EUROFI

Regulatory Update

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Inside

- Macro-economic challenges and reforms
- Capital market and banking regulation updates
- The EU sustainability agenda
- Cryptoassets and DeFi prospects



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EUROFI POLICY NOTES

PUBLIC AND PRIVATE SECTOR VIEWS

Content

1.1	MACRO-ECONOMIC CHALLENGES AND REFORMS	4
	Strengthening the Economic and Monetary Union	
	Reforming the Stability and Growth Pact	
	The abuses of financialization	
	The euro and its future	
2.	CAPITAL MARKET AND BANKING REGULATION UPDATES	20
	Banking fragmentation issues in the EU	
	Retail Investment Strategy: objectives and on-going assessments	
	Securitisation: Ghosts of Crisis Past	
3.1	THE EU SUSTAINABILITY AGENDA	56
	EU sustainable labels and rating providers: dynamism, diversity, complexity and possible reforms	
	Corporate Sustainability Due Diligence Directive: finding the right balance	
4. (CRYPTOASSETS AND DEFI PROSPECTS	64
	Cryptoassets: market trends and policy proposals	
	Decentralized Finance (DeFi): opportunities, challenges and policy implications	

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Macro-Economic Challenges and Reforms

Strengthening the Economic and Monetary Union	5
■ Reforming the Stability and Growth Pact	7
■ The abuses of financialization	13
■ The euro and its future	17

Strengthening the Economic and Monetary Union (EMU)

Note written by Jacques de Larosière and Didier Cahen

A monetary union does not by itself create economic convergence.

The Eurofi Macroeconomic Scoreboard (September 2022) underlines that the eurozone is a currency area comprising heterogeneous countries with a low level of federalism (their productivity levels, productive specialisation, level of fiscal deficits and indebtedness, and level of labour force skills being different).

Many Member States have relaxed their macroeconomic discipline over the last twenty years and those who played the card of fiscal vigilance turned out to be the winners. The Covid-19 crisis has exacerbated these existing heterogeneities across EU Member States. In this context, it is important that the implementation of Next Generation EU is a success¹.

But as long as it is not sufficiently understood, notably in highly indebted countries, that excessive debt is a source of under-competitiveness, the economic situation in these countries will continue to deteriorate and it will be all the more difficult to progress in Europe towards more public or private risk sharing.

It is also an illusion to try to solve the structural problems of our economies by prolonged increases in public or private debt or by using money creation. Yet this is what has been too often tried by pursuing lax fiscal, monetary and political policies that inevitably pose systemic risks to financial stability and therefore to future growth. It is not because budget deficits are monetised that they disappear. In addition, central banks will not always be able to buy everything, and the quality of a state's signature is an essential element of confidence that shall be preserved at all costs for the country's future.

It is economic growth that eventually solves indebtedness issues. The only way of promoting robust growth in the EU is to implement ambitious structural reforms in all Member States.

Monetary policy can erase spread differentials but cannot address structural issues and notably the lack of confidence and the persistence of structural discrepancies, which explains the limited capital flows from North to South. Europe benefits from a large pool of savings which could contribute to finance long term investments and notably

those related to the green and digital transition, provided that such savings are not taxed but remunerated. However, these savings exit the EU and finance the rest of the world (in particular the United States). This is notably due to the interest rate differential between the US and Europe (the risk is better remunerated in the US than in Europe), the limited financial flows between the eurozone countries and the insufficient number of investment projects. These limited cross-border capital flows in the euro area reflect as the lack of a genuine Banking Union and integrated financial markets as well as persistent doubts of some investors in Northern Europe about the solvency of states and companies in other countries.

If the divergence of interest rates between the two sides of the Atlantic continues to increase in favour of the United States, the problem of transfer savings to higher interest rate areas could have very negative consequences for Europe.

The result of a too slow monetary normalisation in the euro area, in a context of persistent and very high inflation – HICP inflation is above 2% in the euro zone since April 2021 and increased to 8,9% in July 2022 compared to 8.6% in June 2022, 8,1% in May and 7.4% in April 2022 – would be an acceleration of inflation and low growth (productive investment would continue to fall as we have seen over the past 20 years in periods of very low interest rates).

Consequently, the eurozone has to embark on the right course: fighting inflation, which requires vision and courage, more fiscal responsibility and more supply reforms geared to increase productivity, as well as steps to complete the Banking Union and implement the Capital Market Union. But this move can only be envisaged if sufficient discipline starts reversing the trend of ever-growing economic heterogeneities across Member States.

Ultimately, the paradox of the euro is that a single currency and national economic policies coexist without a strong cement of coordination. Ultra-accommodating and asymmetric monetary policy have been used to overcome the contradictions of this paradox, but the price of this permanent rescue is costly. It is essential to ensure convergence of fiscal and structural policies. An intelligent revision of the Stability and Growth Pact should help to resolve these contradictions and thus make the euro sustainable.

^{1.} The Recovery and Resilience Facility is the biggest programme of the recovery plan with a maximum of EUR 672.5 billion of loans and grants for Member States to finance reforms and investments. The aim of the Recovery and Resilience Facility is to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient, and better prepared for the challenges and opportunities of the green and digital transitions

To be viable, the eurozone needs:

• To combat very high and persistent inflation without further delay by gradually returning to positive real interest rates. As the 2022 annual economic BIS report reminds us, the most pressing monetary policy task is to restore low and stable inflation and to sustainably rebuild monetary buffers. Higher rates will also reduce central banks remittances to the governments. The reappearance of spreads should not dominate the decision-making process.

It is usual in times of high inflation to increase nominal and real interest rates to avoid further increases in demand. The recommendation is therefore to raise interest rates and gradually move to positive real interest rates. This would only not be the case if the economy were in a deep economic crisis with rising unemployment or a risk of deflation, which is not the current situation (nor the one that has prevailed since the beginning of the second quarter of 2021, when inflation returned strongly). As long as interest rates remain negative or zero, the nominal increases implemented can only generate very weak recessionary effects.

- National budgets under control in all parts of the Union. No responsible state cannot be expected financing current public deficits generated by other eurozone members of the Union that do not follow the rules of the Union. The future - and notably the solution to market fragmentation - depends on a consolidation of present weak fiscal positions (primary surpluses) and a shift towards quality of expenditure and investment. We do not need more redistributive expenses. We must rein them in and allow adequate space for public investment. The revision of the Stability and Growth Pact is of paramount importance in this respect. Postponing discussions on the revision of the Pact delays the solution, exacerbates tensions within the market (due to the lack of benchmarks) and only complicates the resolution of problems that are likely to become even more acute.
- <u>Domestic structural measures towards increasing growth potential should be encouraged and monitored</u>. Reducing output gaps cannot be ensured just by subsidies to the labour markets. This requires more substantially to increase the productivity of the system, which necessitates more competition and long-term investment. Making the European recovery plan a success is therefore essential and should contribute to boost potential growth.
- An active banking and integrated capital market in <u>Europe</u>. In sum, members of the Monetary Union must act together to make it work, and not behave as passive individual bystanders hoping that things will turn out fine. Ultimately, the fate of euro will depend on the political will to achieve genuine cooperation within the euro area.

Reforming the Stability and Growth Pact

Note written by Jacques de Larosière & Didier Cahen

European fiscal rules, as enshrined in the Stability and Growth Pact, are currently suspended to allow governments to fight the economic fallout from the pandemic. Under current plans, these fiscal rules will be enacted again in 2024 and the EU Commission should put forward its SGP reform proposals this fall.

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

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

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

1. An EU and adapted framework for a common discipline

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

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

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

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

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

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

In the euro area, between 2007 and 2019, the aggregate government debt-to-GDP ratio rose from 66 % to 83.8% — one-third more debt compared to the pre-crisis level. In France, the public debt ratio compared to GDP has increased even more from 64.5% to 97.4% of GDP between 2007 and 2019. In Italy the public debt ratio has grown from 103.9% to 134.1% and in Spain from 35.8% to 98.3%. However, by contrast, in Germany public debt has decreased from 64.2% in 2007 to 58.9% in 2019.

Except for few countries, the fiscal rules of the SGP have not been obeyed particularly for large countries (e.g., Italy, France...).

The economic consequences of the current Covid-19 crisis are worsening the situation. They are increasing the heterogeneity of fiscal performance across euro area member states. The aggregate government debt-to-GDP ratio rose by around 12 percentage points between 2019 and 2021, reaching respectively 88.1% and 95.6% in the EU/EA in 2021, according to Eurostat.

Between 2019 and 2021, fiscal divergences rose further in terms of public debt-to-GDP. In average, the public debt of each EU Member State deviated by 37.3 percentage points from the EU aggregate public debt level in 2021, up from 35.2 percentage points in 2019. Indeed, five EU Member States still saw their public debt exceeding 110% of GDP in 2021: Greece (193.3%), Italy (150.8%), Portugal (127.4%), Spain (118.4%) and France (112.9%). By contrast, seventeen EU countries kept their ratio below 75% of GDP in 2021. Among them, Germany, the Netherlands, and Finland had their public debt compared to GDP hovering respectively at 69.3% of GDP, 52.1% and 65.8% in 2021.

After the Covid-19 crisis, the public debt-to-GDP ratio is projected to stabilize at elevated levels in EU Member States. For 2022, the ratio would fall marginally in France from 112.9% of GDP in 2021 to 111.2%. It would drop by 3.3 pp in Spain (from 118.4% to 115.1%) and by 2.9 pp in Italy (from 150.8% to 147.9%), according to the EU Commission¹.

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

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

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

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

Fiscal deficits — if they are increased above their huge present levels — will only be possible if monetary policy and interest rates remain accommodative. One of the most concerning consequences of accommodative and low rates for long policies has been precisely the marked reduction in real terms of global productive investment over the last 15 years: lasting low interest rates do not foster, by themselves, more productive investment². What they do — notably in the EU — is to encourage savers to keep their financial assets in liquid instruments and not to channel them in securities geared to long term investments³.

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

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

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

1.4 Distinguish between legitimate and abnormal fiscal heterogeneity

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

To work on this complexity, first it is critical to understand what could be called the "legitimate heterogeneity".

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

1.5 Better internalize the European framework in domestic systems

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

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

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

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

2. The gist of a common framework

The approach would be to achieve a mechanism that is sufficiently adapted to the problems — by definition different — of each of the Member States, by establishing common standards under European supervision in order to achieve credible and realistic debt-reduction trajectories and build fiscal buffers to face new unexpected challenges.

^{2.} See Eurofi Economic and Monetary Scoreboards, February 2022

^{3.} 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

2.1 A case-by-case framework

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

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

Each state would have to explain its orientation by focusing on its own priorities. The European authorities (European Commission, ESM) should regularly monitor the implementation of what would reflect the common understanding on these issues.

This is important because the markets are guided more by dynamics than by absolute numbers in determining country spreads. Because monetary policy will not always be there to buy all the new sovereign issues, it will be imperative to reassure the markets by gradual fiscal normalization policy.

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

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

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

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

It is indeed problematic to reach 55% of public expenditure on GDP (before Covid) when the European average is 8 to 10 percentage points lower. In this respect, a country like France, which holds all records of public spending relative to GDP, devotes only a small amount of resources to productive public investment. Absorbing 55% of GDP to finance the "end of the month" is much more dangerous than if much of it were spent

on public investment. Such a situation is incompatible with future growth and requires more active treatment. The new European mechanism will have to take this into account.

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

2.3 Primary fiscal balances

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

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

The 3% deficit rule is already very tolerant. It is a hard-to-challenge safeguard in "Normal" periods. It is sufficient to stabilize the economy during downturn. It has proven to be a good fiscal anchor and should be kept.

This is a minimum ratio not to be exceeded: in the case of a country's nominal growth of 3% per annum, with a deficit of 3%, the public debt of that country is stabilized.

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

A recent ESM paper⁴ states that "Keeping the 60% reference value and assuming a 20-year horizon to achieve it would necessitate unrealistically high fiscal surpluses for several countries. For example, Portugal would need a primary surplus of close to 2.5% of GDP on average for the next 20 years despite a significant decline in debt service costs since the 1990s⁵. The required primary surplus would be even higher for some other countries, which risks causing countries to adopt inappropriately tight and unsustainable policies". This paper also proposes to raise the debt limit to 100%.

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

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

^{4.} O. Francová, E. Hitaj, J. Goossen, R. Kraemer, A. Lenarčič, and G. Palaiodimos, "EU fiscal rules: reform considerations", ESM Discussion Paper 17, October 2021

^{5. &}quot;This is an illustrative exercise, and the surplus quoted is different from that implied by the existing debt rule. Debt dynamics could evidently vary over time and for example, require higher consolidation efforts, at the start with higher debt levels. Structural measures of the primary surplus may lead to different outcomes, and possibly showing even higher adjustment needs"

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

There are huge public spending needs, given new investments for the green and digital transitions, education, healthcare⁶. But a special treatment for growthenhancing expenditure would not be helpful. It comes from the illusion that public financial means are not scarce. Actually, it is a matter of refocusing the priorities. Unproductive public spending needs to be replaced by productive public spending.

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

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

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

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

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

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

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

The fact that money has been thrown at the problems for years has worked against supply-side policy. In order to reduce the unused margin of the economy ("output gap"), it is necessary to deal not only with the stimulation of demand, the reduction of unemployment but also to increase productive investment and productivity gains, which have been the orphans of this story.

In an extreme case, stimulating demand does not translate

into increased production, but leads to a widening of our trade deficit if a country does not have an efficient production system. In this respect, the quality of public spending is becoming an absolute imperative: as much as we need to fight against unproductive spending, we can encourage the financing of infrastructure spending (including research) that can be financed by debt.

2.8 An effective fiscal surveillance and enforcement process

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

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

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

In the face of the difficulties of such a system or the opposition that would inevitably arise, one should be able to count on the European Commission to fulfill this role in an independent manner.

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

It would then be appropriate to set up a supervisory body (including economists) that could independently monitor the effective implementation of national budget programs and on which the Commission could rely.

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

^{6.} The Commission estimates that the additional private and public needs related to the green and digital transitions will be nearly 650 billion per year until 2030. The green transition alone accounts for €520 billion per year

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

In other words, the penalty is the loss of credibility and its ability to participate actively in the Union and its modes of cooperation and of course, a country that embarked on this type of path would be labelled as **such** (name and shame).

Transitional aspects

In 2022, there will not be many countries with a deficit below 3%. Several will have deficits close to 5% and will need and should have a number of years, for economic reasons, to reduce them.

A transition period could be envisaged, where something like Jean Pisani-Ferry's recommendations is used⁷: country-specific adjustment or consolidation plans proposed by the Commission, discussed in the Eurogroup and agreed in the Council, in order to bridge the time until a new common framework is reached, perhaps after two years.

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

When the house is burning (when deficits and public debt are increasing in certain countries), we must not postpone the arrival of the fire department (absence of European rules and postponement of the discussion on the economic governance of Europe).

It is important to understand that if fiscal policies were to remain expansionary, central banks would have to tighten monetary policies even further to curb inflation and reduce inflationary expectations exacerbated by this fiscal stimulus.

Moreover, as public debt ratios worsen, the problem of debt sustainability becomes more acute.

Historically, a negative "r-g" ratio (where $r \equiv interest\ rate$, $g \equiv economic\ growth\ rate$) does not eliminate sustainability problems. Indeed, the growth rate and the interest rate are not independent of the level of indebtedness. The higher the level of indebtedness, the higher the market interest rate and the more fragile the economy. Hence the extreme caution that must be attached to the question of risks to

debt sustainability in Europe. It must be understood that money creation and the purchase of public securities will not always be able to solve this problem. The Maastricht Treaty contains limits on the monetary financing of the Treasury, and opinions on this issue are far from unified.

Since the pandemic hit in 2020, the general escape clause of the Stability and Growth Pact has been applied and the Commission motivated the Member States to pursue an expansionary fiscal policy. Reacting to the economic consequences of the Russian invasion of Ukraine, the European Commission postponed again the renewed enforcement of its fiscal rules by a year, to 2024. However, the problem of excessive public deficits and indebtedness of some EU Member States constitutes the central explanation for the financial fragmentation within the eurozone.

Without an effectively implemented European fiscal framework, it is not possible to resolve this issue and thus to reduce the growing heterogeneity in terms of budget and debt between the virtuous states (Germany, the Netherlands, Austria, Portugal, etc.) and the others (Italy, France, Spain, etc.).

As we have observed, these fundamental problems have been with us for nearly 20 years and were not created by the war in Ukraine or the Covid crisis. The war in Ukraine exacerbates these problems but is not the cause.

By renewing the suspension of European fiscal rules once again in May 2022, policy makers believe that they will have an easier time later. In reality, postponing solves nothing, exacerbates tensions within the market (due to the lack of reference points) and only complicates the resolution of problems that are likely to become even more acute.

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

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

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

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

The abuses of financialization

Note written by Jacques de Larosière

The research – which I have been doing for a long time and which has resulted in a new book to be published in autumn 2022 – is on the subject of the abuses of 'financialization'.

The notion of financialization can be defined as the extension of the role of finance in the functioning of the economy and in determining the cycle.

I will try to clarify this phenomenon, touching on its historical development, its current state and its consequences on our societies.

To better understand the subject, we can refer to some simple but significant data. It has been calculated that over the last 20 years, the growth rate of credit has been, on average, twice as high as the growth rate of the real economy, whereas in "normal" historical periods, the two rates have generally kept pace.

This phenomenon has allowed governments to borrow more and more to finance current account deficits (deficits that should never be covered by borrowing since, by definition, they are permanent losses that are not creditable and must be repaid).

But "financialization" does not only affect public debt. It concerns all economic agents: households and companies.

1. Before describing the current importance of the indebtedness that characterizes our world, let us try to understand the history, the genesis of this phenomenon

I think it can be stated without question that the trend towards systematic indebtedness dates from the end of Bretton Woods. A brief historical review is in order. The so-called "Bretton Woods" system, created under the aegis of the United States in 1944, consisted of an exchange rate discipline:

- In relation to the dollar the system's central currency

 the other currencies should maintain a fixed link and
 not diverge by more than 1%.
- These countries could only devalue with the prior authorization of the International Monetary Fund and on condition that they implemented a 'conditionality' negotiated with the IMF.
- In return for the advantage derived from its central position, the dollar was subject to a gold convertibility obligation in the event that foreign central banks wished to dispose of the dollars they had accumulated.

The Bretton Woods system was therefore more than an agreement on exchange rate fixity. It was a means of enforcing economic discipline by the member states. Indeed, if a state wished to pursue a more expensive

policy than the system average, *i.e.* if it wished to increase its budget or balance of payments deficits, it was quickly called to order. Indeed, the unavoidable devaluation of such a state's currency required a formal devaluation, which was only allowed if the IMF ensured that the state in question would return to "the right path".

This system worked fairly well until the late 1960s. But with the rise in US public spending as a result of the welfare state and especially the Vietnam War, the US was faced with a dilemma: to finance the war through taxation or borrowing. It chose the second option and its dollar debt skyrocketed – very quickly, its gold stockpile was no longer sufficient to ensure the conversion of dollars into gold. And on 15 August 1971, President Nixon unilaterally decided to end the convertibility of the dollar. The fixed exchange rate system collapsed and was followed by the general floating of currencies.

Many economists at the time welcomed the advent of floating exchange rates.

The constraint – the fixity of parities – which limited the freedom of economic policies had finally given way. Each state could now freely choose its optimal economic growth policy.

But what was not realized in 1971 was that the world was about to enter a very dangerous process of indebtedness, and then of over-indebtedness. With the freedom of capital movements and the extraordinary inventiveness that would characterize financial innovations, recourse to debt became the rule and the 'leverage' of the system exceeded the limits of the imagination.

Under the Bretton Woods system, each state was responsible for its currency and the stability of its external value. When the system collapsed, no one was responsible anymore.

It was the market that decided the value of currencies at any given time. The end of the system effectively opened the floodgates to international debt and consigned the notion of economic discipline and cooperation to oblivion.

2. A few figures enable us to measure the extent of the phenomenon of financialization

Global debt – as calculated by the Institute of International Finance – has reached dizzying heights.

It now stands at 300 trillion dollars (1 trillion = one thousand billion) or 360% of world GDP. These are figures that have never been observed in peacetime.

1. Speech delivered on June 9, 2022 at a dinner organized by the Cercle du Nouveau in Paris Monde at the Centre Interallié

They translate into an over-indebtedness of economic agents, whether governmental or private. This means that our financial system is:

- Overexposed (in terms of repayment capacity)
- And therefore vulnerable (the more a system is overexposed, the more an economic slowdown – even a modest one – can lead to defaults and, by extension, to financial crises.

3. What are the dangers and challenges presented by this massive indebtedness? debt?

I see three major drawbacks.

3.1 Overexposure of the global system increases the risks – and severity – of financial crises.

This phenomenon has been amplified by the fall in interest rates that has been instituted by the extremely accommodating monetary policies pursued over the last two decades.

It should be recalled that policy rates — those set by Central Banks — have been negative (in real terms) for more than 20 years.

This low interest rate environment has not only encouraged debt, but has also degraded its quality:

Indeed, when rates are very low (or even zero or negative) the concern of many fund managers is to seek yield, whatever the risk.

As a result, loans to low-rated companies (such as those rated BBB, the lowest investment grade) now account for more than half the market. As the debt of these borrowers increases, so does the likelihood of default crises.

McKinsey has shown that the global balance sheet of our world has tripled in 20 years (which is unprecedented and out of all proportion to GDP growth). This balance sheet now represents \$1.540 trillion, or 18 times the world's GDP.

3.2 Low interest rates and abundant credit are accompanied by a decline in productive investment.

This observation does not seem obvious. On the face of it, one might expect very low interest rates to favour investment projects.

But the reality is quite different: it is since rates have been low that the decline in global productive investment has been observed. The stock of productive capital has in fact fallen over the last 20 years by 2.5% of world GDP, which is considerable.

It is here that we must refer to Keynes' fear of the "liquidity trap". Keynes was certainly in favour of low interest rates, but, he added, "not too low". Indeed, when savings are no longer remunerated (or even when they are taxed in the case of a negative rate), investors' attitudes change. Since the remuneration of savings disappears, it is more rational to keep one's funds in the most liquid form possible, rather than to invest them in risky productive investment projects. While we are at it, the saver who is no longer remunerated has an interest in remaining liquid.

This increase in the most liquid part of financial savings characterizes the current situation, particularly in Europe, and explains the disaffection with long-term productive investment projects.

An economy cannot prosper when productive investment is lost.

3.3 The current paradigm is based on the rise in asset valuations for the benefit of privileged social categories.

For the past 20 years, the rise in asset prices (real estate or stock markets) has represented ¾ of the increase in the global balance sheet.

Thus, in the United States (where the trend in relation to the average has increased), 87% of the growth in the value of balance sheets has been the result of increases in valuations and not of the added value created by investment.

This paradigm shift – the shift towards higher valuations at the expense of real growth and wages – has worrying consequences:

- Systems that favour the wealthiest 10% those who benefit from valuations – to the detriment of the great mass of the population lead to a formidable social fragility;
- Fundamentally, such a system which penalizes productive investment – does not make it possible to finance the immense ecological transformation projects that are indispensable.

In the environment of quantitative monetary ease and low – or negative – interest rates maintained by central banks for more than 15 years, the valuations of financial assets have soared, allowing equity holders, in particular, to make gains above normal remuneration ("operating returns").

It is understandable, in these conditions, that investors have given priority to making quick profits on valuations rather than committing themselves (without remuneration) to financing risky long-term projects.

This observation is important. An economy cannot function in the long term and for the good of all if investors' choices are oriented (notably because of monetary policy) towards immediate speculative opportunities and gains on valuations, rather than towards long-term growth prospects.

Let us not delude ourselves: if the stock of productive investment has declined over the last 20 years (by nearly 3% of world GDP, which is considerable), it is largely because real investments — risky, medium — and long-term investments — have been discouraged because of zero or even negative returns, in favour of liquid investments, which are certainly non-remunerative, but risk-free.

For 20 years, debt has exceeded investment.

Over the period from 2000 to 2020, the increase in debt – in the broadest sense – has far exceeded investment.

It has been calculated (McKinsey) that on average 4 dollars of liabilities (debt and the like) had to be brought into play to create 1 dollar of net investment during this period.

Even if there are strong disparities between countries in this area, the fact remains that this multiplier of 4 indicates a considerable leverage effect – a historical record – which can only raise concerns about the sustainability of this debt in the future.

As much as it is normal to go into debt to invest, it is also dangerous to see financial commitments swell well beyond investment needs. This is a sign of overexposure to debt, particularly in terms of financing current expenditure and public sector deficits and property speculation.

If we look at the ratio between value and production (net worth/GDP) we see that before 2000 this ratio was generally stable (the rise in this ratio, sometimes observed in the past, was mainly due to real estate). But since 2000, both net worth and real assets have been growing — and consistently — faster than GDP.

So, we need to return to simpler and more fundamental truths:

Don't believe that always borrowing more and creating more money will solve structural problems. Structural reforms must be undertaken where the nature of the problems requires it and care must be taken not to weaken our financial system:

- Remunerating savings and in particular those who wish to invest in the long term – according to the conditions of supply and demand;
- Do not allow an economic system to persist where ¾
 of the activity is translated into valuations for a small
 minority.
- Restore work to its fundamental role of social and economic transformation and avoid wage stagnation;
- Promote the development of human capital and corporate equity and abandon the traditional focus on debt;
- Reflect on what could be improved by the reform of the international monetary system, which should be based on greater discipline and genuine economic cooperation.

Ultimately, it would be imperative to:

 To revive productive investment, the orphan of this narrative, and to do this we must refrain from administratively setting (or "guiding" the market) long-term interest rates at zero and accept to let the market remunerate savings in the medium and long term – according to supply and demand – without which there can be neither productive investment nor productivity gains.

2. To put an end to "moral hazard".

It is important to understand that the laxity of monetary policy has led to an extraordinary development of what is called "moral hazard".

The more a system gets into debt, the more fragile it becomes because imprudent borrowers risk defaulting. To counter this risk and the risk of a market collapse, central banks have felt obliged to provide overindebted agents with an implicit guarantee intended to limit the losses incurred by these borrowers in the event of a crisis following a market downturn.

This implicit guarantee — which does not involve the payment of any insurance premium by the beneficiaries — has played a key role in the phenomenon of overindebtedness described in my book. It encouraged operators to take more and more risks since the public authority was in fact insuring them. This moral hazard — ethically shocking because it transfers to the nation the cost of the risks taken by some — has considerably encouraged the phenomenon of financialization that I describe.

3. To establish more social justice, whereas financialization has, in fact, arbitrated in favour of the
privileged 10% at the expense of employees.
Maintaining the current paradigm, as revealed by the
"global balance sheet" described in this book, will never
allow our country to modernize or recover. It must
therefore be changed: stop the crazy progression of
money creation and debt, encourage the development
of equity rather than debt, and accept that the most
privileged pay their share of a fairer and more efficient
economy.

You may be surprised that I have not mentioned inflation which, after a long period of absence — due in particular to the effects of low wages incorporated into imports from emerging countries accessing international trade — is noisily reinviting itself to the world economic scene.

The current very high inflation (8% price rises over a year) has many causes: rigidities in production chains (following in particular the restrictions on globalisation introduced by the USA some time ago), the intensity of the recovery in demand after months of sanitary confinement, the rise in commodity prices and, in particular, the surge in energy and raw material costs, the effects of the war in the Ukraine, and the resurgence of the pandemic in China...

But let us not forget that inflation, whatever its causes, is always fostered by excess money creation. When the money supply increases for a long time much faster than production — which is exactly the phenomenon described in this book — we always end up with a rise in prices. This is what is known as the "quantitative money equation", which was formulated by the French economist Jean Bodin in 1558 and which has remained accurate ever since. It continues to provide the explanation behind today's

inflation. Some may be tempted to say that inflation will at least relieve the debt burden on borrowers.

This is another illusion produced by the proponents of financialization. Inflation is never a solution: at most it is a terrible admission of failure. It is, in the end, a tax that impoverishes the vast mass of the population by reducing their purchasing power. A shameful tax that is not submitted to Parliament and that is supposed to erase the mistakes of those who allowed it, or even prepared it.

I do not wish any country to go down the road of "stagflation" — for which we have paid the price for more than twenty years — and which cumulates all the negative effects of the phenomenon: impoverishment and instability.

The euro and its future'

Note written by Jacques de Larosière

The euro, created in 1999, has weathered almost a quarter of a century of crises and storms without sinking. It is used by 340 million people in 19 countries of the euro zone². It is, after the dollar, the second most widely used international currency.

And yet the euro was faced with a challenge: to make a common currency prosper in an area where the various member countries are masters of their own budgetary policies.

Has this challenge been met?

In part yes and in part no.

1. The specific aspects of the euro area: a common currency in a disparate environment

1.1 Firstly, it should be noted that the heterogeneity of economic policies in the euro area increased during the first ten years of this history (2000 to 2009)

Inflation rates have diverged – higher in the "South" than in the North of the zone.

And since monetary policy is unique, the result was that inflation in the South was encouraged by a monetary policy that was too liberal on average — which could not be adapted to the heterogeneity of the specific situations. To combat this contradiction, macroeconomic cooperation should have been intensified and more restrictive fiscal policies implemented in the South. This was not done. Hence the sovereign crisis of the euro from 2010 onwards.

1.2 The "sovereign" euro crisis (2010-2012) could only be overcome by the resolve shown by the ECB ("we will do whatever it takes")

The ECB's response was a systematic policy of stimulating demand and the LTRO: "Long Term Refinancing Operations" launched at the end of 2008, which made it possible to distribute more than 1000 billion to European banks. This policy was accompanied by a fall in interest rates which converged towards zero.

From January 2015, the ECB launched a programme of qualitative easing (QE) which involved the purchase by the Issuing Institute of the sovereign bonds of all the countries in the zone at a rate of 60 billion euros per month. The programme was increased several times and extended (2016-2017).

From the time of the pandemic crisis (2020), the ECB set

up a vast additional programme of asset purchases: the Pandemic Emergency Purchasing Program (PEPP) to the tune of 1350 billion.

All these purchases swelled the ECB's balance sheet to 70% of GDP (compared to 21% in 2008).

This strong stimulative reaction of the ECB to the sovereign debt shocks (2010) and to the pandemic (2020-2022) made it possible to "save the euro" by reducing the spreads on the different signatures and thus preserving the unity of the financial market and the cohesion of the Union.

1.3 But the question must be asked: "at what cost?

The question — which goes beyond the borders of the euro — of the cost of these rescue measures and their long-term consequences must be examined if the sustainability of the euro is to be assessed.

The monetary easing measures have had three main negative effects:

The excessive increase in liquidity and money creation.

The liquidity created by QE has continued to accumulate since 2020 despite the increase in demand and the revival of inflation (which had exceeded its target level of 2% since 2019).

The ECB's balance sheet grew by almost 5 trillion euros from 2014 to 2022.

This highly stimulative policy has weakened the financial market.

Economic agents have taken on massive amounts of debt, which has increased the number of overexposed credit areas and therefore the probability of defaults and a financial crisis in the event of cyclical difficulties. At the same time, the quality of credit ("search for yield") has deteriorated with the expansion of loans to poorly rated companies (below investment grade).

With the fall in interest rates, it has been noticed that productive investment has tended to decrease (-2.5% of world GDP over the last 20 years).

The "liquidity trap", Keynes' fear, has occurred: savers have abandoned long-term, non-interest-bearing investments in favour of holding liquid, risk-free portfolios.

The ECB's ultra-stimulative policy has thus contributed to the decline in productive investment and thus, in the medium term, to hampering our future growth.

^{1.} Speech delivered Speech delivered on May 30, 2022 at a conference organized in Paris by the European League for Economic Cooperation (ELEC)

^{2.} The banknotes in circulation represent about €1.5 trillion.

2. The place of the euro in the international monetary system

The history of exchange rate relations between the euro and the dollar is marked by a fairly high degree of volatility, as well as by the resilience of the dollar as the main international currency.

2.1 The relatively high volatility of the exchange rate relationship between the euro and the dollar

When the euro was launched in January 1999, it was close to the parity of 1 euro to 1.1 dollar.

Then, the euro went on a very steep downward slope for two years (from 1999 to 2001): it lost more than 25% of its initial value against the dollar.

This was followed by a contrasting phase (between January 2001 and May 2003) where the euro regained ground and returned to its launch level.

This was followed by alternating phases of volatility with no clear link to the 'fundamentals', particularly the level of inflation.

- From 2003 to 2008, the euro appreciated steadily against the dollar (weakened by the fall in US rates and the external deficit). In April 2008, the euro reached its high point (1.60). That is to say 35% appreciation compared to its entry point.
- From 2008 to 2014 it was a yo-yo game. The 2008 crisis strengthened the dollar but the US QE limited this appreciation.
 - Despite the euro sovereign crisis and the fear of an implosion of the euro in 2010, the "whatever it takes" of 2012 stabilized the euro around 1.30.
- In 2015, with the ECB's QE, the euro fell by 13% against the dollar (1.10) and then normalized at 1.15-1.20. And the pandemic has little effect on the exchange rate, which remains at 1.20.
- With the war in Ukraine and the deterioration of Europe's economic forecasts, the euro has fallen significantly. It has been between 1.035 and 1.04 since May 13th.
- The uncertainty maintained by the ECB on the evolution of interest rates encourages this depreciation of the euro (since 2020, the euro has lost 14% of its value against the US dollar).

2.2 The dollar remains THE international currency

It remains the most widely used reserve currency (65% of total reserves are denominated in dollars).

Although the dollar shares the denomination of commercial transactions with the euro, it is nonetheless true that the dollar is still the world's currency, in particular because of the size of its public securities market and its liquidity.

The Commission's latest report on the euro area shows that in the event of a crisis, it is the Fed that appears to be the only lender of last resort — in 2008, the Fed provided the dollar liquidity required by the most affected countries, while the liquid assets issued by the ECB decreased.

For the euro to benefit from the dollar's "exorbitant privilege" and become a true international currency, a

bulwark of liquidity and stability in the event of a crisis, it would be necessary:

- That budgetary and fiscal cooperation and convergence between EU members becomes an operational reality,
- That the banking union is completed, (today the forces of fragmentation are at work),
- And that the unified capital market is achieved, which
 is far from being the case (the surplus of capital
 movements is exported outside the euro zone).

It is not excluded that the currency sanctions against Russia will encourage a trend towards fractional use of international currencies (with clearing platforms developing around the renminbi, for example). But the euro is not necessarily the currency that will emerge as the winner from these changes.

If monetary policies were to diverge sharply in the coming months on both sides of the Atlantic, with a less pronounced rise in rates in Europe than in the US, we could expect a stronger depreciation of the euro against the dollar.

But this depreciation would probably remain limited because, unlike the US, the euro zone still has a current account surplus and exports its capital outside the Union.

Conclusion

But a major uncertainty remains for the long-term future of the euro: debt sustainability.

The fiscal stimulus, amplified by the pandemic, has led to a considerable deterioration in the euro area's public finances.

The public debt ratio of the area jumped by 13 percentage points of GDP in 2020 alone to 92%.

The public debt ratio of the six most vulnerable countries (Belgium, Greece, Spain, France, Italy, Portugal) remains above 100% of their GDP.

The planned increase in military spending, following the Ukraine War, will worsen these figures.

But it is important to understand that as public debt ratios worsen, the problem of debt sustainability becomes more acute.

Historically, a negative "r-g" ratio (where $r \equiv interest\ rate, g \equiv economic\ growth\ rate$) does not eliminate sustainability problems. Indeed, the growth rate and the interest rate are not independent of the level of indebtedness. The higher the level of indebtedness, the more market interest rates tend to rise and the more fragile the economy becomes. Hence the extreme caution that must be attached to the question of risks to debt sustainability in Europe. It must be understood that money creation and the purchase of public securities will not always be able to solve this problem. The Maastricht Treaty contains limits on the monetary financing of the Treasury and opinions on this issue are far from unified.

Ultimately, the fate of the euro will depend on the political will to achieve genuine cooperation within the zone.

Capital Market and Banking Regulation Updates

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Banking fragmentation issues in the EU	21
Retail Investment Strategy: objectives and	
on-going assessments	47
Securitiestion: Charte of Cricic Dact	51

Banking fragmentation issues in the EU

Note written by Didier Cahen with the support of Elisa Brousse

While we have come a long way since the establishment of the Single Supervisory Mechanism (SSM), the European Banking Union is far from complete. An efficient Banking Union would break the sovereign-bank vicious circle, foster a more effective allocation of resources across the eurozone (e.g., companies would be able to tap wider and cheaper sources of funding in all parts of the euro area), and help to achieve a better diversification of risks thus contributing to private risk sharing within the Union.

Despite the challenges faced in recent years, many European countries' banking systems remain overcrowded. Bank profitability continues to be hampered in Europe by overcapacity in several Member States and a competitive environment, with revenues under pressure not just from their peers but also from new entrants from outside the sector such as fintech companies. In addition, international or cross-border consolidation processes have been few and far behind, and this pattern has not changed since the launch of the Banking Union. The limited strength of private risk sharing channels in the euro area reflects both the underdevelopment of capital markets and a highly segmented banking system at the national level. There is little progress in cross-border lending, especially in the retail markets, or in other words, in lending to households and firms. Expanding this crossborder activity would be important for the sound working of the euro area.

Consolidation through mergers and acquisitions is one way of tackling structural problems, by helping to unlock economies of scale and diversify revenues. Little progress has been made on this front over the past few years within the EU, with only a small number of deals — mainly domestic — taking place.

This paper shows how the Banking Union is failing to provide banking integration within the EU. Then it describes the different consequences of the still fragmented EU banking sector. Finally, it assesses the possible solutions to move towards greater European banking consolidation.

1. The Banking Union is failing to provide the expected degree of financial integration

The creation of the Single Supervisory Mechanism (SSM) and the Single Resolution Board (SRB) have not had the expected impact on the banking integration in Europe. Indeed, the banking sector in Europe is too fragmented along national borders, not concentrated enough and overcrowded. The sovereign-bank nexus is on the rise and the sovereign-Central Bank loop is reaching significant levels.

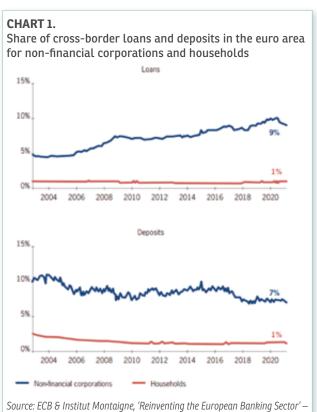
Domestic ring-fencing, regulatory measures and heterogeneities of the national retail markets due to the absence of harmonised legal, fiscal and consumer protection rules explain this fragmentation.

1.1 Very low share of cross-border deposits in the euro area from firms & overall relatively low level of cross border penetration for a Banking Union

The cross-border integration of the sector has progressed at snail's pace in recent years, even after single European banking supervision was established in 2014.

The share of cross-border loans to households and cross-border deposits from households in the euro area remain negligible at around 1%.

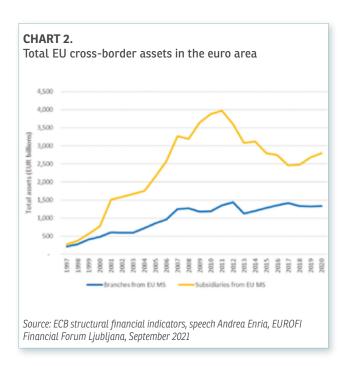
Direct cross-border loans to non-financial firms account for only 9% and this figure has hardly changed since the creation of the Banking Union (see Chart 1).



Source: ECB & Institut Montaigne, 'Reinventing the European Banking Sector' -November 2021, p.121

In charts 2 and 3, Andrea Enria highlighted two additional indicators; the total EU cross-border assets (branches and subsidiaries) in the euro area and the domestic and non-domestic claims in the euro area, to illustrate this lack of integration in a speech delivered during a Eurofi Seminar (2021)¹.

As we can see from Chart 2, "foreign" assets in euro area banks have not changed significantly since the creation of the Banking Union. In fact, the measures adopted by national governments in response to the great financial crisis led to the "repatriation" of many assets that were previously held in local subsidiaries of cross-border groups. The launch of the SSM has not reversed this trend. Overall, subsidiaries currently account for around two-thirds of EU foreign assets in the euro area, while branches make up the remaining third (see Chart 2) and the total amount remains quite modest, well below the early 2011 level.



Moreover, looking at the split between foreign assets and domestic assets held by euro area banks in the years since European banking supervision was established (see Chart 3), there really does not seem to be any significant change in trend.

As we also saw from Chart 2, "foreign" assets in euro area banks have not changed significantly since the creation of the Banking Union. Banking sector integration in the euro area is still an "elusive target".

1.2 The sovereign-bank nexus is still reaching significant levels

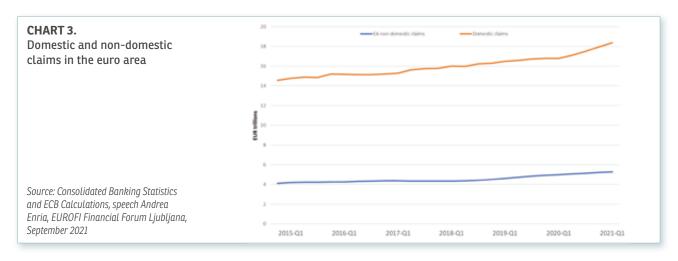
The situation of European banks is certainly different from the one that prevailed in 2010-2012: European banks are indeed much more solid and liquid than at the time of the creation of the Banking Union². But this sovereign-bank link remains an important issue because the debt situation of certain states has deteriorated since then (Italy, France, Spain, etc.).

The exposure of banks to their domestic sovereigns remains at high levels. Indeed, the doom loop between banks and their sovereigns is far from being resolved due to important levels of public deficit for many years in numerous Member States.

1.2.1 The sovereign exposure has not been reduced since the creation of the Banking Union (2012)

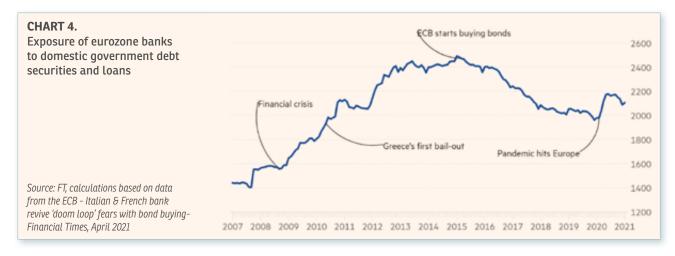
The sovereign and banking sectors are connected through different channels (see Appendix). Following the EU sovereign crisis (2011-2012), the Banking Union was created notably to break the link between banks and states³. However, the doom loop between banks and their sovereigns is still reaching significant levels despite the Quantitative Easing policy of the ECB, as shown in the chart below, which is focused on eurozone countries.

After the sovereign debt crisis, in December 2013, the total sovereign exposures of EU banks reached EUR 2.6 tn and increased to EUR 3.3 tn in June 2016 according to EBA statistics. Exposures to general governments have then slightly declined since June 2016. Then between 2016 and 2021, the sovereign exposures maintain a stabilised level, despite the QE policies. Indeed, in the EU, unlike the US, it is the banks that are the main sellers of sovereign bonds to the ECB, which have been accompanied by an increase in the balance sheets of central banks and an increase in the excess reserves of banks with them.



^{2.} According to the SSM, at the start of 2022, Common Equity Tier 1 (CET1) capital levels stood at 15.5% and liquidity coverage ratios at 173.4% at the end of 2021, both close to the highest level ever recorded since the start of the Banking Union. The ratio of non-performing loans was at an all-time low of 2.1%

^{3.} During the sovereign debt crisis (a decade ago), banks' vast domestic sovereign debt exposure created a "doom loop", as a vicious circle between private sector lenders and governments weakened each other and ultimately threatened the existence of the single currency zone



Total sovereign exposure of the EU banking sector stood at EUR 3.0 tn as of June 2018.

As of June 2019, the total exposures to sovereign entities of EU banks stood at EUR 3.1 tn, slightly up from June 2018.

European banks' ownership of sovereign debt has further increased in the course of the year 2020. Indeed, following the Covid-19 crisis, public debt across EU Member States exploded. Despite the unconventional policy and the massive purchase programs of the ECB (PEPP, APP), the sovereign bank loop rose again until the end of 2020, to decline somewhat in the first half of 2021 but to slightly higher levels than before the pandemic. In June 2020, the total gross carrying amount of sovereign exposures stood at EUR 3.4 trillion (*i.e.*, 14% of total assets). This went down to EUR 3.3 tn (*i.e.* 13% of total assets) in June 2021, but it was still above the levels observed in December 2019 (EUR 3.1 tn).

Finally in December 2021, we see in Chart 6 that it declined enough to meet pre-pandemic levels with EU/EEA's banks total sovereign exposures reaching EUR 3.0 tn (*i.e.*, 11.5% of total assets).

Banks in euro area countries tend to have a higher ratio of sovereign exposures to total assets than their peers in non-euro area countries⁴.

On average in the EU, nearly 50% of these exposures were towards domestic counterparties since 2012 and for the vast majority of the countries, foreign sovereign exposures were mostly concentrated in EEA countries.

1.2.2 The high level of public debts, the weak potential growth in some EU Member States and the prudential regulatory framework contribute to the development of the sovereign-bank loop

Banks have to respond to the issuance of bonds by the state because they think it is a good investment to hold in terms of risk; they are encouraged to do so, from a regulatory point of view, to meet their regulatory short-term liquidity ratio. Indeed, sovereign securities are considered as liquid assets that help complying with the Basel Liquidity Covered Ratio (LCR) for banks.

The numerator of the LCR must be composed of at least 60% of Tier 1 assets (cash, central bank reserves, domestic sovereign debt or other 0% weighted assets).

As L. Quignon explains⁵, "the LCR creates an artificial demand for government bonds and incidentally tends to reinforce the link between banks and the government." "The corollary of the improvement in bank liquidity is therefore a decrease in the credit multiplier for the fraction of High Quality of Liquid Assets (HQLA) constituted in the form of central bank reserves and, for that constituted of government debt securities, a distortion of credit to the economy to the detriment of private sector financing."

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. These regulatory measures also contribute to the growing of the sovereign-bank loop in Europe.

But it is the level of public debt in Member States, the consequent financing requirements and the weak potential growth in these countries that mainly explain the development of this sovereign bank loop and why it is more or less important in different Member States.

As long as the rules of the Stability and Growth Pact are not applied across Europe, the sovereign bank link cannot be reduced. An EU agreement on EDIS will not help to break this link.

Some observers also point out that many eurozone banks are controlled or influenced by national or local governments and or politics, which reinforces the bank-sovereign nexus.

1.2.3 Sovereign exposures' evolution varies significantly across EU countries

Banks located in countries with higher public debt have the highest exposure to their sovereign (see Charts 5 & 6). In most EU indebted countries — Italy, Portugal, or Spain — the sovereign bank loop has increased in 2020, and slightly decreased since the first half of 2021.

The exposure of Italian banks to domestic government debt hit a record EUR 712 bn last August 2020. French banks' exposure to sovereign debt of their own countries has also hit record high since the pandemic started.

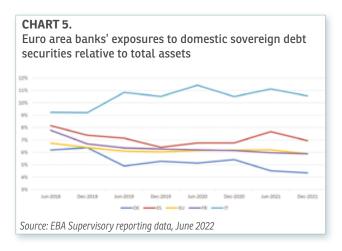
According to the EBA⁶, at the end of December 2021, the exposure to total sovereign debt securities was equal to 17.8 % of their total assets for Italian banks (EUR 499 bn)

^{4.} EBA, Risk Assessment of the European Banking System, December 202

^{5.} L. Quignon, "The LCR goes against the need to reduce the bank-sovereign link", Revue Banque, October 2013

^{6.} EBA, Risk Assessment of the European Banking System, December 2021

and 13 % for Spanish banks (EUR 463 bn), but close to 10% for French (11,2% *i.e.*, EUR 962 bn) and German banks (9.5% *i.e.*, EUR 357 bn) – see Chart 6. Thus, the downward evolution continued during the second half of 2021 as the total sovereign exposure went from EUR 3.3 tn to EUR 3.0 tn.



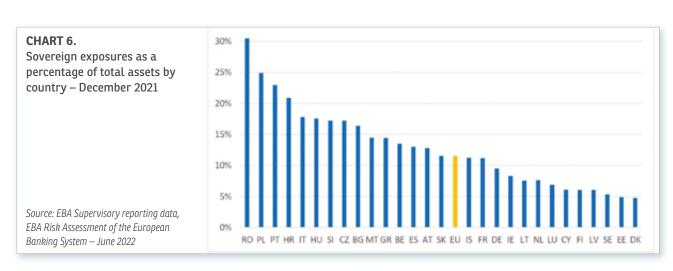
In December 2021, 52% of EU/EEA banks' sovereign exposures was to their respective home countries (59% as of June 2021). Close to 80% of banks' total sovereign exposures were to an EU/EEA country, broadly 5 percentage points less than in June 2021 (see Chart 7).

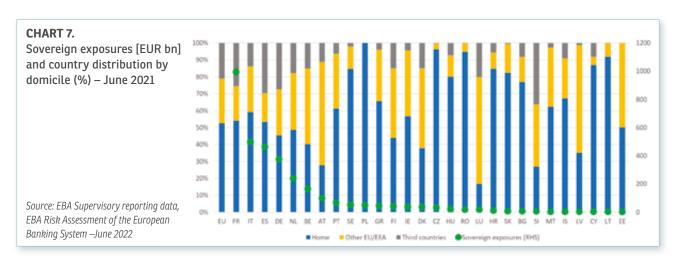
Among the largest Member States, in December 2021, banks in Italy held the most domestic sovereign debt relative to Tier 1 capital (173.9%, *i.e.*, EUR 296 bn), followed by Spain (123.5%, *i.e.*, EUR 247 bn), France (118.9%, *i.e.*, EUR 530 bn), and the Netherlands (88.4%, *i.e.*, EUR 116 bn) and Germany (82.3%, *i.e.*, EUR 170 bn).

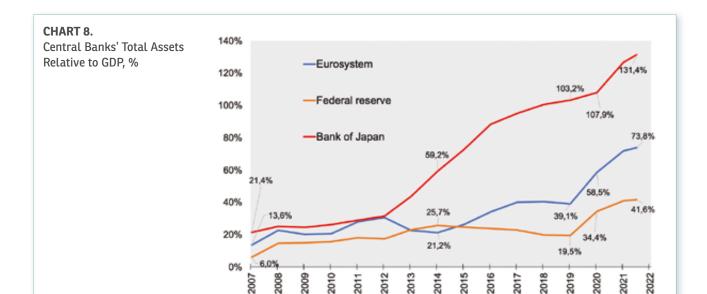
For Italy, the doom loop remains also due to banks taking advantage of an attractive carry trade that allows them to use free money from the ECB and invest in sovereign debt with decent yields.

As shown by forecasts made by the Commission, public deficits will remain high (above 3%) in some EU countries (Italy, Spain, France, etc.) in 2022 and 2023, especially since the rules of the fiscal pact are still suspended in these years. In such an economic context and with the end of sovereign bond purchases (end of QE policy) by the Eurosystem since the beginning of July 2022, it is inevitable that the sovereign-bank link will intensify in 2022.

Yet, the decrease in economic convergence across EU Member States in terms of public deficit and public debt in the context of non-compliance with the stability package creates high risks of financial fragmentation and impedes the completion of the Banking Union. Only fiscal discipline implemented in all parts of the euro area and the EU can break the sovereign-bank loop and favour the completion of the Banking Union.







In such a context the implementation of Next Generation EU must be a success⁷. Indeed, it should lead to higher potential growth in the weakest economies that benefit from EU money provided that the series of economic reforms to which the states have committed themselves are actually implemented.

Source: Federal Reserve, Bank of Japan

1.3 The Central Bank-sovereign nexus is significantly rising since 2015

The 2% inflation objective pursued by central banks have pushed them to maintain very accommodative financing conditions, and to be asymmetric over the past 20 years. Central Banks and the ECB in particular have not tightened monetary conditions when the economic situation improved. The massive increase in central banks' total assets and the expansion of the monetary base illustrate this asymmetry.

We saw previously (section 1.2) that the sovereign bank nexus decreased between 2015 and 2019. The counterpart of this decrease has been an increase of the Eurosystem balance sheet due to the QE policy of the ECB. Thus, there is a stronger central-bank sovereign nexus.

From January 2015 to early March 2020, a total of EUR 2.66 tn of public and private securities were purchased by the Eurosystem, corresponding to nearly 20% of the eurozone's 2019 GDP. This brought the balance sheet's value to EUR 4.7 tn, *i.e.*, 39.1% of GDP.

Between 2014 and mid-2022, the ECB's balance sheet increased from 21.2% of the eurozone's GDP, to 73.8% (see Chart 8). That is a EUR 6.8 tn rise towards the record of EUR 8.83 tn as of end-May 2022.

When the pandemic struck in March 2020, the key financing rate of the ECB could not be lowered further, leaving little room for manoeuvre. Substantial monetary policy accommodation was emphasized over the course of 2020 and 2021 to counter the negative impact of the pandemic

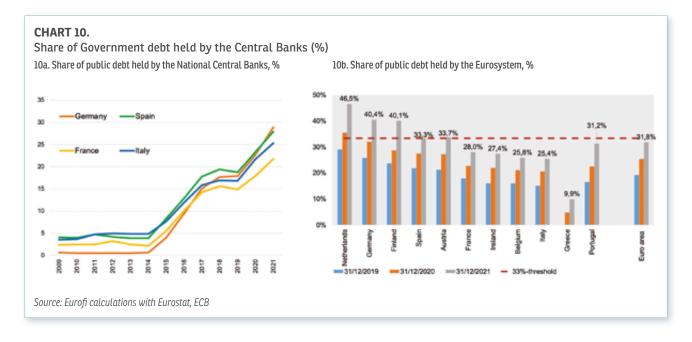
on the inflation outlook. Thus the size of the Eurosystem's balance sheet as a share if the eurozone's GDP expanded by more than twice as much as it did after the GFC and EU sovereign debt crisis (see Chart 9).

Considering the ECB's action, the Governing Council decided on March 2020 to launch a Pandemic Emergency Purchase Programme (PEPP) of up to EUR 750 bn until the end of 2020, on top of the EUR 120 bn in extra purchases as part of the existing APP.

Following the end of the net purchase under the PEPP in March 2022, the Eurosystem continued buying securities as part of the APP. The ECB started to slow down the pace of asset purchases in March 2022. Indeed, net purchases under the APP have ceased on 1 July 2022, and bonds purchased under the PEPP will be reinvested until 2024 – implying the stabilisation of the stock of sovereign bonds at its current level.



^{7.} The Recovery and Resilience Facility is the biggest programme of the recovery plan with a maximum of EUR 672.5 billion of loans and grants for Member States to finance reforms and investments. The aim of the Recovery and Resilience Facility is to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient, and better prepared for the challenges and opportunities of the green and digital transitions



As of the end of May 2022, the consolidated balance sheet of the Eurosystem, which includes the assets and liabilities of the euro area NCBs and the ECB vis-à-vis third parties, amounted to EUR 8.83 billion (compared with EUR 6.98 billion in December 2020). This increase over the previous year was mainly due to the acquisition of securities under the PEPP and the APP and to the increase in the Eurosystem's refinancing operations.

The Eurosystem has then had a leading role in public debt monetisation during the Covid-19 crisis.

At the end of 2021, the Eurosystem held 28% of the French public debt and 25.4% of the Italian debt. Holdings of Dutch, Spanish, German and Finnish government debts then exceeded the 33% threshold, initially set under the APP but suspended under the PEPP (see Chart 10). This highlights the monetisation of public debt by the Eurosystem during the COVID crisis as in 2019 the Eurosystem held only 25.8% of German debt, 21.8% of Spanish debt, 17.9% of French debt and 15.1% of Italian debt. Finally, the Eurosystem absorbed more than all new

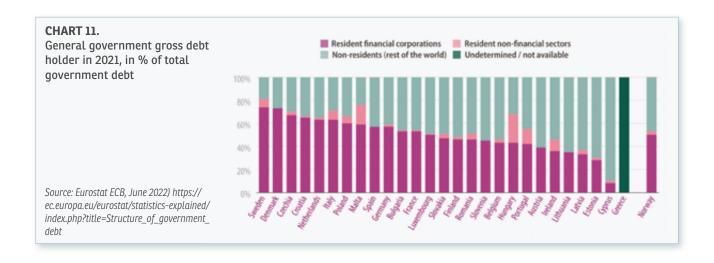
public debt issuances in the euro area in 2021 (78.5% in 2020; 146.4% in 2021).

Thus, over the past decade, advanced economies have seen their central banks endorsing stronger responsibilities, strengthening the sovereign-central bank loop.

Since 1995, we observe that this trend is happening in most of EA countries⁸. The increase in domestic holdings of government debt was mainly driven by non-monetary financial institutions until the euro area sovereign debt crisis and thereafter by monetary financial institutions including central banks.

For instance, the share of government debt held by the National Central Bank has almost tripled in Italy and Spain between 2015 and 2020.

In Italy, the proportion of domestic holders has risen by nearly 8 percentage points, from 61.8% to 70.2% between 2010 and 20209. In 2021, the proportion of domestic holders still reaches more than 70%. In Spain, it has been growing gradually since 2015, to reach 59% in 2021 (see Chart 11).



^{8.} ECB Economic Bulletin, Issue 3/2021

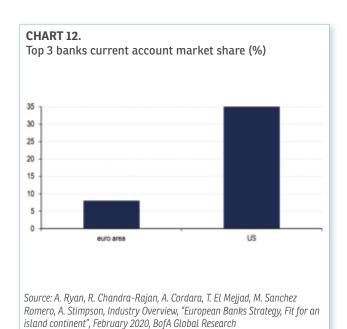
^{9.} Italian & French bank revive 'doom loop' fears with bond buying, Financial Times, April 2021

Linkages between governments and banks are now extended to central banks. This sheds a special light on the independence of central banks, as National Central Banks own a growing and significant share of the national government debts and have de facto became the agents of fiscal policies.

1.4 The banking system in the EU is much less concentrated than the US

The market share of the top five US banks within the United States was more than 40% before the Covid crisis, whereas the market share in the eurozone of the top five European banks stood at more or less 20% in 2020¹⁰.

Moreover, Chart 12 highlights that the top 3 banks account for over one third of primary current accounts, while the equivalent for the euro area is more than two-thirds smaller — and that is heavily dependent on Credit Agricole's unusually high deposit share in just one market, France.



US banks that have a strong market share in their large domestic market have therefore an extraordinary advantage and a greater capacity to develop internationally.

1.5 Several indicators reflect the overcapacity of the EU banking system, and highlight the differences with its non-European peers

The EU banking sector continues to struggle with excess capacity, with too many undersized banks and a costly physical banking infrastructure. It still has too many banks competing for the same customers.

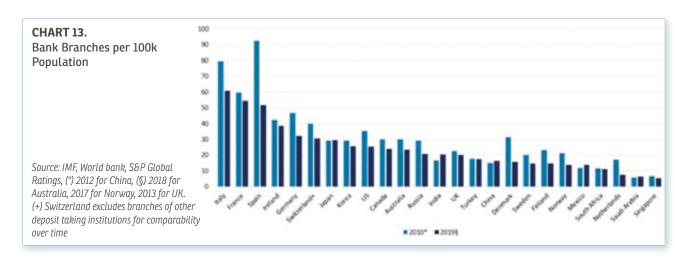
Three indicators point to this overcapacity of the EU banking sector: the number of branches per population, the number of inhabitants per bank and the cost to income ratio.

The branches per population indicator (see Chart 13) varies from 60 per 100 000 inhabitants in Italy, 55 in France, 52 in Spain, 32 in Germany versus 25 in the United States in 2019.

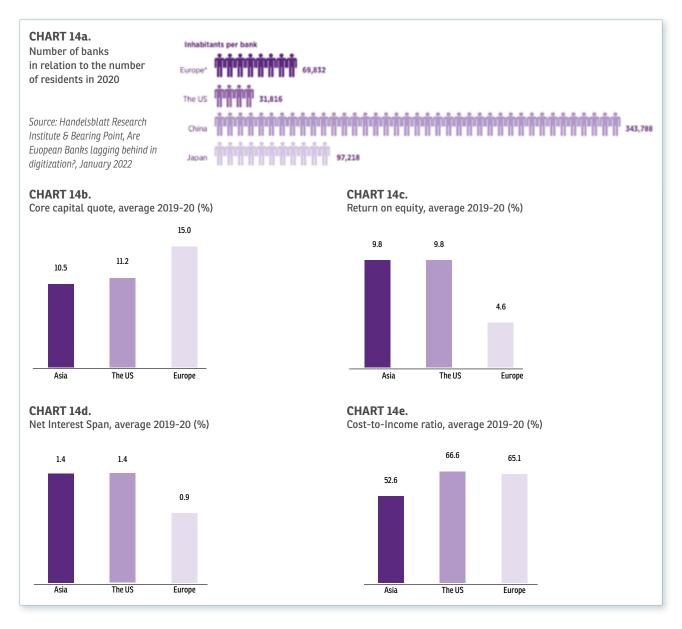
Moreover, Italy and Germany, which are two of the least concentrated banking sectors within the euro area with the highest number of branches, have witnessed the largest number of transactions, but very few of these have reached beyond national borders.

Another efficiency indicator is the number of inhabitants per bank. According to a BearingPoint study, "[i]n the EU, the United Kingdom, and Switzerland, there is one bank for every 70 000 inhabitants in 2020. In the US banking market, one bank accounts for approximately 32 000 inhabitants [(see Chart 14)]. If we include cooperative banks in addition to commercial banks in the US banking market, it can be described as even more overbanked than the European market. These figures are considered a rough yardstick, but they cannot be seen as the only indication of overbanking. In addition to the size of the banking sector, competitive pressures and the banking infrastructure also play a role."

Banks in Europe have to face a much more competitive environment than in the United States and therefore a



10. Compared with other jurisdictions, only a few banks exited the market in the euro area. Many banks were bailed out and kept alive due to a lack of European crisis management tools. This underlines the need for further review of the EU bank crisis management



much stronger pressure on their margins since the EU banking sector is not globally concentrated enough (see 1.41) notably compared to the US one.

The BearingPoint study, which is based on the annual financial statements for 2019 and 2020 underlines that European banking sector has the highest average common equity tier 1 (CET1 ratio), and the ratio of common equity tier 1 capital to total assets of the largest 25 banks is 15 percent (Fig. 14b). It is versus 11.2 percent and 10.5 percent in the US and Asia respectively. The profitability of these European banks is therefore automatically affected; while the pre-tax return on equity (ROE) of the banks in Asia and the US is 9.8 percent on average, the figure for Europe is less than half, at only 4.6 percent (Fig. 14c).

In addition, Asian and US banks earn significantly more in interests with loans (Fig. 14.d). The net interest margin — the difference between interest income and interest paid to lenders as a proportion of total assets — is significantly higher for them. However, there are differences not only in profitability but also in efficiency (Fig. 14e). With a cost-income ratio (CIR) of 52.6 percent, the 25 largest Asian banks are significantly more efficient than their peers in

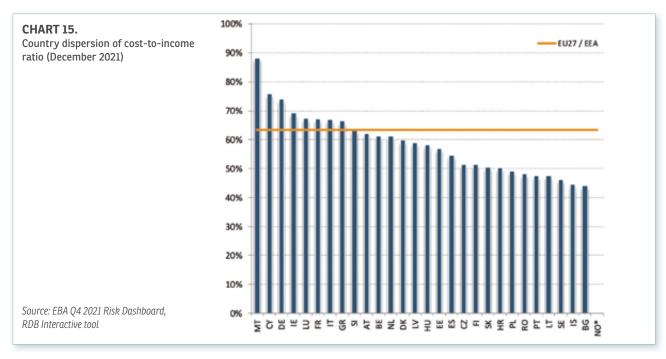
Europe (65.1 percent) and the US (66.6 percent). While Asian banks need just over 50 cents to earn one euro, the other banks need more than 65 cents.

These different charts and comments illustrate how the efficiency and profitability of the European banking sector are hampered by a persistent trend of gold-plating by authorities, by a highly competitive pressure notably linked to a market structure where many players are not very shareholder-value minded, and by market fragmentation.

We can also highlight the great heterogeneity concerning the cost income ratio in the European banking sector itself. Indeed, German banks ratio was by 19 percentage points worse than the Spanish banks' one (74% versus 54.6% respectively in December 2021).

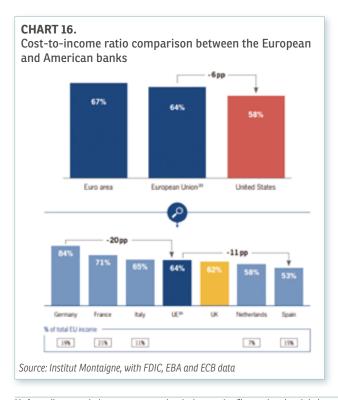
As shown in Chart 15, Germany, France and Italia are all above the EU average in December 2021 (74%, 67.2% and 66.8% respectively). Yet, between December 2019 and December 2021, Germany and France saw their cost income ratio decreasing whereas Italy faced an increase (from 64.8% to 66.8%).

We also observe that the cost income to several Member States are below 50%: Poland (49.1%), Portugal (47.5%).



Moreover, US banks boasted a cost income ratio roughly 15 percentage points better than their European counterparts in 2021. About 80% of that gap was attributable to support function costs. US banks are getting more out of their technology than European banks due to the scale advantage of the American markets¹¹.

The difference in cost income ratios between the EU and the US is an efficiency indicator that illustrates the operational underperformance of the EU banking system compared to the American (see Chart 16 below). In 2019, the gap in cost income ratios was of 6 percentage points and 9 considering the euro area only.



Even though the cost to income ratio of US and EU banks do not differ significantly (65.9% for the US and 65.2% for the EU in December 2020), since December 2014, this ratio has fallen in the US from 71.8% to 65.9% whereas in the EU it has gone up from 62.9% to 65.2%.

1.6 Member States have ring fenced their banking sectors

There are no host supervisors anymore in the Banking Union area but 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.

Indeed, national regulators still fear that capital and liquidity will be trapped in individual Member States if a pan-European banking group fails. This perception is particularly acute in countries that are strongly dependent on foreign banks for the financing of their economies and explains the absence of a truly single prudential jurisdiction in the euro area.

1.6.1 Subsidiaries of cross-border groups operating in the Banking Union are mainly governed by national rules

Examples of national bias in regulation and supervision sound multiples: application, at the local level of specific capital, liquidity and MREL requirements, increased capital buffers or Pillar 2 requirements for subsidiaries, EU prudential treatment of cross-border exposures within the Banking Union still partly as foreign (and not domestic) exposures in the calculation of the Global Systemically Important Bank (GSIB) systemic risk buffer.

1 - Ring fencing policies are applied to capital, liquidity and MREL liabilities

The obstacles to the integrated management of bank capital and liquidity within cross-border groups operating in the Banking Union remain persistent and fragment banking markets.

^{11.} According to an industry representative during session "Improving the global competitiveness of the EU banking sector", EUROFI Financial Seminar — Paris, February 2022

While recognised in 2013 by the fourth Capital Requirements Directive (CRD4), capital and liquidity waivers¹² remain at the discretion of the national supervisors, which are most often reluctant to use them. Consequently, despite the progress made in terms of harmonisation of banking law since the inception of the Banking Union in 2014, crossborder banking groups are often unable to manage their capital and liquidity on a consolidated basis. In practice, all capital and liquidity ratios are applied at both solo and (sub-)consolidated level, notwithstanding the possibility of waivers allowed by the legislation.

Calculations by the ECB Banking Supervision show that, in the absence of cross-border liquidity waivers — as it is currently the case — the combination of the European and national provisions prevents around EUR 250 billion of high-quality liquid assets from being moved freely within the banking union¹³.

One typical example in this respect is the application of the output floor¹⁴ on an individual entity (solo) level required by host supervisors last year in a letter about the banking package (CCR3-CRD6) currently under discussion, while the Basel rules are designed to apply at the consolidated level of the banking groups and are calibrated by the BCBS with this scope in mind.

Domestic resolution authorities may also have the possibility to add MREL to local subsidiaries of banking groups on top of the MREL decisions made by the SRB. This may lead the subsidiaries of banking groups to have different levels of MRELs from those of domestic banks of an equivalent risk profile and the sum of local MREL to exceed the level of MREL defined at the group¹⁵.

2 - Internal MREL and Daisy chain

The "daisy chain" proposal has been adopted and imposes the deduction of own funds held by intermediate entities in their subsidiaries subject to internal MREL requirements instead of risk weighting them as it is currently done. This will lead to an increase of the level of internal MREL, and potentially also of the own funds, required for these intermediate entities. As a result, and strangely enough, for intermediate entities, it will be less onerous to hold a participation in a foreign bank outside the EU for instance.

In addition, internal MREL will now be required for all institutions (*i.e.*, credit institutions and investment firms) and financial holding companies with a balance sheet exceeding EUR 10 bn, irrespectively to the size of the group.

All in all, ever more funds have to be pre-positioned at subsidiaries and thus are not available for re-allocation within groups if and when necessary.

3 - Several host authorities tend to submit any dividend distribution to their approval

Several Member States tend to submit dividend distribution from subsidiaries to parent entities within cross-border banking groups to their approval, even if these distributions are organised at group level and thus should be supervised by the group supervisor in line with different macroprudential measures taken as well as with views to make the group more resilient and agile.

4 - Increased Pillar 2 requirements (P2R) for subsidiaries of European transnational banking groups

The numerous instances where different pillar 2 requirements (P2R) and buffers such as the domestic systemic risk buffer are applied by host supervisors to the same European banking group also illustrate the fragmentation of the EU Banking Union and the lack of harmonisation within it.

5 - Treatment of intra-Banking Union exposures under the G-SIB scoring methodology for G-SIB buffers as nondomestic exposures

Banking operations between two countries of the euro area, has been considered until June 2022 (see 2.14) as cross-border operations by the EU prudential legislative framework in the calculation of the Global Systemically Important Bank (GSIB) systemic risk buffer.

The EU legislation in force (CRD5 voted in 2019), sets that, "without prejudice to the capacity of competent or designated authorities to exercise their supervisory judgment, an alternative score reflecting [the Banking Union] should be calculated¹⁶ and competent or designated authorities should take that score into consideration when assessing the systemic importance of credit institutions, without affecting the data supplied to the BCBS for the determination of international denominators".

Despite this provision, the request made by a G-SIB in 2021 to benefit from the application of the alternative score was denied until June 2022, in contradiction with the will of the European legislator.

1.6.2 The root causes of ring-fencing practices

The persistence of domestic ring-fencing practices in the eurozone, despite a common supervision, mainly results from the solo approach of the EU banking regulatory framework and the existence of options and national discretions within the single rulebook. Concern about the way possible banking group resolutions may be handled in the EU remains the main underlying factor of this non-recognition of banking groups in the regulatory framework.

^{12.} The legislative framework does allow cross-border waivers of individual liquidity requirements, creating cross-border liquidity sub-groups. But some Member States, exercising an option that will remain in the legislation until 2028, have imposed limits on intragroup exemptions from the large exposure requirements which cannot be waived, cross-border, at the solo level. This restricts banks' freedom to move liquidity within their groups

^{13.} See A. Enria, "How can we make the most of an incomplete banking union?" Eurofi Financial Forum, Ljubljana, September 2019. https://www.bankingsupervision.europa.eu/press/speeches/date/2021/html/ssm.sp210909~18c3f8d609.en.html

^{14.} The output floor, one of the central elements of the Basel III reform, sets a lower limit ("floor") on the capital requirements ("output") that banks calculate when using their internal models. The main aim is to address model risk, in particular the risk that a bank's internal model incorrectly estimates the bank's capital requirements

^{15.} Defining prudential requirements at group level should contribute to enhancing financial stability. For instance, the main benefit of defining MREL only at the group level rather than also on the level of each subsidiary (internal MREL) is that it increases flexibility. In the case of a loss in a subsidiary that would be greater than the amount of internal MRELs prepositioned in the country of this subsidiary, it would be easier to mobilise the required capital using centrally held resources from the parent company. If all resources have been pre-allocated, it is unlikely that any local supervisor would accept that internal MRELs located in their jurisdiction should be released and transferred to another one

^{16.} Under the alternative score, the Banking Union is considered as a single jurisdiction, as it is the case of the United States, and thus intra-Banking Union exposures are scoped out of the cross-border exposure measures applied in the G-SIB methodology

Indeed, the EU legislative framework does not recognise transnational banking groups at the consolidated level but only as a sum of separate subsidiaries.

There is also an excessive flexibility in the EU macroprudential framework which encourages ring fencing measures¹⁷, in addition to other arguments such as the still strong sovereign bank nexus, the insufficient involvement of host jurisdictions in the resolution strategy of transnational banking groups, or the lack of EDIS.

However, EDIS remains a contentious issue in the banking industry. Indeed, some bankers do not see EDIS as a way to avoid ring-fencing but fear that EDIS could facilitate existing ring-fencing practices at common cost.

1 - The EU legislative framework does not recognise transnational banking groups at the consolidated level but only as a sum of separate subsidiaries ("national or solo approach")

Transnational banking groups of the euro area are not considered as unique entities from an operational, regulatory, and supervisory perspective but as a sum of separate subsidiaries.

Indeed, despite the implementation of the SSM and the SRB, national regulators still believe that capital and liquidity will be trapped in individual Member States if a pan-European banking group fails. These concerns also reflect the prominent role of the home authority in case of resolution. In addition, domestic regulators and supervisors are concerned by the sovereign-bank loop which still exists in certain euro area Member States.

The perception of this problem is particularly acute in countries that are strongly dependent on foreign banks for the financing of their economies. This lack of mutual trust among regulators and supervisors reflects a lack of trust between national authorities or a lack of trust in the sustainability of the business models of many banks. This is one of the most damaging legacies of the global financial crisis and the EU sovereign debt crisis.

2 - The excessive flexibility in the EU macroprudential framework encourages ring fencing measures

The legal framework for macroprudential tools has entrusted national designated authorities with flexibility. The ECB can only intervene in the case of EU harmonised measures but many national macroprudential powers are delinked from EU legislation. The European legislative framework contains all the drawbacks of minimum harmonisation. Moreover, most of the macroprudential requirements are enshrined in the Capital Requirements Directive, while the most relevant macroprudential provisions in the Capital Requirements Regulation relate to options for Member States.

3 - Other arguments explaining ring-fencing practices

During several sessions of Eurofi events dedicated to

Banking Union issues¹⁸, several representatives of host jurisdictions highlighted the sovereign-bank nexus which remains a problem in some Member States, the insufficient involvement of host jurisdictions in the resolution strategy of transnational banking groups and the lack of EDIS. Moreover, they explained the EU bank crisis management framework is not sufficiently harmonised, consistent and predictable¹⁹.

They also underlined that the governance of Banking Union Institutions does not sufficiently take into account host country concerns. The main concern remains burden sharing issues and the way cross-border banking groups may be handled in the EU²⁰. They are notably concerned by the impact that the possible failure of a transnational banking groups or their local subsidiary might have on their depositors and on their economies, and by the fact that these impacts would have to be addressed entity by entity domestically. All the more so as to conclude the resolution framework has not worked properly so far.

1.7 The lack of uniformity of standards at European level and the presence of diversity in the markets are other barriers to an integrated European market, independently of the presence of ring-fencing practices

There is great potential for cross-border expansion of European banks, and a harmonisation of the European market. However, the single banking market is not yet a reality although banking regulation has become more uniform in the EU with the single rulebook, and the ECB clarified its supervisory approach to consolidation²¹. Indeed, a number of traditional factors such as legal systems, language and traditions remain and fragment banking markets. The EU Commission adds that "differences in taxation, borrower protection, or anti money laundering provisions at Member State level result in bank-specific entry and adjustment costs that discourage cross border banking". For example, there is no single EU-wide loan registry, as it is the case in the US.

The European banking sector is therefore still marked by the prevalence of national legislation, regulations, or enforcement practices. In addition, Member States understandably seek to ensure that national objectives are met in terms of, for instance, consumer protection, public health, and the environment. In doing so, they do not necessarily take due account of the impact of their actions on the EU banking sector.

An Oliver Wyman study underlines that banking products vary across European countries, partly because of customary differences in markets which have developed separately and partly because of differences in relevant laws and fiscal specificities.

A vivid example is real estate financing. European markets vary in consumers' preferences for mortgage types (fixed vs. floating, amortising vs. bullet), legal requirements

^{17.} National regulators remain in charge of financial stability and macro-prudential issues in their own country while not in charge of supervising often large parts of their banking sector

^{18.} Eurofi Seminar, Sessions from III. Banking and insurance policy priorities, p. 37-63, Paris, February 2022

^{19.} Eurofi Seminar, "EU banking crisis management framework: improvement priorities", Paris, February 2022

^{20.} See, for instance, "Ring-Fencing policies in the Banking Union", Eurofi Summary, Paris, February 2022

^{21.} ECB Banking Supervision, Guide on the supervisory approach to consolidation in the banking sector, January 2021. This guide clarifies particularly three key prudential issues that are often discussed in this context: how the ECB sets Pillar 2 capital requirements for newly formed entities; how it treats badwill from a prudential perspective; and how it treats and assesses internal models

concerning consumer protection and collateral enforcement, national credit reference schemes (e.g., Crédit Logement in France) and creditor selection criteria (LTV vs. monthly incomes). These differences influence product design, distribution strategies and back-office operations. And they prevent banks from sharing processes and systems across European countries. Large banks consequently miss scale advantage when moving into new European markets. Because these domestic variations are greater in some lines of business than others, the potential for Europeanisation also varies by line of business.

2. Consequences of banking fragmentation

The geographical nationalisation of the European Banking system, coupled with the current prudential regulatory framework, slows down the restructuring of its banking sector and weakens the profitability of banks.

In addition, pan-European banks face a competition disadvantage compared to US banks, which benefit from a large domestic base, enabling them to increasingly take larger market shares in the European markets.

Finally, the EU shows a lack of mobility of capital and credit, which stay within national borders and weaken the EU resistance to asymmetric shocks as private risk sharing and risk diversification are impeded.

2.1 The restructuring of the banking sector in Europe is slowed down

Mergers and Acquisitions (M&A) are failing to accelerate the restructuring of the banking sector in Europe. Indeed, M&A represent another option for banks to streamline their operating structures to embark on consolidation. "Bank consolidation via M&A is frequently mentioned as a means of reducing overcapacities in banking as domestic-oriented

M&A could allow the institutions involved to eliminate duplication in their branch networks and to release resources to speed up their restructuring. Domestic M&A deals can also help banks exploit potential cost synergies and economies of scale. M&A impact then the competitive landscape in the banking industry and can lead to higher market concentration"²².

Yet, cross-border merger and acquisition activities among banks within Europe have drastically diminished since the year 2000 (see Chart below), notably due to the still predominant national bias, leading countries to use ringfencing practices. As for the remaining M&A deals, they are mainly domestic. This lack of M&A deals within Europe does not help to improve the profitability of banks in member countries.

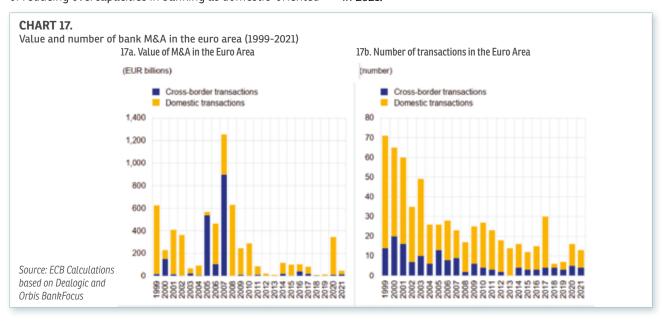
Defining the most appropriate banking structure in the EU is a must for progress.

2.1.1 Cross-border mergers have decreased since 2000

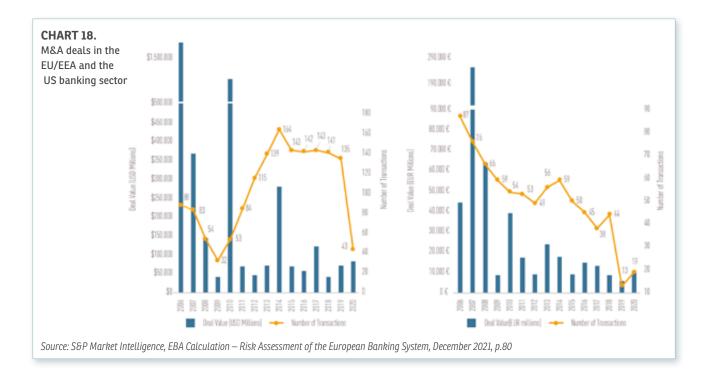
Although it rebounded in 2006 and 2007 it was back to its negative trend in the wake of the subprimes crisis (see Chart 17). According to the ECB, "the value of M&A transactions²³ fell by about two-thirds between the precrisis decade and the period since 2008"²⁴.

In 2020, M&A transactions increased in the EU/EEA banking sector. There were 19 major deals (13 in 2019) with a total value of EUR 10.8 bn – EUR 5.6 bn in 2019 – (Chart 18). The main transactions took place in Spain and Italy. More importantly, M&A activity in the EU/EEA banking sector is only a fraction of the activity observed in the US (see Chart 18)²⁵.

Yet, even if there was, in terms of value, a slight increase in cross-border transactions and a consequential one in domestic transactions in 2020, this trend did not continue in 2021. Indeed, the amount of M&A in the euro area in 2020 reached about EUR 350 billion against EUR 50 billion in 2021.



- 22. Claudio Borio and Kostas Tsatsaronis (1999), Andreas R. Dombret (2018)
- 23. Proxied by the total assets of M&A targets
- 24. Bank mergers and acquisitions in the euro area: drivers and implications for bank performance, Prepared by Isabel Figueiras, Sándor Gardó, Maciej Grodzicki, Benjamin Klaus, Laura Lebastard, Barbara Meller and Wouter Wakker, Published as part of the , ECB
- 25. Risk Assessment of the European Banking System, December 2021 EBA, p.80



2.1.2 The declining trend in banking M&As in the EU impacts negatively the level of concentration of the EU banking system

Bank Merger & Acquisition (M&A) transactions within the Euro Area have been on a steadily declining trend, both in terms of number and value, since the year 2000. Five major reasons may explain the decline in European M&As:

- The Single Banking Market is not yet a reality although banking regulation has become more uniform in the EU through the single rulebook and the ECB's clarified supervisory approach to consolidation. This fragmentation along national lines puts new cross-border market entrants at a disadvantage. In particular, banks that want to expand and diversify their activities throughout the EU have to create local service units in each Member State, which reduces economies of scale. Finally, improving the profitability of the EU banking sector is only possible on a countryby-country basis, through national mergers. New and innovative players have no choice but to develop a specific business case for each member state. The opportunities promised by the single market of (retail) financial services are not materialising.
- 2. Furthermore, the EU legislative prudential framework does not recognise trans-national groups at the consolidated level but as a sum of separate subsidiaries ("national or solo approach") notably due to the insufficient trust of Member States with regard among others to the national supervision. Moreover, ring-fencing policies (capital, liquidity, bailin instruments, leverage ratio...) by host supervisors, applied to subsidiaries of transnational banking groups located in their countries impose higher costs and discourage large EU banks to increase the number of their subsidiaries in the EU since scale effects through the centralisation of capital and liquidity cannot be achieved.

- 3. Digitalisation and fintech challenges may be seen to have overpast the aim of consolidation.
- 4. Another obstacle to merger activity is the structure of the banking industry; only 30% of the significant banks in the euro zone (directly supervised by the SSM) are publicly traded companies. Most of the non-listed banks in the eurozone are (regional) state-owned saving banks, regional banks or cooperative banks.
- 5. Finally, in the current political context, no state would be keen to see the disappearance of one of its banks due to a takeover by a bank in another European country.

Some bankers also point out that the expansion of European banks is also penalised by the European regulation and supervision through:

- the non-recognition of the benefits of geographical diversification,
- the penalisation of third country exposures in multiple ways,
- the penalisation of the minority interest.

2.1.3 The post-crisis period (after 2008) is characterised by a predominant proportion of 'domestic' transactions

Besides, compared with pre-2008, the post-crisis period is characterised by a predominant proportion of 'domestic' transactions (around 80% of all deals). Large transactions have also become rare, and in recent years more euro area banks were acquired from outside the euro area than from within. Within the EU, cross-border M&As transactions have been clustered in neighbouring countries and follow existent linkages, allowing to conclude on the fact the single European market remains disjointed.

Indeed, in 2021, we observe in Chart 17, that there were only a few transactions (less than 5) between European banks, for really small amounts (totalling around EUR 10 billion).

No real progress has been observed since 2018 where two-thirds of Europe's banking consolidation was also from domestic deals. For example, in 2018 Spain and Italy were dominated by domestic transactions with the Banco Santander's takeover of Banco Popular for EUR 1 in June, or Intesa Sanpaolo's acquisition of two failed domestic rivals in Italy's Veneto region also for a token price.

2.1.4 The lack of M&A deals hampers the profitability of the EU banking sector

Both domestic and cross-border bank mergers have the potential to address excess capacities and cost inefficiencies, two of the factors behind structurally low profitability in Europe.

Nevertheless, domestic consolidation is growing at snail's pace and cross-border bank consolidation has practically disappeared (in terms of transactions' value), it should thus be considered to remove remaining regulatory obstacles²⁶. As pointed out by the ECB²⁷, such operations need to be supervised.

But as explained in the 1.42 subsection, the current EU legislative framework does not recognise transnational groups at the consolidated level (national approach). In addition, Member States have ring-fenced their banking sector. In such an environment, cost reduction through economies of scale becomes difficult, as scale effects of centralisation of capital and liquidity cannot be achieved. This fragmentation along national lines (1.22) means that banks that want to expand and diversify within the EU have to create local units in each Member State instead of focusing on M&A.

At this stage, profitability of the EU banking sector can then only be improved on a country-by-country basis, through national mergers. Yet, the impact on profitability will be greater for cross-border mergers.

Therefore, common EU practices removing remaining obstacles will allow more cross-border M&A deals and accelerate the restructuring of the EU banking sector into a more consolidated and profitable sector.

2.1.5 Can the new rules decided by the global regulators on the calculation of extra-capital buffers within the European Union help accelerate M&A deals?

In June 2022, the Basel Committee of Banking Supervision has completed its target to treating cross-border exposures within the European Banking Union (EBU) on the methodology for G-SIBs.²⁸ The Committee has recognised the progress that has been made in the development of the Banking Union. It agreed to recognise this progress in the G-SIB framework through the existing_methodology, which allows for adjustments to be made according to supervisory judgment.

Under the agreement, a parallel set of G-SIB scores will

be calculated for EBU-headquartered G-SIBs and used to adjust their bucket allocations. The parallel scores recognise 66% of the score reduction that would result from treating intra-EBU exposures as domestic exposures under the G-SIB scoring methodology. The Committee's agreement will not affect the classification of any banks as G-SIBs or the scores or bucket allocations of banks outside of the EBU.

The new rules agreed by the BIS will affect the calculation of extra-capital buffers for the eight eurozone-based lenders included in the list of 30 globally systemically important banks that are considered most likely to trigger a financial crisis if they were to go under.

In other words, only two-thirds of their pan-eurozone exposures will be treated as domestic, instead of foreign – and therefore riskier²⁹.

With this, being able to consider their cross-border exposures within the block more like domestic ones could reduce the amount of extra capital the banks need to cover because of their systemic importance. This reform is helping to remove one of the regulatory disincentives to developing pan-European activities.

According to the AGEFI³⁰, the French bank BNP Paribas, which is mainly implemented in Belgium and Italy, and which has the highest G-SIB buffer, could be the main beneficiary of this reform and see its systemic surcharge decrease by 0.5 solvency ratio points.

This shift is a step in the right direction, toward a more integrated banking sector in Europe, the creation of a truly domestic market and a harmonisation of regulations for the eurozone banking sector. However, there are still too many obstacles to a real acceleration of banking consolidation. In addition to the regulatory burdens, the BCBS has decided, even for this reform, not to treat all, but only two-thirds of pan-European exposures as fully domestic because the Banking Union is still incomplete.

2.2 The profitability of EU banks remains a concern

"Even before the COVID-19 outbreak, the European banking system suffered from a number of known structural weaknesses, such as low profitability, as reflected in high cost income ratios implying little capacity to invest in new technologies. This persistently low level of profitability is linked to an overcapacity in the European banking sector." ³¹

The low profitability remains a concern as since the Global Financial Crisis, European banks' return on equity has been lower than their cost of capital and they have had lower profitability than their Asian and American competitors. This competitiveness gap between large EU banks and their American and Asian peers can be explained by cyclical and structural reasons.

^{26.} ECB — April 2022 — Financial Integration & structure in the Euro Area p.15

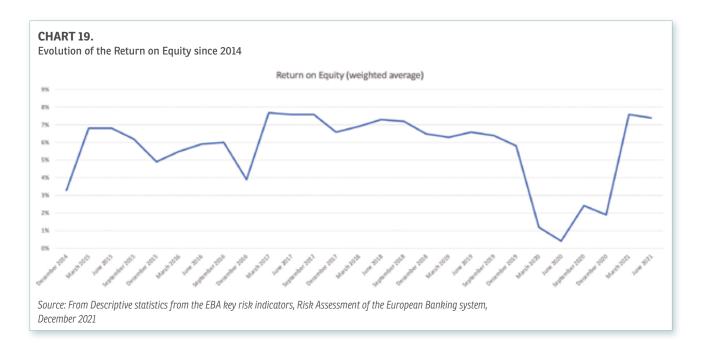
^{27.} Gardó, S. and Klaus, B., "Overcapacities in banking: measurements, trends and determinants", Occasional Paper Series, No 236, ECB, November 2019

^{28.} The Basel Committee finalises principles on climate-related financial risks, progresses work on specifying cryptoassets' prudential treatment and agrees on way forward for the G-SIB assessment methodology review, BIS Press Release, May 2022

^{29.} Martin Arnold, BNP Paribas to benefit from change to eurozone exposure rules, Financial Times, May 2022

^{30.} Franck Joselin, Le Comité de Bâle lève un obstacle à la consolidation bancaire éuropéenne, June 2022, AGEFI Quotidien & La charge des banques systémiques s'allège en zone euro, June 2022, AGEFI Hebdo

^{31.} Edouard Fernandez-Bollo (EC), The EUROFI Magazine, "Does the Covid crisis reinforce the case for Banking Union?", September 2020 Berlin.



2.2.1 Facts & figures: The structural lack of profitability of the European banking system is notably reflected in the ROE of major banks

Since the Global Financial Crisis, average profitability levels have been below the estimated cost of equity, which is estimated at between 8% and 10%.

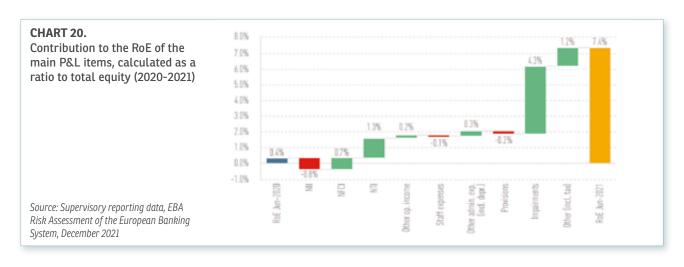
The Covid-19 outbreak has only heightened the profitability challenge. Indeed, the profitability of European banks has fallen from 6.7% in 2019 to 0.4% in 2020 (*Chart 19*).

There is no doubt that the COVID-19 shock has further damaged the profitability of the European banking sector, especially that of banks that were already struggling before the pandemic³².

Nevertheless, the RoE of EU banks was back to prepandemic levels in 2021. As of June 2021, the average RoE stood at 7.4%, which is an increase of 7 pp compared to the levels observed a year before (0.4%). The recovery was driven mainly by the decrease in impairments and, to a lesser extent, by an increase in net trading income (NTI). Other non-recurrent items such as profit from negative goodwill or from non-current assets (included under 'Other (incl. tax)' in the chart below) also played an important role (see Chart 20)³³.

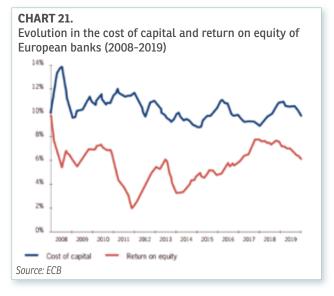
Although it reached pre-pandemic level in 2021, European banks' return on equity remains lower than their cost of capital, and it is the case since 2008, with an average difference of around 5 points, or 45% (see Chart 21). If profitability is higher than the cost of capital, value is being created. Otherwise, there is value destruction – which has been the case for European banks since the financial crisis.

For Q4 2021, the return on equity (RoE) was reported at 7.3%, and slightly decreased from 7.7% in Q3 2021 (see Chart 22). Cost of risk stood at 0.47%, substantially lower than at the same period last year (0.75%). Operating expenses showed increases not least driven by inflationary pressures. Finally, net interest margin (NIM) remains near historic lows.



^{32.} Consolidation in the European banking sector: challenges and opportunities, Keynote speech by Edouard Fernandez-Bollo, Member of the Supervisory Board of the ECB, at a lecture on Corporate Banking Law at the University of Bologna, June 2021

33. EBA - December 2021 - Risk Assessment of the European Banking System



Low profitability implies a double risk. On the one hand, since profits are the first line of defence against losses, banks with low operating profits might be in a worse position to withstand a shock. On the other, should a capital increase be necessary, this would be very expensive in terms of shareholder dilution for banks whose market valuations are poor.

2.2.2 Profitability of major European banks has lagged behind international peers

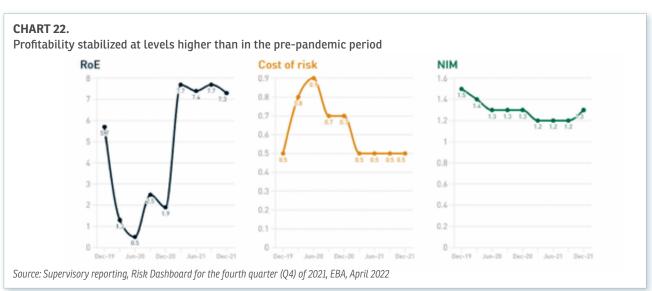
Since the financial crisis, European banks have had lower profitability than their Asian and American competitors (see Chart 23). In 2006, the pre-tax return on equity was 22% for US banks, 20% for European banks and 17% for Asian banks. More than a decade later, profitability levels have fallen in all three regions as equity levels increased, particularly in Europe, but this common trend is compounded by a specific decline in European banks³⁴.

As shown by the charts below (Chart 24), the trends of US and European bank profitability have diverged over the last years, with the largest US banks being constantly more profitable (at least twice as much) than their European counterparts.

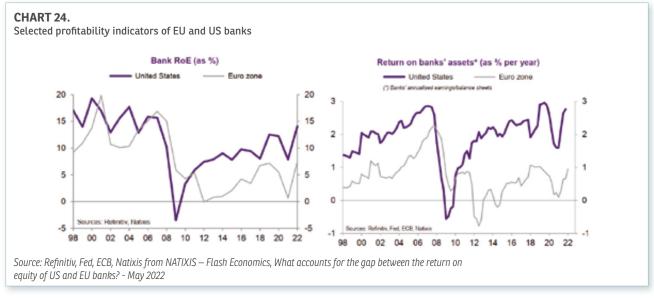


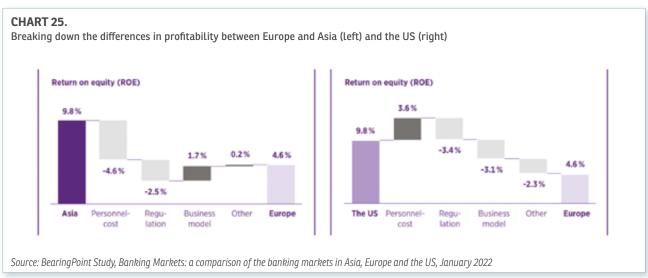
Moreover, when considering the 25 largest banks by total assets in Asia, Europe, and the US over 2019 and 2020, we find similar results³⁵. The comparison between Asian and European banks shows that a large part of the differences in profitability and efficiency can be explained by the different personnel cost levels (Chart 25).

Personnel costs in Europe, which are almost twice as high as in Asia, hurt both profitability and efficiency³⁶. If personnel costs were the same as in Europe, the return on equity in Asia would be around five percentage points



- 34. 'Reinventing the European Banking Sector' Report November 2021 Institute Montaigne
- 35. BearingPoint Study, Banking Markets: a comparison of the banking markets in Asia, Europe and the US, January 2022
- 36. The BearingPoint study explains that the banking sectors in Asia, Europe and the US differ significantly in staff deployment, salary structures and the resulting personnel costs. With an average of 126 000 employees, the largest 25 banks in Asia have a substantially larger workforce, twice the size of the US banks' workforce. However, the salary level in the Asian banking sector is much lower. Average personnel costs in the Asian banking sector amount to "only" EUR 44 000 per employee (full-time equivalent/FTE). In Europe, costs are EUR 84 000, and in the US, more than two and a half times as in Asia at EUR 117 000. As the difference in personnel costs per employee between the US and Asia is greater than the difference in headcount, total personnel costs account for a smaller share of total costs at Asian banks. Between Europe and the US, the net effect plays in favour of the US. At least half of the costs in Europe and the US are attributable to personnel vs. only 36 percent in Asia according to this study (see page 4 of the document).





lower. From a European perspective, the effect of stricter capital adequacy requirements goes in the same direction, albeit to a lesser extent. If European banks had to hold as little capital as Asian institutions, their return on equity would be around three percentage points higher.

Since the differences in personnel costs between the US and Europe are not as large as those between Asia and Europe, their share of the total is smaller. By contrast, the laxer capital requirements are in the US, compared to Europe, the most favoured US banks are.

To sum up, following the great financial crisis (GFC), despite a significant increase of EU banks' resilience, their profitability has lagged behind their international peers, in particular regarding US banks.

Therefore, the major European banks remain generally less profitable and undervalued compared to their global counterparts. Cyclical and structural reasons explain this gap.

2.2.2.1 Cyclical reasons

Four cyclical reasons contribute to the competitiveness

gap between large EU banks and their American and Asian peers $^{\! 37}\!.$

- The yield curve and interest rate differential between the US and the eurozone. There has long been a real difference in the yield curve. Lasting low interest rates have negative consequences on EU banks profitability; it compresses net interest margins which penalises them vis-à-vis their American counterparts. Indeed, net interest income represents 50% of EU banks' net operating income, and profit and loss (P&L) is made of more than 50% of credit and loan related activities. The interest level matters. Since 2014 the ECB deposit facility rate has also been negative, unlike US rates. Combining all these conditions on the interest side, there is a large difference, and it is a long-lasting difference.
- 2. The USA's more favourable macroeconomic environment. The macroeconomic situation has been less favourable in Europe than in the US since the great financial crisis. This is reflected not just in terms of profitability on capital, but also of sheer volume of profit and market cap.

- 3. The legacy of the Global Financial Crisis. There is also the issue of the treatment of the legacy of the financial crisis, and in particular the treatment of non-performing loans (NPL). In Europe, there is a lack of an active market for NPLs.
- 4. The corporate taxation rate. In the US in 2018, a reduction of the corporate taxation rate brought it to 21%, which is much lower than what the top 10 SSM banks are required to pay.

2.2.2.2 Structural reasons

The competitiveness gap can also be explained by structural reasons.

- There is an absence of a securitisation and a single capital market in Europe. Indeed, there are banks that have large balance sheets in Europe, but unlike those in the US they are not able to originate and (mainly) distribute as much as they should, due to regulatory constraints. Therefore, a euro of capital is, by definition, not as productive depending on the side of the Atlantic where the bank is located. Thanks to active securitisation as well as federal agencies, US banks can reduce their balance sheets and have greater capital efficiency. By contrast, integration in EU capital markets is only at an early stage and the euro area still lacks a common risk-free asset. It is an impediment, in particular in the light of the Basel IV framework, where holding a loan in the balance sheet will be even more expensive than it currently is and knowing that Europe does not have public agencies like Fannie Mae and Freddie Mac in the US (which act like gigantic vacuum cleaners of major amounts of mortgage loans that European banks have to keep on the balance sheet).
- The European financial market remains small and most of the financing in Europe is provided by the banking sector. The situation is the opposite in the US.
- 3. The low level of concentration and the higher fragmentation of the EU banking sector is a source of inefficiencies and vulnerabilities. This situation leads to insufficient risk sharing at the EU level, since in case of difficulties, safety nets remain largely national. Fragmentation also entails "overbanking", which in the end affects the profitability of the banks in the system as shown by the higher cost to income ratio, notably linked to the relatively high number of branches within the EU.
- 4. Additionally, there are new competitors. This new paradigm between banking activities and new actors (fintech, big tech, etc.) is a challenge in terms of profitability for banks, which are obliged to invest large amounts to be able to compete with these new actors and properly address consumers' expectations.
- 5. The underlying risk requirements can also be very different depending on the US or EU market. With the French banking system, there is a long historical period of lower and less volatile cost of risk. Such conditions year after year, reflect a low risk profile on the domestic market, and in particular on residential real estate. With lower risk, there are lower interest margins because there is less need to cover the risks.

- This can partly explain the US-EU difference in terms of profitability.
- Finally, the competitive structure differs between the euro area and the US banking system because many eurozone banks are controlled or influenced by national or local governments and the euro area banking landscape remains more fragmented. There is a much more diverse nature to national markets in Europe, and that is due to different attitudes toward credit, the different legal frameworks, the different structures and the need to satisfy different types of customers' needs. The most pertinent goal for euro area banks is to generate healthy levels of profitability, which function as a buffer against losses. The goal is not for EA banks to be compared directly to US banks but to look at how to address the profitability questions. The fragmentation and the different regimes in Europe are then reasons for the cost income ratio of European banks being so high.
- 7. The high share of personnel costs in total costs of European banks compared to US and even more to Asian ones does also hurt their profitability and denotes a relative inefficiency.

The structural lack of profitability in the European banking system is a problem both for the financing of the recovery, the green and digital transition and for financial stability, as it means that European banks would take longer to build the necessary capital levels to meet the financing needs and to rebuild them if buffers were consumed in a crisis. Achieving higher profitability is therefore important for strengthening resilience, engaging the transformation towards more sustainable business models, and unlocking sufficient investment in digitisation and consolidation in order to remain competitive.

2.3 Foreign investment banks take more and more market shares into European markets, which contradicts the political will to improve Europe's strategic autonomy in financial matters

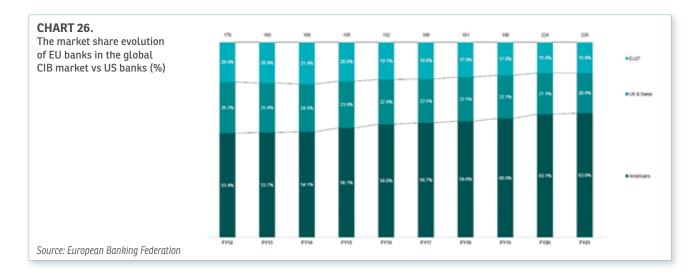
Foreign investment banks are increasingly present into European markets, threatening EU financial sovereignty. Moreover, the framework implemented by Basel III still presents many obstacles to banking consolidation.

2.3.1 Non-EU investment banks are gaining market share in Europe, putting pressure on profitability and strategic autonomy of EU economies

The EU has long been attractive to banks which are headquartered outside the EU.

US banks that have a strong market share in their large domestic market have an extraordinary advantage and a greater capacity to develop internationally (e.g., the US still represent 50% of the global financial market, with the capitalisation of a company like Apple being USD 3 trillion – the equivalent of the CAC 40). They are active in Europe and take market share from local competitors.

At this stage on retail, it may be seen by authorities as a remote issue, but we should not underestimate their competition in the future. They might try to take part in the most attractive part of the retail and wealth management business in Europe.



In addition, European banks have more of a compliance mindset than American banks, which have a growth mindset. In such a context, looking at the role of Global Systemically Important Institutions (G-SII) in the European Union, American banks are 2.5 times more active than European banks in fixed income; in equities it is 3 times and 4 times in Investment Banking Department. That gap has been growing every year³⁸.

Chart 26 displays historical data on the market share evolution of EU banks in the global CIB market vs. US banks, with a particular focus on the US and European regions. As expected, the main takeaway is that in 10 years, US banks gradually took 10% of market share away from European banks (5% away from EU27 banks, 5% away from UK/Swiss banks) - this is true both in North America and in Europe as regions as well.

Thus, an additional source of concern affecting EU bank profitability is the overtaking of EU banks by their US counterparts in their own market as the largest US banks have accounted for more than half of total investment banking revenues in the EMEA region since 2016.

This latest development sharply raises the stakes for further financial integration in the EU, as not only is EU banks' profitability at stake, but also EU sovereignty. Indeed, the increasing market share of non-EU investment banks could expose the EU economy to a risk of investment outflows in times of stress. As such, the coming years will be crucial to address any systemic risks stemming from excessive reliance on non-EU entities.

2.3.2 The EU financial sector should not be at the mercy of non-European actors due to Basel III+

Another significant question would be how clients perceive financial autonomy. During the Covid crisis, Europe has seen a reversal of a trend that previously existed around provision of service and financing to European corporates by foreign banks. Up until 2020, foreign banks had been the fastest growing ones when it came to provision of loans to German corporates, but from the second half of 2020 onwards they have been significantly decreasing. Foreign banks saw a 5% yearly contraction of their provision of lending to Germany. Europe is still heavily dependent on bank funding. The Basel III framework will likely see significant impacts by 2030³⁹.

With US regulators indicating a capital-neutral approach for US banks, there is a risk that European implementation of Basel III in its current form may weaken the competitive position of European banks, which would undermine the strategic autonomy agenda. Hasty withdrawals from markets that do not seem to be attractive anymore are typical from foreign players. From a financial and economic stability point of view, such volatility in market presence creates serious risks.

It is vital therefore not create a regulatory environment that disadvantages the European banking sector – in its own market. Basel III is forcing corporates to obtain an external rating in order for them to have access to relatively inexpensive funding capital, when 70% to 80% of European corporates are currently unrated. Basel III also increases costs for European corporates to hedge their interest rates activities, credit exposures, and pools that are split between the UK and Europe.

2.4 Absence of private risk sharing

Risk sharing in the euro area is the sum of mechanisms through which a shock - positive or negative - to a country's economy is transmitted in other economies. Risk sharing takes place through two main channels: the public (or fiscal) and the private (credit or market).

Private mechanisms work through the credit channel (cross-border lending/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.

Yet, private risk sharing has been impaired in the euro area, and a fortiori in the EU, due to the absence of an efficient Banking Union and a genuine capital markets union. This should be a concern, as it is through risk sharing channels that the overall system becomes, at the same time, more resilient and more productive.

^{38.} Eurofi Summary of the High Level Seminar, "Global competitiveness of the EU banking sector", Paris, February 2022

^{39.} The Eurofi High Level Seminar 2022- Open strategic autonomy: implications for finance

Integrated credit markets could contribute to reinforce risk sharing; the supply of credit to the economy should be less affected by country-specific shocks when international banks operate in that economy.

It is estimated that 80% of a shock to GDP growth in the eurozone remain unsmoothed against at most 40% in the US⁴⁰. Risk sharing declined further in the euro area in the beginning of the COVID-19 pandemic⁴¹.

A truly integrated banking market can act as a powerful shock absorber in crisis times. When the banking sector is segmented along national lines, a shock that hits one country will have to be absorbed within that country, putting a huge burden on its economy. But if the European banking sector is more integrated, local losses can be smoothly offset with profits from other countries and the risk can thus be privately shared across borders. And in the event of a shock hitting the entire banking sector of a single Member State, the assets and liabilities of failing banks can be sold to banks from other Member States, thus limiting disruptions for local depositors and borrowers.

However, the Banking Union is not fully delivering on its private risk-sharing. As Andrea Enria already stated in 2018; overall, since 2007, the credit channel (*i.e.*, crossborder lending and borrowing) has been acting in the euro area as a shock amplifier rather than a shock absorber (*see Chart 27*) 42 .

The chart above shows the negative contribution to risk sharing via the credit channel, implying borrowing abroad in economic good times and repayment of the loans in economic bad times. This finding suggests that a complete Banking Union is a fundamental prerequisite to allow the credit channel to contribute positively (as in the US). The fiscal channel is also negatively contributing. Finally, the capital channel is also smaller than in the US, respectively 20% against 35%.

In order to increase risk-sharing within the euro area, the EU should implement a fully developed capital markets

union and complete its banking union, which would deepen and strengthen the EMU.

3. Solutions have been identified but not implemented

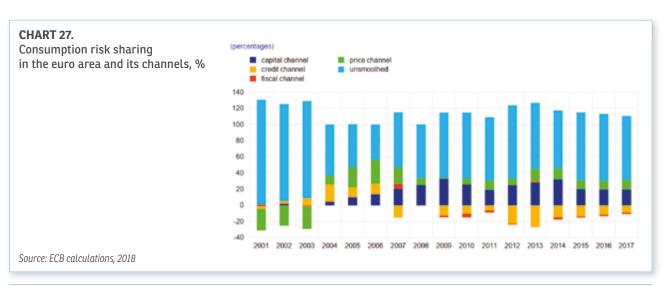
Five solutions are suggested by authorities or by the industry to remedy the fragmentation of banking in Europe:

- 1. Recognition of transnational groups at a consolidated level by the EU prudential and crisis management frameworks.
- 2. Harmonisation of national insolvency rules for banks to ensure that small and medium sized banks that are not placed in resolution effectively exit the market.
- Allowing Deposit Guarantee Schemes (DGS) to address the funding gap in resolution for mid-sized banks without damaging depositor trust in the overall set-up.
- 4. Encourage credible support provided by parent companies to solve the home-host dilemma.
- 5. Promote branchification as another possible route for cross-border banking groups.

These solutions are nevertheless difficult to implement, especially as economic and fiscal divergences have increased between the different European countries in recent years. Some of them raise serious level playing field issues and risk of putting a heavy burden on the sound part of the banking sector.

3.1 The EU prudential and crisis management frameworks should recognise trans-national groups at the consolidated level

It is important to consider capital, liquidity and MREL requirements at the consolidated level rather than



40. J. Cimadomo, S. Hauptmeier, A. Anna Palazzo, A. Popov, "Risk Sharing in the euro area", ECB Economic Bulletin, Issue 3, 2018, ECB

42. A. Enria, "Fragmentation in banking markets: crisis legacy and the challenge of Brexit", EBA, 17 September 2018

^{41. &}quot;Risk sharing within the euro area and the EU", p.21, European Financial Stability and Integration Review 2022, April 2022, European Commission. (Findings from the study prepared by the CEPS for the European Commission, Alcidi, C., Postica, D. and Shamsfakhr, F., (2022), Analysis of developments in EU capital flows in the global context — Rise and fall after the Covid-19 outbreak, forthcoming. The sample in this study includes non-EA countries as a control group to assess how risk sharing is affected by membership in the monetary union. The sample period covers the 2008 global financial crisis and the outbreak of COVID-19.)

fragmenting these assessments and considering each legal entity in a cross-border banking group individually. The EU prudential and crisis management frameworks (CRD, CRR, BRRD) should adopt a consolidated approach for the definition of capital and liquidity requirements (LCR, NSFR, MREL, leverage ratio...).

In a recent speech, E. Enria has proposed that Member States entrust the authorities of the Banking Union, the ECB⁴³ and the SRB with powers to define adequate levels of capital, liquidity and MREL of transnational banking groups in order to guarantee that the group and each of its subsidiaries within our single prudential jurisdiction are resilient and capable of supporting their customers, also in distressed situations.

"To this end, EU legislation should directly empower European authorities to require banks to maintain an appropriate level of capital, eligible loss-absorbing liabilities, and liquidity also at the level of each subsidiary and rely on recovery and resolution plans to make sure that losses can be properly distributed across the group and liquidity can flow where needed at times of stress. We, as prudential and resolution authorities for the whole area, will then tailor the requirements to the specific business model of each bank and enable a greater pooling of resources where arrangements for group support in case of stress are more robust and reliable."

In parallel, it is essential to entrust the authorities of the banking union (ECB and SRB) with effective powers to ensure their prudential supervisory tools are calibrated in the most appropriate way to balance group-wide interests with legitimate concerns at the national level of each legal entity. This approach would be a real step forward compared with a rigid, one-size-fits-all, legislative regime, and could also be implemented in the absence of EDIS.

3.2 Harmonisation of national insolvency rules for banks to ensure that small banks, and medium sized banks that are not to be placed in resolution effectively exit the market

There is currently a European resolution framework which is matched by 19 different liquidation regimes. Liquidation is still managed at the national level (entity by entity), and this can require public money of the Member State where the distressed bank is located.

National insolvency frameworks should be harmonised, allowing those non-viable small and medium sized banks that cannot be placed in resolution to be safely and effectively removed from the market. The variety of approaches followed by national authorities for small and mid-sized banks in recent years crystallised a lack of trust amongst Member States. This is one of the obstacles on the road to completing the banking union. The new rules should ensure an equal treatment of creditors of the same rank.

Deciding the Public Interest Assessment at the EU level, including for the small and mid-sized banks, and making it more transparent and predictable could help to increase

the trust in the framework, avoid limbo situations and ensure that banks that could not be resolved today without state aid or DGS alternative measures correctly pay exante the cost of their true (locally) systemic nature.

In an interim stage, Eurofi proposed in 2018 one solution that would be to extend to subsidiaries the liquidation approach currently used for branches. This would thus allow all the subsidiaries of the group to be treated under the same liquidation regime.

3.3 Allowing Deposit Guarantee Schemes (DGS) to address the funding gap in resolution for mid-sized banks?

The EU is more constrained in its ability to deploy the resources of the Single Resolution Fund (SRF) and Deposit Guarantee Schemes (DGS)⁴⁴ on a least cost basis than the United States. Funding from the Single Resolution Fund (SRF) can be disbursed only after at least 8% of own funds and liabilities have been bailed in, which for many midsized banks, unlike for large cross-border groups, would imply digging deep into the uninsured depositors' base.

National Deposit Guarantee Schemes can not only be used to repay depositors, but also to support sales of business or other crisis management tools, when this implies lower disbursement of resources than compensating depositors in liquidation. However, 15 Member States across the Banking Union do not make use of this possibility. In the remaining six Member States, where national deposit guarantee schemes could perform a wider range of functions, national discretion on how to carry out the least-cost test has further contributed to a fragmentation of the Single Market.

Authorities including the European Commission and the SRB have suggested eliminating the super-priority of deposit guarantee schemes, and/or granting a general depositor preference, also including uncovered deposits, as is the case in the US system. Coupled with harmonised rules for the least-cost test and its execution at the European level (not national) could significantly enhance the flexibility of our framework, as well as its ability to ensure the smooth exit from the market of a number of mid-sized banks while preserving the level playing field. Finally, this function of national deposit guarantee schemes to support effective crisis management could also be extended to unlock access to the SRF, by helping to finance the gap to the 8% threshold for bail-in of liabilities in resolution and preventing a destabilising effect which may discourage recourse to the Fund.

Andrea Enria believes these reforms would be sufficient to significantly improve the functioning of the EU crisis management framework, even in the absence of a fully-fledged EDIS. By building trust in the functioning of our crisis management tools, this could also allay some Member States' concerns on possible mutualisation of bank losses in a crisis scenario, thus helping the transition to a complete Banking Union.

^{43.} The SSM is not a home supervisor. It is both the home and the host supervisor, also responsible for subsidiaries

^{44.} The SRF will amount to an estimated EUR 80 billion (1% of all covered deposits of authorized banks in all the participating Member States) by the end of 2023. The latest available data indicate that at the end of 2020, national deposit guarantee schemes collectively totalled some EUR 37 billion, and should reach 0.8% of covered deposits by the end of 2023. All in all, the amount of total resources is in the same ballpark as in the United States, where the FDIC has an objective of a 2% reserve ratio, but which at the end of 2021 stood at 1.27%, or USD 123 billion

A recent note from Eurofi made comments and proposals on these subjects⁴⁵:

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

If creditors and depositors of banks with a negative PIA are totally exempted from the constraints stemming from the resolution framework but can still benefit from State aid or "aid-free" mutualised resources at a lower cost than in resolution, this would contradict the principles of BRRD. Taxpayers and the DGS (i.e., essentially healthy and relatively large banks within the sector) might be subsidising ailing banks that do not issue sufficient MREL. Therefore, it appears mandatory to avoid the moral hazard issue caused by "free-riders" sailing between the two positions, claiming not to have the means to raise MREL, but claiming to be too important locally or nationally to go into insolvency.

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

In such a context, this note proposed that MREL requirements must be specified for medium sized banks even with a credible sale of business as preferred resolution strategy. Until recently, the MREL market — also due to the low interest rate environment that fuels a search for yield — was wide open for small medium sized banks. In such a context, this note proposed that:

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

Small banks -e.g., with a balance sheet of less than 5 billion euros - do not have to go into resolution if they are in difficulty: they must be liquidated and exit the market (they are not by definition of public interest)

Deposit Guarantee Schemes (DGS) / Institutional Protection Schemes (IPS) funds could support early or alternative intervention but within strict pre-established safeguards in order to limit moral hazard:

 DGS/IPS must be systemically subject to state-aid rules when they are mobilised to carry out preventive and alternative measures, in the same way as Fund Aid through Article 19 SRMR. This is all the more important now that some of these DGS can escape state-aid control (thanks to the Banca Tercas ruling of the ECJ) and therefore disrupt the level playing field between national banking markets.

- DGSs/IPS should have reached the target of 0.8% (or 0.5% in concentrated markets) of covered deposits and that the amount available for use in such circumstances be capped at a certain level (e.g., 0.2% of covered deposits).
- Increasing the capacity of DGS/IPS to fund alternative tools must not come at the cost of deteriorating a DGS's general position. This is why such an approach must strictly respect the 'least-cost-test' principle.
- The statement of the Eurogroup from June with regard to "preserving a functioning framework for institutional protection schemes to implement preventive measures" [Eurogroup Statement dd 16 June 2022] has to be respected.
- This least-cost-test (LCT) should be harmonised at the EU level to allow for consistent application to banks under the remit of the SRB (or the SSM for early intervention measures) and ideally across the whole Banking Union.
- Harmonisation of LCT means that it must be approved at EU level, not at national one.
- The LCT should be subject to three conditions that must be fulfilled for the DGS to provide funding for alternative measures:
 - 1 The gross cost of alternative measures does not exceed the gross cost of pay-out for covered deposits. As for the cash flow analysis, it disregards reimbursements and recoveries and limits the gross amount used for alternative measures.
 - 2 The hypothetical loss resulting from the alternative measures (cost of alternative measures, including indirect costs, net of funds that would be subsequently recovered, *i.e.* reimbursement of loans, reimbursement or sale of an equity stake in a bridge bank) does not exceed the hypothetical ultimate loss borne by the DGS in case of pay-out after deducting funds recovered in the insolvency proceeding and adding indirect costs. As reminder, alternative measures should anyway lead to market exit.
 - 3 The indirect cost assumed in case of a pay-out does not exceed a cap determined in terms of the covered deposits.
 - 4 No alternative or preventive measure should be considered for banks with negative Public Interest Assessment (PIA) as determined at EU level, unless to ensure smooth liquidation.

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

There should be no change in the creditor hierarchy, as it would lead to a wider use of preventive interventions and would cost more

Change of the creditor hierarchy by establishing a general preference for all deposits (instead of the current super preference for covered deposits and preference limited to retail and small enterprises' deposits over senior creditors that include corporate and institutional deposits today) or a removal of the DGS super preference (as they are substituted to the covered deposits) in insolvency would increase the final net cost for the DGS of compensating creditors and, hence, make the LCT easier to pass. In fact, that would facilitate the bail-out of ailing banks by the sound part of the banking sector.

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

3.4 Credible support provided by parent companies to euro area subsidiaries based on European law and enforced by European authorities is a 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 need to commit to providing credible guarantees to each subsidiary located in the euro area in case of difficulty and before a possible resolution situation.

This "outright group support" would consist of mobilising 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 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.

The SSM recognised that such a solution (already proposed in a 2018 Eurofi paper), would at least foster a more positive attitude at national authorities, creating the conditions for legislative change to happen sooner.

3.5 Branchification is another possible route for crossborder banking groups

Another solution would be for banks to review their crossborder organisational structure more actively and rely more on branches and the free provision of services, rather than subsidiaries, to develop cross-border business within the banking union and the Single Market.

European banks have made little use of the freedoms that have been made available to them since 1992 despite US banks and some European ones (e.g., Nordea, Luminor) have set up European corporations for that purpose.

Andrea Enria reminds us that in the context of Brexit, there are numerous cases concerning third country groups, in particular Swiss and US groups, which are relocating various activities to the euro area. UBS is a good example, but many US investment banks have also taken the same approach of using the legal tool of the European Company, or Societas Europaea, to transform several legal entities in various Member States into branches of a credit institution incorporated in a single Member State (e.g., Germany for UBS and some US banks).

Despite the complexities of such large reorganisations, these institutions reported significant efficiency gains in terms of simplified legal structures and corporate governance, savings related to annual accounts, internal audit or lower overall regulatory requirements, among many others. Certainly, all the legislative prudential obstacles described previously would disappear if, instead of there being separate legal entities in different Member States, capital and liquidity could flow freely within the cross-border group since a branch is structurally part of a single corporate entity.

However, there are obstacles to branchify subsidiaries with significant retail activities such as legal obstacles and a pressure of host jurisdictions. For instance, some governments have made clear that business would not be available to banks if they set a branch framework instead of a subsidiary framework. In addition, the differences in retail market practices may render a branch model inappropriate for that type of business.

This is the reason why Eurofi has underlined in different papers that such a solution — to be acceptable by host countries — requires that the national supervisors and Parliaments should receive the necessary information to understand the risks national depositors are exposed to from these branches and the possible impacts on the financing of their economies. This may require developing specific reporting instruments and processes for the local authorities to continue to be able to appropriately supervise local activities and thus contribute to supervisory decisions taken at the SSM level that may impact their jurisdiction.

However, this could also prove to be insufficient insofar as the host jurisdictions have human resources that would become unused, which could then cause social problems.

Finally, the more fiscal and structural convergences (such as a reasonable level of public debt in all eurozone countries...) are achieved, the more positive integration trends will creep into the Union and reduce the incentives for national authorities to "ring fence" transnational banks in terms of capital and liquidity, thus strengthening banks

in their capacity to become pan-European players. In other words, a monetary union and all the more a banking (or capital) union are not workable without economic convergence and fiscal discipline.

Despite remarkable achievements in terms of balance sheets cleaning, regulatory harmonisation, and deepening institutional integration within the Banking Union, where the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM) are up and running, financial integration is lagging. The Banking Union is failing to provide the degree of financial integration that we would have expected. Rather than smoothing idiosyncratic shocks to individual Member States, the current, fragmented structure of the EU banking sector entails that it tends to amplify shocks.

If the EU wants to keep up with the US and China economically as well as politically, it must break out this downward spiral and strengthen its banking industry. Only competitive and profitable banks can take on the risks necessary to finance sustainable growth. This is why a financial integration agenda for the Banking Union should rank high among the priorities of legislators and authorities for the coming semesters. It is essential to give to the markets the message that the path to further integration is still there to ensure that the banking system will be in the future able to finance the necessary transformation of the economy, to address the challenges and opportunities of both digitalisation and climate change.

Furthermore, EU legislators should make sure that the implementation of Basel III does not affect the financing capacity of EU banks. There is indeed a serious gap between the impact recently measured by EBA and G20 statement that the reform should not lead to a significant increase of capital requirements.

Finally, this integration movement must preserve the diversity of banking business models in Europe. Such a diversity is a European asset; it increases the resilience and the financing potential of the financial system and satisfies different types of customers and stakeholders 'needs. Sufficient profitability is essential to all banks, but profitability should not be the sole compass for supervisors. Proportionality in regulation and supervision is of the essence.

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.

Appendix

Banks and sovereigns are linked by multiple channels

The sovereign and banking sectors are connected through three key channels that facilitate the transmission of shocks from one sector to the other, interacting with and magnifying vulnerabilities in each sector and generating adverse feedback loops (see Chart 8)⁴⁶.

The three interacting channels are:

- The sovereign-exposure channel (banks hold large amounts of sovereign debt)
- The safety net channel (banks are protected by government guarantees)
- The macroeconomic channel (the health of banks and governments affect and is affected by economic activity.

Evidence suggest that all three channels are relevant⁴⁷.

The first channel stems from the direct exposure of banks to sovereign risk through their holdings of government debt.

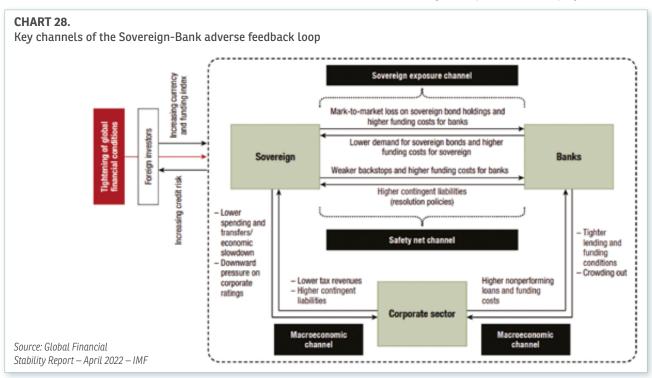
The second channel relates to the safety net, or government support provided to banks in the form of implicit and explicit guarantees⁴⁸.

In addition to direct sovereign exposures, the loan guarantee schemes set up in many countries to support lending to non-financial companies during the pandemic potentially reinforced the sovereign-bank loop. For instance, government-backed credit support to businesses amounted to EUR 218 bn in Italy, more than EUR 140 bn in France or EUR 132 bn in Spain (with latest data⁴⁹ as of September 2021).

In contrast to direct sovereign exposures accounted at fair value through P&L or through other comprehensive income, or held for trading, publicly guaranteed loans are not subject to mark-to-market adjustments that might end up affecting banks' capital levels. The ECB highlighted that" these dependencies not only increase the economy's vulnerability to a deterioration in financial conditions but can in turn also cause financial market conditions to respond more strongly to unforeseen adverse shocks"⁵⁰.

A third channel refers to the indirect feedback loop effect between sovereigns and banks through the broader macroeconomy (in particular the corporate sector).

These three channels tend to feed into one another as financial conditions tighten, thus transmitting and amplifying shocks from one sector to the other, weakening balance sheets and creating a mutually reinforcing vicious "doom loop." That said, well-capitalised banks could also serve as a shock absorber in times of distress by acting as a stable buyer of sovereign debt, especially in countries with a limited domestic investor base. Nevertheless, the overreliance of governments on the domestic banking sector for their financing needs is a source of significant risk; for example, by leading to a more concentrated investor base and greater potential to amplify shocks.



^{46.} IMF, Global Financial Stability Report, April 2022

^{47.} Detailed in ECB, Working Paper Series No 2177, Managing the sovereign-bank nexus, September 2018

^{48.} Such guarantees are provided to support banks and reduce the likelihood of a financial disruption if the banking sector comes under severe financial stress 49. Bruegel, "Loan guarantees and other national credit-support programs in the wake of COVID-10" (September 2019). Amounts show guaranteed credit commitments according to Bruegel calculations, with data from Kreditanstalt für Wiederaufbau (KfW), Bundesministerium für Wirtschaft und Energie (BMWi), Bank of Italy, French Ministry of Economics and Finance, Spanish Instituto de Crédito Oficial (ICO).

^{50.} ECB, Financial Stability Review, November 2021

Retail Investment Strategy: objectives and on-going assessments

Note written by Marc Truchet (Eurofi)

1. Improving the EU framework for retail investment is a key objective of the CMU

Retail investment is regulated at present by a significant policy framework¹ in the EU including product and disclosure rules² (UCITS, ELTIF, PEPP, PRIIPs...), distribution rules³ (MiFID, IDD...) and securities regulations⁴ (MiFIR, MAR...), but its effectiveness in terms of investor protection and capacity to foster increased retail investment is called into question in several areas.

A first issue is the fragmentation of investor protection rules across different legislations, which makes investment decisions across comparable products more difficult for consumers and leads to regulatory differences and overlaps, increasing the complexity for financial players to manage and distribute products across the EU. Secondly, the effectiveness of certain rules, notably the PRIIPs KID (Key Investor Document) and MiFID suitability and inducement requirements has been questioned (insufficient user-friendliness of the KID, suitability assessments considered to be too cumbersome for the more sophisticated investors and of limited use for average retail investors due to their product focus, insufficient capacity of MiFID inducement rules to eliminate biased advice⁵). The need to adapt investor protection rules and disclosure requirements to the increasing digitalisation of retail investment activities and also to new investment options in cryptoassets is moreover emphasized by many stakeholders. Thirdly, many observers consider that a stronger emphasis should be put on empowering customers and supporting them in their investment journey in order to foster more retail investment, rather than focusing mainly on investor protection.

In the new Capital Markets Union (CMU) action plan published in September 2020⁶, the European Commission

announced its intention to propose a Retail Investment Strategy in 2022, taking a more holistic and investor-centered perspective. Developing long term retail investment in capital markets is indeed one of the main objectives of this new CMU action plan? According to the Commission's assessments, the current low level of retail investor participation in capital markets deprives EU companies and more generally the EU economy of long-term funding and it also means that retail investors do not benefit sufficiently from the investment opportunities offered by capital markets, particularly for preparing their retirement, with a significant proportion of savings still held in bank and savings accounts in many Member States⁸.

The aim of the proposed Retail Investment Strategy is to ensure that retail investors can take full advantage of capital markets and that rules are coherent across financial instruments. More specifically, the objectives put forward by the Commission at the outset of this initiative were to ensure that retail investors benefit from (i) adequate protection, (ii) bias-free advice and fair treatment, (iii) open markets with a variety of competitive and cost-efficient financial services and products, and (iv) transparent, comparable and understandable product information. Further objectives were that EU legislation is this area should be forward-looking and should reflect ongoing developments in digitalisation and sustainability, as well as the increasing need for retirement savings. These priorities are currently being assessed by the Commission, as well as the policy actions that should be considered in the areas of financial literacy, disclosures, inducements and suitability and appropriateness regimes.

Other on-going CMU and MiFIR related actions that may have implications for retail investors include the European Single Access Point (ESAP) project⁹, the review of the ELTIF

- 1. These EU frameworks are completed by domestic product frameworks and general consumer protection frameworks. Their implementation is supported by supervision that remains largely domestic in this field, although actions are being undertaken at ESMA level to enhance supervisory convergence. Educational aspects concerning the improvement of financial literacy are also managed at national level
- 2. EU product frameworks targeting retail savers such as the UCITS directive, the ELTIF and PEPP (Pan-European Pension Product) regulations cover notably eligible asset, liquidity and investor disclosure rules. The EU PRIIPs (Packaged Retail and Insurance-based Investment Products) regulation moreover aims to enhance the consistency of investor disclosure across comparable investment products such as investment funds, insurance based products or structured products
- 3. The MiFID and IDD (markets in financial instruments and insurance distribution) directives provide rules for the distribution respectively of securities and insurance-based products covering issues such as investor classification, product suitability and appropriateness assessment, advice and information at the point of sale and inducements
- 4. MiFIR and other securities market regulations (MAR, EMIR, CSDR) also regulate the execution of securities transactions and the venues and market infrastructures that execute these transactions
- 5. The general MiFID II inducement rule prohibits firms from paying benefits to or receiving benefits from third parties, unless the benefits are designed to enhance the quality of the relevant service to the client, and do not impair compliance with the firm's duty to act honestly, fairly, and professionally in accordance with the best interests of its clients. These rules give rise to heated debates. While some stakeholders consider that the current restrictions on inducements are not sufficient for eliminating biased advice suggesting that they should be further curbed or banned (as is the case in the NL and UK), others argue that a stricter ban of inducements would be detrimental for investors, potentially increasing the price of advice and reducing its availability for non-high net worth clients, particularly with the current distribution structure in the EU which is mostly integrated
- 6. Communication A CMU for people and businesses new action plan 24 September 2020
- 7. See note published by Eurofi in February 2022 for further information about retail investment trends, opportunities and challenges in Europe https://www.eurofi.net/wp-content/uploads/2022/05/eurofi_retail-investment_opportunities-challenges-and-eu-policy-proposals_paris_february-2022.pdf
- 8. See Eurofi note on retail investment (February 2022) for more detailed statistics https://www.eurofi.net/wp-content/uploads/2022/05/eurofi_retail-investment_opportunities-challenges-and-eu-policy-proposals_paris_february-2022.pdf
- 9. The ESAP project aims to provide all investors, including retail investors, with an easier access to financial and sustainability information on EU companies.

framework¹⁰ and the MiFIR review proposals to improve the transparency on securities transactions¹¹. On-going actions to improve pension adequacy (*e.g.* report on pension autoenrolment best practice¹², pension dashboard¹³), financial literacy (publication of a financial competence framework that may support the development of national financial literacy strategies¹⁴) and sustainable finance disclosures and reporting also aim to contribute to increasing retail engagement in capital markets.

A further area of assessment is supervision and notably the supervision of cross-border activities in a context of increasing digitalisation and with the development of investments in cryptoassets which are often made on a cross-border basis.

Looking at the international level, initiatives are also being conducted in the US on similar topics, for example in the US with the work conducted by the SEC on digital engagement practices and the UK FCA's initiative on a new consumer duty that aims to set higher and clearer standards of consumer protection across financial services, requiring firms to put their customers' needs first.

2. A number of assessments have been conducted by the EU authorities since 2020 in preparation for the Retail Investment Strategy proposal

2.1 Assessments conducted on different aspects relating to retail investment: disclosures, inducements, digitalisation

To support the preparation of a proposal for a European Retail Investment Strategy, the Commission has conducted assessments to gather evidence on key issues potentially hampering retail investment.

An external study was published by the Commission in August 2022 on disclosure, inducements and suitability rules for retail investor¹⁵ aiming to evaluate the impact of existing rules on the ability of retail investors to understand the risks, costs and potential returns of investment products, assess the effective implementation of requirements and identify potential inconsistencies across regimes. The study first describes the main trends in the supply and distribution of retail investment products in the EU and the main current drivers for the demand of retail investor products (low interest rates, supply of products with lower costs, supply of products labelled as sustainable and the

booming demand for cryptoassets particularly among the younger and risk-seeking population). The study also evaluates the impact, cost-efficiency and EU added value of potential actions in the areas of (i) disclosure, (ii) inducements and advice and (iii) suitability tests.

This study follows the advice published in April 2020 by ESMA on inducements and costs and charges disclosures under MiFID II in which ESMA did not recommend a ban of inducements for retail products, but encouraged the European Commission to conduct further analysis on their impact and on the possible implications of a ban and also proposed some changes to the regime (notably in terms of client information about inducements). In terms of disclosure, ESMA advised the Commission to scale back certain disclosure obligations on costs and charges for eligible counterparties and professional investors in particular.

ESMA and EIOPA were also asked by the Commission to provide advice on a number of focused aspects of retail investor protection such as disclosures, digital channels, inducements and product complexity, which have led to recommendations to update MiFID II, IDD in these areas published in April 2022¹⁶.

Concerning disclosures, ESMA emphasized the ergonomics of information provision proposing for example that minimum 'vital information' should be defined for investors to be able to make informed decisions and to use 'layering' to provide relevant information step by step to investors in a user-friendly way and address overload and complexity. New areas such as 'gamification' i.e. the use of game-like elements or functions in non-game contexts were also addressed in ESMA's recommendations with a balanced approach. While considering that practices related to gamification may be beneficial in some ways e.g. for conveying information in a simpler and more understandable way, ESMA recommended ensuring that certain online practices on social media encouraging investors to make investments do not wrongly influence them e.g. nudging them to take undue risks, with a view that such gaming tools should be authorised as long as they are in the best interest of customers.

EIOPA also set views in a number of areas. First, in the area of consumer disclosure, EIOPA recommended a shift towards truly consumer-focused disclosures built upon an enhanced framework that fits the digital age and built using behavioural research and consumer testing. EIOPA also proposed tackling conflicts of interest that arise throughout the product lifecycle, including in the product design phase when underlying funds are selected

^{10.} One of the key objectives of the review of the ELTIF (European Long Term Investment Fund) regulation is to make those funds more accessible to retail investors, with a reduction of the investment thresholds applicable to these funds and the introduction of an additional liquidity window redemption mechanism, thus allowing more retail long-term investment in infrastructure projects and SMEs

^{11.} The measures proposed in the MiFIR review to enhance transparency, in particular the implementation of an EU consolidated tape, should contribute to improving the information available to retail investors among others

^{12.} Pension auto-enrolment is a mechanism that automatically enrols individuals into a supplementary retirement savings scheme unless they explicitly opt-out, in order to ensure more adequate retirement income

^{13.} The pension dashboard aims to support Member States in the improvement of their pension systems, in addition to collecting best practices for the implementation of individual pension tracking systems at domestic level

^{14.} The Commission published in January 2022 a financial competence framework for adults developed with the OECD, which is due to be completed by a framework for children and youths

^{15.} Disclosure, inducements and suitability rules for retail investors study — Kantar in cooperation with milieu and CEPS - August 2022 https://op.europa.eu/en/publication-detail/-/publication/5d189b3c-120a-11ed-8fa0-01aa75ed71a1/language-en

^{16.} See ESMA_final_report_on_technical_advice_on_ec_retail_investments_strategy_290422.pdf, EIOPA_Final Report - Technical advice on Retail Investor Protection_290422.pdf, ESA Joint, Com_advice_on_priips_regulation_Call for advice_290422.pdf

for unit-linked products and in the sales process notably concerning inducements. Thirdly EIOPA recommended addressing complexity and cost-efficiency in the retail investment market particularly at the product level, where clearer standards or criteria should be defined for evaluating product complexity.

The ESA Joint Committee moreover made recommendations concerning PRIIPs and notably the KID, to make it more consumer-friendly and to enhance the clarity and consistency of product descriptions.

2.2 Consultations led by the Commission highlighted the importance of improving suitability and appropriateness regimes

A consultation was conducted by the Commission between May and August 2021 aiming to identify the main issues to tackle in the Retail Investment Strategy and the MiFID II, IDD and PRIIPs reviews with regard to retail investment¹⁷. In the answers received, financial literacy was considered to be the area with most scope for improvement, followed by disclosure requirements and digital innovation. Many stakeholders also called for an improvement of the suitability and appropriateness regimes of MiFID II and IDD to simplify the way investor profiles are assessed, develop a more holistic approach focusing more on investor portfolio composition than individual product investment and adjust requirements to online environments.

The Commission subsequently launched a targeted consultation at the beginning of 2022 on ways to improve suitability and appropriateness assessments with a proposal to replace the current product suitability approach by the establishment of a personalised asset allocation strategy that would set out an investment plan and an optimal allocation of asset classes considered fit for the goals of a given retail investor. The aim is to allow an evolution towards a perspective of individual portfolio creation in the advice provided, rather than the current focus on individual products and to enhance the portability of suitability assessments. The investor would remain free to choose the products she/he wants to invest in within this personalised asset allocation, which could be transferable across financial intermediaries.

ESMA has also proposed some specific improvements to MiFID II suitability requirements at the beginning of 2022 notably to clarify how the assessment of clients' sustainability preferences should be conducted in the context of suitability assessments.

2.3 Assessment of the value-for-money of retail investment products

The value for money of retail investment products is a further area of investigation of ESMA and EIOPA, based on an annual monitoring of product performance and costs.

In its third annual report on this topic (2021) ESMA emphasized the high impact of costs on the final returns of retail investors. Over the period of 2009-18, a hypothetical 10 year retail investment has generated a net return of +61% with costs amounting to 17%, according to ESMA's calculations and costs tend to be significantly higher for retail investors than for institutional ones¹⁸. In addition it was estimated that the gross outperformance of active funds compared to passive ones such as ETFs was not high enough to compensate for the higher costs.

Concerning life insurance products, EIOPA also underlined the need to put consumer outcomes at the heart of product design and distribution, following observations that unit-linked products provide on average higher returns despite the higher costs, but also expose policyholders to market shocks and volatility, which may generate a lower return in some periods than profit participation products with lower risk profiles. EIOPA subsequently launched a consultation19 on a framework to assess whether unitlinked products offer sufficient value for money, taking into account the needs, objectives and characteristics of the target market. The principles put forward include that the value offered by these products should be assessed by considering the product as a whole, as well as each of its components. In addition, it was recommended that product features and characteristics including costs and the reward profile of the products should be tested to ensure that no undue costs are charged to consumers and that efforts should be made to make products easier to understand by retail customers.

^{17.} Main areas covered: financial literacy, digital innovation, disclosure requirements, suitability and appropriateness assessment, investor categorisation, inducements and quality of advice, product complexity, redress and complaints, intervention powers and sustainable investing

^{18.} Source: Performance and costs of retail investment products in the EU – ESMA – 14 April 2021

^{19.} Consultation on a framework to address value for money risk in the EU unit-linked market — EIOPA — April 2021

Securitisation: ghosts of crisis past

How key aspects of Europe's securitisation regulation are shaped by factors that have ceased to exist

Note written by Ian Bell, PCS

The European Commission is currently reviewing the regulatory framework for securitisation. That the changes brought about by the coming into force of the Securitisation Regulation in early 2019 have not resulted in the anticipated and wished for revival of the European securitisation market is universally acknowledged. The reasons for this are at times argued over but the role played by flaws in the regulatory framework is sometimes underplayed, with regulators and policy makers often preferring to point the finger solely at the ECB's monetary policy.

We will see why this is a potentially dangerous illusion. Finalising the reforms begun in 2017 with the passing of the Securitisation Regulation and attendant amendments of the Capital Requirements Regulation and Solvency II is essential to the future of Europe's finances.

The changes that are needed are also well known. They were laid out by the European Commission's High-Level Forum of experts and endorsed by virtually the entire stakeholder universe, including PCS¹. At the heart of these necessary reforms are more risk sensitive capital requirements for bank and insurance companies holding securitisations, and especially the extremely high-quality securitisations meeting the STS standards.

Yet, both in written and public oral pronouncements, the European Banking Authority and the European Insurance and Occupational Pensions Authority have expressed a great reluctance to revisit these capital calibrations². This paper will contend that this reluctance is largely grounded in the fear of ghosts from the GFC. They are described as "ghosts" because, in truth and certainly for STS securitisations, these factors no longer exist, or – if they still have some existence – they exist in such ghostly attenuated forms that they pose no actual threat. Yet they remain frightening, it seems.

Importance and urgency

The reasons why a revitalisation of the European securitisation market is essential to the economic future of the continent have been rehearsed extensively and it is not the purpose of this paper to go over this ground once more³.

These reasons include securitisation being the vector for safe and pro-active capital management by European banks to ensure sufficient lending capacity to meet the needs of the European economy, the role of securitisation in helping fund the immense needs of the European Green Plan, the importance of securitisation to the global competitiveness of European banks faced with US and Chinese banks that benefit from a healthy securitisation market and the need for safe European assets to channel the large savings pools that exist in the EU.

To the importance of a revival of the securitisation market has now been added urgency. Since the GFC, the ECB has provided the banking system with effectively infinite liquidity. Today, the times of endless free central bank money are drawing to a close. Some policy makers have expressed the belief that the lack of revival of the securitisation market was caused primarily by monetary accommodation and that ECB QT would reverse this trend. Although proving counterfactuals is always challenging, there are good reasons to doubt that this is the whole (or even the primary) reason for the anaemic securitisation market. For one, the substantial growth in covered bond issuance - especially from institutions that previously were large securitisation issuers – strongly suggests that regulatory arbitrage played a greater role in the decline of securitisation.

Setting aside the fact that achieving the correct capital requirements for debt instruments is a public good in and of itself and essential to avoid regulatory arbitrage, when taking into account the necessary time to achieve regulatory changes and the immediacy of the seachange brought about by the ECB's new direction, we believe that waiting to see how things turn out following monetary tightening before addressing known issues with securitisation's regulatory framework runs very serious and unnecessary risks for Europe's capacity to fund a fragilized economy. It would be akin to someone jumping off a diving board in the hope that their belief there is indeed water at the bottom will prove correct, notwithstanding the views of many experts that this is probably not the case. This is especially odd when the diver has the means to ensure the pool is filled.

But then there are the ghosts...

^{1.} https://finance.ec.europa.eu/system/files/2020-06/200610-cmu-high-level-forum-final-report_en.pdf

^{2.} For example, the assertion that the current Solvency II rules were "fit for purpose" in the recent EIOPA consultation (https://www.eiopa.europa.eu/sites/default/files/publications/consultation_paper_on_cfa_on_securitisation_prudential_framework_in_solvency_ii.pdf)

^{3.} See, for example, "Securitisation: the indispensable reform" (p.58 Eurofi Regulatory Update - https://www.eurofi.net/wp-content/uploads/2021/09/regulatory-update_ljubljana_september-2021.pdf)

Agency risks

Both the EBA and EIOPA, as well as many national competent authorities, when challenged on the fact that the capital requirements for securitisations do not seem consistent with the data on the risk of the securitised assets or with the rules for other similar assets refer to "agency risks" as the explanation.

What are agency risks?

"Agency risks" play a technical role in what is called the "non-neutrality" issue in the CRR. The investor in a securitisation takes the risk of the assets that have been securitised without recourse to the originator or other third party. At first blush, this would mean that if the assets do not perform, the investor's loss and delinquencies will match the losses and delinquencies on the assets. It would therefore follow that the capital required by a bank investor who invested in every tranche of a securitisation should be the same as the capital that investor would need to hold if he held the securitised assets directly on his books. Same risk, same capital.

However, this is not the case under the CRR. This is because policy makers are worried about additional risks that are not in the securitised assets but are created by the act of securitisation itself. The archetypal such risk is the "originate to distribute" risk where the originator having no "skin in the game" for the assets securitised because it sells all of them, originates assets which are much worst credit risks than the "normal" assets for which capital calibrations have been fixed.

All those additional risks created by the act of securitising are called "agency risks". In the case of the CRR they are captured by the p factor in the capital formula. The p factor is an arbitrary number that increases the capital requirement above what a "neutral" formula would generate.

Agency risks also play a role in the approach to capital rules for insurance investors and more generally as somewhat of a catch-all explanation of why capital requirements for securitisations in Europe are greater than those of the assets, similar asset backed instruments or than what data would suggest⁴.

The advantage of "agency risks" is that most have never been quantified mathematically. For example, how much worse would the credit of assets originated under an "originate to distribute" model be than traditionally originated assets? Twice as bad, three times, ten times...? This allows regulators arbitrarily to fix the surplus capital for "agency risks" at any rate they feel comfortable with without having to justify it. The *p* factor in CRR, as mentioned above, is an entirely arbitrary figure not derived from any data.

A similar problem exists in the Solvency II calibration where the capital for securitisation is multiple times that for its underlying assets. Even though the discrepancy in capital requirements is nowhere near as large in the US, the US

insurance regulator (NAIC) made the realignment of the capital after securitisation with that before securitisation for the same type of assets a key objective of the recently proposed solvency capital ratio.

Problem with relying on agency risks

First, we should be clear that agency risks are real. They are a legitimate category of risks that should be examined and quantified.

Although, in Europe, even before the securitisation reforms of 2017, agency risks appear to be more theoretical than actual. In Italy, research showed when examining the infamous "originate-to-distribute" lack of alignment, that Italian mortgages that had been securitised performed *better* than those that had not. This, in PCS' view, is not merely an accident but reflect fundamental differences in the structure of financial services on either side of the Atlantic⁵.

The problem is that, in calibrating regulatory requirements – especially post the 2019 reforms – they were usually not examined and even less quantified.

Yet, when they are examined, especially for Simple Transparent Standard (STS) securitisations, they appear not to exist.

When they do exist, for example in non-STS securitisations, they appear to be identical to well-known and banal risks that exist in many other capital market instruments. Yet, they are effectively ignored in the capital fixing for those other instruments.

Where is the agency-related risks list?

Most regulatory references to agency risks are vague with a few non-exclusive examples given but with little elaboration: additional capital is required "for agency risks (such as servicing risk)" and let us leave it at that. But agency risks are a set of risks capable of enumeration. It is not possible to examine, even less to quantify, agency risks without listing them. Such a list must be generated if stakeholders are to engage in a meaningful debate with policy makers on the correct way to account for them in the regulation. There is no conceptual or technical reason that would impede the collation of such a list.

Was that not the point of STS?

The process of defining "simple, transparent and standardised (STS)" securitisations involved the EBA, ESMA, EIOPA, the European Commission, the European Council and the European Parliament, over a period of three years and with the assistance of multiple consultations and hearings, examining all the aspects of securitisation with the sole and focused aim to identify each and every specific non-credit risk that could exist and to exclude them from STS designated securitisations. This process resulted in a definition that removed 103 separate non-credit risks (the STS criteria). The vast majority are designed with the explicit aim to remove, one by one, individually identified

^{4.} For example, they are extensively cited by EIOPA in their recent consultation as to why capital requirements for securitisations are as high as they are (https://www.eiopa.eu/sites/default/files/publications/consultation_paper_on_cfa_on_securitisation_prudential_framework_in_solvency_ii.pdf)

^{5.} See "Securitization is not that evil after all" by Ugo Albertazzi et al. (BIS Working Paper 341 – 2011) - https://www.bis.org/publ/work341.pdf

agency risks. For example, the risk that the originator securitises its worse assets is explicitly the subject matter of an STS criteria prohibiting such behaviour. Similarly, originate-to-distribute risk is removed by the mandatory retention requirement (that applies not only to STS but all securitisations).

We would respectfully invite regulatory authorities, if they believe that there exist agency risks that are not catered for in the 103 STS criteria, to identify and list them. Should these, indeed, be identified, PCS would volunteer to advocate in favour of adding them as additional STS criteria in the current review. If, however, and as we strongly suspect, no such risks are identified, then the appropriate conclusions need be drawn and any reference to nebulous and unspecified "agency risks" should no longer be used as a justification for non-neutrality for STS investments.

Comparisons with other asset classes

It is also worth noting that, whereas STS securitisations are burdened by additional capital requirements for agency risks that do not exist, other asset classes where the same agency risks do actually exist have absolutely no modifier to their capital requirements to account for them.

For example, the risk that the originator securitises its worst assets is prohibited in STS securitisation. But the same risk exists in mortgage or SME portfolio sales. These are very common, and the purchasers are often insurance companies. Clearly the seller is incentivised to sell its worst assets, yet Solvency II makes no adjustment for this agency risk.

We also note that no such prohibition exists for covered bond where a bank may choose its worst assets to go into a cover pool to retain the option of selling its better assets later if it gets into trouble. Again, this agency risk is unaccounted for.

Many other examples could be provided.

What about risks that cannot be catered for in STS?

In their recent consultation, EIOPA also listed as examples a series of agency risks that could not, by their nature, be the subject of an STS criterion. However, upon closer examination, these risks all appear to be fraud or quasi-fraud risks and, although common to many debt instruments, are only used to justify additional requirements when related to securitisation.

We will take some of the examples given by EIOPA and show what we mean.

- The originator may disregard the selection criteria for the assets. Disregard for the defined criteria is a fraud. This is no different than disregard for the selection criteria in a portfolio sale or in the selection criteria over a cover pool for a covered bond or an investment fund. No p factor or other modifier applies though in those cases.
- The servicer may fail to report losses. This is outright fraud. Failure to report losses is at the root of almost

- all corporate bond fraud or asset management fraud (e.g., Wirecard or Madoff). Yet, no capital modifier exists to account for this in any other asset class.
- Lack of motivation to collect receivables. This is breach of contract and makes the servicer liable for damages. It also ignores the fact that, with retention requirements, this would necessarily lead (in almost all cases i.e., where the servicer is the originator) to the servicer suffering losses. This is the alignment of interest sought by and achieved by the retention rules. But equally important it is also a risk that exists in every mortgage or SME portfolio purchased by insurance companies and serviced by the originator without, in those cases, any mitigation from retention requirements. But despite that lack of mitigation, no extra-weight is provided for such pools. In the case of covered bonds, the issue is even more acute since the investor only relies on the pool after the insolvency of the bank. Regulators are therefore concerned, in the case of securitisations, about a solvent bank that has a financial and reputational incentive to collect the receivables but are completely comfortable, in the case of covered bonds, with an insolvent one that has pretty much zero incentive to collect money that is of no benefit to its insolvent estate.
- Failure to report losses. Again, this is fraud or quasi fraud. But we fail to see how this is a securitisation agency risk and not equally a corporate bond via published accounts, covered bond or even, sovereign bond risk.

When dealing with general non-securitisation specific "agency risk", both in CRR and in Solvency II, the approach appears to be that such risks are deemed reflected in the historical data and therefore need no specific adjustments unless they appear in the context of a securitisation where they are used to justify an additional amount of capital on top of what the data requires.

Modelling risks

The other category of risks mentioned in ushed tones by regulators are "modelling risks". These are deemed to be particular to, or particularly vicious when involved with, securitisations.

Again, as with agency risk, modelling risk is a real risk and needs to be examined. We would argue that together with originate to distribute in sub-prime mortgages in the United States, modelling risk in CDOs was the main cause of the catastrophe that overtook the US securitisation market in 2007-2008.

But, as with agency risks, when examined in the context of European securitisation post reform, modelling risk appears to be no more than a ghostly and unthreatening presence.

In the 2013 White Paper on the causes of the securitisation crisis⁶, PCS cited model risk as one of the four aspects of

^{6. &}quot;Europe in transition — Bridging the Funding Gap" (2013) - https://pcsmarket.org/draft//wp-content/uploads/2013/03/Europe-in-Transition-Bridging-the-Funding-Gap1.pdf

the crisis that had caused securitisations to fail. The EBA, in its own 2014 paper on the matter was kind enough to endorse explicitly our analysis⁷.

But the modelling risk that we identified was in a very specific context: that of the use of models on models. The risk only emerges as meaningful when a model was seeking to model the output of the combination of other similar models. The contention is that all models of future behaviour have uncertainty. When another model takes the output of a first model and models it, then the uncertainties are factored.

This is a risk that obtained in one specific type of securitisation and only that type of securitisation: resecuritisations.

Re-securitisations were banned in Europe from 2019.

In all other types of securitisations — and even more so in STS securitisations where non-sequential payments are (broadly) not allowed — the models used are simple, straightforward and do not carry the model-on-model risk.

They are not more complex than the models one would need to model asset behaviour in a covered bond pool should the investor need to rely on the collateral. They are simpler than most models in project finance or even corporate finance when an investor needs to figure out if there will be sufficient cash to pay interest and principal. They are much simpler than the models used to model a sovereign's debt service capacity which depend on complex economic and fiscal assumptions.

Conclusions

When examining the case for better calibrations of the securitisation regulations, policy makers and regulators must not rely on nebulous or barely examined categories such as agency risks and modelling risks as excuses for holding on to indefensible numbers.

Like other frightening phenomena, agency risks and modelling risks should be subjected to a rigorous, scientific and objective analysis. We believe that to do this will allow a realistic assessment of the actual risks involved, especially in STS securitisations. We are confident that this assessment will show that a substantial reduction of capital requirements imposed because of these ghostly risks is warranted.

We also, as with many other aspects of securitisation regulation, urge policy makers and regulators to bring a holistic approach to regulation. This means not imposing burdens on one capital market instrument for perceived risks that exist but are ignored in others. This is the only way to establish a level-playing field and thus avoid regulatory arbitrage.

^{7. &}quot;EBA discussion paper on simple, standard and transparent securitisations" (2014) at page 36 - https://www.eba.europa.eu/sites/default/documents/files/documents/10180/846157/ceefdf3f-58ea-452f-a924-2563410d1705/EBA-DP-2014-02%20Discussion%20Paper%20on%20simple%20standard%20and%20 transparent%20securitisations.pdf

The EU sustainability agenda 3

Sustainable labels and sustainable rating providers	
in the European Union: dynamism, diversity,	
complexity and reforms	57
Corporate Sustainability Due Diligence Directive:	
finding the right balance	61

Sustainable labels and sustainable rating providers in the European Union: dynamism, diversity, complexity and reforms

Note written by Jean-François Pons, Alphalex-Consult

The volume of sustainable or ESG (Environment, Social, Governance) finance is continuously increasing. Last year for instance, the issuance of sustainable bonds (Green bonds + Social bonds + Sustainable-linked bonds) exceeded \$ 1.000 Bn, up 75% from 2020. The EU-domiciled ESG funds have also very much increased to € 1.600 Bn at the end of 2021, up 60% from the end of 2019.

But there is also a growing suspicion of "greenwashing" and a couple of financial actors are under investigation for this reason or have even been penalized in Europe and the United States.

Moreover, it is often not clear for investors why a financial product is said to be sustainable.

Sustainable (or ESG) labels and sustainable rating providers have the goal to help the investor who wants to assess the sustainability performance of corporates or of financial funds.

Due to the rapidly increasing interest for sustainable investments, there is a real dynamism in sustainable labels and sustainable ratings. But there is also a big diversity and a great complexity for investors when they see the difference of sustainability assessment for the same corporate by different labels or sustainable rating providers.

The sector has also been impacted by greenwashing suspicion. For instance, Bloomberg at the end of 2021 has questioned the adequacy of ESG marks given by the giant sustainability ESG rating agency MSCI.

Two recent documents clarified the situation and the trends of sustainable labels and sustainable rating providers in the European Union:

A study by Novethic on the most used EU ESG labels.

A report from the European Securities and Markets Authority (ESMA) on sustainable rating agencies in the EU, which followed a wide consultation.

1. The Novethic study on ESG labels underline their dynamism, their similarities and differences and the trend of their reforming process in line with the EU regulation

Novethic, a subsidiary of the Caisse des Dépôts specialised in sustainable analysis, publishes each year a review of the most important EU sustainability labels. Their last annual document, published in March 2022, specifically reports on the six more important ESG labels *i.e.*, ISR (France), Towards sustainability (Belgium), Lux Flag (Luxembourg), FNG Siegel (Germany, Austria, and Switzerland), Umweltzeichen (Austria) and Nordic Swan Ecolabel (Nordic countries). They also address 3 Green labels: Greenfin (France), LuxFlag Environment and LuxFlag Climate finance (Luxembourg), although they operate on a much less important number of funds.

The study underlines the dynamism of the 6 ESG labels, their similarities and differences and their reform process generally linked to the EU regulation.

1.1 The dynamism of the EU sustainable labels:

The two leaders are ISR ($\[\in \]$ 77 Bn) and Towards sustainability ($\[\in \]$ 578 Bn), far ahead of LuxFlag ESG ($\[\in \]$ 148 Bn), FNG-Siegel ($\[\in \]$ 115 Bn), Umweltzeichen ($\[\in \]$ 60 Bn), Nordic Swan ($\[\in \]$ 34 Bn), and of the 3 Green labels: Greenfin ($\[\in \]$ 31 Bn), LuxFlag Environment ($\[\in \]$ 2 Bn) and LuxFlag Climate change ($\[\in \]$ 1 Bn).

1.2 Similarities, differences, and complexities:

There are many similarities between the 6 ESG labels on their general orientations:

- All of them are assessing the ESG selection process of funds, and look at a large part of their portfolios (up to 90% for ISR and 100% for Towards Sustainability, FNG-Siegel and LuxFlag ESG),
- All of them have defined criteria regarding the engagement of the funds as shareholders,
- 3 out of 5 labels (FNG-Siegel, Umweltzeichen, Nordic Swan) base their analysis on points scale, based on a limited number of criteria (between 4 and 7).
- All except ISR have today an exclusion policy.
- Exclusion policies are similar regarding their two broad options: corporates and States, which are controversial (human rights, environment, etc), and sensitive sectors (fossil energy, weapons, tobacco). But the underlaying criteria are not the same. For instance, Towards Sustainability excludes corporates which do not respect the Global Compact and the minimum social safeguards of the EU Taxonomy, while FNG-

Siegel only excludes corporates, which do not respect the Global Compact and Umweltzeichen and Nordic Swan have their own policy. 5 ESG labels exclude the exploration and production of fossil energy, but 2 of them derogate (Towards Sustainability and Nordic Swan) regarding those corporates who heavily invest in renewable energy and who are reducing their production of fossil energy (Towards Sustainability) or do not increase it in non-conventional fossil energy (e.g., shale gas, tight gas and coalbed methane according to Nordic Swan).

 There is a clear "double materiality" approach by Towards Sustainability and Nordic Swan, but not so by the other labels. Nordic Swan is also the only label to include biodiversity as a criterion for the analysis of corporates in sectors known to exert pressure on biodiversity.

Finally, however, although Novethic has made a great effort to compare these labels' priorities, criteria and methodologies, a number of important criteria and methodologies are not transparent enough and the comparability is far from being easy.

1.3 A continuous reform process in line with EU regulation:

4 out of the 6 ESG labels have been reformed in 2021 or at the beginning of 2022, notably because of the implementation of the SFDR (Sustainable Finance Disclosure Regulation) in March 2021. The most important ESG label, ISR, has launched a long reforming process, which is not yet finished.

SFDR has introduced the classification of sustainable funds in Article 8 or Article 9 of SFDR. The implementation of the SFDR has complicated the landscape, because some sustainable funds have used the article 8 or 9 of the regulation as new labels even if it is only a self-declaration. To overcome this new complexity, 4 of the 6 ESG labels have included an obligation of the fund to conform to the Article 8 and/or Article 9, what allow them to assess this conformity.

The concept of "double materiality" is also progressively introduced in labels' analysis, especially by Towards Sustainability and Nordic Swan. Finally, the points scale of Nordic Swan gives preferences to funds with a focus on EU taxonomy and on respect of biodiversity in sensitive sectors.

It is to be expected that the reforming process of these labels will continue in line with the incoming EU regulation: CSDR, the development of the EU Taxonomy etc.

EU investors would welcome more comparability and convergence between the 6 ESG labels, and as soon as possible a pan-EU and robust label which seems today unreachable. It is to be hoped that this reform process will also deliver progress in this regard.

2. The ESMA report on sustainable rating providers in the European Union: a concentrated market with a number of shortcomings

ESMA has made the fight against greenwashing and for making sustainable finance more transparent one of its priorities.

It is well known that the differences between the ESG rating providers outcomes are acute, contrarily to creditratings delivered by credit rating agencies¹. In this respect McKinsey recently highlighted that "while credit scores of S&P and Moody's correlated at 99 percent, ESG scores across six of the most prominent ESG ratings and scores providers correlate on average by only 54 percent and range from 38 percent to 71 percent"². Most of users and rated entities think that the ratings are generally not transparent enough and not easy to compare.

In June 2022, ESMA published a letter to the European Commission providing its finding from a call of evidence to gather information on the market structure for ESG rating providers in the European Union. Based on the 154 responses (including the responses of the 59 rating providers), ESMA report describes the market structure and underlines the shortcomings of the activities of these rating providers in the EU.

2.1 A market structure of numerous rating providers but dominated by 3 non-EU giants

Most of the 59 sustainable rating providers in the EU are very small (median turnover €5 million) but there is also three non-EU headquartered giants (MSCI, Sustainalytics and ISS) having the larger share by far. There are only two medium-sized EU data providers: Ethifinance and Scope. A large majority of these rating providers also offer other ESG data products.

Users of ESG ratings are generally contracting for these products from several providers simultaneously, on an investor-pay basis. Their reasons for selecting more than one provider are most notably to increase coverage, either by asset class or geographic, or in order to receive diverse ESG assessments. However, the majority of users contract with a small number of rating providers, indicating a degree of concentration in the market.

2.2 The responses to the consultation show several shortcomings

The responses of the users show that most of them are not satisfied with the level of methodological transparency. Methodologies are deemed as often too complex and unclear. Sometimes providers were not able to clarify how their results had been determined.

The responses of the rated entities to the ESMA survey, underline their communication difficulties with rating providers. Commenting or report feedback by the rated entities can be a cumbersome and difficult process and is made also more difficult by the lack of transparency around the key inputs in the rating process.

^{1.} Eurofi : addressing ESG confusion to avoid greenwashing in asset-management, Matteo Le Hérissé, February 2022

^{2.} p17. Florian Berg, Julian Kölbel, and Roberto Rigobon, "Aggregate confusion: The divergence of ESG ratings," Review of Finance, forthcoming, updated April 26, 2022

Some rated entities question also the "American bias" resulting from the increasing concentration of US-based ESG rating providers. "Respondents had the view that some methodologies are consistently biased towards larger and/ or listed companies, as well as US industries, while EU companies, whose operations are more strictly correlated with their geography and their national regulations, are penalised by the methodologies.

In December 2020, the French and the Dutch markets authorities (Autorité française des Marchés and Autoriteit Financiële Markten) had asked for a regulation on ESG rating providers to prevent greenwashing and ensure the protection of investors. They pleaded for more transparent methodologies, control of conflict of interest and a better dialogue with rated entities. This initiative seems to be comforted by the ESMA study.

In her letter to the European Commission transmitting this report, Verena Ross, Chair of ESMA, wrote: "We consider the feedback we have received on the market for ESG rating and data providers is indicative of an immature but growing market, which, following a number of years of consolidation, has seen the emergence of a small number of large non-EU headquartered providers. In our view this market structure bears some resemblance to that which currently exists for credit ratings. Similar to that market, there are a large number of smaller more specialised EU entities co-existing with larger non-EU entities who provide a more comprehensive suite of services. We trust that you find this input useful for a possible assessment around the need for introducing regulatory safeguards for ESG rating products."

The logical conclusion of the ESMA report is that the biggest rating providers should be supervised as the credit rating agencies, in order to avoid conflict of interest and to make their rating process and their methodologies clearer.

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Corporate Sustainability Due Diligence Directive: finding the right balance

Note written by Mathilde Flamant and Jean-François Pons, Alphalex-Consult

On 23rd February 2022, the European Commission presented a new phase of its initiative on sustainable corporate governance with the proposal for a Corporate Sustainability Due Diligence Directive (CSDD). The proposal was introduced by Commissioner for Justice Didier Reynders as 'a real game-changer in the way companies operate their business activities throughout their global supply chain.'

The proposed rules aim at advancing the green transition and at better protecting human rights in Europe and beyond by establishing a corporate sustainability due diligence duty on the companies over a certain threshold. If such a proposal is accepted by the co-legislators, it would represent a significant step forward in using corporate law to fight climate change and human rights violations, given its binding nature, its extraterritorial scope and the economic significance of activities covered through the value chains. There have been already concerns expressed by the corporate sector about the absence of clarity in some of these rules and the risk of a heavy burden on the companies concerned and even indirectly on SMEs. At this stage the proposal demonstrates shortcomings in terms of legal clarity and coherence with other EU and international rules and seems to fall short of achieving harmonization in the EU. The balance found by the EC will certainly impact the financial sector, despite many exceptions accorded to it.

1. The CSDD

The CSDD will apply to companies over certain thresholds, namely all EU limited liability companies with more than 500 employees and more than EUR 150 million in net turnover worldwide; limited liability companies operating in defined high impact sectors, which do not meet both thresholds but have more than 250 employees and a net turnover of more than EUR 40 million worldwide; non-EU companies active in the EU with EU generated turnover thresholds, similar to those for EU companies.

These thresholds make narrow the direct scope of the proposal, as it excludes all SMEs, it only covers approximately 13,000 EU companies and 4,000 third-country companies. However, the proposal has a much broader scope by indirect application. Indeed, covered companies will need to follow the directive's requirements in their own operations, those of subsidiaries and their 'value chain operations', which are their direct and indirect established business relationships.

The CSDD is a bold and innovative text as it goes beyond reporting duties and requires covered companies to

integrate due diligence into policies; identify actual or potential adverse human rights and environmental impacts; prevent or mitigate potential impacts; bring to an end or minimise actual impacts; establish and maintain a complaints procedure; monitor the effectiveness of the due diligence policy and measures; and publicly communicate on due diligence. The proposed directive contains many controversial aspects, including new obligations upon directors and administrative law enforcement in the Member States.

2. Lack of clarity causing legal uncertainty

One of the flaws of the proposed directive underlined by many economic actors, is its lack of clarity on some aspects. For instance, directors have an obligation to 'take into account the consequences of their decisions for sustainability matters'. The term 'sustainability matters' is arguably very broad and may lead to legal uncertainty. It is important to clarify that this duty to consider 'sustainability matters' should only apply within the scope of directors' responsibilities in national corporate governance law, otherwise the CSDD risks affecting the national corporate governance frameworks that have already been adopted by many Member States (France, Germany...). Plus, the notion of 'directors' needs to be clarified, as despite the definition given, no difference is made between executive and nonexecutive directors. The proposed rules set a nonexhaustive list of rights and a list of instruments in its Annex, in order to define human rights and environmental impacts. This approach can cause challenges of interpretation and clarity. It may even limit the scope of the proposal by encouraging a 'box ticking' attitude.

3. Lack of coherence with other instruments

3.1 Lack of coherence with international guidelines on corporate sustainability

The CSDD proposal intervenes in a context where legal definitions of due diligence already exist and are being followed across the world. Particularly, there are due diligence frameworks with the UNGPs (UN Guiding Principles Reporting Framework), the 2011 OECD guidelines, and the 2018 OECD guidance. The proposed rules of the European Commission should be more aligned with these frameworks, especially with the UNGPs, rather than introducing a 'new, UNGP-resembling definition of due diligence'. In addition, the CSDD introduces undesirable

deviations from the UNGPs, with the concept of direct and indirect established business relationships. It is intended to induce more effective due diligence, as risks are generally less known when further in the global value chain. There exist specialized organisations monitoring human rights abuses in subsidiaries outside Europe. NGOs have a key role there too.

Yet, it has been argued that UNGPs' approach focusing on prioritization of likelihood and severity of adverse impacts throughout the entire global-value-chain is more appropriate and would avoid different standards between EU and international scale. Despite these shortcomings, the CSDD rightly mirrors the cycle of due diligence described by the UNGPs and complements it with greater details, as could have been expected.

3.2 Lack of consistency with related European legislation

In the Preamble, the proposed rules are closely related to the Corporate Sustainability Reporting Directive (CSRD), the Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy's minimum social safeguards. It is essential that the EU adopts a holistic approach to these regulations along with the CSDD and that the CSDD is consistent with them. Indeed, CSRD regulates reporting requirements; SFDR regulates financial market requirements, valuation and ratings; and CSDD regulates due diligence requirements. In particular, to ensure complementarity and coherence, the legislator should carefully monitor that the CSDD requirements such as the transition plan requirement, are mirrored in the CSRD.

4. Lack of sufficient harmonization

The proposed rules allow for a rather large room for Member States transposition. Even though this difficulty is to be expected considering the nature itself of a directive, it is believed that more harmonization would avoid excessive fragmentation.

Regarding supervisory authorities, their allocated power to impose penalties based on the company's turnover and defined by each Member State will lead to different national rules and may drive a 'race to the bottom' amongst them.

In addition, the CSDD does not legislate on the burden of proof but leaves the choice to national law. This has the risk of creating very unequal level playing fields in the Member States and will undermine liability's effectiveness. Indeed, companies might rearrange their supply chains in order to minimize their liability exposure. Finally, a minimum harmonized framework for civil liability is needed in order to limit gaps between Member States.

5. The CSDD and the financial sector

There is a specific regulation for the sustainable reporting of the financial sector (SFDR). The major difficulty of implementation of this regulation since 2021 is the lack of sustainable data from the non-financial firms. Together,

with the CSRD, which has been approved by the Council and the European Parliament in June 2022, the CSDD will increase the pressure on non-financial firms to publish sustainable data which will help the financial sector for the implementation of SFDR.

The CSDD features specific rules for the financial sector.

Article 6 of the CSDD introduces the general duty to identify actual and potential adverse impacts. However, this duty is limited for the companies of the financial sector (article 6(3)), which only must conduct *ex ante* rather than ongoing risk identification in relation to financial activities.

Plus, while under the draft directive, the companies in the scope are prohibited from extending existing business relations or from entering new business relations with second entities when it has not applied appropriate measures to prevent or mitigate potential adverse impacts. Covered companies must also 'temporarily suspend commercial relations' and 'terminate the business relationship' if a potential adverse impact is severe, the financial sector benefits from important exceptions. Notably, financial services companies do not need to terminate or suspend the relationship where termination of loans, credits or other financial services could cause 'substantial prejudice'. This provision might raise questions considering that the same practical consequences may arise from suspensions and terminations of commercial relationships in other sectors. Similarly, the financial sector does not have to refrain from entering new or extending existing relations if adverse impacts cannot be prevented or mitigated when providing credit, loan and other financial services. Once again, no apparent justification is put forward by the European Commission for this exemption.

6. The difficulty of finding the right balance

6.1 A too bold initiative?

The CSDD proposal introduces some ground-breaking provisions that have caused vivid debates.

The European Banking Federation (EBF) has notably underlined several key points that it would like to see removed. For instance, it stands against the obligation to terminate a contract when potential adverse impacts could not be prevented or mitigated or when actual adverse impacts could not be ended. The EBF argues that such an obligation would breach the fundamental contract law principle pacta sunt servanda (meaning that commitments made in an agreement must be kept by the parties to this agreement) which is not 'reasonable', nor 'pragmatic' from a commercial perspective.

In addition, the EBF takes position against the "obligation of means" to bring actual adverse impacts to an end, underlining that it would create potentially very onerous obligations. This position is shared with the risk management profession (FERMA), which underlines the practical challenges of the proposed rules.

The EBF 'strongly oppose' the inclusion of civil liability and the payment of damages to affected groups, claiming such obligations would create an 'unaccountable and uncertain legal risk for companies.' It also asks that subsidiaries are exempted from covered companies' liability.

Similarly, the risk management profession does not seem fully ready to embrace as many new obligations as established in the proposed CSDD. They ask the European Commission for more time in order to ensure that companies have the appropriate systems and processes in place to comply with the new provisions without overburdening the SMEs.

Other criticisms have been formulated towards the proposed rules, notably on their cross-border and competitive impacts. Indeed, since many European companies would be responsible for their subsidiaries and business relationships outside the EU, there is a risk of putting the covered European entities at a competitive disadvantage compared to their non-European competitors. This risk is limited inside the European market since many third-country competitors would be subject to the same obligations. Yet, there is a risk (probably limited, but still) to disadvantage the EU markets if third country companies decide to leave these markets to avoid the CSDD obligations.

6.2 A too shy initiative?

Some economic actors (such as the International Federation of the Economy for the Common Good) have noted key points of potential improvement of the Commission's proposal by the European Parliament and the Member States in the Council, in order to 'make a significant contribution to better sustainability due diligence'. The main criticism made is that restricting due diligence to 'established' business relationships carries the risk of undermining the relevance of CSDD, as covered companies may lack 'established' relationships at lower tiers of their supply chain. In addition, the limited scope of the proposed rules questions the relevance of the text. Indeed, even though SMEs are indirectly covered through their relationships with covered companies, they could have been included in the scope of CSDD on a risk-based approach. Another criterion put forward was that due diligence requirements should be extended to all companies covered by the obligation of financial reporting.

Conclusion

In a nutshell, the CSDD is a considerable step forward in the European Commission's acknowledgement that companies need to be involved in building a sustainable economy and society. It has an ambitious goal. Indeed, the proposed rules will effectively oblige and empower companies to mitigate the risks across their value chains. Yet, the upcoming discussions in the European Parliament and Council should focus on the room of improvement left in the Commission's proposal, particularly regarding legal clarity; coherence with other frameworks and legislation; harmonization; implementation challenges and possible scope adjustments.

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Cryptoassets and DeFi prospects 4

Cryptoassets: market trends and policy proposals	65
■ Decentralized Finance (DeFi): opportunities, challenges	
and policy implications	71

Cryptoassets: market trends and policy proposals

Note written by Marc Truchet (Eurofi)

1. Main characteristics of the cryptoasset market

1.1 Cryptoasset market segments

Cryptoassets are a digital representation of value or contractual rights that can be transferred, stored or traded electronically and which typically use distributed ledger technology (DLT) secured by cryptography or similar technologies.

Cryptoassets include two main categories of assets: (i) unbacked cryptoassets, such as Bitcoin or Ether, that have no underlying asset and no intrinsic value and fluctuate according to offer and demand and (ii) stablecoins, such as Thether (USDT) or USDCoin (USDC) which are designed to maintain a stable value relative to a fiat currency or other reference assets and offer holders the promise that coins can be redeemed at par upon request¹. This constant value is achieved either by holding backing assets intended to stabilise the value of coins mainly against existing fiat currencies, or through a protocol aiming to stabilise their value². This latter category is known as algorithmic or decentralized stablecoins. Neither unbacked cryptoassets nor stablecoins benefit from deposit insurance or access to central bank facilities. On the contrary, Central Bank Digital Currencies (CBDC), which can be considered as a particular form of stablecoin issued by a Central Bank and backed by central bank money would benefit from such quarantees.

Unbacked cryptoassets are at present mainly used as an instrument of investment and speculation via the trading, lending / borrowing or staking³ of cryptoassets. Their high volatility means that it is difficult to use them as a means of payment, a store of value or a unit of account, at least in the current state of the market. Stablecoins could in theory more easily be used as a means of payment due to their stable value. However, at present, they are mostly used to facilitate transactions and investments involving other cryptoassets: allowing the connecting between bank deposits in flat currency and cryptocurrencies, facilitating lending and trading activities with stablecoins used as collateral or for the payment of interest, acting as a

bridge between different crypto platforms and allowing investors to reduce their exposure to cryptoasset volatility by exchanging unbacked cryptoassets for stablecoins⁴. In particular they play an instrumental role in DeFi platforms, where they are used for the execution of most DeFi services (trading and lending in particular)⁵.

Transactions involving cryptoassets are executed on crypto platforms, such as crypto exchanges, and facilitated by cryptoasset service providers (CASPs) that also provide additional services such as asset custody. These platforms provide similar services to the traditional financial system, including the trading of cryptoassets and crypto derivatives, the lending and borrowing of cryptos and various combinations of these activities and related services such as cryptoasset portfolio management. Most cryptoasset platforms operate at present in a centralized way (with a platform acting as an intermediary much as in traditional finance), but a new category of platforms known as DeFi (decentralized finance) operate in a decentralized way i.e. in a peer-to-peer mode and without the use of financial intermediaries. DeFi platforms are based on financial applications that run on a permissionless blockchain, such as Ethereum, and use smart contracts automating the provision of financial services without the need for intermediaries6.

1.2 Market size and trends

The overall global market capitalisation of cryptoassets has grown rapidly in recent years, peaking at €2.5 trillion in November 2021, which was 7 times the market capitalization of the start of 2020 and then experiencing a significant fall in 2022 with the value of major cryptocurrencies such as Bitcoin divided by more than 2 since November 2021. This corresponds to less than 1% of global financial assets, but is a similar size for example to securitized sub-prime mortgage markets before the 2007 financial crisis⁷.

There are around 16,000 cryptoassets in existence, but it is estimated that only around 20 or 25 of them have a significant size e.g. with a market capitalization comparable to that of a large cap equity. Bitcoin and Ether are by far the largest cryptoassets, with a market cap of around €550 Bio in total mid-2022 representing about 30% of the total

1. Some compare stablecoins to Constant Net Asset Value Money Market Funds (CNAV MMFs), which are a type of MMF that aims to preserve a stable value of €1 or \$1 per share at which investors either redeem or purchase shares

3. Staking involves the pledging of coins using a proof-of-stake model to a given cryptocurrency protocol in exchange for a reward in order to support that blockchain network and confirm transactions

4. Various wholesale tokens providing their holders with interests or governance rights on blockchain platforms also exist, although they normally fall in one of the two previous categories

5. e.g. allowing the payment of interest or facilitating lending and trading activities with stablecoins used as collateral or settlement asset

6. The functioning of DeFi platforms, the opportunities and challenges associated with DeFi and the possible regulatory approach to DeFi are described in another Eurofi note of the September 2022 Regulatory Update "Decentralized Finance (DeFi): opportunities, challenges and policy implications"

7. Source ECB Financial Stability Review, May 2022

^{2.} For example in the case of TerraUSD which crashed earlier in 2022 the dollar was maintained through a system relying on traders burning or creating tokens and by mutually pairing Terra USD with another cryptocurrency, Luna. When the price of TerraUSD dropped below \$1, traders could burn TerraUSD or remove it from circulation in exchange for a dollar in Luna. This allowed the reduction of TerraUSD token supply and a rise of the price of the tokens. In the same way, if the price of TerraUSD exceeded \$1, traders were incentivized to burn Luna for a dollar in TerraUSD. This algorithmic balancing act aimed to maintain the price of TerraUSD at \$1

market. Stablecoins are still a relatively small segment, representing less than 10% of the total market.

Currently the majority of cryptoasset activity is driven by investment and trading in unbacked cryptoassets and to a lesser extent by cryptoasset lending. New means of gaining exposure to cryptoassets are however developing, such as cryptoasset derivatives, funds and ETFs and also staking⁸. DeFi is also a fast developing segment of the market, however the total value locked into DeFi was below €100 Bio in Q2 2022.

The interest in cryptoassets among retail investors has increased in Europe over the years, with surveys conducted in some large Euro countries indicating that around 10% of Europeans (and as many as 14% in the NL and 16% in the US) invested in cryptoassets in 20219. This evolution is mainly driven by search for yield, the fear of missing out and asset diversification objectives and the additional opportunities of unrestricted leverage allowed e.g. in DeFi activities¹⁰. There is also the perception among certain investors that cryptoassets may be uncorrelated to capital markets or may provide a hedge against the impacts of inflation. However market evolutions in 2022 have shown cryptoasset volatility to be strongly correlated with other risky assets, including equities and such correlation has further intensified during the recent downturn, according to assessments by the OECD and the IMF11. The growth of the cryptoasset market is also supported by supply trends such as the development of crypto investment platforms and services in the major economies, a very active ecosystem in terms of news and social media coverage and the availability of crypto-based securities and derivatives¹² which is expected to increase notably on regulated exchanges.

The 'institutionalisation' of cryptoassets is also a developing trend in the market 13 i.e. the increased direct and indirect investment of institutional investors such as dedicated crypto funds, venture capital, hedge funds and family offices in cryptoassets and related companies. A survey conducted at the European level by an asset manager in 2021 showed for example that more than 50% of European institutional investors have some level of exposure to cryptoassets and that there is the intention to increase it. Statistics also show that professional investors and highnet-worth individuals hold almost two-thirds of the bitcoin market (as opposed to 10% for retail investors holding less than 10 bitcoins), pointing to an increasing concentration the holding of cryptocurrencies¹⁴. Institutional participation in DeFi markets is also significant, peaking in May-June 2021 at more than 80% of total transactions in DeFi¹⁵, before decreasing. The interest of institutional investors in cryptoassets is driven by the same search for

yield and diversification objectives as retail investment and is also supported by regulatory evolutions in certain jurisdictions — for example since July 2021 institutional investment funds in Germany are allowed to invest up to 20% of their holding in cryptoassets.

Other signs of institutionalisation are the plans of traditional banks and stock exchanges to develop activities in the broader crypto-asset and decentralised finance space, including custody and customer facilitation, research and other dedicated services and also partnerships developing between asset managers and cryptoasset service providers to facilitate access to digital asset markets.

2. Opportunities, risks and challenges from cryptoassets

2.1 Opportunities associated with cryptoassets and underlying technology

Cryptoassets and crypto platforms offer opportunities for users in several areas.

First, as an alternative source of investment. Some investors, particularly among the younger and most riskseeking population, bet on cryptoassets and on related activities (arbitrage between cryptoassets, crypto lending and staking) in search for higher returns and asset diversification. While this may be considered, particularly among the regulatory community, as highly risky speculation on volatile assets, crypto service providers argue that cryptoassets offer investment opportunities in innovative digital assets and can also be seen as a way of supporting the emergence of a new blockchain and digital currency-based ecosystem that may eventually facilitate the improvement of the financial system (and potentially other industries) through the digitalisation of value chains and the reaping of the potential efficiency benefits of tokenization.

Secondly, cryptoassets used as settlement tokens may support the digitalization of financial and commercial processes until CBDCs are widely available or in a complementary way to CBDCs e.g. facilitating the execution and settlement of transactions involving tokenized assets on blockchains and the connection between bank accounts in fiat currency and blockchain-based platforms.

Thirdly, cryptoassets, and particularly stablecoins may provide alternative means of payment and money transfer, provided they are adequately backed and that appropriate AML/CFT procedures are in place. This may

^{8.} The first bitcoin ETF was launched for example in the US in October 2021

^{9.} Source ECB Consumer Expectations Survey (CES) and speech by Fabio Panetta "For a few cryptos more: the Wild West of crypto finance" April 2022

^{10.} These trends show the dynamism of the crypto market but have also led to accusations by some regulators of dynamics resembling a Ponzi scheme, with growth fueled by an increasing number of investors led to believe that prices will continue to increase

^{11.} See OECD (2022), Institutionalisation of crypto-assets and DeFi-TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en. The correlation between changes in the prices of cryptoassets and of equities has been positive since 2020. The returns on bitcoin for example were unrelated to those on the S&P500 index between 2017 and 2019, but their correlation coefficient increased to 35% in the period 2020-21. See IMF blog January 2022 Crypto prices move more in synch with stocks posing new risks

^{12.} Such as futures, exchange-traded notes, exchange-traded funds and OTC-traded trusts

^{13.} See OECD (2022), Institutionalisation of crypto-assets and DeFi–TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en

^{14.} See speech by Fabio Panetta "For a few cryptos more: the Wild West of crypto finance" April 2022

^{15.} See OECD (2022), Institutionalisation of crypto-assets and DeFi-TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en. The share of institutional transactions in this analysis corresponds to the share of investors executing transactions above \$1 million, with transaction size used as a proxy

benefit financial inclusion in particular providing payment solutions for the unbanked population and also support the wider development of digital payments particularly on a cross-border basis. Many regulators however consider that this use case of medium of exchange will mainly be taken up by CBDCs if and when they eventually emerge, due to the volatility of unbacked cryptoassets and the potential issues surrounding stablecoins.

In addition DeFi proposes the creating of an alternative financial ecosystem based on cryptoassets, providing a wide range of financial services with potentially higher levels of efficiency, transparency and integration than the traditional financial system. Efficiency may indeed be brought by the use of smart contracts and related automation and also the non-custodial and peer-to-peer nature of DeFi that can reduce the need for intermediaries and infrastructures and lead to a reduction of transaction costs and delays.

Beyond these opportunities from the direct use of cryptoassets or cryptoasset platforms, some observers consider that the main benefit from cryptoassets resides in their underlying technologies. Distributed Ledger Technology (DLT), the main underlying technology of cryptoassets is already being used and tested in many areas of finance and of the wider economy. But beyond DLT, the technologies supporting DeFi in particular, such as smart contracts¹⁶, may help to improve existing financial value chains, potentially supporting for example the settlement of securities transactions¹⁷, coupon payments or market making activities in a more efficient way. New types of services have also emerged on DeFi platforms, such as automated margining mechanisms for bitcoin futures¹⁸ and flash loans supporting arbitrage activities¹⁹. Some of these services may represent a significant risk at the current stage of development of the DeFi market, also considering their unregulated nature, but could possibly lead to new ways of designing certain financial products and services in the future. The composability of DeFi protocols allowing different programmatic components to be combined to create new financial services thanks to their interoperability and the non-custodial nature of DeFi with users maintaining custody of their keys - and therefore of their assets - offer further opportunities for innovating and increasing efficiency in the financial sector.

2.2 Risks from cryptoassets

The risks from cryptoassets and cryptoasset investment

are of different natures.

Some risks are similar to those posed generally by investment and credit activities such as high volatility, leverage, liquidity and counterparty risks, the risk of illicit activity, hack risks and also front running and market manipulation risks. These risks are however potentially amplified by the fact that cryptoasset activities are currently unregulated and unsupervised and until now were not subject to AML/CFT checks, do not benefit from any backstop or investor protection measures and are also highly exposed to ICT risks. The recent failure of certain crypto lending platforms has shown that the unregulated lending and borrowing activities of cryptoassets can be highly risky, as customer assets may be reinvested by the platform in risky investments for example with no backstop and no investor protection measures.

Some risks are more specific to crypto activities. The potential conflicts of interest that exist on crypto platforms have been pointed out by regulators²⁰. These stem from the combination of activities performed on crypto platforms that include e.g. third-party trading, proprietary trading, margin lending and token issuance, potentially creating market-manipulation risks such as the front-running of trades²¹ by miners who help to validate transactions on the digital ledger. The risks from stablecoins are a second area of concern for regulators since they are potentially subject to runs if a stablecoin 'breaks the buck' which could impact the crypto activities using stablecoins and also impact underlying commercial paper or bond markets used to back stablecoins (similar to certain MMFs). The recent crash of the Terra stablecoin has made the potential risks of stablecoins that may not be backed by sufficient reserves²² more tangible, although Terra was a so-called algorithmic stablecoin.

DeFi activities pose some specific risks as well. These include technology risks resulting from the specific features of DeFi platforms such as smart contracts or oracles²³ and from specific services provided in DeFi such as flash loans. In addition the pseudo anonymity of DeFi platforms may amplify illicit activity risks and DeFi platforms may be more exposed than centralised crypto platforms to stablecoin risks due to the structural role played by stablecoins in the DeFi ecosystem. The existence of specific governance risks regarding DeFi applications has also been highlighted by regulators²⁴ more particularly in two areas: the control of administrative keys (used by the project core team to *e.g.* upgrade smart contracts on which

^{16.} Smart contracts allow the execution of all contractual terms via a blockchain in an automated and programmable way without the need for intermediaries

^{17.} For example, blockchain platforms have recently been experimented by central banks including the Banque de France for the settlement of securities transactions in tokenised form against wholesale CBDCs issued on the blockchain using smart contracts in order to enhance the efficiency of such processes and their capacity to be operated cross-border

^{18.} FTX, a crypto-exchange has for example recently sought approval from the CFTC for offering bitcoin futures contracts with an automated margining mechanism. Under the FTX proposal, customers would deposit collateral in FTX accounts — cash or crypto — and be responsible for keeping enough on hand to cover margin requirements at all times. Margin levels would be calculated every 30 seconds. If the margin falls too low, FTX would start liquidating the position in seconds, selling it off in 10 per cent increments or, in worst-case scenarios, offering it to "backstop liquidity providers who agree ahead of time to accept a set amount". This would allow the bypassing of brokers who currently collect margin and make sure that customers have enough to support their positions and may also allow platforms to function 24/7. Source FT "Blockchain and financial markets: will computers push out brokers?" 5 April 2022

^{19.} Flash loans are a type of uncollateralised lending that allows assets to be borrowed and repaid with interest within the same blockchain transaction and are used in particular to support arbitrage activities. Flash loans use smart contracts that do not permit the exchange of funds unless the borrower can repay the loan before the transaction ends, otherwise the smart contract cancels the transaction

^{20.} IOSCO Decentralised finance report March 2022

^{21.} i.e. trading ahead of transactions in the queue of transactions to be validated in order to gain advantage

^{22.} For example the Terra / Luna ecosystem. Stablecoins that are not backed by sufficient reserves may lose their peg to the dollar and be the victims of a run

^{23.} Oracle services allow data and content external to the blockchain (e.g. asset prices needed to execute transactions or to price derivatives), to be incorporated into the DeFi transaction flow, enabling the execution of smart contracts

^{24.} IOSCO Decentralised finance report March 2022

protocols are based, perform emergency shutdowns if needed) and the functioning of the governance structures of DeFi platforms based on governance tokens that may lead to a high concentration of voting control in certain hands and a possible misalignment of incentives. In DeFi platforms there may also be a concentration of tokens in the hands of the core development team or the VC/other funders backing the project.

The possible spillover risks between crypto activities and traditional finance have also been emphasized in recent reports and speeches by regulatory authorities²⁵ due to the growing interconnectedness between cryptoasset activities and traditional finance (e.g. with institutionals investing in cryptos and banks potentially developing custody and customer facilitation services). Regulators have highlighted different contagion channels to the broader financial system, such as the potential impact of a fall in the value of cryptoassets or of a failure such as a fraud on the wealth and level of confidence of investors and the activities of market players, which could spill over to broader financial markets. The failure of a major stablecoin 'breaking the buck' due to solvency issues could moreover impair the collateral and liquidity on DeFi platforms, potentially leading to significant liquidations and stress. A possible run on a stablecoin could also trigger instability in underlying short term paper markets (used as reserves). Possible contagion risks between different crypto activities have also been emphasized by regulators as an additional source of vulnerability (e.g. shown by users of centralised platforms lending crypto assets to DeFi platforms for a return).

Regulators however generally consider that at this stage these risks do not have significant financial stability implications due to the relatively limited volumes concerned, compared to the overall financial system²⁶.

2.3 Operational challenges facing the development of cryptoassets

Certain assessments notably performed by the BIS and the ECB have also demonstrated intrinsic limitations in the cryptoasset and DeFi ecosystems and the functioning of their underlying technical platforms, in the present state of development of the market, which may limit the development of these activities.

A first issue is the energy consumption of cryptoasset activity. It is estimated that the annualized energy consumption of certain larger cryptoassets is similar to that of some mid-sized countries such as Belgium or Chile, which is not sustainable if the market continues

to develop²⁷. The main reason lies in the cryptographic protocol used by cryptoassets such as bitcoin and also most stablecoins, relying on the proof-of-work (PoW) consensus mechanism²⁸, requiring vast amounts of computational power to validate cryptoasset transactions. This issue can potentially be addressed by a move towards the proof-of-stake (PoS) consensus mechanism, which involves the locking up by network participants of a certain amount of the underlying cryptoasset to validate a transaction instead of computing power²⁹. However, while PoS is developing, the market capitalization of PoWbased cryptoassets still represents around 80% of the total cryptoasset market. While the possibility to limit the use of PoW was considered by the European Parliament in the context of the debates around the proposed MiCA (Markets in Cryptoassets) regulation, the option finally retained is to request the Commission to include cryptoasset mining activities that contribute substantially to climate change in the EU taxonomy for sustainable activities, considering that sustainability disclosure requirements and related regulatory scrutinity of consensus mechanisms will accelerate the transition to more sustainable mechanisms such as PoS.

Two other operational challenges more specific to the DeFi ecosystem are the fragmentation of the crypto ecosystem and over-collateralisation.

The inherent fragmentation of the crypto ecosystem, leading to congestion and high fees, has been highlighted by the BIS³⁰. This fragmentation is due to the existence of a large number of competing blockchains that do not interoperate, the limited scalability of crypto platforms compared to traditional centralised market infrastructures and also the system's current incentive structure. Validators on pseudo-anonymous crypto platforms, where reputation cannot play a role, are indeed incentivised through monetary rewards and for these to be kept high enough the capacity of the blockchain is limited, leading to congestion and higher fees. Users are inclined to switch to alternative blockchains in order to transact at lower fees, a trend which is sustained at present by VC investments in new crypto projects. As a consequence, as more users enter the crypto ecosystem, more and more competing blockchains are used according to the BIS31, reducing the efficiency of the overall system and also increasing risks, since this leads to the creation of bridges across blockchains with a higher exposure to hacks.

The over-collateralisation that is needed for DeFi lending is a second challenge³². With no ability to screen borrowers due to the pseudo anonymous nature of DeFi platforms, these platforms rely on collateral often consisting in

^{25.} OECD (2022), Institutionalisation of crypto-assets and DeFi-TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en; IOSCO Decentralised finance report March 2022. Speech by Fabio Panetta "For a few cryptos more: the Wild West of crypto finance" April 2022

^{26.} FSB (2022) Assessment of Risks to Financial Stability from Crypto-assets https://www.fsb.org/2022/02/assessment-of-risks-to-financial-stability-from-crypto-assets/

^{27.} It is estimated that mining in the bitcoin network uses up about 0.36% of the world's electricity Source IMF Global Financial Stability Report October 2021. See also ECB Mining the environment — is climate risk priced into cryptoassets? 2022 https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb. mpbu202207_3~d9614ea8e6.en.html

^{28.} Under PoW, which emerged with the invention of bitcoin, miners use specialised hardware to solve the complex mathematical puzzle of mining the crypto-asset, validate transactions and secure the expanding network. This procedure is computationally expensive and translates directly into high energy consumption

^{29.} Crypto-assets built on PoS blockchains thus rely on miners pledging crypto-asset collateral, leading to substantially lower energy consumption. Estimates by the Ethereum Foundation suggest that moving the Ethereum blockchain from PoW to PoS would dramatically reduce energy consumption by 99.95% while ensuring the same functionality. Source ECB Mining the environment – is climate risk priced into cryptoassets? 2022

^{30.} See BIS Bulletin — Blockchain scalability and the fragmentation of crypto — 7 June 2022 and BIS - 2022 annual economic report

^{31.} In contrast to traditional financial infrastructures where network effects lead to a higher level of concentration

^{32.} Source BIS Bulletin N°57 DeFi lending: intermediation without information? 14 June 2022

cryptoassets. The high volatility of these assets means that there is often over-collateralisation, which may lead to an inefficient use of capital and foster procyclicality. In booms appreciating prices of collateral values increase the capacity to borrow, while in busts declining collateral value reduces lending activity. Some observers have also suggested that over-collateralisation goes against one of the initial objectives of DeFi which is to widen access to finance.

3. Policy approach to cryptoassets

At present policy initiatives related to cryptoassets cover two main areas AML / CFT rules and the regulation of cryptoassets and cryptoasset service providers. These latter regulatory initiatives aim to tackle two types of risks: risks for consumer protection and market integrity on one hand — including the provision of sufficient information to users and the protection of user assets — and financial stability risks on the other.

3.1 AML / CFT regulation

AML / CFT requirements are being reviewed at the EU and global levels to adapt them to financial activities involving crypto-assets and the service providers and users concerned.

In October 2018 and June 2019, the Financial Action Task Force (FATF) adopted changes to its international AML/CFT recommendations to clarify that they apply to financial activities involving virtual assets such as cryptoassets, and virtual or crypto-asset service providers (VASPs) and this was followed in October 2021 by the publication of a more detailed risk-based guidance³³.

In the EU, AML / CFT rules are also being revised in order to extend their scope to cryptoassets, their holders and related service providers³⁴, which will also provide the basis for a harmonized approach to supervising them in the perspective of the establishment of a new European AML Authority. The EU institutions also reached at the end of June 2022 a provisional agreement on the proposal to extend the rules on information accompanying transfers of funds (the so-called "travel rule") to cover transfers in cryptoassets (TFR regulation). This rule requires that

information on the source of the asset and its beneficiary travels with the transaction and is stored on both sides of the transfer³⁵.

3.2 Regulation of cryptoassets and cryptoasset providers

Work is underway at the global level, following progress made by the FSB³⁶ in connection with the global standard setters for advancing the agenda on crypto-assets.

A regulatory policy agenda concerning cryptoassets was published by IOSCO in July 2022 aiming to respond to the market integrity and investor protection concerns raised by crypto activities and also identify potential systemic risks. The work will initially be divided in two workstreams: one covering crypto and digital assets (CDA) and the second one focusing on DeFi, with an objective to publish policy recommendations by the end of 2023. The CDA workstram will assess trading, transparency and market manipulation risks, as well as safekeeping and custody, starting with a taxonomy of activities and an evaluation of emerging risks that may be specific to cryptoasset markets. The DeFi working group will examine in particular how IOSCO principles and standards can apply in DeFi and also assess the links between DeFi, stablecoins and cryptoasset trading, lending and borrowing platforms, as well as the interactions of DeFi with broader financial markets.

CPMI and IOSCO have also issued final guidance on stablecoin arrangements in July 2022 confirming that the Principles for Financial Market Infrastructures apply to systemically important arrangements that transfer stablecoins.

Several jurisdictions have moreover launched regulatory initiatives concerning stablecoins and their issuers aiming to tackle related financial stability and user protection risks. In Japan for example, only banks, fund transfer service providers and trust companies are now entitled to issue stablecoins and each is subject to the requirement to ensure redemption³⁷. The Japanese framework also includes a number of measures to enhance cryptoasset user protection³⁸. In the US also action is being taken in the area of digital assets and stable coins³⁹.

In the EU, crypto-asset activities, are due to be regulated by the Markets in Crypto-Assets (MiCA) regulation⁴⁰, which

^{33.} Greater guidance from the FATF is provided in 6 key areas: (i) clarification of the definition of VA and VASP (virtual assets and virtual asset service providers), (ii) guidance on how the FATF standards apply to stablecoins and the range of entities the standards apply to, (iii) additional guidance on the risks and tools available to address AML/TF risks for peer-to-per transactions, (iv) updated guidance on the licensing and registration of VASPs, (v) additional guidance on the implementation of the 'travel rule', and (vi) principles for information-sharing and cooperation among VASP supervisors. Source FATF - Updated guidance: a risk-based approach to virtual assets and virtual asset service providers October 2021

^{34.} The current AML/CFT rules only apply to exchanges of crypto-assets for money

^{35.} There will be no minimum threshold or exemptions for low-value transfers of cryptoassets, except for transactions from un-hosted wallets (i.e. wallets held directly by their owners without using a cryptoasset service provider (CASP)) to which a 1000€ threshold will apply. In addition CASPs will be required to verify that the source of the asset is not subject to restrictive measures or sanctions and a public register for non-compliant CASPs will be set up under MiCA

^{36.} For example see FSB Assessment of risks to financial stability from cryptoassets — February 2022

^{37.} Banks should issue stablecoins as deposits. They are already subject to prudential regulations and stablecoin holders are protected by deposit insurance in the same manner as conventional bank deposits. Fund transfer service providers issue stablecoins as claims on outstanding obligations. They are required to secure the obligation through either money deposits with official depositaries, bank guarantees, or segregated safe assets, such as bank deposits and government bonds. Trust companies issue stablecoins as trust beneficiary rights. They are required to hold all the trusted assets in the form of bank deposits. See Eurofi Views Magazine September 2022 p. 254 article by Tomoko Amaya (J-FSA) Three major policy perspectives for financial regulators regarding crypto-assets

^{38.} For further detail about the the Japanese framework for cryptoassets see Eurofi Views Magazine September 2022 p. 254 article by Tomoko Amaya (J-FSA)

^{39.} See Executive order on ensuring responsible development of digital assets (March 2022), Report on stablecoins from the President's working group on financial markets (November 2021)

^{40.} The Digital Operational Resilience Act (DORA) should moreover help to mitigate ICT risks such as cyber-risks that may affect crypto and DeFi platforms and their different components among others

is part of the Digital Finance package⁴¹. MiCA proposes a new EU legal framework for crypto-assets (including stablecoins), that do not fall under existing EU legislation⁴² and also for the entities that issue these assets and those that provide services related to them. MiCA aims to establish uniform rules related to crypto-assets in the EU providing legal certainty for crypto-asset issuers and providers, enhancing consumer protection and ensuring financial stability while supporting innovation. The legislative process is underway with the adoption of the ECON Committee report on MiCA in March 2022.

MiCA adopts a technology-neutral approach (same activities, same risks, same rules), which means that it should normally apply to all cryptoasset activities, however DeFi for example is not explicitly mentioned in the MiCA legislation and therefore it is still uncertain how MiCA rules will apply to decentralized platforms⁴³.

The MiCA proposal provides a set of definitions of different cryptoassets (including asset-referenced tokens i.e. stablecoins; electronic money tokens and utility tokens) and a regime for the issuance of cryptoassets and the provision of cryptoasset services to the public. This regime includes a mandatory authorisation of cryptoassets (with the notification of a white paper to the authorities) and of cryptoasset service providers, providing a passport valid throughout Europe. MiCA also puts forward requirements for the offering and marketing of crypto-assets to the public and a certain number of safeguards for crypto-asset holders (including prudential safeguards, rules concerning the safekeeping of clients' cryptoassets and funds, the obligation to establish a complaints procedures, rules on conflicts of interest and outsourcing and rules to prevent market abuse). Requirements are moreover established for asset-referenced tokens including rules on the reserve of assets backing them, on the custody of reserve assets and their nature (secure and low risk) and on the disclosure of the rights attached to these assets. The supervision of issuers of 'significant' asset-referenced tokens (to be defined by specific criteria of size) is a further area covered in the MiCA proposal with the provision of specific powers and competences to EBA in particular⁴⁴. The establishment of a register of cryptoasset service providers by ESMA is also mandated.

In addition, regarding the supervision of cryptoasset platforms, the Commission has announced in its strategy on supervisory data in EU financial services its intention to launch a pilot project on the technical foundations of DeFi supervision embedded in blockchain in 2022 and also to request ESMA to prepare a report on new data collection approaches under the DLT pilot regime for market infrastructures⁴⁵.

3.3 Possible further evolutions for reaping the benefits of cryptoasset technology

In some reports by public authorities⁴⁶ it has been suggested that regulation and supervision, however desirable, will not be sufficient to allow the reaping of the full benefit of crypto and DeFi technology, such as programmability, composability and tokenisation, because of the inherent fragmentation and fragility hampering crypto platforms. The suggestion has been made that this would require building further scale necessitating further interoperability and network effects and ensuring sufficient safety in the crypto system. One way to do this, according to the BIS and OECD would be to use central bank digital currency (CBDC) on crypto platforms instead of private stablecoins in certain instances, in order to increase the safety of settlements and mitigate potential contagion risks from stablecoins.

Some observers have also emphasized, concerning DeFi, that the lack of accountability is a major impediment for a wide-scale institutional adoption of this technology⁴⁷, suggesting that protocols using a permissioned pool of participants who may be legally identifiable and accountable could be a way forward.

^{41.} The Digital Finance package aims to support the potential of digital finance in terms of innovation and competition, while mitigating the risks and incudes several initiatives such as the Digital Finance Strategy, MiCA, DORA and the DLT pilot regime

^{42.} For example utility tokens that provide access to a service, stablecoins that can be used for payments and claim to maintain a stable value. Some derivatives may for example qualify as financial instruments and be regulated under MiFID II / MiFIR, and therefore be out of the scope of MiCA

^{43.} See further details on the policy implications of DeFi in the Eurofi note on DeFi opportunities, challenges and policy implications (September 2022)

^{44.} The ECON Committee report has proposed that ESMA should be tasked with supervising the issuance of asset-referenced tokens, whereas EBA would be in charge of supervising electronic money tokens

^{45.} See European Commission - European Financial and Stability Review 2022

^{46.} For example BIS Annual Economic Report 2022 – The future monetary system; OECD (2022), Institutionalisation of crypto-assets and DeFi-TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en

^{47.} See Eurofi Magazine February 2022 – page 274 – Jos Dijsselhof, SIX Group; Remarks by L. Brainard on cryptoassets and decentralized finance through a financial stability lens 8 July 2022

Decentralized Finance (DeFi): opportunities, challenges and policy implications

Note written by Marc Truchet (Eurofi)

1. Update on DeFi market trends

1.1 Specificities of DeFi

Decentralised finance (DeFi) refers to financial applications which are run on a permissionless blockchain, such as Ethereum, and use smart contracts automating the provision of financial services without the need for intermediaries¹. DeFi facilitates investment in cryptoassets on decentralised crypto exchanges (DEX) and also the provision of a certain number of financial services (lending, asset management, derivatives, insurance...) in a peer-to-peer mode and without the use of financial intermediaries potentially creating an alternative decentralised and open source financial system based on cryptoassets.

The use of smart contracts facilitating the automation and programmability of DeFi services and the decentralised nature of the operation and governance of the platform are the two main features that distinguish DeFi from centralised blockchain systems. The composability of DeFi protocols allowing different programmatic components to be combined to create new financial services thanks to their interoperability is another specific feature of these platforms. The non-custodial nature of DeFi is another defining characteristic, as users maintain custody of their keys – and therefore of their assets.

Some regulators have however pointed out that decentralisation is not a reality for most DeFi platforms², at least in their current stage of development, because their administration and governance remains in the hands of a limited group of individuals who tend to hold a majority of governance tokens, or due to other points of centralisation in DeFi platforms (e.g. admin keys, oracles³). This may nevertheless evolve as DeFi platforms expand and implement further decentralisation notably in terms of governance. Indeed, decentralisation is by nature on a spectrum and not a binary issue, and the level of decentralisation of DeFi applications can follow the path of the protocol development cycle, starting from very centralised projects at the inception and

software development phase and becoming increasingly decentralised as it is deployed and shared with users⁴.

The importance of stablecoins such as Tether (USDT) or USDCoin (USDC) for the operation of DeFi platforms has also been pointed out. Stablecoins are used on all crypto platforms since they allow the connection between bank deposits in fiat currency and cryptocurrencies, act as a bridge between different crypto platforms and allow investors to reduce their exposure to cryptoasset volatility by exchanging unbacked cryptoassets for stablecoins, but they play a particularly important role on DeFi protocols where they are used for the execution of most DeFi services, e.g. allowing the payment of interest or facilitating lending and trading activities, with stablecoins used as collateral or settlement asset.

1.2 Recent market trends

DeFi experienced a significant surge of activity in 2021, with the total value of cryptoassets locked in DeFi applications built on Ethereum reaching \$86 Bio at the end of 2021⁵ (down from a record \$110 Bio at the peak of the market in November 2021) compared to \$10 Bio at the beginning of 2020⁶. But the value locked into these DeFi applications has since gone down to around \$40 Bio in July 2022. This downward trend during the first semester of 2022 is confirmed by BIS statistics covering a broader scope of DeFi activity, that show that the total value locked in DeFi across all cryptoassets has gone down to around \$100 Bio in Q2 2022 compared to more than \$160 Bio at the end of 2021⁷.

Another trend that has been highlighted by regulators, notably the OECD⁸, is the increasing institutionalisation of DeFi (and more generally of crypto markets) *i.e.* the increased direct or indirect investment of institutional investors such as dedicated crypto funds, venture capital, hedge funds and family offices in DeFi markets and related companies. This evolution is driven by search for yield and asset diversification objectives and the additional opportunities of unrestricted leverage allowed in DeFi activities. There is also the perception among certain

^{1.} The functioning of DeFi platforms and the opportunities and challenges associated with DeFi were described in a previous note written by Eurofi in February 2022 - Decentralized Finance (DeFi): opportunities, challenges and policy implications https://www.eurofi.net/wp-content/uploads/2022/05/eurofi_decentralized-finance-defi_opportunities-challenges-and-policy-implications_paris_february-2022.pdf

finance-defi_opportunities-challenges-and-policy-implications_paris_february-2022.pdf
A recent report from the EU Blockchain Observatory and Forum (EUBOF) also provides a detailed description of the functioning and implications of DeFi https://www.eublockchainforum.eu/sites/default/files/reports/DeFi%20Report%20EUBOF%20-%20Final_0.pdf

^{2.} See DeFi risks and the decentralisation illusion - BIS Quarterly Review December 2021

^{3.} Oracle services allow data and content external to the blockchain (e.g. asset prices needed to execute transactions or to price derivatives), to be incorporated into the DeFi transaction flow, enabling the execution of smart contracts

^{4.} OECD 2022, Why Decentralised Finance (DeFi) Matters and the Policy Implications https://www.oecd.org/daf/fin/financial-markets/Why-Decentralised-Finance-DeFi-Matters-and-the-Policy-Implications.pdf

^{5.} Source defipulse.com

^{6.} A WEF report (DeFi policy-maker toolkit — June 2021) also estimates that between mid-2020 and mid-2021 the number of user wallets was multiplied by 11 reaching 1.2 million and the number of DeFi applications reached more than 200

^{7.} Source BIS Bulletin N°57 DeFi lending: intermediation without information? 14 June 2022

^{8.} See OECD (2022), Institutionalisation of crypto-assets and DeFi-TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en

investors that cryptoassets may be uncorrelated to capital markets or may provide a hedge against the impacts of inflation. However, market evolutions in 2022 have shown cryptoasset volatility to be strongly correlated with other risky assets, including equities, and such correlation has further intensified during the recent downturn, according to assessments by the OECD. Institutional participation in DeFi markets peaked in May-June 2021 when institutional transactions represented more than 80% of total transactions in DeFi⁹, but has since gone down. Other signs of institutionalisation are the plans of traditional banks and stock exchanges to develop activities in the broader cryptoasset and decentralised finance space, including custody and customer facilitation, research and other dedicated services and also partnerships developing between asset managers and cryptoasset service providers to facilitate access to digital asset markets.

2. Main opportunities, risks and challenges associated with DeFi

2.1 Opportunities of DeFi

In theory, DeFi has the potential to create an alternative financial ecosystem based on cryptoassets providing a wide range of financial services with potentially higher levels of efficiency, transparency and integration than the traditional financial system. Efficiency may indeed be brought by the use of smart contracts and related automation and also the non-custodial and peer-to-peer nature of DeFi that can reduce the need for intermediaries and infrastructures and lead to a reduction of transaction costs and delays. Public blockchains on which DeFi platforms are built are also transparent by design, offering supervisors the opportunity to monitor risks more effectively, notably AML / CFT risks, and providing users with improved transparency. The non-custodial nature of DeFi and the interoperability of DeFi applications may also facilitate the cross-border development of DeFi services. Finally, DeFi may also contribute to enhancing resilience by removing single points of failure.

At present, however, DeFi services are not used as alternatives or complements to traditional financial

services in most cases, but mainly as an additional source of speculative investment for investors in cryptoassets. In 2021 decentralised cryptoexchanges (DEX) and crypto lending were the largest DeFi activities by far, representing around two-thirds of total DeFi activities. Investors in DeFi bet on the new lending and staking opportunities offered by DeFi platforms offering high yields and use the increased leverage capacity and arbitrage options across cryptoassets available on DeFi platforms (e.g. between centralised and decentralised platforms and between different DeFi platforms). Some recent failures of centralised crypto lending platforms have revealed for example that some of these platforms were investing a significant portion of customer deposits in DeFi activity in search of higher returns.

Some observers also point out that the main added value of DeFi for the wider financial system and economy lies in its underlying technical features, which may open finance to the potentialities of Web3¹⁰ and support the digitalisation of existing financial value chains, with all the potential benefits of tokenisation for financial markets and their participants, including atomic settlement of transactions¹¹. These features include smart contracts which may help to improve existing financial value chains, potentially supporting for example the settlement of securities transactions¹², coupon payments or market making activities. New types of services have also emerged on DeFi platforms, such as automated margining mechanisms for bitcoin futures13 and flash loans supporting arbitrage activities14. Some of these services may represent a significant risk at the current stage of development of the DeFi market, also considering their unregulated nature, but could possibly lead to new ways of designing certain financial products and services in the future.

2.2 Risks associated with DeFi activities

The assessment of the risks associated with DeFi activities has continued over the last few months with several new reports published notably by IOSCO, the OECD and the BIS. The recent failures of certain unregulated crypto lending platforms and algorithmic stablecoins that were not backed by sufficient reserves¹⁵ have also made the potential risks posed by DeFi more tangible, given the importance of stablecoins¹⁶ and lending activities in the DeFi ecosystem, although the activities concerned by these failures were not particularly decentralised.

- 9. See OECD (2022), Institutionalisation of crypto-assets and DeFi-TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en. The share of institutional transactions in this analysis corresponds to the share of investors executing transactions abover \$1 million, with transaction size used as a proxy
- 10. Web3 is considered to be the future of the internet, a decentralized form of the internet, where users become owners. Rather than using centralised platforms and apps to connect to the internet, browse, interact, and make transactions online, as with the current internet (Web2), users in the future Web3 phase will be able to participate in the creation, operation, and governance of the protocols and apps themselves
- 11. OECD (2020), The Tokenisation of Assets and Potential Implications for Financial Markets https://www.oecd.org/finance/The-Tokenisation-of-Assets-and-Potential-Implications-for-Financial-Markets.pdf
- 12. For example, blockchain platforms have recently been experimented by central banks including the Banque de France for the settlement of securities transactions in tokenised form against wholesale CBDCs issued on the blockchain using smart contracts in order to enhance the efficiency of such processes and their capacity to be operated cross-border
- 13. FTX, a crypto-exchange has for example recently sought approval from the CFTC for offering bitcoin futures contracts with an automated margining mechanism. Under the FTX proposal, customers would deposit collateral in FTX accounts cash or crypto and be responsible for keeping enough on hand to cover margin requirements at all times. Margin levels would be calculated every 30 seconds. If the margin falls too low, FTX would start liquidating the position in seconds, selling it off in 10 per cent increments or, in worst-case scenarios, offering it to "backstop liquidity providers who agree ahead of time to accept a set amount". This would allow the bypassing of brokers who currently collect margin and make sure that customers have enough to support their positions and may also allow platforms to function 24/7. Source FT "Blockchain and financial markets: will computers push out brokers?" 5 April 2022
- 14. Flash loans are a type of uncollateralised lending that allows assets to be borrowed and repaid with interest within the same blockchain transaction and are used in particular to support arbitrage activities. Flash loans use smart contracts that do not permit the exchange of funds unless the borrower can repay the loan before the transaction ends, otherwise the smart contract cancels the transaction
- 15. For example the Terra / Luna ecosystem. Stablecoins that are not backed by sufficient reserves may lose their peg to the dollar and be the victims of a run
- 16. See Nassr (2022), Not-so-stable coins: a double-edged sword for decentralised finance and the key bridge linking DeFi to TradFi https://oecdonthelevel.com/2022/05/30/not-so-stable-coins-a-double-edged-sword-for-decentralised-finance-and-the-key-bridge-linking-defi-to-tradfi/

A majority of the risks from DeFi are common to all unregulated cryptoasset activities and investments. Such risks include market risks, excessive leverage, liquidity and counterparty risks, risk of illicit financing activity and money laundering, hack risks and other operational risks, as well as risk of market manipulation. These may be amplified by the pseudo-anonymity on DeFi platforms and certain features of DeFi platforms such as the automaticity of smart contracts, the immutability of code once deployed and the potential absence of central service providers. The potential conflicts of interest that exist on crypto and DeFi platforms have also been pointed out by regulators¹⁷. These stem from the usual concentration of tokens in the hands of the core development team or the VC/other funders backing the project. The combination of activities performed on the same crypto platforms, including e.g. third-party trading, proprietary trading, margin lending and token issuance, may also potentially lead to market-manipulation risks such as the front-running of trades¹⁸ by miners who help to validate transactions on the digital ledger.

The possible spill-over risks between stablecoins and DeFi activities and also between DeFi activities and traditional finance have also been emphasized in recent reports¹⁹. The failure of a major stablecoin 'breaking the buck' due to solvency issues could impair the collateral and liquidity on DeFi platforms, potentially leading to significant liquidations and stress, in addition to the impact of possible stablecoin run risks on underlying commercial paper or bond markets (similar to certain MMFs). The growing interconnectedness also between DeFi and traditional finance (e.g. with institutionals investing in cryptoassets and DeFi, and banks potentially developing custody and customer facilitation services), as well as the contagion risks between different crypto activities (e.g. shown by users of centralised platforms lending crypto assets to DeFi platforms for a return) are additional sources of vulnerability. Regulators however generally consider that at this stage these risks do not have financial stability implications due to the limited volumes concerned²⁰.

Some risks are more specific to the DeFi ecosystem. These include technology risks resulting from the specific features of DeFi platforms such as smart contracts or oracles and from specific services provided in DeFi such as flash loans. In addition the pseudo-anonymity of DeFi platforms may amplify illicit activity risks and DeFi platforms may be more exposed than centralised crypto platforms to stablecoin risks due to the structural role played by stablecoins in the DeFi ecosystem. The existence of specific governance risks regarding DeFi applications has also been highlighted by regulators²¹ more particularly in two areas: the control of administrative keys (used by the project core team to *e.g.* upgrade smart contracts on which protocols are based, perform emergency shutdowns if

needed) and the functioning of the governance structures of DeFi platforms based on governance tokens that may lead to a high concentration of voting control in certain hands and a possible misalignment of incentives.

2.3 Operational challenges facing DeFi

Certain assessments notably performed by the BIS have also demonstrated intrinsic limitations in the cryptoasset and DeFi ecosystems in the present state of development of the market, which may limit the development of this alternative ecosystem.

One issue is the over-collateralisation that is needed for DeFi lending²². With no ability to screen borrowers due to the pseudo anonymous nature of DeFi platforms, these platforms rely on collateral mostly consisting of cryptoassets. The high volatility of these assets means that there is often over-collateralisation, which may lead to an inefficient use of capital and foster procyclicality. In booms, appreciating prices of collateral values increase the capacity to borrow, while in busts declining collateral value reduces lending activity. Some observers have also suggested that over-collateralisation goes against one of the initial objectives of DeFi which is to widen access to finance.

A second issue is the inherent fragmentation of the crypto ecosystem²³ leading to congestion and high fees, which is due to the existence of a large number of competing blockchains that do not interoperate, the limited scalability of crypto platforms compared to traditional centralised market infrastructures and also the system's current incentive structure. Validators on pseudo-anonymous crypto platforms, where reputation cannot play a role, are indeed incentivised through monetary rewards and for these to be kept high enough the capacity of the blockchain is limited, leading to congestion and higher fees. Users are inclined to switch to alternative blockchains in order to transact at lower fees, a trend which is sustained at present by VC investments in new DeFi projects. As a consequence, as more users enter the DeFi system, more and more competing blockchains are used according to the BIS²⁴, reducing the efficiency of the overall system and also increasing risks, since this leads to the creation of bridges across blockchains with a higher exposure to hacks.

3. Policy implications of DeFi

Generally speaking, regulators aim to regulate crypto activities and assets, including DeFi, with a 'same activities, same risks, same rules' approach and with an appropriate balance between risk mitigation and allowing innovation in this area. At present policy initiatives concerning

^{17.} IOSCO Decentralised finance report March 2022 https://www.iosco.org/library/pubdocs/pdf/IOSCOPD699.pdf

^{18.} i.e. trading ahead of transactions in the queue of transactions to be validated in order to gain advantage

^{19.} OECD (2022), Institutionalisation of crypto-assets and DeFi-TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en; IOSCO Decentralised finance report March 2022

^{20.} FSB (2022) Assessment of Risks to Financial Stability from Crypto-assets https://www.fsb.org/2022/02/assessment-of-risks-to-financial-stability-from-crypto-assets/

^{21.} IOSCO Decentralised finance report March 2022

^{22.} Source BIS Bulletin N°57 DeFi lending : intermediation without information? 14 June 2022

^{23.} See BIS Bulletin – Blockchain scalability and the fragmentation of crypto – 7 June 2022 and BIS - 2022 annual economic report

^{24.} In contrast to traditional financial infrastructures where network effects lead to a higher level of concentration

cryptoassets cover two main areas – AML / CFT rules and the regulation of cryptoassets and cryptoasset service providers – and take a relatively "centralized" or "entitybased" perspective. It is therefore still unclear how the specificities of DeFi platforms that would work in a fully decentralised way may be taken into account in these regulations.

3.1 AML / CFT regulation

AML / CFT requirements are being reviewed at the EU and global levels to adapt them to financial activities involving crypto-assets and the service providers and users concerned.

In October 2018 and June 2019, the Financial Action Task Force (FATF) adopted changes to its international AML/CFT recommendations to clarify that they apply to financial activities involving virtual assets such as cryptoassets, and virtual or crypto-asset service providers (VASPs) and this was followed in October 2021 by the publication of a more detailed risk-based guidance²⁵.

In the EU, AML / CFT rules are also being revised in order to extend their scope to cryptoassets, their holders and related service providers²⁶. The EU institutions reached at the end of June 2022 a provisional agreement on the proposal to extend the rules on information accompanying transfers of funds (the so-called "travel rule") to cover transfers in cryptoassets (TFR regulation). This rule requires that information on the source of the asset and its beneficiary travels with the transaction and is stored on both sides of the transfer. There will be no minimum threshold or exemptions for low-value transfers of cryptoassets, except for transactions from un-hosted wallets (i.e. wallets held directly by their owners without using a cryptoasset service provider (CASP)) to which a 1000€ threshold will apply. In addition CASPs will be required to verify that the source of the asset is not subject to restrictive measures or sanctions and a public register for non-compliant CASPs will be set up under the EU MiCA (Markets in Cryptoassets) regulation.

While these rules are due to apply to DeFi platforms, the potential lack of a central entity to implement these rules raises some questions in terms of enforcement. The FATF suggests that where a legal person has sufficient influence on the operation of the protocol and the provision of services offered by it, then such person may be considered a VASP (virtual asset service provider)27, however how this may be implemented in a decentralised DeFi platform remains to be clarified.

3.2 Regulatory approach to DeFi activities

At the global level, a regulatory policy agenda concerning cryptoassets was published by IOSCO in July 2022 aiming to respond to the market integrity and investor protection concerns raised by crypto activities and also identify potential systemic risks. Concerning DeFi, the aim is to publish policy recommendations by the end of 2023. In this context, the DeFi working group of IOSCO will examine in particular how IOSCO principles and standards can apply in DeFi and also assess the links between DeFi, stablecoins and cryptoasset trading, lending and borrowing platforms, as well as the interactions of DeFi with broader financial markets.

In the EU, cryptoasset activities, are due to be regulated by the Markets in Crypto-Assets (MiCA) regulation²⁸. MiCA proposes a new EU legal framework for cryptoassets (including stablecoins), that do not fall under existing EU legislation²⁹, which is the case of most tokens issued, traded or used as collateral on DeFi platforms. MiCA aims to provide legal certainty for cryptoasset issuers and providers, enhance consumer protection and ensure financial stability, while supporting innovation.

MiCA adopts a technology-neutral approach (same activities, same risks, same rules), which means that it should normally apply to DeFi eventually. However at this stage it is not clear how this will be implemented. DeFi platforms and services are not explicitly mentioned in MiCA³⁰ and MiCA takes an 'entity-based' approach which may be challenging to apply to truly decentralized DeFi activities. MiCA indeed requires cryptoasset service providers to be authorised and physically present in the EU and mandates the implementation of a certain number of 'entity-based' safeguards such as capital requirements and the segregation of client's assets, the supervision of cryptoasset issuers and service providers and disclosure requirements. Regulators have however suggested that different forms of centralisation in DeFi or controlling stakeholders could be used as entry points for the regulation and supervision of these platforms: for example organised governance structures when they exist, the holders of controlling shares of governance tokens or the on- and off-ramps used to access or exit DeFi systems when exchanging fiat for cryptocurrency.

Different options, which need to be further assessed, have been suggested for including DeFi in the scope of regulated financial activities. For platforms that do not operate in a fully decentralised way, key specificities related to DeFi services could be introduced in the Level 2 requirements of MiCA, possibly completed by the application of existing financial regulations for services that perform similar functions to traditional finance (e.g. lending services). In addition, MiCA transparency requirements could ensure that sufficient information is provided regarding the specific governance and operational arrangements used on DeFi platforms (e.g. the attribution of governance

^{25.} Greater guidance from the FATF is provided in 6 key areas: (i) clarification of the definition of VA and VASP (virtual assets and virtual asset service providers), (ii) guidance on how the FATF standards apply to stablecoins and the range of entities the standards apply to, (iii) additional guidance on the risks and tools available to address AML/TF risks for peer-to-per transactions, (iv) updated guidance on the licensing and registration of VASPs, (v) additional guidance on the implementation of the 'travel rule', and (vi) principles for information-sharing and cooperation among VASP supervisors. Source FATF - Updated guidance: a risk-based approach to virtual assets and virtual asset service providers October 2021

^{26.} The current AML/CFT rules only apply to exchanges of crypto-assets for money 27. See Eurofi Magazine February 2022 – Robert Ophèle page 272

^{28.} The Digital Operational Resilience Act (DORA) should moreover help to mitigate ICT risks such as cyber-risks that may affect crypto and DeFi platforms and their different components among others

^{29.} Some derivatives may for example qualify as financial instruments and be regulated under MiFID II / MiFIR, and therefore be out of the scope of MiCA

^{30.} In terms of service providers for example, cryptoasset exchanges, trading platforms and wallet providers are the main service providers explicitly mentioned in the MiCA legislative text

tokens, voting schemes, the use of admin keys...). Investor protection disclosure is another possible area of action for policy-makers.

Another complementary option would be to regulate some key components of DeFi such as stablecoins and smart contracts, which are considered to be key potential points of vulnerability of DeFi. Stablecoins are already clearly in the scope of MiCA and regulatory proposals are being made in several other jurisdictions such as Japan and the US to regulate stablecoins and their issuance, but their connections to DeFi and their use on DeFi platforms remain to be further addressed. Smart contracts and other technical features of DeFi are more difficult to regulate as such because they are pieces of software specifically coded for each platform, but standards could be implemented to ensure that reliable audits and due diligence of codes are being conducted for example.

A further approach is to ensure that an appropriate oversight of DeFi platforms is in place, the challenge being that oversight should not be conducted on a single entity but at the overall system level. While enforceability of requirements may be more difficult than in traditional infrastructures due to the possible lack of a central operator (unless the central development team can be used as a point of entry), the monitoring of risks could be facilitated by the fact that data are public on a permissionless blockchain. In passing it can be noted that the Commission has announced in its strategy on supervisory data in EU financial services its intention to launch a pilot project on the technical foundations of DeFi supervision embedded in blockchain in 2022³¹.

3.3 Possible further evolutions for reaping the benefits of DeFi technology

In some reports by public authorities³² it has been suggested that regulation and supervision, however desirable, will not be sufficient to allow the reaping of the full benefit of DeFi technology, such as programmability, composability and tokenisation, because of the inherent fragmentation and fragility hampering DeFi platforms. The suggestion has been made that this would require building further scale on DeFi platforms, necessitating interoperability and network effects and ensuring sufficient safety in the DeFi system. One way to do this, according to the BIS and OECD would be to use central bank digital currency (CBDC), if these become available, in DeFi instead of private stablecoins in certain instances, in order to increase the safety of settlements and mitigate potential contagion risks from stablecoins.

Some observers have also emphasized that the lack of accountability is a major impediment for a widescale institutional adoption of DeFi³³, suggesting that protocols using a permissioned pool of participants who may be legally identifiable and accountable could be a way forward.

Operational developments and advances in the underlying infrastructure of DeFi, for example relating to throughput and transaction costs, could also possibly allow for potential benefits of financial inclusion and 'democratisation of finance' that have been claimed by the DeFi system without being achieved at the moment.

^{31.} See European Commission - European Financial and Stability Review 2022

^{32.} For example BIS Annual Economic Report 2022 – The future monetary system; OECD (2022), Institutionalisation of crypto-assets and DeFi-TradFi interconnectedness, OECD Publishing, Paris, https://doi.org/10.1787/5d9dddbe-en

^{33.} See Eurofi Magazine February 2022 – page 274 – Jos Dijsselhof, SIX Group; Remarks by L. Brainard on cryptoassets and decentralized finance through a financial stability lens 8 July 2022

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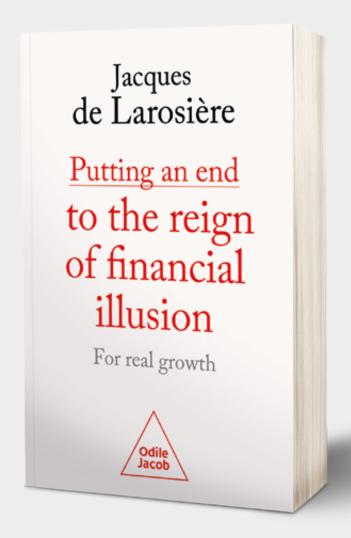
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Notes	

ABOUT EUROFI

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- 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.

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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).

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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:

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