

The Winds of War: Spillovers from the Russia-Ukraine Conflict to ASEAN+3 Banking Systems¹

March 9, 2022

"Truth has anciently been called the first casualty of war. Money may, in fact, have priority."

~ John Kenneth Galbraith Economist, 1908–2006

I. Introduction

1. **On February 24, 2022, Russian President Vladimir Putin announced a "special military operation" in Ukraine and launched missiles into the country.** On February 26, Western governments banned several Russian banks from the Society for Worldwide Interbank Financial Telecommunication (SWIFT) international payment system and—together with Japan—also blocked the Central Bank of Russia (CBR) from accessing a substantial portion of its USD 643 billion of foreign exchange reserves. The SWIFT system, which is currently used by more than 11,000 financial institutions in over 200 countries, allows banks to quickly and safely send large volumes of money to each other. Russian financial institutions typically handle about USD 46 billion worth of foreign exchange transactions per day, about 80 percent of which are denominated in US dollars, and removal from SWIFT will cut them off from most of their financial transactions worldwide.

2. **Two major Russian banks, representing half of Russian banking sector assets, were among the first to be sanctioned by the West.** Sberbank, which has the largest market share of savings deposits and one-third (USD 487.5 billion) of all banking assets in Russia, was cut off from processing payments through the US financial system; VTB Bank, which is the second largest financial institution, holding 20 percent (USD 280.8 billion) of the country's banking assets, was cut off from SWIFT. Sanctions were also imposed on several other Russian banks, as well as wealthy Russian families close to the Putin administration.^{2,3}

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² See US Treasury at <u>https://home.treasury.gov/news/press-releases/jy0608</u>.

³ See European Commission at <u>https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-ukraine-crisis/history-ukraine-crisis/</u>.

A total of 13 Russian financial institutions (FIs) and non-FIs critical to the Russian economy—including those in oil and gas, electricity, mining, transportation, and telecommunications—have also been restricted from raising funds through the US market.

3. The CBR stated that it had the necessary resources and tools to maintain financial stability and ensure the operational continuity of Russia's financial sector.

For payments within Russia, the CBR can use its own network—the System for Transfer of Financial Messages (STFS). However, it can no longer provide foreign currency liquidity to support its banks. Bank runs are occurring in Russia and at Russian banks in Europe (Turak 2022), with the European Central Bank ordering the closure of Sberbank Europe, and the takeover of its operations in Slovenia and Croatia by domestic banks (Murphy and Sitosucic 2022). The CBR has more than doubled its key interest rate to stabilize the RUB; and some capital controls have been introduced to limit the amount of money that can leave the country.

4. This note analyzes the potential spillovers to ASEAN+3 banking systems from the international sanctions on Russia. ASEAN+3 banks could be affected through several channels:

- **ASEAN+3 banks with operations in Russia.** There could be spillbacks to the respective banking groups if the loan books were to deteriorate sharply.
- **Russian banks operating in the ASEAN+3.** The affected Russian bank branches and/or subsidiaries could become illiquid and be unable to honor deposits and/or roll over loans within the region.
- **ASEAN+3 banks' cross-border lending to Russian non-financial corporations.** The region's parent, subsidiary or branch banks could have provided cross-border credit to Russian firms that are being squeezed by the sanctions.
- **ASEAN+3 banks' cross-border borrowing from Russian entities.** The region's banks could be dependent on Russian lenders to roll over their loans to ensure sufficient liquidity.
- **ASEAN+3 banks with international financial interconnections.** Asian banks could be indirectly affected via the impact of the sanctions on other international banks to which they have exposures.

II. Implications for ASEAN+3

5. **ASEAN+3 banks have been operating in Russia for more than a decade.** China, Japan and Korea each have between two to four banks with businesses in Russia (Table 1), largely to serve as the bridge for their domestic companies in Russia, including export and import businesses. These banks are relatively important within their domestic banking systems (all but one with more than 5 percent of banking system assets). However, the Russian exposures are small for the vast majority, each amounting to less than 0.1 percent of their own assets; shares for the smaller banks are slightly larger, albeit still well below 0.4 percent. Some of these countries have already put in place measures to mitigate any adverse effect, in preparation for a worst-case scenario:

- **China:** The existing Cross-Border Interbank Payment System (CIPS) is able to settle international claims in CNY and run on an independent messaging network (Bloomberg 2022).
- **Japan:** Banks have embarked on gathering of information and conducting simulations to assess their resilience (The Japan Times 2022).
- **Korea:** Banks have stepped up surveillance and put risk management plans in place. KEB Hana Bank has set up a response team to monitor the Russian banks that have been placed on the US Specially Designated Nationals and Blocked Persons List, while Woori Bank has set up a corresponding contingency plan (Yi 2022).

Country	Financial Institution/ Holding Company	Bank Total Assets	Share of Bank's Total in Domestic Banking System	Bank Assets in Russia	Share of Bank's Assets in Russia Relative to Own Assets
	(Establishment year)	(USD billion)	(Percent)	(USD million)	(Percent)
China	Industrial & Commercial Bank (2016)	5,103	10.4	1,086	0.021
	Bank of China (1993)	3,734	7.6	1,034	0.028
	China Construction Bank (2015)	4,305	8.8	329	0.008
	Agricultural Bank of China (2014)	4,163	8.5	174	0.004
Japan	Mizuho Financial Group (2008)	2,038	9.6	1,193	0.064
	Mitsubishi UFJ Financial Group (1992)	3,247	15.2	1,104	0.034
	Sumitomo Mitsui Financial Group (2005)	2,191	10.3	1,039	0.047
	SBI Holdings (2017)	65	0.3	215	0.331
Korea	KEB Hana Bank (2014)	364	6.8	809	0.222
	Woori Bank (2008)	344	6.5	353	0.103

Table 1. ASEAN+3: Banks with Presence in Russia, as of End-2020

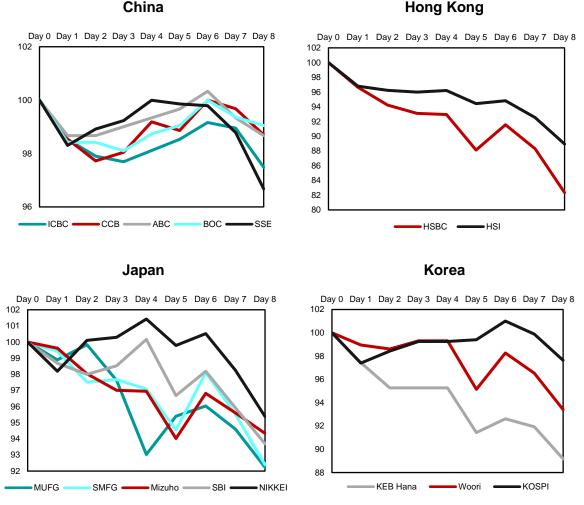
Sources: BankFocus; IMF; and authors' calculations.

6. **Investor sentiment toward ASEAN+3 banks with presence in Russia dipped in the days following its attack on Ukraine.** Their stock prices underperformed relative to the respective stock market indices, as markets continued to digest new information on the sanctions and their potential implications. While still below pre-assault levels, Chinese banks have since outperformed the Shanghai Stock Exchange Composite Index; however, the bank stock prices in Hong Kong, Japan, and Korea have continued to adjust downward, more so than the corresponding stock market indices (Figure 1).

7. **Conversely, VTB Bank is the only Russian bank with any obvious presence in the ASEAN+3 region.** It has operations in China, Singapore, and Vietnam, among the 18 countries around the world in which it has a physical presence (Table 2). It has a branch in China and in Singapore, and a joint venture in Vietnam. VTB operations in China and Vietnam are involved in cross-border transactions, which include trade and investment, while the branch in Singapore is more of a holding company. The Russia Joint Venture Bank in Vietnam does not appear to be systemic—it was ranked number 45 in terms of size in 2019, with VND 19.5 trillion (USD 840 million) in assets—equivalent to 0.13 percent of total banking sector assets, or 0.26 percent of GDP—and VND 10.1 trillion (USD 436 million) in deposits. The China branch has access to the China Foreign Exchange Trade System (CFETS).

Figure 1. ASEAN+3 Banks with Presence in Russia: Stock Prices Relative to Stock Market Index

(Index, 23 Feb 2022=100)



Sources: National stock exchanges: and authors' calculations.

China

Note: Bank stock prices are normalized and adjusted for their respective national stock indices. Japan is normalized against February 22, 2022, given that February 23, 2022 was a public holiday. Only business days are considered in the analysis. ABC = Agricultural Bank of China; BOC = Bank of China; CCB = China Construction Bank; ICBC = Industrial and Commercial Bank of China; HSBC = Hongkong and Shanghai Banking Corporation; HSI = Hang Seng Index; KOSPI = Korea Composite Stock Price Index; MUFG = Mitsubishi UFJ Financial Group; NIKKEI = Nikkei 225 Index; SMFG = Sumitomo Mitsui Financial Group; SBI = SBI Holdings; SSE = Shanghai Stock Exchange Composite Index.

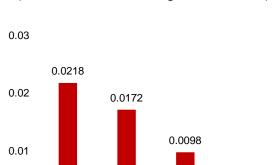
8. Reported ASEAN+3 cross-border claims on and liabilities to Russia appear to be negligible. Of the four member banking systems that have been identified, Korea has the largest claims, amounting to just over 0.021 percent of its banking sector assets, followed by Japan, with claims equivalent to 0.017 percent of bank assets (Figure 2). Conversely, Hong Kong banks have the largest obligations to Russia, amounting to 0.094 percent of the former's banking assets, followed by Korea at 0.004 percent (Figure 3).

Country	Bank	Business Function
China	VTB Bank branch has had a full banking license to operate in China since 2008.	The bank's business activities include conducting both domestic and cross-border transactions in various currencies, including the CNY, EUR, RUB, USD. Also, the bank is a member of the CFETS and is a market maker for RUB trading. It also has considerable experience in direct CNY/RUB conversion, as well as in settlements on foreign trade contracts in both currencies.
Singapore	VTB Capital is a wholesale bank and has been registered in Singapore since 1971.	The bank has a wholesale banking license and could engage in the same range of banking businesses as full banks, except SGD retail banking activities.
Vietnam	Russia Joint Venture Bank (VRB) is a joint venture between Bank for Investment and Development of Vietnam (BIDV) and Bank for Foreign Trade of Russia (VTB). The bank has been operating in Vietnam since 2006.	The company provides consultancy and information services, arranges investment capital, as well as conducts consumer and business banking. It also provides financing for bilateral trade and investment activities.

Table 2. Russian Banks with Presence in the ASEAN+3

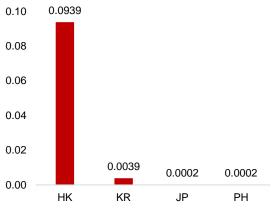
Sources: Monetary Authority of Singapore; Russia Joint Venture Bank; and VTB Bank, Shanghai branch.

Figure 2. ASEAN+3 Banks: Cross-Border Claims on Russia



(Percent of own banking sector assets) (Percent of own banking sector assets)

Figure 3. ASEAN+3 Banks: Cross-Border Liabilities to Russia



(Percent of own banking sector assets)

Sources: BIS; IMF; and AMRO staff calculations. Note: KR = Korea; JP = Japan; HK = Hong Kong; PH = Philippines.

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Sources: BIS; IMF; and AMRO staff calculations. Note: KR = Korea; JP = Japan; HK = Hong Kong; PH = Philippines.

III. Interconnectedness

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PH

9. We analyze the potential spillovers from shocks to the balance sheets of Sberbank and VTB Bank 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. We apply AMRO's Systemic Network of World Expected-Losses of Institutions (SuNWEI) model, which uses co-movements of probabilities of default, to measure financial interconnectedness (Sun 2020). The model allows us to estimate the expected losses from shocks to the two banks, which are attributable to:

- direct credit exposures, on top of the direct credit costs already booked as of end-January (prior to the imposition of sanctions on February 24, 2022); and
- financial interconnectedness, that is, the costs to the wider financial system beyond the direct damage to individual banks' asset quality.

10. The distribution of key counterparties through first- and second-order connections are initially estimated. First-order connections appear to be well diversified across the various regions (Figure 4). The financial networks become significantly denser once second-order interconnections are considered—much more so for VTB bank compared to Sberbank—highlighting the greater potential for contagion if shocks to the two banks were to reverberate further afield and bring systemically important financial institutions into play (Figure 5).

11. The threat to regional—and global—financial stability could come from direct shocks to the balance sheets of systemic entities, whose complex interconnections could cause another "Lehman moment." At the extreme, we simulate the failure of Sberbank and VTB Bank. Expected losses to ASEAN+3 banks from first- and second-order contagion appear to be small (Table 3). However, the size of the estimated expected losses to the direct creditors of these two Russian banks is daunting—USD 244 billion for Sberbank and USD 133 billion for VTB Bank compared to an estimated USD 350–400 billion for Lehman in the months before it went under—and there is little information as to who all the major debtholders may be.

12. **Moreover, the asset quality of some of the major global banks could come under pressure, as a result of the sanctions on the Russian economy.** Société Générale and UniCredit, two G-SIBs with the biggest operations in Russia, saw their share prices drop by more than 20 percent in the week following the sanctions, although their 2021 exposures accounted for less than 2 percent of their total assets in each case (Fitch 2022). Separately, Citigroup disclosed that it had USD 5.4 billion in Russian exposures at the end of 2021, and has been undertaking stress tests with various scenarios (Horowitz 2022).

IV. Conclusion

13. Our preliminary assessment suggests that the region's banking systems do not have significant direct exposures to Russia's banks or its economy, and that the exposures of global systemically important banks (G-SIBs) to Russia appear manageable. While a few ASEAN+3 banks have operations in Russia, they are not expected to have widespread spillover effects to the rest of the region's banking systems, given that those exposures are small and seemingly well contained. Within the ASEAN+3 region, VTB Bank is present in China, Singapore, and Vietnam, but its operations do not appear to be significant. Elsewhere, the **known** exposures of G-SIBs to Russia seem manageable. However, given the size of the balance sheets of the two major Russian banks, any complacency would be misplaced—large credit losses in the event of failure could potentially reveal complex interconnections that are hitherto opaque.

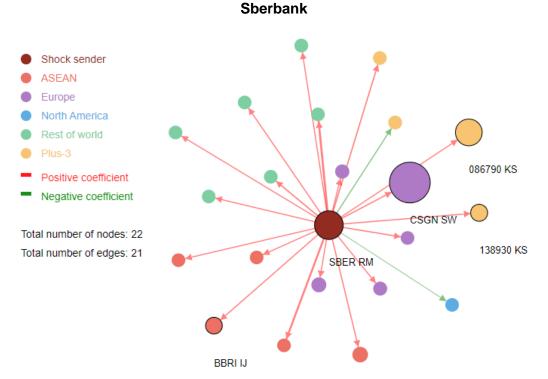
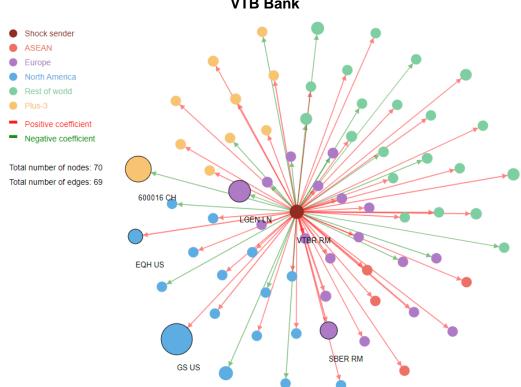


Figure 4. Global Financial Networks: First-Order Interconnectedness

Main connections: Bank Rakyat Indonesia Persero Tbk PT; BNK Financial Group Inc.; Credit Suisse Group AG; Hana Financial Group Inc.



VTB Bank

Main connections: China Minsheng Banking Corp. Ltd.; Equitable Holdings Inc.; Goldman Sachs Group Inc.; Legal & General Group PLC; Sberbank of Russia PJSC.

Sources: Credit Research Initiative of the National University of Singapore; and SuNWEI estimates. Note: Nodes represent entities within the network connected by edges, which represent the relationships between nodes.

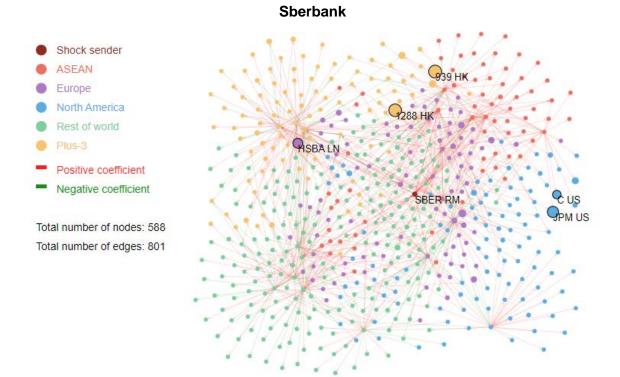
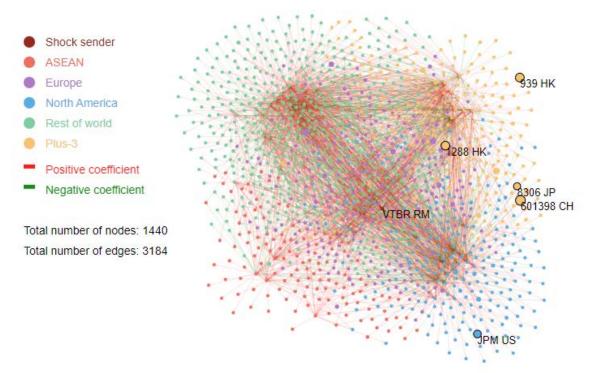


Figure 5. Global Financial Networks: Second-Order Interconnectedness

Main connections: Agricultural Bank of China Ltd.; China Construction Bank Corp.; Citigroup Inc.; HSBC Holdings PLC; JPMorgan Chase & Co.



VTB Bank

Main connections: Agricultural Bank of China Ltd.; China Construction Bank Corp.; Industrial & Commercial Bank of China Ltd.; JPMorgan Chase & Co.; Mitsubishi UFJ Financial Group Inc.

Sources: Credit Research Initiative of the National University of Singapore; and SuNWEI estimates. Note: Nodes represent entities within the network connected by edges, which represent the relationships between nodes.

Table 3. Scenario Analysis: Incremental Expected Credit Losses and "Collateral Damage" to ASEAN+3 Financial Systems fromFailure of Sberbank and VTB Bank, as of January 2022

Shock Sender	Sberbank		VTB Bank		
Shock Receivers	First-Order Contagion	Second-Order Contagion (Incremental)	First-Order Contagion	Second-Order Contagion (Incremental)	
North America	53.1	72.5	340.0	1,779.9	
Europe	0.0	1.1	222.8	359.6	
Plus-3	22.9	24.7	0.4	8.6	
ASEAN	16.4	101.3	22.9	162.2	
Rest of World	0.8	2.7	108.4	372.1	
Direct creditors	243,561.7	243,561.7	132,985.0	132,985.0	

(Millions of US dollars)

Sources: Credit Research Initiative of the National University of Singapore; and SuNWEI estimates.

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