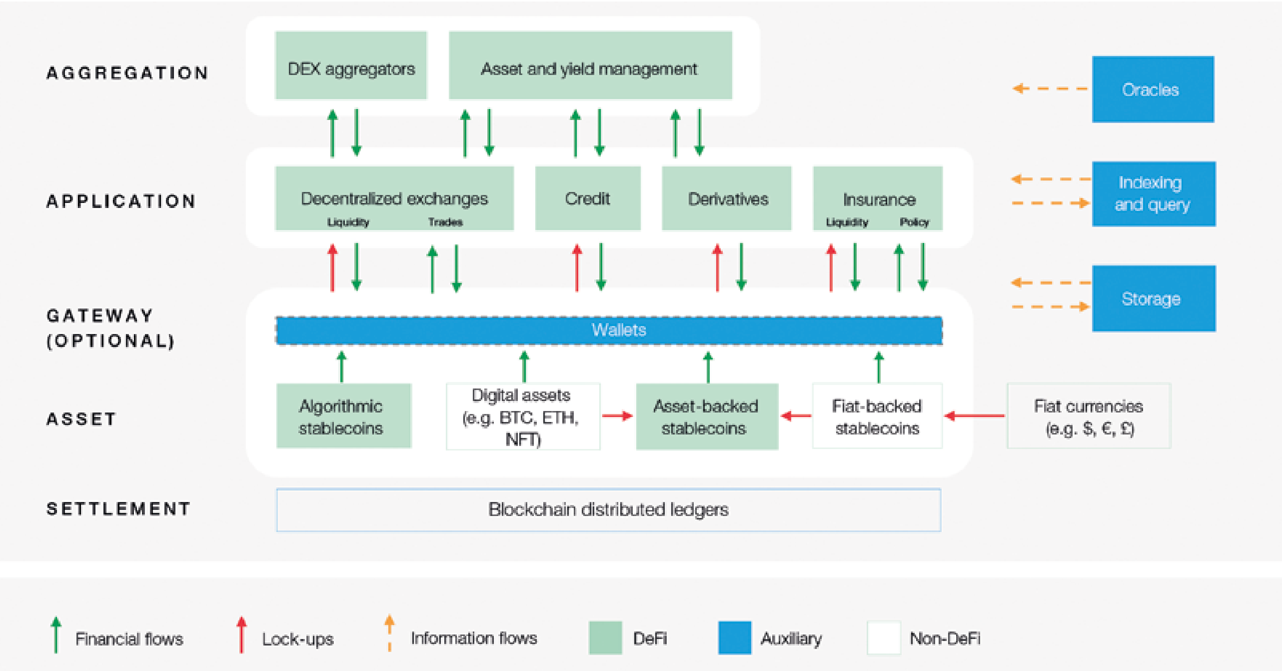
1.3 Architecture of DeFi platforms

In terms of architecture, DeFi platforms are constituted of several building blocks or layers which interact with each other in order to provide different types of financial services (*see Figure 2 below*). The foundation of DeFi platforms is a permissionless blockchain system, which stores ownership information securely and ensures that any state changes adhere to defined rules (the settlement layer). This bottom layer corresponds to the order execution and settlement functions of conventional financial services. The second layer is the asset layer which consists of all digital assets that are issued on the blockchain, including fungible tokens, non-fungible tokenised assets, and also native assets and stablecoins. On top of these two layers is the protocol layer, which provides standards for executing the different financial services that may be delivered on the DeFi platform (i.e. trading, loans, derivatives…). These standards are usually implemented as a set of

17. Source Chainalysis https://blog.chainalysis.com/reports/2022-crypto-crime-report-introduction/
18. Source defipulse.com

FIGURE 2. THE DEFI ARCHITECTURE

Source: World Economic Forum – DeFi policy-maker toolkit – June 2021



smart contracts that can be accessed in an interoperable way by any DeFi application. These applications which are positioned in a fourth layer of the DeFi system (the application layer) provide user-oriented interfaces allowing customers to purchase services or execute transactions. Applications corresponding to generic financial services can be aggregated to provide more sophisticated or customized services (such as cryptoasset management services).

Interfaces are also established between DeFi platforms and various external applications. So-called oracle services allow data and content external to the blockchain (e.g. asset prices needed to execute transactions or to price derivatives), to be incorporated into the DeFi transaction flow, enabling the execution of smart contracts. Connections can also be established with external wallets, allowing users to store, transfer and manage their digital assets.

DeFi protocols and applications are moreover "composable", meaning that they are normally designed so that the programmatic components underlying them are interoperable and can be combined to create new financial instruments and services operating on the shared settlement layer of the blockchain. DeFi advocates sometimes suggest visualizing this concept as akin to building blocks or legos. This is facilitated by the widespread use of open-source code and the permissionless nature of the network which allow any participant to look into the code and integrate or fork[19] different components in order to create new services and products or customize existing ones. This feature supports innovation on DeFi platforms and increases network effects, since participants can re-use assets on different applications, but it may also add to the complexity of using such platforms.

2. MAIN OPPORTUNITIES AND CHALLENGES ASSOCIATED WITH THE DEFI ECOSYSTEM

2.1 Opportunities and benefits associated with DeFi

DeFi offers many potential opportunities that may contribute to increasing the efficiency, flexibility, transparency and accessibility of the financial system, provided a sufficient scale and level of liquidity can be achieved.

Efficiency and flexibility. The use of smart contracts on DeFi platforms potentially eliminates the need for institutions such as market infrastructures or financial intermediaries for handling the transactions concerned. This may reduce costs and intermediation risks, although some features of DeFi such as the high levels of collateralisation may also diminish capital efficiency, potentially offsetting part of these benefits. In addition, token transfers can be much faster and easier to implement with DeFi than traditional financial transactions on a domestic and cross-border level. DeFi platforms are moreover highly flexible due to the composability of protocols and applications.

Transparency and accessibility. The use and assessment of DeFi applications and smart contract codes are in theory accessible to all stakeholders of a DeFi platform, contributing to the openness of these systems. Restrictions to the access to certain tokens (for example security or derivative tokens) can however be built into the token contract if needed for reasons e.g. of customer protection. The transactions recorded are also traceable and verifiable on the blockchain, albeit in a pseudonymous way.

19. Fork code i.e. take source code and create an independent development.

Trust. The fact that DeFi services are implemented via a set of smart contracts and according to the logic of transparent DeFi protocols means that they are executed and recorded automatically according to predetermined rules, eliminating intermediation or custody risks. In addition, changes to the protocols of the settlement layer or of DeFi applications are normally executed through transparent governance mechanisms in which all users holding governance tokens can participate[20].

2.2 Potential risks posed by DeFi applications

Generally speaking, the financial risks associated with DeFi activities (e.g. counterparty, leverage, liquidity risks…) are similar to those of traditional finance since they concern the same types of services, whereas operational and technology risks and to a certain extent illicit activity risks are more specific, due to the decentralised nature and particular technical features of the DeFi architecture. Moreover, DeFi activities are mostly unregulated at present, which introduces additional consumer protection and regulatory arbitrage risks compared to traditional finance. But this situation is due to evolve in the EU with the implementation of MiCA and the update of AML/CFT rules (*see section 3*).

Spillover risks and related financial stability issues related to the linkages between DeFi and the traditional financial system also need considering (e.g. with the use within DeFi protocols of stablecoins backed by fiat collateral[21] and the expected increase in the use of tokenised assets as collateral). These risks are limited at present by relatively low asset and liability side exposures, but may grow as DeFi develops.

2.2.1 Financial risks

Financial activities performed on DeFi applications give rise to market, leverage, liquidity and counterparty risks in the same way as those that are processed by traditional financial players. However the nature and magnitude of these risks may differ due to the particular features of crypto-assets and crypto-asset transactions.

Counterparty and intermediation risks should be in theory lower with DeFi than with traditional finance or even inexistent, due to the use of smart contracts and over-collateralisation and because there is no separate settlement step (transactions are executed through a transfer of the underlying value on the blockchain). However, the absence of public backstop and access to central bank balance sheets in DeFi platforms introduces potential financial risks in periods of stress and also limitations (e.g. in the volumes of credit provision). In addition, the high volatility of underlying digital assets may reduce the initial level of collateralisation of loans in certain periods, although platforms can put in place mechanisms to liquidate under-collateralised loans automatically. At the current stage of development of the DeFi market there is moreover a significant concentration risk due to the fact that a large part of the activity is concentrated in a limited number of protocols running mostly on the Ethereum blockchain[22] and that many key operations are held in the hands of a relatively small number of persons or entities (e.g. the core development team).

Leverage risks are also limited normally by over-collateralisation, with the caveats mentioned above, but a certain number of restrictions concerning credit creation that exist for regulated financial activities do not apply to DeFi at present. For example, funds borrowed on a DeFi platform can be re-used as collateral in other transactions increasing exposure; DEXs allow higher margins and leverage for derivative contracts than traditional exchanges[23]. Flash loans, which are uncollateralised, may also create additional leverage and credit risks if they were to expand.

As for liquidity and market risks, the difficulty of assessing the intrinsic quality and value of crypto-assets may also exacerbate these risks, particularly in periods of stress or in case of loss of trust concerning a particular type of crypto-asset, leading to possible runs.

2.2.2 Illicit activity risks

Crypto-asset transactions are usually associated with a high risk of illicit activity (financial crime, fraud and market manipulation), due to some of their features such as the potential for increased anonymity of transaction flows and counterparties and the speed of transactions. Some sources quoted by the BIS have estimated that in 2019 about 1.1% of all cryptocurrency transactions worth around $ 11 billion were illicit[24]. More recent figures however show that illicit activity concerning cryptoassets has gone down since 2019 in relative terms, when taking into account the growth of the market[25], reaching 0.15% of transaction volumes in 2021, down from 3.37% in 2019. The recent review of AML / CFT rules at the EU and global levels to take into account crypto-asset based transactions should further facilitate the mitigation of these risks going forward (*see 3. Further down*).

DeFi may increase illicit activity risks associated with cryptoassets, because transactions take place without the involvement of financial intermediaries which means that AML/CFT[26] preventive measures such as customer due diligence, record-keeping and suspicious

20. In some less decentralised DeFi platforms token holders may only have power over certain parameters or the initial core team of developers may retain veto power.
21. Issuers of stablecoins pegged to national currencies and backed by fiat collateral are increasingly investing in commercial paper (CP) and other short term assets for example, as part of their reserve management strategies, which may potentially disrupt the CP market and related money market funds (MMF) in case of mass redemption event – souce OECD.
22. Source OECD Why DeFi matters and the policy implications – January 2022.
23. See DeFi risks and decentralisation illusion pp. 29-30– BIS Quarterly Review December 2021.
24. Source FSI Insight N°31 Supervising cryptoassets for anti-money laundering – April 2021.
25. Source Chainalysis - Crypto Crime Trends for 2022: Illicit Transaction Activity Reaches All-Time High in Value, All-Time Low in Share of All Cryptocurrency Activity – January 6 2022 https://blog.chainalysis.com/reports/2022-crypto-crime-report-introduction/
26. AML / CFT: Anti-Money Laundering and Combating the Financing of Terrorism.

transaction reporting are more difficult to implement. DeFi, due to its novelty, is also a source of new scams and thefts and the underlying smart contracts are also an additional target for hackers.

2.2.3 Operational and technology risks

The settlement layer of DeFi systems is exposed to risks that are common to all blockchain-based systems, such as possible attacks on the blockchain network or miner risks (due to the malicious behaviour of miners or manipulations e.g. in the order in which transactions are executed).

The architecture and technical features of DeFi platforms expose them also to some specific risks. The first are smart contract risks, related to programming flaws that may lead code to not execute as intended or that may create vulnerabilities that malicious attackers may exploit. These coding risks also exist on centralised systems, but they are exacerbated in DeFi by the fact that smart contracts are due to function in an automated way and that possible errors are not easy to redress (they are usually subject to a decentralised arbitration mechanism). Oracle-dependent DeFi protocols are also exposed to possible manipulations or attacks that may impact data feeds or corrupt protocols.

DeFi protocols and applications themselves are also exposed to operational security risks which can be due to hacks, a corruption of the admin keys used by the core developer team, if these are not stored securely, or to the malicious behaviour of members of the core team. The BIS mentions for example the risk that transaction validators holding a large proportion of coins earned through the validation process may alter the blockchain for financial gain, congest the chain with artificial trades in order to raise fees or front-run large orders. A variety of techniques are however used to mitigate these risks including requiring multiple signatures (multisig) and implementing timelocks specifying the earliest time at which a transaction can be confirmed.

3. POLICY IMPLICATIONS OF DEFI

In the EU, crypto-asset activities, whether they are centralised or decentralised, are due to be regulated by the Markets in Crypto-Assets (MiCA) regulation, which adopts a technology-neutral approach (same risks, same rules). The Digital Operational Resilience Act (DORA) should moreover help to mitigate ICT risks such as cyber-risks that may affect DeFi platforms and their different components among others.

MiCA proposes a new EU legal framework for crypto-assets (including stablecoins), that do not fall under existing EU legislation[27], which is the case of most tokens issued, traded or used as collateral on DeFi platforms. In terms of scope, these rules apply to currently unregulated crypto-asset issuers and service providers and their users. Although cryptoasset exchanges, trading platforms and wallet providers are the main service providers explicitly mentioned in the legislative text, it can be expected that MiCA will apply to all activities provided on DeFi platforms except those that may be in the scope of other regulations, such as payment activities.

MiCA aims to provide legal certainty for crypto-asset issuers and providers, enhance consumer protection and ensure financial stability while supporting innovation. To this end MiCA requires crypto-asset service providers to be authorised and physically present in the EU and mandates the implementation of a certain number of safeguards including capital requirements, the segregation of client's assets, the implementation of procedures concerning complaints and investor rights, as well as provisions for the supervision of cryptoasset issuers and service providers. MiCA also establishes uniform disclosure and transparency rules related to crypto-assets, such as the publication of a white paper and requirements for the offering and marketing of crypto-assets to the public, aiming to improve the protection of participants in these platforms. Cryptoasset service providers authorised in one Member State will also be able to passport their services across the EU.

AML / CFT requirements are moreover being reviewed at the EU and global levels to adapt them to financial activities involving crypto-assets and the service providers and users concerned and will therefore apply to DeFi platforms. In October 2018 and June 2019, the Financial Action Task Force (FATF) adopted changes to its international AML/CFT recommendations to clarify that they apply to financial activities involving virtual assets such as cryptoassets, and virtual asset service providers and this was followed in October 2021 by the publication of a more detailed risk-based guidance[28]. In the EU, AML / CFT rules are also being revised in order to extend their scope to cryptoassets, their holders and related service providers[29]. The EU proposals aim in particular to extend the information requirements currently applying to traditional transfers of funds to cryptoasset transfers. Measures proposed include the requirement for the customers of cryptoasset service providers to be subject to due diligence, the full traceability of transactions and the prohibition of anonymous cryptoasset wallets[30].

Concerning the regulation of DeFi activities, an issue that is often put forward — besides the challenge of finding an appropriate balance between risk mitigation

27. Some derivatives may for example qualify as financial instruments and be regulated under MiFID II / MiFIR, and therefore be out of the scope of MiCA.

28. Greater guidance from the FATF is provided in 6 key areas: (i) clarification of the definition of VA and VASP (virtual assets and virtual asset service providers), (ii)guidance on how the FATF standards apply to stablecoins and the range of entities the standards apply to, (iii) additional guidance on the risks and tools available to address AML/TF risks for peer-to-per transactions, (iv) updated guidance on the licensing and registration of VASPs, (v) additional guidance on the implementation of the 'travel rule', and (vi) principles for information-sharing and cooperation among VASP supervisors. Source FATF - Updated guidance: a risk-based approach to virtual assets and virtual asset service providers October 2021.

29. An agreement was reached in December 2021 at Council level on a mandate to negotiate these proposals with the European Parliament.

30. The crypto-asset service provider of the originator will therefore need to ensure that transfers of crypto-assets are accompanied by the relevant information on the originator. In addition, the crypto-asset service provider of the beneficiary must implement effective procedures to detect whether the information on the originator is included in, or follows the transfer of crypto-assets as well as effective procedures, including, where appropriate, ex-post monitoring or real-time monitoring, to detect whether the required information on the originator or the beneficiary is missing.

and supporting innovation, which is common to all digital policy initiatives — is the difficulty of implementing and enforcing policy provisions in a decentralised environment. Although DeFi does not significantly increase the likelihood of illicit activity per se, its decentralised, non-custodial and composable structure may indeed make it more difficult to identify responsibilities, liabilities and accountable entities. For example, the possibility to implement certain 'entity-centric' provisions of MiCA such as the requirement for the service provider to be authorised and physically present in the EU is questioned. Some requirements of existing financial regulations may also need to be reviewed to adapt them to the decentralised environment of DeFi. As previously mentioned, some public authorities such as the BIS have however argued that most DeFi platforms adopt a certain form of centralisation in their governance (e.g. around holders of governance tokens or admin keys, the use of governance guidelines) and that decisions are taken and implemented by a limited group of stakeholders in most cases (notably the core team of developers), which provides a basis or entry point for regulating and supervising these platforms. This may nevertheless evolve as DeFi platforms expand and implement further decentralisation notably in terms of governance. A first step would be to ensure that MiCA transparency requirements provide sufficient information regarding in particular the governance and operational arrangements used on DeFi platforms (e.g. the attribution of governance tokens, voting schemes, admin keys…).

APPENDIX

Description of the main services currently provided on DeFi platforms

Purchase of tokenised assets Tokenised assets are issued on DeFi blockchains in the form of cryptoassets representing the value of physical assets, securities or digital assets. These tokens can include a promise such as interest payments, dividends or the delivery of a service, the delivery of which is secured by smart contracts allowing an automatic execution in a transparent way. Claims are usually collateralised within the smart contract, meaning that the cryptoasset issuer receives collateral (i.e. assets such as stablecoins) in exchange for the liability represented by the cryptoasset. Although this may resemble a banking process, the buyers of such cryptoassets do not benefit from any deposit insurance or public backstop and issuers rely solely on collateral.

Decentralised exchanges (DEX) allow customers to trade digital assets which may be stable coins or floating value tokens. Unlike centralised crypto-asset exchanges (CEX)[31], DEXs do not take custody of user funds and do not control matching or execution because trade execution happens through a smart contract performing both sides of the transaction in one indivisible transaction and mitigating potential counterparty risk. Some DEXs match through order books which can be on-chain and therefore totally decentralised or more frequently off-chain, managed by centralised third-parties which provide participants with the information they need to select an order they would like to match. Other DEXs use automated market-maker (AMM) protocols, where an algorithm continuously prices transactions based on orders and available liquidity using mathematical formulas. In this latter case, users are not matched with a counterparty via an orderbook but they receive the requested token nearly instantaneously from an underlying liquidity pool making it a pool-to-peer transaction rather than a peer-to-peer transaction. Liquidity is ensured by liquidity providers who are awarded fees and governance tokens and can potentially work for several DEXs.

Lending in DeFi involves the creation of interest-bearing instruments that must be repaid at maturity. Loans are granted between anonymous borrowers and lenders, either bilaterally (peer-to-peer)or based on pooled capital and interest rates are determined by the supply and demand of liquidity rather than by the creditworthiness of the borrower. The collateral deposited in the form of crypto-assets is locked into a smart contract and only released once the debt is repaid[32]. The lack of intermediating function[33] replaced by automated, decentralised and non-custodial protocols, the absence of ratings and legal recourse and also the high volatility of crypto-assets mean that these loans are nearly always over-collateralised. DeFi lending activities thus mirror market-based lending (securities lending, repo) rather than traditional bank lending. To protect the lender, loans can also be automatically liquidated in some cases when the collateralisation ratio falls below a certain threshold. DeFi platforms also offer uncollateralised "flash loans" in which assets are borrowed and repaid with interest within the same blockchain transaction. These loans are mostly used for arbitrage and portfolio restructuring activities, allowing arbitrageurs to act without their own capital by taking out a loan for the entire arbitrage trade and then repaying the loan. If the borrower has not returned the funds plus interest at the end of the transaction's execution cycle, the whole transaction including the loan itself will be reverted.

Decentralised derivatives or insurance also exist on DeFi. They are tokens that can be programmed to derive their value from the performance of an underlying asset or group of assets, the outcome of an event or any other observable variables. For example a synthetic asset can be created that behaves as a stock, commodity, swap or a digital asset such as a NFT (non-fungible token). It can also be tied to the activity of a business or the materialisation of a risk or market evolution. They usually require an oracle connecting the blockchain to an external information system to track the variables on which the derivative is based, thus introducing some dependencies and centralised components in the DeFi system. Insurance products are based on tokens similar to those used for derivatives, allowing the spreading of risks across a common capital pool.

Decentralised asset or portfolio management can be used to follow pre-determined investment strategies involving crypto-assets. Decentralised investment funds allow users to invest in a basket of crypto-assets and employ a variety of strategies without having to handle the tokens individually and also without having to go through a custodian, since the crypto-assets are locked up in a smart contract. Tokens corresponding to a partial ownership of a fund (i.e. of the crypto-assets locked into the smart contract) are issued to investors who can redeem them at a later stage on a DEX. Portfolios can be managed automatically through strategies coded in the smart contract (e.g. with an automatic rebalancing of portfolio weights) or more actively with the support of an asset manager. In the latter case the smart contract ensures that asset managers adhere to the rules and risk profile of the fund.

31. CEXs maintain off-chain records of outstanding orders posted by traders in the form of limit order books. CEXs and DEXs have both substantially grown since 2020, but DEX transaction volumes represent less than 10% of the total – Source BIS Quarterly Review December 2021.
32. Lenders are rewarded with tokens which are native to the platform.
33. E.g. to evaluate of the capacity to repay the loan.

ABOUT EUROFI

The European think tank dedicated to financial services

- **A platform for exchanges between the financial services industry and the public authorities**
- **Topics addressed include the latest developments in financial regulation and supervision and the macroeconomic and industry trends affecting the financial sector**
- **A process organised around 2 major international yearly events, supported by extensive research and consultation among the public and private sectors**

OUR OBJECTIVES

Eurofi was created in 2000 with the aim to contribute to the strengthening and integration of European financial markets.

Our objective is to improve the common understanding among the public and private sectors of the trends and risks affecting the financial sector and facilitate the identification of areas of improvement that may be addressed through regulatory or market-led actions.

OUR APPROACH

We work in a general interest perspective for the improvement of the overall financial market, using an analytical and fact-based approach that considers the impacts of regulations and trends for all concerned stakeholders. We also endeavour to approach issues in a holistic perspective including all relevant implications from a macro-economic, risk, efficiency and user standpoint.

We organise our work mainly around two-yearly international events gathering the main stakeholders concerned by financial regulation and macro-economic issues for informal debates. Research conducted by the Eurofi team and contributions from a wide range of private and public sector participants allow us to structure effective debates and offer extensive input. The result of discussions, once analysed and summarized, provides a comprehensive account of the latest thinking on financial regulation and helps to identify pending issues that merit further action or assessment.

This process combining analytical rigour, diverse inputs and informal interaction has proved over time to be an effective way of moving the regulatory debate forward in an objective and open manner.

OUR ORGANISATION AND MEMBERSHIP

Eurofi works on a membership basis and comprises a diverse range of more than 65 European and international firms, covering all sectors of the financial services industry and all steps of the value chain: banks, insurance companies, asset managers, stock exchanges, market infrastructures, service providers... The members support the activities of Eurofi both financially and in terms of content.

The association is chaired by David Wright who succeeded Jacques de Larosière, Honorary Chairman, in 2016. Its day-to-day activities are conducted by Didier Cahen (Secretary General), Jean-Marie Andres and Marc Truchet (Senior Fellows).

OUR EVENTS AND MEETINGS

Eurofi organizes annually two major international events (the High Level Seminar in April and the Financial Forum in September) for open and in-depth discussions about the latest developments in financial regulation and the possible implications of on-going macro-economic and industry trends. These events assemble a wide range of private sector representatives, EU and international public decision makers and representatives of the civil society.

More than 900 participants on average have attended these events over the last few years, with a balanced representation between the public and private sectors. All European countries are represented as well as several other G20 countries (US, Japan...) and international organisations. The logistics of these events are handled by Virginie Denis and her team. These events take place just before the informal meetings of the Ministers of Finance of the EU (Ecofin) in the country of the EU Council Presidency. Eurofi has also organized similar events in parallel with G20 Presidency meetings.

In addition, Eurofi organizes on an ad hoc basis some meetings and workshops on specific topics depending on the regulatory agenda.

OUR RESEARCH ACTIVITIES AND PUBLICATIONS

Eurofi conducts extensive research on the main topics on the European and global regulatory agenda, recent macro-economic and monetary developments affecting the financial sector and significant industry trends (technology, sustainable finance...). Three main documents are published every 6 months on the occasion of the annual events, as well as a number of research notes on key topics such as the Banking Union, the Capital Markets Union, the EMU, vulnerabilities in the financial sector, sustainable finance.... These documents are widely distributed in the market and to the public sector and are also publicly available on our website www.eurofi.net :

- Regulatory update: background notes and policy papers on the latest developments in financial regulation
- Views Magazine: over 190 contributions on current regulatory topics and trends from a wide and diversified group of European and international public and private sector representatives
- Summary of discussions: report providing a detailed and structured account of the different views expressed by public and private sector representatives during the sessions of the conference on on-going trends, regulatory initiatives underway and how to improve the functioning of the EU financial market.

eurofi

eurofi

www.eurofi.net