



**BANK OF ENGLAND**



[CEO]

**Nathanaël Benjamin**  
**Executive Director**  
Authorisations, Regulatory Technology, and  
International Supervision  
Prudential Regulation Authority

**David Bailey**  
**Executive Director**  
UK Deposit Takers Supervision  
Prudential Regulation Authority

**Sarah Pritchard**  
**Executive Director**  
Markets  
Financial Conduct Authority

**10 December 2021**

**Dear CEO**

## **Supervisory review of global equity finance businesses**

### **Default of Archegos Capital Management**

In March 2021, the default of Archegos Capital Management family office (Archegos) resulted in over \$10 billion of reported losses across multiple firms. Following this significant event, the Prudential Regulation Authority (PRA), Financial Conduct Authority (FCA), and other global regulators have reviewed and assessed firms' equity finance businesses, including for those who were counterparties to Archegos, focusing in particular on counterparty risk management. Having concluded this work, we are writing to draw your attention to a number of significant cross-firm deficiencies that were identified.

The annex to this letter sets out the PRA's and FCA's main observations and expectations in the following areas:

- business strategy and organisation;
- onboarding and reputational risk;
- financial risk management controls and governance; and
- liquidation and close-out.

Our observations include weaknesses in the holistic management of risk across business units; narrow focus of onboarding arrangements and inadequate re-assessment of client relationships thereafter; ineffective and inconsistent margining approaches; and an absence of comprehensive limit frameworks.

Many of the deficiencies set out in this letter are not new and have been observed before.<sup>1</sup> In particular it is highly concerning that lessons from the Global Financial Crisis have not been learned sufficiently and that necessary changes to business and risk management practices have not been embedded in firms' operations. A number of the shortcomings are symptoms of a broader root cause. Their origins often stem from a risk culture in which frontline business executives fail to take accountability for ownership of risk in their organisation; where the independent risk function lacks standing; and where senior management incentives do not promote safe, sound, and sustainable outcomes for the firm.

---

<sup>1</sup> Including in communications such as (i) 'Observations on Risk Management Practices during the Recent Market Turbulence' (March 2008); and (ii) 'Risk Management Lessons from the Global Banking Crisis of 2008' (October 2009), by the Senior Supervisors Group of Financial Stability Board.

This episode demonstrates the importance of firms investing sufficiently in their risk management frameworks and controls infrastructure.<sup>2</sup> It further highlights the critical role of senior management in establishing and reinforcing an effective and appropriate internal risk culture.

While this particular event did not ultimately have financial stability consequences, it led to material losses for certain firms and demonstrated the effects of leverage in the non-bank sector on other counterparties and markets. The incident presented important lessons to learn for risk management in firms' equity financing businesses which are necessary to ensure the risks associated with non-bank leverage do not lead to financial stability issues in the future.

### **Required actions**

Given the impact of these issues and the importance we attach to their remediation, we expect you to carry out a systematic review of your equity finance business and its risk management practices and controls benchmarked against our findings set out in the annex below. While the observations set out in this letter are directly relevant to equity finance businesses and have been brought to light by the default of Archegos, we expect you to consider the highlighted themes more broadly across your sales and trading businesses, including but not limited to other forms of secured and synthetic financing activities, and to reference such work in your response. For the avoidance of doubt, your review should cover all major prime brokerage activity, including, to the extent that you provide them, fixed income and derivative prime brokerage services. You should also address our broader observations on risk culture in your reply.

You should report your findings to the PRA and the FCA together with detailed plans for remediation where relevant, by end of Q1, 2022. To ensure that any necessary improvements identified are made in a timely fashion, we expect you to consider reflecting progress when setting the variable remuneration of relevant senior executives. The PRA and FCA expect firms to designate one or more Senior Managers (where applicable) to be responsible for providing a response to this letter including a remediation plan, to the extent relevant. If you have any questions, or would like to discuss the scope of your internal assessment work further, please do not hesitate to get in touch with your supervision team.

Yours sincerely,

### **Nathanaël Benjamin**

Executive Director, Authorisations, Regulatory Technology, and International Supervision  
Prudential Regulation Authority

### **David Bailey**

Executive Director, UK Deposit Takers Supervision  
Prudential Regulation Authority

### **Sarah Pritchard**

Executive Director, Markets  
Financial Conduct Authority

---

<sup>2</sup> Requirements in respect of risk management are set out in various parts of the PRA Rulebook and FCA Handbook. Firms are directed, in particular to: (i) the high-level requirements in the Fundamental Rules of the PRA Rulebook requiring firms to have effective risk management systems and to control and organise their affairs responsibly and effectively; (ii) the Principles at PRIN of the FCA Handbook; and (iii) the rules in the FCA Handbook on Senior Management Arrangements, Systems and Controls (SYSC) to establish and maintain such systems and controls that are appropriate taking account of, amongst other things, the degree of risk.

## ANNEX

### 1. Business strategy and organisation

In a number of cases, we observed that equity finance business strategies lacked coherence, were opportunistic, or otherwise had not been rigorously assessed or challenged by senior management. Revenue growth objectives and new business acquisition targets were not adequately supported by necessary investments in risk management resources and appropriate infrastructure.

In some instances, equity finance franchises were fragmented, with similar activities split across different business units and locations, with separate management reporting lines. There were no clear criteria establishing where different client accounts should be onboarded or subsequently relationship-managed. As a result, separate business units, acting in silos and sometimes in competition, adopted different standards in areas such as margining, documentation, and contractual terms. Comprehensive ownership of risk both within the first and second lines of defence was often hampered by these fragmented organisational arrangements, with separate resourcing models for similar business activities, inconsistent approaches to risk monitoring, and disparate analytical tools and capabilities being observed across a number of firms.

Senior management should ensure that equity finance business strategies are vigorously evaluated and challenged on an ongoing basis, with appropriate prominence given to business expertise, infrastructure, resources, and risk control considerations, commensurate with revenue projections and growth aspirations. Where equity finance products and structures with similar risk profile are offered by more than one desk or business unit, firms should establish clear and detailed mandates for each of these businesses. Risk measurement, monitoring, and control frameworks, in both the first and second lines of defence, should be consistent and joined up across such business units, enabling a holistic approach to risk ownership and risk management.<sup>3</sup>

### 2. Onboarding and reputational risk

Firms had well-established Know Your Customer (KYC) and financial crime policies, practices, and approaches; however, we observed a variance in decision-making standards and methods across firms when assessing the reputational risk of client relationships, including in the case of Archegos, where the regulatory history of its founder had been widely reported. In a number of instances, there was no committee or senior management forum designated to consider and sign-off on client accounts where due diligence processes raised matters of reputational concern. In other cases, where such fora existed, there were poorly-defined expectations and procedures for re-assessing previous decisions upon changes in circumstances of existing accounts.

Onboarding arrangements were narrowly focused on KYC and financial crime objectives, and once a client had been onboarded, there was little or no follow-through from the initial reputational risk assessment into ongoing risk appetite calibration for an account. Where new reputational risk due diligence information was received, or independent credit risk assessments were updated, or variations in the risk profile of an account were noted, there was no process to combine dynamically these observations across disparate business and control groups and formally reconsider reputational risk and client selection assessments on an ongoing basis.

Firms should embed senior-level decision-making governance fora in their reputational risk and client selection processes, with escalation criteria clearly defined. These reputational risk processes should set out formal arrangements for holistic and dynamic re-assessment of client relationships on an ongoing basis. Firms should ensure there is adequate oversight of onboarding and reputational risk processes to ensure that the firm's policies and controls are operating effectively.

---

<sup>3</sup> Indented paragraphs set out PRA and FCA expectations of firms, in each relevant area.

### 3. Financial risk management controls and governance

#### 3.1 Documentation standards and contractual rights

Many contractual provisions in client agreements are based upon commercial decisions. However we noted that some firms had adopted sub-optimal protections for the risk management of certain types of client exposure profile. Instances of weaker documentation standards and contractual rights included clauses that restricted firms' ability to change margin terms post trade execution, or which hampered their capacity to take immediate actions upon identifying counterparty liquidity and credit concerns.

In some cases, different business units within the same firm had negotiated divergent agreements and contractual protections for similar products with comparable risk profiles.

Firms should ensure that they have consistent and robust policies and procedures for the negotiation of client agreements and contractual terms, with such terms being suitable for the risk profile of each client. These arrangements should define a risk appetite related to documentation, setting out standard contractual terms for different types of client account and relevant investment strategies, irrespective of business unit. Processes should include appropriate escalation and governance procedures for contractual arrangements that are outside of established risk appetite.

#### 3.2 Margining

Some firms had adopted static margining terms for clients' total return swap financing exposures. For relationship-based single stock equity finance activity, this methodology, whereby the Independent Amount is set as a fixed percentage of notional exposure at trade inception, generally provides inadequate protection to the firm.

Other firms employed dynamic margining methodologies, whereby the initial margin adjusted as the mark-to-market value of the underlying exposures changed, and further add-ons were applied to specific risk exposures. While dynamic margining arrangements were, in principle, more appropriate for this type of activity, in some cases reliance by firms on standard calibrations of their dynamic margin terms was misplaced, proving to be insufficiently sensitive to concentration risk. These firms did not adequately factor in the illiquidity characteristics of the portfolio and correlations of highly concentrated positions upon unwind.

Some firms were seen to employ different margining approaches, both static and dynamic, across different business units that offered similar products, with no effective standards controlling consistency of use.

Firms should ensure that the margin methodology used is appropriate for the risk profile of each client account. There should be clearly defined policies and procedures covering different types of margin methodology adopted by firms for products with a similar risk profile. In the first instance, firms should rigorously review any such differences in methodologies, and their suitability for use in specific agreed circumstances. Different business units offering similar products should apply a consistent margining methodology and risk appetite unless specific exemptions are agreed, based upon legitimate risk management grounds.

Margin models should be appropriately calibrated, reflecting effectively different exposure profiles including concentration risk and illiquidity of each client portfolio. Firms should establish a formal risk appetite for deviations from their standard margin terms, and put in place arrangements to measure and monitor exposures against this risk appetite. This risk appetite, measurement and monitoring process should be independently owned by the second line of defence. Firms should define and agree formal actions and escalations with respect to any breach of this appetite.

### 3.3 Ongoing due diligence and disclosures

Firms did not require, through contractual provisions, routine disclosure of the wider financing relationships and investment exposures of their hedge fund and family office clients. Some clients provided little, or extremely limited informal disclosures of their broader risk profile to firms' independent credit risk management functions. This lack of transparency hampered firms' abilities to understand properly the concentration and liquidity risk profile of their own risk exposures. In several instances we observed that firms did not formally distinguish between accounts with lesser or greater transparency arrangements when making risk management decisions, including the calibration of margin requirements.

Whilst there are multiple sources of public disclosure of economic and ownership interests of equities, this information was not systematically used in the ongoing monitoring of wider client risk exposure profiles by a number of firms.

Firms routinely required Net Asset Value disclosures from both hedge fund and family office accounts, however many failed to consider or determine whether such information was independently prepared or verified. Furthermore, there was limited formal evidence gathered or proof sought of liquid assets held by client accounts away from the firm, including the format and composition of such assets.

Firms should systematically review their risk appetite for accounts that do not provide wider disclosure of their investment strategy, leverage and financing relationships. Risk management practices, including client onboarding decisions, setting of risk limits and margin requirements, should formally take into account the level of disclosures provided by individual accounts. Firms should review their use of public sources of information covering economic and ownership interests in securities, ensuring that their approach is sufficiently comprehensive. Furthermore, firms should assess their ongoing account due diligence processes to ensure that adequate proof, supporting assurances and verification is sought with respect to client financial disclosures.

### 3.4 Risk management and governance

For the larger, more established equity finance businesses, the first line of defence typically employed a specialist in-business risk team to support front office risk ownership. In some circumstances, this in-business risk team was attached to the prime brokerage business and had limited, or no, formal responsibility for risks in other areas which had exposures to similar products and structures. For smaller or less established businesses, there was no specialist in-business risk resource. As a result, dedicated or specialist resources were not available to support risk ownership or to inform risk-taking decisions within the first line of defence.

Independent risk management groups in the second line of defence typically set a formal risk appetite using a limit framework. This group was responsible for ongoing credit due diligence assessments, exposure measurement, monitoring, and adherence to the limit framework. In a number of cases, this group was seen to lack the stature necessary to control risk effectively. Escalation procedures were ill defined, management reporting was insufficiently timely and targeted, and growing exposure concerns and risk appetite exceptions were not flagged clearly. As a result, risk reporting to formal governance bodies and committees, both at the functional and legal entity level, lacked clarity and the necessary speed, in turn limiting the effectiveness of these fora. Senior management oversight within individual legal entities was similarly rendered less effective by these fundamental escalation and reporting deficiencies. Moreover, gaps were observed in local management accountability and the interaction between functional and legal entity reporting lines.

Risk management resources supporting risk ownership within the first line of defence should be proportionate to the size and complexity of the business activity. Where no dedicated in-business risk resources are employed, firms should ensure that the scale, nature and complexity of their business activities are appropriately calibrated to the front office's capacity and capabilities. Where firms offer similar products and structures across different business units, they should ensure that in-business risk resources, where deployed, support risk ownership holistically across all such units.

Firms should review their risk culture and assess the stature and prominence of their independent risk management function. Firms' boards should satisfy themselves that this function has sufficient investment, tools, resources, expertise and status, to ensure its impact on decision making. Furthermore, there should be appropriate checks and balances in place to ensure that the role of independent risk management within the firm is adequately supported and reinforced by senior management on an ongoing basis.<sup>4</sup>

Firms should review their escalation policies and procedures within both the first and second lines of defence to ensure that escalation triggers for exceptions to risk appetite are clearly articulated and followed up in a timely manner. Management information supporting these escalations should be formally assessed by senior management and all relevant governance fora as fit for purpose. Firms should review legal entity booking frameworks, accountability and controls to ensure that clearly defined and well-understood roles and responsibilities are established for all relevant business managers, local legal entity control functions, registered Senior Managers and Committee structures.<sup>5</sup>

### 3.5 Limit frameworks

Firms' independent risk functions generally used a Potential Exposure model to set formal counterparty risk limits and to monitor exposures. A number of instances were observed where these models had serious data quality issues or other limitations that undermined their effectiveness. Limit breaches were in some cases ignored. Potential Exposure measurements did not, by definition, capture extreme tail events relevant to highly concentrated portfolio compositions such as in the case of Archegos. Nevertheless, in certain instances independent risk management functions relied solely on such Potential Exposure limits to control and constrain client exposures.

A number of firms applied stress scenarios to client portfolios or employed a supplementary stress loss limit framework. However, in a number of instances the stress loss models failed to assess adequately portfolio concentration risks. Furthermore, in some cases, independent risk management functions only carried out ad hoc monitoring of outputs from stress loss models that were managed and controlled by the first line of defence, without clearly articulated links to the firms' risk appetite framework.

A number of firms had established margin loan debit caps within their cash prime brokerage portfolios, thereby regulating the total amount of financing extended to individual clients. However, few firms had put in place gross market value limits for individual clients as a complementary measure to constrain their synthetic financing exposures. Given the shortcomings in existing counterparty risk measurement tools and limit frameworks, absent these additional controls, synthetic financing exposures could grow to levels ultimately in excess of risk appetite.

Firms should ensure that their independent counterparty risk limit and systematic exposure monitoring frameworks are sufficiently comprehensive to adequately represent their risk appetite for all types of client portfolio exposure, including highly concentrated positions under stress.

Sufficient resources and focus should be assigned to data quality issues and other modelling limitations in these risk measurement and monitoring tools, so that the outputs from these risk models are reliable.

---

<sup>4</sup> The PRA sets rules on the responsibilities of boards in promoting safety and soundness. Firms are directed in particular to the requirements for banks and PRA-designated investment firms set out in the General Organisational Requirements Part of the PRA Rulebook. PRA expectations in respect of boards (including oversight of risk management, risk appetite, and internal controls) are set out in Supervisory Statement (SS) 5/16, 'Corporate Governance: Board Responsibilities'.

<sup>5</sup> The PRA's requirements on senior managers at banks and PRA-designated investment firms are set out in the Allocation of Responsibilities, Senior Management Functions and Conduct Rules Parts of the PRA Rulebook. The PRA sets expectations in respect of these requirements in SS 28/15, 'Strengthening individual accountability in banking'.

#### **4. Liquidation and close-out**

When rapidly growing their secured and synthetic financing risk exposures to individual clients and underlying reference assets, some firms did not consider adequately their own equities franchise distribution capabilities in liquidating collateral or hedges upon a client default event.

Those firms that had established default and liquidation playbooks, with clearly defined and understood roles and responsibilities, were better positioned to manage a liquidation event.

Firms should ensure that exposures are scaled and calibrated to their own capabilities to exit risk positions upon default of a counterparty. Furthermore, firms should put in place a default playbook setting out detailed scenarios, roles, and responsibilities that would support any future close-out and liquidation event.