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From the New Normal to New Abnormal World: Banks' Risk Profile Shifts in the New Socio-economic Landscape

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ABSTRACT

After a long period of low interest rates, many European banks have let their business model evolve towards a greater diversification of revenues and lower interest rates protection. The sector has proven its resilience during the Covid-19 and the geopolitical crises. Nowadays, with the simultaneous surge of inflation and consciousness about environmental dangers, banks are confronted with an unprecedented challenge. They have to cope with re-emerging or original sources of financial risks. These include stock market risks (due to their off-balance sheet asset management activities), funding risk (due to the pass-through of the rising interest rates on liabilities), ESG risks (on the valuation of the banks' assets), and credit risk (due to the cost of the climate transition and the tension between the 'E' and the 'S' dimensions). This will increasingly lead banks to move away from comfortable risk management tools, and develop competences and approaches to deal with uncertainty, potentially for a long period of time.

Introduction: Diversification and emerging risks in the low-for-long environment

The long period of (very) low interest rates in the Eurozone has considerably transformed the banking industry, probably to a larger extent than many people think. In the pre-2008 world, with largely positive interest rates at both ends of the yield curve (short term and long term), a bank's classical maturity transformation activity used to be profitable on both sides of its balance sheet. Deposits would be remunerated less than the market funding cost, and loans would be charged at a higher tariff than the long term market interest rate. As a result, the net interest rate margin was comfortable and banks could even abstain from directly charging their customers with the fees for ancillary services such as the treatment of payment, the regular communication paperwork, or desk withdrawals.

The world has changed with the financial crisis and the consecutive drop in interest rates, with even up to five years of negative short term rates. Because of floored interest rates on regulated accounts in many Eurozone countries, including Belgium, banks have been induced to compensate the shortfall (sometimes even negative levels) of margins on deposits by a larger margin on their loans. But this has not proven to be sufficient in order to preserve the profitability. The contrast between the pre- and post-global financial crisis evolution of banks' cost of equity (COE, based on a market model) and their return on equity (ROE, based on financial statements) reveals this deterioration. This is shown

in the following graph, issued and widely used by the ECB in order to induce banks to accelerate the shift in their business model.

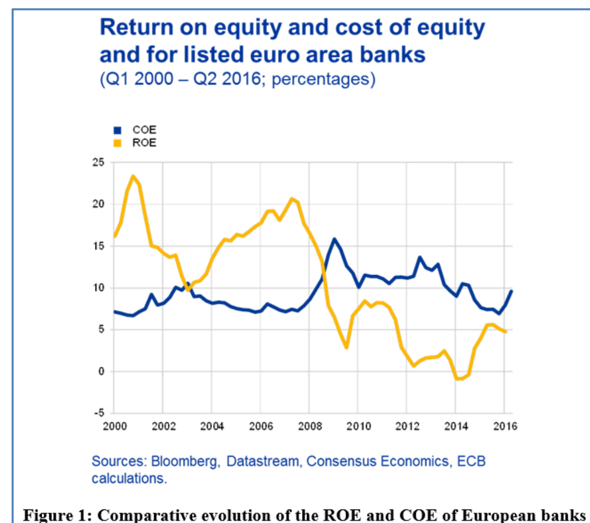

Figure 1: Comparative evolution of the ROE and COE of European banks

During the negative interest period, the dominant mood in banking was that one had to prepare for a further "low-for-long" environment. Consequently, we could witness two reactions to this conviction: (i) Under-hedge duration risk by adopting less payer swaps than necessary to preserve the economic value of equity against rises in interest rates, in order to protect profitability of intermediation activities in case of permanently low levels; and (ii) Increase off-balance sheet activities (payment/asset management) in order to diversify sources of income with lower capital intensity and a higher ROE. The shift between on- and off-balance sheet sources of income has been evidenced for Belgian banks by Hübner (2021) in a related article.

Quite surprisingly, the two consecutive *Deus ex machina*, namely the burst of the Covid-19 Pandemic and the war in Ukraine, both substantially affecting the society in the period 2020-2022, have not dramatically affected the banking sector. Indeed, thanks to their enhanced solvency and comfortable liquidity positions, many European banks have rather been part of the solution than of the problem. None of these two extreme events have really resulted in questioning banks' new strategic orientations; on the contrary, the diversification of revenues has proven its merits in a very volatile environment.

The game changer: The "Inflation-Environment" cocktail

The cocktail made up with "high and stubborn inflation" and "environmental urgency" equally represents threats and opportunities for the financial sector. From a bank's risk profile perspective, it can be seen as a game changer whose long term consequences could be much more pronounced than simple shocks to the business cycle.

The first ingredient of this cocktail is a durable increase in inflation, leading to traditional monetary response on short term policy rates, but at a very fast pace, as represented in the following graph.

Europe has experienced a very long period of low inflation and accommodative monetary policy. The new situation that arose in 2022 with the sudden peak in inflation and the steep increase in the ECB (and the Fed) policy rates is not really an "evolution" from the perspective of continuity, but rather a "regime switch", closing a period that had lasted for more than 12 years. "*Who is here now and was there then?*". This is not only about people (who, amongst the risk specialists, know what inflation really is?), this is also about data and the models that use them.

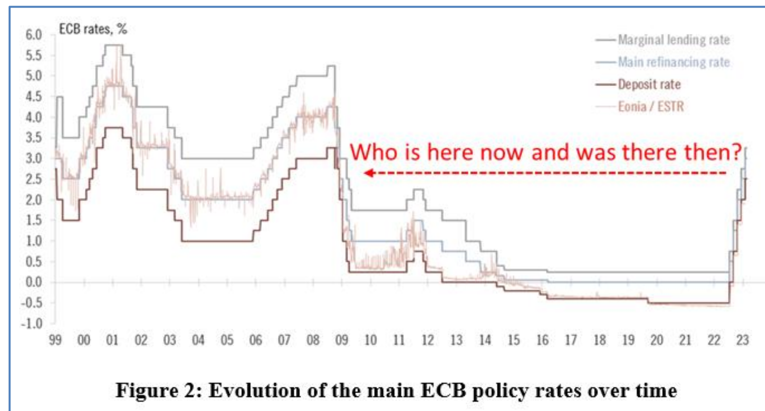

Figure 2: Evolution of the main ECB policy rates over time

The second ingredient is a sudden and at the same time pervasive sense of urgency on environmental risk, evidenced by the graph below that shows an example (on a financial portfolio) of the potential consequences of missing the Paris Pathway scenario, leading to an immediate but "dataless" transition preparation. The recent banking climate stress test exercise at the European level has revealed that the maturity level of financial institutions was very heterogenous regarding quality and quantity of data, concrete actions taken towards the transition pathway, and preparation for a long term scenario thinking.

As a result, we are witnessing a competition escalation regarding the communication of ESG commitments (especially on the "E" – environment – side) within the financial sector. This is usually – not always – backed by a substantive shift towards green investments, be it inside the banking book (green loans), the trading book (green bonds and sustainable investments) and asset management activities.

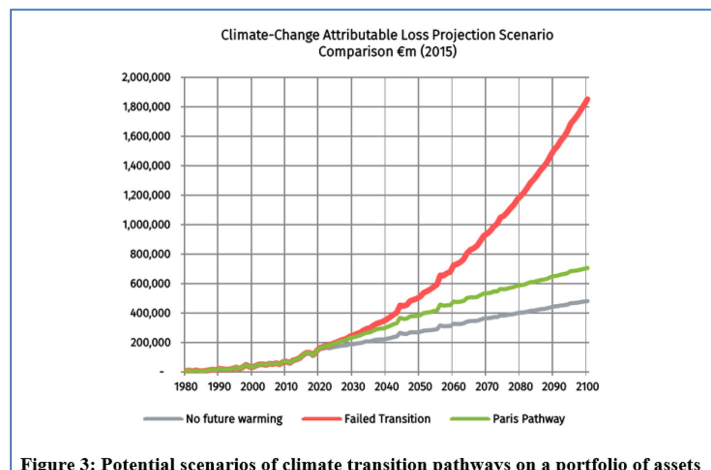

Figure 3: Potential scenarios of climate transition pathways on a portfolio of assets

The combination of these two ingredients is likely to lead to a profound evolution of the notion of risk management in financial institutions.

From risk to uncertainty management

Risk management is all about dealing with "known knowns and unknowns". The cornerstone of an effective risk management organization is the combination of the awareness of the risk exposures

and their potential consequences, their translation into a workable framework (typically though models in the context of financial risks), the identification of tools or methods that can mitigate them, an associated decision making process, and the control of the effectiveness of implementation with a feedback loop.

There are a number of dimensions for which this “Inflation-Environment” cocktail may lead to a shift from a comfortable risk management process to a much less controllable “uncertainty management” (please forgive this oxymoron), in which new, unmodelled risks emerge for which the control environment will be much more exploratory than based on deductions from experience. Let us list four of them, all related to financial types of exposures.

1. <u>Market risk - off-balance sheet</u>
   The increasing reliance on asset management and related activities creates a type of risk that is classical in investment banking, but rather new to financial intermediaries: financial market risk. Fee income is generally proportional to the global asset under management inventory. These assets usually belong for most part to the bank’s customers – who thereby have to assume the full market risk – but the bank has an indirect exposure because of the “market impact” on the level of fees. Because the regulatory framework and the IFRS norms do not allow banks to macro-hedge this type of risk without a painless impact on the income statement, the risk of fluctuations in this type of revenues is essentially unhedgeable.[1] One may consider that this risk remains limited and that is naturally offsets the interest rate risk that banks bear on their transformation activities. This is defendable up to a certain extent. “Perfect storms” may occur on financial markets, with sharp increases in interest rates that are too strong to produce an immediate positive impact on the net interest margin, while simultaneously influencing financial assets and the related generation of income. An example of such a storm, whose potential effects are largely unavoidable for most banks, occurred in 2022 with the simultaneous drop in equities (“a bad year”) and crash in bonds (“a catastrophic year”), as illustrated in Figure 4 below.

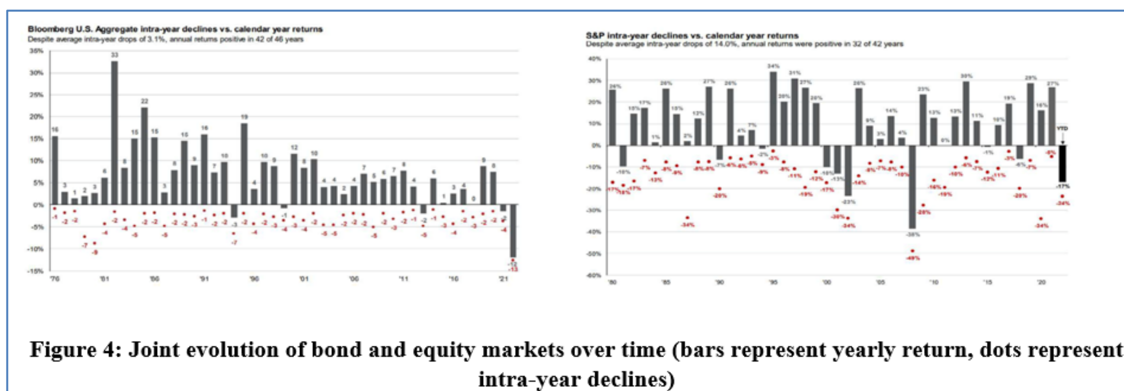

Figure 4: Joint evolution of bond and equity markets over time (bars represent yearly return, dots represent intra-year declines)

[1] This contrasts with the situation of assets held by banks on their balance sheet under the business model “held to maturity”, that can be hedged against the impact of a rise in interest rates. Banks have the possibility to hedge this risk, and they may also accept the risk (under the scrutiny of the supervisor or not). This was the case with SVB, whose risk management was deficient.

Furthermore, the behavior of financial investors could become rather erratic, with possible reinforcement effects of the adverse market effects. Because of all these difficulties, banks have to prepare scenarios for which off-balance sheet events could occur without the possibility to proactively manage these risks, whereas only a limited regulatory capital should be affected to these activities.

2. <u>Market risk - liabilities</u>
The rapid changes in interest rates triggered in 2022, with much uncertainty about the forthcoming inflation and rates scenarios, revives an old problem for financial intermediaries: how and when to organize the "pass-through" of market interest rates on the tariffs of savings accounts? Some fifteen or twenty years ago, this would have been a rather classical and well-mastered problem: banks had experts, data, and experience about changes in interest rates (in both directions) and the corresponding consequences on the depositor's behavior. As a reminder, what banks have to primarily assess in this context is the elasticity of the supply of deposits vis-à-vis the changes in the remuneration of the customers' accounts. Who *really* knows it now? Real interest rates are currently negative but nominal ones are positive. The shape of the yield curve fluctuates in unpredictable manners. Savers of 2023 are not the same as in 2008. They are one click away from another bank, and at the same time they seem to have a sticky relationship with their own current bank. The situation is simple: banks' models are largely powerless to address the current challenges. Banks explore, grope and probe in order to extract information from their customers. Scenario thinking has become the norm, and this explains to some extent the prudence of the financial sector regarding the very sensitive question of tariffs on savings accounts.

3. <u>Market risk - assets</u>
Simultaneous with the surge of inflation, ESG concerns have become dominant in most business decisions. This comprises a radical shift of the investments towards greener assets, both on behalf of customers (through the mix of funds and financial products that are offered under the scope of asset management) and on the banks' own balance sheets (through green bonds and loans). This is a very welcome evolution, which had become essentially inevitable given the urgency to react to the severity of environmental challenges. But what do know about the risk-

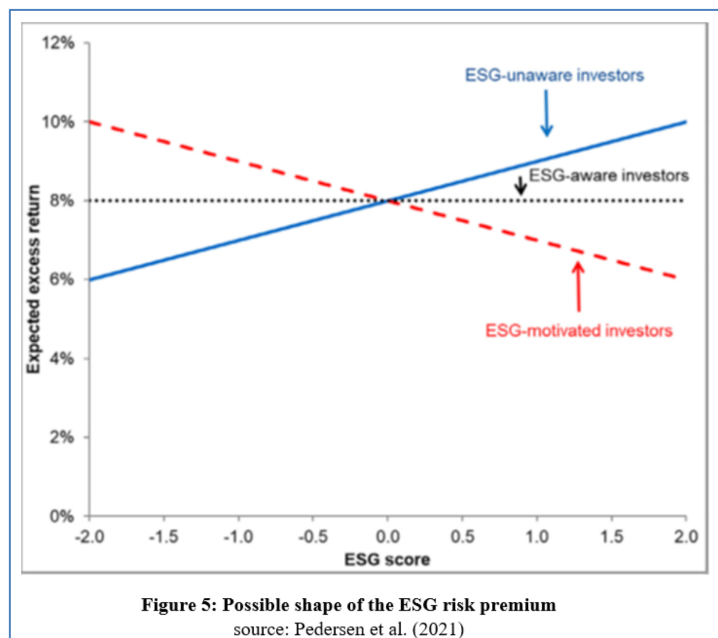

Figure 5: Possible shape of the ESG risk premium
source: Pedersen et al. (2021)

return properties of ESG characteristics associated with financial assets? Very little indeed. Currently, there is a debate about whether the risk premium associated with ESG investments is positive, nil, or negative – this largely depends upon the degree of motivation and activism of ESG investors, as shown by Pedersen et al. (2021) in the graph.

Moreover, the efforts that are necessary in order to comply with the Paris transition pathway will not only display largely unknown effects on credit risk (see below), but also on market risk. What is known nowadays is that the expected return on financial assets will drop by a few percentage points, at least for equities, in the near and/or distant future. When? To what extent? For which types of assets? Obviously, this adverse impact of environmental measures on financial assets will have spillover impacts on their risk profile, but without any data to back these scenarios, we are (again) left with judgment calls and, at most with an educated buildup of expertise.

4. Credit risk – assets
   As a final illustration, consider the evolution of the loan book of credit institutions in the wake of the evolution towards the 2050 Paris trajectory. The tension between direct environment and associated transition risk is likely to exacerbate in the years to come. Take the example of residential real estate, which represents a significant fraction of the loans granted by banks to their individual customers. For a city like Paris, for instance, an average of close to 55% of all residential real estate does not currently comply with the target EPC norms. This means that huge investments will have to be done in order to progress towards near-passive buildings. Who will pay the bill? Will it be evenly spread across all categories of the population, or will the burden be mostly borne by the weakest shoulders, as it appears to be the case? Furthermore, there will be a capacity problem regarding the human and technological resources necessary to perform this necessary green evolution. Banks are increasingly aware that the 'E' and 'S' criteria can be conflicting, but it remains to be decided how they will tackle this problem. Its resolution will dramatically impact the potential credit risk that they will bear on their interest-bearing assets. Not for next year, but for the 25 years to come, and without any hindsight!

Concluding remarks

The direct impact of the Covid-19 pandemic and the geopolitical turmoil has been absorbed without much damage by the financial system. What comes next is more anxiogenic, because banks, despite their awareness of the new sources of uncertainty engendered by the combination of inflation and environment-related concerns, are not fully equipped to tackle these risks.

The post-2020 risk profile of financial intermediaries is likely to experience a paradigm shift, not really because the role of banks in the economy would have changed, but more probably because the consequences of their decisions generate a larger uncertainty, not reassured by any comparative past experience, that they need to tackle. Ignoring them is not possible, and avoiding them is not an option. Talented managers, with a vision and imagination associated with strong competencies, might become the key to the resilience of the financial system.

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References

Hübner, G. (2021), Drift in business models and emerging market risks for the banking sector. *Revue Bancaire et Financière*, Special Issue for the 85th anniversary of the Review, pp. 126-132.

Pedersen, L.H., Fitzgibbons, and S., Pomorski, L. (2021), Responsible investing: The ESG-efficient frontier. *Journal of Financial Economics*, Vol. 142, pp. 572-597.