

The Failure of Archegos Capital Management: Estimating Potential Spillovers to ASEAN+3 Financial Systems¹

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“Gold is money, everything else is credit.”

~ J.P. Morgan
American banker
Testimony to U.S. Congress, 2012

I. Introduction

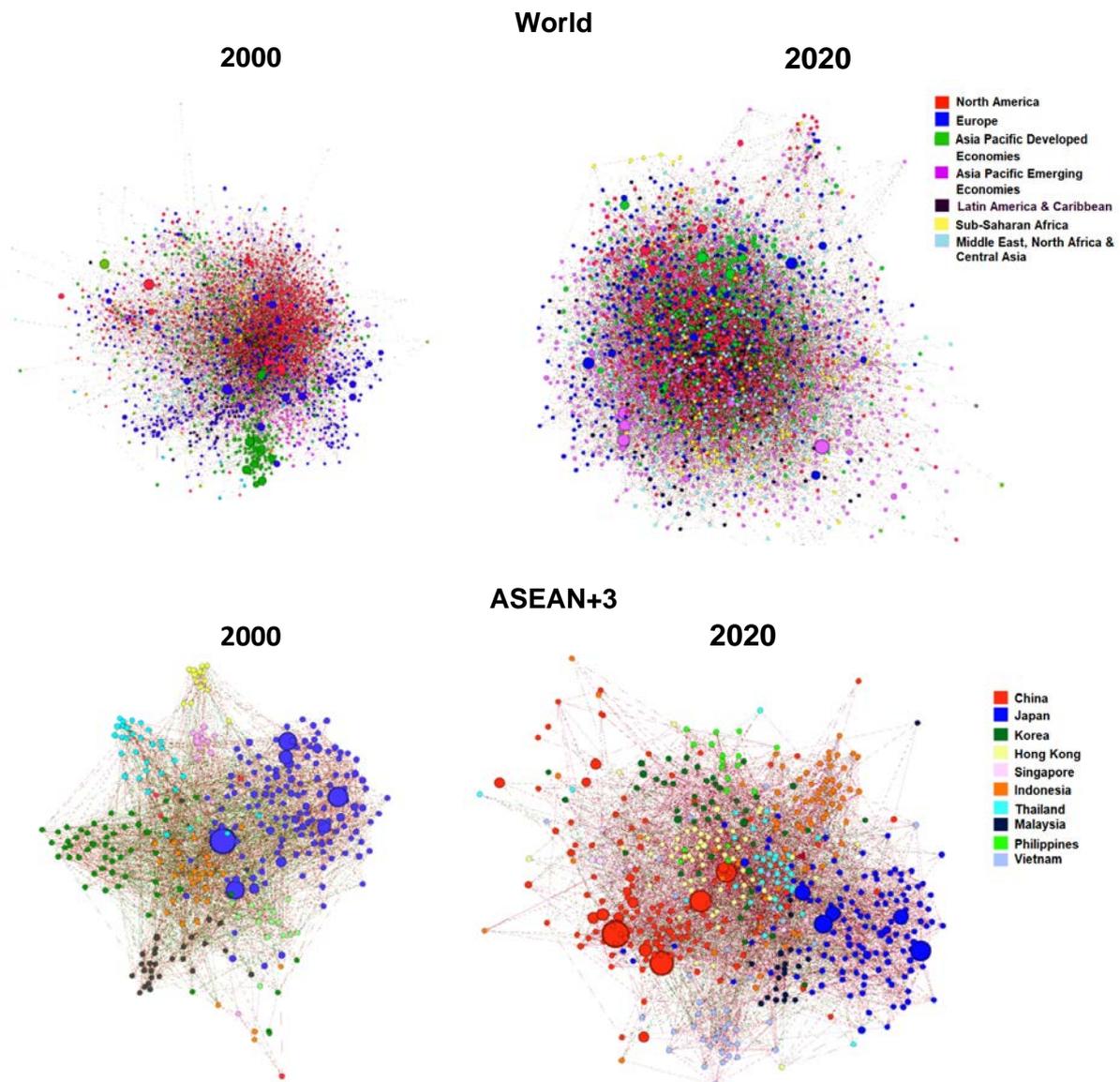
1. [archēgos /ar-khee-gos; ar-khay-gos/ *noun* Greek for leader; pioneer]. **The default by US private investment firm, Archegos Capital Management (ACM) sent shudders through global financial markets.** On March 26, 2021, ACM’s inability to meet its margin calls resulted in a fire sale of stocks by its prime brokers, estimated to be in excess of USD 30 billion ([Patrick and Narioka 2021](#)).² As a warning that the lessons from the global financial crisis have not been learned, the ACM incident is yet another example of how strategies that combine high leverage with complex, opaque financial instruments could disrupt markets and impact a wide network of financial institutions when they go bad. Many of ACM’s lenders had not realized until it was too late that they were all holding similar positions, wherein a collective sell-off would exacerbate a downward spiral in the value of their portfolios.

2. **The ACM episode involved some of the world’s largest banks, with potential spillover implications, and has hit at least two of them particularly hard.** They are Nomura, Japan’s eight largest bank with assets amounting to USD 405 billion, and Credit Suisse—designated one of the 30 global systemically important banks (G-SIBs) ([Financial Stability Board 2020](#))—with total assets of USD 910 billion. Within increasingly interconnected global and regional financial systems (Figure 1), pressure on banks’ balance sheets could have significant ripple effects, which could then push other financial institutions into distress. *In this note, we estimate the potential spillovers from the ACM default to ASEAN+3 financial systems, to determine if the event poses systemic risk to the region.*

¹ Prepared by Li Lian Ong and Wei Sun (both Financial Surveillance); reviewed and authorized by Hoe Ee Khor (Chief Economist). The views expressed in this note are the authors’ and do not necessarily represent those of the AMRO or AMRO management. The authors would like to thank Toshinori Doi, Wenxing Pan, and Prashant Pande for useful comments.

² A prime broker is an investment house that services hedge funds by facilitating trades and providing margin lending, among other services.

Figure 1. Financial Deepening and Integration



Sources: Credit Research Initiative of the National University of Singapore; [Sun \(2020\)](#); and [AMRO \(2021\)](#).

Note: Each node represents a listed financial institution (FI). The size of the node represents the magnitude of the FI's liabilities. The color of the node denotes its economy/region of domicile. Two nodes are connected with an edge if there is a non-zero correlation between the default risks of the two institutions. The thickness of the edge represents the strength of the default correlation.

II. Background

3. **ACM was reportedly running highly leveraged long-short strategies, employing derivative instruments that obscured its true exposures from its lenders.** ACM had purchased complex swaps from banks, known as contracts-for-difference (CFDs),³ which allow buyers to place directional bets on the prices of securities without actually buying or selling the underlying instruments. Those contracts, brokered by the major banks, enable a buyer to realize the profits and losses from a portfolio of stocks or other assets in exchange for a fee—when the price of a security goes up, the seller pays the buyer the difference, and vice versa. In ACM's case, the payments appear to have been correlated to a basket of

³ See <https://www.contracts-for-difference.com/strategies/Long-short-portfolio.html> for an explanation on long-short strategies and CFDs.

shares. CFDs also allow investors to take "leveraged bets," that is, borrow money from the banks at a fraction of the cost of the underlying asset(s), of around 10–20 per cent.

4. **The use of the derivatives also meant that ACM did not have to declare its position to US regulators.** Under US Securities Exchange Commission (SEC) regulations, investors who acquire more than 5 percent of equity securities in a US publicly-listed company must disclose their holdings and subsequent transactions. ACM was able to stay under the SEC's radar even though it was estimated to have exposures of more than 10 percent to the shares of several companies, which would usually subject the investor to additional disclosures ([Chung and Patrick 2021](#)). ACM's holdings were particularly difficult to monitor given that the positions were taken through multiple prime brokers.

5. **ACM came under pressure when some of the stocks in its "basket" began to decline in the days leading up to the default as a result of an unfortunate confluence of events.** ACM was said to have held concentrated long positions in media companies (e.g., Discovery, Farfetch, ViacomCBS), and US-listed Chinese technology stocks (e.g., Baidu, GSX Techedu, IQIYI, Tencent Music). On March 24, ViacomCBS announced that it was looking to raise capital of between USD 2.65–3.06 billion, which set off a sharp slide in its stock price ([Walton 2021](#)). Separately, the rollout by the SEC on March 24 of a law that would delist foreign firms for failing to comply with US auditing standards likely caused the sharp decline in US-listed Chinese stock prices ([Global Times 2021](#); [Reuters 2021a](#)).

6. **As the stock prices fell, ACM was faced with margin calls that it could not meet.** In addition to Credit Suisse and Nomura, ACM reportedly used at least half a dozen other prime brokers, including Deutsche Bank, Goldman Sachs, Mitsubishi UFJ, Morgan Stanley, UBS, and Wells Fargo—all G-SIBs. The default on March 26 sparked the rapid liquidation, known as block trades, by many of ACM's lenders of the names they held on behalf of ACM, leading to a collapse in those prices (Figure 2). Goldman Sachs reportedly sold USD 6.6 billion worth of shares of Baidu, Tencent Music and Vipshop Holdings, before the US market opened on March 26, followed by a selldown of USD 3.9 billion worth of shares in ViacomCBS, Discovery, Farfetch, iQIYI and GSX Techedu ([Reuters 2021b](#)).

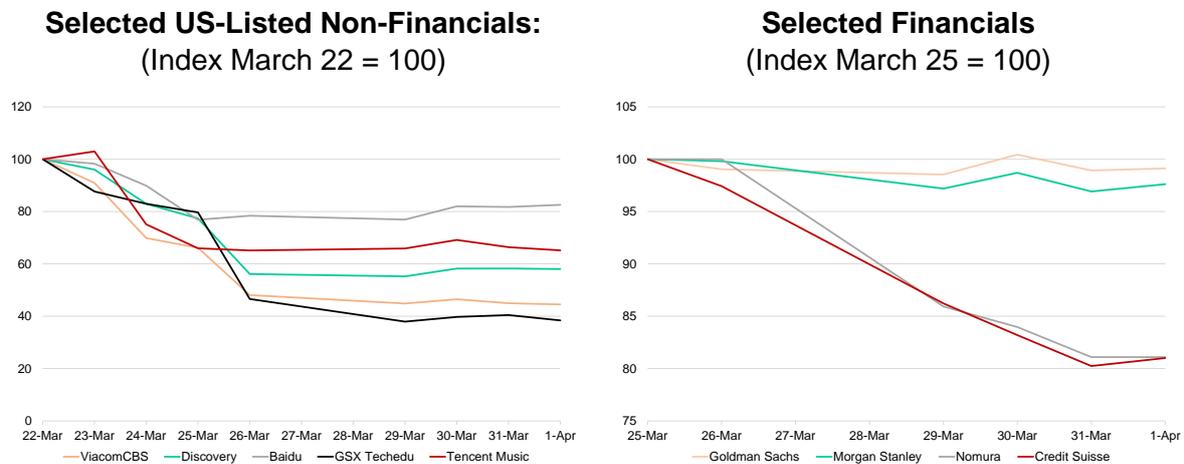
7. **While most lenders were ostensibly able to avoid massive losses, Nomura and Credit Suisse were slow to exit and appear to have been left holding the bag.** Banks' losses are estimated at between USD 6–10 billion, with Credit Suisse and Nomura the most affected (Figure 2). Nomura indicated that the amount of its claim against the (then unnamed) client was approximately USD 2 billion based on market prices as of March 26; Credit Suisse has since revealed a USD 4.7 billion loss. The stock prices of Credit Suisse and Nomura collectively lost USD 9 billion in value in the immediate aftermath ([Reuters 2021c](#)).

III. Spillovers

8. **The dust has yet to settle around the ACM implosion and the final tally of losses to its individual lenders remains unknown.** While analysts do not anticipate that the event will become a "Lehman 2.0," markets remain nervous about whether the full extent of ACM's "wipeout" has been realized or whether there could be more nasty surprises to come (Global Times, 2021). Indeed, ACM's network of lenders have not been fully disclosed, and even among those who have revealed the extent of their losses to date, more may be forthcoming. Even the size of ACM's at the time of the default has been subject to speculation—with some estimating **total** assets of around USD 10 billion ([Maley 2021](#)), while

others suggesting **net** assets of USD 20 billion ([Schatzker, Natarajan, and Burton 2021](#)), and actual exposures of between USD 50 billion ([Williams 2021](#)) and USD 100 billion or more ([Burgess 2021](#); [Naysmith 2021](#)).

Figure 2. Impact on Stock Prices from ACM Default



9. **We analyze the potential spillovers from the shocks to the balance sheets of Credit Suisse and Nomura to the ASEAN+3 region.** The general lack of publicly available information on counterparty risks among financial institutions means that their interrelationships would have to be inferred via other methods. We apply AMRO's *Systemic Network of World Expected-Losses of Institutions* ("SuNWEI") model, which uses co-movements of probabilities of default (PDs), to measure financial interconnectedness ([Sun 2020](#)). The model allows us to estimate additional expected costs from any further shocks to the two banks, namely, the losses that are: (1) **on top of** the direct credit costs already booked prior to the ACM episode; and (2) attributable to financial interconnectedness, that is, the costs to the wider financial system beyond the direct damage to individual banks' asset quality.

10. **The extent of significant counterparties through first- and second-order connections are initially estimated.** They number 48 for Credit Suisse, of which a handful are in the Asian region, and 30 for Nomura, whose main network appears to be largely within the Japanese banking system (Figure 3). The financial networks become denser once the second-order interconnections are considered, highlighting the much wider potential for contagion if any **further** shocks to the two banks were to reverberate further afield (Figure 4).

11. **The fallout has raised questions about whether these banks fully grasp the risks taken by similar clients, including their transactions with other banks.** Although the PDs of Credit Suisse and Nomura remained relatively stable following their Archegos revelations, likely because the losses could be absorbed by earnings, we stress test their **interconnections** for possible scenarios where additional problems arise. We apply several benchmark shocks to provide a reference for the outcomes: (1) a move from investment to speculative grade which, historically, has increased PDs by 20 basis points; (2) the magnitude of stress equivalent to that experienced by Asia-Pacific banks during the global financial crisis (GFC), which increased PDs by 100 basis points; and (3) the magnitude of stress equivalent to that of the Asian financial crisis (AFC), which increased PDs by 400 basis points.

Figure 3. Global Financial Networks: First-Order Interconnectedness

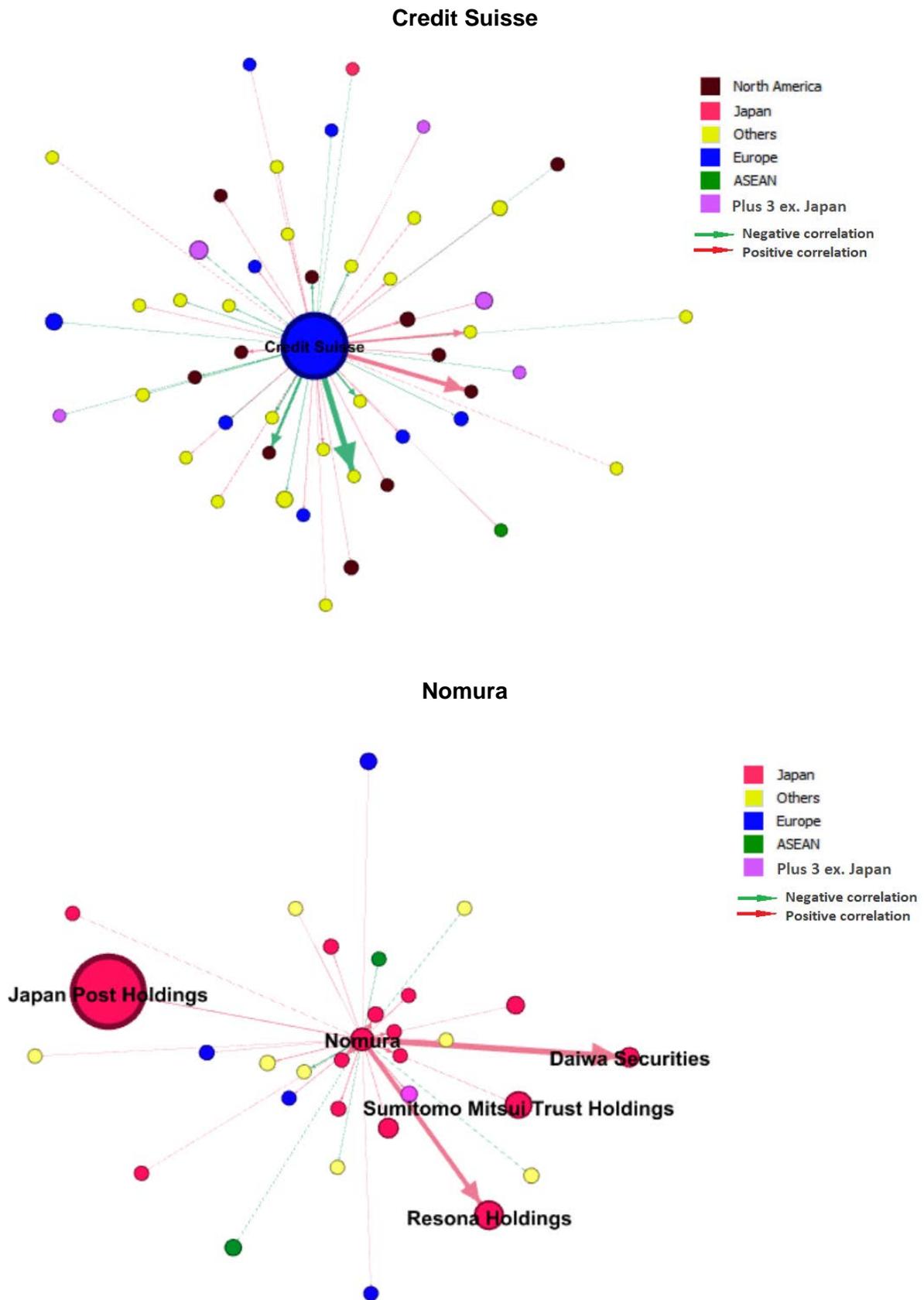
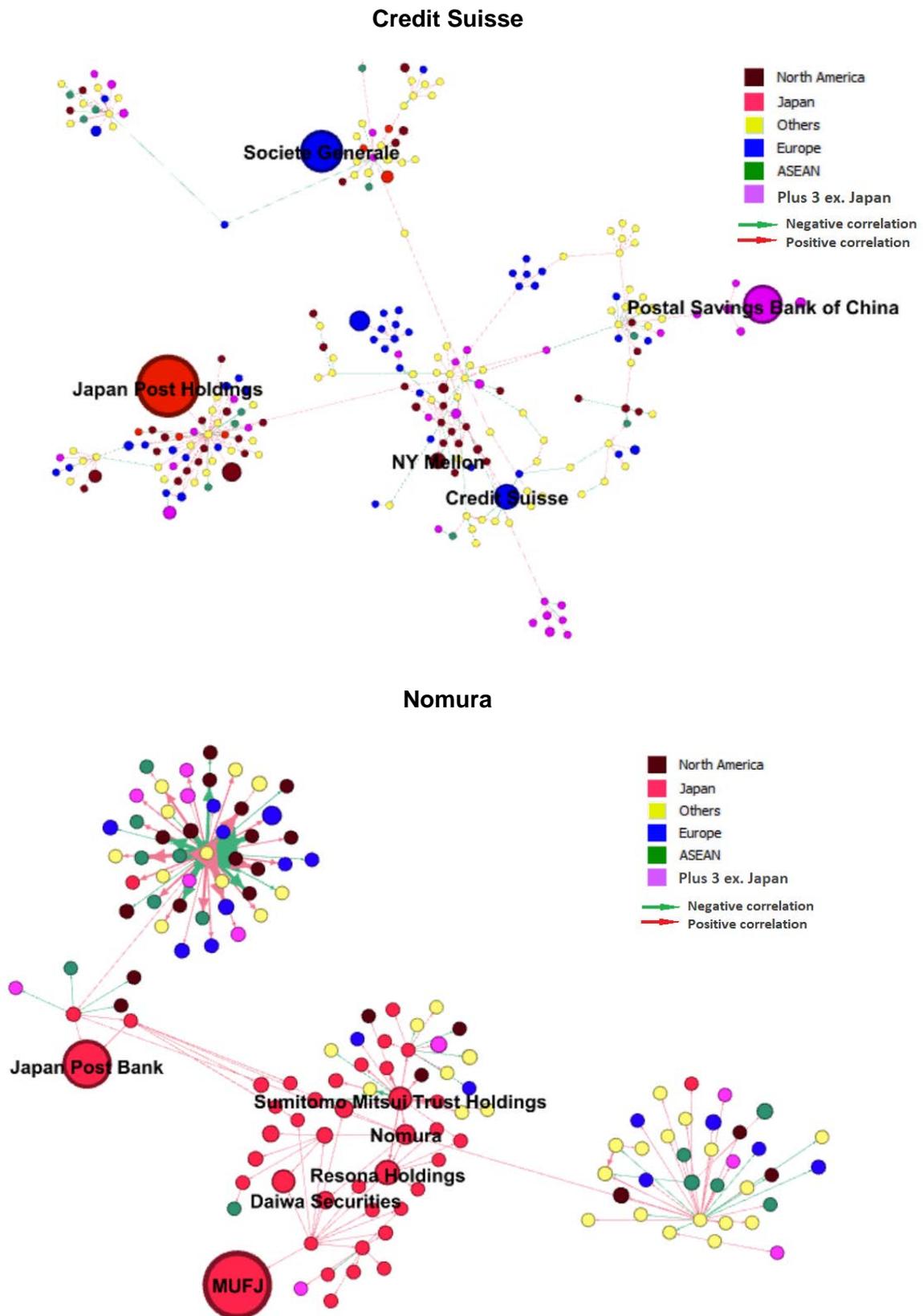


Figure 4. Global Financial Networks: Second-Order Interconnectedness



Sources: Credit Research Initiative of the National University of Singapore; and authors' calculations.

12. **The resulting estimates suggest that ASEAN+3 financial systems would be largely insulated against contagion from any further stress to the two key banks in the ACM saga, but could be exposed to direct credit risks.** Specifically, Credit Suisse would pose a much bigger threat through the size of its aggregate borrowings from its direct creditors—some of who may be Asian financial institutions—than through its interconnectedness, including within Switzerland (Table 1). An AFC-equivalent size shock to PDs could result in expected losses amounting to 2.8 percent of Swiss GDP, but a GFC-equivalent size shock would cost less than 1 percent of GDP. In contrast, some shock scenarios could see Nomura triggering greater contagion through Japan’s financial system relative to the expected losses to its direct creditors. Even so, an AFC-equivalent size shock to Nomura would only result in expected losses of less than 0.4 percent of Japan’s GDP.⁴

IV. Conclusion

13. **Firms like ACM, which manage the wealth of individuals or families, have the potential to become systemically important for financial stability.** According to [UBS \(2020\)](#), 121 of the largest single-family offices accounted for a net worth of around USD 142 billion, while [Beech \(2019\)](#) had previously estimated that 7,300 family offices worldwide had total assets under management of USD 5.9 trillion. In the wake of the ACM failure, several financial stability concerns have come to the fore: With bank balance sheets globally already weakened by the rising credit risks from the COVID-19 pandemic, could additional losses manifest as the dominoes from the ACM event fall? Who else may be holding the balance of the default losses and were the stock sell-offs able to cover most of those losses? Have other unrelated financial institutions taken large mark-to-market hits to their portfolios and will any associated problems be revealed in the weeks and months ahead?

14. **The ACM episode shows that the twin threats to financial stability from opaque financial instruments and high leverage remain alive and well.** ASEAN+3 financial institutions appear to have avoided any significant fallout from this particular event—at least to date—and seem resilient to further shocks to the two protagonist banks. However, regional financial systems continue to be exposed to spillovers that may be beyond their control and outside their purview in an increasingly interconnected global financial system. In this regard, the only mitigants may be that financial supervisors and regulators must ensure that their financial institutions remain well buffered, and that they adopt strong risk management practices, and eschew risky, non-transparent transactions.

⁴ Our analyses are up to second order contagion, where the large proportion of increases tend to occur, so the estimated collateral damage amount would be larger.

Table 1. Scenario Analysis: Incremental Expected Credit Losses and “Collateral Damage” to ASEAN+3 Financial Systems from Further Shocks to Credit Suisse and Nomura
(Millions of US dollars unless indicated otherwise)

Loss Component	Credit Suisse			Nomura		
	20 bps	100 bps	400 bps	20 bps	100 bps	400 bps
Collateral damage due to contagion from source entities						
(1) To own financial system	0.1	0.2	0.3	1,378.5	3,659.1	6,698.1
(2) To Plus 3 financial system (excluding own)	8.8	21.8	36.5	22.4	56.1	95.2
(3) To ASEAN financial system (excluding own)	0.1	0.2	0.3	0.2	0.4	0.7
(4) To rest of world financial system	15.0	37.2	62.3	16.8	41.6	69.8
(5) Expected credit loss from source entities to direct creditors	1,054.9	5,274.7	21,098.9	459.7	2,298.3	9,193.2
Total loss as percentage of 2020 domestic GDP:						
((1)+(2)+(3)+(4)+(5))/GDP	0.14	0.71	2.83	0.04	0.12	0.32

Sources: Credit Research Initiative of the National University of Singapore; and authors' calculations.
Note: bps = basis points.

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