

ELIZABETH WARREN
MASSACHUSETTS

COMMITTEES:
BANKING, HOUSING, AND URBAN AFFAIRS
HEALTH, EDUCATION, LABOR, AND PENSIONS
ARMED SERVICES
SPECIAL COMMITTEE ON AGING

United States Senate

UNITED STATES SENATE
WASHINGTON, DC 20510-2105
P: 202-224-4543

2400 JFK FEDERAL BUILDING
15 NEW SUDBURY STREET
BOSTON, MA 02203
P: 617-565-3170

1550 MAIN STREET
SUITE 406
SPRINGFIELD, MA 01103
P: 413-788-2690

www.warren.senate.gov

February 28, 2020

Brian Moynihan
Chairman of the Board and Chief Executive Officer
Bank of America
100 North Tryon Street
Charlotte, NC 28255

Dear Mr. Moynihan:

I write to inquire how your bank is monitoring and managing the economic threat and potential risk to your bank related to the spread of coronavirus in China and around the world. As a globally systemic important bank, your institution and the customers it serves could be impacted either directly through exposures to areas where the virus has spread or indirectly through a change in market conditions caused by disruptions in supply chains, a drop in tourism or travel, or numerous other factors that could cause a slowdown in economic growth. As a result, I ask that you provide information regarding how you evaluate the risks to your institution and its customers associated with coronavirus, the extent to which your institution is exposed to those risks and prepared to absorb their impact, and how you are monitoring the developments going forward.

Following the detection of a novel coronavirus now known as "COVID-19" in Wuhan City, China in December 2019, the World Health Organization (WHO) declared a "Public Health Emergency of International Concern" on January 30, 2020.¹ Based on data from the WHO as of February 26, 2020, there are over 80,000 confirmed cases of the disease globally, with the vast majority of these cases located throughout Asia, the Middle East, and Europe.² A top official at the Centers for Disease Control and Prevention (CDC) announced earlier this week that "we expect we will see community spread [of coronavirus] in the United States. It's not a question of if this will happen, but when this will happen, and how many people in this country will have

¹ World Health Organization, "Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)," press release, January 30, 2020, [https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)).

² World Health Organization, "Coronavirus disease 2019 (COVID-19) Situation Report – 37," February 26, 2020, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200226-sitrep-37-covid-19.pdf?sfvrsn=2146841e_2.

severe illnesses.”³ The CDC announced the first possible instance of community spread of coronavirus in California on February 26, 2020.⁴

The virus has already had significant effects on the economies and those effects are likely to grow. The International Monetary Fund and officials from the Federal Reserve have both projected that coronavirus will slow Chinese growth⁵ ⁶ and “spill” over to the global economy.⁷ Major global companies, like Apple, have already announced that they will not meet their at least one of their quarterly revenue projections for 2020⁸ because of the supply chain disruption caused by coronavirus.⁹ According to a recent survey, two-thirds of Chinese businesses still report being under some form of lockdown, with almost a third of firms having been completely closed since the Lunar New Year holiday.¹⁰ Additionally, global oil and gas prices have declined to levels near record lows as the transportation of goods and services have slowed.¹¹ In recent days, stock markets around the world have posted declines not seen since the financial crisis, a sign of growing investor concern.¹²

Coronavirus could have an impact on a bank’s operations in several ways. First, your customers may be among the businesses that have curbed or shut down their operations due to the virus, making it harder for them to repay their loans. Even if your customers’ businesses are open and in a region that has not yet been affected by the virus, they could face supply chain disruptions, diminishing their ability to bring goods to the market and undercutting their ability to make good on their liabilities. These effects may be more pronounced in banks with direct exposure to the regions where the coronavirus is most prevalent, but because of the interconnected nature of global supply chains, even banks with limited exposure to these areas will feel an impact. And other risks associated with the coronavirus outbreak – stock market declines, interest rate changes, increases in sovereign credit risk, and even the potential for civil

³ Washington Post, “Coronavirus’s spread in U.S. is ‘inevitable,’ CDC warns,” Erica Werner, Yasmeen Abutaleb, Lena H. Sun, and Lenny Bernstein, February 25, 2020, <https://www.washingtonpost.com/us-policy/2020/02/25/cdc-coronavirus-inevitable/>.

⁴ Centers for Disease Control and Prevention, “CDC Confirms Possible Instance of Community Spread of COVID-19 in U.S.,” February 26, 2020, <https://www.cdc.gov/media/releases/2020/s0226-Covid-19-spread.html>

⁵ International Monetary Fund, “Remarks by IMF Managing Director Kristalina Georgieva to G20 on Economic Impact of COVID-19,” February 22, 2020, <https://www.imf.org/en/News/Articles/2020/02/22/pr2061-remarks-by-kristalina-georgieva-to-g20-on-economic-impact-of-covid-19>.

⁶ Board of Governors of the Federal Reserve System, “U.S. Economic Outlook and Monetary Policy,” Vice Chair Richard H. Clarida, February 25, 2020, <https://www.federalreserve.gov/newsevents/speech/clarida20200225a.htm>.

⁷ *Id.*

⁸ CNBC, “Apple warns on revenue guidance due to production delays, weak demand in China because of coronavirus,” Amelia Lucas, February 17, 2020, <https://www.cnbc.com/2020/02/17/apple-warns-on-coronavirus-it-wont-meet-revenue-guidance-because-of-constrained-iphone-supply-and-suppressed-demand-in-china.html>.

⁹ Time, “China’s Economy Running at Just 40-50% Capacity Amid Coronavirus Lockdown, Data Suggests,” Bloomberg, February 18, 2020, <https://time.com/5785651/china-economy-slowdown/>.

¹⁰ CNBC, “China starts to get back to work as leaders worry about people’s jobs,” Evelyn Cheng, February 21, 2020, <https://www.cnbc.com/2020/02/21/china-starts-to-get-back-to-work-as-leaders-worry-about-peoples-jobs.html>.

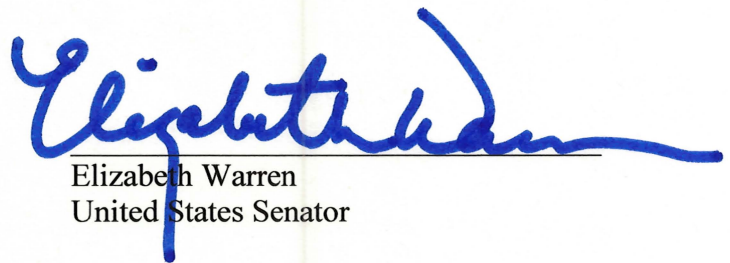
¹¹ Council on Foreign Relations, “The Coronavirus, Oil, and Global Supply Chains,” Amy M. Jaffe, February 24, 2020, <https://www.cfr.org/blog/coronavirus-oil-and-global-supply-chains>.

¹² CNN Business, “Dow falls 1,191 points -- the most in history,” Anneken Tappe, February 27, 2020, <https://www.cnn.com/2020/02/27/investing/dow-stock-market-selloff/index.html>.

unrest in countries hard-hit by the threat – could expose banks and other financial institutions to a suite of threats that are difficult to predict or model. These threats are particularly disturbing because they come after regulators either have weakened or are attempting to weaken critical safeguards put in place after the 2008 financial crisis. These safeguards were designed to protect the financial system and the economy as a whole from the risks of financial institutions that are too big to fail.

Your institution has been designated as a globally systemically important bank.¹³ Because of your institution's size and role in the global economy and to better understand how you are monitoring and preparing for the risks associated with this outbreak, I request your response to the following questions by March 13, 2020.

Sincerely,



Elizabeth Warren
United States Senator

1. How are you monitoring the status of and risks from the coronavirus outbreak?
 - a. Which economic sectors do you believe will be most affected by the outbreak?
 - b. Which economic sectors are you monitoring most closely and how are you doing so? Which sectors is your institution exposed to the most?
 - c. What are the signs and market indicators that you are looking to as you measure the extent of any regional or economic downturn or other threat to stability as a result of the virus?
2. Please identify your current level of exposure to the following countries:
 - a. China
 - b. Republic of Korea
 - c. Japan
 - d. Singapore
 - e. Thailand
 - f. Italy
 - g. Iran
3. Do you believe the virus outbreak will have an impact on your institution's revenue and profits? If so, please quantify this impact and specify how long you expect these effects to last.

¹³ Financial Stability Board, "2019 list of globally systemically important banks (G-SIBs)," November 22, 2019, <https://www.fsb.org/wp-content/uploads/P221119-1.pdf>.

4. Do you anticipate the outbreak will have an impact on the demand for commercial and industrial loans from your institution? If so, have you modified your previous estimates regarding the growth or trajectory of these loans? How?
5. Do you anticipate the outbreak affecting the amount and growth of nonperforming loans for your institution? Have you increased your provisions for loan and lease losses? If so, how much?
 - a. Has your institution rolled over any loans to companies that have been materially affected by the outbreak?
6. Is your institution sufficiently well-capitalized to cover any potential losses from nonperforming loans or other effects resulting from the outbreak?
7. Have you received any type of government assistance or support in response to the outbreak? If so, please describe the type and amount of the support, and what agency or institution provided this support.
8. Have your own internal risk models included a scenario involving a global pandemic and the series of potential losses this could impose on your institution? If so, what did these models show and do you believe that they adequately capture the full extent of potential losses?

ELIZABETH WARREN
MASSACHUSETTS

COMMITTEES:
BANKING, HOUSING, AND URBAN AFFAIRS
HEALTH, EDUCATION, LABOR, AND PENSIONS
ARMED SERVICES
SPECIAL COMMITTEE ON AGING

United States Senate

UNITED STATES SENATE
WASHINGTON, DC 20510-2105
P: 202-224-4543

2400 JFK FEDERAL BUILDING
15 NEW SUDBURY STREET
BOSTON, MA 02203
P: 617-565-3170

1550 MAIN STREET
SUITE 406
SPRINGFIELD, MA 01103
P: 413-788-2690

www.warren.senate.gov

February 28, 2020

Michael Corbat
Chief Executive Officer
Citigroup
338 Greenwich Street
New York, NY 10013

Dear Mr. Corbat:

I write to inquire how your bank is monitoring and managing the economic threat and potential risk to your bank related to the spread of coronavirus in China and around the world. As a globally systemic important bank, your institution and the customers it serves could be impacted either directly through exposures to areas where the virus has spread or indirectly through a change in market conditions caused by disruptions in supply chains, a drop in tourism or travel, or numerous other factors that could cause a slowdown in economic growth. As a result, I ask that you provide information regarding how you evaluate the risks to your institution and its customers associated with coronavirus, the extent to which your institution is exposed to those risks and prepared to absorb their impact, and how you are monitoring the developments going forward.

Following the detection of a novel coronavirus now known as "COVID-19" in Wuhan City, China in December 2019, the World Health Organization (WHO) declared a "Public Health Emergency of International Concern" on January 30, 2020.¹ Based on data from the WHO as of February 26, 2020, there are over 80,000 confirmed cases of the disease globally, with the vast majority of these cases located throughout Asia, the Middle East, and Europe.² A top official at the Centers for Disease Control and Prevention (CDC) announced earlier this week that "we expect we will see community spread [of coronavirus] in the United States. It's not a question of if this will happen, but when this will happen, and how many people in this country will have

¹ World Health Organization, "Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)," press release, January 30, 2020, [https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)).

² World Health Organization, "Coronavirus disease 2019 (COVID-19) Situation Report – 37," February 26, 2020, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200226-sitrep-37-covid-19.pdf?sfvrsn=2146841e_2.

severe illnesses.”³ The CDC announced the first possible instance of community spread of coronavirus in California on February 26, 2020.⁴

The virus has already had significant effects on the economies and those effects are likely to grow. The International Monetary Fund and officials from the Federal Reserve have both projected that coronavirus will slow Chinese growth⁵ ⁶ and “spill” over to the global economy.⁷ Major global companies, like Apple, have already announced that they will not meet their at least one of their quarterly revenue projections for 2020⁸ because of the supply chain disruption caused by coronavirus.⁹ According to a recent survey, two-thirds of Chinese businesses still report being under some form of lockdown, with almost a third of firms having been completely closed since the Lunar New Year holiday.¹⁰ Additionally, global oil and gas prices have declined to levels near record lows as the transportation of goods and services have slowed.¹¹ In recent days, stock markets around the world have posted declines not seen since the financial crisis, a sign of growing investor concern.¹²

Coronavirus could have an impact on a bank’s operations in several ways. First, your customers may be among the businesses that have curbed or shut down their operations due to the virus, making it harder for them to repay their loans. Even if your customers’ businesses are open and in a region that has not yet been affected by the virus, they could face supply chain disruptions, diminishing their ability to bring goods to the market and undercutting their ability to make good on their liabilities. These effects may be more pronounced in banks with direct exposure to the regions where the coronavirus is most prevalent, but because of the interconnected nature of global supply chains, even banks with limited exposure to these areas will feel an impact. And other risks associated with the coronavirus outbreak – stock market declines, interest rate changes, increases in sovereign credit risk, and even the potential for civil

³ Washington Post, “Coronavirus’s spread in U.S. is ‘inevitable,’ CDC warns,” Erica Werner, Yasmeen Abutaleb, Lena H. Sun, and Lenny Bernstein, February 25, 2020, <https://www.washingtonpost.com/us-policy/2020/02/25/cdc-coronavirus-inevitable/>.

⁴ Centers for Disease Control and Prevention, “CDC Confirms Possible Instance of Community Spread of COVID-19 in U.S.,” February 26, 2020, <https://www.cdc.gov/media/releases/2020/s0226-Covid-19-spread.html>

⁵ International Monetary Fund, “Remarks by IMF Managing Director Kristalina Georgieva to G20 on Economic Impact of COVID-19,” February 22, 2020, <https://www.imf.org/en/News/Articles/2020/02/22/pr2061-remarks-by-kristalina-georgieva-to-g20-on-economic-impact-of-covid-19>.

⁶ Board of Governors of the Federal Reserve System, “U.S. Economic Outlook and Monetary Policy,” Vice Chair Richard H. Clarida, February 25, 2020, <https://www.federalreserve.gov/newsevents/speech/clarida20200225a.htm>.

⁷ *Id.*

⁸ CNBC, “Apple warns on revenue guidance due to production delays, weak demand in China because of coronavirus,” Amelia Lucas, February 17, 2020, <https://www.cnbc.com/2020/02/17/apple-warns-on-coronavirus-it-wont-meet-revenue-guidance-because-of-constrained-iphone-supply-and-suppressed-demand-in-china.html>.

⁹ Time, “China’s Economy Running at Just 40-50% Capacity Amid Coronavirus Lockdown, Data Suggests,” Bloomberg, February 18, 2020, <https://time.com/5785651/china-economy-slowdown/>.

¹⁰ CNBC, “China starts to get back to work as leaders worry about people’s jobs,” Evelyn Cheng, February 21, 2020, <https://www.cnbc.com/2020/02/21/china-starts-to-get-back-to-work-as-leaders-worry-about-peoples-jobs.html>.

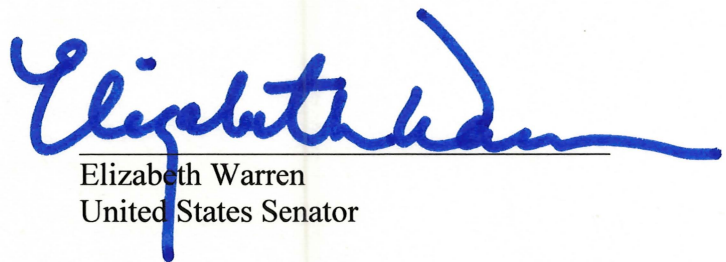
¹¹ Council on Foreign Relations, “The Coronavirus, Oil, and Global Supply Chains,” Amy M. Jaffe, February 24, 2020, <https://www.cfr.org/blog/coronavirus-oil-and-global-supply-chains>.

¹² CNN Business, “Dow falls 1,191 points -- the most in history,” Anneken Tappe, February 27, 2020, <https://www.cnn.com/2020/02/27/investing/dow-stock-market-selloff/index.html>.

unrest in countries hard-hit by the threat – could expose banks and other financial institutions to a suite of threats that are difficult to predict or model. These threats are particularly disturbing because they come after regulators either have weakened or are attempting to weaken critical safeguards put in place after the 2008 financial crisis. These safeguards were designed to protect the financial system and the economy as a whole from the risks of financial institutions that are too big to fail.

Your institution has been designated as a globally systemically important bank.¹³ Because of your institution's size and role in the global economy and to better understand how you are monitoring and preparing for the risks associated with this outbreak, I request your response to the following questions by March 13, 2020.

Sincerely,



Elizabeth Warren
United States Senator

1. How are you monitoring the status of and risks from the coronavirus outbreak?
 - a. Which economic sectors do you believe will be most affected by the outbreak?
 - b. Which economic sectors are you monitoring most closely and how are you doing so? Which sectors is your institution exposed to the most?
 - c. What are the signs and market indicators that you are looking to as you measure the extent of any regional or economic downturn or other threat to stability as a result of the virus?
2. Please identify your current level of exposure to the following countries:
 - a. China
 - b. Republic of Korea
 - c. Japan
 - d. Singapore
 - e. Thailand
 - f. Italy
 - g. Iran
3. Do you believe the virus outbreak will have an impact on your institution's revenue and profits? If so, please quantify this impact and specify how long you expect these effects to last.

¹³ Financial Stability Board, "2019 list of globally systemically important banks (G-SIBs)," November 22, 2019, <https://www.fsb.org/wp-content/uploads/P221119-1.pdf>.

4. Do you anticipate the outbreak will have an impact on the demand for commercial and industrial loans from your institution? If so, have you modified your previous estimates regarding the growth or trajectory of these loans? How?
5. Do you anticipate the outbreak affecting the amount and growth of nonperforming loans for your institution? Have you increased your provisions for loan and lease losses? If so, how much?
 - a. Has your institution rolled over any loans to companies that have been materially affected by the outbreak?
6. Is your institution sufficiently well-capitalized to cover any potential losses from nonperforming loans or other effects resulting from the outbreak?
7. Have you received any type of government assistance or support in response to the outbreak? If so, please describe the type and amount of the support, and what agency or institution provided this support.
8. Have your own internal risk models included a scenario involving a global pandemic and the series of potential losses this could impose on your institution? If so, what did these models show and do you believe that they adequately capture the full extent of potential losses?

ELIZABETH WARREN
MASSACHUSETTS

COMMITTEES:
BANKING, HOUSING, AND URBAN AFFAIRS
HEALTH, EDUCATION, LABOR, AND PENSIONS
ARMED SERVICES
SPECIAL COMMITTEE ON AGING

United States Senate

UNITED STATES SENATE
WASHINGTON, DC 20510-2105
P: 202-224-4543

2400 JFK FEDERAL BUILDING
15 NEW SUBBURY STREET
BOSTON, MA 02203
P: 617-565-3170

1550 MAIN STREET
SUITE 406
SPRINGFIELD, MA 01103
P: 413-788-2690

www.warren.senate.gov

February 28, 2020

David Solomon
Chairman of the Board and Chief Executive Officer
Goldman Sachs
200 West Street
New York, NY 10282

Dear Mr. Solomon:

I write to inquire how your bank is monitoring and managing the economic threat and potential risk to your bank related to the spread of coronavirus in China and around the world. As a globally systemic important bank, your institution and the customers it serves could be impacted either directly through exposures to areas where the virus has spread or indirectly through a change in market conditions caused by disruptions in supply chains, a drop in tourism or travel, or numerous other factors that could cause a slowdown in economic growth. As a result, I ask that you provide information regarding how you evaluate the risks to your institution and its customers associated with coronavirus, the extent to which your institution is exposed to those risks and prepared to absorb their impact, and how you are monitoring the developments going forward.

Following the detection of a novel coronavirus now known as "COVID-19" in Wuhan City, China in December 2019, the World Health Organization (WHO) declared a "Public Health Emergency of International Concern" on January 30, 2020.¹ Based on data from the WHO as of February 26, 2020, there are over 80,000 confirmed cases of the disease globally, with the vast majority of these cases located throughout Asia, the Middle East, and Europe.² A top official at the Centers for Disease Control and Prevention (CDC) announced earlier this week that "we expect we will see community spread [of coronavirus] in the United States. It's not a question of if this will happen, but when this will happen, and how many people in this country will have

¹ World Health Organization, "Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)," press release, January 30, 2020, [https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)).

² World Health Organization, "Coronavirus disease 2019 (COVID-19) Situation Report – 37," February 26, 2020, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200226-sitrep-37-covid-19.pdf?sfvrsn=2146841e_2.

severe illnesses.”³ The CDC announced the first possible instance of community spread of coronavirus in California on February 26, 2020.⁴

The virus has already had significant effects on the economies and those effects are likely to grow. The International Monetary Fund and officials from the Federal Reserve have both projected that coronavirus will slow Chinese growth⁵ ⁶ and “spill” over to the global economy.⁷ Major global companies, like Apple, have already announced that they will not meet their at least one of their quarterly revenue projections for 2020⁸ because of the supply chain disruption caused by coronavirus.⁹ According to a recent survey, two-thirds of Chinese businesses still report being under some form of lockdown, with almost a third of firms having been completely closed since the Lunar New Year holiday.¹⁰ Additionally, global oil and gas prices have declined to levels near record lows as the transportation of goods and services have slowed.¹¹ In recent days, stock markets around the world have posted declines not seen since the financial crisis, a sign of growing investor concern.¹²

Coronavirus could have an impact on a bank’s operations in several ways. First, your customers may be among the businesses that have curbed or shut down their operations due to the virus, making it harder for them to repay their loans. Even if your customers’ businesses are open and in a region that has not yet been affected by the virus, they could face supply chain disruptions, diminishing their ability to bring goods to the market and undercutting their ability to make good on their liabilities. These effects may be more pronounced in banks with direct exposure to the regions where the coronavirus is most prevalent, but because of the interconnected nature of global supply chains, even banks with limited exposure to these areas will feel an impact. And other risks associated with the coronavirus outbreak – stock market declines, interest rate changes, increases in sovereign credit risk, and even the potential for civil

³ Washington Post, “Coronavirus’s spread in U.S. is ‘inevitable,’ CDC warns,” Erica Werner, Yasmeen Abutaleb, Lena H. Sun, and Lenny Bernstein, February 25, 2020, <https://www.washingtonpost.com/us-policy/2020/02/25/cdc-coronavirus-inevitable/>.

⁴ Centers for Disease Control and Prevention, “CDC Confirms Possible Instance of Community Spread of COVID-19 in U.S.,” February 26, 2020, <https://www.cdc.gov/media/releases/2020/s0226-Covid-19-spread.html>

⁵ International Monetary Fund, “Remarks by IMF Managing Director Kristalina Georgieva to G20 on Economic Impact of COVID-19,” February 22, 2020, <https://www.imf.org/en/News/Articles/2020/02/22/pr2061-remarks-by-kristalina-georgieva-to-g20-on-economic-impact-of-covid-19>.

⁶ Board of Governors of the Federal Reserve System, “U.S. Economic Outlook and Monetary Policy,” Vice Chair Richard H. Clarida, February 25, 2020, <https://www.federalreserve.gov/newsevents/speech/clarida20200225a.htm>.

⁷ *Id.*

⁸ CNBC, “Apple warns on revenue guidance due to production delays, weak demand in China because of coronavirus,” Amelia Lucas, February 17, 2020, <https://www.cnbc.com/2020/02/17/apple-warns-on-coronavirus-it-wont-meet-revenue-guidance-because-of-constrained-iphone-supply-and-suppressed-demand-in-china.html>.

⁹ Time, “China’s Economy Running at Just 40-50% Capacity Amid Coronavirus Lockdown, Data Suggests,” Bloomberg, February 18, 2020, <https://time.com/5785651/china-economy-slowdown/>.

¹⁰ CNBC, “China starts to get back to work as leaders worry about people’s jobs,” Evelyn Cheng, February 21, 2020, <https://www.cnbc.com/2020/02/21/china-starts-to-get-back-to-work-as-leaders-worry-about-peoples-jobs.html>.

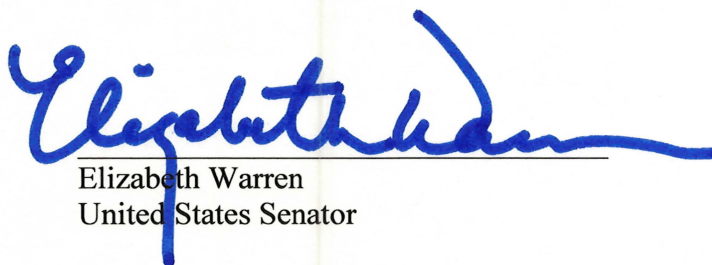
¹¹ Council on Foreign Relations, “The Coronavirus, Oil, and Global Supply Chains,” Amy M. Jaffe, February 24, 2020, <https://www.cfr.org/blog/coronavirus-oil-and-global-supply-chains>.

¹² CNN Business, “Dow falls 1,191 points -- the most in history,” Anneken Tappe, February 27, 2020, <https://www.cnn.com/2020/02/27/investing/dow-stock-market-selloff/index.html>.

unrest in countries hard-hit by the threat – could expose banks and other financial institutions to a suite of threats that are difficult to predict or model. These threats are particularly disturbing because they come after regulators either have weakened or are attempting to weaken critical safeguards put in place after the 2008 financial crisis. These safeguards were designed to protect the financial system and the economy as a whole from the risks of financial institutions that are too big to fail.

Your institution has been designated as a globally systemically important bank.¹³ Because of your institution's size and role in the global economy and to better understand how you are monitoring and preparing for the risks associated with this outbreak, I request your response to the following questions by March 13, 2020.

Sincerely,



Elizabeth Warren
United States Senator

1. How are you monitoring the status of and risks from the coronavirus outbreak?
 - a. Which economic sectors do you believe will be most affected by the outbreak?
 - b. Which economic sectors are you monitoring most closely and how are you doing so? Which sectors is your institution exposed to the most?
 - c. What are the signs and market indicators that you are looking to as you measure the extent of any regional or economic downturn or other threat to stability as a result of the virus?
2. Please identify your current level of exposure to the following countries:
 - a. China
 - b. Republic of Korea
 - c. Japan
 - d. Singapore
 - e. Thailand
 - f. Italy
 - g. Iran
3. Do you believe the virus outbreak will have an impact on your institution's revenue and profits? If so, please quantify this impact and specify how long you expect these effects to last.

¹³ Financial Stability Board, "2019 list of globally systemically important banks (G-SIBs)," November 22, 2019, <https://www.fsb.org/wp-content/uploads/P221119-1.pdf>.

4. Do you anticipate the outbreak will have an impact on the demand for commercial and industrial loans from your institution? If so, have you modified your previous estimates regarding the growth or trajectory of these loans? How?
5. Do you anticipate the outbreak affecting the amount and growth of nonperforming loans for your institution? Have you increased your provisions for loan and lease losses? If so, how much?
 - a. Has your institution rolled over any loans to companies that have been materially affected by the outbreak?
6. Is your institution sufficiently well-capitalized to cover any potential losses from nonperforming loans or other effects resulting from the outbreak?
7. Have you received any type of government assistance or support in response to the outbreak? If so, please describe the type and amount of the support, and what agency or institution provided this support.
8. Have your own internal risk models included a scenario involving a global pandemic and the series of potential losses this could impose on your institution? If so, what did these models show and do you believe that they adequately capture the full extent of potential losses?

ELIZABETH WARREN
MASSACHUSETTS

COMMITTEES:
BANKING, HOUSING, AND URBAN AFFAIRS
HEALTH, EDUCATION, LABOR, AND PENSIONS
ARMED SERVICES
SPECIAL COMMITTEE ON AGING

United States Senate

UNITED STATES SENATE
WASHINGTON, DC 20510-2105
P: 202-224-4543

2400 JFK FEDERAL BUILDING
15 NEW SUDBURY STREET
BOSTON, MA 02203
P: 617-565-3170

1550 MAIN STREET
SUITE 406
SPRINGFIELD, MA 01103
P: 413-788-2690

www.warren.senate.gov

February 28, 2020

Jamie Dimon
Chairman of the Board and Executive Officer
JP Morgan Chase & Co.
383 Madison Avenue
New York, NY 10179

Dear Mr. Dimon:

I write to inquire how your bank is monitoring and managing the economic threat and potential risk to your bank related to the spread of coronavirus in China and around the world. As a globally systemic important bank, your institution and the customers it serves could be impacted either directly through exposures to areas where the virus has spread or indirectly through a change in market conditions caused by disruptions in supply chains, a drop in tourism or travel, or numerous other factors that could cause a slowdown in economic growth. As a result, I ask that you provide information regarding how you evaluate the risks to your institution and its customers associated with coronavirus, the extent to which your institution is exposed to those risks and prepared to absorb their impact, and how you are monitoring the developments going forward.

Following the detection of a novel coronavirus now known as "COVID-19" in Wuhan City, China in December 2019, the World Health Organization (WHO) declared a "Public Health Emergency of International Concern" on January 30, 2020.¹ Based on data from the WHO as of February 26, 2020, there are over 80,000 confirmed cases of the disease globally, with the vast majority of these cases located throughout Asia, the Middle East, and Europe.² A top official at the Centers for Disease Control and Prevention (CDC) announced earlier this week that "we expect we will see community spread [of coronavirus] in the United States. It's not a question of if this will happen, but when this will happen, and how many people in this country will have

¹ World Health Organization, "Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)," press release, January 30, 2020, [https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)).

² World Health Organization, "Coronavirus disease 2019 (COVID-19) Situation Report – 37," February 26, 2020, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200226-sitrep-37-covid-19.pdf?sfvrsn=2146841e_2.

severe illnesses.”³ The CDC announced the first possible instance of community spread of coronavirus in California on February 26, 2020.⁴

The virus has already had significant effects on the economies and those effects are likely to grow. The International Monetary Fund and officials from the Federal Reserve have both projected that coronavirus will slow Chinese growth⁵ ⁶ and “spill” over to the global economy.⁷ Major global companies, like Apple, have already announced that they will not meet their at least one of their quarterly revenue projections for 2020⁸ because of the supply chain disruption caused by coronavirus.⁹ According to a recent survey, two-thirds of Chinese businesses still report being under some form of lockdown, with almost a third of firms having been completely closed since the Lunar New Year holiday.¹⁰ Additionally, global oil and gas prices have declined to levels near record lows as the transportation of goods and services have slowed.¹¹ In recent days, stock markets around the world have posted declines not seen since the financial crisis, a sign of growing investor concern.¹²

Coronavirus could have an impact on a bank’s operations in several ways. First, your customers may be among the businesses that have curbed or shut down their operations due to the virus, making it harder for them to repay their loans. Even if your customers’ businesses are open and in a region that has not yet been affected by the virus, they could face supply chain disruptions, diminishing their ability to bring goods to the market and undercutting their ability to make good on their liabilities. These effects may be more pronounced in banks with direct exposure to the regions where the coronavirus is most prevalent, but because of the interconnected nature of global supply chains, even banks with limited exposure to these areas will feel an impact. And other risks associated with the coronavirus outbreak – stock market declines, interest rate changes, increases in sovereign credit risk, and even the potential for civil

³ Washington Post, “Coronavirus’s spread in U.S. is ‘inevitable,’ CDC warns,” Erica Werner, Yasmeen Abutaleb, Lena H. Sun, and Lenny Bernstein, February 25, 2020, <https://www.washingtonpost.com/us-policy/2020/02/25/cdc-coronavirus-inevitable/>.

⁴ Centers for Disease Control and Prevention, “CDC Confirms Possible Instance of Community Spread of COVID-19 in U.S.,” February 26, 2020, <https://www.cdc.gov/media/releases/2020/s0226-Covid-19-spread.html>

⁵ International Monetary Fund, “Remarks by IMF Managing Director Kristalina Georgieva to G20 on Economic Impact of COVID-19,” February 22, 2020, <https://www.imf.org/en/News/Articles/2020/02/22/pr2061-remarks-by-kristalina-georgieva-to-g20-on-economic-impact-of-covid-19>.

⁶ Board of Governors of the Federal Reserve System, “U.S. Economic Outlook and Monetary Policy,” Vice Chair Richard H. Clarida, February 25, 2020, <https://www.federalreserve.gov/newsevents/speech/clarida20200225a.htm>.

⁷ *Id.*

⁸ CNBC, “Apple warns on revenue guidance due to production delays, weak demand in China because of coronavirus,” Amelia Lucas, February 17, 2020, <https://www.cnbc.com/2020/02/17/apple-warns-on-coronavirus-it-wont-meet-revenue-guidance-because-of-constrained-iphone-supply-and-suppressed-demand-in-china.html>.

⁹ Time, “China’s Economy Running at Just 40-50% Capacity Amid Coronavirus Lockdown, Data Suggests,” Bloomberg, February 18, 2020, <https://time.com/5785651/china-economy-slowdown/>.

¹⁰ CNBC, “China starts to get back to work as leaders worry about people’s jobs,” Evelyn Cheng, February 21, 2020, <https://www.cnbc.com/2020/02/21/china-starts-to-get-back-to-work-as-leaders-worry-about-peoples-jobs.html>.

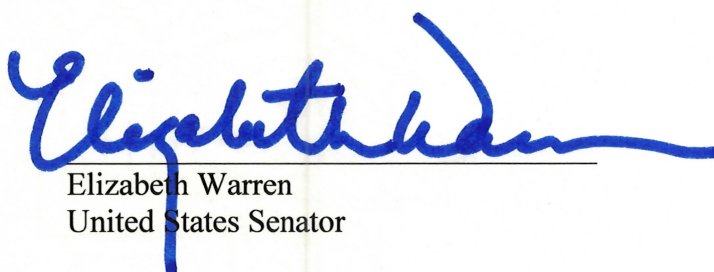
¹¹ Council on Foreign Relations, “The Coronavirus, Oil, and Global Supply Chains,” Amy M. Jaffe, February 24, 2020, <https://www.cfr.org/blog/coronavirus-oil-and-global-supply-chains>.

¹² CNN Business, “Dow falls 1,191 points -- the most in history,” Anneken Tappe, February 27, 2020, <https://www.cnn.com/2020/02/27/investing/dow-stock-market-selloff/index.html>.

unrest in countries hard-hit by the threat – could expose banks and other financial institutions to a suite of threats that are difficult to predict or model. These threats are particularly disturbing because they come after regulators either have weakened or are attempting to weaken critical safeguards put in place after the 2008 financial crisis. These safeguards were designed to protect the financial system and the economy as a whole from the risks of financial institutions that are too big to fail.

Your institution has been designated as a globally systemically important bank.¹³ Because of your institution's size and role in the global economy and to better understand how you are monitoring and preparing for the risks associated with this outbreak, I request your response to the following questions by March 13, 2020.

Sincerely,



Elizabeth Warren
United States Senator

1. How are you monitoring the status of and risks from the coronavirus outbreak?
 - a. Which economic sectors do you believe will be most affected by the outbreak?
 - b. Which economic sectors are you monitoring most closely and how are you doing so? Which sectors is your institution exposed to the most?
 - c. What are the signs and market indicators that you are looking to as you measure the extent of any regional or economic downturn or other threat to stability as a result of the virus?
2. Please identify your current level of exposure to the following countries:
 - a. China
 - b. Republic of Korea
 - c. Japan
 - d. Singapore
 - e. Thailand
 - f. Italy
 - g. Iran
3. Do you believe the virus outbreak will have an impact on your institution's revenue and profits? If so, please quantify this impact and specify how long you expect these effects to last.

¹³ Financial Stability Board, "2019 list of globally systemically important banks (G-SIBs)," November 22, 2019, <https://www.fsb.org/wp-content/uploads/P221119-1.pdf>.

4. Do you anticipate the outbreak will have an impact on the demand for commercial and industrial loans from your institution? If so, have you modified your previous estimates regarding the growth or trajectory of these loans? How?
5. Do you anticipate the outbreak affecting the amount and growth of nonperforming loans for your institution? Have you increased your provisions for loan and lease losses? If so, how much?
 - a. Has your institution rolled over any loans to companies that have been materially affected by the outbreak?
6. Is your institution sufficiently well-capitalized to cover any potential losses from nonperforming loans or other effects resulting from the outbreak?
7. Have you received any type of government assistance or support in response to the outbreak? If so, please describe the type and amount of the support, and what agency or institution provided this support.
8. Have your own internal risk models included a scenario involving a global pandemic and the series of potential losses this could impose on your institution? If so, what did these models show and do you believe that they adequately capture the full extent of potential losses?

ELIZABETH WARREN
MASSACHUSETTS

UNITED STATES SENATE
WASHINGTON, DC 20510-2105
P: 202-224-4543

COMMITTEES:
BANKING, HOUSING, AND URBAN AFFAIRS
HEALTH, EDUCATION, LABOR, AND PENSIONS

United States Senate

2400 JFK FEDERAL BUILDING
15 NEW SUDBURY STREET
BOSTON, MA 02203
P: 617-565-3170

ARMED SERVICES
SPECIAL COMMITTEE ON AGING

1550 MAIN STREET
SUITE 406
SPRINGFIELD, MA 01103
P: 413-788-2690

www.warren.senate.gov

February 28, 2020

James Gorman
Chairman of the Board and Chief Executive Officer
Morgan Stanley & Co.
1585 Broadway Avenue
New York, NY 10036

Dear Mr. Gorman:

I write to inquire how your bank is monitoring and managing the economic threat and potential risk to your bank related to the spread of coronavirus in China and around the world. As a globally systemic important bank, your institution and the customers it serves could be impacted either directly through exposures to areas where the virus has spread or indirectly through a change in market conditions caused by disruptions in supply chains, a drop in tourism or travel, or numerous other factors that could cause a slowdown in economic growth. As a result, I ask that you provide information regarding how you evaluate the risks to your institution and its customers associated with coronavirus, the extent to which your institution is exposed to those risks and prepared to absorb their impact, and how you are monitoring the developments going forward.

Following the detection of a novel coronavirus now known as "COVID-19" in Wuhan City, China in December 2019, the World Health Organization (WHO) declared a "Public Health Emergency of International Concern" on January 30, 2020.¹ Based on data from the WHO as of February 26, 2020, there are over 80,000 confirmed cases of the disease globally, with the vast majority of these cases located throughout Asia, the Middle East, and Europe.² A top official at the Centers for Disease Control and Prevention (CDC) announced earlier this week that "we expect we will see community spread [of coronavirus] in the United States. It's not a question of if this will happen, but when this will happen, and how many people in this country will have

¹ World Health Organization, "Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)," press release, January 30, 2020, [https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)).

² World Health Organization, "Coronavirus disease 2019 (COVID-19) Situation Report – 37," February 26, 2020, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200226-sitrep-37-covid-19.pdf?sfvrsn=2146841e_2.

severe illnesses.”³ The CDC announced the first possible instance of community spread of coronavirus in California on February 26, 2020.⁴

The virus has already had significant effects on the economies and those effects are likely to grow. The International Monetary Fund and officials from the Federal Reserve have both projected that coronavirus will slow Chinese growth⁵ ⁶ and “spill” over to the global economy.⁷ Major global companies, like Apple, have already announced that they will not meet their at least one of their quarterly revenue projections for 2020⁸ because of the supply chain disruption caused by coronavirus.⁹ According to a recent survey, two-thirds of Chinese businesses still report being under some form of lockdown, with almost a third of firms having been completely closed since the Lunar New Year holiday.¹⁰ Additionally, global oil and gas prices have declined to levels near record lows as the transportation of goods and services have slowed.¹¹ In recent days, stock markets around the world have posted declines not seen since the financial crisis, a sign of growing investor concern.¹²

Coronavirus could have an impact on a bank’s operations in several ways. First, your customers may be among the businesses that have curbed or shut down their operations due to the virus, making it harder for them to repay their loans. Even if your customers’ businesses are open and in a region that has not yet been affected by the virus, they could face supply chain disruptions, diminishing their ability to bring goods to the market and undercutting their ability to make good on their liabilities. These effects may be more pronounced in banks with direct exposure to the regions where the coronavirus is most prevalent, but because of the interconnected nature of global supply chains, even banks with limited exposure to these areas will feel an impact. And other risks associated with the coronavirus outbreak – stock market declines, interest rate changes, increases in sovereign credit risk, and even the potential for civil

³ Washington Post, “Coronavirus’s spread in U.S. is ‘inevitable,’ CDC warns,” Erica Werner, Yasmeen Abutaleb, Lena H. Sun, and Lenny Bernstein, February 25, 2020, <https://www.washingtonpost.com/us-policy/2020/02/25/cdc-coronavirus-inevitable/>.

⁴ Centers for Disease Control and Prevention, “CDC Confirms Possible Instance of Community Spread of COVID-19 in U.S.,” February 26, 2020, <https://www.cdc.gov/media/releases/2020/s0226-Covid-19-spread.html>

⁵ International Monetary Fund, “Remarks by IMF Managing Director Kristalina Georgieva to G20 on Economic Impact of COVID-19,” February 22, 2020, <https://www.imf.org/en/News/Articles/2020/02/22/pr2061-remarks-by-kristalina-georgieva-to-g20-on-economic-impact-of-covid-19>.

⁶ Board of Governors of the Federal Reserve System, “U.S. Economic Outlook and Monetary Policy,” Vice Chair Richard H. Clarida, February 25, 2020, <https://www.federalreserve.gov/newsevents/speech/clarida20200225a.htm>.

⁷ *Id.*

⁸ CNBC, “Apple warns on revenue guidance due to production delays, weak demand in China because of coronavirus,” Amelia Lucas, February 17, 2020, <https://www.cnbc.com/2020/02/17/apple-warns-on-coronavirus-it-wont-meet-revenue-guidance-because-of-constrained-iphone-supply-and-suppressed-demand-in-china.html>.

⁹ Time, “China’s Economy Running at Just 40-50% Capacity Amid Coronavirus Lockdown, Data Suggests,” Bloomberg, February 18, 2020, <https://time.com/5785651/china-economy-slowdown/>.

¹⁰ CNBC, “China starts to get back to work as leaders worry about people’s jobs,” Evelyn Cheng, February 21, 2020, <https://www.cnbc.com/2020/02/21/china-starts-to-get-back-to-work-as-leaders-worry-about-peoples-jobs.html>.

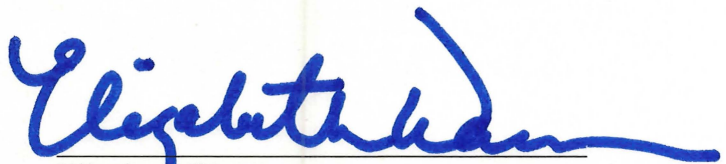
¹¹ Council on Foreign Relations, “The Coronavirus, Oil, and Global Supply Chains,” Amy M. Jaffe, February 24, 2020, <https://www.cfr.org/blog/coronavirus-oil-and-global-supply-chains>.

¹² CNN Business, “Dow falls 1,191 points -- the most in history,” Anneken Tappe, February 27, 2020, <https://www.cnn.com/2020/02/27/investing/dow-stock-market-selloff/index.html>.

unrest in countries hard-hit by the threat – could expose banks and other financial institutions to a suite of threats that are difficult to predict or model. These threats are particularly disturbing because they come after regulators either have weakened or are attempting to weaken critical safeguards put in place after the 2008 financial crisis. These safeguards were designed to protect the financial system and the economy as a whole from the risks of financial institutions that are too big to fail.

Your institution has been designated as a globally systemically important bank.¹³ Because of your institution's size and role in the global economy and to better understand how you are monitoring and preparing for the risks associated with this outbreak, I request your response to the following questions by March 13, 2020.

Sincerely,



Elizabeth Warren
United States Senator

1. How are you monitoring the status of and risks from the coronavirus outbreak?
 - a. Which economic sectors do you believe will be most affected by the outbreak?
 - b. Which economic sectors are you monitoring most closely and how are you doing so? Which sectors is your institution exposed to the most?
 - c. What are the signs and market indicators that you are looking to as you measure the extent of any regional or economic downturn or other threat to stability as a result of the virus?
2. Please identify your current level of exposure to the following countries:
 - a. China
 - b. Republic of Korea
 - c. Japan
 - d. Singapore
 - e. Thailand
 - f. Italy
 - g. Iran
3. Do you believe the virus outbreak will have an impact on your institution's revenue and profits? If so, please quantify this impact and specify how long you expect these effects to last.

¹³ Financial Stability Board, "2019 list of globally systemically important banks (G-SIBs)," November 22, 2019, <https://www.fsb.org/wp-content/uploads/P221119-1.pdf>.

4. Do you anticipate the outbreak will have an impact on the demand for commercial and industrial loans from your institution? If so, have you modified your previous estimates regarding the growth or trajectory of these loans? How?
5. Do you anticipate the outbreak affecting the amount and growth of nonperforming loans for your institution? Have you increased your provisions for loan and lease losses? If so, how much?
 - a. Has your institution rolled over any loans to companies that have been materially affected by the outbreak?
6. Is your institution sufficiently well-capitalized to cover any potential losses from nonperforming loans or other effects resulting from the outbreak?
7. Have you received any type of government assistance or support in response to the outbreak? If so, please describe the type and amount of the support, and what agency or institution provided this support.
8. Have your own internal risk models included a scenario involving a global pandemic and the series of potential losses this could impose on your institution? If so, what did these models show and do you believe that they adequately capture the full extent of potential losses?