# RegCORE Client Alert

**Financial Services: Revisiting the risk from "Fallen Angels"- when bonds go bad and wider corporate zombification risks**

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# Financial Services

## Revisiting the risk from "Fallen Angels" - when bonds go bad and wider corporate zombification risks


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### QuickTake

On 23 July 2020, the European Systemic Risk Board (**ESRB**)[1] published a Technical Note[2] warning about the risks of corporate bond downgrades[3], notably the risks of and adverse impact from so-called "fallen angels" (which should be read in line with an earlier note[4]). While the Technical Note did not propose definitive actions for supervisors, policymakers have themselves increasingly assessed new and tweaked existing responses in rules and supervisory expectations.

This includes the European Central Bank (**ECB**), which published its own views on fallen angels as part of its financial stability Review November 2020.[5] In that review, the ECB concluded that at just over EUR 30 billion, the amount of euro area fallen angels remained comparatively limited and considerably below projections in the early stages of the pandemic. Nevertheless, the number of high-yield issuances have increased. In the

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1 The ESRB is responsible for the macro-prudential oversight of the EU's financial system and systemic risk prevention and mitigation. The ESRB therefore has a broad remit, covering banks, insurers, asset managers, the catch-all pernicious term of those that qualify as "shadow banks", financial market infrastructures and other financial institutions and markets. In carrying out its responsibilities, the ESRB monitors and assesses systemic risks and, where appropriate, issues Warnings and Recommendations. The continued pressure on the economic outlook during the prolonged COVID-19 pandemic plus the growing stock of potential/actual corporate bonds during that time that became "fallen angels", prompted the ESRB to take action. On 2 April 2020 the ESRB launched a targeted research exercise that flowed into the ESRB Technical Note's findings on the following question: "What if a large number of downgrades and forced sales were to occur at the same time?" The simulations the ESRB uses analyse three different sets of "behavioural scenarios", which, as the estimated losses further below show, are important drivers of the results. These are:

- Mild behavioural scenario: Only passive funds are assumed to engage in forced sales; they are assumed to sell all of their fallen angels. All other institutions are assumed not to engage in any forced sales.
- Severe behavioural scenario: Passive funds behave as under the mild behavioural scenario. In addition, active funds, insurers and pension funds are assumed to sell some of their fallen angels. Further details on the assumptions underlying this scenario are provided below.
- Extreme behavioural scenario: Passive and active funds, pension funds and insurers sell all of their fallen angels.

The forced sale analysis focuses only on the first month after the downgrade shock, as price impacts are unlikely to be of first-order importance over longer time horizons. In each instance the anticipated amounts of forced sales were quickly in the hundreds of billions of euros with losses ranging to between 10 billion and 85 billion euros – at 2020 levels. The ESRB also estimated a potential repricing of 150 to 200 billion euros across the EU's financial system with fire sale losses stemming from distressed market reactions adding another 20% to 30% to such losses depending on much of their holdings institutions would sell and how liquid markets would be at the time.

2 Since the 2008 global financial crisis, global investment levels have rapidly moved into investment grade but equally high-yield corporate bonds. The COVID-19 pandemic along with extraordinary government and fiscal support also spurred new pressures for increased funding. Crucially however, a majority of fixed-income investment guidelines and mandates may require portfolio managers to divest from those fixed income issuances that were previously investment grade and which have been downgraded – including past high-yield to junk status. Such products are commonly referred to in market but not legal terms as "fallen angels". In the ESRB's opinion at the time such a change distorts risk premia on yields. The ESRB not only noted this as an issue for corporate issuers but also for financial institutions' own issuances.

3 Specifically, the analysis of the ESRB covered only "plain vanilla" financial and non-financial corporate bonds, thus excluding unrated financial and non-financial corporate bonds as well as sovereign and regional/municipal fixed income issuances although the conclusions reached can indeed be conceptually extended in respect of any remedial or preventive action.

4 Available here.

5 Available here.

Financial Stability Review from May 2021, the ECB warned on "corporate zombification" in which policy measures aimed at supporting corporates and the economy though the pandemic may have supported not just otherwise viable firms but also those unprofitable and but still operating. These zombies can themselves become fallen angels.[6]

Separate to that overview from a central bank financial stability perspective, the ECB, acting in its role at the head of the Banking Union's Single Supervisory Mechanism (**SSM**) in various warnings (including a Dear CEO Letter dated 28 March 2022 – see standalone Thought Leadership on this) on Banking Union supervised institutions (**BUSIs**) complacency in compliance with risk appetite frameworks (**RAF**).

This Client Alert presents revisits the outcomes provided by the ESRB in the context of fallen angels notably as EU financial markets and indeed policymakers pivot their plans from looking beyond a prolonged pandemic to efforts in dealing with how heightened geostrategic tensions on the doorstep of the EU may temper the economic outlook and recovery.

Market participants, regardless of whether they are sellers or buyers will want to improve their risk (both quantitative and qualitative – notably legal and other due diligence review) management assessments and susceptibility of fixed income issuances becoming subject to fallen angel risk (**FAR**). As in past crises wide-spread propagation of FAR may reinforce wide-spread sales amongst investors who are no longer permitted to hold such fallen angels. Available and interested buyers therefore may, assuming the fundamentals fit their risk tolerance, purchase such exposures and secure equity-like returns with fixed-income like risks. If the trade works then this may be attractive, but prudent risk management, notably in light of novel risks such as COVID-19 and the resulting adverse impact on sustainability of business models and the economic recovery shuttering many businesses and corporate fixed income issuers, might merit factoring in FAR into RAFs more fundamentally.

## A focus on fallen angels and FAR – further reaching impacts?

The drop from investment grade to fallen angels are typically unexpected and without reasonable warning. This is particularly hazardous as the deterioration in credit circumstances that moves a credit rating analyst to downgrade to below investment grade can accelerate as it in turn accelerates the market thus causing a self-reinforcing spiral of ratings and pricing drops.

When bond issuances become fallen angels they typically are:

- Susceptible to a higher price volatility due to a major shift in the status of the issuer/corporate – and cliff-edge pricing possibilities driven by index rebalancing;
- Sold off in bulk quantities prior to an anticipated downgrade and/or removal from indices;
- Seen as an opportunity for some investors (the ESRB had pinned its hopes on "hedge funds" in its analysis) that will actively invest in fallen angels provided the issuer/corporation has strong fundamentals and there are hopes of an attractive risk/reward profile that can outperform high-yield issuances when a fallen angel is significantly discounted to fair value and thus under-priced compared to a the broad high-yield market; and
- Subject to possible heightened default rates but also insolvency risk of the issuer or corporate group.

What the ESRB's Technical Note nor the ECB's analysis did not cover was the:

- different priorities and responses of regulated and non-regulated investors as well as active versus passive investors;
- effect of fallen angels on the performance of indices and related investment returns and wider-scale moves by (passive) investors including for equities but also other structured finance issuances;
- impact of losses (irrespective for firm type and/or investment strategy) on prudential regulatory capital, liquidity and solvency requirements as a result of adverse developments in bond ratings and/or closely correlated financial instruments, including derivatives;
- pressures from corresponding increase(s) in margin calls and/or a need by some market participants to rapidly source other forms of eligible collateral assets, including to replace those fixed income instruments that had been mobilised for collateral purposes but which have become fallen angels;
- consequences of increased funding costs for issuers unable to tap capital markets and who may be unable to rely on credit lines from banks; and
- risks of issuances going straight to default.

Moreover, examples of fixed income issuances going from investment grade straight to default without becoming fallen angels are not new. Even if rare, in past crises issuances from Enron, Lehman Brothers, and

[6] Available here.

MF Global went straight to zero and default thus causing further shockwaves through risk propagation channels. In each circumstance, in addition to sales (and correspondingly purchases of fallen issuances), a number of repo and securities lending arrangements in respect of such bonds, correlated financial instruments (including fixed income funds and ETFs) as well as any nature of exchange-traded or OTC-traded derivatives referencing or hedging, the bonds and other financial instruments, may be unwound between private market sector participants and possibly also with those facing public sector market participants, including central banks (as collateral takers/asset purchasers).

Studies from 2020 and 2021 have also shown the amount of fallen angels in emerging markets economies have also been rising and across the fold. From business models in the gaming, hospitality and travel sector through to commodities sectors but also banks are all susceptible to or have become subject to downgrades or on watch-lists – thus raising the prospect of growing FAR in those markets but also risks to EU-domiciled investors and lenders. However, there are those fallen angels that move to new rising stars, in particular where they address (a) structural problems in business segments by reorganising the business into a more viable manner (often concentrating on the core profitable business lines); (b) complete a comprehensive cost-cutting exercised; and (c) allocate available economic capital in a more strategic manner to drive stronger growth in more profitable business lines.

In summary, adverse impacts on corporate ratings and of issuances can rapidly cascade across other transaction channels and cause action to terminate exposures including in the context of a cross-default. As a result, any modelling of FAR should also consider the impact on wider relationships both direct and indirect as well as contractual and other arrangements under a wide-set of financial markets trading documentation. The same applies to identifying, mitigating and managing risks connected to corporate zombies.

## Combatting corporate zombification

Crucially, not all fallen angels are necessarily zombie firms, even if the latter are more at risk of either becoming or already being fallen angels. Corporate zombies whether individually or in a cohort of what should be (but for support) failing firms continue to operate on the back of cheap funding and debt forbearance with a range of business models that were or may during the pandemic have become non-viable. Such firms are perceived as weighing on economic productivity and by trapping resources as well as blocking the emergence of new productive and viable business models.

Zombification may also carry through to issues for BUSIs, especially those that may, for a number of reasons – including in compliance with the applicable regulatory and legal requirements kick-the can down the road by repeatedly extending or altering funding terms rather than pulling the plug and writing off exposures. Such an approach will, in the ECB's view certainly, weigh on all creditors' (not just financial services firms') balance sheets over time, dampen profitability and curtail capacity for new lending.

While, according to the ECB, the median zombie firm in the euro area is 20% smaller in terms of total assets (most may be micro-enterprises) than large firms, the median zombie firm is 60% more leveraged than its non-zombie counterpart. Yet other zombie firms are not so obvious and typically include sectors with very high research & development costs (pharmaceuticals) or where investment are distorted by government regulations (automotive and utilities - including energy) but also consumer demand sectors such as traditional bricks & mortar retail, leisure and gaming.

Compounding the structural problems are those that relate to the pandemic having propped up zombie firms. In 2022 the outlook of loan moratoria put in place during the prolonged pandemic expiring along with the prospect of the impact of rising interest rates and more uncertain funding conditions may push some zombies to have increased non-performing loans/exposures and/or finally into insolvency. This too may cause further complexities for financial markets. This matters, especially given the ECB-SSM's stark warnings on 28 March 2022 to BUSIs on their excessive use of leverage generally, including unviable exposures to a number of zombie firms.

## What market participants may wish to consider

If fallen angels but also zombie firms running into trouble are set to increase, especially as policymakers pare back extraordinary government and fiscal support put in place during the prolonged pandemic and look to prepare for new risks and an uncertain economic outlook, market participants may wish to consider assessing their documented and non-documented arrangements to scenario plan their resilience to FAR but also corporate zombification. This includes (periodically):

1. assessing the strength and data quality of available sources and metrics used to calculate a deterioration probability of fixed income issuances over a 12 to 18 month horizon to, regardless of credit rating analytics, to assess FAR but also corporate zombification as well as turn-around chances/sustainable viability of business model;
2. reviewing impact on FAR in the context of RAFs and risk tolerance levels, notably with respect to investment mandates and, where permitted, application of liquidity management techniques, including use of side pockets to isolate and work-out relevant exposures to FAR and zombie-bound debt;
3. taking stock of collateral asset inventories of what financial instruments and their susceptibility to FAR (or spillover effects affecting valuation/pricing) are being provided/taken as collateral including with whom (as well as when used with central counterparties and other financial market venues). Such a review may also wish to further model in detail the impact of heightened liquidity pressures from increased volatility and margin calls;
4. updating a centralised inventory of credit ratings triggers across exposures as they apply to fallen angels or those exposures referencing them;
5. scenario-planning obligations and options as set out in documented and non-document hedging arrangements for fallen angels and/or close correlated financial instruments as well as in the case of zombie-bound debt;
6. carrying out stress-testing and reverse stress-testing of quantitative and qualitative assumptions and risk models relevant to point 1 to and including 5 above;
7. evaluating the resilience of other funding channels for issues if non-financial corporate issuers access to market-based finance becomes constrained due to widespread FAR as well as legal requirements to off-board corporate zombies due to regulatory requirements applicable to de-risking clients across a wide range of financial products;
8. reviewing context and timeliness of client/investor-facing disclosures so as to comply with regulatory and financial reporting requirements;
9. evaluating buying opportunities through direct purchases or other packaged products of those fallen angels that meet the purchaser's risk tolerance levels in a prudent RAF; and
10. planning for increased supervisory scrutiny from regulators but equally possibility of contentious disputes relating to investments in or management of fallen angels.

Financial market participants will want to also assess, in the (unwelcome) absence of a centralised database or analytics utility in this area that could provide harmonised transparency[7] for opaque exposures, may well want to consider how they compare notes with one another. This is particularly poignant for those firms that will want to proactively work with corporates (whether as fallen angels and/or zombies) to help them rehabilitate or alternatively manage exposure in syndicated situations or where there are systemic and/or systematic risks affecting financial services firms facing those fallen angels and/or zombies more generally.

## Outlook

Uncertainty on the economic outlook may cause a greater amount of fallen angels (and equally zombies – notably in the case potential for rising non-performing loan exposures) to indicate greater fragility, notably in a future downturn. Such trends may contribute (at different paces) to greater risk propagation and a need for financial services firms to adopt even more prudent management.

This is a priority area that the ECB-SSM continues to call for, including most recently in its Dear CEO Letter from 28 March 2022 in which BUSIs are under supervisory scrutiny to carefully (re-)consider their RAF adequacy and agility of governance, compliance, risk and legal measures as part of their systems and controls.

These priorities and supervisory expectations set by the ECB-SSM are likely to continue regardless of the age old adage in financial markets eventually materialising even, for contrarian investors at least, being turned on its head so that "what goes down must eventually go up". In certain sectors, fallen angels have a consistent history of outperformance versus the broader high-yield market over the long term. Part of this is that, despite its fallen status, they retain and thus exhibit structural characteristics of what was an investment grade issuance. This may yield a differentiated stream of returns compared to other strategies. As a consequence, a fallen angel may well be able to be rehabilitated and move to a (new) rising star status for those patient to manage that exposure.

To some extent the same may also hold true for corporate zombies – notably those willing to reform and consolidate – an area that some BUSIs may be less reluctant to push with certain types of corporates. In any

[7] Much in the same way as the European DataWarehouse has done in relation to driving increased market standardisation of data for the fields in which it is active as a Securitisation Repository as well as the loan level data repository for the Eurosystem.

event fallen angels and corporate zombies present compliance challenges for BUSIs and other market participants that the ECB-SSM expects to be managed but may also present a number of compelling options that contrarian investors would like to seize.

# About us

PwC Legal is assisting a number of financial services firms and market participants in forward planning for changes stemming from these proposals.

If you would like to discuss any of the developments mentioned above, or how they may affect your business more generally, please contact any of our key contacts or PwC Legal's RegCORE Team via de_regcore@pwc.com or our website.


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