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Regulatory Update
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Macro-Economic Challenges: tackling EU indebtedness

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Addressing indebtedness in the European Union

Note written by Didier Cahen[1]

Executive summary

Even before the Covid-19 pandemic and the energy crises, global debt had reached an all-time high for peacetime. According to the Bank for International Settlements (BIS), global debt increased from 174.4% of GDP in 2001 to 232.6% in 2023. This unprecedented rise in debt over the past 20 years is due to extremely accommodative monetary policies and historically low interest rates. Furthermore, in Europe, the fiscal rules of the Stability and Growth Pact (SGP) were not respected by some large Member States.

Excessive debt is a source of crisis. In the face of certain countries' over-indebtedness, it is necessary to gradually reduce the current debt excess by reevaluating public budgets, prioritizing qualitative expenditure for the future and undertaking structural supply side-oriented reforms, which are the only way forward and that have been postponed for too long.

On 21 December 2023, the Ecofin Council reached an agreement on the reform of fiscal rules which paved the way for negotiations with the EU Parliament and the Council definitively adopted this reform on 20 April 2024. Admittedly, the revised Stability and Growth Pact do contain some positive elements. In particular, the case-by-case framework – which is a specific technical dialogue between the EU Commission and each Member State regarding their differentiated multi-annual budgetary path – has been introduced in the reformed Pact. This framework allows for a differentiated approach for each Member State, taking into account of the heterogeneity of budgetary positions, public debt and economic challenges in the EU.

However, the goal of simplification of the rules has regrettably not been achieved. Even more concerning is that the Commission's proposal demands the smallest effort to the most indebted countries, which could perpetuate the decline of these economies. Indeed, according to this Ecofin Council compromise, countries that are subject to an excessive deficit procedure (where total public deficit exceeds 3% of GDP) are exempt from the rule requiring them to reduce their public debt by an average of 1% a year until their deficit falls back below 3%. This is not the best way to encourage the worst performers to reduce their debt-to-GDP ratio! It is as exempting the worst performers in a class from extra effort and sanctions as long as their results remain mediocre.

If fiscal, inflationary and economic drift continues in the Eurozone, the 'virtuous' countries will end up paying for it. This would be the definition of an uncooperative game, where most players try to evade their obligations by passing on the cost to those who respect them. We must therefore take the Union's destiny into our own hands and not let it drift. If this is the case, the logical outcome could well be a new and inevitable Eurozone crisis.

•

Introduction

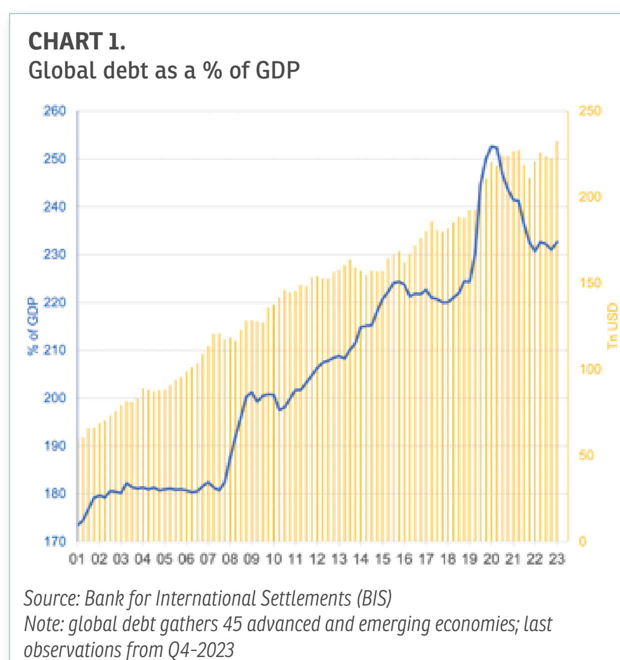
Excessive debt is a source of crisis. Examples abound, such as the European sovereign debt crisis (2011-2012) that would not have occurred if private debt in several EU countries had not risen so fast.

Even before the Covid-19 and the energy crises, global debt was at an all-peacetime record as evidenced by Chart 1. Indeed, the persistence of very low interest rates over the past two decades has encouraged many advanced countries to pursue active fiscal policies and economic agents to borrow more. According to the BIS, global public debt in advanced economies increased from 63.4% in 2000 to 109.8% in 2023. In the Euro area, the ratio of total government debt to GDP rose over the same period from 69.2% to 88.6% over the same period.

The unprecedented rise in debt over the past 20 years is the result of ultra-accommodative monetary policies and very low interest rates. Furthermore, in Europe, the fiscal rules of the Stability and Growth Pact were not respected by some large Member States.

1. This note updates the document published on this topic in February 2024. The author would like to thank Mr. Elias Krief, who actively contributed to the drafting of this note during the second quarter of 2024.

CHART 1.
Global debt as a % of GDP



Source: Bank for International Settlements (BIS)
Note: global debt gathers 45 advanced and emerging economies; last observations from Q4-2023

The Maastricht Treaty specifies reference values – known as the Maastricht criteria – for the general government sector of the various EU Member States: general government deficit should not exceed 3% of GDP, and government debt should remain below 60% of the GDP. But in 1998, political considera tions replaced the strict accounting interpretation of debt. Indeed, Belgium and Italy – two founding countries of the European Union – qualified for entry into the Eurozone with public debt-to-GDP ratios of 117% and 115% respectively.

Since then, the EU institutions have accepted that debt levels in many Member States could rise inexorably. In the Euro area, the divergence in public debt levels has become a major concern. While negative interest rates have ensured the short-term sustainability of European countries' public debt, the absence of structural reforms to gradually reduce these public debt ratios in the long term could lead to economic decline and jeopardize the future of the Euro area.

Monetary policy and the resulting credit expansion in the 2000s played a major role in precipitating the Great Financial Crisis of 2008. Since then, many advanced countries have continued to rely increasingly on public debt, encouraged by persistently very low – and even negative – interest rates, and ultimately passing on a large portion of the costs to future taxpayers that the current generation refuses to assume.

Given the over-indebtedness of some countries, it is necessary to gradually reduce the current debt overhang by reviewing public budgets, prioritizing qualitative spending for the future and implementing the structural reforms that are the only viable path forward and that have been postponed for far too long.

This paper focuses on public and private indebtedness issues in the European Union. The first part of the paper demonstrates that European economies – be they part of the Euro area or not – are characterized by significant divergences in public and private debt. The second explains how public and private debt levels spiraled out of control in many European countries, especially large Member States. The third part outlines the various issues caused by excessive public and private debt levels, while the final part explores the potential solutions that could enable highly indebted countries to restore healthy public and private finances.

1. The Euro area and the EU are characterized by significant public and private debt divergences

The first part of this note aims at depicting the state of public and private debts across EU Member States and identifying certain categories of countries according to their public and private debt levels. Indeed, great divergences can be observed between countries, be it in the levels of debt of governments and of private economic agents – households and Non-Financial Corporations (NFCs).

1.1 Public debt-to-GDP ratios differ widely across Member States

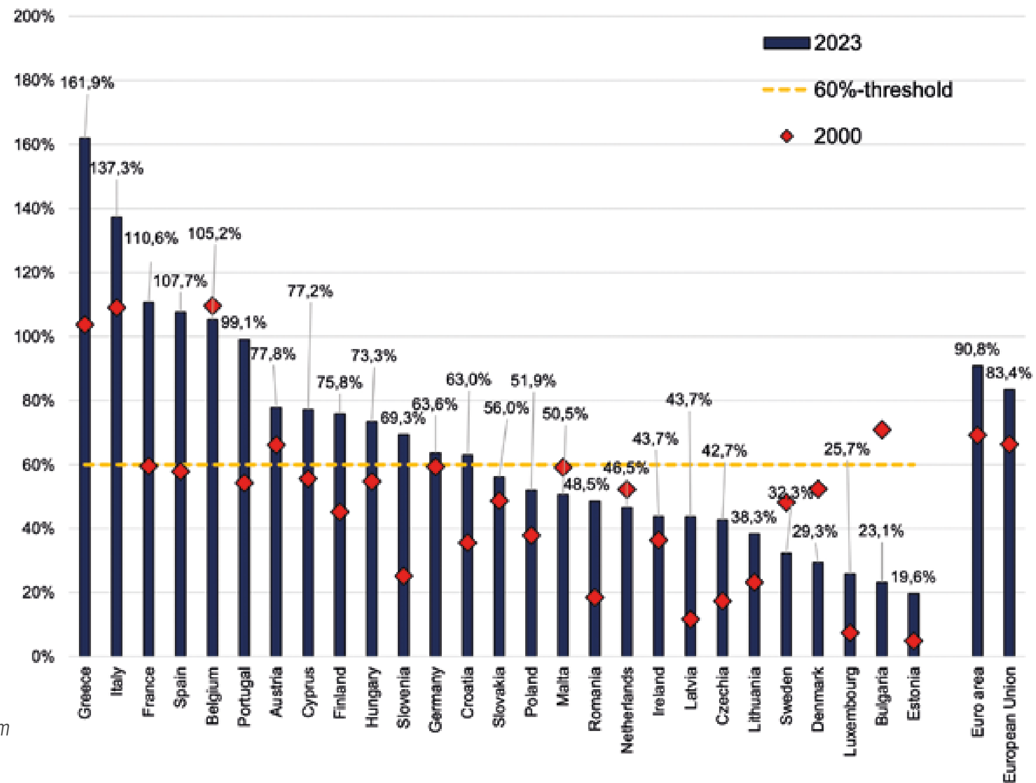
At the end of 2023, public debt has reached very high levels in a small group of large European countries.

Despite the various reforms adopted in the wake of the sovereign debt crisis (European Semester, Six Pack, Two Pack, Treaty on Stability, Coordination and Governance in the Economic and Monetary Union), the public debt-to-GDP ratio has continued to rise in major Euro area countries (*e.g.* France, Italy, Belgium, Spain, Portugal) and is approaching – and in some cases exceeding – 110% of GDP (*see Chart 2*)[2].

On the contrary, countries such as the Netherlands, Germany or Austria have been able to maintain a ratio of public debt-to-GDP of around 60% or less[3].

2. Between 2000 and 2023, gross public debt-to-GDP ratio increased by 28.3 pp in Italy, 51.1 pp in France and 49.8 pp in Spain.
3. Gross public debt-to-GDP ratio increased by 4.3 pp between 2000 and 2023 in Germany and dropped by 5.7 pp in the Netherlands.

CHART 2.
Gross Public Debt to GDP ratio across EU Member States



Source: EU Commission; Data for 2023 are taken from EU Commission's Spring Forecasts of May 2024

In 2023, 14 countries in the EU had a public debt-to-GDP ratio below 60% of GDP: Estonia, Bulgaria, Luxembourg, Sweden, Denmark, Lithuania, Latvia, Czech Republic, Ireland, Romania, the Netherlands, Poland, Malta, and Slovakia. However, Greece (161.9%) and Italy (137.3%) had a public debt exceeding 130% of their GDP. France, Spain, and Belgium also had high public debts, exceeding 100% of their GDP (103.4%, 110.6%, 107.7% and 105.2% of GDP respectively), well above the average of the 27 countries (83.4%), while Germany and the Netherlands had public debt levels of 63.6% and 46.5% respectively.

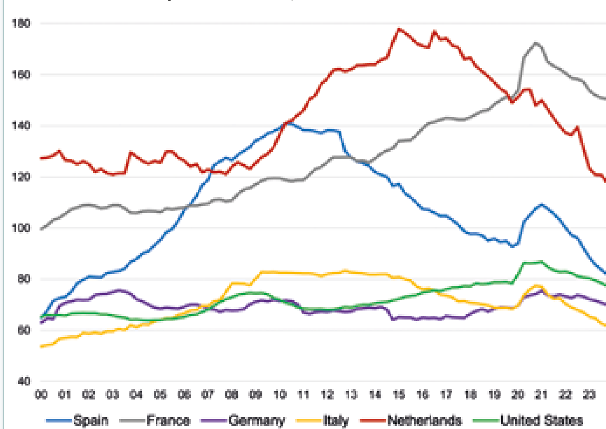
General government debt surged in all countries – whatever their level of indebtedness – as a result of the Covid-19 crisis. However, debt has decreased after its peak of 2020 because of high inflation and enhanced growth – that followed the end of lockdowns, but it remains nowadays at levels above to their pre-pandemic levels.

1.2 Significant divergences among Member States are also observed in private debt levels

Private debt, *i.e.* the debt of households and non-financial corporations, has strongly diverged across EU Member States since the Sovereign Debt Crisis (*see Chart 3*).

In France, private debt increased from 181.1.7% of GDP in 2013 to 213.4.1% in 2023 according to the BIS.

CHART 3.
Non-financial private debt, % of GDP

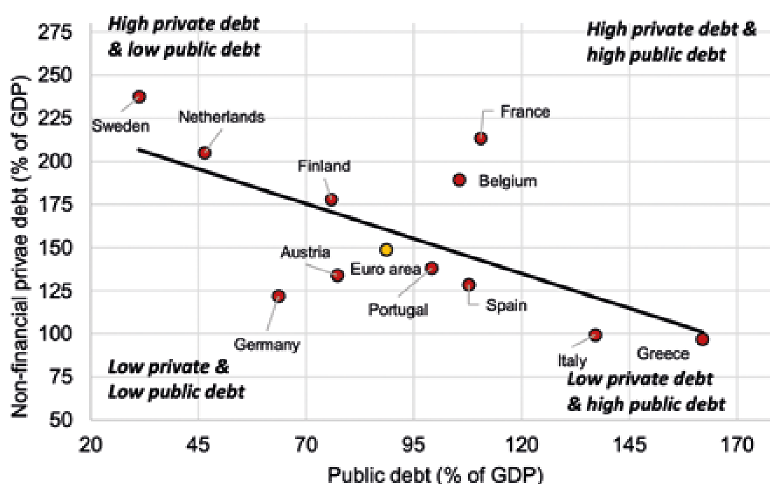


Source: Bank for International Settlements. Last observation from 2023-Q4

By contrast, private debt fell significatively in Spain from 202% of GDP in 2013 to 128.6% in 2023 following corporate deleveraging and the deflation of the real estate bubble. It also decreased in Italy from 125% of GDP to 99.4% and remained stable in Germany from 124.3% to 122% over the same period.

Although the level of French private debt (as share of GDP) remained lower than that of the Netherlands until Q4-2022, it should be noted that private debt in the Netherlands fell by 75.2 pp between 2013 and 2014, while it increased by 32.3 pp in France.

CHART 4.
Private debt v. public debt across selected Euro Member States, as of Q3-2023



Source: Bank for International Settlements, EU Commission (Spring Forecasts of May 2024)

1.3 Several categories of countries can be drawn from their levels of public and private debt

As underlined above, private and public debt levels vary across EU Member States, and debt profiles fall into four categories that are observable on Chart 4.

The first category includes countries with both low public and private debt, namely Germany and Austria which are below the Euro area average.

The second category includes countries with high public debt but low private debt – Italy, Greece, Spain and Portugal, which are among the countries with the highest public debt ratios in the Euro area, while their private debt levels are below the Euro area average.

The third category comprises countries with low government debt but high private debt. The Netherlands, Finland and other EU Member States that are not part of the Euro area, such as Sweden, fall into this category. For example, the Dutch public debt is one of the lowest in the Euro area – 46.4% of GDP in Q4-2023 – while the private sector debt is one of the highest at 205% of GDP.

The fourth category consists of countries with both high public and private debt. It includes France and Belgium, which have public debt of 110.5% and 105.5% of GDP respectively and private debt of 213.4% and 189.3% of GDP, well above the Euro area average for both public and private debt (88.6% and 152.1% of GDP respectively). This category is more exposed to the challenges associated with rising interest rates; all economic agents, whether public or private, are more vulnerable to macroeconomic and monetary changes. The risk of a financial crisis is even more important in these countries, especially as potential growth is low.

2. How did we get there?

The second part of this note focuses on the two main explanations for the diverging debt levels illustrated above. First, a chronological study of debt trajectories over the last two decades shows that some large EU Member States have let their public debt-to-GDP ratios slip in non-crisis times while others have shown greater discipline with respect to the fiscal criteria of the Stability and Growth Pact (SGP), and that in some cases private debt levels have followed the same path as public debt levels. Second, excessive public debt in some EU Member States has been greatly facilitated by the ECB's ultra-accommodative and asymmetric monetary policy since the EU sovereign debt crisis (2011-2012).

2.1 A chronological observation shows that debt levels of over-indebted EU countries have risen in crisis-times (GFC, sovereign debt crisis, Covid-19...) as well as in non-crisis times[4]

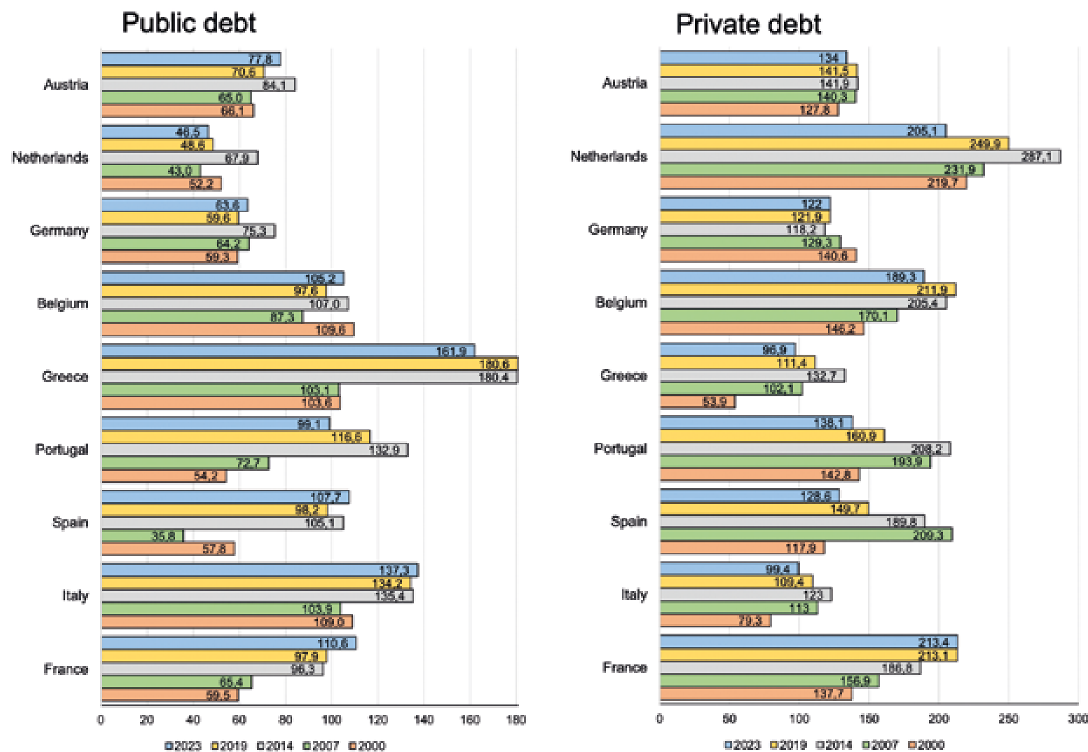
Chart 5 and the following sections aim at providing a chronological understanding of diverging debt trajectories in EU Member States. The first section focuses on the period 2000-2007 and the EU sovereign debt crisis by showing that large Eurozone countries failed to meet the Maastricht fiscal criteria for most of the time and the expansion of private debt in some peripheral Member States put them at the center of the sovereign debt crisis.

The second section analyses the Member States' fiscal heterogeneities between 2014 and 2019, while the third one shows that these fiscal heterogeneities have been exacerbated by the Covid-19 pandemic. Section 4 shows that the divergences in terms of

4. This section is largely based on the *Eurofi Macroeconomic Scoreboard* (September 2024).

CHART 5.

Government and private sector debt across selected Eurozone Member States since 2000, % of GDP



Source: Bank for International Settlements, EU Commission (Spring Forecasts of May 2024)

fiscal deficits and public debt have not been accentuated by the Russian war in Ukraine, but that public debt-to-GDP ratios have stabilized at high levels in 2022 and 2023. Eventually, the fifth section puts in perspective the private and public debt trends.

2.1.1 2000-2007: Large Eurozone countries failed to meet the Maastricht fiscal criteria for most of the time and the expansion of private debt in some peripheral Member States put them at the center of the sovereign debt crisis

The Monetary Union had an inauspicious start. Although, the public debt ratios of France and Germany were close to 60% of GDP in 1999 and their public deficits were limited (1.5% of GDP in 1999), by 2002, fiscal deficits had already begun to exceed the 3% threshold.

Germany improved its public finances between 2004 and 2007, with the fiscal deficit narrowing from -3.3% to a balanced position. However, such a virtuous budgetary path did not materialize across the board. For instance, despite a favorable economic climate between 2004 and 2007 (average annual real GDP growth of 2.5% over these 3 years), France continued to record public deficits above 3% of GDP, thus abandoning the economic discipline it had adopted in order to join the Eurozone.

In the pre-crisis period (2000-2007), the fiscal balance was positive, on average, in Ireland (1.4% of GDP) and Spain (0.4%). It should be noted, however, that government revenues in both countries were kept artificially high by tax revenues generated by the real estate boom. In contrast, fiscal balances were negative on average between 2000 and 2006, in Austria (-2.2%), Germany (-2.5%), France (-2.7%) and Italy (-3%). Greece (-6.4%) and Portugal (-4.6%) exceeded the Maastricht criterion of 3%.

In some peripheral countries, healthy public accounts masked a surge in private debt, fuelled by very accommodative financial conditions.

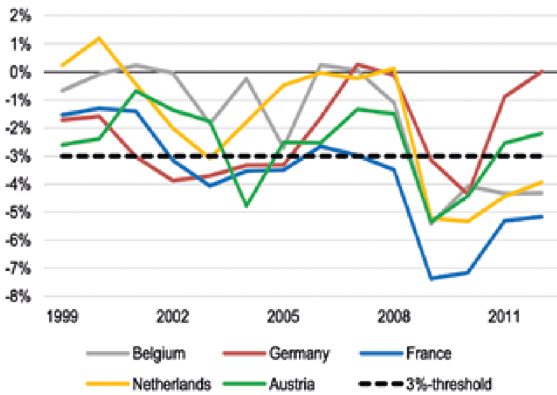
As there is only one key interest rate in a currency zone, real interest rates (after adjusting for inflation) in peripheral countries became lower than in northern countries, or even negative after joining the euro. This created a greater incentive to borrow. The easing of financial conditions stimulated the distribution of credit (particularly real-estate mortgages) in southern Europe and Ireland, leading to a sharp rise in property prices.

The "GIPS" (Greece, Italy, Portugal, Spain) experienced significant increases in private debt between 2000 and 2007; for instance, the Spanish private debt nearly doubled from 117.9% of GDP in 2000 to 209.3% in 2007. In Italy and Portugal, private debt

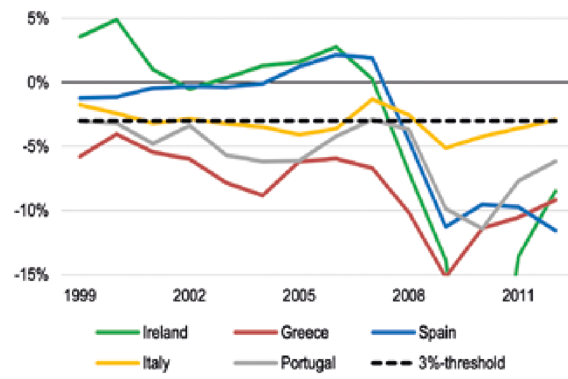
CHART 6.

Total Budget Balance across the EU Member States between 1999 and 2012, % of GDP

6a. Core countries



6b. Peripherical countries

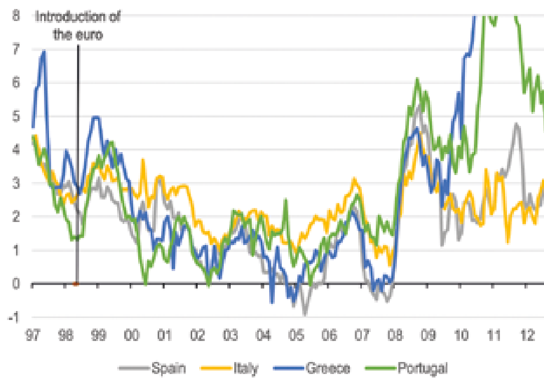


Source: EU Commission

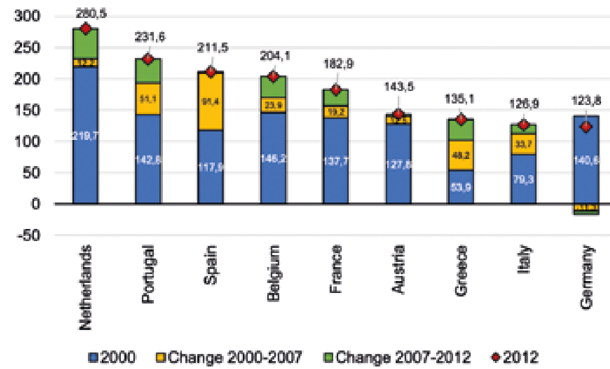
CHART 7.

Real interest rates and credit dynamics across Euro area Member States [2000-2012]

7a. 10-year sovereign bond yields, adjusted for inflation in selected periphery Member States(%)



7b. 10-year sovereign bond yields, adjusted for inflation in selected periphery Member States(%)



Sources: Bank for International Settlements, OECD

increased by more than a third over the same period. Excessive private debt levels –closely linked to real estate bubbles in certain cases, such as Spain – became a source of financial vulnerabilities that materialized during the GFC.

When the crisis broke out in 2007, public debt ratios soared, particularly in southern European countries. Spain, for example, had a public debt of only 35.8% of GDP in 2007; by 2014, the debt ratio had surged to 105.1%. In Ireland and Greece, the debt-to-GDP ratio rose from 23.9% and 103.1% in 2007 respectively to 119.6% and 180.4% in 2014 (*see Chart 5*). Southern European countries were particularly affected by the GFC due to the 'sudden stop' of capital flows: from 2000 to 2007, they benefited from massive foreign capital inflows, which suddenly stopped following the collapse of Lehman Brothers.

2.1.2 2012-2019: While private debt has fallen in the most vulnerable Member States as a result of corporate deleveraging, public debt has stabilised at high levels in these countries

Private debt in peripheral countries most affected by the sovereign debt crisis declined between 2014 and 2019. For example, Spanish private debt fell from 209.3% in 2007 to 189.8% in 2014 and 149.8% in 2019 (compared with 117.9% in 2000), and Portuguese private debt peaked at 193.9% in 2007 and fell to 208.2% in 2014, and then to 160.9% in 2014, still higher than its 2000 level of 142.8%. In Italy, private debt fell from 123% of GDP in 2014 to 109.4% in 2019.

While private debt fell in all Euro area countries, France was the exception. Its private debt increased from 186.8% of GDP in 2014 to 213.1% in 2019.

This was the highest level of private debt in the Euro area after the Netherlands (249.9% of GDP in 2019), which, unlike France, saw its private debt ratio fall sharply over the period (by 30 points between 2014 and 2019).

With the exception of France, all Eurozone countries had improved their public accounts by 2019 compared to their 2010-12 levels.

- The **Italian** deficit fell below 3% of GDP from 2015 onwards, fluctuating between 2.5% and 1.5% of GDP. Fiscal efforts are reflected in the achievement of primary surpluses over the period (an average of 1.6% between 2014 and 2019), although insufficient to offset the much higher interest burden (3.9% of GDP on average).
- With a deficit at 5.9% of GDP in 2015, the **Greek** fiscal balance moved into surplus the following year, fluctuating around 0.8% of GDP until 2019. Adjusted for interest payments, it stood at 2.2% of GDP over this period.
- The consolidation of government finances was also visible in **Portugal**, which achieved its first primary surplus in 2015 (+0.1%). By 2019, this had risen to 3.1%.
- The fiscal adjustment was less pronounced in **Spain**, where the deficit fell below 3% of GDP only once between 2012 and 2019. In 2019, the deficit will still be 3.1% of GDP, lower than in the previous year (-2.6%). Unlike Italy, Greece and Portugal, Spain never recorded a primary surplus between 2012 and 2019.
- **France** stands out as an exception, maintaining budget deficits above 3% of GDP throughout the period. Between 2012 and 2019, the French government deficit fell below 3% in only two of those years. Unlike all the other large Member States, and similar to Spain, France never achieved a primary surplus during this period.

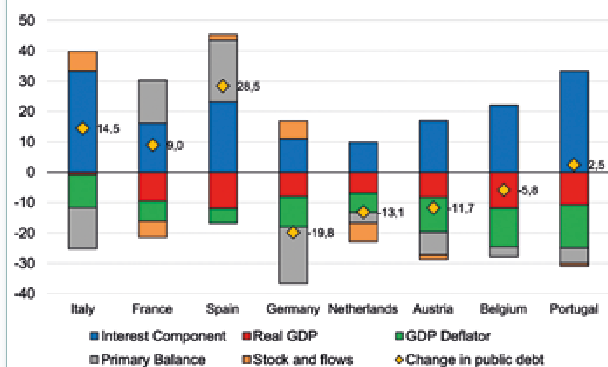
In 2019, seven Member States had a public debt ratio above 90% of GDP. The ratio exceeded 100% of GDP in Greece (180.6%), Italy (134.6%) and Portugal (116.6%). It exceeded 90% in France (97.9%), Spain (98.2%), Belgium (97.6%) and Cyprus (93.1%).

In **Italy** and **Greece**, the primary surpluses recorded were not enough to prevent an increase in their debt ratios, which rose by 18.7 points and 7.7 points respectively between 2012 and 2019. On the other hand, they were beneficial to Portugal, where the public debt ratio fell by 12.5 points over the same period.

In **France** and **Spain**, which both ran primary deficits throughout this period, public debt increased by 6.2 points and 8.2 points respectively between 2012 and 2019. The deterioration in public finances in France and Spain contrasts sharply with the budgetary efforts made by **Germany**, the **Netherlands**, and **Austria**, where the public debt ratios fell by 21.5 points, 17.7 points, and 11.3 points respectively between 2012 and 2019.

While some Member States (**Spain**, **Portugal** and **Belgium**) moved slightly closer to the 60% of GDP threshold between 2012 and 2019, **Italy**, **France** and **Greece** moved further away from this threshold over this period.

CHART 8.
Change in the level of Gross Public Debt to GDP ratio between 2012 and 2019, breakdown by components



Source: EU Commission, Ekonomics calculation
Notes: all components are expressed in percentage points ;
labels design the change in gross public debt between 2012 and 2019

2.1.3 2020-2024: fiscal divergences exacerbated by the Covid-19 crisis (2020) and the energy crisis (2022)

In 2020, the crisis impact on public accounts and economic growth was greatest in the countries with the worst public finances in the pre-Covid-19 period.

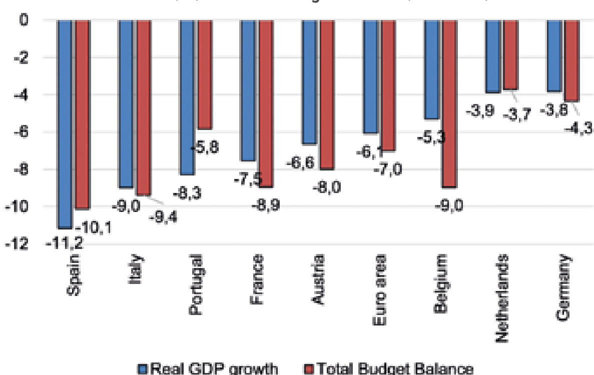
EU countries that best managed their public finances after the GFC (2008) and the EU Sovereign crisis (2011-13) are those that suffered the least from the Covid-19 shock.

Thanks to the fiscal discipline achieved since 2013, Germany and the Netherlands largely contained the shock induced by the Covid-19 crisis. At 4.3% of GDP and 3.7% respectively, their 2020 fiscal deficit remained below the Eurozone average of 7%. These achievements contrast with the close to double-digit deficit ratios that France (-8.9% of GDP), Spain (-10.1%) and Italy (-9.4%) experienced during the crisis.

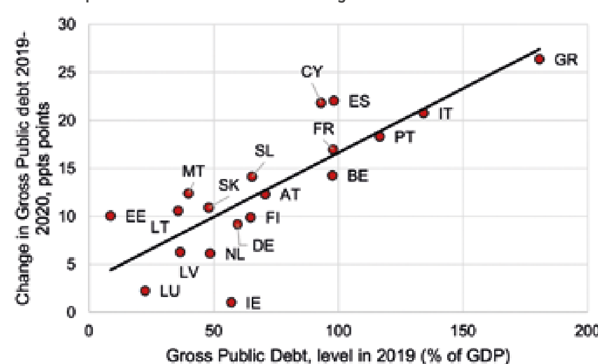
During the Covid-19 crisis, France, Italy, and Spain experienced the most significant output shortfall in

CHART 9.
Real GDP growth, Budget Balance & Gross Public Debt dynamics across EA Member States during the Covid-19 crisis

9a. Real GDP Growth (%) and Total budget balance (% of GDP) in 2020



9b. Gross public debt level in 2019 vs change in 2020



Source: EU Commission

the Euro area. In 2020, Spain's GDP plummeted by 11.2%, while Italy and France saw declines of 9% and 7.5%, respectively.

With public finances already deteriorated on the eve of the pandemic, these three countries recorded some of the largest increases in their public debt-to-GDP ratios between 2019 and 2020. Spain experienced the highest rise (+22 percentage points, against 13.2 pp for the Euro area). Italy and France followed, as their public debt grew by respectively 20.8 pp and 17 pp.

The energy crisis exacerbated by the war in Ukraine in 2022 was handled differently by the Member States, widening economic and fiscal divergences between them.

In 2023, France and Italy recorded budget deficits above 5% for the third consecutive year since 2020, leading them to enter the excessive deficit procedure. In 2023, the deficit in both countries was above 5% of GDP for the third consecutive year, at 7.4% in Italy and 5.5% in France. Belgium (4.4%) and Spain (3.6%) also remain above 3% of GDP in 2023.

Germany, Portugal and the Netherlands managed to maintain relatively balanced current account balances, in some cases even surpluses, thanks to sustained efforts to reduce their public deficits to 3% or less since 2021.

Although high inflation has helped reduce the public debt ratio from 2021, rising interest burdens combined with slower GDP growth are expected to reverse this trend from 2024 in some indebted countries[5].

Until 2023, the persistence of high primary deficits combined with the increase in the debt burden was more than offset by nominal growth, which in turn was largely boosted by inflation. This mechanism has been particularly favorable to the most heavily indebted countries, which have seen their debt ratios fall from 2021 onwards. In Spain, the public debt ratio has fallen by 13 points, from 120% of GDP in 2020 to 107% in 2023. From 155% of GDP in 2020, Italy's government debt amounted to 138.6% of GDP in 2023. In France, the ratio has fallen by 4 points, from 114.9% in 2020 to 110.6% in 2023.

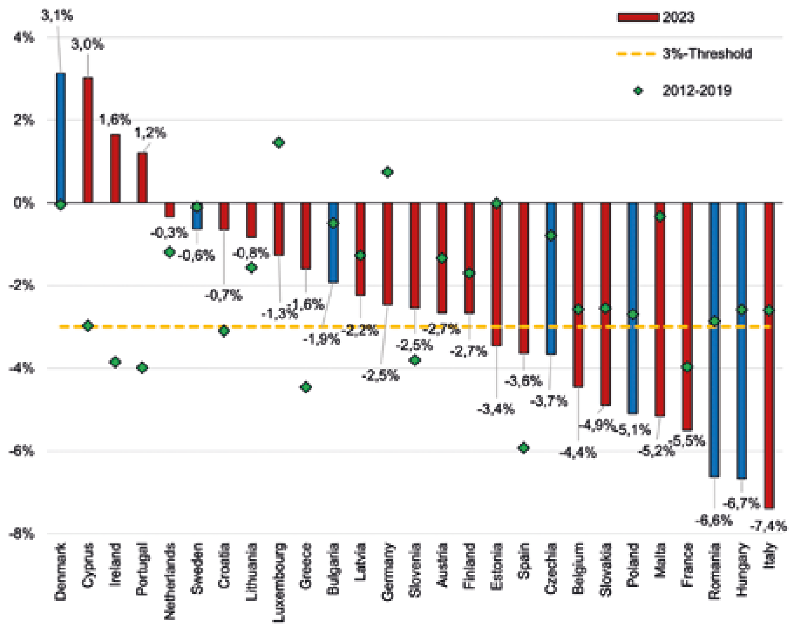
However, this trend is set to reverse as early as 2024. The decline in nominal growth, combined with rising interest charges and continuing high primary deficits, could lead to an increase in the debt ratio in some Member States. According to the European Commission's May 2024 forecasts, debt ratios are projected to start rising again from 2024 in France (from 110.6% of GDP in 2023 to 112.4% in 2024) and Italy (from 137.3% to 138.6%). Contrarily to France, where the primary deficit is expected to remain above 3% of GDP (3.3% in 2024 vs. 3.8% in 2023), the increase in Italy's government debt is more likely to be linked to the expected rise in the interest burden, which the reduction in the primary deficit (-0.5% in 2024 vs. -3.6% in 2023) may not be able to offset.

The public debt ratio should continue to decline in Portugal (99.1% to 95.6%) and Greece (161.9% to 153.9%) thanks to continued primary surpluses in 2024, Combined with nominal growth still above 5%, the reduction in Spain's primary deficit should also contribute to a reduction in the public debt ratio in 2024 (105.5% in 2024 vs. 107.7% in 2023). Despite their encouraging trends, the public debt ratios of Spain, Greece and Portugal will nevertheless remain well above those of Germany (62.9%) and the Netherlands (47.1%) in 2024.

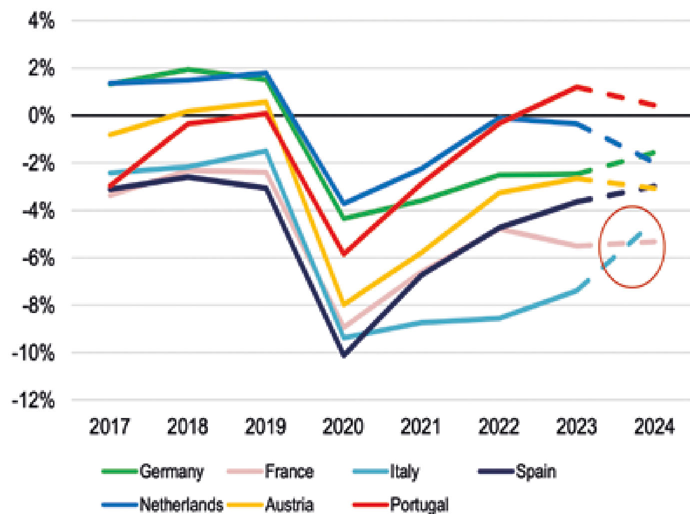
5. For a detailed analysis of the government debt dynamic between 2020 and 2024 for Germany, France, Italy and Spain, *see Part 4.1*.

CHART 10.
Recent trend in Governement Budget Balance across EU Member States

10a. Across all EU Member States, % of GDP



10b. Across the main EA Member States, % of GDP



Source: AMECO Spring Forecasts (May 2024)

2.2 The ECB ultra-accommodative and asymmetric monetary policy since the European sovereign debt crisis (2011-2012) and the lack of fiscal discipline have led to excessive public debt in some EU Member States

The very accommodative monetary policy in the Euro area over the last 20 years largely explains this public debt overhang

The monetary policy has created favorable conditions for Member States to accumulate debt for two main reasons. The first is that real interest rates have been most of the time negative between 2000 and 2023 (*see Chart 11a*), maintaining favorable financial conditions for borrowing.

The second reason is the ECB's balance sheet policies, which have led to the massive purchase of government securities since 2015 (*see Chart 11b*). Originally implemented in response to the GFC and the EU sovereign debt crisis, these unconventional policies were not phased out once the crises ended.

One key illustration is the launch of the Asset Purchase Program (APP). Launched in January 2015 by the ECB, it aimed at purchasing public and private securities at a monthly pace of €60 bn.

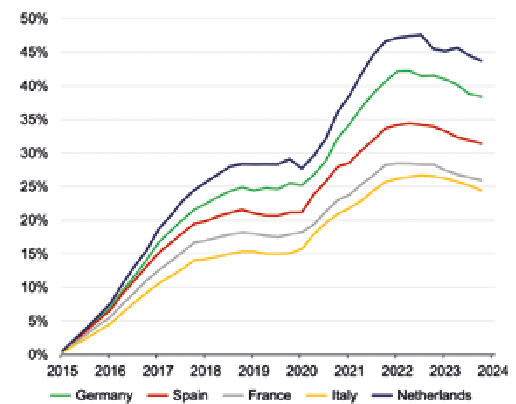
What favored over-indebtedness is that during the non-crisis period from 2014 to late-2019, unconventional policies were not haltered; quite the opposite, as the ECB announced its Quantitative Easing (QE) policy in 2015. By continuing non-conventional policies during a period of stability, the ECB contributed to the monetization of the debt and central banks effectively became agents of fiscal policy.

In the wake of the pandemic, this situation was further exacerbated: in March 2020, the Governing Council decided to launch the Pandemic Emergency Purchase Program (PEPP) on top of the already

CHART 11.
ECB Monetary policy stance since 2000

11a. Real refinancing rates in the Euro area (policy rate minus inflation rate), % points

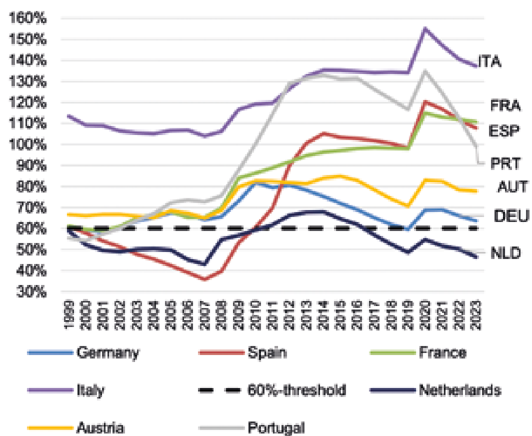
11b. Share of public debt held by the Eurosystem



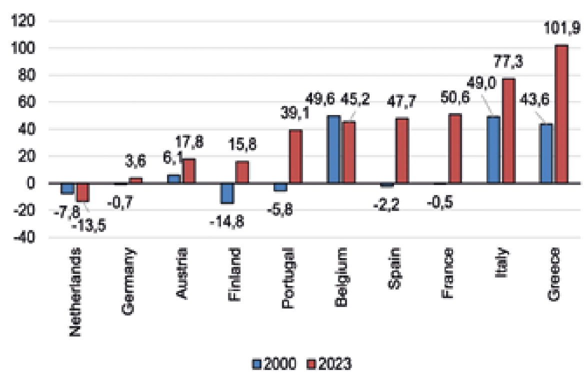
Sources: ECB, Eurostat, Ekonomics Calculations. Last observation from July 2024 for Chart 11a and 2023-Q4 for Chart 11b

CHART 12.
Gross public debt across Member States

12a. Gross Public Debt, % of GDP



12b. Deviation from 60%-threshold (pts%)



Source: EU Commission (Spring Forecasts of May 2024)
Lecture (Chart 12b): While France's public debt ratio was just below the 60% threshold in 2000, it is now 50.6 points above the Maastricht standard for 2023

existing APP, with a total intended envelope of €1,850 tn. Consequently, the Eurosystem played a leading role in public debt monetization during the Covid-19 crisis and until mid-2022, as its public securities purchases amounted to most of governments' borrowing requirements. As a result, the Eurosystem absorbed 85.2% of new government issuances in 2020 and 147.5% of public debt issuances in 2021, meaning that not only did the Eurosystem absorb the entire public debt issued in 2021, but it also repurchased part of the debt that matured that year[6].

The purchase of sovereign bonds since 2015 led the Eurosystem to hold more than a third of the Euro area's public debt by 2023. As of December 2023, the Eurosystem held 25.9% of the French public debt and 24.4% of the Italian debt. The share of Dutch and German government debt still exceeded the 33% threshold, initially set under the APP but suspended under the PEPP.

The fiscal rules of the SGP have not been respected by many large European countries (France, Italy, Spain...) which has contributed to their over-indebtedness.

The diverging debt trajectories since 2000 have led to a significant divergence in how Euro area Member States' government debt levels deviate from the 60% threshold of the Stability and Growth Pact. Indeed, Chart 9 shows that in 2000 Spain, France and Germany had similar levels of government debt (around the 60% threshold). By 2023, France and Spain were 50 percentage points above this threshold (*i.e.* their debt exceeded 105% of GDP), while Germany's debt was only 3 percentage points above the threshold. As for Italy, its debt was already 49 pp above the 60% threshold when it

6. *See 2.4* of *Eurofi Monetary Scoreboard*, September 2024.

joined the Euro area in 1999; in 2023, this gap increased to 77 pp.

The fiscal rule enshrined in the Stability and Growth Pact is the 3% fiscal threshold. However, repeated failure by Member States to comply with this rule is obvious (*see Chart 10a*). Out of the 27 Member States, only 4 showed primary surpluses in 2023, while 11 experienced deficits exceeding 3% of GDP, – among them Spain (-3.6%), France (-5.5%), Belgium (-4.4%) and Italy (-7.4%). As shown in Chart 10a, most of these countries still had deficits above their pre-crisis average (2014-2019) in 2023.

Fiscal coordination is essential in a monetary union. This necessity arises from the fact that the European Union is not a state and that negative externalities – stemming from questionable national fiscal policies – must be considered and avoided. The European Monetary Union has a single monetary policy but no common fiscal and economic policy, hence the need for fiscal coordination.

3. Why is excessive public and private debt a problem in Europe?

This part aims to highlight several issues arising from excessive levels of debt, be it private or public. The first issue is related to debt sustainability which can be challenged in the context of rising interest rates and low growth. Second, high sovereign debt makes countries more vulnerable to shocks. Additionally, excessive private debt levels pose a threat to financial stability in Europe. Furthermore, both public and private over-indebtedness act as barriers to productive investments. Over-indebted EU Member States also risk losing their leadership in Europe and put the European construction in a deadlock. Eventually, high levels of public debt are costly for future taxpayers who will bear a burden they are not responsible for.

3.1 France, Italy, Belgium, and Spain are currently concerned with debt sustainability issues, especially in the context of high interest rates and slowing growth

3.1.1 The sustainability of public debt is linked to the confidence of creditors

The variation of the debt in a given country is explained by its primary budget balance, the difference between r and g and the level of public debt in the previous period[7] which determines the cost of debt service. As a result, creditors are attentive to:

- The potential growth and revenues available to the government to meet its debt obligations,
- The average interest rate on the stock of debt issued by the government compared to the capacity to raise taxes,
- The primary budget balance which increases debt in the case of a deficit or reduces it in the case of a surplus; the higher the debt, the higher the primary surplus required.

However, these determinants are influenced by several other factors including:

- The total amount of public debt and, in particular, its maturity are crucial, especially when interest rates are rising,
- The share of debt that is held by non-residents as foreign ownership is a strong constraint for the borrowing state,
- The type of expenditure financed by the debt (infrastructure and social expenditure have different effects on long-term growth).

3.1.2 Over-indebted Member States are burdened by important debt servicing costs, which can challenge the sustainability of their debt

Debt service costs in heavily indebted countries followed a paradoxical trajectory between 2012 and 2021: while debt rose or stabilized at high levels, interest payments on debt fell as a share of GDP. The ECB's highly accommodative monetary policy has played a key role in this outcome.

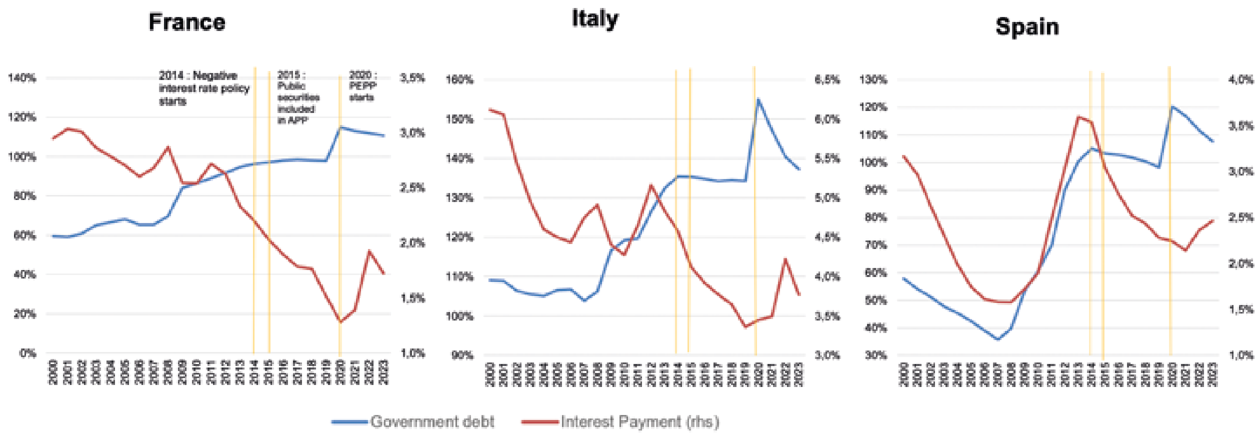
This trend is particularly evident in France:

- In the years before the GFC (2004-2008), the public debt ratio averaged 66.2% of GDP and the interest burden 2.7% of GDP.
- In the pre-Covid-19 years (2014-2019), the debt ratio continued to rise (97%) and the interest burden to fall (1.4%).
- By 2021, the debt ratio jumped to 114.6%, while the interest burden had further decreased to 1.3%.

Underlying this trend is a continued decline in the implicit rate on debt, from an average of 4.1% in 2004-2008 to 1.1% in 2020. According to BIS data, the real (inflation-adjusted) interest rate on 10-year government bonds has fallen from an average of 5.9% in 1984-1995 to -0.6% for the

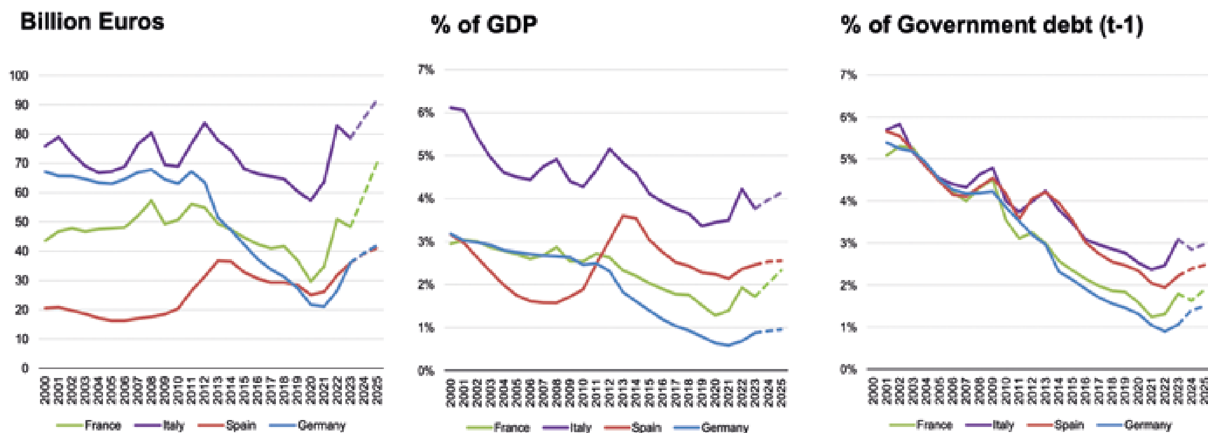
7. The precedent period (t-1) can be a year, a quarter, a month... depending on the chosen reference period (t).

CHART 13.
Government debt and interest payments, % of GDP across key indebted EA Member States



Source: EU Commission's Spring Forecasts (May 2024)

CHART 14.
Debt service costs according to different metrics across key EU Member States



Source: EU Commission
Notes: data for 2024 & 2025 are projections taken from the EU Commission's Spring Forecasts (May 2024)

period 2013-2023 and to -3% for the years 2021-2023 alone (-2.4 in June 2023). This trend is also observed in other heavily indebted countries such as Italy and Spain (*see Chart 13*).

As explained by P. d'Arvisenet, "[this situation] is the consequence of the ultra-aggressive monetary policy (policy rate in negative territory – the ECB deposit rate had been gradually reduced to -0.5% between 2014 and mid-2022), quantitative easing with the APP and PEPP programs which leads one to question the nature of central banks' independence."[8]

From 2022 onwards, debt service costs have been increasing alongside the increase in market interest rates and will be a concern for over-indebted countries in the coming years.

In France, debt servicing costs rose from €36.1 bn in 2019 (1.5% of GDP) to €48.3 bn in 2023 (1.7% of GDP), now exceeding the defense budget in 2023 (€43.9 bn). Projected by the EU Commission to reach €70.5 bn in 2025 – a record high since 1979 when the first data became available – debt servicing costs are set to become the largest government budget item, ahead of education (€59 bn in 2023).

Spain and Italy have also seen a sharp increase in their debt servicing costs since 2022. In 2023, the Italian government allocated €78.6 bn to servicing its debt, compared with €60.4 bn in 2019. The cost is expected to exceed €90 bn in 2025, according to the Commission forecasts. In Spain, €36 bn were earmarked for interest payments in 2023, up from €28.4 bn in 2019. The amount is expected to reach €41.1 bn in 2025 (*see Chart 13 and Appendix 2*).

8. Op. Cited P. d'Arvisenet and *see Eurofi Monetary Scoreboard* (September 2024).

3.2 High sovereign debt makes Member States more vulnerable to shocks

A high government debt burden makes the economy more vulnerable to macro-economic shocks and limits the scope for counter-cyclical fiscal policy. For instance, a rise in long-term interest rates may reignite pressure on more vulnerable sovereigns, thereby triggering a sovereign re-pricing risk.

Additionally, a high government debt entails the need to maintain high primary surpluses over long periods, which may be difficult under fragile political or economic circumstances, as it is the case today.

3.3 Excessive private debt levels also pose a threat to financial stability in Europe

The non-financial private sector is challenged by rising debt servicing costs, and higher funding costs are encouraging corporate defaults.

As underlined by the ECB's financial stability review[9], "Steep increases in interest rates are particularly challenging for borrowers carrying high levels of debt contracted at variable rates or loans that fall due for refinancing in the near term." Indeed, the unanticipated surge in interest rates can challenge borrowers that must honor their commitments in the near future and a fortiori the financial stability of the Euro area as emphasized by the ECB's review: "Financial stability risks associated with high interest rates are emerging in the context of a challenging macro-financial outlook and geopolitical tensions."

3.4 Both public and private over-indebtedness is a barrier to productive investments

Theoretical and empirical literature suggests that high government debt burdens can ultimately impede long-term growth. Indeed, several studies have found that beyond a threshold of 90-100%, public debt negatively impacts growth performance. However, it is crutial to analyze the nature of the expenditure financed by this debt, as infrastructure and social spending do not have the same effects on long-term economic activity. In any case, over-indebtedness eventually impoverishes countries and traps them into a vicious circle.

In countries where debt exceeding 90-100% of GDP and outstanding public spending ratios are high, it has become difficult to prioritize measures fostering productivity and public investment. These efforts are constrained by public spending decisions made in the past that have been automatically renewed for years[10].

Excessive levels of private debt burden productive investments.

A strong corporate sector is crucial for investment, innovation and eventually economic growth. Yet, high corporate indebtedness has a negative impact on investment as it implies higher interest expenses and thus less money available for investment. Firms with high debt also find it harder to obtain new funds from external sources due to their higher default risk. Moreover, the desire to repair weak balance sheets leads firms to reduce their debt burden, and thereby forgo investment opportunities.

In an ECB research document[11], the authors found "a strong interaction between firm indebtedness and investment amid activity shocks. Firms with higher leverage reduce investment significantly more than their peers with lower debt. Over the four years after a large economic contraction, the growth rate of tangible fixed capital of high-debt firms is some 15 percentage points below that of their counterparts with lower debt burden."

This is all the more concerning that the EU is counting on more capital expenditure to promote recovery from the pandemic, to kick-start the European economy and support the ecological and digital transitions, making Europe more resilient and better adapted to future challenges. Namely, the NextGenerationEU program was launched in July 2020 and dedicates a nearly €800 bn envelope to foster investment as well as growth and promote recovery and resilience in all EU Member States.

Indeed, fostering a sustainable path to stronger growth is essential. 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 has led to the deterioration of the potential growth which cannot be improved by cyclical policies.

Excessive levels of public debt burden productive investments, hence reducing productivity gains.

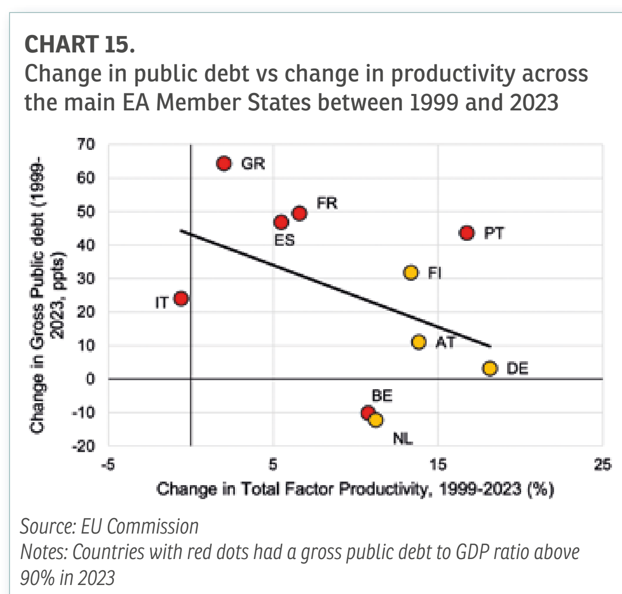
As shown in the Macroeconomic Scoreboard[12], since 1999, Member States whose public debt to GDP has risen the most to reach the highest levels in the Eurozone have recorded the weakest performance in terms of total factor productivity growth. In fact, the countries where public debt

9. "Financial Stability Review", ECB, November 2023.
10. Op. Cited J. de Larosière.
11. "Medium-term investment responses to activity shocks: the role of corporate debt", ECB Working Paper Series N°2751, November 2022.
12. J. de Larosière, D. Cahen & E. Krief, "Macroeconomic Scoreboard", Eurofi (September 2024).

increased the most between 1999 and 2023 are those where productivity grew by less than 5% over this period. Most of these countries have public debt well above 90% of GDP, such as France, Italy – where productivity kept falling over the past 25 years – and Spain.

Such a negative relationship between public debt and productivity gains also shows the extent to which excessive recourse to public debt can damage the supply side of the economy by undermining incentives for undertaking long-term investments and innovation. This is detrimental to productivity.

CHART 15.
Change in public debt vs change in productivity across the main EA Member States between 1999 and 2023



Source: EU Commission
Notes: Countries with red dots had a gross public debt to GDP ratio above 90% in 2023

Over-indebted EU Member States risk losing their leadership in Europe and put the European construction in a deadlock

Over-indebted countries, such as France, are currently losing their credibility and leadership insofar as they fail to meet the commitments they made when signing the Maastricht Treaty, namely to keep their public debt below 60% of GDP and their public deficit below 3% of GDP.

As a result, the EU currently faces a deadlock. Indeed, heterogeneous economic situations make it difficult for EU Member States to define a common interest and a common vision for the future of the Union. Consequently, with diverging interests, no meaningful agreements are reached, and the EU is not moving forward.

As a result, divergent interests prevent meaningful agreements from being reached and the EU from moving forward. For example, progress towards a genuine banking and capital markets union is hampered by the lack of trust between Member States resulting from these economic and fiscal divergences, and even the euro itself has become "a permanent source of issues to negotiate" and is "regularly a source and a manifestation of some discord among Member States[13]."

3.6 The current high levels of public debt are unfair to the future taxpayers who will have to bear a burden they are not responsible for

The high level of public debt generated by large public deficits represents a burden for posterity, especially when these deficits are used to finance public spending rather than productive investment – as is the case in France, where public spending reached 57.9% of GDP in 2022. It is not legitimate to make future taxpayers bear the cost of servicing debt and honoring commitments made to finance major unproductive expenditure. Indeed, future taxpayers will also have to pay for these public expenditures, but they will also need more than ever to have room for maneuver in public finances in order to make the necessary investments for the green and digital transitions, and this will be all the more difficult if they already have outstanding debts[14].

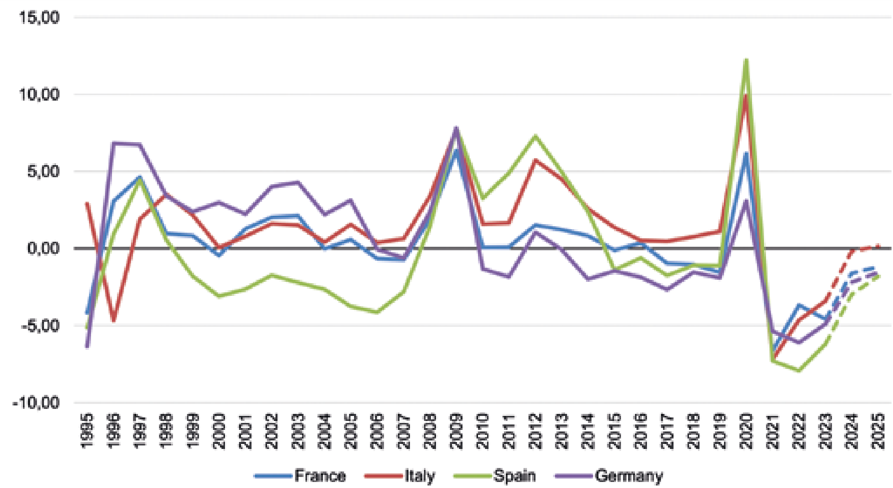
4. How can public debt in the EU be reduced?

As an accounting phenomenon, the mechanisms for reducing public debt are well known and can be assessed in order to find a realistic way to reduce public debt in the EU. The first solution would be to rely on inflation and money creation, but such a strategy is inefficient and even harmful in the long run. Another obvious solution would be to expect growth to continue to outstrip interest rates, but there is always uncertainty about the evolution of these two variables.

Consequently, the only credible solution for reducing public debt is to achieve primary surpluses. The latter requires fiscal discipline, starting with the rationalization of public expenditure and the implementation of structural reforms. In this respect, the project for reform of the Stability and Growth Pact introduced in December 2023 may not be sufficient to achieve a genuine debt reduction strategy in over-indebted EU Member States for the coming decade.

13. J. de Larosière, "EMU: myth or reality?", Keynote Address – Towards EMU 2.0: Hindsight and Prospects, 4 October 2023.
14. M. Pébereau, "Mieux gérer nos finances publiques", Académie des Sciences Morales et Politiques, 25 September 2023.

CHART 16.
(r-g) difference across key EU Member States since 1995



Source: EU Commission (Spring Forecasts of May 2024)

4.1 As an accounting phenomenon, the mechanisms for reducing public debt are well known

Public debt increases when the primary budget balance is lower than the 'stabilizing' balance.

The dynamics of public debt is an accounting phenomenon. Its variation from one period to another is based on the interaction between three key indicators: (i) the r-g differential, (ii) the level of public debt in the previous period and (iii) the primary budget balance.

A 'stabilizing' primary budget balance, which stabilizes the public debt ratio, can be derived from the r-g differential and the level of government debt (*see Appendix 3 for the calculation method*). Any primary balance below this 'stabilizing' balance is then associated with an increase in the debt ratio. The sign of the r-g differential determines the shape of this stabilizing balance.

- A **negative** r-g differential (r<g) implies a deficit stabilizing balance: public debt can be reduced despite a primary deficit, provided that the primary deficit is lower than the stabilizing deficit.
- Conversely, a **positive** r-g differential (r>g) implies a surplus stabilizing balance. To reduce public debt, the primary balance must therefore be in surplus and greater than the stabilizing balance.

The difference between the stabilizing budget balance – derived from the r-g differential and the level of public debt – and the observed budget balance thus determines the path of public debt.

This accounting mechanism helps to explain the significant decline in public debt in some Eurozone countries between 2021 and 2023, in an inflationary context and despite the maintenance of high budget deficits.

Between 2020 and 2023, the debt ratio fell by 4.2 points in France, 17.7 points in Italy and 12.6 points in Spain, to 110.6% of GDP in 2023 in France, 137.3% in Italy and 107.7% in Spain.

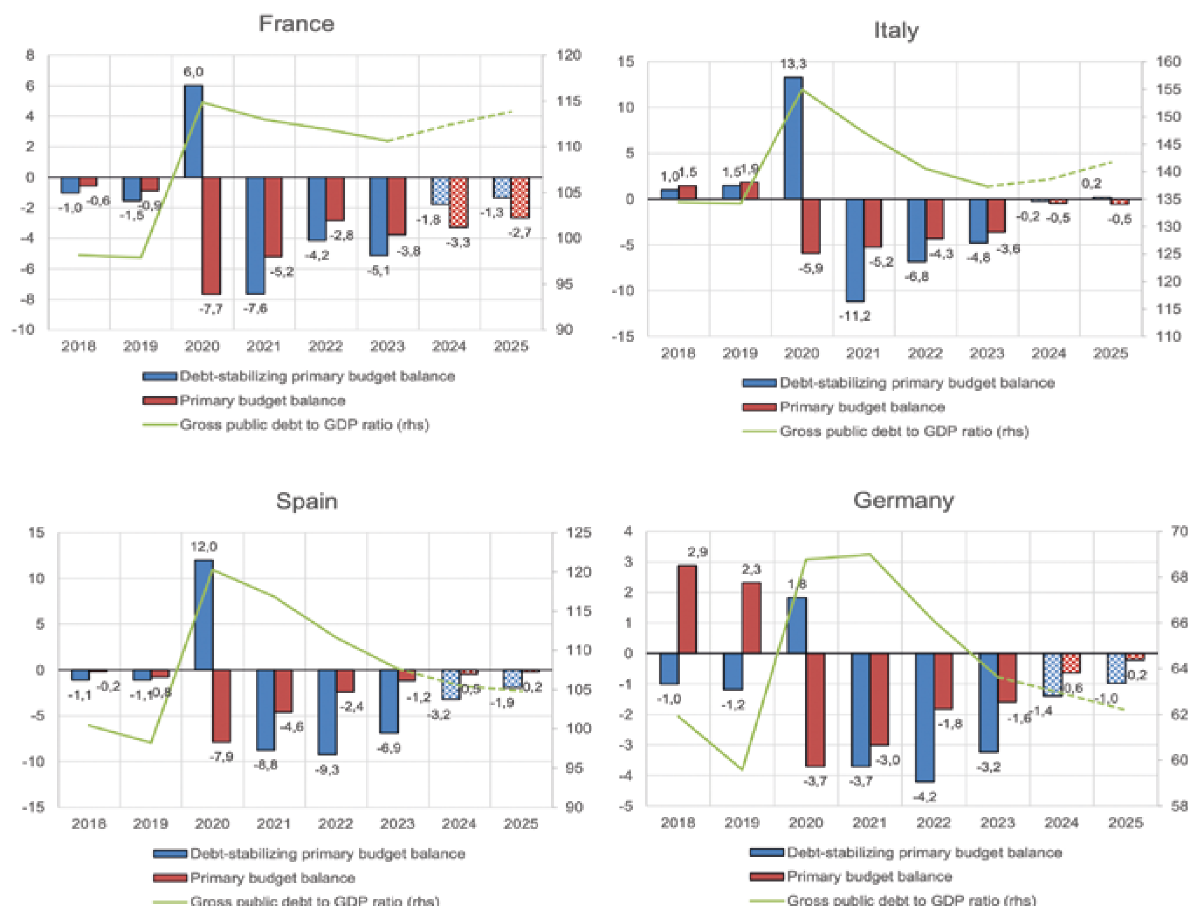
This decline took place while budget deficits have been maintained at levels well above their long-term average. In France, the primary deficit reached an average of 3.9% of GDP per year between 2021 and 2023, twice as high as the pre-Covid-19 (2014-19) average of 1.5% per year (*see Table in Annex 5*).

The situation is similar in Spain, where the deficit amounted to 2.7% of GDP between 2021 and 2023, double its pre-Covid-19 average of 1.3% per year. In Italy, the deficit is 4.4% of GDP, compared with an average surplus of 1.6% per year between 2014 and 2019. Despite their high level, the French, Italian and Spanish deficits remained below their respective stabilizing balances during this period. To stabilize its debt ratio, France should have achieved a primary deficit of 5.2% of GDP per year between 2021 and 2023. This was lower at 3.9% per year. The situation is similar in Italy and Spain, where the primary deficits of 4.4% and 2.7% are below the stabilizing balances of 7.6% and 8.3% of GDP respectively.

This particularly favorable situation for government debt is mainly explained by the historically low level of the r-g differential, which is used to calculate the stabilizing balance (*see Chart 16 and Appendix 4*). In France, the cost of debt was 5 percentage points lower than nominal GDP growth between 2021 and 2023, compared with only 0.4 percentage points between 2014 and 2019. In Spain, the gap between the two variables reached 7.1 points between 2021 and 2023, compared with 0.6 points between 2014 and 2019. After more than 20 years in positive territory, the r-g differential in Italy reached -5.1 points between 2021 and 2023.

The strong growth of the GDP deflator combined with the stability of the debt burden, despite the

CHART 17.
Gross public debt, primary balance and debt-stabilizing primary balances across the main EA Member States



Source: Ekonomics' calculations based on EU Commission's Spring Forecast (May 2024)
Notes: public debt-to-GDP ratio increases when the primary balance exceeds the debt-stabilizing primary balance

rise in market interest rates, made this configuration possible. In France, for example, the GDP deflator rose by 3.3% per year between 2021 and 2023 – three times faster than its pre-Covid-19 average of 0.8% per year – while the interest burden fluctuated between 1.4% and 1.7% of GDP, adjusting to the rise in market interest rates with a lag.

However, in France and Italy, the public debt ratio is expected to resume its upward trend from 2024 onwards, as the budgetary adjustment will be insufficient to counter the gradual decline in inflation and the increase in the cost of debt.

While the inflationary context and the stability of the cost of debt provided a relatively favorable environment for the dynamics of public debt between 2021 and 2023, this trend is expected to reverse in 2024. According to the European Commission's May 2024 forecasts, the growth of the GDP deflator[15] in France and Italy will halve compared to 2023, while the interest burden will increase further. These dynamics should significantly reduce the gap between the cost of debt and nominal growth, which should fall from -5 points in 2023 to -1.6 points in 2024 in France. In Italy, his gap is expected to shrink from -3.4 in 2023 to -0.2 in 2024.

The anticipated narrowing of the r-g differential, with inflation expected to return to around 2% next year, suggests a reduction in the stabilizing balance. In France, the primary deficit needed to stabilize the public debt ratio is projected to be 1.8% of GDP in 2024 (compared with 5.1% in 2023). However, according to the Commission forecasts, the primary deficit would be 3.3% of GDP in 2024 (compared with 3.8% in 2023), *i.e.* twice as high as the stabilizing deficit. The insufficient fiscal adjustment projected by the European Commission in May 2024 - the primary deficit is expected to fall by only 0.5 points between 2023 and 2024 - is thus expected to lead to

15. In general terms, an implicit deflator measures price changes in an area of the economy by dividing the magnitude in value by the same magnitude in volume. Implicit deflators are named according to the aggregate used. The deflators for GDP, final consumption expenditure, gross fixed capital formation, exports and imports measure price changes in their respective parts of the economy. They are used to correct aggregates for the effects of inflation. According to INSEE, the GDP deflator differs from the CPI as a function of changes in the prices of imports, exports and gross fixed capital formation.

an increase in the public debt ratio of 2.4 points, from 110.6% of GDP in 2023 to 112.4% in 2024. This increase in the debt ratio is projected to continue into 2025 for the same reasons, with the primary deficit reaching 2.7% of GDP, still well above the stabilizing balance of 1.3%.

Like France, Italy's public debt ratio is expected to rise in 2024 and 2025, from 137.3% of GDP in 2023 to 141.7% in 2025 according to the European Commission's projections. However, unlike France, this dynamic is expected to occur despite a significant reduction in the primary deficit, which is projected to be -0.5% of GDP in 2024, down from -3.6% in 2023, but still insufficient to counteract the rise in the interest burden, which is expected to exceed 4% of GDP from 2024 onwards.

The projected trajectories of France and Italy are expected to contrast with those of Germany and Spain in 2024 and 2025. For these two countries, the decline in government debt should continue thanks to major budgetary adjustments – the primary deficit should be halved in Spain and tripled in Germany between 2023 and 2024 – relatively more favorable inflation conditions than in France and Italy and a stable interest burden.

4.2 Monetary phenomena such as inflation and monetary creation cannot solve the problems arising from excessive debt

4.2.1 Is inflation a solution to reduce public debt?

It is often said that inflation would be an effective way of reducing the public debt ratios. In theory, it is easier to stabilize or reduce the public debt when inflation is higher. Indeed, the higher the inflation, the higher the value of GDP, which tends to reduce the debt ratio. However, the primary deficit and the interest burden must not allow debt to grow faster than GDP.

Another argument often used is that inflation increases tax revenues in the short run (through taxes directly linked to consumption, *e.g.* the tax on fossil fuels), while expenditure adjusts more slowly. This difference temporarily improves the budget balance and thus reduces the public debt.

But one should be careful with these arguments. After the Second World War, inflation was high and helped to reduce public debt ratios. But today, central banks have clear inflation targets, which has led them to raise interest rates and reduce their balance sheets since 2022.

For inflation to once again become a tool for reducing public debt ratios, central banks would have to change their inflation targets. However, this would raise other structural issues: lasting high inflation slows down the economic activity, makes the future more uncertain for economic agents, and discourages them from investing and consuming. This could depress economic growth, and mechanically increase the debt-to-GDP ratio. Additionally, in the long run, the deterioration of the economic activity reduces fiscal revenues due to lower consumption while it increases the government expenditures. The latter may also increase due to the revaluation of public sector wages and pensions in response to inflation. All these factors lead to a deterioration in the budget balance, which further exacerbates public debt.

Moreover, when inflation is higher than that of the main trading partners, it reduces the external competitiveness of domestic companies, which further depresses growth. Finally, inflation increases social risks and fuels the rise of extremism. It also exacerbates inequalities between households – it disproportionately impacts the poorest – because the ability of economic agents to maintain or increase their purchasing power and wealth during periods of high inflation is not equally distributed.

As a result, inflation is never an appropriate long-term solution for reducing public debt and could even prove dangerous for Europe's resilience and international trade position.

4.2.2 Monetizing debt is not a credible and sustainable solution

Between March 2020 and June 2022, central banks and notably the ECB carried a leading role in the monetization of public debt, buying a large share of new public debt issues. In the face of massive debt purchases, central banks became de facto agents of fiscal policy. This current 'fiscal dominance' calls into question the independence of central banks and is a major disincentive for governments to undertake structural reforms.

Central banks purchases of public debt do not change the overall level of government debt. It prevents interest rates from rising in the long run, but it cannot be permanent, or it becomes inflationary and creates asset bubbles.

Prudent fiscal policy sustains credibility, not monetization.

The notion that governments can manage everything out by leveraging their balance sheets is, unfortunately, a fantasy. Budget deficits do not vanish simply because they are monetized. Despite the scale of QE and its potential impact, the fiscal constraint remains. Analysts and rating agencies continue to scrutinize ratios and assess the quality and sustainability of public debt. This point should

not be underestimated: rating changes are a crucial component of an issuer's creditworthiness and a key factor in private investors' decisions, especially non-residents, to buy securities. Private investors are highly sensitive to rating and thus continue to play a decisive role in the demand for public securities offered for issuance.

It would be a grave mistake to assume that these market judgements are insignificant because the central bank will always be there to buy: the central bank cannot always purshase every bond, and the quality of a government's creditworthiness is an essential element of confidence that must be preserved at all costs for the country's future.

The ECB cannot absorb all public debt forever

If some national central banks are theoretically free to monetize the entire public debt of their country, the same cannot be said of the ECB, which is bound by an international treaty that prohibits the monetization of public debt. Any subsidy to the state that would be implied by the cancellation of public debt is incompatible with the Maastricht Treaty, which prohibits the monetary financing of public debt.

The creation of money cannot indefinitely exempt our societies from the question: "Who will pay?" Do we seriously believe that the unlimited issuance of government bonds will never lead to a fundamental questioning of the solvency of states by the markets?

4.3 Uncertainty remains for the future path of a (r – g) difference in the context of higher interest rates and slowing growth

Except for a few countries such as Italy, most EU Member States benefited from a negative r-g differential over the past decade (2013-2021), *i.e.* a higher nominal growth rate (g) relative to the implicit interest rate (r). However, there is no guarantee that this trend will continue in the coming years. While persistently low interest rates were largely responsible for the negative difference between 2013 and 2021, the recent rise in long-term interest rates since 2022 could reverse this trend. In 2023, nominal interest rates remained higher than in 2019, coinciding with a slowdown in global growth, particularly in the Euro area countries. Accordingly, the combination of higher interest rates and lower growth raises doubts about the future path of (r-g) in the coming years. As described above, this difference depends on uncertain variables such as GDP growth and interest rate levels, making long-term forecasts difficult.

Uncertainty therefore looms, particularly over the future path of interest rates, which are driven by inflation and monetary policy. Ongoing structural changes such as the energy transition, population ageing, and global trade fragmentation could keep inflation persistently above pre-pandemic levels. In March 2023, Larry Summers expected long-term average inflation in the US to be 2.5% and "assign a very low likelihood to it being well below two."[16] This could lead investors to demand higher compensation to protect their real asset returns.

In addition to influencing bondholder attitudes, the prospect of structurally higher inflation could lead to less accommodative monetary policy than in the past decade. From 2023, the ECB has begun to reduce the stock of government bonds it has accumulated since 2015, putting upward pressure on long-term interest rates. As Mahmood Pradhan and his co-authors note (2023[17]), the "trends suggest a new paradigm with more public debt being financed by the market, marking a shift from the pandemic period when central banks effectively financed the net issuance of government debt in most jurisdictions. At the end of this process, financial markets will hold much more government debt than they currently do. [...] How quickly central banks can unload their holdings, and the impact this will have on market yields, will also depend on how much additional debt (net issuance) governments might issue."

4.4 The only credible solution to reduce public debt is to achieve primary surpluses

The Euro area should move gradually and cautiously towards monetary normalization to avoid a cliff effect. The market – the supply and demand of capital – needs to be gradually reintroduced into the setting of medium and long-term interest rates, as remuneration is a key factor in contributing to sustainable growth. This would be a step towards a more productive post-crisis period of higher growth and productive investment.

Conversely, in the absence of fiscal adjustment, investor mistrust may emerge, forcing over-indebted countries to pay higher risk premiums, thereby hampering their ability to repay their debts.

4.4.1 Fiscal discipline is needed to recover primary surpluses

Running primary surpluses is the only credible and safe way to reduce debt. There are two main levers that countries can use to achieve this: on the one hand, increasing revenues, usually in the form of

16. O. Blanchard & L. Summers, "Summers and Blanchard debate the future of interest rates", Virtual event, PIIE (March 2023).
17. M. Pradhan, L. Portelli & T. Perrier, "Central banks' endgame: a new policy paradigm", SUERF Policy Note, Issue No 328 (November 2023).

tax increases, and on the other hand, cutting public spending and/or implementing growth-enhancing reforms. Over-indebted countries such as France, Italy and Belgium therefore urgently need to get back on track with fiscal discipline, as sound fiscal policies are needed to weather shocks and maintain sustainability. Given the already high level of tax burden in these countries[18], a further tax increase is hardly acceptable, hence the focus on rationalizing public spending.

In this regard, the IMF's Article IV provides country-specific guidance on the reforms to be undertaken to achieve fiscal consolidation, debt reduction and more productive investment. The IMF stresses the need for effective fiscal reforms in over-indebted countries to restore potential growth, reduce debt, and improve the ability to cope with shocks and the green transition.

For instance, one of France's main priorities to recover healthy public finances is to implement a "steady, expenditure-based consolidation until reaching a structural deficit of 0.4 percent of GDP in 2030" and "reduce the [fiscal] deficit"[19], as well as restore potential growth. France is therefore expected to steer continued structural reforms, particularly in the areas of pensions, unemployment and product and services markets, which are essential for future fiscal health as well as improved competitiveness and growth. To this end, France needs a credible package of reforms to rationalize public spending (*e.g.* pension and unemployment benefit reforms) to narrow the gap with European and EA peers and regain fiscal space for the green/digital transition.

In addition, the IMF recommends that "to minimize drag, the consolidation [should be] gradual and focus on current spending while protecting investment (particularly given large green/digital investment needs), underpinned by structural reforms."

In Italy, extensive fiscal policy support and rising interest costs have kept fiscal deficits very high in recent years. Yet, the IMF stated that "given the moderate risk of sovereign stress and the need to support disinflation and build fiscal buffers, a faster improvement in the primary balance is warranted and feasible."[20]. The IMF also deemed that "there is scope for further increase spending efficiency, including in the near term" and that "beyond the near term, a credible fiscal framework with well-defined measures, accompanied by growth enhancing reforms, is needed to anchor debt reduction."

The IMF also suggests that Belgium's top priority should be advancing fiscal consolidation to preserve its social model, reduce debt, rebuild buffers and lower inflation. Indeed, Belgium is facing rising spending pressures from aging (0.3 ppt of GDP per year), defense needs, the green transition and other capex investment while "the limited fiscal space is constraining Belgium's ability to address future shocks as risks to the outlook abound. To avoid an abrupt adjustment should a risk or a combination of risks materialize, Belgium needs to rebuild the fiscal buffers that the pandemic and energy crisis eroded[21]." Therefore, fiscal consolidation is particularly challenging for Belgium, and the country should primarily focus its fiscal adjustment on rationalizing public spending and increasing efficiency. Given its already high level of taxation, Belgium has very little room to mobilize additional tax revenue and should instead implement efficiency-enhancing tax reforms.

4.4.2 A change in the nature of budgetary expenditure is required to address the financing challenges related to the climate transition: from unproductive to productive goals

Relying on a proactive fiscal policy to compensate for the diminishing effectiveness of 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 is offset by more fiscal deficits.

Fiscal deficits – if they are increased beyond their current huge levels – will only be possible if monetary policy and interest rates remain accommodative. One of the most worrying consequences of accommodative and low interest rates for long policies has been precisely the marked decline in global productive investment over the last 15 years: lasting low interest rates do not foster, by themselves, more productive investment. What they do – notably in the EU – is to encourage economic agents to keep their financial assets in liquid instruments or to favor purely financial investment (*e.g.* share buybacks, M&A) rather than long-term productive investments.

What we need is more long-term investment to cope with the challenges of reduced labor and the green transition. This will not be achieved through more distribution via budgets or increased money

18. In 2023, current tax burden amounted to 46% of GDP in France. It reached 42.6% in Italy and 45.1% in Belgium. In the three countries, tax burden exceeded the Euro area average of 41%.
19. IMF Country Report No. 23/56 (Article IV), International Monetary Fund, January 2023.
20. IMF Country Report No. 23/273 (Article IV), International Monetary Fund, July 2023.
21. IMF Country Report No. 23/386 (Article IV), International Monetary Fund, December 2023.

creation. It will only be possible if structural – supply-side oriented – reforms and a normal return on risky investments are made possible. Achieving this requires reining in excessive current public expenditure (*i.e.* fiscal normalization), alongside a qualitative shift toward adequate public investment.

If we continue to live under the illusion that fiscal stimulus can 'replace' monetary stimulus, we will face two negative outcomes:

- Fiscal dominance because fiscal stimulus cannot coexist with high interest rates,
- A financial crisis as excessive leverage inevitably leads to it.

4.4.3 How credible is the reform of the Stability and Growth Pact agreed by the Ecofin Council in April 2024?

On 26 April 2023, the Commission presented a package of three legislative proposals: two regulations aiming to replace (preventive arm) or amend (corrective arm) the two pillars of the Stability and Growth Pact first adopted in 1997, and an amended directive on requirements for budgetary frameworks of member states.

On 21 December 2023, the Ecofin Council achieved an agreement on the reform of fiscal rules which paved the way for negotiations with the EU Parliament on the preventive arm regulation and the Council definitively adopted this reform on 20 April 2024.

The goal of simplification of the rules has regrettably not been achieved.

The European agreement on the Stability and Growth Pact of April 2024 contains some positive elements:

- The case-by-case framework – which is a specific technical dialogue between the EU Commission and each Member State regarding their differentiated multi-year budgetary path – has been introduced in the reformed Pact. It allows for a differentiated approach to each Member State taking into account the heterogeneity of fiscal positions, public debt and economic challenges across the EU.
- This dialogue will be based on a new indicator, the "net expenditure[22]", which should serve as a basis for setting a fiscal path and carrying out annual fiscal surveillance for each Member State. The multi-annual trajectory for this indicator, prepared by each Member State, must also be adopted by the Ecofin Council, which should reinforce the self-discipline of Member States.
- An obligation to reduce the public debt-to-GDP ratio by at least one percentage point of GDP per year on average over a period of 4 to 7 years has been introduced for countries with an outstanding public debt of more than 90% of GDP (the preventive aspect of the Pact). This obligation is reduced to 0.5% for countries whose debt ratio is between 60% and 90%.

However, there are several areas of concern:

- For the transitory period in 2025, 2026 and 2027, the Commission may exclude the expected rise in the debt service costs from the calculation of the adjustment effort, despite the fact that it will be the largest item of budget expenditure in some countries, such as France.
  This measure raises questions insofar as it reduces the effectiveness of the mechanism and weakens efforts to consolidate the public finances of over-indebted Member States.
  The credibility of the Pact in terms of restoring structural balances in a period of higher interest rates is questionable, given that between 2014 and 2019, Member States that benefited from very low interest charges due to zero or even negative interest rates have not started to restore their primary budget surpluses between 2014 and 2019.
- Countries subject to the excessive deficit procedure (total government deficit above 3% of GDP) are exempt from the rule that imposes a reduction of their general government debt by an average of 1% per year until their deficit falls below 3%. This is not the best way to encourage the worst performers to reduce their debt-to-GDP ratios! It's as if the worst performers in a class are exempt from extra effort and sanctions as long as their results remain mediocre.
- The horizons for implementing the adjustment appear to be very long: 4 to 7 years to bring the public deficit below 3% (the annual adjustment of the structural primary deficit must be 0.5%) and decades to return to the 60% public debt ratio. Such horizons also extend beyond typical political cycles, and experts deem the Commission unlikely to force a government elected with different priorities in the middle of the seven-year cycle to implement policies agreed by its predecessor[23]. As mentioned by L. Garicano, "the framework is also vulnerable to mani-

22. "Net expenditure" means "government expenditure net of interest expenditure, discretionary revenue measures, expenditure on programs of the Union fully matched by revenue from Union funds, cyclical elements of unemployment benefit expenditure, and one-offs and other temporary measures" (Chapter 1, article 2).
23. L. Garicano, "The EU's new fiscal rules are not fit for purpose", *Financial Times*, 8 January 2024.

pulation through creative accounting and over-optimistic growth assessments."

- Both the corrective and preventive arms of this revised Pact refer to the structural deficit. Its definition as a "cyclically-adjusted deficit" risks weakening the Pact. Why use this complicated reference, which has failed to reduce excessive deficits in the past, and not keep the simple concepts of overall government deficit (as a % of GDP) or primary budget surplus, which are essential ratios for putting the public debt trajectories of the most indebted countries back on a sustainable footing?
- The Commission's powers to enforce these 'new' rules have not been strengthened, even though it can initiate an excessive deficit procedure based solely on the criterion of public debt in relation to GDP.

What makes these new rules any more likely to be implemented than the previous ones? All the more so as the final discussions in the Council focused on minimum safeguards, which risk becoming maximum rules...

The postponement of the of budgetary adjustment for countries subject to an excessive deficit procedure and the extremely long periods granted to over-indebted countries to bring their public debt back to below 60% of their GDP (around 50 years for France, 80 years for Italy) are based on two erroneous prejudices:

- The reduction in the public debt ratio is based on a return to very low medium and long-term interest rates, which is likely to prevent budgetary efforts (*i.e.* cuts in public spending). The peak of the increase in the interest burden on the public debt of hyper-indebted countries is expected to be reached by 2027 and should subsequently fall as a result of the return to permanently low interest rates. This is the "easy money" paradigm: an accommodating monetary policy (permanently low interest rates) avoids budgetary efforts.
- Any budgetary adjustment is 'by nature' recessionary because economic growth is based primarily on domestic demand.

These two assumptions should lead European countries with excessive debt to continue their economic decline. There are several explanations:

The recent monetary history (2014-2021) highlights the paradigm of easy money, which leads to excessive debt that does not stimulate economic growth. The persistence of low (or even negative) interest rates over this period has not led to an increase in productive investment but, on the contrary, has encouraged savers to keep their financial assets in liquid instruments (*see Eurofi Scoreboards*) rather than in securities geared to long-term investments[24]. Furthermore, persistent low interest rates encourage indebtedness and the proliferation of asset bubbles, increase wealth inequalities and favor a misallocation of resources (*e.g.* the development of zombie firms).

Excessive deficits and debt jeopardize economic growth. They require an increasing tax pressure, which deteriorates further the competitiveness of companies in these countries. Stimulating demand does not lead to increased production but to a widening of the trade deficit if a country does not have an efficient production system.

On the contrary, what is needed is to increase potential growth and achieve a better allocation of resources is:

- **Returning to primary surpluses as soon as possible,**
- **Rationalizing public spending – the quality of public spending must be an absolute priority – in countries where the ratio of public spending to GDP exceeds the European average,**
- **Pursuing supply-side reforms that enhance production.**

In over-indebted countries, governments need to take corrective action to ensure a path to primary budget surpluses and reduce unproductive and inefficient public spending. Illusions about the ability of these countries to stimulate demand should be dispelled.

A review of the composition of public finances, focusing on the nature of expenditure, is therefore urgent and essential in highly indebted countries. This will require a thorough review of all levels of national public spending – renewed because they have been previously voted in – and a reduction in unproductive and socially inefficient spending.

Indeed, the climate and digital transitions will impose significant costs on Member States' public finances. But this effort must be made by redirecting current expenditure towards productive investment

Only productivity-enhancing and supply side-oriented reforms can foster productivity and growth, and not negative real interest rates or Quantitative Easing.

24. 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.

If the current trend in public debt continues, the fiscally 'virtuous' countries will ultimately bear the cost. This would exemplify an uncooperative game, where most participants evade their obligations by shifting the burden onto those who comply. We must therefore take the Union's destiny into our own hands and prevent further drift. If we fail to do so, the logical outcome could well be a new and inevitable Eurozone crisis.

APPENDICES

APPENDIX 1.
Credit to Non-Financial Private Sector, Public Sector, Firms and Households, % of GDP

	General Government			Private Non-Financial Sector (a + b)			Non-Financial Corporations (a)			Households (b)		
	2000	2008	Q4-2023	2000	2008	Q4-2023	2000	2008	Q4-2023	2000	2008	Q4-2023
United States	48,6	66,1	113,4	136,7	170,8	150,1	65,9	74,6	77,2	70,8	96,1	72,9
United Kingdom	37,7	50,8	102,2	136	185,3	143,7	70,7	90	64,2	65,3	95,3	79,5
Japan	114,6	145,1	219,4	187,5	163,8	180,5	117,7	103,5	114,8	69,8	60,3	65,7
China	22,9	27,1	83	105,5	108	200,4	n.a	89,8	138,3	n.a	17,9	62,1
Euro area	69,2	69,8	88,6	126	156,7	148,6	76,5	96	94,9	49,6	60,8	53,7
France	59,4	69,8	110,5	137,7	164,2	213,4	104	115,6	150,4	34,2	48,6	63
Germany	59,3	65,8	63,6	140,6	129,9	122	69,4	70,1	69,9	71,2	59,8	52,1
Italy	108,8	106,2	137,1	79,3	116,5	99,4	56,6	77,5	61,7	22,6	39	37,7
Spain	57,8	39,7	107,7	117,9	214,2	128,6	72,5	131,6	81,7	45,4	82,6	46,9
Netherlands	52,2	54,7	46,4	219,7	234,7	205,1	130,1	123,2	117,5	89,6	111,5	87,6
Austria	66,1	68,7	77,2	127,8	142,5	134	83	90,5	89,8	45,3	52	44,2
Portugal	54,2	75,6	99,1	142,8	206,3	138,1	83,9	117,4	82,9	58,8	88,9	55,2
Belgium	109,6	93,2	105,5	146,2	192,1	189,3	105,4	142,2	130,6	40,8	49,9	58,7
Aggregate	n.a	55,6	87,3	n.a	130,1	147,1	n.a	76,1	90,4	n.a	54	56,7

Source: Bank for International Settlements
Note: 'Aggregate' gathers 45 advanced and emerging economies

APPENDIX 2.
Debt service costs according to different metrics across key EU Member States

	Billion Euros			% of GDP			% of Government debt (t-1)		
	2019	2023	2025	2019	2023	2025	2019	2023	2025
France	36,9	48,3	70,1	1,5%	1,7%	2,3%	1,6%	1,6%	2,1%
Germany	27,4	36,1	42	0,8%	0,9%	1,0%	1,3%	1,4%	1,6%
Italy	60,4	78,6	91,6	3,4%	3,8%	4,1%	2,5%	2,8%	3,1%
Spain	28,4	36	41,1	2,3%	2,5%	2,6%	2,3%	2,4%	2,5%
Austria	5,6	5,6	7,5	1,4%	1,2%	1,4%	2,0%	1,6%	1,9%
Netherlands	6,2	6,5	8,2	0,8%	0,6%	0,7%	1,5%	1,4%	1,6%
Portugal	6,3	5,8	6,3	2,9%	2,2%	2,2%	2,5%	2,1%	2,4%
Belgium	9,5	11,8	14,1	2,0%	2,0%	2,2%	2,1%	2,0%	2,2%

Source: EU Commission
Notes: Data for 2024 & 2025 are projections taken from the EU Commission's Spring Forecasts (May 2024)

APPENDIX 3.

Method of calculating the stabilising budget balance

The dynamics of government debt is an accounting phenomenon. Its variation as a percentage of GDP depends on (i) the difference between the apparent interest rate and nominal GDP growth (real growth + inflation), (ii) the level of public debt as a percentage of GDP in the previous period and (iii) the primary budget balance as a percentage of GDP. This mechanism can be illustrated by the following equation:

$$b_t - b_{t-1} = b_{t-1}(r - g) + d_t \qquad (1)$$

With the public debt/GDP ratio in period t; the public debt/GDP ratio in period t-1 ; r, the implicit interest rate (interest burden/public debt in t-1); g, nominal GDP growth; , the primary budget deficit as a percentage of GDP.

From equation 1 we can derive the stabilising balance (-d*), *i.e.* the balance where the debt ratio is constant between two periods. This balance is equal to the difference r-g multiplied by the debt/GDP ratio of the previous period. In other words:

The r-g differential is therefore a determining factor in the dynamics of public debt. There are several configurations to consider, depending on whether r>g or r<g:

- **If r>g**. With a zero primary balance, the debt ratio will increase exponentially at the rate r-g. To put the debt ratio on a downward path, the primary balance must be **positive and greater** than the stabilizing primary balance (-d*, see eq.2), otherwise the debt ratio will increase.
- **If r<g**. Fiscal adjustment is easier, and if the primary balance is zero, the debt ratio will fall steadily. It will also fall if the primary deficit does not exceed -d*.

A numerical illustration: Consider an implicit interest rate (r) of 4% and a growth rate (g) of 2%. The primary surplus required to stabilize a debt ratio of 50% is 1%, 2% for a debt of 100% and 3% for a debt of 150%. Conversely, if r=2% and g=4%, the debt ratio can be stabilized with a primary deficit of 1% for a debt ratio of 50%, 2% for a debt ratio of 100% and 3% for a debt ratio of 150%.

APPENDIX 4.
Implicit interest rate on public debt (r) and current GDP growth rate (g) across key EU Member States

	r - g, percentage points			
	France	Italy	Spain	Germany
Avg 1999-2023	0,2	1,4	-0,3	0,2
Avg 1999-2007	0,6	1,0	-2,8	2,3
Avg 2014-2019	-0,4	1,1	-0,6	-1,9
Avg 2021-2023	-5,0	-5,1	-7,1	-5,5
2021	-6,6	-7,2	-7,3	-5,4
2022	-3,7	-4,6	-7,9	-6,1
2023	-4,6	-3,4	-6,2	-4,9
2024	-1,6	-0,2	-3,0	-2,2
2025	-1,2	0,2	-1,8	-1,6

Source: EU Commission (Spring Forecasts of May 2024)
Notes: r = total interest payment over year t divided by the debt stock at the end of year t-1; g = nominal GDP growth rate at year t

APPENDIX 5.
Observed vs debt-stabilizing primary budget balance across the main EA Member States, % of GDP

	France		Italy		Spain		Germany	
	Stabilizing	Observed	Stabilizing	Observed	Stabilizing	Observed	Stabilizing	Observed
Avg 1999-2023	-0,1	-1,8	1,5	0,7	-0,4	-1,6	0,0	0,6
Avg 1999-2007	0,6	0,3	1,3	2,4	-1,4	2,3	1,8	0,0
Avg 2014-2019	-0,4	-1,5	1,5	1,6	-0,6	-1,3	-1,3	2,4
Avg 2021-2023	-5,6	-3,9	-7,6	-4,4	-8,3	-2,7	-3,7	-2,1
2021	-7,6	-5,2	-11,2	-5,2	-8,8	-4,6	-3,7	-3,0
2022	-4,2	-2,8	-6,8	-4,3	-9,3	-2,4	-4,2	-1,8
2023	-5,1	-3,8	-4,8	-3,6	-6,9	-1,2	-3,2	-1,6
2024	-1,8	-3,3	-0,2	-0,5	-3,2	-0,5	-1,4	-0,6
2025	-1,3	-2,7	0,2	-0,5	-1,9	-0,2	-1,0	-0,2

Source: Ekonomics' calculations based on EU Commission's Spring Forecast (May 2024)

Digitalisation in finance: digital euro and AI Act

2

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The development of a digital euro: are central banks getting into geopolitics?

Note written by Jean-Marie Andrès and Cyrielle Dubois

"After exploring many possible problems that a Central Bank Digital Currency could solve, I am left with the conclusion that a CBDC remains a solution in search of a problem."

Speech by Christopher J. Waller, Member of the Board of Governors of the Federal Reserve System, 2021

Executive summary

Central Bank Digital Currencies (CBDC) are all the new rage. In a survey conducted in 2023, the Bank for International Settlements (BIS) estimated that ninety-four percent of surveyed central banks were exploring a CBDC. Over the course of last year, there has been a significant increase in experiments and pilots with CBDCs, both wholesale and retail. 134 countries & currency unions have started exploring a CBDC, and 68 countries are already in the advanced exploration phase – development, pilot, or launch. Furthermore, 3 countries have now fully launched their CBDCs – the Bahamas, Jamaica, and Nigeria – allowing for firsthand experience of how CBDCs can and will be used.

However, these experiences tell us very little about the usefulness of a possible future retail Digital Euro. Indeed, the motivation to consider the introduction of a CBDC varies greatly among countries, especially between Advanced Economies (AEs) and Emerging Markets and Developing Economies[1] (EMDEs). In a survey conducted in 2021, the Bank for International Settlements found that the weight given to different motivations to issue a CBDC depends on factors such as the national payment system's state of development and structure and the degree of financial inclusion in the jurisdiction. Financial inclusion is cited as a main factor across EMDEs and seems to be a top priority for CBDC development in such economies. EMDEs' motivations also include financial stability and monetary policy. For AEs however, central banks see CBDCs as a way to help maintain a country's monetary sovereignty or provide a public alternative in the possible case of a widespread adoption of private digital currencies denominated in major foreign currencies. For both EMDEs and AEs, payment-related motivations, such as domestic payment efficiency and payment safety are of crucial importance[2].

The BIS also identified a stronger perceived need for CBDCs in EMDEs which translated into a statistic that speaks for itself: seven out of eight central banks in advanced stages of CBDC work are in EMDEs. This underscores the practical benefits seen in these regions, such as improving financial inclusion and stability. EMDEs often face challenges such as limited access to banking services, unstable financial systems, and less efficient payment infrastructures. In the Bahamas, the main motivation for the introduction of the Sand Dollar (the CBDC issued by the Central Bank of the Bahamas) was to improve financial inclusion for 390,000 people spread across 30 inhabited islands, many of them remote. A CBDC in these contexts

1. Westermeier, C. (2024). The digital euro : a materialization of (in)security. Review Of International Political Economy, 124. https://doi.org/10.1080/09692290.2024.2345613
2. Boar, C., & Wehrli, A. (2021). BIS Papers No 114 Ready, steady, go ? – Results of the third BIS survey on central bank digital currency. Dans Bank For International Settlements.

can provide a reliable and inclusive means of financial transaction, helping to bridge the gap for the unbanked or underbanked populations.

In contrast, for advanced economies like those in the Eurozone, the case for a retail digital euro is less clear-cut. Existing payment methods, from credit cards to digital wallets, already offer robust, efficient, and secure solutions for consumers. These methods adequately address the primary objectives that a CBDC would ostensibly fulfill, such as payment efficiency and safety. Credit cards, for instance, are widely accepted and provide consumer protection mechanisms, while digital wallets like PayPal or Apple Pay offer convenience and speed. Consequently, from the consumer's point of view, the introduction of a digital euro appears somewhat redundant. Consumers in advanced economies enjoy a plethora of payment options that are not only efficient but also deeply integrated into the existing financial ecosystem, making the need for a new form of digital currency less apparent.

From the merchant's perspective, while a digital euro might offer some advantages, such as (anticipated) reduced transaction fees or instant settlement, these benefits are insufficient to signify a major shift or solve a critical problem.

The payment system in the EU today is therefore already efficient and constantly progressing, as per the words of a report for the ECON Committee of the European Parliament. There are no market failures suggesting central banks should be directly involved[3]. The current landscape of payment solutions already has established solutions that work accurately.

Yet, the one notable distinction of a retail digital euro lies in its potential to reinforce Europe's strategic autonomy. Currently, the major existing payment methods are dominated by non-European entities (Visa, MasterCard, PayPal, Apple Pay...). By introducing a digital euro, the European Union could, among other things, reduce its dependence on foreign payment systems, thereby enhancing its economic and strategic sovereignty and security. This move would align itself with the EU's strategic autonomy initiative, ensuring that Europe retains control over its payment infrastructure and financial data, which is increasingly important in a digitalized world where data security and sovereignty are paramount concerns.

The introduction of the digital euro may serve more as a geopolitical strategy than a response to a market necessity, highlighting the complex interplay between technology, economics, and sovereignty in the digital age. One can however wonder if alternative solutions to the increased European need for strategic autonomy exist, and whether they might not more effectively address these needs. It is thus crucial to evaluate the digital euro's role within the broader landscape of existing and emerging retail payment technologies, so that different European solutions that would offer almost the same service do not cannibalize each other, but rather build on one another to create a more resilient European payment system.

Introduction

Many countries have started developing Central Bank Digital Currencies (CBDC) over the last few years. Today, 134 countries & currency unions have started exploring a CBDC, and 68 countries are already in the advanced exploration phase – development, pilot, or launch. Three countries have already issued their CBDCs, and first experiences are coming through about their use. CBDCs can address market failures in countries which do not yet benefit from a complete, secure, inclusive and efficient payment system.

In the Euro area, the European Central Bank launched the idea of a possible future digital euro in 2020. It is curious however that the digital euro does not seem to answer to any market failure whatsoever in the eurozone. In the words of Christopher J. Waller, Member of the Board of Governors of the Federal Reserve System, a retail digital euro "remains a solution in search of a problem.[4]"

The one purpose a digital euro would serve is that of enhancing Europe's strategic autonomy. Since the beginning of the war in Ukraine, this narrative has intensified, as the vulnerability of the dependency on external payment service providers is more and more visible.

The introduction of the digital euro seems to be more a geopolitical move than a response to market necessity, highlighting the complex interplay between technology, economics, and sovereignty in the digital age. However, alternative solutions for European strategic autonomy might address these needs more effectively. It is crucial to evaluate the digital euro's role within the broader landscape of retail payment technologies, ensuring that European solutions complement rather than cannibalize each other.

3. Westermeier, C. (2024). The digital euro : a materialization of (in)security. Review Of International Political Economy, 124. https://doi.org/10.1080/09692290.2024.2345613

4. Note: Christopher J. Waller was not talking about the digital euro when he said those words, but about CBDCs in general.

1. The creation of a digital euro does not answer to any market failures in the EU

1.1 The motivations for EMDEs to issue CBDCs do not really apply in the case of the Eurozone

First CBDC movers are EMDE

It is curious and telling that to date, none of the countries that have fully launched a retail CBDC are advanced economies. In October 2020, the Sand Dollar became the first CBDC in the world to go beyond the pilot stage and achieve an official launch. This was followed a year later by Nigeria launching Africa's first digital currency, the eNaira in October 2021. Shortly after, in February 2022, the Jamaican Central Bank launched JAM-DEX, its CBDC. For now, no other country has achieved an official CBDC launch, although China's Central Bank has started to test out the e-CNY, with for example in early 2023, AliPay starting to offer e-CNY in express payment category.

These three countries although quite diverse have something in common: they are all EMDEs. As such, they still suffer from financial inclusion challenges, are susceptible to financial instability, and struggle with monetary policy implementation.

The Central Bank of the Bahamas cited as motivations for a CBDC development its will to foster financial inclusion and strengthen security against money laundering or illicit economic activities. In Nigeria, motivations were very similar: improve financial inclusion, and improve the accountability of the informal sector. As such, the eNaira is expected to help Nigeria reach its target of increasing financial inclusion from 64 percent to 95 percent. Lastly, the primary motivation cited by the Jamaican central bank for issuing a CBDC was to reduce the storage and handling costs of cash usage.

All of these reasons are classical motivations for the issuance of a CBDC for EMDEs. Indeed, in a survey conducted in 2021, the BIS assessed that not only did EMDEs report stronger motivations for issuing CBDC than AEs, but they also importantly gave as motivations payment efficiency, financial inclusion, monetary policy implementation, financial stability, and payment safety/robustness, far more so than their AEs counterparts.

CBDC fosters financial inclusion

Financial inclusion is also cited as one of the main reasons why EMDEs' central banks develop CBDCs. In Sub-Saharan Africa, about 49% of adults own a bank account. There is however a great deal of variation in account ownership, from 91% in Mauritius to 6% in South Sudan[5]. In the Bahamas in 2022, we estimated that around 18% of the population remained unbanked[6]. Limited access to banking services, geographical barriers, and low financial literacy, exacerbate this trend and feed into each other. CBDCs can provide universal access to financial services through digital wallets, making it easier for unbanked populations to participate in the financial system. Most CBDCs do not require having a bank account to open up a wallet. In Nigeria, the only elements required to make payments up to 50,000 Naira a day (about USD121) are a phone number and verified national identity. If individuals owning a bank account have a higher spending limit, this still allows for unbanked individuals to have easy access to digital money. In Europe, the percentage of the population in a situation of financial exclusion is limited, with, in 2022, around 3.6% of Europe's population remaining financially excluded[7].

CBDC transparency and traceability of transactions, contribute to monetary policies effectiveness and improves financial stability

Monetary policy implementation is another significant challenge faced by EMDEs, where informal economies and the lack of reliable economic data can undermine the effectiveness of central bank actions. Informal employment accounts for about 70% of employment in a typical EMDE[8]. A CBDC can enhance transparency and traceability of transactions, providing central banks with better data and tools to monitor economic activities and implement effective monetary policies. This improvement can reduce the influence of informal economies and help in achieving monetary stability. In Europe, we estimate that on average, 11.6 % of total labor input is undeclared[9].

5. World Bank Group. (2024). Financial Inclusion in Sub-Saharan Africa&mdash ; Overview. Dans World Bank. https://www.worldbank.org/en/publication/globalfindex/brief/financial-inclusion-in-sub-saharan-africa-overview
6. Allan Wright, Shavonne C. McKenzie, Lance R. Bodie, Carlisa L. Belle. (2022). Financial Inclusion and Central Bank Digital Currency in The Bahamas. Central Bank Of The Bahamas. https://www.centralbankbahamas.com/viewPDF/documents/2022-09-23-13-49-13-CBDCupdated-paper.pdf
7. Admin. (2023, 14 décembre). Number of unbanked adult EU citizens more than halved in the last four years - WSBI ESBG. WSBI ESBG. https://www.wsbi-esbg.org/number-of-unbanked-adult-eu-citizens-more-than-halved-in-the-last-four-years/
8. Jones, T., Ram, M., & Edwards, P. (2006). Shades of grey in the informal economy. International Journal Of Sociology And Social Policy, 26(9/10), 357373. https://doi.org/10.1108/01443330610690514
9. Williams, C., Bejaković, P., Mikulić, D., Franic, J., Kedir, A., & Horodnic, I. A. (2017). An Evaluation of the Scale of Undeclared Work in the European Union and Its Structural Determinants : Estimates Using the Labour Input Method. Social Science Research Network. https://doi.org/10.2139/ssrn.3092080

Europe enjoys a more formalized and transparent financial system, which makes monetary policy implementation more straightforward and effective.

Financial stability is also a critical concern in many EMDEs due to vulnerable financial systems that are less resilient to economic shocks and often experience higher volatility. By introducing a stable and reliable form of digital money, a CBDC can help stabilize financial systems, and enhance trust in the domestic financial system. Further financial stability is expected to provide a buffer against second round economic shocks. In contrast, financial systems in advanced economies such as Europe are generally more robust and resilient, supported by strong regulatory frameworks and effective risk management practices, reducing the frequency and impact of financial instability.

CBDC may be an easy solution to improve payments efficiency, and safety

Payment's efficiency refers to the effectiveness, speed, cost-effectiveness, and reliability of payment systems within an economy. In many EMDEs, traditional payment systems may face challenges such as high transaction costs, infrastructure deficiency, and limited interoperability. In such a context, CBDCs can streamline and digitize payments, reducing transaction costs and increasing speed and efficiency. It can provide near-instant transactions and reduce reliance on cash. For different reasons, including widespread internet access, reliable financial institutions, advanced payment systems, and scale effects, the Eurozone does not experiences such difficulties in payment efficiencies.

Finally, payment safety and robustness are another significant challenge for EMDEs. Limited resources and expertise to implement robust cybersecurity measures make these economies more vulnerable to cyber-attacks, fraud, and corruption. CBDCs can incorporate advanced cybersecurity measures and anti-fraud technologies, enhancing the safety and robustness of payment systems. Furthermore, central banks can establish and enforce stringent regulatory standards to ensure the integrity and security of the CBDC system. Advanced economies, on the other hand, have greater resources and expertise to implement sophisticated cybersecurity measures, and their regulatory frameworks are typically stronger and more effectively enforced, providing a higher level of payment safety and robustness.

All these typical reasons for implementing a CBDC therefore do not apply to the Eurozone's case.

1.2 Most motivations exposed by the ECB for the digital euro are already answered by other payment solutions or are largely prospective

In the FAQ on the digital euro contained on the ECB website, the first question is "Why would Europe need a digital euro?". The answer given is that the world is becoming more and more digitized and that the use of cash to make payments is declining. According to the ECB, a digital euro would give consumers the option to use central bank money in a digital format.

Central bank money

The need for central bank money in retail transactions is not entirely convincing. Most people do not even know that the money that they use day-to-day on their credit or debit card is not central bank money, let alone do they know what central bank money is.

The actual advantage that central bank money has over private money is that of being backed by the central bank. However, in addition to the financial stability it has already achieved, regulations have made it so that the money in bank accounts is guaranteed up to €100,000. This means that for most people, having access to central bank money or not (and therefore backed by the central bank) is not a critical issue. Finally, although not absent, the risk of a general collapse of the financial banking system is fairly low.

A Payment means that does not already exist

The ECB further presents the digital euro as a way to "make people's lives easier by providing something that does not currently exist: a digital means of payment universally accepted throughout the Euro area, for payments in shops, online, or from person to person." While it is true that there is no universal means of payment, most important card providers are widely used and accepted within the EU. As for person-to-person payment, there has been a significant development in the last few years of payment solutions that allow these types of transactions. These include (but are not limited to) Venmo, PayPal, Revolut, or even ApplePay. If all these payment solutions require that both parties set up an account, the digital euro would not fix this issue, as it would also require both parties to have a digital euro account.

Eventually replace cash

In October 2020, the ECB has also published a Report on a digital euro[10], in which it explored the main uses of the digital euro. It outlines hypothetical

10. European Central Bank. (2021, 14 janvier). Report on a digital euro. https://www.ecb.europa.eu/euro/html/digitaleuro-report.en.html

future scenarios that would require a digital euro in order "to achieve the objectives related to core central bank function". Most of the scenarios are situated in the very long-term future. Scenario 2 for example imagines a world where the role of cash would have significantly declined, up to a point where it would hamper the provision of adequate cash services. Although the use of cash is steadily declining, it is unlikely that it will reach such a low point any time soon, even if the digital euro was introduced.

An essential feature of the EU's contingency toolbox

Scenario 5 highlights the importance of the digital euro in the event of cyber incidents, natural disasters, pandemics, or other extreme events that could hinder the provision of payment services. It is unclear what exactly the digital euro would bring to this. It could be used offline, therefore providing security against cyber-attacks, but some of its proprieties would still require hard and soft wares use (replenishing the account, for example) being at risk as well.

Enlarge the international role of the euro

Scenario 6 handles the international role of the euro, and how the digital euro could contribute to this broad EU objective. It is still unclear whether CBDCs would be widely adopted in an area where existing payment means work well (as they do in Europe), and it is even more so unclear if other countries would subscribe to a digital currency that is not theirs (and that is, as of now, not the dominant one).

Support cost efficiency and ecological footprint

Lastly, scenario 7 describes how a digital euro could proactively support improvements in the overall costs and ecological footprint of the monetary and payment systems. It remains to be seen how this would be integrated into the system, as creating an alternative infrastructure would necessarily be expensive and polluting, at least at first.

The reasons typically given for the introduction of a CBDC do not pose significant issues in Europe, and the scenarios by the ECB are importantly linked more to potential designs of the digital euro than to actual motivations. The digital euro does not seem to respond to any market failure within the European Union.

2.2 The digital euro project appears to mainly answer to the strategic autonomy agenda conducted by the EU

2.1 The digital euro project has always been seen as an asset for the EU's strategic autonomy, but even more so since the beginning of the Russia-Ukraine war

In the context of the European Union, there is no evident market failure that necessitates the introduction of a digital euro. The EU enjoys relatively efficient payment systems, high financial inclusion, robust monetary policy implementation, and stable financial markets. However, a significant driving force behind the digital euro project is the pursuit of strategic autonomy. The ECB has explicitly highlighted the importance of strategic autonomy, notably since the geopolitical shifts triggered by the war in Ukraine and the ensuing sanctions on Russia[11]. These events have underscored the vulnerabilities associated with dependence on external financial infrastructures and the need for Europe to ensure its economic sovereignty.

The war in Ukraine markedly shifted the tone and urgency surrounding the digital euro. Christine Lagarde, in a virtual panel on central-bank digital currencies hosted by the Bank for International Settlements in 2023, emphasized this shift by noting, "When you look at your wallet and you look at your telephone and see the applications that you use for payments or the cards that you use for payment, you very soon realize that those means of payments are not necessarily European.[...] So we just have to be careful. Some people will call it sovereign autonomy, I prefer to call it resilience because that's really what it is.[12]"

Before the war in Ukraine, the connection between Europe's security politics and its currency was already being recognized. In October 2020, the ECB's High-Level Task Force launched a report that outlined several scenarios where the digital euro would be beneficial.

One scenario addressed external threats, warning that the rise of non-euro-denominated forms of money could threaten European financial, economic, and ultimately political sovereignty. The report made it clear that maintaining control over the currency and financial infrastructure was crucial for Europe's autonomy.

11. Westermeier, C. (2024). The digital euro : a materialization of (in)security. Review Of International Political Economy, 124. https://doi.org/10.1080/09692290.2024.2345613
12. Bloomberg, "ECB's Lagarde Says Digital Euro Has Key Role in Payment Autonomy" (2023b, mars 21). https://www.bloomberg.com/news/articles/2023-03-21/ecb-s-lagarde-says-digital-euro-has-key-role-in-payment-autonomy

The experience of 2018, when the US withdrew from the Iran Nuclear Deal and pressured the Society for Worldwide Interbank Financial Telecommunication (SWIFT) to disconnect Iranian banks, serves as a reminder. European companies, despite adhering to the deal, found themselves unable to conduct trade with Iran due to the infrastructural disconnection enforced by US influence. This incident illustrated how sanctions and exclusion from payment systems could impede the EU's ability to maintain its commitments and conduct international trade independently. The situation led to the setup of INSTEX, a European workaround for the established financial system, highlighting the need for independent financial infrastructures.

After the start of the Russian aggression against Ukraine in February 2022, the urgency to address these vulnerabilities intensified.

In September 2022, a member of the executive board of the Deutsche Bundesbank listed "strategic sovereignty in European payments" as the primary reason for needing a digital euro. This shift in focus was echoed by Nadia Calviño, president of the BEI and who was at the time Spanish Minister for Economic Affairs and Digital Transformation, who described the development of the digital euro as a "highly geopolitical challenge" and argued that it underpins the new world order in the making.

While these issues did not directly concern retail payments, they certainly exacerbated the already-building consensus that the European retail payment system, because of its reliance on external providers, could easily be put out of order in the event of an acute geopolitical crisis.
The ECB's reports and communications have increasingly reflected these concerns but have been at the heart of the digital euro project from the beginning. In the previously mentioned Report on a digital euro, three out of seven scenarios directly touch upon the notion of strategic autonomy.

The digital euro could support innovative European digital solutions

Scenario 1 highlights the benefits of a digital euro in fostering the digitalization and independence of the European economy. The issuance of a digital euro could support the development of innovative European solutions in various industries, filling gaps in the provision of digital payment solutions and functionalities. By making pan-European end-user solutions accessible to consumers, the digital euro could help preserve European autonomy in the strategic sector of retail payments. The flexible architecture of the digital euro system would support future payment needs and the integration of new technologies, thereby reinforcing Europe's strategic autonomy.

The digital euro contributes to addressing monetary and strategic autonomy challenges

Both scenarios 3 and 4 address concerns about monetary policy and strategic autonomy. Scenario 3 discusses potential risks from foreign-developed global stablecoins undermining European sovereignty and monetary policy transmission. It argues that a digital euro could protect European standards and control. Scenario 4 indirectly touches on strategic autonomy by exploring the benefits and uncertainties of a digital euro in influencing economic choices, despite unclear methods for achieving this.

While the ECB's public communications have touched on various potential benefits of a digital euro, it is clear that the underlying strategic motivation is to bolster Europe's financial sovereignty. In a world where financial systems are increasingly weaponized, the digital euro project is a step to ensure that Europe can independently manage its economic and financial future. It is also a crucial step that the ECB is taking towards a more political stance on issues, as it is a response to current geopolitical events.

2.2 The digital euro answers to three key strategic autonomy challenges

2.2.1 Securing financial infrastructure and reducing dependence on non-European providers

Today, approximately 70% of European card payment transactions are managed by payment service providers originating outside of Europe[13]. This heavy reliance on non-European infrastructure for such a critical component of the financial system poses significant risks. In times of geopolitical tension or policy divergence, this dependence could be leveraged against European interests, potentially disrupting the functioning of the European economy.

In March 2022, in what seemed to be a coordinated response, both Visa and Mastercard announced on the same day that they were suspending all operations in Russia, following the country's invasion of Ukraine. Effective immediately, Visa said in a statement that it would work with its client and partners within Russia to cease all Visa transactions in the country[14].

13. What ways and means for a real strategic autonomy of the EU in the economic field ? (2023, 13 décembre). European Economic And Social Committee. https://www.eesc.europa.eu/en/our-work/publications-other-work/publications/what-ways-and-means-real-strategic-autonomy-eu-economic-field
14. Visa and Mastercard halt operations in Russia. (s. d.). https://www.vixio.com/insights/pc-visa-and-mastercard-halt-operations-russia

Visa and MasterCard, as major payment providers, dominate the European market. If for now, interests seem to align between Europe and the US, the geopolitical uncertainty in which our world has been plunged in the past few years makes it possible that Europe and the US could disagree on geopolitical matters. If that were the case, and if, pressured by the American government (or even by their own will), Visa or MasterCard decided to halt their activities in Europe, the consequences would be disastrous for the European economy, both at a micro and a macro scale.

By building a CBDC, the ECB intends to contribute to mitigating the vulnerabilities that come from this reliance on external payment providers. Developing a sovereign digital currency would help the EU secure its financial infrastructure against external shocks and maintain control over its economic operations.

2.2.2 Achieving enhanced sovereignty in monetary policy

As more and more countries develop a CBDC, there is also a risk that these will be massively adopted by the European population in the context of internet transactions notably. Numerous countries are developing CBDCs, with China's e-CNY being a prominent example. Additionally, private companies have also ventured into this realm, as evidenced by Facebook's (now Meta) attempt to introduce the stablecoin Libra, although the project was ultimately abandoned. The widespread adoption of these foreign digital currencies or private alternatives threatens to diffuse the control over monetary policy that the ECB currently holds.

If foreign CBDCs or private stablecoins were to gain substantial traction within Europe, the ECB's ability to effectively transmit its monetary policy could be compromised proportionately. Scenario 3 of the "Report on a Digital Euro" elucidates this concern, warning that the extensive use of non-euro-denominated digital currencies could undermine European financial, economic, and political sovereignty. Such a shift would dilute the ECB's influence over domestic financial conditions, potentially destabilizing the region's economy. The weakening of the monetary policy transmission mechanism would pose significant risks to financial stability, as it would hinder the ECB's efforts to manage liquidity and control inflation. Implementing a digital euro then consists in hindering foreign competition from having too big of a grasp on the European economy.

The ECB also believes that the digital euro could be a means to enhance sovereignty in monetary policy. In scenario 4 of the "Report on a Digital Euro", the ECB outlines how a digital euro could reinforce control over monetary policy. It mentions how by enabling the central bank to set the remuneration rate on digital euro holdings, the ECB would gain a direct tool to influence consumption and investment decisions within the non-financial sector. Whether this could actually be implemented is still questioned. Furthermore, the effectiveness of this method has yet to be proven.

Still, maintaining control over monetary policy is essential for the ECB to fulfill its mandate of ensuring price stability. In an increasingly interconnected financial world, the digital euro project is a crucial step to ensure that Europe retains independent control over its economic and financial destiny.

2.2.3 Protecting privacy and ensuring high levels of data protection

Data is rapidly becoming one of the most valuable commodities in the global market. The global big data market, valued at $163.5 billion in 2021, is projected to grow significantly, reaching $473.6 billion by 2030. Within this vast data landscape, financial data holds a particularly critical position. Transactional data, which reveals consumption habits and financial behaviors, serves as a goldmine for insights into individuals' lives. The increasing use of electronic and digital payments amplifies the value of this data, making it especially coveted by companies with data-driven business models, most of which are non-European.

Currently, the predominant payment systems operating within Europe are American. Despite regulatory efforts to protect data, these external providers still access significant portions of transactional information. This situation presents a substantial risk to European privacy standards and data protection. The adoption of foreign digital currencies, such as China's e-CNY, could exacerbate this issue. The level of privacy protection in China is far inferior to that in Europe, raising concerns about the potential misuse of sensitive financial data if such currencies gain prominence within the EU.

A digital euro could serve as a robust safeguard against these privacy risks. By ensuring that payment data remains within a secure, European-controlled system, the digital euro would protect sensitive financial information from being exploited by non-European entities. This protection is critical not only for individual privacy but also for maintaining the integrity and trustworthiness of the European financial system.

The ECB's commitment to data protection and privacy is deeply intertwined with the strategic autonomy agenda. It seems that we have now

entered an age where central banks possess geopolitical agendas, as this move towards the digital euro is a reaction to geopolitical events that have happened in the past few decades.

3. Other solutions may be as efficient in ensuring the EU's strategic autonomy, and need to go hand in hand with the development of a digital euro

3.1 The EPI, one exemple of an European payment solution that would contribute to the EU strategic autonomy

By analyzing and comparing some existing and projected payment solutions, it becomes clear that from the point of view of the consumer, there is little difference between these different payment solutions, which all seem to offer similar ease of use, and more and more offer similar experiences even in offline/peer to peer payments. A digital euro would however present a significant advantage on current international card payments at a retail level, whether it is on Visa and MasterCard, most notably in terms of strategic autonomy. It would also cover a scope that is not covered by national payment solutions: that of cross-border availability. It is however less clear what advantages the digital euro has over European solutions that are being developed such as the European Payments Initiative (EPI), most notably in terms of strategic autonomy.

The interest in analysing and comparing the digital euro and EPI is that both solutions would be pan-European ones, and that EPI offers an integrated package including the payment scheme (TIPs) and the interface (WERO) to make it easier for citizens to use. In this sense, it is a payment solution that highly resembles what the digital euro would be.

The only characteristic that the EPI and the digital euro do not share is that the latter would not use central bank money, which, as previously explained, is not an obvious priority in a financial system as developed as the European landscape. The level of privacy offered would also maybe be slightly different, but electronic transactions always require at least a little data. Consequently, the difference would not be fundamental.

The EPI, launched in July 2020 by a coalition of European banks and payment service providers, aims to establish a pan-European payment network. Initially, the EPI aimed to create a card-based system usable throughout Europe. However, the expected growth of instant payments as well as cost-sharing challenges, prompted it to refocus its efforts on an instant transfer solution supported by a digital wallet. As for the digital euro, this initiative was driven by the desire to reduce the dominance of American payment giants.

The EPI aims to create a unified, secure, and efficient payment system across Europe, addressing both retail and wholesale payment needs. The instant payment infrastructure builds on the existing Single Euro Payments Area (SEPA) provisions and focuses on a wallet (WERO). This wallet, which had a successful pilot phase in late 2023, allows for instant payments between consumers and businesses, online and in-store transactions, and cross-border payments.

The strategic value of the EPI is similar to that of the digital euro. It has the potential to offer a European-governed alternative to American payment systems, thereby enhancing the EU's financial sovereignty. By bringing together European banks and leveraging existing financial infrastructure, the EPI seeks to create a payment ecosystem that is not only competitive with but also independent of non-European providers. This is particularly important in the context of safeguarding European data privacy standards and ensuring compliance with European regulations,

	Digital euro	VISA/MasterCard	National payment solutions	EPI	Cash
Central bank money	Y	N	N	N	Y
European origin	Y	N	Y	Y	Y
EU reach	Y	Y	N	Y	Y
Cross-border availability	Y	Y	N	Y	Y
Privacy	higher	standard	standard	high	very high
Offline usability/peer to peer	Y	Y	Y	Y	Y
Instant transaction	Y	Y/N	N	Y	Y
Financial inclusion	Y	N	N	Y	Y
Low cost to consumers	Y	N	Y	Y	Y
Low cost to merchants	Y	N	Y/N reduced	Y	Y

such as the General Data Protection Regulation (GDPR). Additionally, because it is European and automatically labeled in euros, it preserves monetary policy effectiveness, which could be jeopardized by the adoption of a digital currency or a stablecoin not denominated in euros.

3.2 The digital euro and the EPI (and similar EU initiatives) have to evolve in a way that they do not cannibalize each other, but rather work together towards ensuring a resilient European payment system

Both of these payment solutions, although they would function differently, offer the same advantage of strategic autonomy at a European level. From a consumer perspective, the means to the end will not be a crucial differentiator, as long as securitized payments can be made easily. In both cases, ease of use will not be an issue.

The EPI's development timeline also appears to be significantly shorter than that of the digital euro. While the digital euro is still undergoing legal and technical preparations and is unlikely to be issued before 2027, the EPI's infrastructure is already operational and can be scaled more rapidly. This speed of deployment gives the EPI a critical advantage in meeting immediate strategic autonomy goals while the digital euro project matures.

Furthermore, because it leverages already existing and established systems, the cost of implementation of the EPI solution will be low and easy to maintain. It does not require important innovations, which the digital euro might.

It is also likely that the EPI, being a sector initiative, will have an advantage in fostering innovation in Europe over the digital euro.

In any case, both solutions would enter a market that is already very competitive. Two similar payment systems designed to strengthen Europe's strategic autonomy could easily cannibalize each other[15]. It is therefore crucial that they are constructed with each other in mind.

If a digital euro would largely duplicate EPI services, the ECB may still decide to issue it nevertheless, most notably because, even if a shorter-term solution can exist for strategic autonomy, the digital euro may become one day, for one reason or another, necessary. Establishing structures that might be used by both solutions would be a good starting point for ensuring that money is efficiently spent on a European payment system project.

Conclusion

The development of a digital euro by the ECB is not a response to market demands or to any type of market failures, but a significant geopolitical move. This in itself distinguishes it from any initiative that has been taken by the ECB before. Traditionally, central banks have steered clear of geopolitical arenas, focusing instead on domestic economic stability and policy implementation. The current global instability has however compelled the ECB to engage more directly in geopolitical matters. The digital euro therefore emerges primarily from a desire for strategic autonomy.

At its core, the digital euro aims to reduce Europe's dependency on non-European payment systems, thereby enhancing the continent's economic sovereignty. This strategic autonomy is crucial in a world where geopolitical tensions can easily disrupt existing financial infrastructures.

It is worth noting that Europe is concurrently developing other payment solutions that could address similar concerns. Some of them, like the EPI, are now in an advanced phase and rollout could be almost imminent. The success of the introduction of a European payment method will heavily depend on the careful integration of these solutions to avoid redundancy and competition. A coordinated approach is essential to ensure that various initiatives complement rather than cannibalize each other.

Lastly, despite the strategic motivations, the actual implementation of a digital euro remains uncertain. The project is still in its preparatory phase, with the ECB yet to make a final decision on its issuance. The development and potential deployment of a digital euro will depend on thorough evaluations and the evolving geopolitical and economic landscape.

15. Research, D. B. (2023, 6 juillet). European autonomy in payments : Digital euro is not the only option. Deutsche Bank Research. https://www.dbresearch.com/PROD/RPS_EN-PROD/PROD0000000000528893/European_autonomy_in_payments%3A_Digital_euro_is_not.xhtml?rwnode=RPS_EN-PROD%24HIDDEN_GLOBAL_SEARCH

AI Act: key measures and implications for financial services

1. Market trends and AI adoption

1.1 Current uptake of AI in finance

Artificial Intelligence (AI) is increasingly used by fintechs and more established financial firms to automate routine tasks, better predict market evolutions and manage risks. This allows firms to enhance operational efficiency, reduce costs and improve risk management and decision-making. AI is also used to provide customers with more tailored products and improved service, potentially fostering innovation and greater customer satisfaction. At present, AI applications in the financial sector are more focused on operational efficiency, but it is expected that as the deployment of AI continues, an increasing number of firms focus on customer-oriented applications that may boost customer demand and loyalty.

Key use cases for financial services include AML and fraud detection, where AI's ability to analyze vast amounts of data in real-time is transforming how financial institutions detect and prevent fraudulent activities. Additionally, AI-driven credit scoring models are helping to redefine how credit-worthiness is assessed, incorporating a broader range of data to provide more accurate and inclusive assessments. Trading is a third area of application. AI helps traders to optimize their order execution, identify arbitrage opportunities and manage portfolios more effectively.

The use of AI is progressing significantly in all sectors of finance and more generally of the economy. According to a McKinsey survey published in 2024, 91% of financial services companies are either assessing AI or already using it in production[1]. It is estimated that approximately 60% of European financial institutions are using AI to enhance fraud detection capabilities[2] and 50% of trading firms are using AI. A report published by EIOPA in 2024 also shows that 50% of non-life insurance firms surveyed and 24% of life insurance firms use AI for their operations[3].

1.2 Future trends and developments

Looking ahead, new generations of AI, such as generative AI, are expected to further accelerate this trend, driving innovation and new use cases. These advancements will offer opportunities to increase efficiency across the financial sector, enhance personalization, and ultimately make AI a key component of financial firms' competitiveness.

Generative AI leverages Large Language Models (LLMs) to generate new content such as text, images, and also enhance data analysis by identifying patterns in vast datasets, synthesizing insights and generating predictive models. In the financial sector, generative AI can be applied for example to automated report generation, personalized client communication, fraud detection through anomaly pattern identification, and enhanced predictive analytics for market trends and risk management. As this technology evolves, it will offer the potential to streamline operations, increase customer engagement, and uncover new insights from financial data.

High-performance and quantum computing and the combination of AI with other technologies such as blockchain are also expected to amplify the uptake and impact of AI, enabling even more advanced AI applications and greater levels of efficiency, security, and personalization. Quantum enabled AI, for instance, could revolutionize risk management and portfolio optimization, solving problems that are currently beyond the capabilities of traditional computing. Similarly, AI's integration with blockchain could enhance the transparency and security of financial transactions, paving the way for more robust and trustworthy financial systems and supporting the further automation of securities value chains.

However, the integration of AI is not without challenges for firms. Implementation costs, complexity in system integration, the shortage of skills and the challenges associated with data quality and availability pose significant obstacles to a wide scale adoption of AI at present. AI also

1. The state of AI in 2024: McKinsey Global Survey results, McKinsey, 2024.
2. Artificial intelligence in financial services, PwC, 2024.
3. See *Eurofi Views Magazine* September 2024, P. Hielkema, EIOPA.

creates new potential issues in terms of fairness, bias and transparency that need to be addressed from a customer perspective. The rapid pace of AI-driven innovation also presents new challenges for regulators and supervisors, requiring them to continually adapt their skills and strategies to effectively navigate these evolving developments.

The recently adopted EU Artificial Intelligence Act (AI Act), which aims to ensure that AI systems are safe and respect fundamental rights will address some of these challenges. It will enter into force in August 2024 and will be implemented in stages by August 2026. Work is also underway in other major financial jurisdictions such as the US, the UK and Japan to provide further guidance for the use of AI-based systems.

2. Objectives and key measures of the AI Act

The EU Artificial Intelligence Act (AI Act) was formally adopted by the European Parliament in March 2024 and by the European Council in May 2024 and will enter into force in August 2024[4].

The Act establishes a harmonized regulatory framework across the EU to address the growing influence of AI technologies in a cross-sectoral manner[5]. It aims to protect fundamental rights and ensure safety while fostering innovation. This framework is designed to complement existing sector-specific regulations, such as financial regulations that already address certain risks posed by AI, without imposing specific AI requirements[6].

As the world's first comprehensive AI law, the Act also seeks to position the EU as a global leader in the ethical use of AI by setting standards in line with the EU's commitment to a "human-centric" approach to AI, that could influence global AI governance[7].

2.1 Risk-based approach to AI regulation

In order to balance the ethical use of AI and the protection of human rights with the need for innovation, the AI Act adopts a risk-based and proportionate legislation. The Act categorizes AI systems into four risk levels: minimal risk, limited risk, high risk, and unacceptable risk. This classification determines the regulatory requirements each AI system must comply with.

The AI Act sets out a methodology for the classification of AI systems and establishes a list of high-risk use cases of AI across a number of sectors including financial services in Annex III of the AI Act. Providers, deployers, and distributors of AI systems will be required to evaluate the level of risk posed by their systems based on this methodology and classification, which will also offer greater legal certainty for AI system operators[8].

- Minimal Risk: AI systems in this category, such as AI-enabled video games or spam filters, will remain subject to the existing legislation without additional legal obligations related to the AI Act due to their low potential for harm. These systems represent the majority of existing AI systems. Voluntarily, providers of those systems may choose to apply the requirements for trustworthy AI and adhere to voluntary codes of conduct.
- Limited Risk: Systems such as chatbots or AI-enabled text or image generation systems fall into this category. They will be subject to transparency and user notification obligations in order to ensure that users are aware that they are interacting with an AI system and reduce the risk of deception, misuse or manipulation.
- High Risk: High-risk AI systems are those that can have a significant impact on people's safety, health, or fundamental rights and those that can lead to disruptions in the ordinary conduct of social and economic activities[9]. These systems will have to comply with stringent requirements related to risk management, data governance, transparency, and human oversight before being deployed in the market, in order to prevent harm and ensure that these systems are reliable and trustworthy.
- Unacceptable Risk: AI systems deemed to pose unacceptable risks, such as those that manipulate human behavior through subliminal techniques, enable biometric identification,

4. The AI Act was signed by the presidents of both institutions on June 13, 2024. The Act is set to be published in the *Official Journal of the EU* in July 2024, and it will enter into force 20 days after publication.
5. The AI Act defines an AI system as "a machine-based system designed to operate with varying levels of autonomy, that may exhibit adaptiveness after deployment and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments". Recital 11 further sets out the reasons for this definition, notably setting out that it is based on key characteristics that distinguish it from simpler traditional software systems of programming approaches.
6. For instance, AI-enabled trading algorithms must adhere to the existing requirements under the MiFID II/MiFIR framework and the market abuse regulations and therefore the associated risks are already partly mitigated by the existing framework.
7. Artificial Intelligence Act, European Parliament, March 2024.
8. Artificial Intelligence – Q&A – European Commission, August 2024 https://ec.europa.eu/commission/presscorner/detail/en/QANDA_21_1683
9. AI systems can classify as high-risk in two cases: (i) the AI system is intended to be used for a high-risk use case listed in Annex III of the AI Act, (ii) the AI system is embedded as a safety component in products covered by existing product legislation, such as AI-based medical software.

individual predictive policing or social scoring, are banned outright under the AI Act as they are deemed to violate fundamental rights. For example, systems like social scoring by public authorities, are considered to potentially infringe on human dignity and lead to unfair discrimination.

High-risk systems, which are the acceptable AI systems on which the highest level of requirements will be imposed, are listed in Annex III of the regulation. Two types of AI systems are considered 'high risk' in the financial sector due to their potential impact on individuals' financial well-being and the integrity of financial markets.

- AI systems intended to be used to evaluate the creditworthiness of natural persons or establish their credit score, with the exception of those AI systems used for the purpose of detecting financial fraud.
- AI systems intended to be used for risk assessment and pricing in relation to natural persons in the case of life and health insurance.

The AI Act imposes strict obligations on high-risk AI systems to ensure safety, transparency, accuracy and fairness and also respect for fundamental rights. Providers must implement risk management, ensure the use of high-quality and unbiased data, maintain transparency through documentation and user information, and ensure human oversight and cybersecurity. For instance, AI systems used for credit scoring must be transparent about the data sources and algorithms used to ensure that decisions are made fairly and without bias. The Act also mandates that these systems undergo regular audits and assessments to ensure they meet the required standards of accuracy and reliability. High-risk AI systems must undergo conformity assessments and be registered in an EU database before deployment. Providers are also required to monitor AI systems after deployment and ensure liability mechanisms are in place for compensation in case of harm.

The Act also includes penalties for non-compliance that can reach up to 3% of a company's annual global turnover for violations concerning high-risk systems and up to 1% for less risky systems.

2.2 Specific measures for Generative AI systems

With the rise of powerful general-purpose AI models (GPAI), such as large language models (LLMs), which serve as the foundation for many generative AI systems, the AI Act has introduced additional obligations for GPAI developers, particularly when these models have high-impact capabilities that could pose systemic risks[10]. These models may propagate harmful biases across multiple applications if they are not properly developed or may be misused, potentially affecting many individuals. They are however challenging to regulate due to their versatility and broad applicability across various domains, which is why obligations are imposed on their providers.

The EU AI Act introduces rules and oversight for GPAI model providers to ensure that models are developed in a safe, transparent and fair way. Providers are required to maintain up-to-date technical documentation, share relevant information with downstream providers, and comply with Union copyright laws, while also disclosing training data summaries[11].

When potential systemic risks are identified in connection with the use of GPAI models, providers must assess and mitigate them by conducting evaluations, adversarial testing, and ensuring robust cybersecurity measures. The AI Act mandates additional responsibilities, such as tracking incidents and implementing corrective actions, especially for AI models with significant capabilities or widespread usage.

One of the challenges in implementing these measures will be defining the responsibilities of different actors in the AI value chain involved in the development or use of GPAI models, including developers, providers, and users of AI systems. This may be complex, as GPAI models can be adapted and used in various high-risk applications by third parties. It is necessary to provide clear guidelines on how these responsibilities are distributed to ensure accountability and compliance across the entire AI ecosystem[12].

2.3 Implementation timeline and next steps

The AI Act will be implemented in a phased way to allow stakeholders sufficient time to comply with the new regulations. While the Act officially comes into force in August 2024, its provisions will be phased in over a two-year period to facilitate a smooth transition. This gradual rollout aims to help all companies, including smaller ones, to adjust to the new requirements and achieve compliance without disrupting their operations. The obligations will affect both providers of AI systems (*e.g.* a developer of a CV-screening tool) and deployers (*e.g.* a bank buying this screening tool).

10. Background Consultation Trustworthy General-Purpose AI, European AI Office, July 2024.
11. Exceptions to these requirements are granted to open-source AI models unless they pose systemic risks.
12. The European Union AI Act: premature or precocious regulation?, Bruegel, March 2024.

- August 2024: The AI Act comes into force, marking the beginning of the regulatory framework's implementation.
- February 2025: Prohibitions on AI systems deemed to pose unacceptable risks, such as those that manipulate or deceive people, will take effect. This includes bans on systems like social scoring and predictive policing, which could violate fundamental rights and freedoms.
- August 2025: Rules for General Purpose AI Models (GPAI) will become applicable, requiring developers of these models to comply with the specified documentation, testing, and cyber-security requirements.
- August 2026: The full range of obligations for high-risk AI systems, including those in the financial services sector will be enforced.

In parallel, the Commission will issue by 2026 several pieces of secondary legislation including delegated acts, implementing acts and guidelines specifying how the AI Act's provisions should be applied in practice. Delegated acts are expected to cover areas such as the definition and classification of AI systems and GPAI models, transparency and documentation requirements, whereas implementing acts should focus more on operational guidelines for the implementation of the AI Act, such as codes of practice and establishing the AI Act governance system. Additionally, the Commission will provide practical guidance on more specific aspects of the AI Act implementation (*e.g.* guidelines for classifying AI systems, for implementing disclosure requirements...).

The European Commission is conducting targeted consultations to identify the need for specific guidance or implementation measures, particularly for high-risk systems.

A targeted consultation on AI in the financial sector launched in June 2024, which aims to assess the main use cases and risks of AI, the potential impacts of the AI Act in the sector and the interactions with the existing acquis, is due to be finalized in September 2024[13].

The European AI Office also initiated in July 2024 a call for participants to help draft the first Code of Practice for GPAI providers, inviting industry stakeholders, civil society organizations, and academic experts to contribute in a collaborative way. This consultation will address transparency and copyright-related rules for GPAI models, and risk assessment and mitigation for GPAI models posing systemic risk, as well as the monitoring of the codes of practice. This Code, which will detail the AI Act rules for providers of GPAI models, will apply 12 months after the entry into force of the AI Act (August 2025).

A voluntary scheme taking up some key obligations of the AI Act (the AI Pact) will be provided for developers wanting to start implementing obligations of the AI Act ahead of the legal deadline.

The AI Pact also aims to initiate engagement between the AI Office, the Commission's implementing body of the AI Act, and organisations developing and utilizing AI systems.

2.4 Governance of the AI Act implementation

A new AI office has been created within the European Commission to draft secondary legislation (*e.g.* delegated acts, guidelines, codes of practice) setting out how the provisions of the AI Act should be applied in practice. The AI Office is moreover in charge of the EU's international engagement in the area of AI and the promotion of responsible stewardship and good governance of AI in collaboration with international partners[14].

To ensure EU-wide coherence and cooperation in the implementation and application of the AI Act, a European Artificial Intelligence Board (AI Board) will also be established, comprising representatives from Member States, with specialized subgroups for national regulators and other competent authorities including the European Data Protection Supervisor. The AI Office will also offer strategic guidance to the AI Board. The AI Board will provide guidance on all matters related to AI policy, notably AI regulation, innovation and excellence policy and international cooperation on AI.

In addition, the AI Act establishes two advisory bodies to provide expert input: the Scientific Panel and the Advisory Forum. These bodies will offer insights from stakeholders and interdisciplinary scientific communities, informing decision-making and ensuring a balanced approach to AI development.

The AI Act moreover establishes a two-tiered governance system, where national authorities are responsible for overseeing and enforcing rules for AI systems, while the EU level is responsible for governing general-purpose AI models[15].

13. Targeted Consultation on Artificial Intelligence in the Financial Sector, European Commission, June 2024.
14. The EU is involved in multilateral forums where AI is discussed – notably G7, G20, the OECD, the Council of Europe, the Global Partnership on AI and the United Nations – and the EU has close bilateral ties with *e.g.* Canada, the US, India, Japan, South Korea, Singapore, and the Latin American and Caribbean region. Source AI Q&A European Commission August 2024.
15. Artificial Intelligence Questions and Answers, August 2024.

3. Potential issues to be further considered

The comments of different private and public sector stakeholders on the AI Act highlight different aspects that may require further clarification or assessment for a successful implementation of the AI Act, possibly through secondary legislation and additional guidance. These issues may affect all sectors, but are quite relevant for the financial sector, which is highly data-driven.

3.1 Impact on innovation and the uptake of AI

While the AI Act seeks to balance the objectives of risk mitigation and innovation, a potential concern with regulating AI is that risk mitigation may overshadow innovation and ultimately impact the competitiveness of EU firms. The potential impacts of the AI Act will require careful consideration during the drafting of secondary legislation and continuous monitoring in the early stages of implementation[16].

Financial regulators, meanwhile, face the challenge of keeping pace with rapid advancements in AI. Adequate resources and collaboration between regulatory bodies and the industry will be essential[17].

According to the European Commission, the AI Act is designed to support innovation in several ways. The strengthening of user trust, which the Act aims to achieve, is expected to drive demand for AI from companies and public authorities. By increasing legal certainty and harmonizing rules, the Act will also help AI providers access larger markets with products that gain consumer and user confidence. Moreover, the Act promotes innovation through regulatory sandboxes and real-world testing, allowing companies to experiment with new AI technologies in controlled environments. These measures, alongside the AI Board's role in fostering innovation and excellence policy, aim to create a supportive framework for AI development and deployment.

The European Commission has also acknowledged the challenges the AI Act may pose for smaller firms and is exploring ways to mitigate these impacts. On 24 January 2024, the Commission adopted an AI innovation package, which includes measures to support European startups and SMEs in developing trustworthy AI that align with EU values and regulations[18].

3.2 Interactions with European data regulations

The AI Act does not exist in isolation; it interacts with existing financial regulation and also European data regulations, creating both overlaps and synergies that need to be carefully managed.

The AI Act's requirements for data transparency and governance must in particular be aligned with the provisions of the Data Act and the European Data Strategy, which regulate data access and sharing within the EU. Ensuring consistency between these regulations is essential to avoid conflicts and ensure that AI systems can operate effectively while respecting data protection and privacy standards[19].

There are moreover interactions with the General Data Protection Regulation (GDPR). The handling of personal data by AI systems is a critical concern, and the AI Act must be fully compatible with the GDPR. This interaction is particularly important for high-risk AI systems that process large amounts of personal data, such as those used for financial services. The AI Act must ensure that these systems adhere to GDPR principles, including the rights of data subjects and the requirements for data minimization and security[20].

The potential interactions between the AI Act and the FIDA (Financial Data Access) proposal, which aims to govern the access to and sharing of customers' financial data in the context of open finance, must also be considered. FIDA may increase the data available for AI systems to analyze, potentially enhancing AI-driven insights and financial services. Additionally, AI can play a significant role in maximizing the benefits of broader data sharing within open finance by improving data processing and generating valuable insights. To fully leverage these synergies, it is necessary to ensure that the FIDA and AI Act requirements –

16. Throughout the legislative process, several potential negative impacts of the AI Act proposal were raised. These included fears that the AI Act could stifle innovation and place European companies at a disadvantage compared to regions with less restrictive regulations, such as the U.S. or China. Additionally, concerns were expressed that high compliance costs and complexities – especially for high-risk systems and in areas such as transparency and data governance – might deter investment in AI. Smaller companies could be disproportionately burdened, potentially driving innovation to regions with more favorable regulatory environments. Larger institutions may also face significant obstacles, as the constraints imposed by the AI Act could limit their ability to effectively implement AI systems and hinder their access to and use of data.
17. The risk that overly complex requirements might also confuse consumers, eroding trust in AI-driven financial services was also raised. Clear, accessible communication about AI systems is therefore essential. See Encountering the AI revolution: the role of development cooperation, Friends of Europe, April 2024.
18. Commission launches AI Innovation package to support AI startups and SMEs, 24 January 2024.
19. Europe's rushed attempt to set the rules for AI, Financial Times, July 2024.
20. Data minimization is a key principle under the GDPR (Article 5(1)(c)), which requires that personal data collected must be adequate, relevant, and limited to what is necessary for the purposes for which they are processed. This means organizations, including those using AI systems, should collect only the data they need to fulfill specific, legitimate purposes and no more than that.

particularly around privacy, transparency, and data governance – are sufficiently aligned to avoid conflicts and overlaps.

3.3 Data quality and standardization issues

The absence of explicit standards for data quality in the AI Act raises potential concerns in the financial sector. The quality of data indeed directly influences the accuracy, fairness, and effectiveness of AI systems used in the financial sector. Without sufficiently high quality and standardized data, there is a risk that AI systems may produce biased or inaccurate outcomes, leading to flawed decision-making and potential legal, financial, and reputational consequences.

Moreover, the lack of standardized data practices across the EU could result in inconsistencies in AI outputs across different jurisdictions, complicating the regulatory oversight of AI systems and increasing the complexity of compliance for cross-border financial institutions. This inconsistency could create a fragmented regulatory environment, where the same AI system might be deemed compliant in one member state but not in another, leading to legal uncertainties and potential conflicts[21].

To address these challenges, there is a need for the development and implementation of clear and robust data quality standards that are sufficiently harmonized across the EU. These standards should encompass guidelines for data collection, processing, and validation to ensure that the data used in AI systems is accurate, relevant, and free from bias[22]. Furthermore, the standardization of data practices would facilitate greater interoperability of AI systems across different sectors and jurisdictions, enabling financial institutions to leverage AI more effectively while ensuring compliance with EU regulations.

Strong data governance is also essential to ensure the integrity of AI-driven financial services, as AI and data usage expand, to ensure that data is collected, processed, and shared in a consistent and secure manner. This requires promoting policies that drive common standards and best practices for data governance. Without such standards, the financial sector risks producing biased or inaccurate outcomes, potentially undermining consumer trust and financial stability[23].

4. International context of AI regulation

Global regulatory coordination is an important theme for AI with the fast uptake of these technologies in all jurisdictions and sectors of the economy. Consistency of requirements is important for multinational companies operating in various jurisdictions, as potential inconsistencies of rules and standards could complicate compliance efforts and increase operational costs, ultimately slowing down the pace of innovation and the development of an effective AI ecosystem. Consistency is also important from a risk and financial stability perspective, as differences in standards may lead to regulatory arbitrage, creating potential risks in the financial system particularly from the use of high-risk AI systems in a cross-border context.

4.1 Global context of AI regulation

The regulation of artificial intelligence (AI) has become a priority on the global stage as governments, international organizations, and financial institutions recognize the profound impact of AI technologies on economies, societies, and financial systems. Various international bodies, including the OECD, the IMF, and the BIS, have been actively developing recommendations and guidelines to ensure the safe, ethical, and effective deployment of AI technologies worldwide. However, it is necessary to ensure that these principles are translated into actionable regulations that are consistently applied across different jurisdictions.

The Organisation for Economic Co-operation and Development (OECD) has been a leading force in setting international standards for AI. In 2019, the OECD published its AI Principles, which were the first intergovernmental standards agreed upon by OECD member countries. These principles emphasize the importance of human-centric AI that is trustworthy and respects fundamental rights. The guidelines also call for transparency, accountability, and the promotion of sustainable development[24] through AI.

Recently, the OECD has updated these principles to reflect the rapid advancements in AI technologies and the emerging challenges they pose. The updated guidelines underscore the need for continuous monitoring of AI systems and ensuring that they are aligned with evolving societal values and ethical standards. Additionally, the OECD has introduced new recommendations for enhancing cross-border cooperation on AI governance,

21. AI in Financial Services: Regulatory Challenges and Opportunities, European Banking Authority, 2024.
22. Towards a European Data Quality Framework for AI, European Commission, 2024.
23. Eurofi Views Magazine, September 2024, Giuseppe Siani, Banca d'Italia.
24. *i.e.* ensuring that AI systems are designed and implemented in a way that contribute to long-term social, economic, and environmental goals.

recognizing that the global nature of AI requires a coordinated international response[25].

The International Monetary Fund (IMF) and the Bank for International Settlements (BIS) have also been active in the AI regulatory space, particularly concerning its implications for the global financial system.

The IMF is investigating AI's broader impact on economies and societies by gathering global knowledge through surveillance activities, and by convening key actors to share successful policy responses, foster international consensus and harmonize regulations. The IMF has been assessing in particular the potential macroeconomic impacts of AI in terms of labor markets, productivity, and financial stability and the related opportunities and risks in terms of economic growth, as well as the measures needed to mitigate these risks. The Fund has also established an AI Preparedness Index assessing the level of AI readiness across 174 countries.

The BIS, on the other hand, has focused mainly on the implications of AI for central banking and financial supervision. The BIS has published several reports examining how AI can be used to enhance the efficiency and effectiveness of central bank operations, such as in monetary policy implementation and financial stability monitoring. The BIS has also explored the ethical and governance challenges associated with the use of AI in financial supervision, emphasizing the need for transparency, accountability, and the avoidance of algorithmic bias.

4.2 Approaches to AI regulation in major financial jurisdictions

In addition to the international organisations, major jurisdictions around the world are developing their own regulatory frameworks to manage the risks and opportunities presented by AI systems. These approaches vary to a certain extent in terms of content and progress, reflecting different regulatory philosophies, economic priorities, and technological capacities. However major jurisdictions such as the EU, the UK, the US and Japan are committed to ensuring that their efforts in this area are aligned with global standards by engaging in international discussions and collaborations at G7, OECD and IMF levels[26].

4.2.1 The UK's principles-based approach to AI regulation

The United Kingdom has taken a proactive approach to AI regulation, focusing on creating a flexible and innovation-friendly framework. The UK government has published a series of guidelines and policy papers outlining its approach to AI regulation, which emphasizes a principles-based framework rather than prescriptive rules. This approach is designed to foster innovation while ensuring that AI systems are used responsibly.

One of the key aspects of the UK's approach is the establishment of the AI Council, an independent expert committee that advises the government on AI policy and regulation. Moreover, the UK's regulatory framework for AI is being integrated with its broader digital and data strategies, ensuring that AI regulation is consistent with its commitments to data protection, cybersecurity, and digital innovation. The UK is also exploring the use of regulatory sandboxes to allow companies to test AI technologies in a controlled environment, helping to identify potential risks and regulatory challenges before AI systems are fully deployed in the market[27].

4.2.2 The US landscape of AI regulation

The United States's approach to AI regulation aims to balance innovation with concerns about security and ethics. This involves a mix of federal initiatives, state legislation, and voluntary commitments from the private sector. This combination of federal and state laws should allow for tailored approaches to regulation but may also lead to a certain level of fragmentation in the US regulatory landscape, at least in the first stages.

In October 2023 the Biden administration released an executive order on AI which directed a whole-of-government approach to analysing and understanding the impacts of AI and providing guidance. This executive order emphasizes safety standards, data privacy, algorithmic accountability, and national security, requiring AI developers to share safety test results and establish cybersecurity protocols[28]. It has since driven significant regulatory developments.

In 2024 efforts have been made to implement the Biden administration order in a number of areas. The U.S. Department of Commerce and the National Institute of Standards and Technology (NIST) have released new guidance and tools

25. Recommendation of the Council on Artificial Intelligence, OECD, May 2024.
26. This is the case in particular of the UK and Japan. See for example Asia-Pacific Regulations Keep Pace with Rapid Evolution of Artificial Intelligence Technology, Data Matters Privacy Blog, August 2024.
27. Europe's rushed attempt to set the rules for AI, Financial Times, July 2024; Recommendation of the Council on Artificial Intelligence, OECD, May 2024.
28. United States approach to artificial intelligence, European Parliamentary Research Service, January 2024.

aimed at improving the safety and trustworthiness of AI systems. These efforts include the development of AI testbeds, guidelines for managing generative AI risks, and international collaboration on AI safety standards. Furthermore, the US administration has continued to push for AI governance through bilateral and multilateral engagements, including cooperation with the European Union via the Trade and Technology Council (TTC) and partnerships with the UK's AI Safety Institute, which is dedicated to ensuring the safety of advanced AI systems[29].

A key deliverable for the financial services sector is the best practices report from the US Treasury for financial institutions, released in March 2024, which highlights the opportunities from AI and also proposes next steps to address AI-related operational risk, cybersecurity and fraud challenges. The US SEC and CFTC have also recently launched consultations and proposals on the use of AI in the financial services sector and the identification of bias and market manipulation risks[30].

4.2.3 Japan's approach to AI regulation

Japan also aims to take a balanced approach to AI regulation, with a combination of "soft law" guidelines and legislative initiatives aimed at managing the rapid development of AI technologies. The country's regulatory strategy is anchored in the "Social Principles of Human-Centric AI" which emphasize innovation, privacy protection, fairness, and accountability[31].

The soft-law approach, which involves issuing nonbinding guidelines that encourage companies to voluntarily adopt ethical AI practices, allows for flexibility and continuous adaptation to technological advancements. Key documents, such as the AI Governance Guidelines published by the Ministry of Economy, Trade, and Industry (METI), provide frameworks for companies to implement responsible AI practices while ensuring alignment with international standards[32].

However, in response to the growing influence of AI and the potential risks associated with generative AI technologies, Japan is shifting towards more concrete legislative measures. In 2024, new legislation was proposed to regulate foundational AI models, addressing concerns such as disinformation and privacy violations, marking a step towards a more regulated AI environment[33]. In addition, sector-specific laws, such as the Financial Instruments and Exchange Act, also impact the use of AI for certain financial activities, such as algorithmic trading for which risk management protocols are mandated[34].

Note written by Lucie Truchet

29. Department of Commerce announces new guidance and tools 270 days following President Biden's Executive Order on AI, U.S. Department of Commerce, July 2024.
30. The Securities and Exchange Commission (SEC) recently put out a proposal on the use of predictive data analytics by SEC registrants. This proposal is tackling risks such as bias when supervised entities are deploying AI. The Commodity Futures Trading Commission (CFTC) also recently made a request for comment on the use of AI by its registrants, which include banks, asset managers, exchanges and clearing houses in order to understand how they are deploying AI, particularly in markets, trading and other use cases and the possible risks and obstacles to overcome. One risk that is being evaluated in a factual way is the risk of market manipulation. See Eurofi Ghent Summary February 2024.
31. Japan's Social Principles of Human-Centric AI are a set of guidelines published in 2019 by the Japanese government designed to ensure that AI development aligns with human rights, societal values, and sustainability goals. These principles aim to create an «AI-Ready Society» as part of Japan's broader vision for Society 5.0, a future society that leverages advanced technologies like AI to enhance well-being.
32. Data Protection Laws and Regulations Report 2024: Trends in AI Governance in Japan, ICLG, February 2024.
33. Japan joins global AI regulation race with comprehensive 2024 legislative push, Digital Watch Observatory, February 2024.
34. Asia-Pacific Regulations Keep Pace With Rapid Evolution of Artificial Intelligence Technology, Data Matters Privacy Blog, August 2024.

Annex: AI in finance: key use cases and future outlook

1. Level of adoption and main use cases of AI in the financial sector

1.1 Uptake of AI in the financial sector

The uptake of AI in the financial sector has been rapid and widespread, driven by the need for efficiency, enhanced customer experience, and competitive advantage. According to a recent survey published by McKinsey in 2024, 91% of financial services companies are either assessing AI or already using it in production[35].

Financial institutions of all sizes are adopting AI technologies at an increasing pace. Large banks and asset management firms are leading the way, investing heavily in AI to optimize their operations and gain a competitive edge. Smaller firms are also beginning to embrace AI, particularly in areas such as customer service, credit scoring, and risk management. This widespread adoption is supported by the growing availability of AI tools and platforms that are accessible even to smaller firms with limited resources[36].

1.2 Main use cases of AI in the financial services sector

1.2.1 Fraud detection and prevention

One of the most widespread applications of AI in finance is in fraud detection and prevention. AI algorithms can analyze vast amounts of transactional data in real-time, identifying patterns and anomalies that could indicate fraudulent activity. By leveraging machine learning, these systems continuously improve their accuracy, adapting to new types of fraud as they emerge. For example, AI can detect unusual spending patterns on credit cards or flag suspicious transactions in real-time, allowing financial institutions to respond promptly[37]. As of 2024, approximately 60% of European financial institutions are using AI to enhance their fraud detection capabilities[38].

1.2.2 Credit scoring and risk assessment

AI-driven credit scoring models are transforming the way financial institutions assess credit-worthiness. Traditional credit scoring systems rely heavily on historical financial data, which may not fully capture an individual's or a business's financial behaviour. AI models, however, can incorporate a wider range of data sources, such as social media activity, online behaviour, and even alternative financial data, to generate more accurate and inclusive credit scores. This may be beneficial for individuals and small businesses with limited credit history, thereby promoting financial inclusion[39]. By 2024, 63% of financial services firms reported that AI facilitates the creation of new financial products, including advanced credit scoring systems[40].

1.2.3 Algorithmic trading

Algorithmic trading is another area where AI has made significant inroads. By using AI, algorithms, traders can execute orders at optimal times, identify arbitrage opportunities, and manage portfolios more effectively. AI can process vast amounts of market data faster than any human, identifying trends and making trades based on pre-set parameters or predictive models. This has led to increased efficiency and profitability in trading activities, though it has also raised concerns about market stability and the need for regulatory oversight[41]. Currently, AI-enabled trading accounts for a significant portion of daily trading volumes on major European stock exchanges, with over 50% of trading firms utilizing AI[42].

1.2.4 Customer service and personalization

AI-powered chatbots and virtual assistants are revolutionizing customer service in the financial

35. The state of AI in 2024: McKinsey Global Survey results, McKinsey, 2024.
36. Recommendation of the Council on Artificial Intelligence, OECD, May 2024.
37. Recommendation of the Council on Artificial Intelligence, OECD, May 2024.
38. Artificial intelligence in financial services, PwC, 2024.
39. Artificial Intelligence Act, European Parliament, March 2024.
40. The state of AI in 2024: McKinsey Global Survey results, McKinsey, 2024.
41. The European Union AI Act: premature or precocious regulation?, Bruegel, March 2024.
42. Artificial intelligence in financial services, Deloitte, 2024.

sector. These tools provide 24/7 support, handling routine inquiries and transactions, thereby freeing up human agents to deal with more complex issues. Additionally, AI enables financial institutions to offer personalized services, such as tailored investment advice or customized product recommendations based on individual customer profiles. This enhances customer satisfaction and loyalty[43]. In 2024, approximately 46% of European financial institutions reported that AI has significantly improved customer experience and customer engagement[44].

2. Perspectives offered by generative AI in the financial sector

Generative AI, a new generation of AI, leverages Large Language Models (LLMs)[45] to generate new content such as text, images, and enhance data analysis by identifying patterns in vast datasets, synthesizing insights and generating predictive models. In the financial sector, generative AI can be applied to automated report generation, chatbots, personalized client communication, fraud detection through anomaly pattern identification, and enhanced predictive analytics for market trends and risk management. As this technology evolves, it offers the potential to streamline operations, increase customer engagement, and uncover new insights from financial data. Approximately 55% of financial services firms in Europe are actively seeking to implement generative AI workflows[46].

2.1 Content creation for marketing and communication

In marketing and communication, generative AI can automate personalized content creation, enabling financial institutions to generate tailored marketing materials, reports, and client communications at scale. By analyzing customer data, generative AI can craft messages that resonate with individual clients, addressing their specific needs and preferences. This capability allows firms to engage with clients more effectively, ensuring that communications are not only timely but also highly relevant. Moreover, the automation of content creation saves significant time and resources, allowing marketing teams to focus on strategy rather than execution. As a result, customer engagement is strengthened, leading to better client relationships and improved business outcomes[47]. Generative AI has become a key tool for enhancing customer engagement, with 34% of firms using it for personalized marketing and communication[48].

2.2 Personalized financial services

Generative AI can be used to create more personalized financial products and services. By leveraging its ability to analyze vast datasets and detect patterns, generative AI can tailor financial offerings to individual customers based on their unique financial behaviour, preferences, and needs. For instance, when developing an insurance policy or an investment portfolio, generative AI models can consider a client's financial history, risk tolerance, and future goals. Unlike traditional models that rely on broad categories or historical averages, generative AI can dynamically adjust its outputs to align precisely with an individual's unique profile. This hyper-personalization can lead to better customer outcomes, higher satisfaction rates, and increased loyalty, as clients receive financial products that are more tailored to their needs[49].

2.3 Enhanced predictive analytics

Generative AI can also enhance predictive analytics by enabling financial institutions to generate and evaluate an extensive range of scenarios. Traditional predictive models often rely on analyzing past data to forecast future trends, but generative AI can go a step further by creating entirely new data scenarios. For example, in risk management, generative AI can simulate potential market conditions, economic crises, or unexpected events, providing financial institutions with the insights needed to prepare for a wide array of possibilities. This not only improves the accuracy of predictions but also allows institutions to develop robust risk mitigation strategies, ultimately enhancing financial stability[50]. Generative AI is increasingly being used for investment research and scenario analysis, with 37% of financial firms focusing on these applications[51].

43. Artificial Intelligence prospects for financial services and policy approach, Eurofi, September 2020.
44. AI Act gives financial sector opportunity to promote trust, PwC, 2024.
45. Generative AI leverages Large Language Models (LLMs) to generate new content by predicting the most likely sequence of words, phrases, or sentences based on the patterns it has learned from vast amounts of text data.
46. AI Act gives financial sector opportunity to promote trust, PwC, 2024.
47. Recommendation of the Council on Artificial Intelligence, OECD, May 2024.
48. AI Act gives financial sector opportunity to promote trust, PwC, 2024.
49. The European Union AI Act: premature or precocious regulation?, Bruegel, March 2024.
50. Artificial Intelligence Act, European Parliament, March 2024.
51. Artificial intelligence in financial services, Deloitte, 2024.

3. AI-powered finance: future trends and developments

Beyond generative AI, new AI applications and AI systems could potentially drive further innovation and transformation of traditional business models in the future.

3.1 Autonomous financial ecosystems

In the future, AI could potentially help to create fully autonomous financial ecosystems for certain activities, where AI systems would handle all operations without human intervention, from market analysis to decision-making, trading, and compliance. Such ecosystems would rely on AI to continuously learn and adapt, optimizing financial strategies and operations in real-time. This level of autonomy, if achievable, could revolutionize the efficiency of financial markets, reducing latency and human error, and enabling financial institutions to operate 24/7 with minimal oversight[52]. The potential issues in terms of accountability and transparency would however have to be managed.

3.2 Predictive behavioural finance

AI could advance into the realm of predictive behavioural finance, where it not only analyzes financial data but also anticipates human behavior in response to market conditions. This could involve AI systems that integrate psychological and sociological data with financial data to predict how different segments of the population will react to specific economic events or policy changes. Such capabilities could allow financial institutions to preemptively adjust strategies and offerings to mitigate risks or capitalize on predicted behaviours[53].

3.3 Quantum AI for finance

Quantum computing, when combined with AI, could drastically change the landscape of finance by enabling the processing of complex calculations and data sets that are currently beyond the reach of classical computers. Quantum AI could lead to breakthroughs in areas such as risk modeling, portfolio optimization, and fraud detection. Financial institutions might use quantum AI to solve problems that require the simultaneous analysis of vast amounts of variables, potentially leading to new financial products and services that are currently unimaginable[54].

3.4 AI-driven ethical finance platforms

The future might see the rise of AI-driven ethical finance platforms that ensure all investments and financial products adhere to specific ethical guidelines, such as environmental, social, and governance (ESG) criteria. These platforms could use AI to assess the ethical implications of investment portfolios continuously, automatically rebalancing them to align with an investor's ethical preferences. This could lead to a new standard in socially responsible investing, where AI not only maximizes returns but also ensures that investments contribute positively to society[55].

3.5 AI in hyper-personalized finance

While AI-enabled personalization is already a trend, future AI systems could take this to an entirely new level by delivering hyper-personalized financial products that adjust in real-time based on a user's changing circumstances. For example, AI could offer financial advice that adapts to real-time shifts in a user's employment status, spending habits, or even health data, integrating these changes seamlessly into financial planning. This could make financial services far more responsive and tailored, potentially leading to better financial outcomes for individuals[56].

3.6 Real-time and predictive economic monitoring

AI could be utilized to create real-time global economic monitoring systems that not only track economic indicators but also predict and respond to economic crises before they unfold. These systems could be used by governments and financial institutions to stabilize markets and prevent recessions, offering predictive insights that guide policy decisions and market interventions. This kind of proactive economic management could transform how economies are managed[57].

52. The Future of AI in Banking, McKinsey, 2024.
53.AI in Fintech - Trends for 2024 and Beyond, Pragmatic Coders, 2024.
54. The Future of AI in Banking, McKinsey, 2024.
55. 7 AI Trends in Finance in 2024, Datarails, 2024.
56. AI in Fintech - Trends for 2024 and Beyond, Pragmatic Coders, 2024.
57. How AI is Revolutionizing the Financial Landscape in 2024, The Recursive, 2024.

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CMU priorities and next steps

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CMU future steps: main proposals

Note written by Marc Truchet

1. Renewed momentum for CMU but limited growth of EU capital markets

1.1 Increased political support for CMU as a new European cycle begins

As a new political cycle begins in Europe, there is a renewed and growing momentum around the Capital Markets Union (CMU) initiative.

Support for the CMU has been clearly expressed by the French President and the German Chancellor in a joint article published in the Financial Times in May 2024, following a similar op-ed by the German and French finance ministers in September 2023. Additionally, an initiative led by the Eurogroup President in 2023 resulted in a statement on CMU published in March 2024, endorsed by all Eurogroup Ministers[1], demonstrating the strong commitment for CMU at the Eurozone level. This statement also includes a detailed action plan outlining future steps for the CMU. The prominent focus on CMU in the Letta report on the single market[2] further highlights its importance on the EU political agenda, and the CMU is also expected to be a key theme in the upcoming Draghi report on EU competitiveness.

Moreover, a significant number of contributions and reports published by EU and national authorities, industry representatives and think tanks in 2023 and 2024 – including, among others, ESMA's position paper on CMU (May 2024), the proposals of the French Ministry of Finance for a Savings and Investments Union (April 2024), and a joint report from AFM and DNB on the next steps for CMU (February 2024) – reaffirm support for the CMU's objectives and outline priorities for its next steps. These reports primarily address three main areas: the rationale for the CMU, the key actions required to achieve it, and the most effective approach to implementing these actions.

1.2 Slow progress in European capital market growth so far

However, nine years after the launch of the CMU initiative, the general perception in the market is that while the CMU has led to significant advancements in the regulatory framework, it has fallen short in fostering growth or integration of European capital markets. European markets continue to be underdeveloped relative to the economy's size and remain fragmented along national lines. Some scepticism therefore remains about the initiative's ability to drive a significant expansion of European capital markets going forward, if there is no significant change in the way the CMU project is led.

This limited progress in terms of market growth enabled by CMU is attributed to several factors including the slow EU legislative process, the watering-down of some measures proposed by the Commission due to insufficient political backing behind the project and vested interests at industry and member state levels, the persistence of fragmented legal and fiscal frameworks that hinder further integration and the multiplicity of key areas for the development of European capital markets outside the direct competencies of the EU (such as taxes, pensions, financial education, etc.).

The under-development of European capital markets can be measured through different indicators including the size of markets relative to GDP, the funding mix of firms and the size of available funding pools[3].

The size of European capital markets relative to GDP has not grown significantly in recent years, with the gap widening with the US and some APAC countries. At the end of 2021, EU debt securities and public equity markets represented 233% of GDP, half the size of US markets at 449% of GDP, with the main difference coming from equity markets. In addition, the EU's share of global capital market activity fell by over 40% between 2006 and 2022,

1. Eurogroup statement on CMU, March 2024.
2. Enrico Letta Report on the Single Market, Much more than a market, April 2024.
3. See Eurofi note 'Update on the progress made with CMU', Eurofi Regulatory Update, February 2024 for sources, further detail and additional statistics www.eurofi.net/wp-content/uploads/2024/03/eurofi_update-on-the-progress-made-on-cmu_ghent_february_2024.pdf

now representing only 10% of the global market, compared to a share of global GDP of 19%.

In terms of funding mix, EU non-financial companies (NFCs) still rely heavily on bank lending, which constitutes 76% of their corporate borrowing compared to just 27% in the US, with tradeable assets like debt securities and listed equity accounting for only 26% of their overall funding in 2022, much lower than in the US (68%), the UK (42%) and Japan (48%). Additionally, the share of EU NFC's funding derived from bond and equity issuance dropped to 10.3% in the first half of 2023, down from an average of 11.5% between 2016 and 2019, and IPO issuance volumes have significantly decreased.

Moreover, EU households' participation in capital markets remains low with 30% of their financial assets held in currency and bank deposits in 2021 compared to 12% in the US, and only 25% in securities compared to 45% in the US. The total size of EU financial assets likely to be invested in the capital markets is also significantly smaller, representing 254% of GDP in the EU compared to 553% in the US and 339% in the UK in 2022, due in particular to lower pension assets. The size of household financial assets relative to GDP (excluding cash, deposits and unlisted securities) is also much lower than in the US and UK (90% compared to 182% in the UK and 310% in the US in H1 2023.

Finally, European capital markets vary significantly in development, with strong markets in the Nordics and some Western European countries, and very limited markets in many Southern and Central Eastern European (CEE) countries. They also remain fragmented along national lines, which limits their efficiency, liquidity and depth, with persistent home bias in the detention of equities and bonds and in the issuance of equity[4]. Recent data shows that 70% of equity investments by EU investors remain within their home country and cross-border equity issuance in the EU accounts for only about 15% of total issuance[5].

2. Proposals made for the future steps of CMU

The reports published on the future steps of the CMU and the Letta report collectively present a broad range of actions aimed at further developing capital markets in Europe. While many of the themes from previous CMU action plans reappear, new ideas have also emerged, such as the introduction of improved European long-term retail investment products or new product labels, tax incentives for retail investors, and the creation or consolidation of exchanges focused on specific market segments (SMEs, tech) at EU level. There is also a greater focus than in earlier plans on fostering digitalisation and on the interactions between capital markets and sustainable finance. Additionally, some reports demonstrate a higher level of ambition compared to previous recommendations in areas such as securitization, supervision, and the harmonization of legal requirements.

The proposals made in these reports cover 7 main areas:

1. **Enhancing EU level supervision and rulemaking:** The improvement of EU capital markets supervision is highlighted in most reports as an important step towards advancing market integration, ensuring consistent regulation, and promoting financial stability. However, stake-holder views differ on the extent of and approach to such integration.

   Suggestions range from progressively increasing EU-level supervision of significant market participants and cross-border activities to simply optimizing existing coordination mechanisms. A review of the European Supervisory Authorities (ESAs)'s governance arrangements is also proposed to better align them with the needs of an increasingly integrated market, as well as a centralisation of certain supervisory data collection and processing activities at the EU level to enhance consistency and efficiency. Additionally, measures to improve rulemaking are proposed to maintain consistency and agility with faster evolving capital markets. These measures include the introduction of no-action letters, adopting a more principles-based legislative approach in areas that are rapidly changing and a systematic use of regulations.

2. **Reviving the EU securitisation market:** Proposals are put forward to revive securitisation, as a means to enhance banks' lending capacity, improve risk distribution, and support the development of new asset classes. Despite previous efforts, including the introduction of the Simple, Transparent, and Standardised (STS) label, the European market has not gained traction.

4. A growth of cross-border investment fund volumes within the EU has been observed however over the last few years and cross-border bond issuance is quite high.

5. Source ESMA 2023 data on cross-border investment activity of firms. The AFME CMU KPIs of November 2023 show that while the level of intra-EU integration is quite limited in terms of equity issuance and holding and debt holding, it is high for debt issuance.

Suggested measures include a review of the prudential treatment of securitisation for banks and insurance companies; an improvement of reporting and due diligence requirements; and the introduction of public guarantees for certain segments such as green securitisations. The creation of a European platform for issuing and guaranteeing securitisations with standardised processes is also proposed, particularly for green securitisations, in order to reduce costs and enhance the scalability of EU securitisation activities.

3. **Improving long term retail investment products and related incentives:** Proposals are made to enhance long-term retail investment products in the EU with the aim of more effectively utilizing retail savings to support the European economy and address the pension gap.

   These proposals include the creation of a new European retail product label or of improved long-term savings products to encourage retail investment and the development of private pension markets. The enhancement of tax incentives is also proposed, with the objective of encouraging Member States to implement consistent and favourable tax treatments for long term retail investment across the EU. Additional measures focus on increasing retail engagement and improving investment outcomes, such as promoting financial literacy, supporting the digitalization of investment solutions, and enhancing financial advice and financial health checks.

4. **Further integrating EU securities markets:** The further integration of European capital markets remains a key objective in the reports on CMU, with a focus on addressing challenges related to fragmentation in regulatory frameworks that limit cross-border capital flows and economies of scale and encouraging the further integration of market infrastructures.

   To address these issues, the European Commission is encouraged to pursue the harmonisation of securities clearing, settlement, and collateral management rules. Additionally, there is a call to promote greater convergence in insolvency laws, tax processes, and securities laws that impact cross-border securities transactions. Other suggested initiatives include the creation of EU-level exchanges for smaller market segments, such as SME and tech markets, to enhance liquidity and market visibility, as well as the development of a digital CMU for tokenised assets.

5. **Stimulating equity funding:** Developing equity markets is a key objective of previous CMU action plans aimed at supporting the financing of innovative businesses in high-growth sectors such as technology and green industries, and reducing reliance on debt.

   Measures include the Listing Act and the European Single Access Point (ESAP). The Debt-Equity Bias Reduction Allowance (DEBRA) proposal, although currently paused, is also identified as an important measure for creating a more balanced approach between debt and equity financing. Additional actions are suggested to improve the financing of firms throughout their lifecycle, including exchanges of best practices across EU member states and measures to strengthen the funding of scale-up firms, which often seek financing outside the EU. These letter proposals build on initiatives such as the European Tech Champions Initiative (ETCI) established by the European Investment Fund (EIF).

6. **Supporting green and digital investments:** A key objective highlighted in recent reports on CMU is to support the digital and green transitions while positioning the EU as a global leader in sustainability and innovation.

   Proposed measures include promoting public-private partnerships for green infrastructure, enhancing the EU sustainable finance framework, and developing green finance hubs. The proposals also emphasize the importance of fostering digital innovation within the financial sector, particularly through the increased adoption of blockchain and distributed ledger technology (DLT), with the broader goal of creating a digital CMU potentially based on a common infrastructure for digital assets.

7. **Developing private pensions in the EU:** In response to the growing pension gap in the EU, driven by a rapidly aging population, there is a strong push to develop private pension systems.

   Proposed measures include promoting auto-enrolment schemes and relaunching the Pan-European Personal Pension Product (PEPP), with recommendations to simplify the product,

improve its tax treatment, and provide more flexible investment options. These proposals are completed by calls for better digital tools and platforms dedicated to pensions, such as pension tracking systems and dashboards, to increase awareness of pension issues and to facilitate the management of pension schemes by EU citizens. Finally, there is an emphasis on improving financial literacy and enhancing tax incentives to foster long-term investment in private pension products.

3. Additional areas of focus for the next steps of CMU

3.1 Completing the narrative around CMU with a shared vision and strategic direction for CMU

The need for a more convincing and appealing narrative around CMU that may encourage political decision makers, regulators and industry participants to drive the project forward is emphasised by many observers. Indeed, CMU cannot be an end in itself and must serve specific needs of the EU economy and society. As much of the 'low-hanging fruit' has already been addressed, the project now requires a more aspirational and forward-looking narrative to drive it forward and tackle the more structural and contentious issues that have been previously sidelined to a certain extent.

The reports recently published on the future steps of CMU provide a strong narrative about the rationale for CMU, highlighting its importance for the European economy and the potential benefits larger and more integrated capital markets may bring. They emphasize the critical role of capital markets in driving innovation, economic growth, and supplementing bank and public financing in the EU to provide the significant investments required for the green and digital transitions, estimated at over €620 billion annually. The further integration of EU capital markets enabled by CMU would reduce funding costs and make markets more attractive for issuers and investors. Several reports also note the importance of better utilizing European citizens' savings, currently largely invested in bank accounts, to fund EU capital markets and improve long-term returns for savers. Some commentators however argue that increasing retail participation alone may not boost funding for European firms, unless specific measures are put in place to direct investments to these firms, since a large part of savings may be invested outside the EU to boost returns and increase diversification.

At this stage, however, there is no shared narrative on the final form the CMU should take or the pathway to achieve it, which may involve successive intermediary stages of development. To build a more concrete and compelling narrative – and to better prioritize the key drivers and actions for the next steps of CMU – a more precise formulation of the objectives of CMU is needed, particularly in two areas.

A first area is determining the financing model that we are aiming for in Europe in terms of balance between capital market and bank financing and how to transition from a predominantly bank-financed economy to a more diversified funding model, which also requires a reflection on the synergies between the CMU and the Banking Union[6]. Although the US capital market is used as the main benchmark, several structural differences between the EU and the US – such as the fragmentation of legal frameworks in Europe, the dominance of pay-as-you-go Pillar 1 pension systems, the smaller size of SMEs in Europe on average, the diverse maturity of financial markets – make it challenging for the EU to fully replicate the US model, even in the longer term. Therefore, a distinct European financing model must be developed that combines capital market and bank financing and builds on the complementarities between the two, also considering the variability in financing needs across EU Member States.

A second aspect concerns the degree of integration that needs to be achieved to develop European capital markets and the target model of a more integrated CMU – *e.g.* a fully integrated EU capital market or an interconnected network of financial centres or regional markets and ecosystems across Europe – as well as the implications of such integration on market structure. Further thought is also needed on the degree of priority of this objective compared to the growth of domestic or regional markets, given the challenges raised by the lifting of

6. One question is the extent to which a further integration of the banking sector is essential for the CMU. Currently, the Banking Union is at a standstill, which perpetuates the fragmentation of the European banking sector. However, considering the central role that banks play in capital markets—for activities such as in primary issuance, trading, market-making and investor intermediation—significantly growing and integrating European capital markets seems challenging without a more integrated banking sector.

legal and fiscal barriers to integration. Indeed, while the further harmonisation and integration of capital markets is essential for wholesale and institutional markets and sophisticated retail investors, mainstream retail and SME markets can develop to a certain extent at a domestic or regional level, particularly in the countries where they are non-existent at present[7].

These aspects are quite challenging to define and agree on upfront, given the diversity of needs and interests across the EU. However, with the benefit of hindsight from the initial action plans, building a narrative around the vision and strategic direction for CMU in terms of financing model and level of integration is essential to drive the next stages of the project.

3.2 Issues to further consider in the next steps of CMU

Despite the broad scope covered by the reports on the future steps of CMU, three issues may require further consideration in the actions proposed.

A first issue is the interaction between bank and capital market financing and the measures needed to support a transition from a predominantly bank-centric economy to one where funding is more evenly balanced. Several elements must be further specified, including how banks can contribute to this shift and bridge the gap in terms of capital provision until capital markets are more developed (*e.g.* through bank-funded investment initiatives like the BGF fund in the UK[8]) and how the business models of banks should evolve to adapt to a more balanced financing mix (*e.g.*, if a portion of retail deposits is redirected into capital markets). Clarifying the role that securitisation may play in developing synergies between bank and capital market financing is also essential. Securitisation can indeed help to increase the lending capacity of banks, as well as contribute to the development of capital markets by transforming lending portfolios into investable securities and therefore may play a key role in the synergies between bank and capital market financing[9].

A second important aspect to consider in further steps of the CMU is the impact of the competitiveness of the European economy on the development of capital markets. A key factor driving EU investments to the US, for example, is the higher returns that investors can obtain, which stem not only from the greater size and liquidity of US markets but also from the differences in productivity, profitability, and overall competitiveness between the EU and US economies and firms. This competitiveness gap has significant implications for the growth and development of European capital markets. However, addressing it requires structural reforms that extend beyond the scope of the CMU.

Open strategic autonomy is a third important aspect to consider. It underpins several CMU proposals, such as directing more retail savings into the EU economy and retaining scale-ups within Europe. However, these goals may create trade-offs with market development objectives. For instance, directing retail savings to EU firms might conflict in the short term with offering higher returns to savers. Additionally, further integration of European capital markets could benefit foreign players, highlighting the need to enhance the competitiveness of European financial institutions to preserve strategic autonomy. Explicitly considering open strategic autonomy issues in CMU decisions could help balance these trade-offs and challenges more effectively.

4. Approach for further developing EU capital markets: a top down or bottom up approach

Another important aspect is determining how the CMU should be conducted and implemented going forward. A key question is whether the CMU should adopt a top-down or bottom-up approach. The top-down approach emphasizes harmonizing regulations and implementing EU-level frameworks driven by EU institutions, while the bottom-up approach aims to leverage existing best practices and build more on existing financial centres and ecosystems with coordination at the EU level. Related to this debate is how the decision-making process around the CMU action plan and its implementation should be conducted: *i.e.* whether an up-front commitment from EU institutions to CMU objectives and priorities should be favoured, or if efforts should be made to

7. This leads to questioning whether priority should be given in the CMU to the development of wholesale markets, which are likely to enhance the liquidity, depth, and scale of European markets, or whether the primary focus should be on retail investment and SME funding, as suggested by the proposal to rename CMU as a 'Savings and Investments Union'. While both objectives must eventually be achieved, as they are mutually reinforcing, clarifying the strategy for the development of capital markets in these two areas and how they may complement each other, would help to build an effective action plan and strengthen the narrative around CMU. Previous CMU action plans combine actions to develop retail and SME markets such as the Retail Investment Strategy, the Listing Act and actions that may benefit more wholesale markets like the MiFIR review with measures including consolidated tapes, but this has not been done in a explicit way and is not reflected in the narrative around CMU.

8. See Eurofi Views Magazine September 2024 James Chew, HSBC.

9. See Eurofi Paris Summary February 2022 How can banks contribute more to the CMU?

build consensus among member states in a more bottom-up manner[10].

Recently, there have been several calls for a top-down approach to CMU, with a strong focus on integration and harmonisation. Proponents argue that EU-level initiatives – such as implementing a unified rulebook and establishing a single capital market – are essential for financing innovation and addressing challenges related to the green and digital transitions, which are common objectives across all EU Member States. Broader capital markets are indeed essential in their view to allow innovative firms to have access to adequate financing, necessitating greater harmonization and integration efforts. Additionally, integrated markets can lower financing costs for all firms and enhance private risk-sharing across the EU.

For example, in November 2023, the ECB President called for a "Kantian shift" towards a more top-down CMU approach[11], highlighting the need for a European SEC to enforce a unified rulebook and for a consolidation of market infrastructures at EU level. Additionally, in June 2023, the IMF Managing Director emphasized the importance of the "Union" aspect of the CMU[12], advocating for a single access point to disclosures and information at EU level[13], rule harmonization (including corporate insolvency), supervisory convergence, and the creation of interconnected clusters of expertise across the continent, rather than multiplying separate domestic financial centres.

However, CMU measures must also address the diverse needs of EU Member States, particularly concerning SME financing and retail engagement, while promoting capital market development in countries where markets are underdeveloped. The CMU approach must also allow for an effective exchange of best practices in a context where domestic markets vary widely in maturity. Bottom-up approaches are necessary to meet these varied needs, but the goal should be to support progress toward common objectives and rules, albeit at a pace adapted to the maturity levels of different markets, which requires appropriate EU-level coordination. This is consistent with the approach recently endorsed by the Eurogroup, which published a statement on the future of CMU after consulting Eurozone finance ministers and industry representatives. A list of 13 actions was proposed, with a strong focus on the further convergence and harmonization of existing rules and processes, the sharing of best practices and an effective allocation of responsibilities between the European Commission, Member States and the industry for their implementation.

For future stages of the CMU, a balanced approach combining top-down actions with the flexibility to adapt to the specificities of individual member states and their markets will likely be needed[14], capitalizing on the complementarity of these two strategies. While a bottom-up approach fosters consensus and builds on existing best practices, merely developing domestic markets and integrating them bottom-up through harmonization efforts may fall short, even with effective EU-level coordination. Separate domestic markets and national specificities may persist, hindering the creation of large, efficient capital markets in Europe. Therefore, a top-down approach is also needed to achieve a single capital market over time – featuring common European rules and procedures[15], consistent enforcement and supervision across the EU, and single access points to the EU market – combined with coordinated efforts to ensure all Member States progress toward a common objective[16].

10. The CMU High-Level Forum for example proposed in 2020 to seek an upfront commitment from the Commission, the Council and the Parliament on the main components of the CMU action plan, including a joint delivery timetable, monitored and enforced by all the EU institutions. The report also proposed that Member States should subsequently commit to 'swiftly and faithfully' implement the agreed measures and pursue measures at national level in domains where there are no EU policies yet. However, these proposals have not been implemented so far. Source: Final Report of the High Level Forum on the Capital Markets Union – June 2020.
11. Speech by C. Lagarde at the European Banking Congress, 17 November 2023 'A Kantian shift for the Capital Markets Union'.
12. IMF Managing Director's remarks on strategic priorities for the European capital markets, 15 June 2023.
13. This has been implemented with the European Single Access Point measure (ESAP).
14. See AFM and DNB report on the next steps for the CMU, February 2024.
15. Including notably common capital market rules, common key corporate laws for the capital market, common tax procedures to avoid double taxation.
16. See contribution by J. Berrigan to the Eurofi February 2024 Views Magazine for example.

Clearing and settlement: main regulatory developments and further issues

Note written by Marc Truchet

1. Clearing: EMIR 3 agreement and next steps

1.1. Key measures agreed in the EMIR 3 review

The EMIR 3 review, which was agreed by the co-legislators in February 2024, aims at achieving three main objectives.

First, the review seeks to improve the competitiveness of the EU clearing ecosystem, with measures to reduce approval timelines for risk model changes and product extensions deemed minor, in order to shorten the time to market for new products and models. EMIR 3 also creates a new central database where EU CCPs will be required to submit in one place their applications for authorisation, extensions of services and validations of risk models.

The second objective is to improve the safety and resilience of the EU clearing ecosystem in the perspective of an increase of EU clearing volumes, with a reinforced EMIR framework[1]. The final text supports a stronger coordination role for ESMA, in particular in emergency situations, and focuses on enhancing supervisory convergence between National Competent Authorities (NCAs), with for example the co-chairing with ESMA of the CCP supervisory colleges and the new requirement for ESMA to provide Opinions on the compliance of EU CCPs with EMIR provisions and on the annual reviews of CCPs conducted by the NCAs.

The third objective is to reduce the EU's excessive reliance on third-country CCPs, with the introduction of a requirement for EU market participants to hold an active account at EU CCPs. The final text agrees to implement the Active Account Requirement (AAR) in a phased manner, with first a minimum level of representative activity to be cleared in the AAs at EU CCPs, followed by a programmed report by ESMA on the impact of this measure 18 months after the entry into force, based on an aggregate monitoring of the AAR at EU level by the Joint Monitoring Mechanism[2], and a review clause by the Commission within 24 months of the entry into force.

1.2. Main next steps

An important number of EMIR 3 requirements remain to be further specified by ESMA. This includes the clarification of changes (e.g. of risk models, products…) for which a reduced approval timeline should be requested and a specification of the conditions to be met by counterparties under the AAR.

ESMA has also been tasked with developing forward-looking reports in several areas beyond EMIR 3, including the possible extension of EMIR to CCPs clearing spot commodities and crypto-assets and considerations around the potential segregation of accounts across the clearing chain of non-financial and financial counterparties.

2. Settlement: T+1 assessments and measures proposed to support CMU

2.1. Progress made in the European settlement space

The efficiency and resilience of post-trading activities are crucial for the growth and integration of EU capital markets. Over the past two decades, substantial progress has been made in the settlement space, including the removal of most of the Giovannini barriers, the implementation of the

1. Measures include increased transparency and reporting requirements, stricter risk management obligations for CCPs.

2. The Joint Monitoring Mechanism (JMM) in EMIR 3.0 is a supervisory framework designed to ensure compliance with the new regulatory requirements, particularly those related to the active account requirement. The JMM will track the use and proportion of AA across the EU to reduce excessive reliance on the non-EU (third-country) CCPs that are seen as posing risks to EU financial stability. This mechanism will collect key data metrics, such as the number of AA and the volume of transactions cleared through them. It aims to support authorities in monitoring cross-border risks and ensuring that the policies promoting EU financial stability and clearing independence are effective.

Central Securities Depository Regulation (CSDR), and the launch of TARGET2-Securities (T2S), which have driven significant harmonization and integration improvements, as well as greater settlement discipline.

Despite these advancements and industry-led consolidation efforts, the EU post-trading landscape remains fragmented. For example, the EU still has 28 active CSDs for equities, with the top five handling over 80% of the volumes, compared to just one in the US. This fragmentation limits economies of scale and hampers cross-border settlement. In addition, the implementation of T2S has not led so far to a development of cross-CSD settlement[3]. Persistently divergent legal and tax systems, as well as differing market practices across Member States, further complicate and increase the cost of cross-border transactions, hindering deeper integration of EU securities markets.

Harmonization efforts in the post-trading space are continuing, albeit incrementally. The latest CMU Action Plan proposes a targeted harmonization of corporate insolvency frameworks and improvements to withholding tax procedures to boost efficiency and security. In May 2024, the Council reached an agreement (general approach) on the FASTER Directive (Faster and Safer Relief of Excess Withholding Taxes), aimed at simplifying withholding tax procedures across the EU while reinforcing protections against tax fraud and abuse.

Additionally, the recently adopted CSDR Refit regulation aims to reduce the financial and regulatory burdens of CSDR on CSDs, enhance their ability to operate across borders, and bolster financial stability. Key measures include simplifying the passporting regime, improving supervisory cooperation, expanding access to bank-like ancillary services, and strengthening the settlement discipline regime.

2.2. Additional actions being considered

Further improvements are being considered in two main areas: shortening settlement cycles and deepening the integration of EU post-trading to support the Capital Markets Union (CMU).

In May 2024, the US, Canada, and Mexico transitioned to a T+1 (trade date plus one day) settlement cycle, while India equity markets have been operating on a T+1 basis since 2023. In the UK, the Accelerated Settlement Taskforce has recommended moving to T+1 by the end of 2027. In response, a technical group established by the UK government is expected to present recommendations on the next steps for the implementation of T+1 by the end of 2024.

Meanwhile, ESMA has conducted a call for evidence to assess the impact of shortening the securities settlement cycle in the EU. This assessment examined the effects of a shift to T+1 on market participants' operations, the potential benefits and costs, and the practicalities of implementation. ESMA will submit a report on T+1 to the European Parliament and the Council by mid-January 2025.

Preliminary findings indicate that T+1 could bring significant benefits to the European market, including increased efficiency, improved resilience, lower margin requirements, while addressing the difficulties created for EU market stakeholders by the misalignment with some key markets such as the US[4]. However, this transition also presents challenges, such as the need for all market participants to adapt their processes and align with international timelines in a timely manner, which will require clear regulatory guidance, effective industry collaboration and a robust governance framework. Consideration must also be given to the EU's unique market characteristics, including its diversity of currencies, market infrastructures, and differing tax and legal systems across Member States.

Although no timeline has been set yet for the implementation of T+1 in the EU, many market participants have suggested that aligning the timeframe with the UK and Switzerland would be desirable.

The further integration of securities post-trading at the EU level is also considered crucial for supporting CMU, as simplifying and reducing the cost of cross-border settlement could stimulate greater capital flows within the EU. Several reports published in 2023/24 on the future steps of the CMU[5] and also the Letta report on the single market, recommend achieving a single pan-

3. According to a report on CMU published by the French Ministry of Finance in April 2024 (Proposals for a Savings and Investments Union), transactions with a cross-border dimension (flows directly on T2S by two CSDs referred to as cross-CSD settlement) only amounted to less than 1.5% of settlement volumes and 4% of settlement amounts on T2S in 2022. This means that the vast majority of settlement is "intra-CSD" settlement with a single CSD handling the transaction flows on T2S for other CSDs, including cross-border transactions. In effect T2S has not become a node of interoperability for cross-border transactions according to the report but is rather a tool for outsourcing certain technical tasks, mainly used for national purposes. It is hoped that further harmonization efforts concerning *e.g.* collateral management, withholding tax procedures... will contribute to increase T2S cross-border settlement volumes.
4. Concerns for issuers seeking funding in the EU and in the US and the difficulties stemming from the misaligned settlement cycles for their corporate events have been raised. Issues for the asset management industry, for instance with regards to ETFs invested in securities in jurisdictions with different settlement cycles have also been mentioned. See *Eurofi Views Magazine* September 2024, Natasha Cazenave, ESMA.
5. Proposals on the further integration of securities markets and harmonization of securities rules are made for example in the Eurogroup statement on CMU (March 2024), the ESMA position paper on CMU (May 2024), the proposals of the French Ministry of Finance for a savings and investment union (April 2024).

European rulebook for securities clearing, settlement, and collateral management, as well as pursuing harmonization efforts on legal aspects that currently hinder the integration of securities post-trading activities, such as certain areas of corporate laws, securities laws, tax processes, accounting frameworks, and corporate insolvency regimes[6].

An additional suggestion from the CMU report drafted by the French Ministry of Finance[7] is to expand the role of T2S in cross-border settlement, which remains limited. Achieving this would require further convergence of securities laws, collateral management and withholding tax procedures as well as measures to increase the role of T2S in cross-border transactions[8]. A longer-term option proposed involves creating a "European unified ledger" – a single blockchain infrastructure that could potentially be developed in connection with T2S – to provide a common platform for a future digital CMU based on asset tokenization.

Additionally, the Letta report suggests pooling certain existing market segments at the EU level – such as SME markets – that currently lack the size, liquidity, and visibility to attract EU and international investors. It also recommends creating EU-level exchanges focusing on new market segments – such as deep tech or digital assets - which would also potentially need to be supported by common post-trading infrastructures.

6. Notably with regard to the ranking of claims and insolvency triggers or the rules for financial collateral.

7. Proposals of the French Ministry of Finance for a savings and investment union (April 2024).

8. The report of the French Finance Ministry suggests that this requires inter alia allowing T2S to perform some functions traditionally offered by CSDs and making T2S more attractive for its users by extending the operating hours of the platform or reducing operating costs.

Securitisation: of lessons learned and things remembered

Note written for Eurofi by Ian Bell

Contemplating the monarchist émigrés who had fled France at the revolution as they came back to power after the fall of Napoleon, Talleyrand – the great political survivor of said revolution, consulate, empire and now restoration – is said to have remarked disparagingly: "they have learned nothing and forgotten nothing".

As Europe contemplates calls for a revival of the securitisation market and the regulatory changes to allow it to happen, one could be forgiven – looking back at the great financial crisis – for thinking that possibly finance also had "learned nothing and forgotten nothing". Yet this is not the case.

A renewed and expanded focus

From the call by the ECB president for a "Kantian shift" to a substantial European capital market anchored explicitly in securitisation to the recent European Commission's commitment to work towards such a market, the voices in favour of a revival of a strong securitisation market have multiplied.[1]

It is worth noting though the change in both the centrality and the context in which this project is articulated.

Calls for a revival of the securitisation market are not new. The Commission and co-legislators' work from 2014 onward resulting in the Securitisation Regulation was explicitly designed to effect such a revival. It is the legislation's failure, for whatever reasons, to achieve its aim that is leading to calls for new measures.

Back then, though, the measures were part of a suite including many other potential reforms and certainly not picked out as uniquely important. But in the recent articles, speeches and reports, the revival of securitisation is presented as both central and essential.

For a long time, securitisation reforms were primarily presented as a means to free up bank capital and allow more financing to the real economy. Today, securitisation's growth is seen in the wider context of the future of Europe in a dangerous world when our economy is seen as falling behind. To underpin Europe's future and social model, a means of channelling European savings to the European economy via the creation of a capital markets union and a strengthening of the banking sector's lending capacity appears almost existential. And for a variety of cogent reasons, securitisation is seen as uniquely able to do this[2]. The debate has moved from "nice to have" for banks to "essential to have for Europe's future."

The suspicion

This essentiality of securitisation makes it, for those who support this view, a major political priority. But this also raises legitimate concerns from those who remain to be convinced.

Are we not being presented with proposals that ask us collectively to jettison the lessons from the crisis? Are genuine concerns for Europe's future on the world stage not blinding us to the dangers we tried to shield ourselves from after the crisis?

Worse, are we not asked to encourage through regulatory incentives the return of a known danger? Is this a case where political expediency is seeking to overwhelm a prudential norm? Are we being

1. Including the ECB Governing Council Statement (March 2024), the Eurogroup Report on the CMU (March 2024), the Letta Report on the Single Market (April 2024), the Noyer Report (April 2024), the Macron-Scholtz joint op-ed in the Financial Times (May 2024) and Commissioner McGuiness speech (June 2024).
2. Refer to PCS Eurofi article in this publication, https://pcsmarket.org/wp-content/uploads/Securitisations-Europes-categorical-imperative.pdf

asked, for the sake of a "greater good" to take very real risks with financial stability?

An analysis of the key proposals demonstrates this is not the case. The core of the proposals coming from industry and many policy makers is about building on the post-crisis reforms and completing to their logical conclusions unfinished parts of those reforms or correcting obvious overshoots.

The proposals

There are, of course, a plethora of proposals to adjust the regulatory rules around securitisation and often different approaches to each specific one. However, from both the industry and policy making side five core proposals have emerged.

- An adjustment of the capital requirements for banks investing in securitisations (the CRR proposal).
- An adjustment of the rules on eligibility of securitisations for inclusion in banks' liquidity coverage ratio pools (the LCR proposal).
- An adjustment to the capital requirements for insurance companies investing in securitisation (the Solvency II proposal).
- Amendments to the mandatory disclosure requirements for securitisation issuances (the disclosure proposal).
- Amendmenents to the mandatory due diligence requirements for securitisation investors (the due diligence proposal).[3]

CRR proposal

In a nutshell, the issue around bank capital revolves around the concept of "non-neutrality". After the GFC, the Basel committee decided – not unreasonably – that securitisation could generate a greater risk than the risk the Basel rules attributed to the underlying securitised assets. These risks were called "agency risks" and the capital formulae for securitisation were tweaked by the insertion of a number (the p factor)[4].

The current proposals all centre around some form of reduction of this *p* factor.

At first glance this could seem like a request arbitrarily to reduce a prudentially calculated number to achieve a political purpose. It is the reverse.

The *p* factor was never "calculated". It was not derived from data or generated by a model. The suspiciously round 100% number was simply chosen as a rough estimate of what felt right to those around the Basel table: a "gut feeling".

What is being requested is an adjustment based on both a conceptual and data driven approach.

Conceptually, since the crisis, European legislation has banned for all securitisations the most severe causes of agency risk. It has also created a strictly defined category – STS – from which pretty much all known agency risks have deliberately been extracted.

So, what is requested is an adjustment of the p factor to reflect the actual performance data for those securitisations which would have been STS before the crisis. A data-based formula to replace the current arbitrary number.

LCR proposal

Only a very limited sub-set of STS securitisations are allowed in LCR pools. Also, those must be of the highest rating category. Should they drop even one rating notch they are instantly excluded. Also, allowed securitisation are consigned to the third and lowest strata of allowable assets with the highest haircut.

There are a number of problems with this approach. First, the EBA's conclusion that securitisations were not sufficiently liquid to be in a higher eligibility category was principally based on GFC data. But the GFC was a crisis triggered by a sub-set of US securitisations. That liquidity should vanish from an asset class during a stress period centred on that very asset class is self-evident. This is true even of the most liquid assets: during the LDI crisis in the UK in 2022, there was briefly no bid for the 30-year UK gilt. That is literally the most liquid sterling instrument in existence. Liquidity in covered bonds was shaken during the sovereign/banking crisis that followed the GFC in 2011/2012.

Since then, the STS securitisation market has demonstrated excellent and testable liquidity. This is the case both in day-to-day trading and in

3. Again, it must be stressed that this is not a complete list, nor should the fact that a proposal does not appear in this list imply that it is not valuable or worthy of examination. But these are by consensus treated as the five key proposals.

4. Basically, a *p* factor of 1 represents a 100% increase in the risk. So the capital required of a bank holding all the tranches of a securitisation is twice the capital required if the bank held all the assets in their natural form. Consequently, a *p* factor of 0,5 represents a 50% increase, etc...

stressed environment such as the LDI crisis where securitisations were the first resort of investors needing to generate liquidity.

The argument sometimes advanced that we have not had a deep liquidity crisis to test this proposition and so we should wait until such a crisis is redolent unfortunately of "generals preparing to fight the last war". Much has happened since the GFC, including in the regulation of securitisation. To ignore all that has happened and expect that next crisis to be like the last could be seen as unwise.

The approach to LCR eligibility has also resulted in a very high concentration of European banks' liquidity pools in a very small number of assets.[5] This means that, in a banking crisis, the banks will be seeking to generate liquidity by selling at the same time the same assets. This is likely to lead to greater rather than less stress on the financial system.

A better approach would be to look at both the data and the events since the GFC that demonstrate STS securitisations' liquidity which in turn would allow for more diversified and balanced LCR pools able to be used from wherever source the instability comes. This approach again is based on analysis of data and seeks to increase prudential safety rather than trade it off for policy aims.

Solvency II

EIOPA is on record as asserting that, when it comes to securitisation, Solvency II is "fit for purpose". This assertion, however, remains difficult to reconcile with certain known outcomes of the current regulation.

For example, an insurance company is required to set aside more capital to meet losses arising from holding a AAA STS prime mortgage senior securitisation tranche than it would for holding the mortgages themselves. This is notwithstanding that the securitisation is protected from losses by a junior tranche that is usually equal in around 10 to 15 times the worst losses ever suffered on mortgages. And, since these are STS securitisations, from which most, if not all, agency risks have been removed, this anomaly cannot be attributed to them.

Another example, from synthetic securitisations: if an insurance company enters as protection provider into a synthetic securitisation in guarantee form this will be on the asset side of its balance sheet. As such it will require a given amount of capital to meet potential losses as required for a "securitisation holding". But if the same insurance company enters into the exact same synthetic securitisation as an insurance contract, that risk will end up on the liability side of its balance sheet. As such it will require, for the exact same risk, a much smaller amount of capital. This is currently resulting in a regulatory arbitrage that is distorting the market for synthetic securitisations across Europe.

These two examples demonstrate that Solvency II is self-evidently *not* fit for purpose.

The request to revise the capital requirements for insurance companies holding securitisations is not a request for indulgence but a request to align the capital requirements for insurance companies to the actual risk they face and, amongst other things, prevent continued regulatory arbitrages.

Disclosure

The regulations require mandatory disclosures for all securitisations. The details of what is required are set out in secondary legislation drafted by ESMA.

Underpinning ESMA's approach would appear to be a sense of the uniquely dangerous and complex nature of securitisations derived from the worst types of transactions issued before the crisis. The result is a hugely extensive, rigid and detailed set of mandatory requirements. Impossibility to meet even the smallest portion can close the door to an originator being able to access this financing channel.

There are a number of issues here:

a) It does not take into account the overall amelioration in the safety and simplicity of European transactions brought about by the rest of the regulatory rules. This is particularly true for STS securitisations, which – in the senior tranches – far from being uniquely dangerous are uniquely safe.

b) No investor we have encountered uses the mandatory disclosure templates in their entirety – if at all – to analyse securitisations or would require, were there no such templates, equivalent disclosure.

c) The number and rigidity of the mandatory fields means that it is extremely unlikely that potential new originators (and especially smaller financial

5. See EBA report (page 88 – HQLA by Asset Class) - https://pcsmarket.org/wp-content/uploads/JC-2022-66-JC-Advice-on-the-review-of-the-securitisation-prudential-framework-Banking.pdf

institutions) have that data in full. This means that accessing securitisation will require IT expenditure that can quickly climb and make this form of financing very unattractive for mid-to-small banks.

d) This type of disclosure is not required of any other capital market instrument, including instruments whose underlying credit is based on asset performance. This results in an unjustifiable unlevel playing field generating yet further regulatory arbitrage.

The legitimacy of mandatory disclosure for securitisation is not being challenged. However, the proposals are for a disclosure regime that takes into account all the improvements around securitisations' simplicity. They should also aim at a regime based on what conservative long-time investors believe to be necessary for a reasonable analysis by a reasonably conservative investor. Finally, a levelling of the playing field with other types of capital market products could be explored via an alignment of disclosures on asset performance for asset-based financial instruments. The end result would be a fair yet conservative disclosure regime.

Due Diligence

The regulations require specific, detailed and extensive due diligence for all securitisations (and, oddly, more for STS securitisations, which are the safest products).

No-one, of course, is suggesting that investors should not perform appropriately thorough due diligence on the bonds they purchase. The question is whether, looking at investor rules holistically, it really makes sense that legislation sets out detailed, costly and mandatory rules for an STS, prime-mortgage backed, AAA rated senior tranche of a European securitisation – a product with zero losses during the GFC – and none whatsoever for corporate equity or convertible warrants or AT1 deeply subordinated convertible bonds or any other highly complex and risky capital market investment.

Once more, these rules appear grounded in a legitimate post-GFC notion that:

a) Securitisations were uniquely complex and risky.

b) Rating agencies could not be relied upon due to conflicts of interest.

c) Securitisations were uniquely opaque and thus required heightened due diligence.

However, subsequent European legislative changes have, especially for the simpler STS securitisations addressed most, if not all, those issues. Rating agency regulations have also addressed this aspect of the GFC.

But why, it could be countered, should we wish to roll-back due diligence obligations? Surely, all due diligence is a public good.

The problem is that the mandatory and detailed nature of the required due diligence imposes costs in both time and money (*e.g.*, compliance costs). When the simplicity and the safety of the product does not warrant them, those financial costs detract from the attractiveness of the product by artificially reducing post-cost returns. The cost in time also makes the market less efficient as the time taken to buy and sell even an STS, AAA prime-mortgage backed senior tranche must be counted in days or weeks compared to the minutes or even seconds it takes to sell an unrated deeply subordinated convertible bond. When compared to other, riskier markets, this lack of a level playing field becomes an incentive for investors to move to riskier products: if they have to do long and arduous due diligence anyway, why do it for the lower returns provided by the safest STS securitisations?

The heart of the proposals for reforming the current due diligence requirements is to apply a consistent and proportionate approach, bearing in mind the approaches adopted for other – often more complex – products.

Some general considerations

When these proposals, and particularly the capital requirement proposals, were put forward, some argued that there was very little if any demand from industry for such changes. This is an odd comment. It seems well established that prudential requirements should be correctly calibrated to the risk, notwithstanding the wishes of prudentially regulated entities for it to be otherwise. It is also not uncontroversial that miscalibration of prudential rules almost invariably leads to regulatory arbitrage. In turn, regulatory arbitrage almost always results in an increase in systemic risk as capital becomes allocated to the wrong part of the financial system. We believe this has become apparent in respect of high-quality, low-risk securitisations.

Conclusion

This article has set out what we consider to be the five key proposals for regulatory improvements. Other proposals exist and new ones may come later. But in all cases it is argued that the best approach is certainly not to undermine the systemic safety of European finance. What needs to be achieved is a fact-based approach that takes into account both the legislative changes already made and the actual pre-and-post GFC data. It must also be an approach that avoids the current regulatory arbitrages that result from focusing solely on the rules for securitisation rather than on the rules for capital market instruments generally, of which the former are but a sub-set. This will allow for a coherent, logical and consistent approach to the capital markets union rather than a distorted and potentially dangerous structure that would flow from manipulating prudential rules to favour some instruments over others.

Securitisation reform to boost European competitiveness

Focussing on bank capital velocity and regulatory governance will expand bank-funded investment

Note written for Eurofi by the following co-authors[1]
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Top European policymakers, such as the ECB Governing Council and the Eurogroup, have argued in recent months that European Union countries need "massive private investments" to advance the climate agenda and generate higher productivity and competitiveness. Equity markets can play a role by providing EU corporates with the risk capacity to invest more. But debt will be necessary to finance most of the increase in capital investment. European banks will be central to intermediating surplus funds from European and international savers by providing the additional debt.

From a macroeconomic perspective, there is little mystery why private sector investment in Europe has fallen short of what central bankers and others believe is necessary to generate economic growth. The recovery in demand since the pandemic has been sluggish and the profitability of European firms has been too weak to generate a spontaneous increase in real investment by the private sector. Moreover, many believe that structural impediments to investment exist in Europe's financial markets. European debt markets function primarily through the region's banks, and the profitability of these banks lags behind that of international competitors.

How could European banks finance an upturn in investment-related lending? Bank liquidity and funding are in plentiful supply, but capital remains a constraint. Since new bank equity (beyond what is required by prudential regulation) is largely unavailable, how can banks rise to the challenge of financing additional investment?

If 'massive private investment' were to be financed by issuing covered bonds (CBs), European banks' balance sheets would have to be much larger and their equity larger. This appears simply infeasible to shareholders who would have to supply additional equity. It is, thus, natural that the ECB Governing Council and the Eurogroup have been focussing attention on the potential for expanding the securitisation market.

CBs are no substitute for securitisation, especially when banks are capital constrained. Indeed, bank financing raised through CBs or securitisation are fundamentally different. The credit risk of the loan pool covered by a CB remains on the issuing bank's balance sheet and CBs generate neither a transfer of credit risk nor a commensurate reduction in regulatory capital. This form of financing provides no capital relief.

In contrast, securitisation, when it satisfies the Significant Risk Transfer (SRT) requirements of regulators, shifts risk off the issuing bank's balance sheet, allowing a bank to redeploy its risk capacity by making new loans. This feature of securitisation may be labelled 'capital velocity', expressing the notion that securitisation permits a bank to deploy its risk capacity more than once. In contrast, CBs do not provide banks with 'capital velocity'.

On the other hand, both CBs and traditional (true sale) securitisations provide liquidity to the issuer. They share the feature that both permit one bank to provide secured funding to another. Reinforcing

1. The co-authors accept full responsibility for any errors or omissions. The views expressed are those of the authors and not necessarily those of their companies and institutions, or of those with whom the authors have had discussions, or of their companies. All authors can be contacted via LinkedIn.

secured lending channels among banks is important in generating robust funding flows without relying on intermediation by central banks. Before the 2011-2013 European Sovereign Debt Crisis, European banks operated a substantial unsecured interbank market with significant depth even at relatively long tenors. This unsecured interbank market dried up in the 2011-2013 crisis except for transactions at the very shortest tenors. While liquidity has returned, CBs and securitisation remain important mechanisms for making interbank funding more robust and reducing the burden that will fall on central banks if another crisis were to occur.

We believe that modest but key modifications to the regulatory rules on securitisation could boost 'capital velocity'. Real economy investment would increase if banks were able to optimise their balance sheets more effectively. Over the last decade, European regulators have made multiple attempts to adjust securitisation regulations to arrive at a smooth functioning and financially stable market. Success has been limited. We believe that the answer is not to dismantle the regulatory framework that has been developed but to make small, judiciously chosen adjustments to the rules aimed at better aligning regulatory rules with actual risk.

The political will to adapt rules to European needs has been evident in several past attempted reforms but clearly these have been insufficient to restore the market. Examples include (i) the European Parliament's introduction of the SME Supporting Factor, (ii) the European Commission's rewording of the standards to change the hierarchy of approaches for bank securitisation capital (reducing Europe's reliance on external ratings), (iii) the European Supervisory Authorities (ESAs) development of a synthetic simple, transparent and standardised (STS) securitisation framework.

The last of these measures is aimed at improving the 'capital velocity' of European banks and represents a success in the sense that volumes rose, and smaller banks participated. But it also represents a partial failure in that it introduced new investor fragmentation in the market. By not mentioning regulated and diversified European (re) insurers in the list of authorised guarantors, the rules prevent insurers from participating in the STS market on an unfunded basis (though they remain active in the shrinking non-STS segment).[2]

The adoption of a 0% risk-weighted requirement for Multilateral Development Banks (MDBs) as unfunded guarantors for STS has strengthened the roles of the European Investment Fund (EIF) in various European countries and of the European Bank for Reconstruction and Development (EBRD) in a growing number of CEE countries, where securitisation markets remain subdued. The greater role of these prominent institutions has helped to popularise the securitisation technique and reduced the post-GFC stigma attached to securitisation in those countries. The effect, however, has been to limit the mobilisation by the MDB resources of private money in these securitisation transactions to improve European competitiveness.

Overall, market data show that the traditional securitisation market in Europe is a shadow of its past self, with only the synthetic SRT market showing reasonable levels of activity. Can securitisation be mended, one may ask? We believe the answer is yes, but it will require that regulators make appropriate choices adapted to Europe's needs and then legislate and implement them. This should be done on a timescale that makes results visible in the data before the end of the next European Commission's mandate. The complexity of the process and the timescale constraints make reform in securitisation regulation a significant journey. Large steps could be taken early on by focusing on 'low hanging fruit'.

What competitiveness gains might be achieved by changing regulation and which changes would be most effective and easiest to implement? A straightforward and effective improvement in the securitisation rules would be the introduction of a risk-sensitive risk weight (RW) floor proportional to pool RWs. This would constitute a simple and easily implementable step, better aligning risk and regulatory RWs, and would be highly relevant for senior tranches. The securitisation RW floor currently equals a constant percentage of notional value. This makes no distinction between securitisations secured on risky versus safe pools. The distortionary effects of the current approach are clearly visible in the distribution of the existing market across different asset classes.

Designs for such a risk-sensitive RW floor were presented in a paper entitled "Rethinking the Securitisation Risk Weight Floor".[3] Our preferred option: for internal ratings-based approach (IRB) and standardised approach (SA) banks, a factor of proportionality of 10% applied to the underlying pool risk-weight under SA. Adopting this would provide stable capital requirements for senior

2. According to an IACPM survey, "in 2023, the 13 participating insurers protected more than €1 billion of SRT tranches mostly at mezzanine level and, as close to 90% of insurance protections are syndicated, each participant retained on average one third of the insured tranche, with an average size of insurance protection of €25 million after syndication. Insurers' appetite to protect SRT transactions continues to increase but is capped by their inability to access the growing EU STS market."

3. Duponcheele, Georges, Marc Fayémi, Jérémy Hermant, William Perraudin and Frédéric Zana (2024) "Rethinking the Securitisation Risk Weight Floor", May. https://www.riskcontrollimited.com/wp-content/uploads/2024/05/20240503-Rethinking-the-Securitisation-Risk-Weight-Floor-v61.pdf

tranches, unaffected by whether the IRB capital requirements or the SA Output Floor capital requirements apply.

In addition to adopting this simple change, we believe that reform of securitisation regulation would be more effective if changes in governance arrangements were adopted by the EU co-legislators. Specifically, the implementation of regulatory changes and the effectiveness of reforms would be enhanced if the following steps were taken.

a) Introduce mitigation techniques if unintended consequences from poorly framed regulation arise. The European Lamfalussy architecture of financial regulation and supervision has moved over time from a principles-based to a rules-based system, which brings rigidity when obvious reforms of regulation are needed. This would include the power to suspend unworkable rules until the next legislative or review cycle. Such tools exist in the US, but not in the EU or not in a way that can be used dynamically.

b) Regard securitisation as a balance sheet optimisation and 'capital velocity' instrument in regulation and, in this respect, quite different from CBs. Regulators could adapt their risk appetite for risk transfer more dynamically depending on whether greater or lesser risk transfer is desired at a macro or micro level.

c) Unify EU securitisation market supervision under the coordination of ESMA.[4] Important benefits can be achieved by having a single-entry point for market participants such as increasing supervisory convergence and reducing supervisory costs on an EU-wide basis. The Joint Committee of ESAs Securitisation Committee, which should receive enhanced decision-making powers could provide a second level of control of supervisory activities.

d) Develop regulatory rules in collaboration with capital market participants. There is currently no experts' group or stakeholder group at the level of the Joint Committee of the ESAs, which should receive enhanced decision-making powers to remove regulatory frictions in the demand and supply sides of the market. Several past episodes exemplify collaboration by regulators and market participants to achieve common goals (ECB Loan Level Initiative, European DataWarehouse). An efficient Capital Markets Union (CMU) depends on more such collaborative work.

e) Finally, in the long-term, 'smart' regulatory governance should foster innovations in the CMU. This would allow for a reduction in market fragmentation within the European Union, adapting and harmonising local jurisdictions to foster a truly pan-European market.

As the ECB Governing Council has pointed out much is at stake for the region. It is in everyone's interest that prudent changes in regulation to support the region's investment needs be identified and implemented. Now is the moment to rethink certain aspects of securitisation regulations which are highly material for European competitiveness. Mario Draghi, former ECB governor and Italian Prime Minister has recently said: "Rethinking our economic policies to increase productivity growth and competitiveness is essential to preserve Europe's unique social model." We believe that the concrete changes advocated here, (i) the adoption of a risk-sensitive RW floor, and (ii) changes in governance, would contribute to the objectives he expresses.

4. Currently, there are 48 distinct supervisory entities responsible for the supervision of securitisation transactions in the EU.

Banking regulation priorities

4

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Banking Union: what way out of the current deadlock?

Note written by Didier Cahen with Lucie Truchet

A paradox lies at the heart of the Maastricht Treaty: despite the introduction of a single monetary policy on 4 January 1999, responsibility for financial supervision remained national. Remarkably, in the 15 years following the creation of the euro, there was little concern about the need for a Banking Union. It was only in the wake of the EU sovereign debt crisis (2011-2012) that Member States reached a consensus to address this discrepancy.

The Banking Union aims to create a resilient banking sector in the EU by centralizing banking oversight, streamlining bank resolutions, and uniformly protecting depositors across Member States. The objective of the Banking Union, as stated in the Euro Area Summit Statement of 29 June 2012, which many regard as the 'birth certificate' of the Banking Union[1], was to "break the 'vicious circle between banks and sovereigns[2]', hence placing the banking sector on a more sound footing and restore confidence in the Euro as part of a longer term vision for economic and fiscal integration[3]."

Its architecture is still incomplete. The Banking Union is indeed built on three pillars to make the banking sector more stable and resilient: supervision, resolution, and the still-debated European Deposit Insurance Scheme (EDIS)[4]. The first pillar, the Single Supervisory Mechanism (SSM), created on November 4, 2014, has helped to promote a resilient banking sector, as demonstrated by the sector's resilience during the banking turmoil of spring 2023[5]. The second pillar, the Single Resolution Mechanism (SRM), created on January 1, 2016, aims to protect financial stability and taxpayers by planning for and managing bank failures. Yet, it requires improvements to make the European framework for Crisis Management and Deposit Insurance (CMDI EU resolution framework concretely applicable and less prone to deviations to the non-bail out principal.

Despite the creation of the SSM and the SRM, the distinction between home and host authorities and the 'national bias' still exists for banks operating across borders in the 'Banking Union' under the remit of the Single Supervisory Mechanism: transnational banking groups are unable to manage their capital, liquidity and MREL liabilities on a consolidated basis. The banking sector in Europe remains too fragmented and over-banked, and market concentration has progressed only at domestic level. As a result, the Banking Union project has been at a standstill for years.

The purpose of this paper is to suggest ways out of the political deadlock and to move forward with the completion of the Banking Union. The first part describes the benefits that a genuine Banking Union would bring to the competitiveness of the EU banking sector and the EU economies. The second part focuses on the existing shortcomings in the design of the Banking Union, which make it fragmented and sub-optimal. The third part assesses the ways forward that have been identified but have been hampered by the prevalence of national interests over European ones. Finally, the fourth part explores possible ways out of the impasse and guidelines for resuming meaningful progress on the Banking Union.

1. A genuine Banking Union would be beneficial for the competitiveness of the EU banking sector

A genuine Banking Union would bring several benefits to the EU banking sector, – and a fortiori to the EU financial sector as a whole – and to the EU economy. The first section shows that the completion the Banking Union would foster the

1. L. Mari Pastu Sortos, Vice-Governor of the *Banco de Portugal*, Opening remarks, June 2024.
2. European Council, Euro Area Summit Statement, 29 June 2012.
3. European Commission, "Single Market Act II – Together for new growth", 2012.
4. European Commission, "Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 806/2014 in order to establish a European Deposit Insurance Scheme", 2015; European Parliament, "Report on the proposal for a Regulation establishing the European Deposit Insurance Scheme (EDIS)", April 2024.
5. According to Claudia Buch (Speech on financial integration, 30 April 2024), "the CET1 ratio increased from 12.7% of risk-weighted assets in 2015 to 15.7% at the end of 2023. The leverage ratio, which is based on banks' total assets, has also increased, albeit more modestly – from 5.3% in 2016 to 5.8% at the end of 2023."

integration of banking markets and, as a result, make the allocation of resources in the EU economy more efficient. The second section focuses on the synergies existing between the Banking Union and the Capital Markets Union. Advancing both projects would strengthen the EU financial sector and financial sovereignty, provided that we improve the competitiveness of European banking and financial actors. The third section explains, however, that the benefits to the EU of a genuine Banking Union should not be overestimated.

1.1 A genuine Banking Union would accelerate the integration of banking markets, which is a prerequisite for a more effective allocation of resources across the EU economy

A proper Banking Union would promote a better integration of EU banking markets – *i.e.* banking markets in which banks operate in the Euro area as they would in their home country – which would in turn foster a more efficient allocation of resources across the Euro area (*e.g.* firms would be able to tap broader and cheaper sources of bank funding) and achieve a better diversification of risks. In such a context, Euro area cross-border banking groups would be considered as single entities from an operational, regulatory and supervisory perspective, rather than as the sum of separate subsidiaries with different capital, liquidity and recovery frameworks imposed at national level.

In other words, the EU regulatory framework would recognize cross-border banking groups at the consolidated level, making the Banking Union a 'single jurisdiction' based on the already largely single rulebook. In this single jurisdiction, the SSM and the SRB would be empowered to set appropriate levels of capital, liquidity and MREL at consolidated level for each cross-border banking group in Europe, to monitor the allocation of those financial resources across legal entities, and to ensure a fair allocation of losses in the event of resolution.

70% of the financing of the European economy is provided by banks, unlike the United States, which finances around 2/3 of its economic development through the markets. The solidity and competitiveness of banks in Europe and therefore the creation of a genuine Banking Union are key to ensuring the financing of economic activity and Europe's financial sovereignty.

But banks are becoming smaller compared with their global rivals and are not sized to face the economic challenges (energy and digital transitions, remilitarization). "While the balance sheets of the top five US banks are 2,8 times larger than those of the European peers, allowing for more diversification, larger exposures, and greater investment budgets with which to jump to the forefront of technological developments[6]." As a result, the large European banks are making much lower profits than their US rivals and have less capacity to provide new financing than their US counterparts (*see 2.3*)[7]. Banking fragmentation and the absence of large, globally competitive pan-European banks are also major obstacles to the emergence of a CMU.

As F. Villeroy de Galhau noted[8] "For banks, as we see this in the United States, scale is objectively a major determinant of competitiveness, particularly as it enables bank to amortize the cost of critical investments in digital technology and artificial intelligence."

An effective Banking Union would encourage this development of larger and more competitive transnational banking groups in the EU, helping to channel excess Euro area savings across borders to parts of Europe where the most attractive investment opportunities exist. Any firm in any Member State would be able to finance its investment projects through any subsidiary or branch located anywhere in the Banking Union.

Robust transnational banking groups would also improve private risk-sharing mechanisms. With transnational banks operating in different parts of the Union, they would be able to offset losses in one recession-hit region with profits in another, thereby continuing to lend to sound borrowers. Depositors would also contribute to the funding of a more diversified pool of assets, insuring them against shocks specific to their home country.

By facilitating the integration of European banking markets, the Banking Union should also lead to more efficient and safer institutions and better and cheaper banking services for customers.

Moreover, such an effective Banking Union is a step towards a genuine Economic and Monetary Union (EMU), as it will achieve a resilient and growth-friendly banking sector. It also improves the efficiency of the transmission of monetary policy, for which banking activities in the Euro area play an essential role, as the feedback loop between banks and sovereigns would have disappeared and funding costs between banks would converge.

6. See C. Edelman, "why Pan-European banks are now a necessity", *Eurofi Magazine*, September 2024.
7. In 2023, the combined net income of six American GSIBs (JP Morgan Chase, Citigroup, Wells Fargo, Bank of New York Mellon, Goldman Sachs, and Morgan Stanley) totaled $113 billion, which is approximately 2.73 times higher than the combined net income of the six Euro area GSIBs (BNP Paribas, Crédit Agricole, BPCE, Santander, Société Générale, and Deutsche Bank), which amounted to €38.699 billion, or $41.408 billion.
8. F. Villeroy de Galhau, "Ten years of the Single Supervisory Mechanism: great achievements, and new journeys to complete", ACPR, 24 June 2024.

1.2 Apparent synergies exist between the Banking Union and Capital Markets Union

As V. Grilli points out[9], "A true Capital Market Union requires a Banking Union and an integrated and frictionless single market. Considering the amount of work that remains to be done in order to achieve the three, moving ahead simultaneously on all issues would be greatly beneficial to help grow the appeal of the EU's financial markets, as well as build trust and confidence in financial services from consumers across Member States. It would allow for the natural deepening of cross border integration across the Union."

1.2.1 The Banking Union supports the CMU, and the CMU supports the Banking Union

A fully-fledged Banking Union would contribute to the development of the Capital Markets Union (CMU), which would benefit investment and competitiveness in the EU.

Indeed, the Banking Union and the CMU are "mutually reinforcing initiatives that can take the single market for financial services to the next level", as banks and capital markets complement each other in financing the real economy. More specifically, V. Constâncio explains[10] that "a more resilient banking system supports the smooth functioning of capital markets. For example, resilient banks are more likely to act as market makers for certain capital market instruments and can ideally buffer extreme price movements in times of crisis. In addition, well-capitalized banks are less likely to be forced to sell certain asset classes. This leads to less market disruption in times of crisis.

In turn, the CMU supports the Banking Union: more integrated and jointly regulated capital markets would support cross-border activities and bank resilience." V. Constâncio underlines that "in a significantly more integrated capital market, banks would no longer need to develop local expertise for each national capital market. They could more easily exploit cross-border economies of scale by offering similar or even the same products and services in another Member State. By operating in a larger, integrated market, banks would be likely to increase their cross-border asset holdings and build larger and more diversified collateral pools for securitized products and covered bonds."

Securitization acts as a unique link between credit and capital markets. As V. Grilli notes in his interview for the *Eurofi Magazine* (September 2024), "Re-launching and scaling up securitization is an essential component of the CMU, a bridge between the Banking Union and the CMU, and can bring considerable benefits to the European financial system, including by reducing over-reliance on bank funding while encouraging cross border investments. When developed in such a way as to be responsible, prudentially sound and transparent, securitization is an important vehicle to increase the capacity of banks to lend and also for investors to have access to European credit products.

Another benefit of such reform would be the fact that it would significantly free up capital in bank's balance sheet. This increase in capital available could be deployed into corporates, making it easier for them to raise capital in the traditional banking system."

Ultimately, the Banking Union, together with the CMU, can play an important role in enhancing the EU's open strategic autonomy and strengthening confidence in the euro. Strategic autonomy requires, among other things, converging EU economies, a strong and widely used currency, and a resilient, competitive and thriving financial sector. These, in turn, would benefit greatly from, for example, a Euro area safe asset, deep capital markets and a single banking market.

Both larger and more numerous pan European banking groups and larger, deeper and more liquid capital markets are needed in Europe to respond to massive investment needs (digital and climate transitions...).

But to reap the benefits of the synergies between the Banking Union and the CMU, and to achieve effective financial strategic autonomy for the EU, European banks need to be competitive. Otherwise, the development of financial markets will mainly benefit non-EU banks.

1.2.2 The integration of banking and financial markets must be accompanied by an increase in the competitiveness of banking and financial operators

Industrial sovereignty in Europe is unattainable without financial sovereignty, which is the foundation of European sovereignty. To achieve financial sovereignty, it is essential to improve the competitiveness of EU financial institutions, such as banks and asset managers, which has declined significantly over the past 15 years.

Indeed, the EU's economic lag behind its main competitors (the US and Asia) has led to a decline in the competitiveness of European financial institutions.

9. V. Grilli, "The new political cycle brings an opportunity that cannot be missed if we want to achieve a true CMU", Interview for the *Eurofi Magazine*, September 2024.
10. V. Constâncio, "Synergies between banking union and capital markets union", Brussels, 19 May 2017.

The European financial sector has gradually lost market share to its US counterparts in both investment and corporate banking and asset management due to persistently low interest rates, the absence of a single market, and the high regulatory and supervisory burden in Europe.

Financial regulation should be predictable, legally precise, in line with best international practice, and rigorously implemented and enforced, without regulatory arbitrage. The fact that regulators have erred on the side of caution over the past decade is logical after the financial industry caused massive economic losses and chaos in the global financial crisis and in the EU economy. As a result, the EU has not seen the kind of bank failures over the past 13 years that the US has seen recently, with some of its regional banks betting on interest rate futures.

But European financial players complain that there are too many rules that are too detailed, too complex and too burdensome. They argue that the EU legislative process fails to assess the impact of these regulations on the competitiveness of market participants. They also stress that there are several cases of Level 1 texts being gold-plated by regulators or supervisors at Level 2 or 3, in a context where the European financial sector is gradually losing market share to its US counterparts, both in investment and corporate banking and in asset management.

To restore the competitiveness of European players, a fundamental shift in monetary, economic[16] and prudential paradigms in Europe is essential.

At the prudential level, a profound change in the way EU regulations are designed, is needed. We should avoid over-regulation and gold-plating of capital requirements.

Ideally, the official mandate of European regulators and supervisors should be revised to include

Table illustrating the decline in the global competitiveness of European financial players

Sector	Year	European Share (% of Relevant Parameter)	US Share (% of Relevant Parameter)	Notes
Banking[11] (Share of Global Market Capitalization of Banks)	2009	34	23	
	2022	17.5	34	Investor confidence has increasingly favored US banks due to their robust capital structures and profitability, further boosting their market capitalization
Global Capital Markets[12]	2006	18	43.6	
	2022	10	42.5	Decline in the EU due to more dynamic and better-integrated financial markets in the US and Asia
Asset management[13] (Global Funds Market Share)	2007	47	51	
	2022	22	70	Only two European asset managers (Amundi and Natixis) among the world's top 20
Insurance[14] (Share of the Global Insurance Market)	2010	37	32	
	2020	26	45	US's market share rose, showing stronger growth and resilience
Payments Market[15] (Share of the Total Payment Transaction Volumes in the Global Market)	2022	10	60	American players (Visa, Master Card, PayPal, Apple Pay, Google Pay) dominate in most European countries. Reflects technological superiority and lack of competitive European alternatives

11. SIFMA, Capital Markets Fact Book 2022.
12. SIFMA, Capital Markets Fact Book, 2023; McKinsey & Company, Mapping global capital markets: Fifth annual report, 2008.
13. EFAMA, Asset Management Report, 2022.
14. Global Insurance Market Report (GIMAR), 2020; Allianz, Selected Global Insurance Markets, 2020.
15. McKinsey & Company, The 2023 McKinsey Global Payments Report.
16. See Jacques de Larosière's interview in the Eurofi Magazine, September 2024.

objectives for competitiveness and long-term growth, similar to the approach in the US and, from 2023, in the UK[17].

Given the political complexity of changing these mandates, it is essential that any impact assessment of EU legislative proposals in the financial sector better considers the impact on the EU economy and the competitiveness of EU financial actors. This assessment should be carried out again during the trilogue, as the text will have been significantly modified.

1.3 Nonetheless, the benefits of the Banking Union should not be overestimated

Progress on the Banking Union requires, above all, economic convergence among the largest Member States (Germany, France, Italy, Spain) to restore trust among European leaders, without which cooperation is not possible. Economic convergence and sound public finances in all parts of the EU are essential to restore confidence among Member States, break the sovereign-bank doom loop, promote the creation of an EU safe asset and reach a European agreement on a European Deposit Insurance Scheme (EDIS).

Moreover, progress on the Banking Union and the CMU has been hampered by an adverse monetary and economic environment for more than a decade. Interest rates and returns on assets are systematically lower in Europe than in the US, leading Member States with excess savings, such as Germany and the Netherlands, to invest in the US rather than in countries with lower GDP per capita, such as Spain, Italy, Portugal and Greece.

Investment in the US is better remunerated in the US and economic growth is higher there than in the EU, because of economic disparities between large Member States and the lack of common policies in industry, energy, defense and other key sectors.

Differences in national approaches to state aid and bank taxes are additional obstacles to progress in the Banking Union. State aid creates competitive distortions across the EU due to its asymmetric distribution across Member States. Similarly, bank tax proposals in one country can cause turbulence across the EU, as illustrated by the reaction of EU bank share prices to the Italian bank tax proposal[18].

Beyond this adverse economic environment, the development of the CMU requires adjustments that are not linked to progress in the Banking Union:

- Similar returns on EU and US assets in order to avoid capital outflows,
- Long-term saving products[19] (*e.g.* pension funds),
- Stimulation of household investment in equity-like products (taking into account EU retail savers' aversion to risk); this links with the EU Retail Investment Strategy,
- An effective EU market for securitization,
- Rules that do not disincentivize equity financing (listed or not),
- Consolidation and centralized supervision of post-trade market infrastructure located on EU territory,
- (Progressive) harmonization of EU "securities, corporate and insolvency laws",
- A combination of a top-down approach – with a single rulebook regarding listing, market abuse, products, etc, and a bottom-up approach – where each Member State works on developing its capital market.

Moreover, a real Banking Union alone would not create a single market for retail banking services. This would require harmonization of legal, fiscal and consumer protection rules. Without such harmonization, cross-border banking groups would not benefit fully from economies of scale, and cross-border mergers in the retail area would continue to be hampered by this fragmentation.

In addition, the Basel regulatory framework, which increases capital requirements based on the size of the balance sheet, further complicates these mergers. Global systemically important banks (GSIBs) are classified by the Financial Stability Board into five "buckets" with increasing levels of systemic importance and corresponding additional capital requirements[20], although higher SIFI surcharge seems rather limited, according to policymakers, when considering the factors inhibiting the emergence of truly cross border banks in the EU.

Finally, it is important to keep in mind that a major challenge of the Banking Union is to achieve the objectives of an unrestricted single market while allowing for competitive national sub-systems. Steps towards further integration must take into

17. Since 2023, in the UK. Notably, the UK's Financial Conduct Authority now has a secondary objective focusing on international competitiveness and growth, as does its Prudential Regulation Authority. Their mandate includes "facilitating the international competitiveness of the UK economy, particularly the financial services sector, and its growth in the medium to long term."
18. "On August 7, 2023, Italy's vice-president M. Salvini unexpectedly announced a 40% tax on bank windfall profits (...) The markets responded spectacularly, send Italian bank shares plummeting on the Milan Stock Exchange" (Source: "Italy announces tax on bank windfall profits, causing stock to plummet, *Le Monde*, 9 August 2023).
19. Long-term saving products improve the financing of pension regimes (*e.g.* 401K in the US), improve the competitiveness of market activities in Europe and favor the development of EU asset managers.
20. See 2.1.

account the full spectrum of the EU's diversified banking sector. The success of the Banking Union should not be measured solely by the emergence of so-called 'European champions' in the banking sector. This is not a panacea for creating a more stable and efficient banking industry for Europe, its customers and the real economy.

2. Loopholes in the design of the Banking Union make it fragmented and suboptimal

Since the creation of the SSM and the SRM in 2014, significant progress has been made in the Banking Union. The European banking sector has shown remarkable resilience during the Covid-19 crisis, the war in Ukraine, and the banking turmoil of spring 2023. Nevertheless, loopholes exist that make the Banking Union fragmented and suboptimal. The first section explains the problem that persists around the resolution of some domestic Less Significant Institutions (LSIs). The second section examines other key issues such as economic divergence, the home-host dilemma, the sovereign-bank nexus, and ring-fencing practices that hinder the progress of the Banking Union. The third section shows that the existing fragmentation undermines the profitability and competitiveness of the EU banking sector and that, as a result, EU banks lag behind their international peers.

2.1 The SSM has strengthened the resilience of the EU banking system and the EU framework for bank resolution has progressed, although issues remain for the resolution of some domestic Less Significant Institutions (LSIs)

The first pillar of the Banking Union, the SSM, directly supervises the 115 most important Euro area banks (holding almost 82% of European assets). The enhanced regulatory and supervisory reforms implemented over the past 10 years have proven effective: the European banking sector showed remarkable resilience during the banking turmoil of the spring of 2023.

The second pillar, the SRM, needs to be improved, as national authorities continue to mistrust the European framework, especially with regard to crisis management and deposit insurance (CMDI).

European resolution rules have often been divisive, with past disagreements between the SRB and national resolution authorities over the definition of public interest (PI). However, the EU framework has been significantly strengthened over the past decade, particularly for large banks. According to the SRB[21], 97 out of 113 banking groups under the SRB's remit are prepared for resolution and have built up their capabilities to comply with the SRB's Expectations for Banks (EfB) and the steady state MREL[22] Target[23]. In addition, the Single Resolution Fund (SRF) reached 1% of covered deposits, marking the end of the SRF build-up phase and unlocking a significant normalization of earnings for banks, after years of massive contributions weighting on their Returns on Equity.

On April 18, 2023, the European Commission published its proposal to revise the BRRD, SRMR, DGSD and Daisy Chains Directive - the Crisis Management and Deposit Insurance Proposal (CMDI). In particular, the Commission proposed a new public interest test that would increase the number of banks that would be put into resolution (rather than liquidation) in the event of their failure. Of the approximately 2,000 Less Significant Institutions (LSIs) in the Banking Union, only 68 would be earmarked for resolution at the end of 2022. Out of these 68 banks, 25 still fell short of the final MREL target at the end of 2022.

The CMDI proposal is likely to bring additional banks within the scope of resolution, with the aim of strengthening financial stability and avoiding value destruction (where a transfer strategy is less costly than liquidation). It changes the criteria for determining which banks are subject to resolution (*i.e.* the so-called public interest test) but the decision on this matter remains at the discretion of the relevant resolution authorities.

The CMDI also seeks to enhance the funding options available to finance the market exit of these banks in resolution. The DGS bridge would absorb the bank's losses in lieu of deposits after MREL has been exhausted, up to the level of the 8% TOLF.

In effect, CMDI is proposing to make the possibility of using Deposit Guarantee Schemes (DGS) in resolution more practical. To achieve its objectives, the CMDI proposed to remove the DGS super-priority, to introduce a single tier depositor preference and some harmonization of the Least Cost Test (LCT). In other words, the CMDI proposed to change the position of the DGS in the creditor hierarchy by placing it on the same level as uninsured depositors. This change, which is necessary to increase resolution funding, has met with strong industry and some Member States' opposition which has lead to changes in the original Commission's proposal in the opposite direction.

21. "SRB Bi-annual reporting note to the Eurogroup", Single Resolution Board, November 2023.
22. Minimum requirement for own funds and eligible liabilities (MREL) is one of the key tools in resolvability, ensuring that banks maintain a minimum amount of equity and debt to support an effective resolution.
23. Therefore, as of December 2023, the 16 remaining groups under the remit of the SRB would go into liquidation.

Host supervisors fear that if a pan-European banking group fails, capital and liquidity will remain trapped in individual Member States or will be allocated inequitably (*see 2.2.3*). It might be hoped that the progress made on the EU bank resolution framework would at least partially address the concerns of host supervisors and encourage them to lift some ring-fencing practices[24], in particular with respect to liquidity management in cross-border banking groups. Such a decision could send a positive signal to authorities and banks to resume progress on the Banking Union. But this has not yet happened.

EDIS is the third pillar of the Banking Union. In November 2015, the EU Commission presented a proposal for EDIS. Since then, no political agreement has been reached. Support within the industry has also been limited. With EDIS, around 2,200 smaller and regional banks organized in networks fear losing the benefits of their Institutional Protection Schemes (IPS). Large banking groups also see the costs of implementing EDIS as outweighing the benefits.

2.2 The Banking Union faces a number of issues

Ten years after its creation, the Banking Union has not been completed as several key issues persist.

2.2.1 The EU banking sector is hampered by the significant economic divergences between Member States which fosters distrust among national authorities and the SSM and the SRB

The significant fiscal and economic disparities between EU countries, coupled with some Member States' fear of having limited influence over European decisions, make it difficult to define a common interest in Europe. This situation fosters an "every man for himself" mentality and creates a climate of mistrust between Member States. Moreover, these economic disparities make it difficult for EU policymakers to agree on a European safe asset and a mutualized EDIS, thus hindering the completion of the Banking Union.

The heterogeneous economic situations are particularly evident in the differences in public debt levels and current account balances from one Member State to another. For example, in 2023, Germany's public debt was about 63.6% of its GDP, while France's debt was between 110% and 115%, and Italy's debt exceeded 140% of its GDP. Moreover, in 2023, Germany had a substantial current account surplus of 6.9% of GDP, while France and Italy had current account deficits of -2.0% and -1.3% of GDP, respectively.

As long as Member States continue to diverge, significant progress towards the completion of the Banking Union, CMU and EMU will remain elusive. Member States are failing to cooperate due to persistent economic divergences and a lack of mutual trust, which is a prerequisite for a deeper Banking Union.

2.2.2 The sovereign-bank nexus persists not least because of endlessly too high fiscal deficits in certain Member States

Although EU banks now have higher capital and liquidity ratios than in 2012, and the EU banking sector proved resilient during the banking turmoil of the spring of 2023, the Banking Union has not achieved its objective of breaking the sovereign-bank nexus that threatens financial stability.

The persistence of the sovereign-bank loop is not the result of a dysfunction of the SSM or the SRB, but the consequence of fiscal slippages in some countries, exacerbated by the Covid-19 crisis (*i.e.*, the budgetary excesses encourage banks to contribute to the financing of these deficits).

It is also worth noting here that prudential regulations, in particular the Liquidity Covered Ratio (LCR)[25], encourage banks to buy sovereign securities on a massive scale, as they are considered more liquid. In addition, global and EU banking regulations treat sovereign debt as a risk-free investment for banks, allowing them to allocate no capital for such assets.

EU/EEA banks continue to increase their sovereign exposures

According to the EBA[26], the substantial increase in EU/EEA banks' debt securities holdings was mostly driven by sovereign exposures. EU/EEA banks exposures of around €3.4 tn towards sovereign counterparties increased in December 2023 by 8% compared with December 2022 (€3.1 tn). Almost half of these exposures were towards domestically domiciled counterparties, while 27% were towards other EU/EEA countries. Sovereign exposures towards non-EU/EEA domiciled counterparties were slightly above €810 bn, around €80 bn more than a year before.

EU/EEA banks' total exposure to sovereigns is more than twice their equity, while several banks have sovereign exposures that exceed several times their equity. As of December 2023, the reported sovereign exposure of EU/EEA banks was 203% of their CET1 equity. Banks in Central and Eastern as well as Southern Europe generally reported a higher ratio of sovereign exposures to capital.

24. See 2.2.

25. The LCR is a ratio that calculates the minimum amount of High- Quality Assets (HQLA) that financial institutions are required to hold in order to ensure their ongoing ability to meet short term obligations. The ne numerator of the LCR must be composed at least of 60% of Tier 1 assets (cash, central bank reserves, sovereign debts or other 0% weighted assets).

26. EBA – Risk assessment report – July 2024.

According to EBA statistics, the domestic sovereign exposure of EU/EEA banks in December 2023 stood at 6% relative to their total assets, and at 99% compared to their CET1 capital, which means that the risk concentrated on domestic sovereign is still looming.

These figures are 10% and 154% for Italy, 7% and 120% for France and 26% and 317% for Poland respectively.

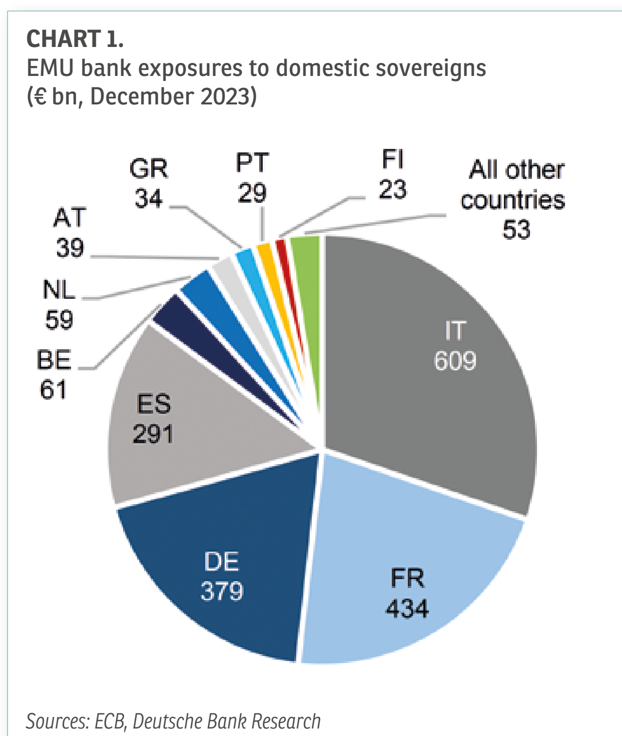
The evolution of sovereign exposure varies significantly among Member States

According to Deutsche Bank Research[27], "Aggregated Euro area banking sector figures mask significant national differences, though, within the monetary Union. Of particular importance are the five largest individual banking markets, which together account for 84% of total EMU bank assets: France, Germany, Italy, Spain, and the Netherlands. In absolute terms, Italian banks have invested the most in domestic sovereign debt, followed by France and Germany.

When considering the Eurozone, relative to total assets, Italian and Spanish banks remain the most exposed, while Dutch banks are the most restrained" (*see Chart 2*).

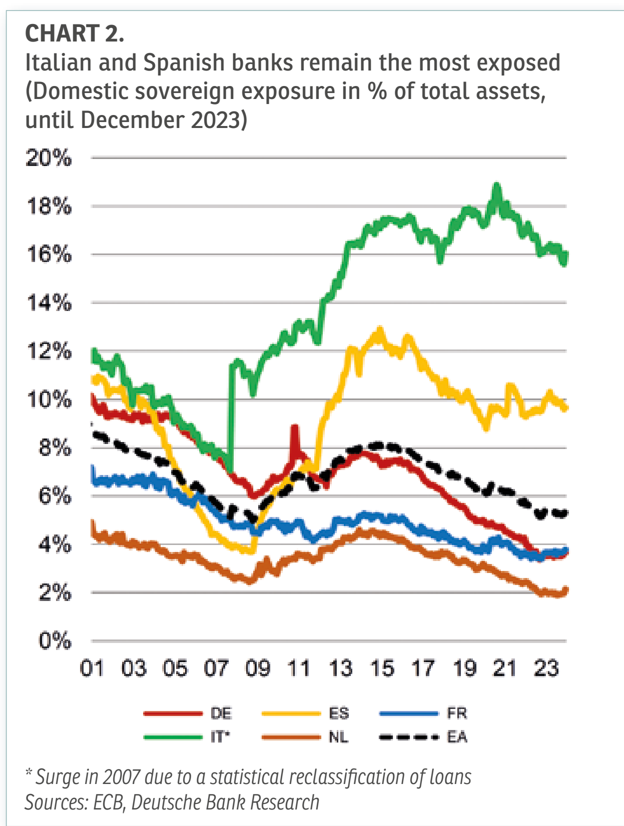
As the graph above shows, Italian banks' holdings of domestic bonds are almost twice as high as those of German banks in terms of value while, according to Eurostat data, the size of the Italian banking sector, in terms of assets held in 2020, is more than half that of the German banking sector (assets of €3,8 tn in Italy compared with 8,9 tn in Germany in 2020).

CHART 1.
EMU bank exposures to domestic sovereigns
(€ bn, December 2023)



Sources: ECB, Deutsche Bank Research

CHART 2.
Italian and Spanish banks remain the most exposed
(Domestic sovereign exposure in % of total assets, until December 2023)



** Surge in 2007 due to a statistical reclassification of loans*
Sources: ECB, Deutsche Bank Research

The home bias remains significantly high, especially in countries with a high level of public debt, such as France, Spain and Italy. On the contrary, countries with healthy fiscal situations tend to be below average; it is namely the case for Germany and the Netherlands. This home bias can find several explanations.

The main reason is that because highly indebted countries have a higher risk profile – This is illustrated by the ratings of Italian (BBB) and Spanish (A) debt, which differ from the AAA-rated German and Dutch debt (according to S&P), their bonds are riskier and therefore not bought by countries with a safer risk profile. For example, German banks will prefer German bonds to Italian bonds because they know that their own bonds are less risky than Italian bonds. Therefore, cross-border diversification by banks remains low, despite the same regulatory treatment for all Euro area sovereign debt[28].

Moreover, loans are also partly responsible for the home bias because bank loans. According to Deutsche Bank Research, "They are mostly taken out by lower levels of government which might explain why there are few cross-border loans. Also, there could be closer business ties between domestic banks and authorities. In addition, diversification has been particularly unattractive for banks in countries with higher sovereign yields, especially in the negative-rate environment."

27. Deutsche Bank Research, "European banks make some progress in diversifying their sovereign exposures", 26 March 2024.
28. Under current rules, there are no capital charges or concentration limits to mitigate sovereign risk on bank balance sheets, although such claims are in scope of the leverage ratio requirement.

Finally, it should be noted in this respect that, as a Eurofi note shows[29], the central bank-sovereign nexus has increased significantly from 2015 to 2022 because of Quantitative Easing (QE) policies. A genuine implementation of Quantitative Tightening (QT) by the ECB will mechanically reduce the central bank-sovereign nexus but should increase the sovereign-bank nexus, especially in highly indebted countries.

As long as all EU Member States do not comply with fiscal rules, the sovereign-bank loop is doomed to remain. Eradicating such a link requires that every Member States achieve fiscal consolidation. It is not the completion of the Banking Union that will resolve this issue, but sound budgetary policies.

2.2.3 The EU banking sector is fragmented along national lines

Despite the creation of the SSM and the SRM, the distinction between home and host authorities, coupled with a persistent 'national bias', still exists for banks operating across borders under the SSM, which contributes to weakening their competitiveness and hindering cross-border mergers.

There is no free flow of capital and liquidity within a banking group in EU countries. Ring-fencing refers to the regulatory and supervisory measures taken by host authorities to secure resources within their own jurisdictions. These measures apply to capital, including the output floor, liquidity, leverage ratio and MREL. In addition, banks must navigate a patchwork of national authorities with differing views on macroprudential rules and conduct. This, combined with tax differentiation, leads to fragmented banking markets.

Capital and liquidity Ratios

While recognized by the Capital Requirements Regulation (CRR), capital and liquidity waivers remain at the discretion of the national supervisors, who are reluctant to grant them[30]. Despite the progress made in terms of harmonization of banking law since the inception of the Banking Union in 2014, cross-border banking groups are unable to manage their capital and liquidity requirements on a consolidated basis. In practice, all capital and liquidity ratios (Liquidity Covered ratio, Net Stable Funding Ratio) are applied at both solo and (sub-) consolidated levels, notwithstanding the possibility of liquidity waivers allowed by the legislation (Article 8, CRR).

This situation will be further worsened with the application of the Output Floor (OF), which has been designed by the Basel Committee on Banking Supervision (BCBS) to set a floor in (consolidated) capital requirements calculated under internal models at 72.5% of those required under standardized approaches.

The transposition of this rule in Europe stipulates that this output floor will be calculated by default at the level of each subsidiary, while leaving open the possibility for a State (typically France or Germany) to authorize a calculation at the consolidated level of all the entities of the same group established on its own territory.

Likewise, the effective implementation of cross-border liquidity waivers, although prescribed by the European legislation, remains far too limited in practice.

The SSM has calculated that, without cross-border liquidity waivers, approximately €250 billion[31] of High-Quality Liquid Assets are prevented from moving freely within the Banking Union. This constraint significantly hampers the efficient allocation of liquidity across Member States and impacts the overall stability and flexibility of the European banking system.

Minimum Requirement for Own Funds and Eligible Liabilities (MREL)

The 'Daisy Chain' directive (2024) introduces significant changes to the Bank Recovery and Resolution Directive (BRRD) and the Single Resolution Mechanism Regulation (SRMR), particularly concerning the treatment of internal MREL within bank resolution groups.

The Daisy Chain amendments set out the concept and scope of liquidation entities and provides the conditions for the application of the consolidated treatment of 'internal MREL'. It includes targeted proportionality requirements to the treatment of 'internal MREL' in bank resolution groups.

Where an MREL instrument is issued by a subsidiary within a banking group and directly or indirectly subscribed by its parent group, it is referred to as 'internal MREL'. The intermediate subsidiary must deduct its holdings of internal MREL instruments in its own subsidiaries from its own MREL capacity to ensure the integrity and loss absorbency of the MREL instruments.

After analysis, the Commission found that the application of the deduction requirement on internal MREL could have a disproportionate detrimental impact for certain banking group structures, namely those operating under a parent holding company and certain operating company structures.

29. D. Cahen and A. Valroff, Banking fragmentation issues in the EU, Eurofi note, September 2023.
30. The CRR permits capital waivers for domestic subsidiaries only (Article 7).
31. Andrea Enria, "How can we make the most of an incomplete banking union?", Ljubljana Eurofi seminar, September 2021.

The new rules also give the resolution authorities the power of setting internal MREL on a sub- basis subject to certain conditions. Where the resolution authority requires an intermediate entity to apply such sub-consolidated treatment, it will not be obliged to deduct its individual holdings of internal MREL instruments in its own subsidiaries, thus logically preventing the detrimental effect identified by the Commission.

In addition, the new rules introduce a specific MREL treatment for 'liquidation entities'. Those are defined as entities within a banking group earmarked for winding-up in accordance with insolvency laws, which would, therefore, not be subject to resolution action (conversion or write-down of MREL instruments).

On this basis and as a rule, liquidation entities will not be obliged to comply with an MREL requirement, unless the resolution authority decides otherwise on a case-by-case basis for financial stability reasons. The own funds of liquidation entities without MREL requirement issued to the intermediate entities will not need to be deducted except when, in aggregate, they represent more than 7% of the own funds and eligible liabilities of the intermediate entity.

The objective is to prevent double-counting and ensure more accurate capital requirements at different levels of the banking group and to enhance the resolvability of banks by ensuring that sufficient resources are pre-positioned within entities that might face resolution.

However, this set of rules (deductions, option to set internal MREL on a sub-consolidated basis or to impose MREL higher than own funds for some liquidation entities) will lead to higher levels of internal MREL, in many cases without possibility to redeploy such means elsewhere in the Group, fueling further fragmentation and hindering free flow of funds within groups.

Leverage Ratio

In the EU, the leverage-based capital requirements are defined as a ratio relative to T1 capital. The stack consists of a minimum requirement of 3%, a potential Pillar 2 Requirement for the Leverage Ratio (P2R LR), an add-on for Global Systemically Important Institutions (LR G-SII buffer) calibrated to 50% of the G-SII buffer requirement in the solvency framework, as well as a Pillar 2 Guidance for the Leverage Ratio (P2G LR).

Macroprudential framework

The European macroprudential framework operates under a regime of minimum harmonization. Most macroprudential requirements are part of the Capital Requirements Directive (CRD), while the main macroprudential measures remain optional for Member States. The ECB's intervention is limited to EU-harmonized measures[32], while many macroprudential powers reside at the national level.

Andrea Enria, highlighted this issue during a speech in Ljubljana. He noted, "The current framework for macroprudential policy is characterized by minimum harmonization, which allows for significant national discretion. This has led to a diverse and sometimes fragmented landscape of macroprudential measures within the Banking Union."

National authorities determine the levels of three capital buffers: the Countercyclical Capital Buffer (CCyB)[33], the Systemic Risk Buffer (SyRB)[34], and the Other Systemically Important Institutions (O-SII) buffer[35].

These three buffers vary widely across the EU, creating an uneven macroprudential landscape. This could be justified as financial cycles differ across EA countries, but the problem is the way these buffers are calibrated and activated which may create inconsistencies.

For instance, as of July 2024, the CCyB, which is designed to counter procyclicality in the financial system, stands at 1% or less in Italy, Spain, France and Germany, whereas it is equal to or greater than 2% in the Netherlands, Sweden, Denmark, Iceland, and Norway.

Similarly, the SyRB varies widely. It ranges from 0%

32. While the macroprudential framework is not centralised by design, the ECB has contributed to the harmonised use of such measures by national authorities, for instance through its floor methodology for the setting of O-SII buffers.
33. The Countercyclical Capital Buffer (CCyB) is a capital buffer which is designed to counter procyclicality in the financial system. When cyclical systemic risk is judged to be increasing, institutions should accumulate capital to create buffers that strengthen the resilience of the banking sector during periods of stress when losses materialise. This will help maintain the supply of credit to the economy and dampen the downswing of the financial cycle. The CCyB can also help dampen excessive credit growth during the upswing of the financial cycle. The CCyB is set for each Member State. The CCyB applicable to each bank is calculated as the sum of each credit exposure weighted by the CCyB rate defined by the Member State where the exposures are located. It generally ranges from 0% to 2.5% of TREA but can exceed 2.5% in some circumstances.
34. The Systemic Risk Buffer (SyRB) addresses systemic risks not covered by the CRR, CCyB, or G-SII/O-SII buffers. The level of the SyRB's can vary across institutions and exposures. The level of the SyRB may vary across institutions or sets of institutions as well as across subsets of exposures. It is cumulative to the O-SII and G-SII buffers. If the SyRB is above 3% (up to 5%) an opinion from the Commission needs to be considered and if the combined O-SII (or G-SII) and SyRB is above 5% then the European Commission needs to provide an authorisation. Since the advent of CRR2/ CRD5, the SyRB can be implemented on a sectoral basis, such as for example targeting only exposures secured by residential real estate in a country.
35. The Other Systemically Important Institutions (O-SII) buffer is assigned to a specific subset of banks that is deemed to be of systemic importance to a specific jurisdiction. The framework supplements the buffers applied to Global Systemically Important Banks (G-SIBs). For an individual bank that is also a G-SII, the level of the O-SII buffer may exceed the level of the G-SII buffer. National authorities identify O-SIIs in their jurisdiction and determine the level of the buffer. The maximum level is 3%, but can be set higher if an NCA receives authorisation from the European Commission.

in France, Spain and Italy, to 3% for all exposures in Sweden and domestic exposure in Iceland, and to 9% for retail exposures secured by residential property in Belgium as of May 2023. Such discrepancies can lead to ring-fencing and undermine the stability and coherence of the European financial system.

Lastly, whilst the EBA has adopted a methodology to identify which banks should be classified as O-SIIs based on their local systemic importance[36], there are wide divergences between the O-SII buffer levels of banks with similar scores in different countries. This is because national authorities have wide discretion deciding on the level of the requirement, and there is no binding link between the level of the buffer and the O-SII score.

According to industry players, no authority currently reviews the aggregate capital requirements for a bank against its actual risk profile, leading to excessive capital requirements for even low-risk banks. While public decision makers recognize the complexity of the institutional framework involving European and national micro and macroprudential authorities, they underline that ECB has a mandate for both micro- and macroprudential supervision and looks holistically at the capital requirements of its supervised banks. In addition, they often state that they have no evidence that capital requirements are excessive in the EU.

Intra-group Dividend Distribution Approval

Several national supervisors tend to submit dividend distribution from subsidiaries to parent entities within cross-border banking groups to their approval, even if these distributions are organized at group level and thus should be supervised by the group supervisor (Joint Supervisory Team, JST) in line with the different macroprudential measures taken, as well as with views to make the group more resilient and agile at the consolidated level.

Pillar 2 Requirements (P2R)

Eventually, subsidiaries of European transnational groups can be required to have increased Pillar 2 Requirements (P2R). Pillar 2 Requirement (P2R) is a mandatory capital requirement that can be set by competent authorities on top of the Pilar1 minimum capital requirement, and below the CBR. P2R serves the purpose of capturing risks, besides the risk of excessive leverage, that are insufficiently or not captured in the Pillar 1 capital requirements. Total P2R has been subject to public disclosure since CRR2/ CRD5.

According to industry players, while the Single Supervisory Mechanism (SSM) is responsible for setting P2R levels, including Pillar 2 Guidance (P2G) for subsidiaries, host countries can – most of the time successfully – submit their proposals to the SSM to increase such levels in order to shield their economy, further contributing to inconsistencies across the Union.

Public decision-makers respond to this argument by pointing out that SREP decisions, both at consolidated level and at subsidiary level (for domestic and non-domestic subsidiaries alike), are taken by the Supervisory Board, based on proposals by the relevant JSTs which include both ECB and NCA staff. There are no separate NCA proposals for individual subsidiaries.

2.2.4 Root causes of ring-fencing practices have been identified but continue to exist

First, ring-fencing is deeply rooted in a general lack of trust, mainly due to the economic and fiscal divergences between the largest Member States described above.

Second, national supervisors still fear that if a pan-European banking group were to fail, capital and liquidity might be trapped in other individual Member States or might be inadequately allocated from their point of view. This perception is particularly acute in countries that rely heavily on banks belonging to groups headquartered in other Member States for the financing of their economies.

In addition, the bad memories of the EU sovereign debt crisis (2011-2012) in some Member States, such as Luxembourg or Belgium, where some foreign banks took over leading national banks, are a fundamental root for ring-fencing measures.

Developing a pan-European financing offer in these host countries to develop investment and the competitiveness of their economies is not an argument shared by these countries, for two reasons:

- Local banks respond well to local financing needs and public demands (national debt financing).
- In these host countries, there are few large companies – they have no financing difficulties – and a very large majority of very small companies that are satisfied with local financing.

In these countries, therefore, there is no apparent need for additional financing. On the contrary, these host countries are afraid of being enslaved and losing control over the financing of their economies by opening up to the offers of non-local banks.

36. https://www.eba.europa.eu/documents/10180/930752/964fa8c7-6f7c-431a-8c34-82d42d112d91/EBA-GL-2014-10%20(Guidelines%20on%20O-SIIs%20Assessment).pdf

2.2.5 The market for retail banking services progresses too slowly: the lack of uniform standards, products and protection rules at the EU level is a barrier to an integrated European banking market which discourages cross-border banking

Despite the EU's single rulebook and the ECB's clarification of the supervisory approach to consolidation, a number of traditional factors such as legal systems, languages and customs remain and fragment banking markets.

In addition, differences in taxation, borrower protection or anti-money laundering rules at Member State level create bank-specific entry and adaptation costs that discourage cross-border banking.
For example, there is no single EU-wide credit registry, as there is in the United States. Moreover, the Rome I Convention stipulates that the consumer protection rules of the consumer's country must be applied. As these rules vary widely from country to country, cross-border retail banking is not possible, except for very simple products such as payments.

Finally, there is a significant diversity of banking products, leading to fragmentation of the EU banking landscape. For example, banks in countries such as Spain, Italy and Germany offer variable interest rates and are therefore directly affected by the ECB's interest rate hikes, while French banks mostly offer fixed interest rates.

2.2.6 The Banking Union is hampered by the lack of cooperation among Member States

Overall, progress on the Banking Union is hampered by the lack of cooperation. One example of that is the outcome of the proposals of the Eurogroup of December 2021 in order to complete the Banking Union. The Eurogroup proposed 4 areas to explore:

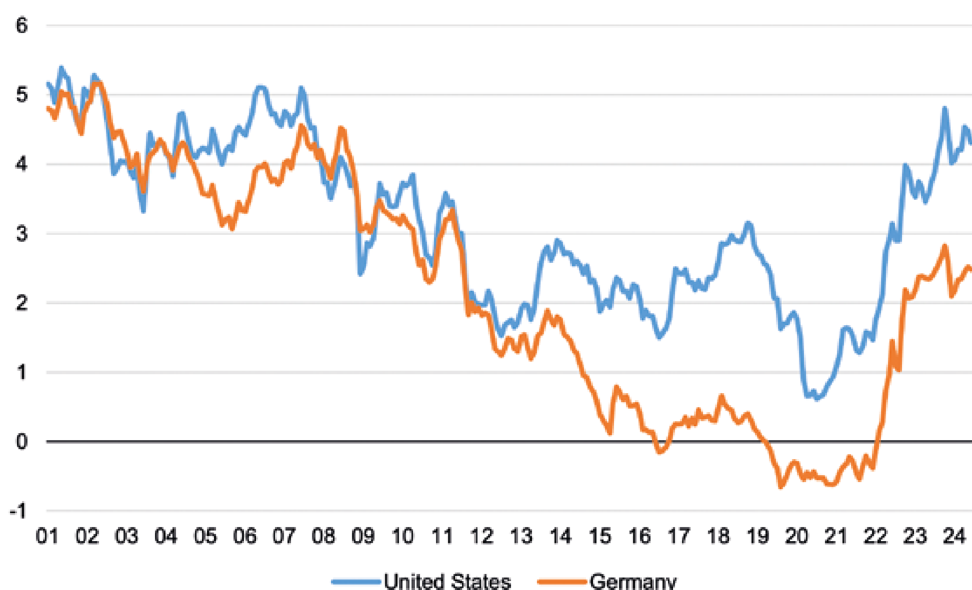
- To strengthen the framework for the management of failing banks in the EU,
- To create a more robust common protection scheme for depositors,
- To facilitate a more integrated single banking market for banking service,
- To encourage greater diversification of banks' sovereign bond holding in the EU.

After six months of discussions, the Eurogroup decided in June 2022 to only focus on strengthening the Crisis Management and Deposit Insurance (CMDI) framework. In the meantime, no further concrete steps are contemplated to improve the single banking market or to tackle the sovereign-bank nexus.

2.2.7 Banking integration in Europe remains limited and the EU lacks private risk sharing mechanisms

Private risk sharing mechanisms work through the credit channel (cross-border lending and borrowing) and the capital market channel (diversified private investment portfolios across Euro area countries). The more risk is shared through banks and markets, the fewer fiscal mechanisms are needed on the public side to address failures. Banking integration through private risk sharing mechanisms is essential to strengthen the EMU but the EU currently lacks such mechanisms.

CHART 3.
10-year sovereign bond yields (%) in the United States and Germany



Source: OECD
Note: Note: the German government bond is considered as a benchmark for a EU safe asset and thus can be compared to the US government bond

As A. Enria already stated in 2018[37], since 2007 in the Euro area, the credit channel has acted more as a shock amplifier than a shock absorber.

Cross-border assets held by banks in the Euro area have hardly changed since the launch of the Banking Union project. Furthermore, the cross-border integration of the sector in the retail area has progressed at a snail's pace in recent years, including after the establishment of the single European banking supervision in 2014. Indeed, the share of cross-border loans to households and cross-border deposits from households in the Euro area remain negligible, a little above 1%.

There is relatively little cross-border retail banking activity, with slow movement towards further integration. Cross-border merger and acquisition activity in banking has been weak. Most lending takes place within national markets. According to the SSM, cross-border lending within the Euro area accounts for 7% of total retail lending, while lending to borrowers outside of the Euro area accounts for 11%[38].

2.3 Fragmentation undermines the profitability and competitiveness of the EU banking sector and as a result, EU banks lag behind their international competitors

Fragmentation has left the European banking sector struggling with overcapacity, as cross-border merger and acquisition (M&A) activity among banks in Europe has declined dramatically since 2000.

As a result, the EU banking sector is overcrowded, putting pressure on banks' margins. Overcapacity is also associated with cost inefficiencies, which are two of the factors behind the structurally low profitability of EU banks. This is a real concern, given that around 70% of economic activity in the EU is financed by bank loans: the profitability of EU banks is all the more important as it can pose a risk to financial stability and the strategic autonomy of the EU if it remains weak.

Moreover, the ECB's Financial Stability Review of November 2023 highlights that the low valuations of bank shares – driven by political and regulatory uncertainty in addition to economic expectations – can also pose a risk to financial stability. In contrast, the profitability of American banks is fostered by several elements. First, growth in the US is stronger than in the EU: Since 1995, real US gross domestic product has increased more than 90 per cent, against the Euro area's more than 50 per cent.

Interest rates are also structurally higher in the US than in the EU as evidenced by Chart 3. The prolonged period of low interest rates has had a negative impact on the profitability of EU banks up to 2022: it has compressed net interest margins – putting them at a disadvantage compared to their US counterparts. In fact, net interest income represented 50% of EU banks' net operating income, and more than 50% of their profit and loss (P&L) was derived from lending and borrowing activities.

Furthermore, U.S. banks benefit from a consolidated single market for banking services, which means there is less competition than in Europe and U.S. banks therefore have greater pricing power, which increases their revenues. Unlike the EU, which has 27 Member States, the US is a single country with a deep and liquid Treasury market, a consolidated post-trade infrastructure (DTCC) and a single set of securities, corporate and insolvency laws.

In addition, the US has a true securitization market[39] with government-sponsored enterprises (GSEs) such as Freddie Mac and Fanny Mae, and benefits from a strong equity financing ecosystem, including long-term savings products (*e.g.*, 401K). Finally, US retail savers tend to be more risk-averse than European savers, possibly due to a more developed financial market that encourages risk-taking behavior.

The overall profitability of EU banks has improved, except during the Covid-19 pandemic, but still lags behind that of US banks.

At the beginning of 2008, the market capitalization of the top Eurozone bank was very similar to that of the top US bank. At the beginning of this year, JPMorgan Chase was worth more than the top 10 Eurozone banks combined. The profitability of the European banking sector has eroded to a level much lower than that of other international players. Since 2008, EU banks have been weakened by weak growth, prolonged negative interest rates, market fragmentation and lack of scale.

European banks are losing ground to competitors, especially US banks, which have a market share four times higher than EU banks. EU banks also have a lower CIB market share than UK and Swiss banks. Thus, European banks remain smaller and less competitive on a global scale than their US counterparts. In 2023, the domestic market share of the top five US banks was 42%, while the top five European banks had only about 28%.

37. A. Enria, Fragmentation in banking markets: crisis legacy and the challenge of Brexit, EBA, 17 September 2018.
38. Speech by Claudia Buch, Chair of the Supervisory Board of the ECB, April 2024.
39. As V. Grilli notes in his interview for the *Eurofi Magazine* (September 2024), "securitization represents 12.5% of GDP in the US (excluding GSEs) and 12% in the UK *vs*. 3% in the EU-27. We can therefore see the potential that securitization has in the EU to advance capital markets union and green finance, although it does not mean that the same levels should be replicated in the EU."

Moreover, the most active European bank in investment banking ranks only ninth globally, well behind the top five, all of which are American. As a result of this size disparity, European banks will capture only 29% of the investment banking fees generated by the top 10 players in Europe in 2023, down from 34% a year earlier[40].

3. Ways forward have been identified but are hampered by the prevalence of national interests over European interests

During the Eurofi Financial Forum of September 2023, officials and industrial representatives have emphasized the need for a mindset shift regarding the completion of the Banking Union and the integration of banking markets. Several ways forward have been identified, but their implementation requires significant will and effort. The first section outlines the main advantages and drawbacks of branchification as well as the reason why banks are reluctant to branchify retail activities. The second section explains that credible support provided by parent companies to Euro area subsidiaries based on European law and European authorities is another way forward to solve the home-host dilemma.

3.1 Branchification offers real benefits for wholesale banking, but branchifying retail activities is impeded by Member States

Branchification is the process of merging all existing subsidiaries into the parent company and only operating through the branches of a single, unified legal entity.

Benefits from branchification include "clearer governance and accountabilities, simpler and more effective balance sheet and liquidity management, avoidance of many duplicated requirements on subsidiaries (capital, liquidity, MREL...), ability to cater for large financing needs (scale benefits from a large balance sheet), one prudential supervisor, improved resolvability, and reduced reporting burden", explains J. Vesala[41], Head of Group Credit at Nordea.

However, many obstacles remain and prevent banks from undergoing this transformation. Indeed, branchification is very difficult to implement in banks that offer retail services as host jurisdictions are often opposed to such a legal structure. It is extremely burdensome and complicated for banks to do business in a country on a daily basis against the directives of the country's government, so it is easier for banks to keep their subsidiaries and avoid possible retaliation. Furthermore, even with a branch structure, national conduct rules need to be followed, and complex and varying macro-prudential rules create unnecessary uncertainty that discourages banks from branchifying.

Additionally, technical obstacles to branchification exist and include legal hurdles and a pressure from host jurisdictions. Though Nordea chose this structure, J. Vesala acknowledges that "the process of branchification remains complex and cumbersome, even in the Nordic region. The challenges include transition uncertainties and the operational burden taking the focus away from regular banking business". For instance, banks aiming to convert a subsidiary into a branch may face problems for the treatment of the contributions to the local Deposit Guarantee Schemes (DGSs). There is no, or at best very limited "portability" of contributions between DGSs. This may represent a technical roadblock to convert a subsidiary in a branch, but it is a technical issue that could be addressed.

3.2 Credible support provided by parent companies to Euro area subsidiaries based on European law and enforced by European authorities is another way forward to solve the home-host dilemma

Authorities in the host Member States may be concerned that, in the event of a crisis, the parent entity might refuse to support local subsidiaries. To address these concerns, European transnational banking groups that wish to operate in an integrated way could decide to commit to providing credible guarantees to each subsidiary located in the Euro area in case of difficulty and before a possible resolution situation ("the outright group support").

This "outright group support" would consist of mobilizing the own funds of the Group to support any difficulties of a subsidiary located in the Euro area. Since the level of own funds and the creation of MRELs have considerably increased the solvency of EU banking groups, they should be able to face up to any difficulty of their subsidiary located in the Euro area.

This group support should be based on EU law and enforced by EU authorities. It could be enshrined in

40. See F. Villeroy de Galhau, "Ten years of SSM: great achievements, and new journeys to complete", ACPR, June 2024.
41. J. Vesala, "Why there is little cross-border branching in the EU", Views, the *Eurofi Magazine*, September 2023.

groups' recovery plans and approved by the supervisory authority – the ECB – which would be neutral, pursuing neither a home nor a host agenda. This would also ensure that the parent company has the necessary own funds to face the possible needs of their subsidiaries.

This commitment is the key condition for these banking groups to define prudential requirements at the consolidated level.

Some believe that a European fund financed by Member States should even be created to be deployed to assist a host country in difficulty due to the failure of a subsidiary of a pan European banking group and thus provide a complete insurance system.

The SSM recognized that such a solution already proposed in a 2018 Eurofi paper, would, at least foster a more positive attitude from national authorities, creating the conditions for legislative change to happen sooner. Yet, due to the lack of confidence among Member States, it is not possible to implement it yet.

4. What to do?

70% of the financing of the European economy is provided by banks, unlike the United States, which finances around 2/3 of its economic development through the markets. The absence of a genuine banking union in such a context has very negative and worrying consequences for the financing of the European economy, the global competitiveness of European banks, the momentum in favour of CMU, and Europe's financial sovereignty: competition for savings remains largely national, the opportunities to deploy capital where it can create the most growth are limited, and the lack of scale means that European banks cannot compete in all aspects of global finance.

However, economic and fiscal fragmentation in Europe is an obstacle to the development of common projects such as the Banking Union because it creates a climate of mistrust between Member States (between indebted and less indebted countries, in particular). Fragmentation also constitutes a risk for the future of the banking sector because it perpetuates the sovereign doom loop in countries with high budget deficits, making the banking sector more fragile in these Member States, less profitable and therefore more vulnerable to shocks.

For several years, the Banking Union has been characterized by the absence of solutions to the 'home-host' dilemma and is currently at an impasse. Paradoxically, all stakeholders seem to be satisfied with the situation: some host countries benefit from the capital of the subsidiaries of large groups to help finance their public debt and national fiscal needs, favoring their interests to the detriment of European ones.

In addition, European G-SIBs are reluctant to grow too much in order not to cross the threshold that requires larger buckets and are satisfied with not having to pay additional financial contributions that would further reduce their profitability (*e.g.* for EDIS).

The projects of making the Banking Union a single jurisdiction and a single European banking license remain out of reach today, especially given the strong economic divergences between major countries and the rise of nationalism in many Member States.

According to many banking players, there is a misunderstanding between them and public decision-makers about the ambitions of the Banking Union. For public authorities, the Banking Union is a temple with three pillars: SSM, SRM and EDIS. Their objective is to put in place the third pillar, which they believe would complete the Banking Union.

For these industry players, this is not the case at all. SSM, SRM and EDIS are administrative items that do not in themselves ensure the emergence of a European banking market with free movement of capital and liquidity within European banking groups. In fact, every year they see the emergence of additional obstacles, such as the principle of applying the output floor at solo level in the banking package, with only the possibility of a derogation at the national level. In reality, they explain that we are moving further away from the 'Banking Union' every year, with the 'improvements' in the administrative columns in no way compensating for the worsening economic and financial fragmentation in Europe.

In the short term, only the creation of a European securitisation market seems feasible and useful for the competitiveness of banks and contributing to the revival of the CMU.

We do not live in an ideal European community: national interests prevail over European goals and benefits. In fact, the proposed solutions are not supported by European political leaders. Moreover, the strengthening and rise of extremism and anti-European nationalism exacerbate this tendency to refuse to move forward in European construction and to leave European projects in a kind of paralysis.

This is not doomed to be the case forever, but without a strong awareness and willingness to act

together as a European community, nothing will change, and the EU will remain in the deadlock it has been in for years. This passivity and inaction are accompanied by the return of nationalism, which takes precedence over the common European interest.

For real integration to take place, fiscal discipline must first be restored to the public finances of countries with excessive debt (France, Italy, Belgium…). In the current tense global context, fiscally virtuous countries are facing a series of difficulties and will not take the additional risk of paying for the budgetary slippage of these countries.

Once all Member States have made sustainable adjustments, it will be easier to move towards the Banking Union and the CMU. Only with strong political will and cooperative determination can the EU overcome the current impasse and realize the full potential of a full Banking Union.

Baron Louis, Minister of Finance in France said to his government around 1820: "Faites-moi de la bonne politique et je vous ferai de la bonne finance", which can be translated as "Make good policies, and I will bring you good finance."

We could say under his tutelage and inspiration: "Do the structural reforms, eliminate excessive disequilibria, converge our economies symmetrically, show a little more kindness on risk sharing and I will bring you a Banking Union". In other words, it is not only the Union that makes the Force, but also the Force that makes the Union: only strong Member States – which have corrected their fiscal imbalances and are effectively converging economically among themselves – will make Europe stronger.

Basel III implementation: preserving EU banks' capacity to finance the economy

Note written for Eurofi by Véronique Ormezzano

Key messages

- EU banks are now recognized as well capitalised, with a CET1 capital amount that has more than doubled since the Global Financial Crisis, a CET1 ratio that has reached at 31st Dec 2023 an all-time high of 16%[1], up from 6% in 2011, and a shock absorbency capacity confirmed in stress tests.
- However, their competitiveness remains lower than their non-EU peers. Their ROE, boosted by a rise in Net Interest Margin (+17 bps in 2023 vs 2022), has reached around 10%[2] in 2023, covering (at last) their cost of equity[3], and helping valuations to somewhat recover. However, it is likely to decline in 2024 as higher funding costs squeeze margins and the cost of risk likely rises.
- The "finalisation of Basel III", which will be implemented in the EU from 1 January 2025, as planned, will significantly impact EU banks' Risk-Weighted Assets (RWA), with a 10.7% increase, and 15.1% for G-SIIs[4]. While the Output Floor is the single most important driver, and benefits from a phase-in until 2030, the combined other drivers represent half of the increase for G-SIIs, and will therefore materialize as early as Q1 2025.
- Given the remaining high degree of uncertainty in timing and substance of implementation in the US and, to a lesser extent, in the UK, this would further deteriorate the competitiveness of EU banks, and further reduce the EU's sovereignty in the financing its investment needs.
- However, there remains significant room for maneuver to either worsen or improve the situation, in the course of implementation of CRR3 in the next few months.
  - On one hand, the impact on EU banks may be significantly worsened if level 2 and 3 texts are weighing on the conservative side compared to the level 1 text, a real risk given the large number of mandates given to the EBA.
  - On the other hand, the RWA inflation should be financed by the capital buffers accumulated by banks, subject to a reduction of CET1 ratio targets being allowed by supervisors. Indeed, the EBA reports that "the first driver to hold a management buffer target is to anticipate regulatory changes"[5]. It would therefore be natural that when this change materializes, the buffer is released.

It is critical that a clear policy be articulated and communicated to the market in the next few months as regards this recalibration of buffers. This would be a way for the EU to implement its commitment faithfully, while avoiding fragilizing its banking sector, which finances the bulk of the EU economy. Otherwise, if EU banks face the obligation to maintain their target ratio at or close to the current level, they will have to accumulate up to €200 bn of additional CET1 capital, with serious impact on financial stability, and freezing up to 1.2 trn of potential additional lending, at the expense of the European economy.

1. EBA RISK ASSESSMENT REPORT – July 2024 - https://www.eba.europa.eu/sites/default/files/2024-07/9604ba14-0ec4-4236-94e9-b07cb79db918/Risk%20assessment%20report%20%20July%202024.pdf
2. Id.
3. S&P Global estimates EU banks cost of equity to range from 8 to 12% depending on countries. Source: S&P Global - European Banks' Earnings Top Equity Costs, For Now – March 2024 https://www.spglobal.com/ratings/en/research/articles/240319-your-three-minutes-in-banking-european-banks-earnings-top-equity-costs-for-now-13041748
4. EBA BASEL III MONITORING EXERCISE – RESULTS BASED ON DATA AS OF 31 December 2022 (ANNEX – ANALYSIS OF EU SPECIFIC ADJUSTMENTS) September 2023 – Table 2 EBA QIS data (December 2022), sample 157 banks
5. EBA STACKING ORDERS AND CAPITAL BUFFRS – July 2024 https://www.eba.europa.eu/sites/default/files/2024-07/3f548b65-873a-4f0d-ab5a-094cd18dee33/Report%20on%20stacking%20orders%20and%20capital%20buffers.pdf

1. EU banks are well capitalised

Regulators and supervisors are now regularly communicating on the resilience and high capitalisation of EU banks, which has been demonstrated through various angles.

1.1 EU banks' average CET1 ratio has reached as of Dec 2023 a record high of 16%, a much higher level than international peers

As shown in the BCBS Monitoring report, the CET1 ratio of European banks has continuously increased in the last decade, reaching 15% in June 2023, and 16% as per EBC figures as of December 2023 (*see Figure 1*).

This increase is in contrast with the stabilisation of CET1 ratios in other jurisdictions around 12.5% since 2017.

The BCBS comments that "Across all regions and groups, the drivers of the change in capital ratios were mixed. Capital ratios in the Americas remained flat due to similar-size changes in Tier 1 capital and RWA. The rise in capital ratios in Europe was attributable to capital increasing at a greater pace than RWA, and the decline in capital ratios for the rest of the world was due to an increase in RWA."

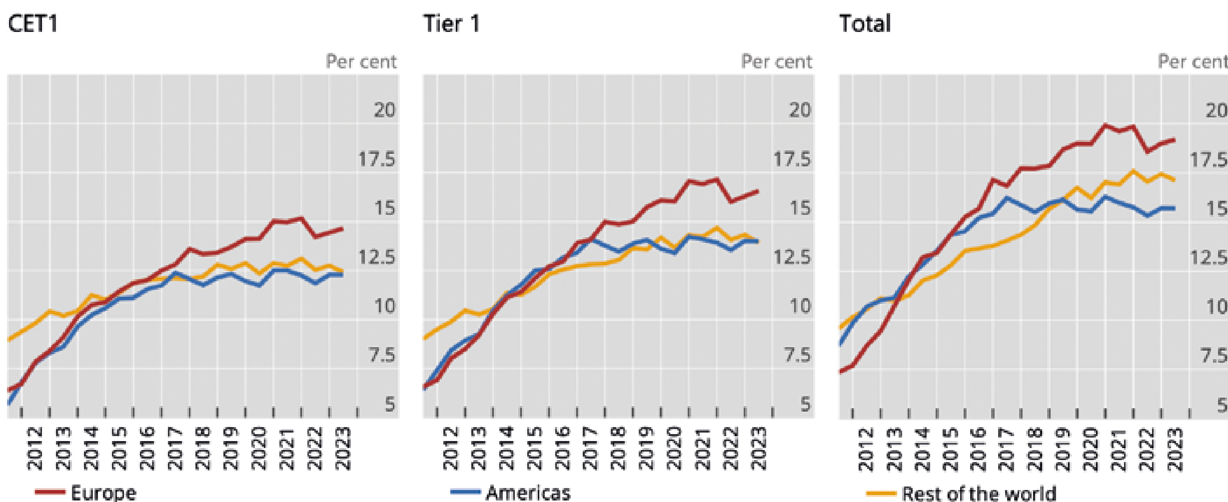
1.2 In the EU, this continuous increase since 2014 was achieved through a combination of earnings retention and subdued RWA growth

Indeed, European banks have achieved this record CET1 ratio by accumulating capital through earnings retention, and low RWA growth.

As per the EBA Dashboard[7], since 2014, the CET1 capital amount of EU banks increased by close to 40%, while the RWAs have only increased by 10%. Such a low RWA cumulated increase over a decade, not adjusted by inflation, and while TRIM and the IRB repair program have rather increased RW density of loan portfolios, shows that banks have been highly constrained in volume growth, which impacted their profitability and reduced their capacity to finance the EU's economic growth, at the benefit of non-EU banks and non-banks. In particular, unlike their peers, European banks have reduced the availability of higher-risk loans – and, therefore, their contribution to financing the productive economy – rather than raise or generate additional capital, due to subdued profitability and valuation. (*see Figure 2*)

This very high level of CET1 accumulation is in response to ever increasing buffer requirements by supervisors and macro-prudential authorities, and on top of them, ever higher "management buffers",

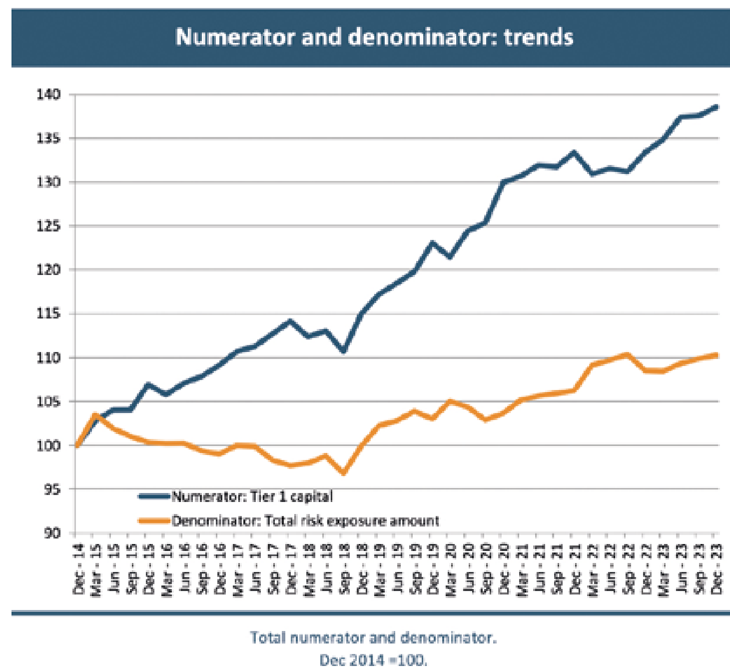
FIGURE 1.
Evolution of Capital ratios by region
Initial Basel III CET1, Tier 1 and total capital ratios, by region
Group 1 banks, balanced data set



Source: BCBS Monitoring Report, March 2024, Data as of June 2023 – https://www.bis.org/bcbs/publ/d570.pdf [6]

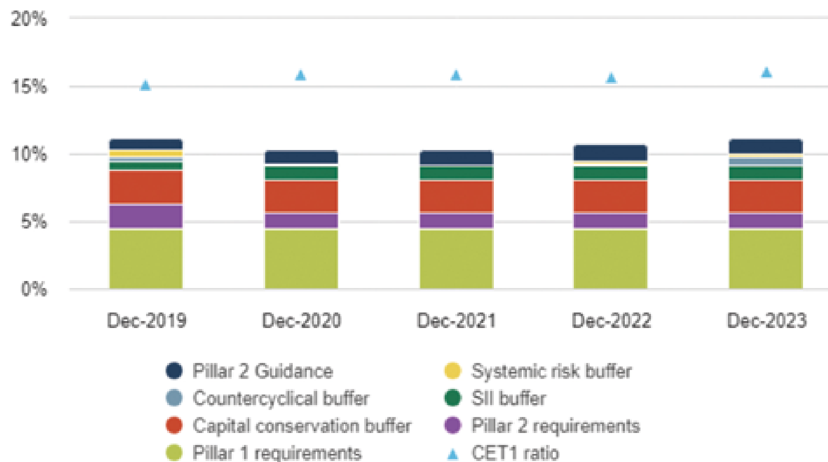
6. The BCBS sample includes 178 banks, including 112 Group 1 banks and 65 Group 2 banks. Group 1 banks are those that have Tier 1 capital of more than €3 billion and are internationally active. Only 12 US banks have contributed to the QIS exercise, given the limited scope of application of BCBS standards in the US. 40 banks are included in the European sample, o/w 30 in the EU.
7. EBA Risk Dashboard – Q1 2024 - https://www.eba.europa.eu/sites/default/files/2024-06/b4a17394-1285-4b4e-923e-642a2f725d7e/EBA%20Dashboard%20-%20Q1%202024.pdf

FIGURE 2.
Evolution of CET1 capital and Risk Weighted Assets[8]



Source: EBA

FIGURE 3.
Evolution of Capital requirement and guidance vs reported CET1 ratios



Source: EBA supervisory reporting data

notably anticipating the future impact of CRR3. The EBA graph below (*see Figure 3*) shows the ongoing increase in capital buffers requirements since 2020 (a "low" point where contracyclical buffers had been reduced due to Covid-19), and the ample capital headroom on top of them.[9]

Those two trends are analysed below.

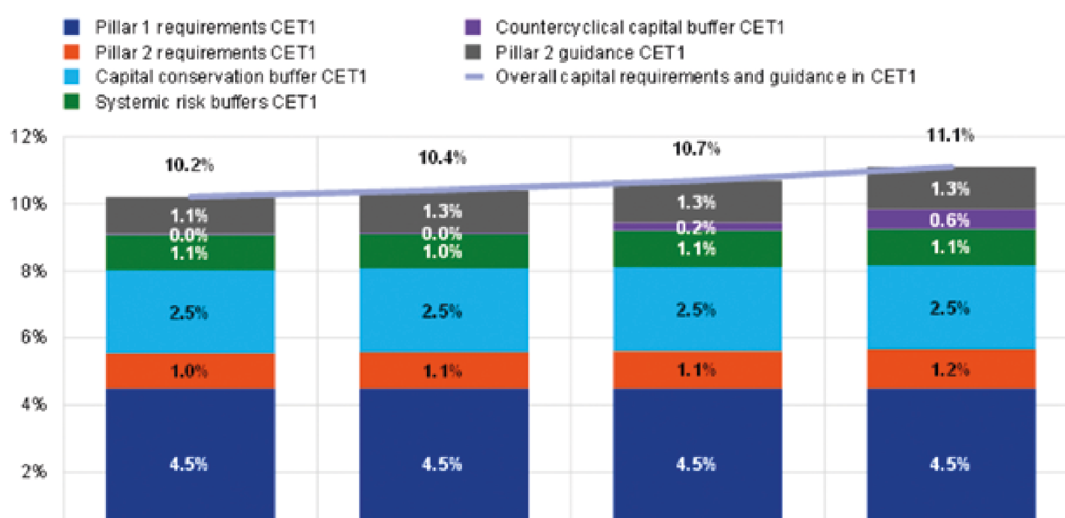
1.2.1 Evolution of buffer requirements

The ECB Aggregated results of SREP 2023[10] shows the evolution of the overall CET1 capital requirements and guidance. It increased by 0.9 pp since 2021 to reach an average of 11.1% to be reached by EU banks in 2024 (*see Figure 4*).

From 2023 to 2024 alone, the average overall capital requirements and guidance increased by a further 0,4 pp (mostly due to increases in CCyB and in P2R), absorbing most of the CET1 capital accumulated by EU banks which amounted to 0.5 pp during the same period (from a CET1 ratio of 15.4% to 15.9%). The EBA notes "EU/EEA banks' CET1 headroom above overall capital requirements (OCR) and Pillar 2 Guidance (P2G)

8. EBA Risk Dashboard - https://www.eba.europa.eu/sites/default/files/2024-04/b26d6541-df25-498c-adbe-9702c031c8e9/EBA%20Dashboard%20-%20Q4%20 2023.pdf
9. EBA - RISK ASSESSMENT REPORT – July 2024 - https://www.eba.europa.eu/sites/default/files/2024-07/9604ba14-0ec4-4236-94e9-b07cb79db918/Risk%20 assessment%20report%20%20July%202024.pdf
10. ECB Aggregated SREP results 2023 - https://www.bankingsupervision.europa.eu/banking/srep/2023/html/ssm.srep202312_aggregatedresults2023.en.html

FIGURE 4.
Evolution of the Overall Capital Requirement and Guidance



Source: ECB A Aggregated SREP Results 2023

has remained at comfortable levels. This is due to a nearly parallel rise in CET1 ratios and respective requirements." in its Risk Assessment Report.

Said otherwise, this means that 80% of the earnings retention of EU banks in 2023 had to be allocated to cover the increase in capital requirements on the existing portfolio, and that only 20% of this additional capital was available for the financing of new business. No surprise if EU banks' shares remain unattractive for investors... And if such a trend were to continue, needless to say that banks would not be in a position to contribute to the financing of the EU renewed ambitions.

Such a level of buffer requirements is also to be compared to the BCBS framework, which includes:

- a minimum CET1 capital ratio requirement of 4.5%
- a Capital Conservation Buffer of 2.5 percent
- if applicable, a capital surcharge for G-SIBs, which is at least 1%
- a Countracyclical Buffer

leading to a minimum of 7% minimum CET1 ratio which, based on the EU G-SIBs and CCyB buffers above, would translate into a minimum of 8.7% (7% + G-SIB + CCyB).

The BCBS also includes a Pillar 2 concept, but does not provide prescriptive guidance as to whether it should be applied or how it should be calibrated, leaving it to competent authorities' supervisory judgment.

1.2.2 Why have the banks accumulated so much capital on top of the already elevated buffer requirements?

In its Risk Assessment Report, the EBA comments: "EU/EEA banks' CET1 headroom above OCR – which consist of Pillar 1, Pillar 2 and the combined buffer requirements – and P2G, have remained at comfortable levels. They rose slightly YoY, reaching nearly 500 bps as of Q4 2023 (around 490 bps in Q4 2022)."

The EBA has analysed in detail this subject in a study called "Stacking Orders And Capital Buffers"[11].

First of all, the EU prudential and resolution framework is conducive to the establishment of additional buffers on top of the capital requirements, unlike other jurisdictions.

Citing the EBA, "in addition to minimum requirements, buffer requirements and Pillar 2 requirements and guidance, institutions are also required to determine their own internal requirements. Following their internal processes and given their own strategies and risk appetite, EU institutions may hold additional financial resources in the form of own funds and/or eligible liabilities above the applicable minimum requirements (including possibly P2G). In accordance with EBA guidelines on recovery triggers, **banks are expected to set triggers above levels requiring supervisory intervention.** Therefore, recovery triggers should be set sufficiently above capital and leverage requirements / TLAC / MREL plus CBR. Moreover, from a prudential standpoint, institutions are also required to define their risk

11. EBA - STACKING ORDERS AND CAPITAL BUFFERS – July 2024 - https://www.eba.europa.eu/sites/default/files/2024-07/3f548b65-873a-4f0d-ab5a-094cd18dee33/Report%20on%20stacking%20orders%20and%20capital%20buffers.pdf

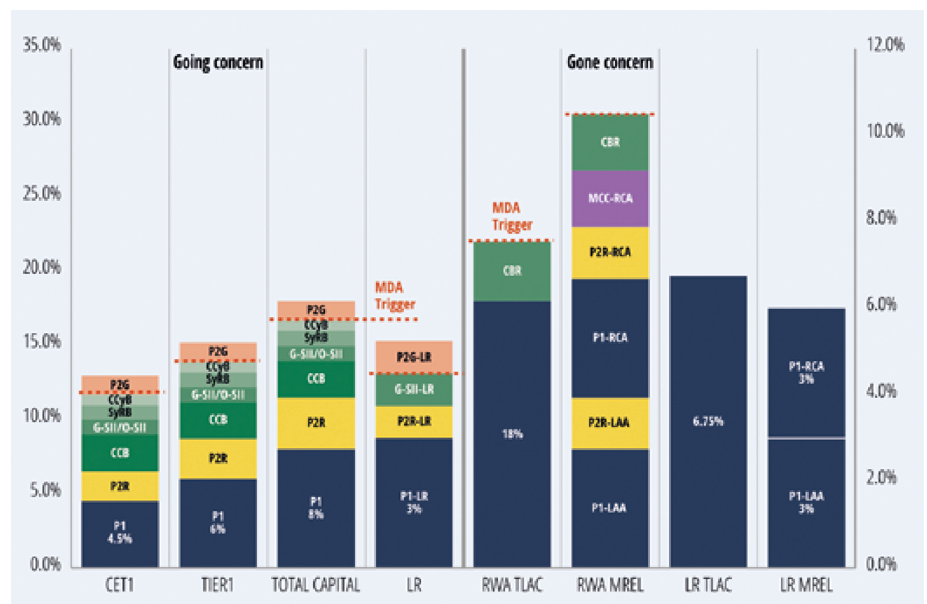
appetite statements and to develop their risk appetite framework around a set of limits and early warning triggers **which imply a higher level of financial resources. Competent authorities may also set more specific expectations for additional management buffers.** For example, **the SSM's ICAAP guide states that 'the institution is expected to assess and define management buffers above the regulatory and supervisory minima and internal capital needs that allow it to sustainably follow its strategy."**

Second, the capital target must allow the bank to comply not only with the CET1 requirement, but all capital stacks. The EBA identifies up to 10 different capital requirements that need to be met: "EU G-SIIs are subject to four going concern capital requirements (between solvency and leverage) and up to six gone concern ones (from a risk-based and leverage perspective), which can be illustrated graphically as in *Figure 5*. For simplicity neither the subordinated MREL requirement, expressed as % TREA and % TEM, nor the 8% TLOF rule have been included." The additional complexity introduced in CRR3 with the output floor is not taken into account either.

"As can be seen from the figure, multiple Maximum Distributable Amounts (MDA) thresholds apply. First in the risk-based own funds stack (CET1, T1 and TC), second in the leverage ratio stack (for G-SIIs only) and third in the risk-based TLAC (G-SIIs only) and MREL stacks. The process to restrict MDA is triggered upon breach of CBR (G-SII LR buffer requirement for the LR stack)."

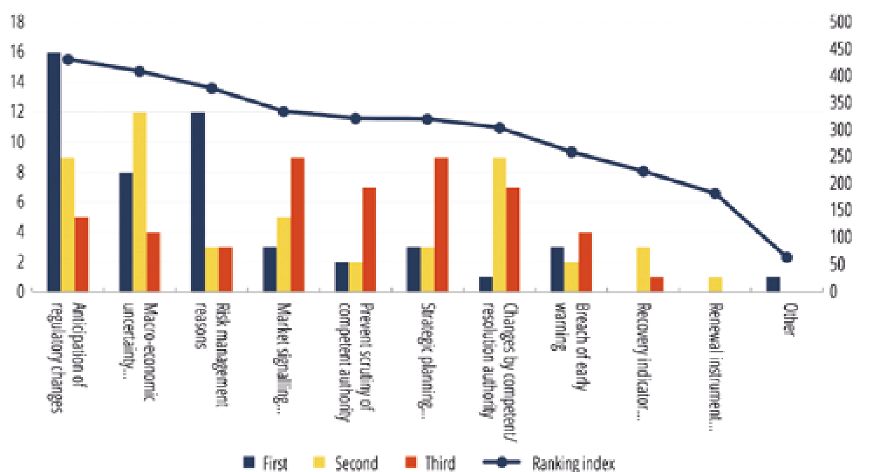
Maintaining a sufficient Distance to MDA for all metrics has therefore become a major aspect of capital management, and "Distance to MDA" is a key indicator of resilience for equity and debt investors. In practice, this means that the target level of capital must be set as a function of the most binding constraint(s), which can be, depending

FIGURE 5.
EU capital requirement framework



Source: EBA - Stacking Orders and Capital Buffers

FIGURE 6.
Ranking of drivers to set a management buffer



Source: EBA - Stacking Orders and Capital Buffers

on the risk profile of each bank, the Risk based capital ratio, the leverage ratio, the TLAC/MREL ratios...

The room for reducing the management buffer is therefore not necessarily only a function of the evolution of RWAs, although there are some interactions between the stacks, for example, the TLAC stack also includes the capital buffer requirement, so would be positively impacted by a reduction in CET1 buffers.

Finally, the EBA reported the outcome of a survey of banks about their practices on management buffers. This survey shows that the primary driver for banks in setting up CET1 targets is the need to "anticipate changes in regulation" (*see Figure 6)*.

This finding confirms that banks have accumulated capital above the buffer requirements and guidance in order to anticipate the impact of CRR3, and that they are well prepared to absorb this shock while continuing lending to the economy, without the need to further increase their capital.

1.3 Banks' shock absorbing capacity is confirmed in stress tests

In the last stress test, conducted in 2023, EU banks were submitted to an extreme shock, combining a 6% decline in GDP over the 3-years period, large drops in Retail and Commercial Real Estate prices, and higher interest and credit spreads, reflecting an underlying assumption of higher and more persistent inflation.

Such scenario translates into simulated losses of €496 bn, a level much higher than observed losses during the Global Financial Crisis.

Despite this severity, EU banks' stressed CET1 ratio remained at 10.4%. According to the EBA[12], "The results of the stress test indicate that on average banks finish the exercise in the adverse scenario with a Common Equity Tier 1 (CET1) ratio above 10% and shows that banks can continue to support the economy also in times of severe stress". The ECB communication[13] is more sober and states that "The stress test results show that the euro area banking sector is overall resilient to a severe economic downturn, as represented in the adverse scenario."

European authorities refrain however to set an explicit minimum level post stress, contrary to their US counterparts.

The FED communication[14] is very clear that banks need to comply only with the 4.5% minimum Pillar 1 CET1 requirement post stress, making all buffers explicitly "usable" to cover stressed losses, as per their "raison d'être" (*see Figure 7*).

Instead, the more ambiguous European communication leads banks to accumulate "buffers on top of the buffers". This reopens the debate on the usability of buffers which was initiated after Covid-19 and remained inconclusive.

Given a record high level of CET1 ratio, and a proven capacity to absorb massive losses, a logical conclusion should be that EU banks do not need to further increase their level of capital, a

FIGURE 7.
FED communication on 2023 Stress tests

Aggregate capital ratios, actual, projected 2023:Q1–2025:Q1, and regulatory minimums
Percent

Regulatory ratio	Actual 2022:Q4	Stressed minimum capital ratios, severely adverse	Minimum regulatory capital ratios
Common equity tier 1 capital ratio	12.4	9.9	4.5
Tier 1 capital ratio	14.1	11.6	6.0
Total capital ratio	16.1	13.9	8.0
Tier 1 leverage ratio	7.5	6.1	4.0
Supplementary leverage ratio	6.3	5.1	3.0

Source: Dodd-Frank Act Stress Test 2023: Supervisory Stress Test Results - June 2023
Note: The capital ratios are calculated using the capital action assumptions provided within the supervisory stress testing rules. See 12 C.F.R. §238.132(d); 12 C.F.R. §252.44(c). These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. The minimum capital ratios are for the period 2023:Q1 to 2025:Q1. Supplementary laverage ratio projections only include estimates for banks subject to Category I. II. or III standards.

12. EBA - 2023 EU-WIDE STRESS TEST RESULTS - 28 July 2023 https://www.eba.europa.eu/sites/default/files/document_library/Risk%20Analysis%20and%20Data/EU-wide%20Stress%20Testing/2023/Results/1061374/2023-EU-wide-stress-test-Results.pdf
13. ECB - 2023 stress test of euro area banks Final results - July 2023 https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.Report_2023_Stress_Test~96bb5a3af8.en.pdf
14. FED - Dodd-Frank Act Stress Test 2023: Supervisory Stress Test Results - June 2023 https://www.federalreserve.gov/publications/2023-june-dodd-frank-act-stress-test-executive-summary.htm

message which also resonates with on one hand, the G20[15] and ECOFIN statements that the implementation of the final Basel III should not lead to a significant capital increase, and on the other hand, with the EBA monitoring report[16] which concludes that, despite the significant increase in RWAs, EU banks show a minimal capital shortfall.

2. However, the competitiveness of the EU banking sector remains low

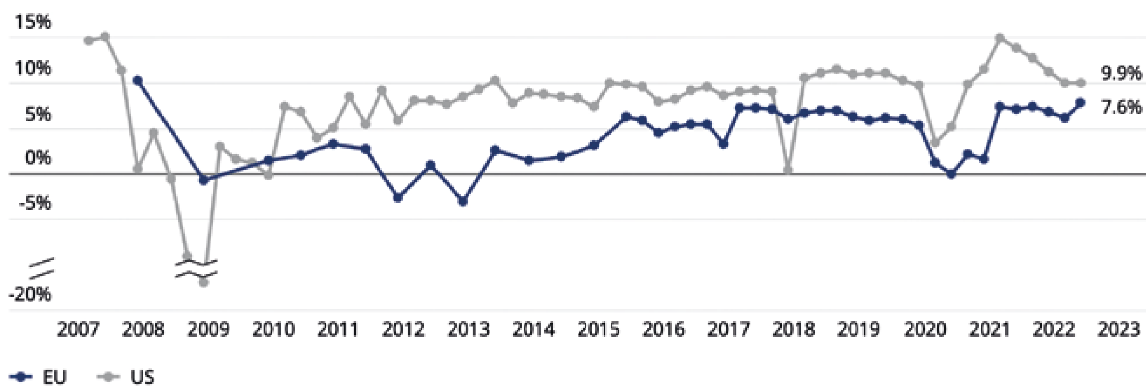
EU banks' competitiveness remains lower than their non-EU peers. Since the Global Financial Crisis, their RoE as been consistently lower than their US peers, while their cost of equity has been consistently higher, weighing on their valuations.

In 2023, EU banks' ROE, boosted by a rise in Net Interest Margin (+17 bps in 2023 vs 2022), has reached around 10% in 2023, covering (at last) their cost of equity, and helping valuations to somewhat recover. However, after a peak in Q2/Q3 2023, RoEs have started to decline in Q4 2023, at 9.31% as higher funding costs squeeze margins and the cost of risk likely rises.

In this context, while EU banks' profitability has reached multi-year highs in 2023, bank equity valuations has not substantially exceeded pre-pandemic levels.

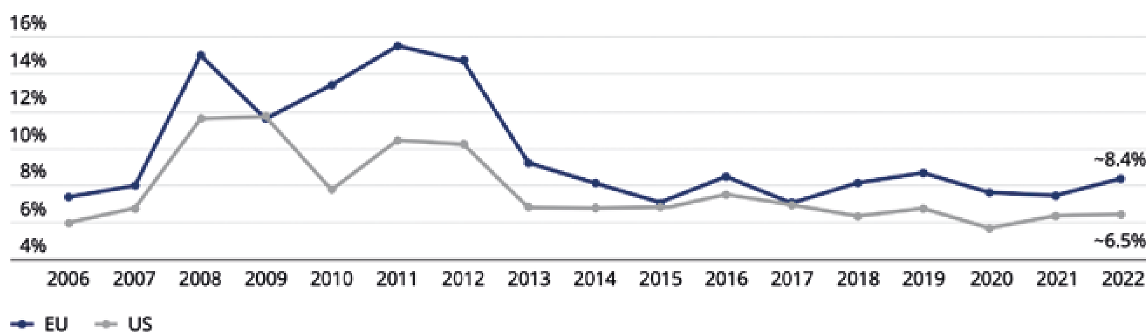
Weak bank stock valuations and a high COE increase the cost of lending to the real economy and make it harder for banks to raise capital. Uncertainty about the outlook for bank profits and asset quality, coupled with concerns about the sustainability of dividend payouts following announcements of

FIGURE 8.
Comparison of RoE between EU and US banks)[17]



Source: Oliver Wyman, based on data from Eurostat, AFME and SIFMA – January 2023

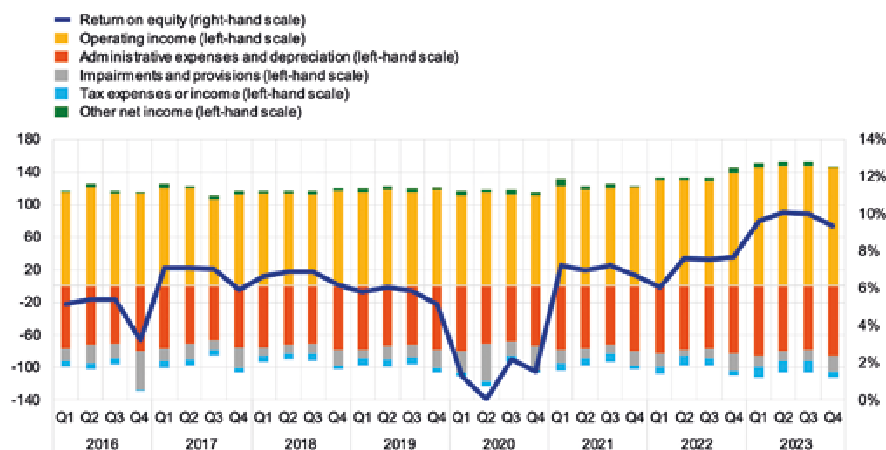
FIGURE 9.
Comparison of Cost of Equity between EU banks and US banks



Source: Oliver Wyman, based on data from Eurostat, AFME and SIFMA – January 2023

15. Communiqué of the G20 Finance Ministers and Central Bank Governors Meeting on 17-18 March 2017, available at http://www.g20.utoronto.ca/2017/170318-finance-en.pdf.
16. EBA - BASEL III MONITORING EXERCISE – RESULTS BASED ON DATA AS OF 31 December 2022 (ANNEX – ANALYSIS OF EU SPECIFIC ADJUSTMENTS) - September 2023 https://www.eba.europa.eu/sites/default/files/document_library/Publications/Reports/2023/Basel%20III%20monitoring%20report/1062188/Annex%20to%20Basel%20III%20monitoring%20report%20as%20of%20December%202022%20-%20EU-specific%20Analysis.pdf
17. Oliver Wyman, based on data from Eurostat, AFME and SIFMA – January 2023 https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2023/jan/The-EU-banking-regulatory-framework-and-its-impact-on-banks-and-economy-.pdf

FIGURE 10.
RoE of SSM supervised banks – recent trends[18]
(in billions of euros; as a percentage)

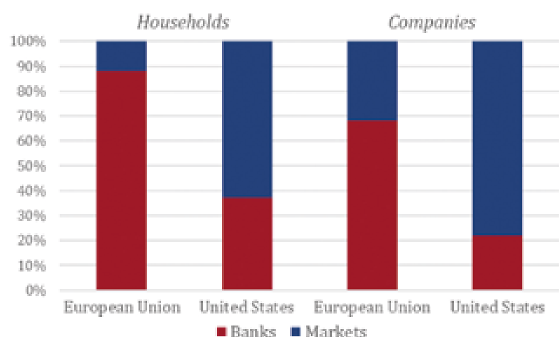


Source: Press release from the Banque de France

higher bank taxes, is contributing to the stagnant valuations and persistently high equity risk premia observed in the euro area banking sector. In the long run, this may adversely affect financial stability as banks which are valued by investors at a discount will likely find it more challenging to raise new equity when needed. As capital required to support lending is remunerated by lending rates, weak valuations translate directly into stricter terms and conditions for finance to the real economy.[19]

The European economy is mostly financed by banks. In the EU, banks account for 90% of household debt and 70% of business debt. By comparison, these figures are just 40% and 20% respectively in the United States (*see Figure 11*). Banks therefore meet the vast majority of financing needs in Europe, whereas the markets play a prominent role in the United States. Yet, it is to be noted that this market dominance in the US does not exclude banks from the equation altogether: they act as market makers and originate assets, which are then traded on the markets (securitisation).

FIGURE 11.
Banks and Capital Markets as a share of household and corporate funding, EU and United States, 2022[20]



Source: Oliver Wyman, based on data from Eurostat, AFME and SIFMA – January 2023

As such, and even if European authorities intend to give a new impetus to the Capital Market Union, banks need to play an important role in the financing of the European renewed investment ambitions, which will require additional capital to be generated organically or raised in the market. To note, a substantial scale-up of the securitisation market would be part of the solution, as it would allow banks to maintain or grow their lending origination while transferring part of the risk to market participants, reducing their additional capital need.

3. At the same time, the "finalisation of Basel III" will significantly impact EU banks' Risk-Weighted Assets (RWA)

Despite some (mostly temporary) adjustments, considering "European specificities", the impact of CRR3 will remain significant: indeed, the implementation of CRR3 is estimated by EBA to translate into a risk-weighted asset (RWA) increase by 15.1% for EU G-SIIs, and by 10.7% for all banks, an increase that will inevitably weigh on the EU banking sector capacity to finance the EU households and businesses.

While the Output Floor is the single most important driver, and benefits from a phase-in until 2030, the combined other drivers represent half of the increase for G-SIIs, and will therefore materialize as early as Q1 2025.

The impact of Basel III on EU banks is even more critical at a point where total uncertainty remains on the timing and content of the US implementation

18. https://www.banque-france.fr/fr/communiques-de-presse/la-bce-publie-des-statistiques-de-supervision-bancaire-sur-les-etablissements-importants-pour-le-1#:~:text=Le%20rendement%20annualis%C3%A9%20agr%C3%A9g%C3%A9%20des,%25%20au%20quatri%C3%A8me%20trimestre%202022).
19. ECB - Euro area bank fundamentals, valuations and cost of equity – November 2023 https://www.ecb.europa.eu/press/financial-stability-publications/fsr/focus/2023/html/ecb.fsrbox202311_05~519e436375.en.html
20. Oliver Wyman, based on data from Eurostat, AFME and SIFMA – January 2023 https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2023/jan/The-EU-banking-regulatory-framework-and-its-impact-on-banks-and-economy-.pdf

FIGURE 12.
Increase in Minimum Capital Requirement in the Basel III and EU specific implementation[21]

Bank group	Scenario	Credit risk				Market risk	CVA	Op Risk	Output floor	Other Pillar 1	Total risk-based	Revised LR	Total
		SA	IRB	Securitisation	CCPs								
All banks	Basel III (ILM = 1)	2.6	1.6	0.0	0.0	1.2	2.4	2.2	6.8	-0.4	16.3	-3.8	12.6
	Delta	*-1.4*	*-2.2*	*0.0*	*0.0*	*0.0*	*-2.0*	*0.0*	*-0.1*	*0.0*	*-5.62*	*2.1*	*-3.6*
	EU-Specific (ILM = 1)	1.2	-0.6	0.0	0.0	1.2	0.4	2.2	6.7	-0.4	10.7	-1.7	9.0
Group 1	Basel III (ILM = 1)	1.9	1.6	0.0	0.0	1.3	2.6	2.6	7.4	-0.5	17.0	-3.7	13.3
	Delta	*-0.8*	*-2.4*	*0.0*	*0.0*	*0.0*	*-2.2*	*0.0*	*0.0*	*0.0*	*-5.5*	*2.2*	*-3.3*
	EU-Specific (ILM = 1)	1.1	-0.8	0.0	0.0	1.3	0.4	2.6	7.4	-0.5	11.5	-1.5	10.0
Of which: G-SIIs	Basel III (ILM = 1)	2.0	4.0	0.0	0.1	2.1	3.1	3.1	7.5	-0.3	21.7	-1.7	20.0
	Delta	*-0.8*	*-3.4*	*0.0*	*0.0*	*0.0*	*-2.4*	*0.0*	*0.2*	*0.0*	*-6.6*	*2.6*	*-4.0*
	EU-Specific (ILM = 1)	1.2	0.6	0.0	0.1	2.1	0.7	3.1	7.7	-0.3	15.1	0.9	16.0
Group 2	Basel III (ILM = 1)	6.0	1.9	0.0	0.0	0.4	1.0	0.5	3.2	-0.1	12.9	-4.0	8.9
	Delta	*-4.1*	*-1.6*	*0.0*	*0.0*	*0.0*	*-0.7*	*0.0*	*-0.3*	*0.0*	*-6.6*	*1.4*	*-5.3*
	EU-Specific (ILM = 1)	1.9	0.3	0.0	0.0	0.4	0.3	0.5	2.9	-0.1	6.3	-2.6	3.6

Source: EBA - Basel III Monitoring Exercise

of the "Basel endgame". The initial Notice of Proposed Regulation, issued for consultation in July 2023, and which is expected to see "broad and material changes", according to FED Chair Jay Powell in March 24, may broaden the scope of banks subject to Basel rules from 9 to 25 banks, and may result in an overall increase in RWAs of 16%. However, the politicized push back against this proposal is likely to result in a significant watering down of the final rule, and uncertain delay in its implementation.

This situation is extremely problematic, not only as regards the competitive advantage of US banks compared to those that must comply with the Basel rules, but also as regards the necessary trust among jurisdictions, and risk favouring further international regulatory and supervisory fragmentation.

At a time where the new European authorities will face considerable challenges and investment needs, numerous reports and statements issued recently (Noyer, Letta, Donohue, ECB Governing Council, Macron/Scholz...) have recognized the importance of the financial system as a pillar of European competitiveness and strategic autonomy, and called for ensuring that European financial regulation should not hamper the capacity of the financial system to play its full role in financing the EU's massive investment needs. Instead, the capital of the banking sector could be put at work, rather than frozen in ever increasing, and poorly justified regulatory and supervisory requirements.

4. In front of this situation, what can the EU do to preserve its financial sovereignty and its capacity to finance its ambitions?

Actually, the European Union still has significant degrees of flexibility to implement this package while being faithful to its international commitments, but minimizing the negative impact on the EU economy.

Those margins of flexibility are of two natures:

1. Avoid any unnecessary gold-plating in the design by the EBA of level 2 and level 3 measures mandated by the legislative texts. The EBA has been tasked with a considerable number of mandates to specify quantitative

21. EBA - BASEL III MONITORING EXERCISE – RESULTS BASED ON DATA AS OF 31 December 2022 (ANNEX – ANALYSIS OF EU SPECIFIC ADJUSTMENTS) - September 2023 https://www.eba.europa.eu/sites/default/files/document_library/Publications/Reports/2023/Basel%20III%20monitoring%20report/1062188/Annex%20to%20Basel%20III%20monitoring%20report%20as%20of%20December%202022%20-%20EU-specific%20Analysis.pdf

aspects of the RWA calculations. Given its governance and exclusive financial stability mandate, EBA's drafts produced so far already point to systematic extreme conservativeness compared to the Level 1 text, and some time compared to BCBS standards. Examples include the ITS project on pillar 3, which initial draft would have required banks to publish their capital ratios without considering the phase-in of the output floor nor the transitional provisions, which extend to 2032, but also the very restrictive definition of Uncommitted Cancellable Commitments, or the full revamping of the Prudent Valuation framework, where the mandate covered only the definition of exceptional circumstances. It is essential that the Commission and the co-legislators exert their rights to object to avoid a worsening of the already painful impact.

2. Ensure that the expected significant RWA inflation is at least partially absorbed by a commensurate reduction in capital ratio targets, that have been inflated in recent years, by the increase in capital buffers set by supervisors and macro-prudential authorities, and by a pressure by the SSM on banks to anticipate the implementation of CRR3. Given the revised RWA calculation will be implemented with CRR3, such buffers are less justified. And as we have seen above, the management buffer already includes the anticipation of regulatory changes, which means that it would be natural to use it when the changes materialize. This provides a clear avenue to reduce the impact of CRR3, without any further Basel deviation, given that the layering of EU buffers goes much further than the strict Basel framework.

There is only one important point to clarify, and to communicate explicitly to market participants: increasing RWA while not increasing the capital amount implies that the capital ratio (capital/RWA) goes down. If the RWA increase by 10/15% and the capital amount is unchanged, the CET1 ratio decreases by about 210/240 bps for all banks and G-SIIs respectively. Such a drop in the ratio should be considered explicitly as acceptable on average (of course, this recalibration of the capital target will be a case-by-case exercise with the supervisory teams). Actually, we are not talking about an increase in risk, but a change in risk measurement. CRR3 changes the graduation of the thermometer, not the height of the mercury column. Therefore, a 15% CET1 ratio today should be the equivalent of a 13% tomorrow. EU banks would have just been allowed to allocate the part of their capital buffer that they have set aside to prepare for CRR3. By the way, this would bring the average CET1 ratio of EU banks closer to the US banks' one, which has remained stable around 12.5% in the last 8 years. This would be a way for the EU to implement its commitment faithfully, while avoiding fragilizing its banking sector, which finances the bulk of the EU economy.

If such a clear and simple communication is not organized by authorities, then the market will push banks to rebuild their ratios, and then, the capital shortfall will be massive, as per an earlier EBF study which estimated a need for €200 bn capital if CET1 ratios were to be maintained. In such a scenario, banks' earnings generation for the next few years would be largely dedicated to rebuilding their CET1 ratios, at the expense of lending growth. Banks' ROE and distribution to shareholders would be severely damaged, impacting equity valuations and leading to potential self-inflicted financial stability issues. The degree to which the Capital Markets Union could grow, from their current low base, remains uncertain. This is why, in parallel, unlocking securitisation is an absolute must, to allow banks to continue originating loans in a highly regulated and supervised process, while reducing the capital charge through risk transfer to market participants.

•

As we approach the implementation date of CRR3, considerable uncertainties remain on fundamental implementation choices. Will the capital impact be minimal, as per the EBA studies, which implicitly assumes a drop in ratios, or will the capital shortfall be €200 bn, if ratios have to be maintained? A dialogue between authorities and the banking industry is urgent to clarify implementation policies and provide necessary market guidance.

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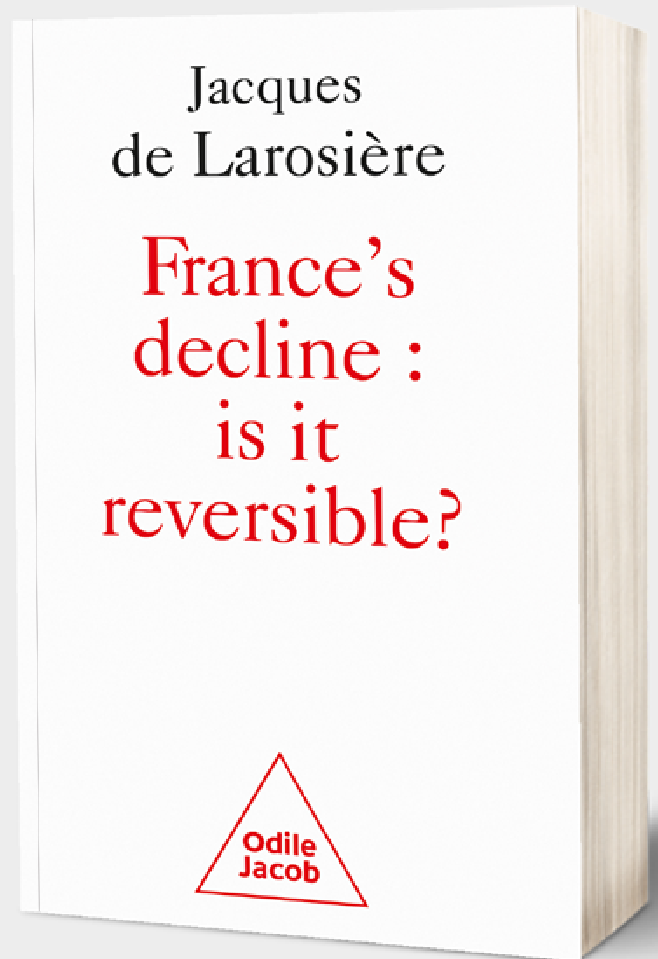

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Sustainability policies and challenges

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The adoption of the Green Deal legislative programme: mission largely accomplished!

Note written for Eurofi by Jean-François Pons and Louise Madec, Alphalex-Consult

2023 has now been established as the warmest year in recorded history. In this context of global warming, the European Union introduced in 2020 the European Green Deal, and the **Climate Law**[1], which sets a legally binding EU-wide and economy-wide common target of net-zero greenhouse gas (GHG) emissions by 2050 and comprises the target to cut GHG emissions by 55% by 2030. This gave birth to the Fit for 55 legislative package and all the related texts which will be evoked in this paper. The Green Deal legislative programme contains more than 40 proposals from the European Commission.

As well as constraints, **the Green Deal opens opportunities for investment**. The growth of green finance is, like every other market, a question of supply and of demand. For instance, a growth in sales of an electric vehicle triggers a growth in loans to finance these acquisitions, itself largely influenced by the EU legislation which has set the end of the sales of cars fueled by fossil fuels by 2035. The same goes for energy efficiency in industry or housing following more stringent standards. **The advancement of the Green Deal Programme is therefore not only of importance for ecological reasons: it will also have implications for investment and for the demand and for the growth of sustainable finance in the coming years.**

First assessments of the implementation of the Green Deal Legislative Program were published in the Eurofi Regulatory Update of April 2023, October 2023 and January 2024. Since these publications, new texts have been approved by the European political institutions, others have become legislation, and others have been proposed by the Commission.

In the last months of 2023 and first months of 2024, the Green Deal aroused many criticisms, notably from farmers and some representative of the business sector. All in all, most of the legistlative proposals from the Commission were approved before the end of the legislature.

This article will review the Green Deal legislation and the propositions of legislation related to climate, environment and circular economy. More specifically, **we will concentrate on specific sectors, those of energy, industry, transport, buildings and nature protection and restoration, which are most likely to foster important green investments and green finance.**

1. Carbone pricing

Carbon pricing is an indispensable tool for guiding the choices of companies and institutions, by making the costs of greenhouse gas emissions tangible through price. It is one of the most effective levers in the fight against global warming.

1.1 ETS: a 'cap and trade' system to reduce emissions via a carbon market

Set up in 2003[2] as the first market tool of its kind, the EU ETS is now under its fourth trading phase (2021-2030). The legislative framework for phase 4 of the EU ETS was first revised in 2018[3], but given the EU's new climate targets, the Commission has proposed in to strengthen the mechanism even more, with the objective to have a carbon pricing in line with the Fit for 55 objectives. On April 18, 2023, the European Parliament approved the reform of the European carbon market, which includes an extension of the carbon market to heating and cars, the inclusion of the maritime and aviation sectors, the phasing out of free allowances and the introduction of a carbon adjustment mechanism at borders[4]. The requirements for phase IV of the EU

1. Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'). Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R1119
2. Directive 2003/87/CE. Link : https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=celex%3A32003L0087
3. Directive (EU) 2018/410. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32018L0410
4. Directive (UE) 2023/959. Link : https://eur-lex.europa.eu/legalcontent/FR/TXT/?uri=uriserv%3AOJ.L_.2023.130.01.0134.01.FRA&toc=OJ%3AL%3A2023%3A130%3ATOC

ETS will be revised from 2024 onwards by an agreement between Parliament and Council reached as part of the negotiations on the "Fit for 55 – Adjustment to the -55% target" package.

1.2 The extension of ETS

1.2.1 The integration of aviation emissions

A revision of aviation rules[5] in the **EU ETS** has been adopted to ensure that Member States notify EU-based airlines of their offsetting obligations for the year 2021 under **CORSIA** (Carbon Offsetting and Reduction Scheme for International Aviation). In April 2023, the effort further continued, as the directive for the revision of EU ETS[6] as regards aviation was adopted by the co-legislators. Its main proposal is to ensure that the sector contributes to the EU's climate targets through increased auctioning of allowances, with an end to free allowances from 2027, applying the linear reduction of aviation allowances. It also allows to integrate within the revised ETS, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), applying it to international flights departing from or arriving at an airport inside the European Economic Area.[7] The phasing out of free allowances will occur one year earlier than proposed by the Commission, and full auctioning will be reached by 2026. A mandatory reporting, verification, and monitoring (MRV) framework for non-CO2 emissions from aviation is required to be implemented from 2025 and evaluated in 2027.

1.2.2 The integration of the maritime sector

Since January 2024, the EU's Emissions Trading System has been extended to cover emissions from all large ships entering EU ports, regardless of their flag. The co legislators agreed to the cutting of emissions from EU ETS sectors – which will now also encompass the maritime industry – by 63% relative to 2005 levels by 2030. To accomplish this, the proposal[8] involves increasing the yearly linear emissions reduction factor from 2.2% to 4.2%.

Under this, 50% of emissions from voyages starting or ending outside of the EU and 100% of emissions that occur between two EU ports and when ships are within EU ports are considered. In practice, this means that shipping companies will have to purchase and use EU ETS emission allowances for each CO2 ton emission reported.

1.2.3 ETS 2 for the buildings, road and transport sectors

In December 2022, the European Parliament and the Council of the EU agreed to establish a distinct emissions trading system, called ETS II, implemented for emissions from fuel distribution in the road transport and building sectors. In April 2023, this new ETS was adopted. It is set to launch in 2027. The system will help regulate fuel suppliers rather than end-consumers. It will also put an absolute cap on emissions, with a goal to decrease them to reach the EU-set goal of carbon neutrality by 2050. The newly introduced ETS 2 is designed to complement the sectoral scope of the EU ETS, expanding the reach of carbon pricing at the EU level to encompass all major sectors of the economy, excluding agriculture and land-use activities.

1.3 The Market Stability Reserve : stabilizing the carbon market by adjusting the supply of emission allowances

The allowances system of the ETS is dealt with under the **Market Stability Reserve**[9] which has recently been reviewed. To expedite the absorption of the excess allowances and promote market stability, the text[10] maintains the current elevated annual allowance intake rate. Indeed, the proposal sustains the existing doubled intake rate of 24% and retains a minimum of 200 million allowances in the reserve until December 31, 2030, the conclusion of Phase IV of the EU ETS. The decision entered into force on May 15th, 2023, after being published in April.

1.4 The Effort Sharing Regulation : legally binding emission reduction targets for each EU Member State for the sectors not covered by (ETS)

The Effort Sharing Regulation[11] (ESR) sets out the European Union's ambitions for reducing greenhouse gas emissions from sectors not covered by the European carbon market (ETS), *i.e.* mainly transport, agriculture, construction and waste.

5. Decision (EU) 2023/136 amending Directive 2003/87/EC. Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023D0136
6. op. cit.
7. Aviation's contribution to European Union climate action: Revision of EU ETS as regards aviation | Think Tank | European Parliament. (n.d.). https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)698882
8. Proposal for amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757.
9. Directive (UE) 2015/1814. Link: https://eur-lex.europa.eu/legal-content/FR/ALL/?uri=celex:32015D1814
10. Proposal for amending Decision (EU) 2015/1814 as regards the amount of allowances to be placed in the market stability reserve for the Union greenhouse gas emission trading scheme until 2030. Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0571
11. Regulation (EU) 2023/857. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023R0857

These sectors account for 60% of greenhouse gas emissions in Europe. The regulation divides the reduction effort (carbon budget) between member states according to their income (GDP/capita), leaving it up to national and local authorities to implement measures to reduce emissions and support these sectors in their ecological transition. Initially adopted in 2018[12], the Regulation was amended in 2023. With their new ambitious national targets Member States will collectively contribute to an emission reduction at EU level, in the Effort Sharing sectors, of 40% compared to 2005 levels. The revised Effort Sharing Regulation came into force on 11 May 2023.

1.5 The Energy taxation directive (ETD): removing outdated exemptions and reducing rates that currently encourage the use of fossil fuels

On 14 July 2021, the Commission tabled a proposal for a revision of the Energy Taxation Directive (ETD), as part of the Fit for 55 packages. Its aim is to align the taxation of energy products with EU energy and climate policies, promote clean technologies and remove outdated exemptions and reduced rates that currently encourage the use of fossil fuels. The main changes include several changes. First, fuels will start being taxed according to their energy content and environmental performance rather than their volume, helping investors and consumers alike to make cleaner, more climate-friendly choices. Then, exemptions for certain products and home heating will be phased out. Fossil fuels used as fuel for intra-EU air transport, maritime transport and fishing should no longer be fully exempt from energy taxation in the EU.

In June 2024, the Belgian presidency of the Council had put forward several compromise texts about prolonged transitional periods and the possibility for Member States to provide total or partial exemptions for certain sectors and services.
However, the Belgian presidency concluded that countries' positions remained nevertheless divergent, requiring further work to reach a balanced agreement.[13]

1.6 The Carbon Border Adjustment Mechanism: prevent carbon leakage by imposing CO2 emission costs on imported goods

Another highly debated text creating a Carbon Border Adjustment Mechanism (CBAM)[14] was voted in 2023, proposed to complement the ETS. Starting in 2026, EU importers will be required to pay a financial adjustment by surrendering CBAM certificates that align with the emissions integrated into their imports. The objective is to prevent the relocation of carbon-intensive industries outside of the EU (known as "carbon leakage"), which could compromise the EU's ambitious climate targets. Additionally, this policy aims to incentivize producers in third-party countries that export to the EU to adopt low-carbon technologies, and to ensure that the price of imports more accurately reflects their carbon footprint. The CBAM regulation officially entered into force the day following its publication in the Official Journal of the EU on 16th May 2023.

2. Energy

The production and the consumption of energy represents, within the EU, more than 75% of the emitted GHG. The Green Deal focuses on three principles for the transition towards clean energy: ensuring a secure and affordable energy supply for the EU, creating an integrated, interconnected and digitized energy market, and prioritizing energy efficiency. The Green Deal has sought to decrease GHG emissions from the energy sector by encouraging the use of green energy itself, notably with the renewable energy directive, the energy efficiency directive and sector specific encouragements.

2.1 Energy infrastructure: the TEN-E regulation

The revision of the **TEN-E regulation**[15] provides a set of instructions for the prompt advancement and interoperability of the priority corridors and areas of energy infrastructure across Europe. The instructions specify the criteria for identifying projects of common interest (PCIs) and mutual interest (PMIs), while also expanding upon the previous guidelines. This updated version has an extended scope: it now includes smart electricity grids and electricity storage, hydrogen networks and power-to-gas, as well as projects with third countries; but it excludes natural gas. It also simplifies procedures to grant permits and proposes the creation of a one-stop-shop for offshore grid development. The revised TEN-E regulation entered into force in June 2022.

12. Regulation (EU) 2018/842. Link : https://eur-lex.europa.eu/eli/reg/2018/842/oj
13. https://www.europarl.europa.eu/legislative-train/spotlight-JD22/file-revision-of-the-energy-taxation-directive
14. Regulation (UE) 2023/956. Link : https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX%3A32023R0956
15. Regulation (EU) 2022/869. Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R0869

2.2 Renewable energies

2.2.1 The Renewable energy directive (RED3)

In March 2023, the legislators reached a political agreement on the Renewable Energy Directive, agreeing to increase the share of renewable energy in the EU's overall energy consumption to 42.5% by 2030, with an additional 2.5% indicative top up to reach 45%. All member states are expected to contribute to this shared objective. Furthermore, the legislators have concurred on more ambitious targets specific to various sectors, including transport, industry, buildings, and district heating and cooling. The aim is to accelerate the incorporation of renewable energy sources in sectors where the progress has been comparatively slower. Specific dispositions include an indicative target of at least 49% of renewable energy share in buildings by 2030, and a target of 5.5% of use for advanced biofuels in the transport industry by 2030. The new legislation was published on 31 October 2023[16].

2.2.2 Delegated Acts on RFNBOs (Renewable Fuels of Non-Biological Origin)

The Commission has published three delegated acts, after an initial agreement in interinstitutional dialogue. Two of them are of particular importance, as they complete the **implementation of the Renewable energy directive**[17]. The delegated Act on renewable liquid and gaseous transport fuels of non-biological origin[18] provides a methodology to ensure that the electricity used to produce renewable liquid and gaseous transport fuels of non-biological origin (the so called "RFNBOs") is indeed of renewable origin, while the delegated Act on GHG emissions savings of recycled carbon fuels[19] sets a minimum threshold and gives a methodology for assessing GHG emissions savings from RFNBOs.

2.3 Energy efficiency

2.3.1 The Energy Efficiency Directive

The **Energy Efficiency Directive**[20] was published in the Official Journal in September 2023, following a revision of a directive adopted in 2012 and already updated in 2018. It officially enforces the principle of 'energy efficiency first' as a foundational element of EU energy policy, granting it legal status for the first time. In practical terms, this mandates that EU member states must take into account energy efficiency in all pertinent policy and significant investment choices within both the energy and non-energy sectors. It requires among others, a binding 11.7% cut in energy consumption by 2030, doubling annual savings goals. It tackles energy poverty, mandates audits for companies, and ensures competence in energy professionals.

2.3.2 Regulation on methane emissions reduction in the energy sector

Before the beginning of the COP28, a provisional agreement was reached between the co-legislators in November 2023 on a **Regulation on Methane Emissions**. This new legislation aims to cut methane emissions both in the European energy sector and in global supply chains. It includes improved measurement, reporting and verification, as well as mandatory leak detection and repair. Key to delivering the EU Methane Strategy[21], the first-ever EU Regulation on methane emissions reduction in the energy sector[22] was adopted on 27 May 2024 and published in July 2024.

2. 4 Energy Markets

2.4.1 The Updated EU rules to decarbonize gas markets and promote hydrogen

The EU hydrogen and gas decarbonisation package[23], was adopted in May 2024, after the Commission proposed it in December 2021. This new regulation promote renewable and low-carbon gases, in order to ensure security and affordability. This supports both the EU's climate neutrality goal by 2050, and the RePower EU plan to reduce reliance on Russian fossil fuel imports. Key aspects of this update the rules on the EU natural gas market[24] include infrastructure planning for a decarbonized gas sector, facilitating integration of renewable gases, and introducing a certification system. It also introduces a new regulatory framework for dedicated hydrogen infrastructure. EU countries have until mid-2026 to transpose the

16. Directive (EU) 2023/2413 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC
Link : https://eur-lex.europa.eu/eli/dir/2023/2413/oj
17. Directive (EU) 2018/2001. Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32018L2001
18. Delegated Regulation (EU) 2023/1184. Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1184
19. Commission Delegated Regulation (EU) 2023/1185. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1185
20. Directive (EU) 2023/1791. Link : https://eur-lex.europa.eu/eli/dir/2023/1791/oj
21. COM2020/663. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0663
22. Regulation (EU) 2024/1787. Link : https://eur-lex.europa.eu/eli/reg/2024/1787/oj
23. Consisting of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789.
Link : https://eur-lex.europa.eu/eli/dir/2024/1788 and https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202401789
24. Gas Directive 2009/73/EC. Link : https://eur-lex.europa.eu/legal-content/FR/ALL/?uri=celex%3A32009L0073

new rules into national law. When transposed, they will facilitate the uptake of renewable and low-carbon gases, including hydrogen, while ensuring security of supply and affordability of energy for all EU citizens.

2.4.2 The Reform of the Electricity Market Design

In December 2023, the Council and the European Parliament reached a provisional political agreement on the reform of the Electricity Market. Measures included in the reform are a better protection for consumers, notably through fixed prices and fixed term contracts, more stability and competitiveness for companies, through two-way contracts for difference, and increased green electricity, with new rules made to integrate renewable energy into the system more easily[25].

3. Transport and alternative fuels

Alternative fuels are derived from sources other than petroleum. Most are produced domestically, reducing our dependence on imported oil, and some are derived from renewable sources. Often, they produce less pollution than gasoline or diesel.

3.1 Alternative Fuel Infrastructure

The new regulation[26] **on the deployment of alternative fuels infrastructure** enforces targets for electric recharging and hydrogen refueling infrastructure in roads, maritime ports, inland waterway ports, and stationary aircraft across the EU. This moves addresses consumer worries about vehicle recharging/refueling accessibility and aims to create a user-friendly experience with transparent pricing, consistent payment options, and unified customer information throughout the EU. It includes provisions according to which for every registered battery-electric car in each member state, a power output of 1.3 kW must be provided by publicly accessible recharging infrastructure. The regulation is applicable since 13 April 2024.

3.2 ReFuelEU aviation initiative

Also regarding transportation, the Refuel aviation initiative was adopted in April 2023[27]. The main aim of the ReFuelEU Aviation initiative is to increase both the demand for and the supply of sustainable aviation fuels (SAC), whose CO2 emissions are lower than those of fossil kerosene, while ensuring a level playing field throughout the EU's air transport market. The text, which is due to come into force between 2024 and 2025, calls for the incorporation of 70% sustainable fuels into aviation kerosene by 2050. This increase will be progressive: at least 2% in 2025, 6% in 2030, 20% in 2035, 34% in 2040, 42% in 2045. The regulation also introduces a European eco-label for flights, to be introduced from 2025, which will specify the carbon footprint of each flight per passenger and the CO2 emissions per kilometer.

3.3 Regulation on fuels for the maritime sector

The Council and the Parliament adopted in 2023, a new law to decarbonize the maritime sector[28]. Following the Parliament's recommendations, it required a more stringent reduction in the greenhouse gas intensity of energy used on ships than the Commission. These reductions have a first deadline of 2035 with 20% by that year, 38% from 2040, 64% by 2045, and 80% by 2050.

3.4 Regulation on emissions from cars and vans

Cars and vans account for about half of global transport carbon dioxide emissions[29]. The decarbonation of the sector is both an opportunity in terms of reduction of pollution, and for the finance sector, as the important and fast changes will require massive investments. The regulation on **Emissions from Cars and Vans**[30] were finally agreed after last minute discussions with Germany which was threatening to withdraw from the agreed political agreement. In comparison to the CO2 emission targets applicable in 2021, the emissions of new passenger cars registered in the EU must be lowered by 55%, while new vans must exhibit a 50% reduction in emissions. By 2035, new passenger cars and vans must exhibit a 100% reduction in CO2 emissions, meaning all new vehicles must have zero emissions. The incentive for low and zero-emission vehicles will no longer apply from 2030. The compromise finally reached with Germany will allow the sale of internal combustion engines after 2035 if they run on e-fuels. The regulation was adopted in April 2023.

25. Electricity market reform. (2023, 21 December). European Council. https://www.consilium.europa.eu/en/policies/electricity-market-reform/
26. Regulation (EU) 2023/1804. Link : https://eur-lex.europa.eu/eli/reg/2023/1804/oj
27. Regulation (EU) 2023/2405. Link : https://eur-lex.europa.eu/eli/reg/2023/2405/oj
28. Regulation (EU) 2023/1805. Link : https://eur-lex.europa.eu/eli/reg/2023/1805/oj
29. Fleck, A. (2023, 22 September). Cars cause biggest share of transportation CO2 emissions. Statista Daily Data. https://www.statista.com/chart/30890/estimated-share-of-co2-emissions-in-the-transportation-sector/#:~:text=Cars%20and%20vans%20accounted%20for,laden%20mode%20of%20transport%20worldwide
30. Regulation (EU) 2023/851. Link : https://eur-lex.europa.eu/eli/reg/2023/851

4. Industry and circular economy

As part of the response to the Covid-19 pandemic and to the imminent threat of climate change and global warming, the Green Deal also introduces a new industrial strategy for Europe, which "will lead the twin green and digital transitions" in order for Europe to become "even more competitive globally"[31].

4.1 The Green Deal Industrial Plan

In February 2023, the European Commission released the **Green Deal Industrial Plan**[32], with a self-proclaimed aim "to provide a more supportive environment for the scaling up of the EU's manufacturing capacity for the net-zero technologies and products required to meet Europe's ambitious climate targets." In this document, the Commission presents a project for several acts to come. Importantly and notably, one of the pillars of this plan is to speed up investment and financing for clean tech production in Europe, both public and private financing, which it says are necessary in order to fund the green transition. The following acts, regulations or rules are part of the Green Deal Industrial Plan which have been the object of a political agreement.

4.1.1 Net-Zero Industry Act

The **Net-Zero Industry Act**[33] was adopted in May 2024. It is set to enhance competitiveness and resilience while accelerating net-zero technology development. As such, the act categorizes technologies, with strategic ones set to receive additional benefits. The technologies listed include solar, renewables, batteries, and carbon capture. The act sets a benchmark for the manufacturing capacity of the strategic net-zero technologies to at least 40% of the EU's annual deployment needs by 2030 and targets 50 million tons of CO_2 storage capacity. To further develop these technologies, the act establishes Net-Zero Academies for skills development, aiming to train 100,000 learners in each technology within three years of their establishment. The creation of the Net-Zero Europe Platform aims to foster collaboration and advice on financing for strategic projects, while the Net-Zero Industrial Partnerships should promote global adoption of net-zero technologies.

4.1.2 Critical Raw material Act

The Critical Raw Material Act[34] aims to maintain and establish a secure and sustainable supply of Critical Raw Materials to the EU. The term Critical Raw Material is defined through two annexes[35]. They list 34 materials which are considered strategic, 17 of which are considered critical. The Act considers the high concentration of these materials within few third countries as a potential risk to their supply. The short period between the EU Commission's proposal in March 2024 and the final adoption of the Act in April 2024 shows how serious the EU's institutions and Member States are taking this risk.
The Act takes a three-fold approach to minimizing the risks related to the supply of Critical Raw Materials. First, the EU advertises and incentivizes the extraction of raw materials in the territories of EU Member States. Second, the Act calls for a significant increase in recycling efforts, totaling up to 25 % of annual consumption in the EU. Third, the EU sets the target of reducing dependency for any critical raw material on a single non-EU country to less than 65 % by 2030.

4.2 The Revision of the Industrial Emissions directive

The Industrial Emissions Directive (IED)[36] aims to achieve a high level of protection of human health and the environment taken as a whole by reducing harmful industrial emissions across the EU. In November 2023, the Parliament, the Commission and the Council managed to secure a political agreement on the Industrial Emissions Directive[37]. The agreement focuses on stricter rules to combat pollution, improve emission reporting and monitoring, and set more effective pollution limits. The accord addresses intensive farming operations, and states that the directive will gradually encompass large agricultural facilities, battery production installations, and non-energy ores mining activities. Some activities will remain excluded from the scope of the directive, notably cattle farming operations. The agreement also introduces a new Industrial Emissions Portal set to replace the current European Pollutant Release and Transfer Register. The Council adopted in May 2024 the revised directive[38] on industrial emissions.

31. Industry and the green Deal. (s. d.). European Commission. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/industry-and-green-deal_en
32. COM/2023/62. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0062
33. Regulation (EU) 2024/1735. Link :
34. Regulation (EU) 2024/1252. Link : https://eur-lex.europa.eu/eli/reg/2024/1252/oj
35. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202401252#d1e45-57-1
36. Directive 2010/75. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02010L0075-20110106
37. https://environment.ec.europa.eu/publications/industrial-emissions-directive-proposal-revision_en
38. Directive (EU) 2024/1785. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202401785

4.3 The regulation on batteries and waste batteries

The **regulation on batteries and waste batteries**[39] sets compulsory standards for all batteries that are introduced in the EU market. Starting from 2024, there will be a gradual implementation of sustainability requirements, and extended producer responsibility provisions will begin to be enforced in mid-2025. By the end of 2027, the minimum collection targets for waste portable batteries will be established at 63%, and this figure will increase to 73% by the end of 2030. Additionally, specific collection targets for waste light means of transport batteries will be introduced, with a target of 51% by the end of 2028 and 61% by the end of 2031. Lastly, there will be a material recovery target of 50% for lithium, which will be set by the end of 2027, and this target will increase to 80% by the end of 2031. The objective of the new regulations is to advance a circular economy by overseeing batteries across their complete lifecycle. As a result, the regulations set forth stipulations for the end-of-life phase, encompassing objectives for collection and responsibilities, as well as targets for material recovery and extended accountability for producers.

4.4 The Waste shipement Regulation

Since 1993, EU law on the shipment of waste includes rules for transporting waste across borders. Two Regulations, one in 1993[40] and another in 2006[41], have implemented the obligations of the Basel Convention (1989) on the control of transboundary movements of hazardous wastes and their disposal. Recently, the EU rules on waste shipments, both within the EU and with regard to imports and exports of waste to and from it, were modernized and updated. The new Regulation on waste shipments[42] was adopted on 11 April 2024 and entered into force on 20 May 2024. It aims to ensure that the EU does not export its waste challenges to third countries and contributes to environmentally sound management of waste. The regulation also aims to strengthen enforcement to prevent illegal shipments of waste occurring within the EU ans increase the traceability of shipments of waste within the EU and facilitating recycling and re-use.

4.5 The Ecodesign For Sustainable Products Regulation

The Ecodesign for Sustainable Products Regulation or ESPR[43] establishing a framework for the setting of ecodesign requirements for sustainable products was adopted on June 13 and published in the Official Journal of the European Union on June 28 2024. It repeals the previous directive[44] which focused on the energy efficiency of certain products, and replaces it with a standardized ecodesign framework for all products placed on the market or put into service in the European Union. Ultimately, this reform should make it possible to improve the sustainability and circularity of products, facilitate consumer access to information on the subject, and promote more sustainable production models, while continuing to guarantee the free circulation of the resulting products.

4.6 The Packaging Waste and packaging transport regulation

In March 2024, the Council of the European Union and European Parliament concluded negotiations on the EU's Packaging and Packaging Regulation. The regulation was approved by the Parlement at first reading in April 2024[45]. Once in full effect, the PPWR will replace the Packaging Directive of 1994[46]. The Regulation introduces waste reduction targets and requires that all packaging placed on the EU market is recyclable and carries recycling labeling. The Regulation also introduces new requirements for packaging minimization, minimum recycled content in plastic packaging, re-use targets for packaging, and bans certain packaging formats. the PPWR will most likely enter into force by the end of 2024, and start applying 18 months from that entry into force date, likely in mid 2026.

5. Buildings

Buildings are currently responsible for 40% of total energy consumption in the EU, and 36% of its energy related greenhouse gas emissions. More than 4 out of 5 buildings within European countries were constructed before 2000, resulting in poor energy performance and efficiency. If the EU is to

39. Regulation (EU) 2023/1542. Link : https://eur-lex.europa.eu/eli/reg/2023/1542/oj
40. Council Regulation (EEC) No 259/93 of 1 February 1993. Link : https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A31993R0259
41. Regulation (EC) No 1013/2006. Link : https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32006R1013
42. Regulation (EU) 2024/1157. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1157
43. (EU) 2024/1781. Link : https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=OJ%3AL_202401781#:~:text=Règlement%20(UE)%202024%2F1781,CETexte%20présentant%20de%20l'intérêt
44. Directive 2009/125/CE. Link : https://eur-lex.europa.eu/legal-content/FR/ALL/?uri=celex%3A32009L0125
45. https://www.europarl.europa.eu/news/en/press-room/20240419IPR20589/new-eu-rules-to-reduce-reuse-and-recycle-packaging
46. Directive 94/62/CE.Link : https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=celex%3A31994L0062

reduce its emissions by 55% by 2035 and to become the first carbon-neutral continent by 2050, reducing emission from buildings is a significant part of the solution.

5.1 The Revised energy performance of building Regulation

The **Energy Performance of Buildings Directive**[47], with which the legislator intends to reduce the average primary electricity use of residential buildings by 16% by 2030, was adopted in April 2024. The directive wants to increase the rate of the renovation of the worst-performing buildings. In order to fight energy poverty, the EU also encourages national governments to finance measures incentivizing and accompanying renovations for the most vulnerable customers. The directive calls for existing buildings to be carbon-neutral by 2050. The same target applies to new buildings by 2030 and from 2028 for new buildings occupied or owned by public authorities. In addition, the Directive calls for a gradual phase-out of boilers powered by fossil fuels. Subsidies for the installation of stand-alone boilers powered by fossil fuels are already forbidden starting from January 2025. It also encourages each member state to establish a national Building Renovation Plan to implement a strategy in order to decarbonize the building stocks, and address the challenges of the sector, such as financing, training and attracting skilled workers.
The directive contributes to the objective of reducing GHG emissions by at least 60% in the building sector by 2030 compared to 2015, and works hand in hand with other European Green Deal policies such as the emissions trading system for fuels used in buildings[48], the revised Energy Efficiency Directive[49], the revised Renewable Energy Directive[50] and the Alternative Fuels Infrastructure Regulation[51].

5.2 The Construction Products Regulation

The Construction Products Regulation (CPR) aims to secure the placing of construction products and materials on the European market. The text also updates sustainability rules for construction products. Provisional agreement on a proposed revised text was reached between the Council of the European Union and the European Parliament in April 2024[52]. It must now be approved and formally adopted by both institutions. The provisional agreement proposes a transition period between the old legal framework, which dates from 2011, and the new one, which will last 15 years from the date of entry into force of the new regulation. The revision of the CPR is part of the package of measures presented by the European Commission in March 2022, as part of the Green Pact for Europe and the Circular Economy Action Plan.

6. Nature preservation and restoration

Biodiversity in the EU is rapidly declining, due to pollution (both by gases and through the release of chemicals in nature), climate change, habitat loss and the proliferation of invasive species[53]. The European Union today estimates up to 80% of its habitats to be in poor condition. Through different measures, the EU aims to restore and to protect natural environments and species.

6.1 The Nature Restoration Law

The Commission proposal has been very much criticized by farmers and by the EPP and the extreme-right in the EP. Finally, a compromise was reached on a less ambitious legislation. On June 17 2024, the Nature Restoration Law was officially adopted. The law's final text confirms the planned targets: to restore at least 20 per cent of Europe's marine and terrestrial territory by 2030 and all endangered habitats by 2050. It includes targets such as reversing the decline of pollinator populations by 2030, achieving an upward trend for standing and lying deadwood, uneven-aged forests, and the stock of organic carbon, increasing grassland butterflies and farmland birds in order to enhance the stock of organic carbon in cropland mineral soils, or restoring marine habitats such as seagrass beds or sediment bottoms that offer climate change mitigation.

6.2 Other acts regarding nature preservation and biodiversity

6.2.1 Regulation on land use and forestry

The **regulation on land use, land use change and forestry (LULUCF)**[54] was revised in 2023 for the

47. Directive (EU) 2024/1275. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024L1275
48. op cit
49. op cit
50. Directive (EU) 2023/2413. Link : https://eur-lex.europa.eu/eli/dir/2023/2413/oj
51. Regulation (EU) 2023/1804. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1804
52. https://www.europarl.europa.eu/doceo/document/TA-9-2024-0188_FR.html
53. Restauration de la nature. (2023, 10 novembre). Conseil Européen. https://www.consilium.europa.eu/fr/policies/nature-restoration/
54. Regulation (EU) 2018/841. Link : https://eur-lex.europa.eu/eli/reg/2018/841/oj

period up to 2030[55]. It aims to reverse the current trend of declining removals in the land sector, to deliver 310 million tons of CO2 equivalent (MtCO2e) removals from the LULUCF sector by 2030 and make it neutral by 2035. Starting in 2026, the sector must achieve a net removal of emissions, and each member State will be responsible for a specific number of removals to be accomplished by 2030. The revised regulations include more stringent reporting guidelines, increased transparency, and a review process by 2025 to ensure compliance. Between 2026 and 2029, if reporting indicates insufficient progress towards their national targets, Member States may face an extra penalty of 8% on their 2030 removal target.

6.2.2 The Regulation on deforestation-free products

In May 2023, the regulation on **deforestation-free products** was adopted[56]. The proposal establishes a responsibility of reasonable care on operators who sell certain commodities or products within the EU market or export them outside the EU. The primary catalyst for these procedures is the increase in agricultural territory, which is associated with the manufacturing of goods like soy, beef, palm oil, timber, cocoa, coffee, rubber, and certain items derived from them, including leather, chocolate, tires, and furniture. As a significant economic entity and consumer of these deforestation and forest degradation-associated commodities, the EU shares a portion of the responsibility for this issue and is striving to take a leading role in addressing it. The objective is to ensure that the goods have been manufactured in compliance with the legislation of the country of production and that the land used for production has not undergone deforestation or forest degradation after 31 December 2020.

6.2.3 The Common Fisheries Policy (CFP)

A preliminary accord has also been reached concerning **updated regulations aimed at preventing overfishing**. The revision of the fisheries control system modernizes the approach to monitoring fishing activities, ensuring that both EU vessels and those operating within EU waters adhere to the guidelines laid out in the Common Fisheries Policy (CFP)[57]. The principal amendements to existing regulations governing fishing vessel control are the revision of the sanctioning system, an enhanced traceability along the supply chains, and the obligation of reporting of their catches for individuals engaging in recreational fishing for specific species.[58]

Conclusion

The adoption of the Green Deal legislative programme has been a success so far: more than 30 texts have already been adopted, almost all in line with the ambitions announced by the European Commission. **Many of those laws already have a real economic impact**, as seen for instance in the rapid growth of electric vehicles. More recently some of them were adopted by a slight majority, like the nature restoration law, and only after striking down some of their most strict clauses. To this day, no significant green proposal has been adopted in the agricultural sector. The most important text missing is the Energy Taxation Directive, under the sole responsibility of the Council.

The implementation of the Green Deal will be progressive in the coming years and its real impact will then have to be assessed. This implementation will also depend on the political and budget support it will receive from the EU political institutions and the Member States in the next legislature. And a change of some key regulations, like for instance the one prohibiting the sale of thermal vehicles since 2035, is of course always possible.

The European People Party, which has the most important group in the European Parliament, recently showed an opposition to some Green Deal proposals, in line with a growing anti-green backlash in some European countries.
The results of the recent European elections showed a rise of votes for the extreme right, very anti-Green Deal, and for the EPP.
However, **the re-election of von der Leyen, supported largely by the EPP, but also by Renew, S&D and the Greens, is a strong sign of continuity**. Her commitment to carbon neutrality by 2050 and the transition to a greener economy remains strong. In her speech to the European Parliament in mid-July 2024 before the vote on her reappointment, she reiterated her determination to pursue ambitious environmental policies: "We must and will stay the course on all of our goals, including

55. Proposal for amending Regulations (EU) 2018/841 as regards the scope, simplifying the compliance rules, setting out the targets of the Member States for 2030 and committing to the collective achievement of climate neutrality by 2035 in the land use, forestry, and agriculture sector, and (EU) 2018/1999 as regards improvement in monitoring, reporting, tracking of progress and review. Link: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52021PC0554
56. Regulation (EU) 2023/1115. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1115
57. Regulation (EU) No 1380/2013. Link : https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32013R1380
58. Council strikes deal on new rules to combat overfishing. (2023, May 31). European Council. https://www.consilium.europa.eu/en/press/press-releases/2023/05/31/council-strikes-deal-on-new-rules-to-combat-overfishing/

those set out in the European Green Deal." She commits her Commission to implement the Green Deal, but also to support the decarbonation of the industry through a new initiative, the Clean Industrial Act. She confirmed also the continuation of the strategy of circular economy.

TABLE OF THE GREEN DEAL LEGISLATION (2020-2024)

LEGISLATION	DATE OF ADOPTION	LEGISLATION IN A NUTSHELL	REVIEW CLAUSE
CARBON PRICING			
Emissions Trade System (ETS) and its extensions	Launched in 2003, revised in 2023	A 'cap and trade' system to reduce emissions via a carbon market. It covers emissions from the electricity and heat generation, industrial manufacturing and aviation sectors - which account for roughly 40% of total GHG emissions in the EU. It started covering emissions from maritime transport in 2024 and will cover emissions from road and building sector in 2027	2026 for the maritime sector
The Market Stability Reserve	Launched in 2018, revised in 2023	Stabilizing the carbon market by adjusting the supply of emission allowances	none
The Effort Sharing Regulation (ESR)	Adopted in 2018, revised in 2023	legally binding emission reduction targets for each EU Member State for the sectors not covered by ETS), i.e. mainly transport, agriculture, construction and waste. These sectors account for 60% of greenhouse gas emissions in Europe	none
The Energy taxation directive (ETD)	Not adopted yet	Removing outdated exemptions and reducing rates that currently encourage the use of fossil fuels	Not adopted
The Carbon Border Adjustment Mechanism (CBAM)	Adopted in 2023, starting in 2026	Prevent carbon leakage by imposing CO2 emission costs on imported goods	2025
ENERGY			
The TEN-E regulation	Adopted in 2013, revised in 2022	Provides a set of instructions for the prompt advancement and interoperability of the priority corridors and areas of energy infrastructure across Europe	none
The Renewable energy directive (RED3)	Adopted in 2009, revised in 2023	The legal framework for the development of clean energy across all sectors of the EU economy, supporting cooperation between EU countries towards this goal	none
The Energy Efficiency Directive	Adopted in 2012, revised in 2023	Mandates that EU member states must take into account energy efficiency in all pertinent policy and significant investment choices within both the energy and non-energy sectors	
The EU hydrogen and gas decarbonisation package	Adopted in May 2024	Promoting renewable and low-carbon gases, in order to ensure security and affordability. It also introduces a new regulatory framework for dedicated hydrogen infrastructure	none

TRANSPORT AND ALTERNATIVE FUELS			
Alternative Fuel Infrastructure	Adopted in 2014, revised in 2023	enforces targets for electric recharging and hydrogen refueling infrastructure in roads, maritime ports, inland waterway ports, and stationary aircraft across the EU	none
ReFuelEU aviation initiative	Adopted in 2023	It intends to promote sustainable commercial air transport in the EU by setting mandatory blending quotas for sustainable aviation fuels (SAF). It will be mandatory in all Member States from 2024 onwards	In 2027 and every four years thereafter
FuelEU Maritime Regulation	Adopted in 2023	The Regulation supports the transition towards more sustainable maritime transport The Regulation will apply in full from 1 January 2025	none
Regulation on emissions from cars and vans	Adopted in 2009, last revision in 2023	The regulation aims to increase carbon dioxide (CO2) emission reductions targets for new cars and vans. The sale of new internal combustion engines will be prohibited after 2035, except if they run on e-fuels	2026
INDUSTRY AND CIRCULAR ECONOMY			
The green deal industrial plan	2023	It aims to provide a more supportive environment for the scaling up of the EU's manufacturing capacity for the net-zero technologies and products required to meet Europe's ambitious climate targets	none
The Net Zero Industry Act (part of the Green Deal Industrial Plan)	2024	It is set to enhance competitiveness and resilience while accelerating net-zero technology development	none
Critical Raw material Act (part of the Green Deal Industrial Plan)	2024	It aims to maintain and establish a secure and sustainable supply of Critical Raw Materials to the EU	none
The Industrial Emissions Directive (IED)	Adopted in 2010 and revised in 2023	It is the main EU instrument to reduce these emissions into air, water and land, and to prevent waste generation from large industrial installations and intensive livestock farms (pig and poultry)	none
The regulation on batteries and waste batteries	Adopted in 2008, revised in 2023	It aims to improve the sustainability of batteries and waste batteries, and make the circular economy more efficient by ensuring all batteries used in the EU market are more durable, safe, and sustainabl	none
The Waste on shipments regulation	2024	It aims to ensure that the EU does not export its waste challenges to third countries and contributes to environmentally sound management of waste	none
The Ecodesign for Sustainable Products Regulation or ESPR	2024	It is establishing a framework for the setting of ecodesign requirements for sustainable products	none
The Packaging Waste and packaging transport regulation	2024 (replacing the 1994's Directive)	It aims at reducing packaging pollution and promoting a circular economy for packaging	Specific review clause in 8 years after the entry into force

BUILDINGS			
Energy Performance of Buildings Directive or EPBD	Adopted in 2010, last revision in 2024	It aims to boost the energy performance of buildings, zorking with the Energy Performance of Buildings Directive	2027
NATURE PRESERVATION AND RESTORATION			
The Nature Restoration Law	2024	It sets legally binding restoration targets for the long-term recovery of nature in Europe	none
Regulation on land use and forestry	Adopted in 2018 and revised in 2023	It aims to include agriculture and forestry into European climate mitigation efforts	none
The Regulation on deforestation-free products	2023	It aims to bring down greenhouse gas emissions and biodiversity loss	none

Financing the Green Deal: how are the EU and Member States contributing?

Note written for Eurofi by Jean-François Pons and Louise Madec, Alphalex-Consult

"Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted."
Albert Einstein

Since the launching of the European Green deal, there have been many announcements of public support commitments and budget decisions. However, there is today to our knowledge no precise publication of all the public funds which have been budgeted at the EU and by the Member States, nor of all the public funds which have been disbursed in the 3 first years of the Green Deal programme. This article aims at listing the different sources of public financing of the Green Deal and to give the figures of commitments and disbursements which are available to our knowledge.

Is it important to acknowledge that investments needs are very high. Over the past decade, the EU has invested an average of €764 billion per year (equivalent to 4.8% of EU GDP in 2022) for environment including climate[1]. More investment is needed, however, to bring GHG emissions in line with the 55% reduction target and to reach the other environmental objectives. The European Commission estimates the annual green investment gap for the 2030 target to be reached – that is to say, the investment needs in addition to historical spending – at €477 billion (3% of EU GDP in 2022), bringing the total annual investment needed to €1,241 billion (7.8% of EU GDP in 2022).[2]

This means that the green transition is an investment challenge. Private funding of these investments should play the major role, but public funding remains indispensable to achieve Green Deal's objectives, because it provides the initial support needed to de-risk private investments, support research and innovation, and ensure a just transition for the regions and communities most affected.

This challenge is further compounded by the global competition for clean technologies' supply chains and manufacturing, notably with the USA and China. The USA's Inflation Reduction Act forecast to spend $400 Bn for the climate only between 2022 and 2031.

After the European elections, and at the start of a new 5-year mandate for the Commission, where there will be political and budget choices to be made concerning the Green Deal, it is important to understand what funds have been disbursed to date to finance the Green Deal and to assess whether Europe can turn its ambition into reality.

1. Direct EU public funding

1.1 The EU Budget

1.1.1 Forecasts: €503 billion over 7 years (2021-2027)

The actual long-term EU budget runs for seven years from 2021 to 2027 and invest substantially in climate and environment related objectives. **30%** of its total contributes to climate action across multiple programs (*e.g.* European Agricultural Fund for Rural Development, European Agricultural Guarantee Fund, European Regional Development Fund, Cohesion Fund, Horizon Europe and Life funds). Of the above-mentioned programs, some are entirely dedicated to climate action (LIFE: €5.4 billion), while others, with larger total

1. https://www.ecb.europa.eu/press/fie/box/html/ecb.fiebox202406_01.en.html#:~:text=Over%20the%20past%20decade%2C%20the,of%20EU%20GDP%20in%202020.
2. See Annex 1 of the European Commission document Investment needs assessment and funding availabilities to strengthen EU's Net-Zero technology manufacturing capacity. The investments required to cater for the RePowerEU plan, the Net Zero Industry Act and the environmental targets would add further to this figure, increasing it to an annual total of €620 billion, as set out in the European Commission's 2023 Strategic Foresight Report. Moreover, with the physical impact of climate change increasing, further funding pressures will emerge related to disaster relief, in particular if adaptation investment does not keep pace.

amounts, devote a significant proportion of their funds to it. Thus, the EU budget is supposed to provide **€503 billion** to the European Green Deal Investment Plan.

Member States also contribute financially to Green Deal initiatives and programs through co-financed funds. The Commission expects that mobilizing €503 billion of the EU budget will trigger additional national co-financing of around **€114 billion** on climate and environment projects in the next 10 years. The 2021-2027 budget alone plans to deploy more than 128 billion in funds financed in part by the States (€35 billion[3]) to meet climate targets.

1.1.2 Disbursements up to 2023

A closer look at the EU's annual budgets shows that the funds allocated to the "environment and climate" heading are not currently up to the expected level of an average of **€72 billion per year**. The amount of the European expenditures between 2021 and 2023 is **€168 billion**[4] (*i.e.* an average of €56 billion a year). Over the next 3 years, therefore, the share of resources directed towards the environment needs to increase significantly.

Moreover, of the total €377 billion pledged by the EU to the Member States for co-financed policies, 19 billion have been paid up to 2023.[5] To date, there are no data to identify which part of this money goes directly to green investments.

1.2 The Just Transition Mechanism

1.2.1 Forecasts: €55 billion over 7 years (2021-2027)

The Just Transition Mechanism (JTM) is a key tool to ensure that the transition towards a climate-neutral economy happens in a fair way, leaving no one behind. It provides targeted support to help mobilise around €55 billion over the period 2021-2027 in the most affected regions, to alleviate the socio-economic impact of the transition. It is built on three pillars.

First, **a new Just Transition Fund** of €19.7 billion in current prices, is expected to mobilise around €7.3 billion of national co-financing, amounting to a total of €27 billion. Then, the **Invest EU "Just Transition" scheme** will provide a budgetary guarantee under the InvestEU. It is expected to mobilise **€10-15 billion** in mostly private sector investments. **Finally, A new Public Sector Loan Facility** will combine €1.5 billion of grants financed from the EU budget with €10 billion of loans from the European Investment Bank, to mobilise €18.5 billion of public investment.

1.2.2 Disbursements up to 2023

By the end of 2023, the Commission had adopted all JTF programmes submitted by the Member States. In total, 96 regions, involving all of the Member States, are receiving support from the fund through 70 plans. So far, the Commission has disbursed **€5.9 billion**[6] in pre-financing under the Just Transition Fund (JTF) to European regions[7]. This was enabled by the entry into force of the Strategic Technologies for Europe Platform (STEP) initiative on 1 March, which aims to boost investments in critical technologies in Europe, leveraging and steering resources across various EU funding programmes.

1.3 Next Generation EU

1.3.1 Forecasts: €248 billion (37% of the RRF) billion in grants and loans by 2026 (115 billion in grants and 133 billion in loans)

Funds from the European budget are complemented by loans and grants from the instrument Next Generation EU presented by the European Commission on May 2020. This unique economic recovery plan is predicted to operate from 2021 to 2026. If NGEU was first and foremost a response to the emergency of the Covid-19 crisis and to the resulting economic downturn that European Union Member States were facing, the Commission imagined it as part of something wider. As talks of the impending climate crisis became more and more urgent in the past years, this plan was envisioned as part of the transition towards cleaner and environmentally respectful economies – the green transition. In this, NGEU inscribes itself in the general framework of the European Green Deal with its objectives.

3. https://cohesiondata.ec.europa.eu/cohesion_overview/21-27
4. Sums of executed expenditure mentioned in official budgets available on the UE budget website: https://eur-lex.europa.eu/budget/data/LBL/2023/en/GenExp.pdf and https://eurlex.europa.eu/budget/data/LBL/2022/en/GenExp.pdf. The amounts paid under the nature and environment expense item are as follows: €56.3 billion in 2021, €57.4 billion in 2022 and €55.8 billion in 2023
5. Of the total 377 billion paid by the EU to the Member States for co-financed policies, 19 billion have been paid up to 2023. To date, there are no data to identify which part of this money goes directly to green investments.
6. The Just Transition Fund has been affected by the delays in the adoption of the MFF and the programme-specific legislation. All JTF programmes were adopted by end of 2022, except for the one for Bulgaria, which was adopted in 2023. The implementation phase started directly after the adoption of the programmes, with all disbursements projected over 2023-2026.
7. https://ec.europa.eu/regional_policy/whats-new/newsroom/03-08-2024-commission-speeds-up-support-to-regions-most-affected-by-the-transition-to-climate neutrality_en#:~:text=to%20climate%20neutrality-,Commission%20speeds%20up%20support%20to%20regions%20most,the%20transition%20to%20climate%20 neutrality&text=The%20Commission%20has%20disbursed%20%E2%82%AC,(JTF)%20to%20European%20regions.

The majority of Next Generation EU funds (€723.8 billion in current prices) will be spent under the Recovery and Resilience Facility (RRF) program. The rest of NGEU consists in 6 others instruments for a total of €77.5 billion in grants. Those instruments are React EU (€47,5 billion), Just transition Fund (10 billion), Rural Development Fund (7,5 billion), Horizon Europe (5 billion), Invest EU (5,6 billion) and Resc EU (1,9 billion).

The RRF consists of large-scale financial support for public investment and areas such as green and digital projects. EU countries must devote at least **37% of the €648 billion** in funding they receive under the Recovery and Resilience Facility to investments and reforms that support climate objectives.

1.3.2 Disbursement until now

Current forecasts predict that countries will far exceed their obligation to spend 37% on environmental reforms and projects, with figures approaching **42%[8],representing a total of €272 billion**. But, between 2021 and June 2024, **€50 billion** from the RRF have been disbursed **(€28.6 billion in grants[9] and €21.2 billion in loans[10])**, an amount well below the commitment to use 30% of NGEU to finance the Green Deal (so far **€170 billion grants and €94 billion grants disbursed)**. Further grants and loans[11] will soon be made available to countries that have undertaken reforms.

1.4 The Emissions Trading Scheme (ETS): €25 billion over the next 10 years (2020-2030)

Recalling the 2016 reflections of the 'Monti Report' on EU own resources, the Commission proposed – and it has been voted[12] – to devote 20% of the revenues from the auctioning of EU Emissions Trading System (ETS) to the EU budget, for an estimated value of €25 billion over the next 10 years. The rest of the revenues is transferred to EU Member States, which report that 76% of the total revenue between 2013 and 2022 was spent on climate, renewable energy and energy efficiency related purposes.[13]

As a reminder, between 2021 and 2023, the EU ETS has generated over €116 billion in revenues[14]. Revenues have risen sharply in recent years with the increase in the price of carbon. To meet GHG emission reduction targets, the number of available quotas will decrease, having a direct effect on the carbon price. The prediction of €25 billion over 10 years is therefore entirely feasible. However, it should be stressed that the amounts of the ETS funds will depend entirely on carbon prices, which remain highly volatile. To our knowledge there is no existing figures published about the precise repartition of the revenues of the ETS over the last few years.

2. Other EU public supports

2.1 Invest EU

2.1.1 Forecasts: €110 billion over 10 years (2021-2031)

Launched in 2021, and building on the mechanism behind the Juncker's Plan, Invest EU uses public funds and guarantees (EU budget guarantee of **€26,2 billion**) to reduce the costs and risks for private investors willing to invest in net-zero technologies. The financial support under Invest EU is available under thematic windows: Small and Medium Sized Companies [€6.9 billion]; Research, Innovation and Digitisation [€6.5 billion]; **Sustainable Infrastructure [€9.9 billion]**; and Social Investment and Skills [€2.8 billion]. Invest EU relies on a multitude of actors with a central role for the European Investment Bank (EIB) Group to achieve its objectives.

It is supposed to mobilize **€372 billion** over the next 7-year Multi-annual Financial Framework (MFF), 30% of which devoted to climate projects. As a result, the Commission expects to unleash **€110 billions**[15] of public and private funds over the next 10 years thanks to this multiplier effect.

8. https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html
9. Grants are non-repayable financial contributions. The total amount of grants given to each Member State is determined by an allocation key and the total estimated cost of the respective recovery and resilience plan.
10. https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/disbursements.html?lang=en
11. The total amount of loans given to each Member State is determined by the assessment of its loan request and cannot exceed 6.8% of its 2019 GNI. Member States can request loans up to 2023 but are not obliged to do so.
12. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_7025
13. https://www.eea.europa.eu/en/analysis/indicators/use-of-auctioning-revenues-generated. Since the 2023 reform came into effect, Member States have to spend EU ETS revenues on climate-related activities pursuant to Article 10 (3) of the EU ETS Directive (with the exception of money used to pay indirect carbon costs to some energy-intensive producers).
14. https://www.statista.com/statistics/1326984/european-union-ets-revenue/
15. https://commission.europa.eu/strategy-and-policy/eu-budget/performance-and-reporting/programme-performance-statements/investeu-performance_en#performance-assessment

2.1.2 Disbursements up to 2023

As of end-2023, 90% of the €26.2 billion EU Guarantee has already been signed with Implementing Partners through Guarantee Agreements (with the EIB and the EIF representing a 75% share of the EU budget guarantee, *i.e.* €19.6 billion was signed in March 2022). Moreover, in less than 2 years, almost **€37 billion** were invested thanks to Invest EU to support the green transition. Those investments are mainly directed to energy and mobility.[16]

2.2 The European Investment Bank: €250 billion by 2027

The European Investment Bank is an integral part of the European Green Deal, with the role of funding agency and advisor, with programs structured around the key area of focus of the Green Deal and with a Climate Action Plan implying the EIB will be making 50% of their lending to climate change-related activities by 2025.

EIB is helping Europe moving from ambition to reality under Invest EU, EU Budget and the Just Transition Fund. In total, the EIB's contribution to the Green Deal Investment Plan is expected to amount to €250 billion in terms of green investments under EU mandates.

The Bank itself is on track to meet all these targets – notably, **green financing reached 58% of all investment in 2022**, three years ahead of target.[17] The EIB Group is also on track to support €1 trillion of green investment in the decade to 2030. The Green Bond Purchasing Programme, under which the EIB purchases green use-of-proceeds bonds issued in EU capital markets, is another important new offer that can help crowd in additional private sector financing. Other examples of new products include the new EIB Green Loan product, and the enhancement of the Group's intermediated lending and guarantee offer through the Green Gateway advisory portal and increased use of "green windows".

3. State aids

State aid is one of the ways in which EU Member States contribute to the funding and implementation of Green Deal policies. According to the EU treaties, State aids are under the control of the Commission. On January 27, 2022, the Commission adopted its new guidelines on State aid for climate, environmental protection and energy[18], which has been influenced by the enactment of the IRA.

Between 2012 and 2022, according to the Commision, more than **€630 billion**[19] in State aid were granted in EU countries for the environment including climate. Apart from crisis aid, aid for environmental protection remains the main political priority for Member States. It is by far the policy objective for which Member States have spent the most in 2022 (€41.51 billion[20]). Despite the decreased expenditure in 2022, environmental aid is more than five times larger than the cumulative expenditure under the second most used objective: regional development (€82.9 billion from 2017 to 2022, of which €13.91 billion in 2022). In Total, €145 billion were spend between 2020 and 2022.

With the new European rules, it is possible to argue that State aid will play an important role in financing the green deal over the coming years.

Conclusion

The existing publications on the public support of the Green deal Deal have two shortcomings, to our knowledge. First of all, some figures are missing, notably the amount of green disbursements amount of regarding the ETs revenues. Then, we cannot add up all the amounts of EU and national public support in this note, because we must avoid double counting, for instance State aids which are refinanced by the NGEU.

But we can still have a reasonable assessment of the public funding of the Green Deal up to now:

1. **The disbursement of EU budget support has to be accelerated to be in line with the pluriannual commitments.** This is notably the case for the EU budget: €56 Bn on average per year between 2021 and 2023 (to be compared to an average of €72 Bn between 2021 and 2027).
   It is also the case for the green part of the NGEU. This underscores the need to speed up implementation of planned projects.
2. If we add all the amounts of EU and national budget support, we obtain a total of €225 Bn coming from the EU budget between 2021 and 2023 (without the disbursements of the ETS

16. https://investeu.europa.eu/investeu-programme/investeu-fund/investeu-indicators_en#implementation-per-policy-window
17. https://www.eif.org/news_centre/publications/mid_term_review_of_the_eib_group_climate_bank_roadmap_en.pdf
18. https://eur-lex.europa.eu/EN/legal-content/summary/2022-guidelines-on-state-aid-for-climate-environmental-protection-and-energy.html
19. https://competition-policy.ec.europa.eu/document/download/0b2037c5-c43f-4917-b654-f48f74444015_en
20. https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1890

which we could not find) and €145 Bn between 2020 and 2023 of State aids. We cannot add these two public supports, because part of the State aids areis refinanced by NGEU, but **we can reasonably estimate that the annual amount of public support coming from EU and the member States is superior to €100 Bn (0,6% of GDP) per year. This is in line with the ambition of the Commission when the Green Deal was launched in 2020, but not with the increase of the commitments since, notably after the decision on NGEU.**

3. **The disbursements of other EU public supports, coming from the EIB and EU Invest are on track to meet their forecasts, and even higher.**
4. **All in all (including ETS funds etc), the public effort in the EU is today significantly higher than the one linked to IRA in the USA of $400 Bn between 2022 and 2031, being recalled that the USA are only focusing on climate, not on other green objectives.**

The public support of the Green Deal will continue to be a priority for the new mandate of the European Commission, which has also to prepare the forthcoming EU pluriannual budget discussions of 2028-2034, also in the context of the end of NGEU in 2026.

In this perspective, a serious effort is necessary to have clearer and more precise figures on the actions undertaken by Member States and the European Union, in order to be able to take well informed political choices and ensure greater transparency and efficiency in the management of public funds.

Climate transition finance: consensus on the objectives, challenges and ways forward

Note written for Eurofi by Jean-François Pons, Alphalex-Consult

The financing of "green", climate-related projects and activities in line with the Paris Treaty, has been developed in the last ten years both through market developments (Green bonds, Sustainable bonds, Sustainable linked-bonds, Green loans etc) and through regulation (the EU sustainable finance regulation including climate taxonomy, the ISSB climate-related standards etc).

A growing economic, financial and political consensus is to focus now also on the transition of "brown", energy-intensive economic actors towards the Paris objectives. To support this goal, there have been different attempts to create, define and develop a sub-sector of sustainable finance, called transition finance or climate transition finance. This article intends to focus on climate transition finance, a concept which is simpler and clearer than transition finance, which can encompass other objectives than climate like environmental ones.

The financing of climate transition is faced with two kind of difficulties :

- Climate transition relies on research and development, innovations, strategies built on scenarios which are unsure, and is therefore riskier than the continuation of "business as usual"; public finance may help to minimise those risks, but the continuity of this support over the medium-term is unsure;
- Transparency is needed to attract sustainable finance, but the undertakings which embark on climate transition will also continue some business as usual and both activities should be clarified to prevent greenwashing or greenwashing controversies.

This note tries to describe the current attempts of developing climate transition finance, which are stepping stones which will need to be consolidated and scaled up, notably through the implementation of the regulatory and supervisory agenda of the European Union.

1. A large consensus for the development of transition finance, with differences in the definitions and the modalities

1.1 In the European Union

In the regulatory framework on green transparency, the priority of the European Commission, advised by the Platform on sustainable finance, has been to establish a green taxonomy. The objective was to induce financial investments in climate-friendly and environmental-friendly corporates and projects, such as renewable energies, building new houses respecting high-quality standards etc. Hence Regulation 2020/852 of June 2020 and its first delegated act.

However justified it may seems, this démarche has a significant shortcoming : it adresses only a limited segment of the economy, the already "green one", and ignores the most important challenge, which is to align the large part of the economy emitting a significant volume of greenhouse gases to the objectives of the EU in line with the Paris Treaty: net zero in 2050 and -55% of GHG in 2030. The implementation of SFDR shows that only a few % of financial assets are deemed "green" according to the EU taxonomy.

The communication of the European Commission in July 2023 recognizes the needs of climate transition finance going further than financing only "green" projects and activities:

"EU efforts have predominantly focused on supporting investment flows towards economic activities that are already environmentally sustainable and towards plans to make them environmentally sustainable. A more supportive framework is needed to address the challenge of financing interim steps in the urgent transition of activities towards the EU's climate neutrality and environmental objectives.

"Finance for the transition to a climate-neutral and sustainable economy is needed today for those undertakings that want to become sustainable but cannot shift in one step to a fully environment-friendly, climate-neutral performance model. Transition finance will be necessary over the coming years to ensure a timely and orderly transition of the real economy towards sustainability while ensuring the competitiveness of the EU economy. Not all technologies are yet available for a sustainable economy and economic actors can reach these objectives at different pace."

This Communication is accompanied by a Recommendation to all interested parties (enterprises, including SMEs, financial actors, governments, supervisors) to help the development of transition finance.

1.2 Climate transition finance in Japan

Japan has built a strategy implying its government, the private financial and non-financial sector, to achieve the transition of carbonated activities in industrial sectors, transport and buildings. This strategy relies on transition pathways for these activities in line with the Paris objectives, supported by public and private finance, including the issuing of Climate-transition bonds.

To support this strategy, Japan has issued in February 2024 a Transition bond of $5,5 Bn. The bond has earmarked 55% of its user of proceeds to R&D, including 18% for the utilisation of hydrogen in the steel making process and the decarbonisation of the thermal process. The remaining 44.5% of the bond's UoP is earmarked to support decarbonisation objectives, including subsidies for low-carbon transport and batteries, subsidies to improve the insulation performance of houses, and subsidies to promote the introduction of clean energy vehicles. The largest subsidy allocation is directed to silicon carbide power semiconductors for renewable energy, clean transport, electricity storage batteries, electricity transmission and distribution, and to strengthen supply chains for critical materials in the manufacturing of storage batteries.

The Japan government announced plans to raise €124 Bn for its climate-transition programme over the next decade.

It is to be noted that some Japanese NGOs, notably Climate integrate, are not fully supportive of this national strategy of transition. They fear that some technological innovations could be not environmental-friendly, like the so-called "clean coal" (co-combustion with ammoniac). For Climate intergrate, "the challenge would be that investors could really assess the consistency of the transition bonds with the Paris objectives."

1.3 At the international market level

The International Capital Markets Association (ICMA, which is notably behind the Green Bonds and the Sustainable Bonds Principles) has published "The Climate transition finance handbook" in July 2023 and "Transition finance in the debt capital market" in February 2024, which give a description of what is climate transition finance in the financial markets and key recommendations to adequate issuing of climate transition bonds.

Today Green bonds and Sustainability-linked bonds are the tools which are the most used to finance climate transition. There are been some issues of Climate transition bonds, but they remain rare up to now.

The main recommendation of ICMA, for the issuers is:

- to adopt a Paris-aligned and measurable climate transition strategy,
- to use and disclose science-based targets and metrics,
- to disclose all the relevant information (for instance on planned changes to the business model and, if relevant, potential adverse impacts and mitigating actions),
- to obtain an external review confirming the credibility of the transition plan and to report annually on the transition plan, targets and metrics.

1.4 The definition of transition finance

There are different definitions possible as recognised by ICMA or the OECD.

The most extensive includes all the finance which supports the transition to a more sustainable economy and to the Paris objectives, including the finance considered as "green" by the EU taxonomy.

The more focused is in Japan, where only "hard to abate" sectors transitioning on the climate objectives of the Paris Treaty are concerned.

For the purpose of this note, we will take the following approach:

- to focuse on climate and not on other environmental issues (for which the concept of transition is much less clear);
- and to focus on the financing of activities and projects which are not "green" per se, but which will enable the undertaking concerned

to align its ges trajectory on the Paris objectives. This will include the "hard to abate" sectors, but also other significantly carbonated activities.

The relationship between green and transition finance over time is described by the Commission in Annex 1.

2. Challenges

2.1 There are two major challenges

- The concern of greenwashing
  For an investor which wants to finance sustainable projects or corporates, it is crucial to avoid greenwashing or even greeanwashing controversy. But how to be reasonably confident that a corporate which says publicly that it is aligned on the Paris objectives is really aligned ? How to assess the growing part of climate transition activities vis-à-vis the continuation of "business as usual?"
- **The lack of convergence at the international level :**
  How to deal with different levels of ambition in corporate and investment practices across juridictions? And with different requirements of climate-related reporting?

2.2 For banks, there is another difficulty : the financing of SMEs and households, economic actors for which it is much more difficult to have adequate data and transition pathways

And the part of these banks' customers in the emission of greenhouse gases is important: SMEs' emissions of CO2 represent 63% of the emissions of all the businesses in the UE.

3. The ways forward

3.1 Well-documented climate transition plans should be the cornerstone of climate transition finance

The core objective of climate transition plan is to describe the transition of carbonated undertakings to the net zero objective of the Paris Treaty.

In the EU, financial and non-financial companies must establish a transition plan, based on the EU regulation (SFDR, CSRD, ESRS and CS3D). Financial supervisors will also look at the transition plans of the banks and insurances according to the EU regulation.

In the UK, transition plans disclosures will be mandatory in January 2025 ; they should follow guidance from the Transition Plan Taskforce (TPT), which published a "Disclosure framework" in October 2023.

To ensure the credibility and follow up of transition plans, there is a certain consensus between the regulators and market participants as reflected in ICMA recommendations (*see Table in Annex 2*), in line with EU regulation, TPT and ISSB. These recommendations can be summed up as follows:

- The transition plan must describe strategy, governance, objectives, KPIs, including Capex and Scope 3,
- It must be audited by a third party,
- It must be reviewed year after year, being understood that all the KPIs for instance will not be available the first year and also that revisions can reveal worse results/objectives than the year before, given the new data added.

3.2 The governments and international organisations should support transition planning by financial and non-financial actors

The undertaking cannot build its transition plan in isolation.

First, public authorities should develop transition planning guidelines, as recommended by l'Association Europe Finance Régulation (AEFR), and these should specifically include guidance on assumptions, execution, and monitoring. The Chartered Financial Analyst Institute (CFA Institute) recommends that governments and regulators harmonise transition plans disclosures and require economic feasibility disclosure. It asks also for the development of a transition taxonomy, but this recommendation seems difficult to implement, given the long, complex and rather frustrating development of the green taxonomy by the EU.

Secondly, the transition plans must rely on economic scenarios both sectoral and national. There are transition pathways or scenarios at the international level designed by international organisms like the International Energy Agency (IEA), the Glasgow Financial Alliance for Net Zero (GFANZ) or the Network for Greening the Financial system (NGFS), which are more or less precise and accepted by the undertakings concerned.

But they should be complemented by sectoral and national plans, which are generally lacking with a few exceptions (Japan, France...). For the EU, national and sectoral plans should be scrutinised and harmonised at the EU level.

Finally, coordination and monitoring of the transition at EU level must be developed and EU supervisory and regulatory entities should align their approach on transition plans.

3.3 The regulation on disclosures, but also ratings and labels could help

In its consultation on SFDR, the Commission presented a proposal of creating a specific category of disclosure of financial products "with a transition focus aiming to bring measurable improvements to the sustainablity profile ot the asset they invest in..." This orientation has been supported by a large majority of the respondents, would help individual investors to navigate the investment product land-scape and attract funds to finance the transition.

Transparency about transition plans by corporates and financial actors could be also comforted by a specific task of sustainable rating agencies and/or sustainable labelling organisations. A proposal for a "good transition label" was made in the Eurofi Regulatory Agenda of February 2024.

3.4 International convergence is required

The publication of transition plans is an obligation in the EU and the UK starting in 2025. It should become the rule for all the big corporates in the world, which are encouraged to do so by numerous international organisms (OECD, GFANZ etc). The pressure of public authorities and of financial supervisors (including IOSCO), but also of the markets, should help. Already over 4.200 companies have set targets approved by the Science-based Targets Initiative (SBTI). ICMA is already providing an efficient support.

Conclusion

The development of climate transition finance is necessary to reach the objectives of the Paris Treaty. Given the challenges recalled in this note, it should be seen in a multi-year perspective. The publication of consistent and credible transition plans by corporates and financial actors should improve year after year, notably through increase of the availability of data, but also through comparability and benchmarking.

Recent developments are encouraging, both at political levels, notably in the EU, the UK and Japan, and at the market level.

The public authorities have a rôle to play by providing transition planning guidelines and by publishing national transition scenarios.

In the EU, harmonisation of transition planning and its supervision are needed at the EU level. The reform of SFDR should also give the opportunity to introduce a specific disclosure category devoted to transition finance, while rating agencies and labelling organisations could develop useful tools, in order to attract the necessary funds from financial investors.

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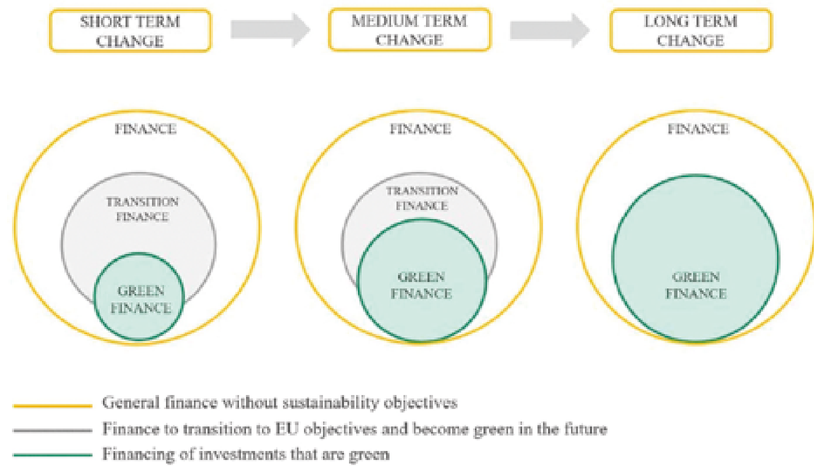
Annex

ANNEX 1.
Relationship between green and transition finance over time



Source: European Commission: Recommandation of 27 June 2023, Table 1

ANNEX 2.
ICMA recommendations on transition plan disclosures

Elements	Key actions & disclosures
Transition strategy, materiality & governance	• Adopt a Paris-aligned (ideally its 1.5°C objective) and quantitatively measurable climate transition strategy and targets using science-based pathways provided by recognised third-party sources, where they exist, and disclose methodologies and scenarios used, as well as any third-party certification. • Ensure that climate transition strategy is relevant to the environmentally material parts of the business model. • Ensure effective climate governance arrangements including senior management approval of the plan and accountability, remuneration/ incentive schemes linked to the transition strategy, and necessary skills and training across the organisation. • Where relevant, consider "just transition" and disclose broader sustainability policies addressing negative sustainability impacts and trade-offs. • Position transition plan as a standalone document sitting alongside financial reporting.
Science-based targets & metrics	• Disclose GHG emissions covering all material Scopes as formulated in absolute (gross tCO2e), economic output (per net revenue), and industry-based metrics. • Adopt and disclose absolute gross (tCO2e), and where relevant, intensity-based targets for all material GHG Scopes. When only intensity targets set, disclose also the associated absolute values. • Adopt short (ideally 3 years max.), medium, and long-term targets, and in any case for 2030, from which date baselines and targets should be updated every 5 years. • There should not be any reliance on offsets except for residual (approx. 5-10%) emissions in net zero targets, in which case they should be disclosed separately and include credibility proof.
Implementation transparency	• Disclose all the relevant information on (i) planned changes to the business model, operations, products, as well as relevant policies and processes supporting those; (ii) actions for short (ideally 3-years max.), medium, and long term; (iii) planned investments, financial resources, and other financial metrics; (iv) internal carbon pricing; (v) engagement strategy and actions for value chains, with industry, public sector, and civil society. • Provide a credible link between the various levers and the transition strategy and quantify the contribution from different levers to climate objectives at least on an estimated basis. • Where relevant, disclose potential adverse sustainability impacts and mitigating actions and expenses (e.g. for "just transition").
Verification & reporting	• Obtain an external review assessing the credibility of the entity's strategy, its alignment to the referenced science-based trajectories, and its climate governance alongside any potential jurisdictional requirement required for sustainability reporting (e.g., limited or reasonable assurance). • Report annually quantitative and qualitative information on the progress against the transition plan, targets, and metrics. • Regularly update the transition plan (ideally every 3 years), and when there are significant changes.

Beyond the insurance gap: building economic resilience in a climate-challenged future

Note written by Jean-Marie Andrès and Cyrielle Dubois

Introduction

In 1906, the great San Francisco earthquake caused unprecedented devastation, with insured damages estimated at over $235 million, equivalent to $6.3 billion in 2018 dollars. Of the $235 million in insured losses, only about $180 million was paid out in claims, as insurers faced financial difficulties following the event. In the aftermath of this event, at least 12 American insurers went bankrupt. As climate change exacerbates natural catastrophes and the insurance gap becomes more important every year, we still face the challenge of mitigating the economic impacts of natural catastrophes through insurance while ensuring insurers' solvability.

Last year, global losses related to natural catastrophes amounted to USD 280 billion, with only about 38% of the losses insured. This means that the global protection gap was USD 174 billion in 2023, up from USD 153 billion in 2022, and the previous 10-year average of USD 134 billion[1]. Several factors suggest that this gap will continue to rise, as property exposure continues to grow, the number and severity of natural catastrophes increase, and insurers withdraw from high-risk regions.

In this context, political authorities are starting to grasp with the concept, alerted by supervisors and insurers alike. Multiple EIOPA, NAIC, and reinsurers reports have emerged over the past few years, describing the widening insurance gap and its dangers. In early 2024, the long-awaited French Langreney report on the insurability of climatic risks was released and contained a series of recommendations for adapting the French insurance system in the face of rising climatic risks. Despite these advances, political authorities are still sorely lacking in initiatives and solutions to this problem.

Yet, the importance of the economic losses linked to climate change is increasingly recognized, on the one hand through the growing visibility of the damage caused by natural disasters, and on the other through the recurrent publication of studies. The multiplication of adaptation plans in several countries shows just how crucial adaptation is considered to be by policymakers to mitigate losses. Insurance and the insurance gap are however mentioned little in these plans, and where they are, operational measures often lack.

It is also important to note that climate risks could be undermining the insurance model based on mutual risk-sharing. People buy insurance because they think they have roughly the same chance of experiencing a loss as everyone else. With climate risks, however, this is not the case, as some areas, people, and activities are more vulnerable than others. It may therefore prove difficult to continue basing insurance schemes on mutualisation since, in reality, they become a call for solidarity.

In addition, as losses grow, it is legitimate to question whether the private sector will continue being able to cover the costs. In 2023, several important (re) insurers reported experiencing losses due to natural catastrophe payouts, resulting in some withdrawing from certain areas. Reducing the damages that are too likely will therefore be necessary to keep insurance as a primary responder to climate-related catastrophes.

In the context of growing anticipations of future physical and economic damages, the insurance sector, as an expert in risk, will necessarily have a role to play. How this role articulates with other actors, with adaptation strategies, and with global economic resilience however remains to be formally articulated. It is nevertheless the only solution to building an economically resilient future, in which losses can still be borne to ensure economic activity and growth.

1. Swiss Re https://www.insurancejournal.com/news/international/2024/03/26/766556.htm#:~:text=Last%20year%2C%20economic%20losses%20from,average%20of%20US%24134%20billion.

1. The many challenges for coping with the physical and economic impacts of climate-related disasters

1. 1 Rising and worrying estimations of future physical and economic losses

Over the years, the cost of climate change has become a recurring question to which no one seems to be able to identify a clear answer. Yet, to estimate the extent and the cost-effectiveness of our so-called "mitigation actions" and to assess the extent of the insurance gap, it is crucial to assess the economic impact climate change and climate-related catastrophes will have in the future.

As the number and severity of natural climate-related disasters escalate, physical losses around the world continue and will continue to rise significantly even in a 1.5°C scenario.

The most visible layer of losses is naturally **physical losses**, which have risen steadily over the past 50 years. In its 2020 Ecological Threat Register, the Institute for Economics & Peace revealed that natural disasters had increased tenfold in 60 years, from 39 recorded incidents in 1960 to 396 in 2019. This can only be attributed to an increase in climate-related natural disasters, as non-climate disasters such as earthquakes or volcanic eruptions have not increased. The resulting cost of the damage caused by natural disasters has risen from US$50 billion per year in the 1980s to US$200 billion per year in the last decade in constant 2019 dollars[2]. In 2017, this **represented about 0.4%** of the world's GDP[3], moderately affecting the potential GDP. This number is however expected to increase significantly in the next few years.

Indeed, models have predicted an increase in both the number of these catastrophic events and their strength. So too are costs associated with physical loss expected to rise, according to Gagliardi et al. (2022), even under a 1.5°C global warming scenario, physical **losses related to climate disasters across the EU are anticipated to double by 2050 and triple by the century's end**. Costs are expected to be notably higher in scenarios with average temperature increases of 2°C or 3°C[4].

The hidden costs of climate change encompassing indirect economic impacts are highly superior to physical losses and are expected to far exceed initial estimates by 2050.

Beyond the physical costs associated with the effects of natural catastrophes, the financial burdens significantly increase due to slow economic recovery (*i.e.* when economies take a prolonged period to bounce back) and from low economic resilience (*i.e.* the inability of economies to withstand and adapt to shocks). These factors truly rack up the costs.

Recent studies have revised estimates of the economic damage from climate-related catastrophes, projecting that by 2050, the costs will be at least six times greater than previously thought, representing a significant share of GDP. In an article published in Nature in April 2024, Kotz, Levermann, and Wenz estimated that the **world economy is committed to an income reduction of 19% within the next 26 years**, in comparison with a baseline without climate-change impacts, **independent of future emission reduction choices**. Depending on the scenario of future income development this corresponds to about 19 to 59 trillion dollars in 2005 US dollars.

In May 2024, the National Bureau of Economic Research published a working paper by Bilal and Känzig confirming this new order of magnitude, estimating that a **1°C increase in global temperature would lead to a 12% decline in world GDP**. Although this study is currently only at the stage of a working paper and has therefore not yet been peer-reviewed, the orders of magnitude found in both studies are comparable. Indeed, it is estimated that by 2050, the average temperature will have risen by between 1.5°C and 2.7°C, which suggests that despite the different methods used in the two studies – one chose to look at the effect of global average temperatures on the economy, while the other went down to a very local scale, taking into account not only variations in local average temperatures but also temperature extremes and precipitation – the estimates are consistent with each other.

The predicted reduction in GDP will however not be sudden and will be smoothed out over time, making it more difficult to perceive these indirect economic losses than purely physical, clearly visible damages.

Although regional disparities in climate change impact will exist, the likely disruption of global value chains, as well as the anticipated migration waves climate change will trigger, demand a wide and general mobilisation to mitigate global income losses.

Regional differences in climate impact are significant. According to a study published in Nature in April 2024, low-income countries face an income

2. https://www.visionofhumanity.org/global-number-of-natural-disasters-increases-ten-times/
3. https://ourworldindata.org/grapher/weather-losses-share-gdp
4. https://economy-finance.ec.europa.eu/document/download/69d8a3f4-2a15-48a0-970d-92a7fb9d921b_en?filename=dp168_en.pdf

loss of 8.9 percentage points (61%) greater than high-income countries by 2050, mainly due to their economic models and geographic locations. North America and Europe may see a median income reduction of about 11%, while South Asia and Africa could face reductions of around 22%[5].

Even at 11%, income reduction is substantial, and these regional disparities will likely cause global economic tensions. With nearly half of global trade involving interconnected value chains, disruptions in one region will affect others, highlighting the need for international solidarity. Support for adaptation in high-risk areas and addressing economic disruptions caused by natural disasters, which can trigger migration and strain resources, will be crucial for global economic stability.

Furthermore, impact studies fail to take into account certain factors such as human health, and therefore underestimate economic impacts.

Income reduction estimations are furthermore often underestimated due to the exclusion of significant factors like heatwaves, sea-level rise, tropical cyclones, tipping points, and non-market damages to ecosystems and human health. This exclusion is primarily due to scientific limitations and the lack of historical data needed to assess future effects accurately[6].

A paper complementing these first two studies published in Nature in March 2024 estimates the economic impact of increased heat wave frequency and severity by 2060. According to Sun et al., the authors of this study, **global economic losses could range from 0.6% to 4.6%**, attributed to health losses (37%-45%, *i.e.* losses associated with mortality due to high temperatures), labour productivity loss (18%-37%), and indirect loss (12%-43%) from supply chain disruptions due to heat stress. The losses vary based on Social Economic Pathways and emissions reduction levels[7].

All of these studies are not coordinated which therefore makes it difficult to understand how they relate to each other. In any case, their multiplication and their similar orders of magnitude are alarming and show that economic losses due to the direct and indirect impacts of climate change have cruelly been underestimated. Indeed, new estimations for losses represent a **significant cost that is likely to have important consequences on future development.**

1.2 Despite the expected increase in physical and economic costs in the face of climate change, and the evident benefits of insurance, the world is still poorly insured

High subscriptions to insurance can limit the GDP growth decline following a natural disaster and can have important roles in providing post-disaster economic relief.

If the world is largely committed to an important part of these losses, studies have shown that insurance can typically diminish the adverse effects of natural disasters on GDP growth rates. In 2012, von Peter et al. affirmed that there was little evidence that countries rebounded from natural catastrophes when uninsured, finding a typical drop in growth of 0.6 to 1% on impact and a cumulative output loss of two to three times this magnitude, with higher estimates for larger catastrophes[8]. By contrast, well-insured catastrophes were found to be inconsequential or even positive for growth over the medium term as insurance payouts helped fund reconstruction efforts. Facher Rousova et al. (2023), confirm these findings, observing that **a major disaster causing direct losses exceeding 0.1% of GDP can diminish GDP growth by roughly 0.5 percentage points in the quarter of impact, particularly if the proportion of insured losses is low, *i.e.* below 35% of the total. This adverse effect on GDP growth persists over the subsequent three quarters[9].**

Yet, the insurance gap continues to grow every year as climate-related disasters intensify.

Despite the increasing frequency and severity of natural disasters, and the evident benefits that insurance can bring out, a significant insurance gap persists worldwide. In 2023 alone, global economic losses from climate-related catastrophes amounted to a staggering USD280 billion, yet only 38% of these losses, totalling USD106 billion, were covered by insurance. The global insurance gap in natural catastrophes in 2023 therefore amounted to USD174 billion.

This glaring disparity highlights the urgent need for enhanced insurance **coverage** in vulnerable regions. Even as communities face mounting losses from events like hurricanes, wildfires, and floods, many remain underinsured, leaving them exposed to financial devastation in the aftermath of such catastrophes. For the European Economic Area, the statistics are slightly lower, with about 55% of

5. https://www.nature.com/articles/s41586-024-07219-0
6. https://www.nature.com/articles/s41586-024-07219-0
7. https://www.nature.com/articles/s41586-024-07147-z
8. https://www.bis.org/publ/work394.pdf
9. https://www.suomenpankki.fi/globalassets/en/financial-stability/events/sra-2023/papers/margherita-giuzio---the-macroeconomic-effects-of-the-climate-insurance-protection-gap.pdf

losses being uninsured. Some regions and countries are however more exposed to the insurance gap than others, for example, the Netherlands to floods. In 2023, only about 4% of possible losses due to coastal floods were insured, although the risk level for floods in this specific region is extremely high[10].

Both demand and supply side factors can explain the insurance gap.

Two main factors can be identified within this issue of an underinsured world: the first one is what properly causes the insurance gap: a lack of universal subscription to insurance. The second is the difficulty of measuring and modelling risks, whose consequence is a solvability risk for insurers, which triggers insurance coverage reduction.

Certain levels of risks are however such that they cannot be insured by the private sector because of their cost and will have to be taken over by the public sector.

1.2.1 On the demand side: Moral hazard, wrong perceptions of risks, and insurance costs are leading to underinsurance

The insurance gap is mainly a demand-side challenge, with a lack of subscription to insurance leaving important parts of the economy uninsured. In the past, only about a quarter of the total losses caused by extreme weather and climate-related events were insured. If today, about 1/3 of losses are insured, room for improvement subsists and policyholders must be encouraged to underwrite themselves. In a study published in 2024, EIOPA identified key reasons for the lack of insurance uptake for natural catastrophes.

Firstly, **consumers often perceive insurance as unaffordable because they focus on the premiums rather than the overall value of the coverage**. Many see premiums as too high, even when the insurance is valuable, due to a lack of understanding of the coverage's comprehensiveness. Additionally, income influences housing choices, with some homes being expensive or difficult to insure.

Confusion about costs and coverage, along with limited knowledge of how insurance works, exacerbates this issue. Misunderstandings about affordability often result from financial illiteracy or the complexity of insurance products, making it hard for consumers to choose the right policy. Negative past experiences with insurers also deter people from purchasing NatCat insurance; only half of the surveyed individuals trust that insurance companies would compensate for NatCat losses.

Risk perception also plays a crucial role in insurance uptake. Over 30% of consumers cited a lack of awareness or misperceptions of risks as their main reason for not buying insurance. Those who have experienced NatCat events are more likely to be insured, indicating that firsthand experience influences risk awareness.

Lastly, **high expectations of state intervention** discourage people from purchasing insurance. Many believe the government will cover losses from NatCat events, creating a moral hazard. Studies show that in countries with lower insurance uptake, 59% of respondents think the government should be responsible for NatCat losses.

1.2.2 On the supply side: insurers underestimate natural catastrophe risk due to outdated models and underestimation of potential impacts, which, when improved, could lead to reduced coverage and higher premiums, further widening the insurance gap

a) Risk assessment is difficult, and few insurers have conducted a comprehensive and complete analysis of climate change and natural catastrophe impacts

While the demand side represents the main reason for the insurance gap, there is also **increasingly a gap in the knowledge of risk on the supply side**, related to the failure of common catastrophe models relying on historical data. The currently used internal models, statistical tools that use available historical data and scientific principles describing the physical mechanisms that control the occurrence and behaviour of natural hazards, are being rendered obsolete by climate change, as past events are no longer an accurate predictor of future events.

Furthermore, some insurers have yet to analyse climate change impacts on their activities. A 2022 EIOPA report highlighted that over 50% of insurers hadn't assessed climate change's potential impact. Insurers often underestimate changes in natural catastrophes, with more than 67% reporting no change in or inability to evaluate wildfire losses. S&P Global estimates that (re)insurers' estimates of their exposure to natural catastrophe risk could be underestimated by 33% to 50%[11].

McKinsey notes that many in the property and casualty insurance industry underestimate the immediacy of climate change's economic effects, stressing its systemic risks to local economies.[12] Forbes suggests this underestimation stems from assumptions that other financial actors, like insurance companies or the state, will cover losses.

10. https://www.eiopa.europa.eu/tools-and-data/dashboard-insurance-protection-gap-natural-catastrophes_en
11. https://www.spglobal.com/ratings/en/research/articles/210923-global-reinsurers-grapple-with-climate-change-risks-12116706
12. https://www.mckinsey.com/industries/financial-services/our-insights/climate-change-and-p-and-c-insurance-the-threat-and-opportunity

However, insurers might reprice or withdraw coverage from high-risk areas, and state intervention is not assured[13].

The evolving landscape of climate change poses significant challenges to traditional insurance risk assessment models, leading to potential underestimation of future risks by insurers and society at large.

b) In the meantime, better assessment of risk may well lead to less insurance coverage, as insurers withdraw, and premiums increase

Better assessing risks could however lead to a widening of the insurance gap through two main mechanisms: where risk is important, insurers will face a dilemma: withdrawal or significant premium increase[14].

The insurance gap is indeed further accentuated by a high probability of risks in certain areas, as **insurers exposed to natural catastrophes rush-react to deep unexpected losses by withdrawing**. For instance, after the devastating wildfire season in California, several major insurers significantly reduced their coverage or entirely exited the market.

Further, enhanced risk models enable insurers to more precisely price policies based on the true level of risk, which often means higher premiums in areas more susceptible to climate-related events. Premiums have already considerably increased over the last years, with for example two of Florida's private insurance companies having applied in February 2024 to increase premiums by over 50%, decreasing affordability. This escalation in costs can lead to decreased insurance uptake, leaving more people exposed to the financial repercussions of natural disasters.

c) Even if these coverage challenges were resolved, insurance cannot be the sole pillar of attenuation of the effects of climate change, and it has to be complemented by adaptation, and at times, by solidarity mechanisms

The insurance gap presents a complex challenge that includes issues on both the supply and demand sides. Efforts are needed to address consumer perceptions, encourage greater insurance uptake, and improve risk analysis. However, other barriers to insurability need to be rectified. Even if insurance becomes more widely purchased, climate change will worsen existing events, making some costs related to natural catastrophes uninsurable for the private sector, which will inevitably lead to the withdrawal of insurance companies from certain regions.

Insurance alone cannot serve as the sole means of mitigating the impacts of climate change on the economy, as costs are high and cannot only be borne by it. This calls for other pillars of action including adaptation, elimination of highly probable risks, and solidarity.

Adaptation is essential for keeping insurance affordable and available.

Often misconstrued as a diversion from emission reduction efforts, **adaptation however stands as an indispensable strategy that must go hand in hand with emissions reduction**. Indeed, irrespective of emission reduction efforts in the near term, we are already bound to significant climatic shifts, translating into a projected 19% global income reduction by 2050. Only after 2050 do the benefits of emission reduction appear. Adaptation is therefore crucial in the immediate future.

To determine the value of adaptation, one must consider the costs of inaction, adaptation, and its benefits. A 2023 European Environment Agency study found that adaptation investments exponentially decrease economic losses from climate impacts, with larger investments leading to lower losses[15]. In a June 2020 report, the French Caisse Centrale de Réassurance showed that preventive flood measures significantly cut losses[16]. By lessening the impact of climate-related events, insurers can offer more reasonable rates, ensuring broader access and reducing financial burdens on individuals and businesses. It also allows for continued coverage in areas where losses were previously too expensive to be borne by private insurers. Without adaptation, insurance could become prohibitively expensive or unavailable in some areas.

Some regions might however become or already are too risk-prone, which means that more drastic population and economic activity relocation measures must be put into place.

In certain regions, the feasibility of adaptation measures may be severely limited by the inevitability of highly probable climate risks. Here, the imperative shifts towards mitigating these risks directly, often through measures like relocating communities from vulnerable areas. Such decisions are going to be difficult and must be driven by political will. The relocation of populations due to climate impacts represents a profound challenge, requiring careful consideration of social, economic, and ethical implications. These decisions are however going to be necessary, as they will

13. https://www.forbes.com/sites/ninaseega/2024/03/01/why-the-insurance-industry-must-wake-up-to-the-harsh-reality-of-climate-change/
14. https://www.forbes.com/sites/ninaseega/2024/03/01/why-the-insurance-industry-must-wake-up-to-the-harsh-reality-of-climate-change/
15. https://www.eea.europa.eu/publications/assesing-the-costs-and-benefits-of
16. https://www.ccr.fr/documents/35794/1252212/CCR+Rapport+efficacite+PPRi+web+06102023.pdf/4dcccd23-0cd8-af1f-6b16-9167d32e56f1?t=1697038007610

safeguard the long-term viability of the insurance system by reducing unsustainable financial exposures.

If we consider that the scale of the losses is of the same order of magnitude as the current ratio between insurance premiums and GDP, insurance could effectively cover these losses, provided that effective measures are taken to delimit insurable risks from those that are not.

It was noted that direct economic losses linked to climate-related disasters currently represent about 0.4% of world GDP. According to the OECD, the ratio of direct gross premiums to GDP has fluctuated between 8.1% and 9.4% over the last 20 years. This data suggests that the amounts that will need to be compensated by insurers are challenging but realistic. However, in recent years, insurers have withdrawn from covering certain regions due to unmanageable losses. In these regions, risks have changed from hazards to certainties.

To tackle this challenge, it's crucial to implement effective adaptation measures, such as enforcing stricter construction norms and taking preventive actions. In some extreme cases, adaptation might not be possible, and it may become necessary to relocate populations from high-risk areas. This approach will help distinguish between insurable and uninsurable risks, ensuring that the insurance industry can continue to function effectively.

Approximately 10% of the global population lives in areas less than 10 meters above sea level. Although this represents a significant portion of the population, the dimensions are still manageable. However, difficult decisions will have to be made, which will necessarily be painful, even if they affect limited proportions of the population.

Such crucial decisions cannot be dictated by insurers' behaviours, as they are too important politically, socially, and economically. The leadership will therefore necessarily have to be political.

Because it is impossible to predict all occurrences, even in the case the right adaptation and relocation measures are taken, some climate-related catastrophes will still be particularly destructive and will require a shift from mutualisation (insurance) to solidarity.

Mutualisation, which involves spreading risk among a large pool of policyholders, works effectively for manageable and predictable risks. However, when facing unprecedented and severe climate events, mutualisation may become insufficient. In such exceptional cases, solidarity mechanisms must come into play to ensure swift recovery.

This shift should remain exceptional, reserved for instance long-tail events that are too destructive for the insurance sector to cover without jeopardizing its financial stability. Even with the implementation of appropriate adaptation and population displacement measures, there will be instances where the magnitude of the disaster exceeds what the insurance industry can manage.

d) The insurance gap underscores the larger issue of ensuring economic and financial resilience in the face of current and future climate change impacts, which necessitate beforehand adaptation, elimination of highly probable risks, and finally insurance-focused solutions

Despite the urgency of addressing climate change, there exists a widespread perception that its impacts are distant, leading to a delay in proactive measures. However, the reality is that the tangible economic consequences of climate change are already evident through the consequences brought about by devastating natural catastrophes. In April 2022, Toyota's plant in Prospecton, South Africa, was severely affected by floods, resulting in substantial financial losses and disruptions to production. The incident led to the destruction of over 4,300 vehicles, a three-month work stoppage, and damages estimated at nearly $1 billion[17]. Such events underscore the critical need for prompt implementation of adaptation measures, aiming to mitigate future economic losses. Waiting for the full force of climate change to manifest before taking action, is not only shortsighted but also economically unsustainable. According to a working paper published by the National Bureau of Economic Research by Adrien Bilal and Diego Känzig, the 0.75°C warming observed between 1960 and 2019 has already weighed on the planet's economy: without it, they found, global GDP would be 37% higher[18].

The term "insurance gap" therefore conceals the broader challenge of ensuring economic resilience against climate disasters, necessitating adaptation and coordinated efforts between insurers and the public sector.

While the term insurance gap has widely been assumed to encapsulate a shortfall in coverage, it is a deceitful word for a much broader issue concerning future economic resilience in the face of climate disasters. Even if individuals were mandated to insure themselves and insurers possessed perfect predictive capabilities, the sheer magnitude of losses from large natural catastrophes and even

17. https://www.insuranceinsider.com/article/2abh903ix1joonkom6q68/reinsurers-section/japanese-big-three-on-risk-for-1bn-south-african-toyota-flood-loss?zephr_sso_ott=zFBAUq
18. https://www.nber.org/papers/w32450

more so from long-tail events would and will surpass the capacity of private insurers to bear.

In reality, the insurance gap is but part of a **wider problem of ensuring future economic resilience** in the face of climate disasters and their indirect economic effects which will have disastrous consequences on GDP growth. Two natural conclusions arise from this. The first one is the necessity of adaptation, and, where not possible, of population and economic displacement, to bridge the insurance gap and reduce the losses that future climatic events will create. The second is that bridging the gap calls for a response not only from the private insurance sector but also from the public sector, who must cooperate to establish each actor's responsibilities and liabilities.

2. Ensuring economic resilience in the face of climate change will require combining articulated adaptation measures (or more, such as population and economic activity displacement, when necessary), insurance gap reduction ones, and building an efficient solidarity mechanism

The wording "insurance gap" merely suggests a low insurance subscription rate and is not the all-encompassing problem it is described as being. Bridging this insurance gap, for example, by ensuring a broadening of insurance coverage, would not fully address the whooping losses that are predicted to occur because of natural catastrophes in the next decades, nor the inevitable rate increases in the most exposed areas.

The issue in itself is that of ensuring economic resilience and recovery after a disaster. To achieve this, we will need on the one hand adaptation strategies, which will allow us to limit losses up to economic affordability, but which also demand possibly excluding certain geographical areas where life and economic activity will become too obviously unsafe, and on the other hand, elaborated insurance coverage spread across the public and the private sectors to achieve fast economic recovery in case of losses following a natural catastrophe.

To address this, we must focus on three main routes: **enhancing economic resilience to climate-related events, ensuring the affordability of potential losses, and maintaining the insurability of risks**.

These approaches must be intertwined and coordinated with each other to succeed and can be brought about by **risk prevision, risk awareness, adaptation, a decreased insurance gap**, and when necessary, an **increase in solidarity**.

The table below is a breakdown of the objectives and the tools that can be used to fulfil them.

2.1 Adequately limiting financial and economic impacts requires achieving economic resilience to climate-related events, ensuring the affordability of potential losses, and fostering the insurability of risks

2.1.1 Building economic resilience to climate-related events by reducing direct and indirect damages and accelerating recovery

The most pressing objective to limit financial and economic impacts will naturally be that of achieving economic resilience to climate-related events. Current projections suggest potential GDP losses exceeding 15% by 2050. These estimates however assume that no measures to limit losses will be

<table>
<tr><th rowspan="2">Objectives</th><th rowspan="2">Underlying objectives</th><th colspan="5">Main tools</th></tr>
<tr><th>1. Risk prevision</th><th>2. Risk awareness</th><th>3. Adaptation</th><th>4. Decreased insurance gap</th><th>5. Increased solidarity</th></tr>
<tr><td rowspan="2">1. Economic resilience to climate related events</td><td>1a. Decrease the extent of direct and indirect damages</td><td rowspan="2">XXX</td><td rowspan="2">XXX</td><td rowspan="2">XXX</td><td rowspan="2">XX
(if mutualisation becomes possible)</td><td rowspan="2">XX</td></tr>
<tr><td>1b. Increase the speed of recovery</td></tr>
<tr><td rowspan="2">2. Affordability of potential losses</td><td>2a. Affordability of the probability of damages</td><td rowspan="2">XXX</td><td rowspan="2">XXX</td><td rowspan="2">XXX</td><td rowspan="2">X
(if mutualisation becomes possible)</td><td rowspan="2">XX</td></tr>
<tr><td>2b. Affordability of the extent of de facto damages</td></tr>
<tr><td rowspan="2">3. Insurability of risks (mutualisable risks)</td><td>3a. Increase the number of policy holders</td><td rowspan="2">XXX</td><td rowspan="2">XXX</td><td rowspan="2">XXX</td><td>XXX</td><td rowspan="2">/</td></tr>
<tr><td>3b. Exclude highly likely damages (not insurable)</td><td>/</td></tr>
</table>

taken, *i.e.*, economic resilience to climate-related events is and will stay low.

These losses, while gradual and not tied to single catastrophic events, will significantly impact future development. To sustain growth, efforts must focus on **decreasing the extent of direct and indirect damages** on the one hand and **increasing the speed of recovery post-damage** on the other hand.

Building financial resilience to climate-related events requires **reducing the extent of direct damages**, which directly affects the **extent of indirect damages**. Indeed, if direct damages are limited, businesses can keep operating smoothly by minimizing disruptions like supply chain interruptions and service losses, protecting jobs and economic stability. This approach also helps prevent spillover effects throughout the economy.

For those indirect damages that will remain and that cannot be eliminated, because we cannot accurately predict everything, **increasing the speed of recovery** will be crucial to economic resilience. Indeed, it is the length of the recovery that usually determines the amount of indirect losses following a catastrophe.

2.1.2 Ensuring the affordability of potential losses by reducing damage probability and minimizing impact

Keeping potential losses affordable is also a key objective in limiting the financial and economic impacts of climate-related disasters because it ensures that affected economies can recover more swiftly and effectively. By managing risks and containing financial losses, it is possible to mitigate long-term impacts on livelihoods, infrastructure, and economic stability. Indeed, unaffordable damages could overwhelm insurance companies and governments, causing widespread economic consequences. Affordability depends firstly on **decreasing the probability of damage**, and secondly on **decreasing the extent of the de facto damages.**

Decreasing damage probability involves comprehensive risk assessments, resilient infrastructure, and adaptation measures. Unfortunately, decreasing damage probability will also mean that in some areas that will become too risk-prone, population displacement will have to be put in place. Ultimately, this means that there has to be a political leadership leading these adaptation plans, and, where impossible, leading these populations displacement, because the topics are sensitive and not only financial, but rather also social and economic. By prioritizing preventive measures and planning, the likelihood of catastrophic damage from climate events can be significantly lessened. This effective prevention decreases the frequency and severity of claims, which helps keep insurance viable and eases the financial burden on government resources.

Since damage probability cannot be completely eliminated, **reducing the extent of the damages** remains important. In some places, this will correspond to effective emergency response, adequate insurance coverage, and promoting resilience through education and training can help minimize impacts. Limiting damages makes recovery more manageable, speeds up return to normalcy, and reduces long-term economic strain. Controlling damage extent keeps costs affordable for insurers and governments, ensuring they can provide necessary financial support without risking their own solvency or fiscal health.

2.1.3 Maintaining insurability by expanding the number of policyholders and mitigating likely fragilities and damages

Lastly, keeping risks insurable (i.e., "mutualisable") allows for efficient risk spreading among policyholders, reducing the impact on any single entity. By pooling resources and sharing risks, the financial burden is distributed, providing stability and security. Maintaining insurability requires **increasing the number of policyholders** and **implementing adaptation measures to suppress highly likely damages**. This ensures that insurers and reinsurers remain the primary responders, keeping the private sector at the forefront of risk management.

Increasing the number of policyholders strengthens risk mitigation strategies and helps close the insurance gap. When more individuals or organizations are insured, the insurance system's overall ability to manage risks improves. A larger number of policyholders not only spreads risks more widely, but also contributes to a more sustainable insurance system. Ultimately, expanding participation helps ensure that losses are covered and allows for swift payouts when needed.

However, **certain damages are so likely that they cannot be addressed by insurance mechanisms**. Indeed, taxpayers and policyholders with reasonable levels of exposure will refuse to pay for these losses. They have to be identified to assess whether risks can be mitigated enough through adaptation measures, or if these risks are no longer hazards and can therefore no longer be underwritten. This proactive approach to managing uninsurable risks helps to minimize the overall impact on policyholders and insurers

alike, ensuring the long-term viability and stability of the insurance industry. It however also means that there will necessarily be a need to displace some populations in areas that are considered to be no longer insurable, a decision which once again has to be a very political one.

2.2 The main tools that can be used to answer these objectives

Having outlined these primary goals, it is crucial to consider practical strategies to achieve these objectives. To address the challenges posed by climate-related events, several key tools have been identified: risk prevision, risk awareness, adaptation, decreasing the insurance gap, and fostering solidarity. These tools represent tangible solutions that will enable individuals, businesses, and governments to better prepare for and respond to future and current climate impacts.

2.2.1 Enhancing risk prevision to limit financial and economic impacts of climate-related events

Improving risk prevision is an overarching need to limit the financial and economic impacts of climate-related events by enhancing overall preparedness and resilience. At its core, risk prevision means improving risk assessment and modelling, which is crucial for accurately predicting the timing, severity, and frequency of climate-related catastrophes.

This enhanced predictive capability allows for the **identification of areas where adaptation is necessary and where it is not**, as well as when and where adaptation measures are not sufficient, and population economic activities displacement is necessary.

Risk prevision therefore allows for better adaptation and prevention plans, essential for ensuring **post-disaster economic resilience**, both through the speed of recovery that can be enhanced through knowledge of possible damages pre-disaster, as it allows for the creation of effective planning, and through the decrease in the extent of indirect damages. Further, **through accurate risk prevision, we can ensure the affordability of potential losses** by decreasing their likelihood and mitigating their severity when they do occur.

Better risk prevision also ensures that **insurance mechanisms remain viable**. By keeping risks insurable, we reinforce the principle of mutualization, spreading the financial burden across a broad base of policyholders who face similar levels of risks, while maintaining the stability and functionality of insurance systems. Effective risk prevision allows us to distinguish insurable risks from those that are uninsurable by the private sector.

This differentiation is vital for the **correct pricing of insurance premiums**, ensuring that insurers do not face situations of insolvency.

Finally, an improvement in risk assessment and modelling would lead to better previsions and therefore **accrued credibility**, a necessary condition to spread risk awareness, and also an essential tool to answer these objectives.

2.2.2 Enhanced risk awareness allows for more insurance subscription and better policy decisions, but can only be achieved through the proliferation of information and studies on the topic

Indeed, **enhanced risk awareness** is crucial for informed decision-making across individuals, businesses, and policymakers to mitigate the financial and economic impacts of climate change. Robust models and widespread dissemination of research findings are fundamental in fostering this awareness. As models improve, they provide clearer insights into potential consequences, emphasizing the urgency for effective mitigation and adaptation strategies.

Greater risk awareness also **boosts insurance subscriptions** and insurability as stakeholders recognize specific climate threats. This broader participation spreads financial risks, enhancing the sustainability of insurance mechanisms. Additionally, a well-informed public supports mitigation measures like relocating from high-risk areas or investing in resilient infrastructure, reducing overall risk exposure.

Risk awareness furthermore plays a critical role in **shaping policy decisions**. When policymakers are well-informed about the potential impacts of climate-related events (and when voters are too, putting pressure on policymakers), they are more likely to implement effective policies and regulations that promote resilience and risk mitigation, such as climate-resilient building codes and zoning laws.

Finally, risk awareness can only be **heightened through the proliferation of studies** highlighting the severity, frequency, and urgency of potential events. This also contributes to the credibility of predictions; as studies are released, one can assume that prediction models get better. Research and the spreading of findings ensure that risk awareness remains high, driving ongoing efforts to mitigate and adapt to climate change.

2.2.3 Adaptation has to be put in place where necessary, but public authorities will also have to make difficult political decisions on where adaptation is impossible, and population and economic activities displacement are therefore necessary

Seeing the colossal losses that climate change will induce in the future, it becomes obvious that **adaptation is a crucial component** to mitigate the financial and economic impacts of climate-related events. By enhancing infrastructure and community resilience, implementing strategic adaptation plans, and addressing the insurance gap, adaptation can importantly mitigate the impacts climate-change-related events will have.

First and foremost, adaptation can significantly **enhance infrastructure and community resilience**. This involves fortifying buildings, roads, and other critical infrastructures to withstand the increasingly severe impacts of climate-related events. By constructing resilient infrastructure, we can reduce the extent of physical and indirect damages, ensuring that economic activities continue with minimal disruption. This not only helps in maintaining economic stability but also supports the speed of recovery post-disaster.

Adaptation efforts can take two primary forms: **adapting to stay in place** or facilitating **population displacement** if risks remain too high. In cases where adaptation measures can sufficiently mitigate risks, communities can continue to live in their current locations with improved safety and resilience. This can make previously uninsurable areas insurable again, as the risks become manageable and mutualisable by the private sector. On the other hand, if the risks are too great and cannot be effectively mitigated, political decisions will have to be made that involve relocating populations to less risk-prone areas.

Insurance and adaptation should not be treated as separate entities. Ensuring economic and financial resilience in the future will necessarily involve both adaptation and insurance and reinsurance mechanisms. Unfortunately, it seems that insurance and adaptation have only been remotely put together. Indeed, while many countries including France, Germany, Italy, and Spain have published national adaptation plans for climate change, they have not linked these plans to insurance and to addressing the growing insurance gaps. Integrating insurance considerations into adaptation plans would create a more comprehensive and effective approach to managing climate risks. As France prepares its third Plan National d'Adaptation au Changement Climatique (PNACC), and as the long-awaited Langreney report on insurability was released, the occasion might finally present itself to mix the two topics into the next French PNACC, which could serve as a leading example for other countries.

2.2.4 Closing the insurance gap as part of the solution to ensure insurability of risks and foster economic resilience and affordability

Decreasing the insurance gap also constitutes a key tool for limiting the financial and economic impacts of climate-related events. This involves increasing the number of policyholders, thereby expanding mutualization, and ensuring that more people are protected in case of disasters, which facilitates faster economic recovery.

Decreasing the insurance gap obviously begins with **increasing the number of policyholders**. More policyholders, means a broader base for mutualization, and therefore risks spread across a larger group. This mutualization is crucial for maintaining the sustainability of the insurance system, as it distributes the financial burden of potential losses more evenly. With a larger pool of policyholders, insurance companies can better absorb the impacts of catastrophic events without overburdening any single entity.

Another critical benefit of decreasing the insurance gap is that it ensures **swift payouts in the event of a disaster, as insurance is more automatic than state compensations**. Swift pay-outs are essential for quick recovery, as they provide the financial support needed to rebuild and resume normal activities. When policyholders receive timely compensation, it reduces the economic standstill, allowing businesses to reopen and communities to recover faster. This rapid recovery is a cornerstone of economic resilience as it minimizes long-term disruptions to economic activities and livelihoods.

Decreasing the insurance gap is particularly vital for **maintaining the insurability of risks**. By increasing the number of policyholders, insurers can **better manage and distribute risks**, ensuring that insurance remains a viable option for more people. This is especially important for high-risk areas that might otherwise be deemed uninsurable. When risks are widely shared, the financial strain on insurers is reduced, allowing them to continue offering coverage even in areas prone to climate-related events.

However, it is crucial to note that while increasing the number of policyholders addresses the first sub-objective of insurability (increasing the number of policyholders), it does less for the second sub-objective (suppressing highly likely damages). Highly likely damages that are predictable and frequent will become uninsurable. They must be addressed through targeted adaptation measures

to reduce their likelihood or impact. Therefore, decreasing the insurance gap works best in tandem with adaptation strategies that mitigate highly probable risks.

2.2.5 Fostering solidarity in cases where mutualisation cannot handle the level of losses

Reducing and adapting to highly likely damages is therefore the priority. However, climate change will exacerbate climatic events and will inevitably **at times lead to unpredictable and severe events that exceed normal risk management capabilities by private insurers. Solidarity will therefore have to step in when losses from a catastrophe, or a series of catastrophes in a given year, become too high for traditional insurance mechanisms to handle.**

Solidarity, in this context, refers to a collective approach where people contribute to cover other's losses, even if they are not faced with the same level of risk. Unlike mutualisation, where risks are shared among policyholders with similar risk levels, solidarity requires contributions from individuals regardless of their exposure. Adaptation and prevision will never be able to fully take out a surprise or a long-tail event, and in those cases, private insurers cannot bear the full burden of climate disasters.

Solidarity must be an **exceptional measure**, activated only when all highly likely damages have been suppressed through adaptation, but a catastrophic loss is too high and could pose a serious systemic risk to the insurance sector. This shift from mutualization to solidarity is necessary because private insurance alone cannot manage the most destructive climate events.

2.3 Coping with increasing natural hazards will require a systematic, coordinated approach that will sometimes involve solidarity mechanisms, particularly for long-tail events, which suggests a role for the European Union

All of these tools must be used in conjunction to truly allow for economic resilience. At the same time, a specific 4-level insurance scheme should be implemented so that even in cases of very important losses (long tail events specifically), economic recovery is fast. A 4-ladder approach with insurance, reinsurance, state intervention, and an eventual European layer would allow this, with the following repartition: the more the event is low-frequency and high-impact, the more public and bigger the entity taking charge of it has to be. On the contrary, for high-frequency, low-impact events, insurance has to be the first responder, with reinsurance providing relief for higher-impact events that do not reach the required level for state or supra-state intervention. Said otherwise, the private sector would be responsible for events where mutualization is sufficient, and the public sector for events where solidarity is necessary.

Indeed, even if we manage to anticipate and therefore eliminate all likely damages, long-tail natural catastrophe events will occur at times and put the insurance sector in difficulty, were it to endorse alone the financial burden they create. In these events, we must switch from a scheme of mutualization organized by private (re)insurance to a scheme of solidarity organized by public actors. If the national level could help with some of these events, a European level will allow to deal with asymmetric chocs, which could put the financial health of a member state in danger.

Further, risk dissemination through all these layers can go through various tools. To disseminate risks, it is important that not only the different actors prepare actively, for example for the public sector by creating ex-ante a fund for natural disasters, or a specific state reinsurer with funds instead of raising funds ex-post, but also that alternative risk transfer mechanisms are used. Amongst those, cat bonds have proven to be resilient for the private sector, although they are not yet very widespread. The more widespread use of such instruments both by the private and the public sector would enhance economic and financial resilience.

Concluding remarks

Climate change and climate-related disasters will represent an important economic loss for all regions, countries, communities, companies, and individuals. The scale of losses makes investment in economic loss reduction essential. It is not just the physical losses that are costly, but also, and foremost the economic losses that result from primary physical losses.

Often blamed as the source of this, the insurance gap is but a logical consequence of the extent of losses. Without remedies, it will further widen in the years to come, as insurers experience heavier unexpected losses that they cannot cover, and irremediably either withdraw from regions or raise premiums, making them unaffordable to policyholders.

To ensure that the financial and economic impacts of climate change and climate-related disasters

stay manageable, we will necessarily need to achieve economic resilience to these events, secure the affordability of losses, and establish continued insurability of risks.

Several steps remain to be taken to guarantee economic resilience. Firstly, as states continue drafting their adaptation plans, there is an urgent need to define an insurability plan within these adaptation plans. Adaptation and insurance need to go hand in hand, as they will sustain each other. Secondly, we will need to continue working on improving risk anticipation, with the dual aim of better identifying the financial mass at risk, the financial mass that can be insured, and that may need to be covered by solidarity schemes when long-tail events happen.

Importantly, a future without insurance is not something that we can manage. However, one where the insurance sector faces systemic risks is not either. Private insurers are capable of taking on such a challenge as climate change, but only and solely if they are helped by policymakers. A lot of the decisions that will need to be taken in the future will have to be political, as they involve hard societal and economic choices that directly impact people's lives (for example, relocation). We would do well to dwell upon the topic of the insurance gap, as the dire consequences for our future resilience and economic stability impel us to urgently implement viable solutions.

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 100 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.

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