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# THE WALL STREET JOURNAL.

**EXCHANGE --- The Ultimate Stress Test --- JPMorgan Chase CEO Jamie Dimon felt a tear rip through his aorta -- just as the pandemic began to ravage the economy. The two crises tested the foundations of America's largest bank.**

By David Benoit  
4,110 words  
26 December 2020  
The Wall Street Journal  
J  
B1  
English

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Fear jolted Jamie Dimon awake in the dark morning hours of March 5.

U.S. coronavirus cases numbered only around a hundred, but markets were flashing warning signs. It was 4 a.m., and the JPMorgan Chase & Co. chief executive dialed up his top lieutenants to deliver a message that couldn't wait: The economy is in trouble.

Mr. Dimon hung up the phone and lay down on the couch to read the morning papers. He felt a rip in his chest. He sat up with a gasp and called his doctor. "Jamie, take a cab," the doctor told him. "You don't have time for an ambulance."

Hours later, Mr. Dimon was clinging to life, surgeons perched above his chest repairing a gash in the artery that delivers blood from the heart to the rest of the body.

"I knew I might not make it," Mr. Dimon told The Wall Street Journal in his first interview about the aortic tear. The CEO's near-death experience came as the U.S. economy was hurtling toward its own crisis. The twin emergencies would test JPMorgan's foundations even more severely than the 2008 financial crisis.

The bank serves half of all U.S. households and 400 of the Fortune 500. For more than a decade, a booming economy lifted JPMorgan's fortunes. The bank, in turn, supported the economy's growth, lending to millions of businesses and consumers. By March, the coronavirus was threatening to punch a hole in that system.

For Mr. Dimon, it was the ultimate test of a career-spanning obsession with what he calls the fortress balance sheet -- a capital position so strong that the bank could withstand any crisis. Had he built a fortress that could withstand this onslaught? And would the fortress hold, even without him?

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Mr. Dimon recovered from his near-fatal heart injury. But for a few weeks, as the coronavirus ravaged the economy, the nation's most famous banker wasn't at the head of America's biggest bank.

The economy is getting better, too. Unemployment has improved every month since April, and vaccines have put the pandemic's end in sight. The stock market has rebounded to set new records.

Mr. Dimon, out of step with some who see those factors fueling a steady recovery, is worried. He thinks the growth is fragile.

A nationwide surge in coronavirus infections and new restrictions could lead to more layoffs, depressed spending and a fresh round of small-business failures. The bank's customer data, he said, paint a picture of an uneven recovery. The unemployed are running dangerously low on savings and cutting back on the basics; the wealthy are buying second homes and new cars.

This week's passage by Congress of a new \$900 billion stimulus plan, if ultimately signed into law, will help, but it won't fix the structural defects that allowed the chasm to open up in the first place, Mr. Dimon said. That, he said, requires an aggressive policy response. Absent one, he fears, the economy won't fully recover. And a tepid economy is bad news for JPMorgan.

"Everything is fubar," Mr. Dimon was telling some staff earlier this year.

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Mr. Dimon's 15th year as the CEO was supposed to be a good one.

JPMorgan closed out 2019 with \$36 billion in profit -- eight times its 2004 earnings. Its stock hit an all-time high, pushing the value of the shares Mr. Dimon owns above \$1 billion for the first time.

The early part of the year was packed with travel, starting with the opening number on every global CEO's dance card: the World Economic Forum in Davos, Switzerland. It was late January, and the coronavirus had sickened hundreds of people in China. That did little to damp the mood at the annual gathering of the world's business and political elite. Standing with former British Prime Minister Tony Blair, a longtime adviser to the bank, Mr. Dimon shook hands in a receiving line at a cocktail reception.

From Davos, Mr. Dimon went to Washington for another annual gathering of the rich and famous, the Alfalfa Club dinner. Then it was a retreat for the bank's top 200 senior leaders. From there, he went to Miami, where clients of JPMorgan's private bank for the ultrarich heard from Prince Harry and Meghan Markle. Covid-19 was still a distant worry; the U.S. had only a handful of confirmed cases.

Mr. Dimon was feeling under the weather but chalked it up to all the travel. Still, to be safe, he skipped the handshakes. When he came down with a fever, he stayed in his hotel room.

At JPMorgan's annual investor day on Feb. 25, Mr. Dimon hinted he was hunting for acquisitions, sending Wall Street into a tizzy. As a young, brash deal maker in the 1990s, Mr. Dimon helped assemble a global banking behemoth -- Citigroup Inc. But JPMorgan hadn't done a big deal since the financial crisis, when it scooped up failing Bear Stearns and Washington Mutual.

Mr. Dimon demurred when an analyst asked if the coronavirus would hit the bank's results.

"I have this nightmare somehow in Davos all of us who went there got it. And then we all left and spread it," he said. "The only good news from that is it might have just killed the elites. So I just don't know, we'll just have to wait and see. I'm not sure it helps to guess."

The audience laughed.

A few days later, the pandemic officially arrived in New York with the city's first confirmed infection. On March 3, the Federal Reserve moved to blunt the economic effects of the rapidly spreading virus with a half-point rate cut.

Wall Street wasn't laughing anymore. Investors piled into ultrasafe government bonds, sending the yield on the 10-year Treasury below 1% for the first time.

The mood had shifted at JPMorgan, too. Top executives formed a SWAT team to handle the growing crisis. They met several times a day in a conference room belonging to Mary Erdoes, the bank's asset- and wealth-management chief, that was retrofitted with dozens of screens to monitor coronavirus cases, staff and activity around the globe.

Mr. Dimon started drafting a letter to Treasury Secretary Steven Mnuchin and others, laying out his predictions for the virus's economic impact. The bank canceled its annual summit of CEOs.

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On March 5, Mr. Dimon was supposed to be at St. Patrick's Cathedral on Fifth Avenue for the funeral of Jack Welch, the longtime General Electric Co. CEO.

Instead, he was 18 blocks uptown at NewYork-Presbyterian Hospital. The details of that morning are crystal clear in Mr. Dimon's memory. Clutching his chest, he replayed the moment the lining of his aorta burst.

"I felt it," Mr. Dimon said. "I thought I heard it."

His wife, Judy, ushered him downstairs and hailed a cab outside their Upper East Side apartment for a short ride to the hospital. He sent his secretary an email saying he didn't feel well and was getting checked out. His right arm ached and the vision in his right eye was sinking into a yellowy darkness.

At the hospital, a surgeon ran a quick test. The blood pressure in Mr. Dimon's left arm was high, with the top number reading 140. But his right arm showed 60, dangerously low.

Half his body wasn't getting enough blood.

A heart surgeon who had once operated on Mr. Dimon's late father explained that he was suffering from an aortic dissection, a tear in the inner wall of the essential artery that delivers blood throughout the body. Mr. Dimon's injury was to the part of the aorta closest to the heart, the ascending section just before the arch that plunges the artery downward.

Left untreated, aortic dissections are typically fatal. Because they are thought to be rare -- in 2018, dissections killed 9,923 in the U.S., according to the Centers for Disease Control and Prevention -- doctors often miss them. Actor John Ritter died after an aortic dissection in 2003. His doctors thought it was a heart attack.

In surgery, the doctor said, they would have a brief window to implant a tube and rebuild his aorta. At any moment, the whole thing could rupture. If that happened, there would be no way to save him.

Mr. Dimon told his wife to call Stacey Friedman, the bank's general counsel.

Ms. Friedman called the bank's lead director. Then she called Daniel Pinto, who runs JPMorgan's corporate and investment bank, and Gordon Smith, the head of its sprawling consumer operations. Together they had risen to become co-presidents and co-chief operating officers, overseeing the bulk of the bank's day-to-day operations.

Mr. Dimon was in surgery, she told them. They were both on deck.

As doctors patched up Mr. Dimon during seven hours of surgery, the board of directors held a vote to implement what they called the "Jamie got hit by a bus" plan -- the bank's emergency succession protocol.

JPMorgan's operating committee, Mr. Dimon's inner circle, gathered that afternoon. They shared word from the doctors and Mr. Dimon's family: The surgery went well but he wasn't out of the woods. Ms. Friedman dialed up officials at the Fed and the Office of the Comptroller of the Currency to tell them what was happening. The bank sent a memo to staff and released it to the press at the same time.

Mr. Pinto caught a plane from London, where he lives, due to arrive in New York at 2 a.m.

That evening, Mr. Dimon surprised his doctors by waking up. He was supposed to be knocked out for a day or two. He wanted his ventilator removed. His wife, his three daughters and two sons-in-law, and his twin brother were all waiting at his bedside.

Over the weekend, Saudi Arabia kicked off an oil price war that sent markets spiraling. On Monday morning, stocks fell so far so fast that they triggered, for the first time in 22 years, a market circuit breaker that halted trading for 15 minutes.

On March 11, Mr. Smith went to Washington, taking Mr. Dimon's place at a White House summit of America's top bankers. The televised meeting was meant to calm jittery markets and reassure the public that the nation's banking system was on solid footing. President Trump asked Mr. Smith how Mr. Dimon was doing.

At that moment, Mr. Dimon lay in a bed at a hospital named for financier Sandy Weill. Mr. Weill, his onetime mentor, had abruptly fired him from Citigroup two decades earlier in a power struggle.

He ached all over. His heart, getting used to its new parts, thumped so strongly his daughters felt it when they hugged him. His scar looked like a zipper that would open a jacket right down the middle of his chest. There were tubes and probes in his lungs, arteries and jugular vein.

After a few days, the medical staff started pulling the tubes and electrodes out of his body. On March 12, a week after surgery, Mr. Dimon was released from the hospital.

Friday, March 13, was Mr. Dimon's 64th birthday. He joined a call with his top executives, and they sang "Happy Birthday" to him.

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That weekend, the coronavirus shut down America.

Schools and nonessential businesses closed. People were told to stay home and avoid socializing outside their households. On Sunday, March 15, the Fed slashed interest rates to near zero, its second emergency cut in as many weeks.

On a conference call with the leaders of America's biggest banks that evening, Morgan Stanley Chief Executive James Gorman suggested they all suspend share repurchases to free up funds to lend to consumers and businesses. Mr. Smith agreed.

By Monday morning, the financial world looked to many to be headed for a crisis. Stocks again tripped their circuit breakers. Investors dumped shares and other securities -- anything that looked even remotely risky -- and stockpiled cash.

Mr. Dimon dialed into the bank's executive meeting. His voice was still hoarse, but he wasn't acting too sick.

Among the options on the table: borrowing from the Fed's emergency-lending program. The discount window, as it is known, is meant to help banks weather short-term funding crunches, typically with an overnight loan. There was a big stigma attached to borrowing directly from the Fed -- banks more or less abandoned it after the financial crisis. Do it, Mr. Dimon said.

Later that day, eight of the biggest U.S. banks announced they would all borrow from the window. None of them needed the Fed to backstop them that night, but the future was deeply uncertain. If they acted as a group now, they would signal that borrowing in the future wasn't cause for alarm.

On March 23, the Federal Reserve rolled out an aggressive plan to flood the markets with money. It would lend to businesses and investors and purchase unlimited amounts of government debt -- whatever was necessary to boost the ailing economy.

Four days later, Mr. Trump signed a \$2 trillion stimulus bill that included direct payments to most Americans, an extra \$600 a week in unemployment benefits, loans and grants for struggling industries and a small-business bailout. Much of the money would flow through America's banks, including JPMorgan.

The fiscal and monetary stimulus revived battered markets. Companies that had hoarded cash by maxing out their credit lines raced to sell new debt to eager investors.

Still, by the end of March, confirmed U.S. cases of Covid-19 had crossed 180,000, and the U.S. Navy hospital ship Comfort was heading into New York harbor.

Some 10 million people had lost their jobs. Bank stocks were plummeting, as investors worried they would face surges in losses. Consumer spending had cratered, and a recession that suddenly looked like the worst since the Great Depression was looming.

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Mr. Dimon, secluded at his Manhattan apartment, was under the care of his wife. He joined virtual operating committee gatherings, but left decisions to them. In recent years, Mr. Dimon had delegated more authority, but he remained deeply embedded in every business line and thrives in a crisis.

Doctors cleared him to return to work full-time remotely the first week of April. He was warned to heed dizziness and pain. By then, he had decamped to his house in Bedford, a Westchester suburb. Still building strength, he took walks of several miles around the neighborhood. More extended family arrived to be with him.

Mr. Dimon got to work preparing JPMorgan for a painful recession. Each morning, he was given reports on the bank's exposure to companies in the news. Executives spent hours debating an ever-shifting set of five economic scenarios, from best-case to worst-case. To figure out how much the bank needed to set aside if people and businesses stopped paying them back for loans, they had to assign probabilities to all five. But they couldn't agree on where the economy was headed.

The bank's researchers and economists needed data that was being revised in real time. They tracked future Broadway ticket sales and Google search trends for "unemployment benefits." Some studied what happened when hurricanes wiped out cities.

Mr. Dimon wanted to prepare for the worst-case scenario. But the most-likely picture, executives decided, was a grim second quarter during which unemployment would rise above 10% and gross domestic product would plunge at a breathtaking annualized rate of 25%.

To estimate how many loans would default, they paired the broad economic forecasts with reams of data on customers. The roughly 150 variables included where they lived and worked and what kind of house they owned.

They were surprised at how customers were behaving.

Unemployment had soared, but customers were paying down credit-card debt instead of racking up balances. Customers flooded the bank with relief requests but kept paying on their loans. Spending on Chase credit cards plunged. Savings swelled. The usual correlation between rising unemployment and deteriorating consumer finances had broken down.

Mr. Dimon was convinced that the flood of government money was easing the symptoms of the recession while masking the economy's underlying illness.

"Every piece of data seems distorted," Mr. Dimon told executives. "A recession is happening. We just can't see all of it."

On April 14, the bank set aside \$8.3 billion to cover potential losses on loans, far more than analysts had predicted. The bank's quarterly profit fell by nearly 70%.

Already, the bank's dire forecasts for the economy had worsened. It now expected 20% unemployment and a 40% annualized drop in GDP in the second quarter.

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The spring and early summer brought better news. Infections fell sharply in New York and the hard-hit Northeast. The unemployment rate peaked at 14.7% in April, below the bank's expectations. Cities and states marched toward reopening.

Mr. Dimon again went against the optimistic thinking and believed that many of the layoffs workers assumed were temporary would eventually become permanent. When that happened, spending would drop again, forcing businesses to cut more jobs.

On June 9, Mr. Dimon returned to JPMorgan's nearly empty Madison Avenue headquarters and started working there most days. His doctors had him monitor his blood pressure at his desk as a precaution, and he was watching his heart rate on his smartwatch.

In late June, he went to Washington to meet with Mr. Mnuchin and lawmakers to urge more action.

For years, Mr. Dimon has used JPMorgan as a platform to weigh in on the nation's problems and offer solutions, from taxes to infrastructure to education. He has been building an internal think tank and a policy group that study the unrivaled data that comes from handling the daily checking accounts of millions of Americans and small businesses.

Mr. Dimon believed the data could help officials understand the severity of what the economy was facing. The shutdowns had hurt many, but the pain wasn't equally spread. Heading into the crisis, half of all small businesses held less than 15 days of cash on hand. They were now hoarding cash, but partly because they had stopped paying suppliers and workers. Minority businesses, in particular, were in trouble.

Meanwhile, JPMorgan customers continued to behave in unexpected ways. They were still holding on to 30% of their stimulus checks, a savings rate that stunned executives.

In July, the bank put aside another \$10.5 billion for potential losses on loans, much of it to cover corporate loans that could go bad. Still, JPMorgan posted more revenue than it ever had in a quarter.

By the middle of August, the S&P 500 was setting new records, but bank stocks were down, as investors worried about their profitability. The only thing that seemed to lift them was talk of stimulus.

In September, Mr. Dimon made another trip to Washington, determined to share evidence that the first round of stimulus was wearing off. Customers on unemployment had used their topped-up benefits to pad their savings. In August, after those extra payments ended, they had burned through two-thirds of it.

Still, Mr. Dimon was quietly talking about a deal that indicated his confidence in the bank's own health. Eaton Vance Corp., an asset manager with \$500 billion in assets, was for sale. It was exactly the kind of acquisition Mr. Dimon had telegraphed at the February investor day: a chance to bring in high-margin assets that aren't easily grown in-house. In the end, he walked away. Morgan Stanley won the prize with a \$7 billion bid.

In October, JPMorgan surprised the market with its third-quarter results: Profit had rebounded to pre-pandemic levels. Markets had staged a remarkable comeback from March and companies rushed to raise debt and equity, boosting the bank's Wall Street businesses.

The bank released some of the money it had been storing for losses on loans. Mr. Dimon tried again to tamp down any enthusiasm and warned that the recovery could stall without more stimulus, leading to a double-dip recession. If that happened, the bank could be as much as \$20 billion short of what it would need to cover soured loans, he said.

The presidential election added more volatility. Stocks moved up and down as investors bet on the outcome and the likelihood for more stimulus.

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In recent weeks, positive news on the vaccine front has raised hopes. On Nov. 24, the Dow Jones Industrial Average surged past 30000 for the first time.

At the same time, though, a nationwide spike in virus cases threatens new lockdowns that could send the economy back into a tailspin. Weekly jobless claims recently hit their highest level since September. Household spending fell in November, after six months of increases.

This week, Congress passed another \$900 billion in stimulus funds. If signed by the president, it will send more checks to households, boost unemployment payouts and extend a nationwide freeze on evictions. It also creates another round of small-business help.

JPMorgan economists had been predicting a decline in the first-quarter U.S. economy, despite the consensus view for growth. After Congress put forward the stimulus plan, the bank lifted its view.

Mr. Dimon still worries about the future. Short-term government actions can't fix the lasting pain and widening inequality in the economy, he warned.

Many of those who kept their jobs came out ahead -- socking away money they would have spent commuting to work or traveling. Others who struggled to navigate the bureaucracy of unemployment have fallen into poverty. Ultralow interest rates have spurred a home-buying boom, while a growing number of Americans are relying on food banks to feed their families.

In the recovery from the last recession, Mr. Dimon believes America grew more slowly than it should have. The inequality that recovery created has made capitalism itself unstable, he has said.

He fears that without fundamental policy changes, this recovery will stall, too. He has been calling for education reform; tax changes that lift the take-home pay for lower-income workers and for training programs so more people can make a living wage; infrastructure spending and litigation reform that would help businesses compete; and tweaks to banking regulation he believes hampers his operations.

JPMorgan also has its scars. In the first nine months, profits fell about 40% from the year before. Its shares are down more than 10% this year, while the S&P 500 is up more than 14%. That would be its worst annual comparison in 30 years -- the bank's stock actually outperformed the broader index during the financial crisis in 2008 and 2009. The profit margin on its core lending business has plunged.

Still, JPMorgan performed better than its big-bank benchmark this year and investors continue to give it a valuation above rivals. Even while it prepared for losses on loans, it stuck to investment plans in its branches and **technology**, work Mr. Dimon insists is critical to growth.

Mr. Dimon's doctors aren't sure why his aorta burst. Old lab results didn't reveal missed signs or evidence of an aneurysm that could have caused the rupture. One doctor wondered if they had missed spikes in his blood pressure that had weakened his aorta. His surgeon chalked it up to a freak accident, and regular checkups have shown no lasting damage.

When Mr. Dimon learned that someone he saw in February had contracted Covid-19, his mind returned to all those hands he shook and the fever that confined him to a Miami hotel room. He has been asked so often he is wondering, too: Could it have been Covid?

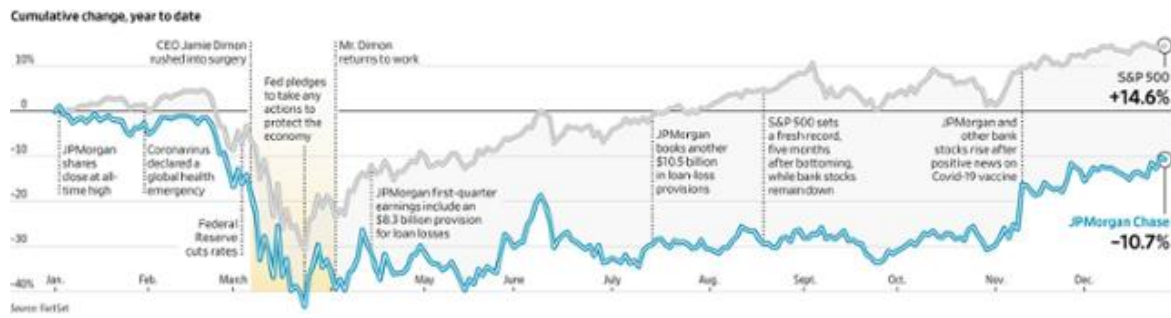
An antibody test came back negative, but that's not unusual for tests taken many months after infection.

One thing he says he is sure of: He is too busy to think about retiring.

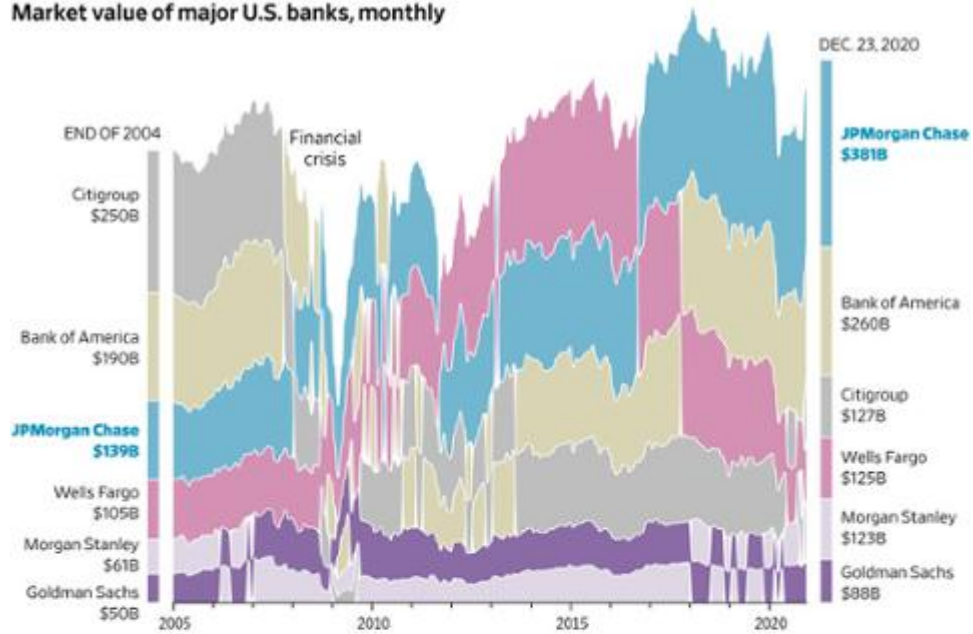
"We have to be focused on beating this," Mr. Dimon said. "We have to get out of Covid before anything else."

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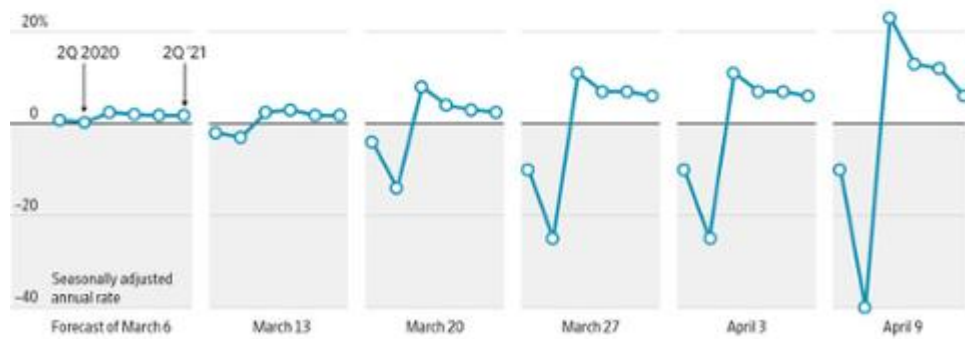
Cara Lombardo and Liz Hoffman contributed to this article.



### Market value of major U.S. banks, monthly



### JPMorgan economists' GDP growth forecasts, by date of forecast



Sources: FactSet (market value); JPMorgan research reports (GDP forecasts)

Document J000000020201226egcq0001f



# THE WALL STREET JOURNAL.

## **Banks Aid Financing for Black-Owned Firms**

By Julie Steinberg

1,039 words

23 November 2020

The Wall Street Journal

J

B10

English

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The biggest banks in the U.S. will give Black-owned businesses advantageous terms on a crucial type of financing that companies use to manage their cash flow, a novel effort to narrow the wealth gap between white and nonwhite communities.

Banks made multibillion-dollar commitments to expand lending to Black consumers and businesses after the wave of protests throughout the U.S. sparked by the killing of George Floyd. The targeted lending is meant to correct decades of discrimination in lending whereby banks denied loans to Black borrowers or steered them toward products with high interest rates and other terms many couldn't afford.

As part of those promises, Citigroup Inc., JPMorgan Chase & Co. and Bank of America Corp. say they will lower charges to Black- and other minority-owned companies in supply-chain finance programs. Companies use supply-chain finance to manage short-term spending needs, similar to the way a consumer might use a credit card.

In a typical supply-chain finance deal, a bank will pay a company's supplier faster than the normal payment terms, which, depending on the industry, typically vary from 30 to 180 days. In return for getting paid early, the supplier agrees to receive slightly less than it would get by waiting, and pays the bank a fee.

The company pays back the bank the full amount down the road, improving its working capital by padding out the time it gets to hold on to its cash. The bank profits by keeping the difference between what it paid the supplier and what it received from the company.

As part of their diversity efforts, the banks will pay Black-owned suppliers earlier than other customers or charge them lower fees, the banks say.

In most types of lending, the Equal Credit Opportunity Act and the Fair Housing Act forbid lenders from making credit decisions based on race. That prevents banks from giving cheaper interest rates on mortgages, for example, to minority applicants.

In the supply-chain finance business, by contrast, the supplier isn't receiving a traditional loan. Rather, the banks' financing relationship is with the company that buys the goods or services from the supplier. The client tells the banks which of its suppliers are eligible for preferential treatment. The banks then run checks to confirm the pool.

John E. Harmon Sr., president of the African American Chamber of Commerce of New Jersey, said the programs would help Black businesses grow faster and level the playing field. Supplier diversity has become a frequent topic of discussion with companies and financial institutions since the racial-justice protests, he said.

Banks have made efforts over the years to lend to Black and other-minority owned businesses. But progress has been mixed, and those businesses often fail to get access to the key types of financing that grease the wheels of commerce.

A December report from the Federal Reserve Bank of Atlanta found that while nearly half of white-owned small businesses got approval for all the financing they applied for in 2018, only 31% of Black-owned firms, 35% of Hispanic-owned and 39% of Asian-owned did.

In the wake of the protests, Citigroup duplicated an existing supply-chain program that extends preferential pricing for suppliers who meet environmental, social and governance criteria like committing to upholding the Paris climate agreement. The new program will focus on Black-owned businesses, said Ebru Pakcan, global head of trade.

"You have the effect of being able to support Black-owned businesses that are already in the marketplace," Ms. Pakcan said. "If growth opportunities have not been at par with others, if they have been disadvantaged in other ways, we are now giving them an extra advantage."

The first client to consider it is a large U.S. telecommunications company, whose program is likely to be implemented next year. The bank is initially targeting 150 suppliers of that client for improved terms or earlier payment, Ms. Pakcan said.

Big users of supply-chain financing include blue-chip companies such as Boeing Co. and Coca-Cola Co., which manage hundreds or thousands of suppliers at a time. The programs help companies conserve cash for longer. By paying suppliers earlier, it makes them more attractive to do business with.

Supply-chain finance deals are private, and public companies aren't obliged to disclose them, so it is difficult to put a precise figure on the size of the business. But there may be more than \$350 billion of invoices involved in the supply-chain finance technique known as reverse factoring, according to research firm Aite Group.

Supply-chain financing spread after the financial crisis and has remained popular through the coronavirus pandemic. It comprises a small but growing part of banks' commercial banking operations. Banks took in \$12.7 billion in revenue during the first half of the year from supply-chain finance, up 3.6% from a year earlier, according to research firm Coalition.

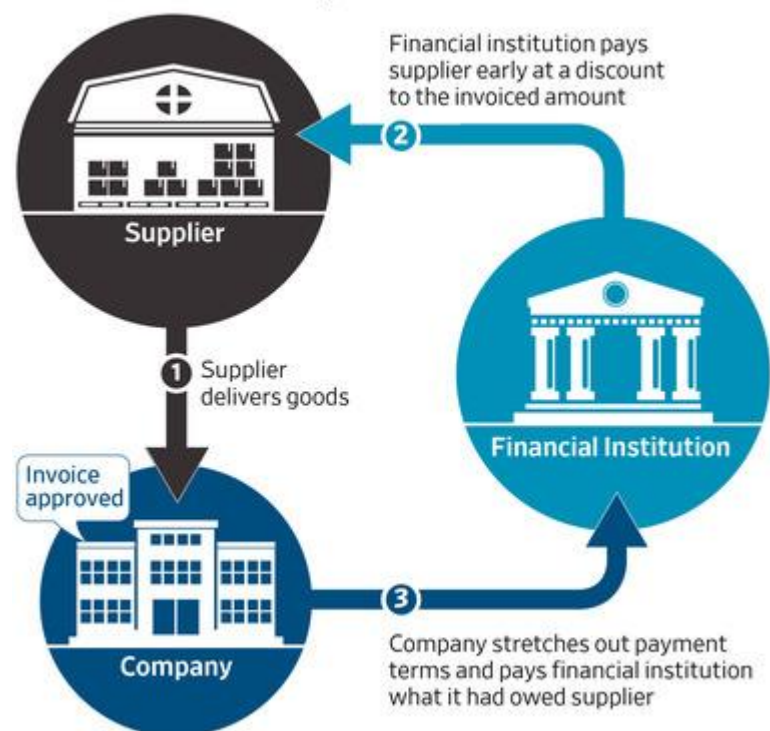
JPMorgan is crafting programs with better pricing for Black- and other minority- and female-owned suppliers, propelled in part by corporate clients reaching out to the bank on the topic, said Vasudha Saxena, head of trade in JPMorgan's commercial bank. The bank in recent months has been working with retail and industrial clients on programs.

**Technology** has helped widen the pool of suppliers. Typically, onboarding supply-chain finance participants has been paper-intensive, making it difficult for small businesses without large treasury departments to enroll. New **technology** is easing the process and allowing more access, she said.

Bank of America will use some of the proceeds from a \$2 billion environmental, social and governance bond it issued in September to fund financing to minority-owned suppliers in the U.S. Black and Hispanic suppliers will get a discount on the rate the bank charges for supply-chain finance, said Geoff Brady, head of global trade and supply-chain finance.

The bank will target hundreds of suppliers in the next several months, he said. One goal of the program is for Bank of America to get access to new, diverse clients with the hopes of banking them beyond supply-chain finance.

**A typical supply-chain finance transaction  
known as reverse factoring**



Sources: WSJ staff reporting

Document J000000020201123egbn00040

# The New York Times

Business/Financial Desk; SECTB  
**DealBook Online Summit**

By Michael J. de la Merced, Lauren Hirsch and Sophia June

579 words

19 November 2020

The New York Times

NYTF

Late Edition - Final

6

English

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Wednesday was the second day of the DealBook Online Summit, where leaders from business, policy and culture weighed in on the world's economic challenges, innovation in the age of Big Tech and the role of corporations in addressing racial inequality.

**FINANCE** Dimon Challenges C.E.O.s In this era of upheaval -- from social injustices to the fraught politics to the pandemic -- it's more important than ever for business leaders to speak up, even on issues not directly related to their companies, said Jamie Dimon, the chief executive of JPMorgan Chase.

"C.E.O.s are being asked to do a lot of things today that they weren't asked to do in the past," he told DealBook's Andrew Ross Sorkin. Speaking personally, Mr. Dimon added, "I'm a patriot before I'm the C.E.O. of JPMorgan."

It is that attitude -- which he said he shared with other chief executives, like Doug McMillon of Walmart -- that has led corporate America to call for unity after the contentious 2020 election, to speak out on erasing the racial equality gap and to demand that political leaders help out ordinary Americans.

"If you travel out of Washington, D.C., and New York City, there is deep, deep, deep frustration" with political leaders, particularly over stimulus negotiations, he said. MICHAEL J. de la MERCED

**TECHNOLOGY** Google's Porat Urges Diversity Ruth Porat, the finance chief of Google and Alphabet, said that patience was waning for Silicon Valley to fully address its challenges with gender and racial equity.

There's a "greater level of impatience" in Silicon Valley, she said. "If you can make the kinds of transformative changes through **technology** that we have, why can't we do it on this issue that we hold so dear to us?"

But unlike many of the technological problems that Silicon Valley innovators seek to solve, diversity is a societal issue, she said. It takes time for people to embrace change.

"That is not acceptable, and that is not an excuse," she said. "So we're trying to break through it in every way we can." She listed addressing unconscious bias and encouraging alliances among the efforts to move the issue forward. LAUREN HIRSCH

**VIDEO GAMES** Epic Chief Talks Connectivity Tim Sweeney, the founder of Epic Games, the maker of the wildly popular video game Fortnite, talked about the future of interconnectivity and how computers were increasingly used as tools to connect people to real-time social experiences, a trend that the pandemic has accelerated.

"It's not just like you playing this game as a solitary experience," Mr. Sweeney said. "It's you and your friends doing something together, just like my generation would go in the woods and play in real forts and this generation is now building virtual forts."

In response to concerns that children may be addicted to Fortnite, Mr. Sweeney objected to the term "addiction."

"Addiction is a serious problem," he said. "If you look at what happens with a heroin or meth addict, I would not apply that term to people who love playing games and sometimes play them more than they ought."

He added: "If that's the case, then I'm addicted to programming, and my mom was addicted to gardening."

Instead, he said, games like Fortnite can be a "healthy social experience." SOPHIA JUNE



# THE WALL STREET JOURNAL.

## Banking & Finance: Fund Managers Place More Bets Tied to Retailers Surviving

By Joe Wallace and Julie Steinberg

716 words

29 October 2020

The Wall Street Journal

J

B10

English

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Pain at the shopping mall is throwing up a moneymaking opportunity for fund managers. For the bet to pay off, retailers on the edge of going bust must actually survive.

The bet rests on a form of protection known as a vendor put option that thrives in times of economic stress. Such deals, which often involve big players like JPMorgan Chase & Co., are on the rise. They can be lucrative for fund managers, who get paid to act as a backstop in case a supplier's customers go bankrupt.

Interest in vendor puts has bloomed recently. In good times, trade-credit insurance, which protects against defaults, is available. But insurers during the pandemic slashed coverage and companies including Neiman Marcus Group Inc. and J.Crew Group Inc. tipped into bankruptcy.

The puts work like this: A supplier grows concerned its client might not stump up for goods and services after it buys them. To protect its accounts receivable, the supplier enters into a contract of up to a year with an investor, which collects a fee upfront and agrees to purchase the receivables claims if the company collapses.

Since May, suppliers have entered into put options on companies including J.C. Penney Co., Macy's Inc. and Bed Bath & Beyond Inc., according to Cherokee Acquisition, which runs an online platform for the instruments. Transportation and **technology** companies are also popular, industry participants say.

JPMorgan often sits in the middle, striking vendor-put deals with suppliers before passing its position onto investors. The bank says requests for prices on vendor puts are up between 30% and 50% over the past year.

Credit Suisse Group AG and Goldman Sachs Group Inc. have been involved in the vendor put market in the past, but currently JPMorgan is the only big bank with a significant presence, according to people familiar with the business.

For funds, puts can be more lucrative than credit-default swaps, another protective financial instrument. Many investors look for annualized returns of 15-18%, according to a person familiar with the trades.

On Oct. 21, it cost vendors \$10,000 a month to protect a notional \$1 million in receivables with a Macy's put on Cherokee's exchange. If the contract lasted a year, the equivalent credit-default swap would cost just under two-thirds as much. The flip side to this premium: Puts are hard to trade and can be costly to manage if there is a bankruptcy, said Cherokee director Bradley Max.

Distressed-investment firm Avenue Capital Group notched a profitable trade in 2018 and early 2019 when Tesla Inc.'s bonds were under pressure. Avenue sold puts to a company supplying body panels to the electric-vehicle maker, a person familiar with the matter said. Avenue co-founder Marc Lasry lauded the trade at the time, saying there was no reason to fear for Tesla's prospects.

Puts are generally much more expensive than credit insurance, but they can't be canceled for the duration of the contract, said Shereen Furio, principal at insurance brokerage Furio Agency. She says requests are up 50% since before the crisis.

The wager typically pays off because most companies covered by the deals don't collapse. Losses are steep when puts are triggered, so many investors hedge by buying credit-default swaps, said Thomas Janover, a lawyer at Kramer Levin Naftalis & Frankel LLP, who draws up put agreements.

Vendor puts were created in the 1990s and dwell in a niche corner of the credit market. Popular through the 2008-09 financial crisis, they wane during periods of economic growth when suppliers are confident their customers will pay. The deals are private, but participants estimate that puts protect receivables tied to payments for hundreds of millions of dollars.

Rene Canezin, managing partner of Evolution Credit Partners, which is backed by Harvard University's endowment, said selling puts is attractive because the firm gets to contribute to the real economy, as the supplier is "worried about his business profile; he needs to ship next month."

Mr. Canezin said the size of returns is linked to puts' bespoke nature, requiring time spent on research and customer service.

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Pat Minczeski contributed to this article.

## Why a supplier might buy a 'vendor put' and how one might work

Economic stress has driven some retailers to seek bankruptcy protection. Some of their suppliers are looking to make sure they get paid for their goods, even if the cash isn't from the retailer. Some buy vendor puts.

A **supplier** sells some jeans to a **retailer**.

The **vendor put** is tied to a 'credit event,' such as a bankruptcy, within a set time period. In this example: eight months.



Document J000000020201029egat0000h

# THE WALL STREET JOURNAL.

## Technology Financial Firms Wary Of Quantum Hackers

By Sara Castellanos  
468 words  
12 October 2020  
The Wall Street Journal  
J  
B4  
English

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Financial-services companies are preparing for a time when a powerful quantum computer could break some of the most widespread cryptographic methods currently used in **cybersecurity**.

Experts say **quantum-computing** cyberattacks could be more than a decade away, based on the **technology**'s rate of progress, but the consequences could be so severe that companies and cryptographers world-wide are preparing now. Visa Inc. and JPMorgan Chase & Co., for example, are researching methods capable of thwarting such an attack, developing new processes and closely following the race for new encryption standards.

"The data we have is sensitive, and it is vast in quantity, so protecting that data is job number one for us," said Rajat Taneja, president of **technology** at Visa.

Nearly six years ago, researchers at Visa began studying so-called post-quantum cryptography, which refers to the new cryptographic methods that could be used to withstand an attack from a quantum computer. Researchers at Visa have published four peer-reviewed papers about cryptographic systems that could be used against a **quantum-computing** attack, and a fifth is in the works, Mr. Taneja said.

Quantum computers are still in the early stages of development. The machines harness the properties of quantum physics, including superposition and entanglement, to radically speed up complex calculations related to finance, health care and manufacturing that are intractable for today's computers. While traditional computers store information as either zeros or ones, quantum computers use quantum bits, or qubits, which represent and store information as both zeros and ones simultaneously.

Some researchers estimate that it would take a machine with 250 million qubits to break today's public-key cryptography, a widely used encryption method that could be particularly vulnerable.

While today's early-stage quantum computers are far less powerful, much of the financial industry is secured by public-key cryptography, ranging from online banking and online transactions to banking mobile apps, Mr. Taneja said.

A popular public-key cryptography method, RSA, would be especially at risk. RSA is vulnerable to quantum computers because it is based on integer factorization, which is essentially reverse multiplication, using numbers that can be about 1,000 digits long.

Regular computers -- even supercomputers -- can't factor such long numbers fast enough to beat these defenses. Quantum computers, though, may be able to solve integer factorization problems many millions of times faster.

A **quantum computing** attack could compromise not only data in the path of the attack but also the digital-signature algorithms used to verify the identity of some secure websites, said Yassir Nawaz, an executive director at JPMorgan responsible for securing emerging technologies at the bank.

That could allow bad actors to create fake identities for websites, as well as fake software downloads and software updates.

Document J000000020201012egac0000m



# THE WALL STREET JOURNAL.

## Regulators' Data Mining Revived Probe of JPMorgan

By Dave Michaels

1,029 words

6 October 2020

The Wall Street Journal

J

B1

English

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Corrections & Amplifications

Five years of CME Group Inc. trading data for precious-metals futures total 1.7 terabytes of information. A Business & Finance article Tuesday about the Commodity Futures Trading Commission's investigations incorrectly said that was the total for five years of complete CME trading data.

(WSJ Oct. 8, 2020)

(END)

WASHINGTON -- Investigators probing whether traders at JPMorgan Chase & Co. rigged silver prices seven years ago decided there was no case to bring. Last week, the same agency hammered the megabank with a \$920 million fine.

How a small agency that once walked away from an investigation of price manipulation, only to later impose its biggest fine yet for the conduct, shows the advances government has made in using data to uncover market manipulation, said James McDonald, enforcement director of the Commodity Futures Trading Commission.

"We could not have brought the JPMorgan case without the **data analytics** program we have now," said Mr. McDonald, who will step down as director this week after more than three years in the post.

The data needed to uncover the eight-year market manipulation scheme came from Chicago-based CME Group Inc., the operator of exchanges including one that offers trading in gold and silver futures. The volume of data -- including trades, orders and other messages flooding into CME's computers -- is so massive the CFTC couldn't store or use it when Mr. McDonald began seeking it in 2017, he said.

Five years of complete CME trading data amounts to 1.7 terabytes, or 127 million pages of information, according to testimony in a recent trial that resulted in the conviction of two former Deutsche Bank AG traders on fraud charges related to spoofing.

As the CFTC added the ability to store and access more trading data in the cloud, it also hired former Chicago traders and other quantitative-minded employees to write programs that filter CME's data for patterns of manipulation.

"There is really no other avenue that we have that allows us to be as proactive [investigating] as data," Mr. McDonald said.

The tactic that JPMorgan admitted its traders used, known as spoofing, is a rapid-fire game of placing and canceling orders that can distort the view of supply and demand, causing prices to move in a direction engineered by the spoofer, regulators say. The victims are sometimes high-frequency trading firms that use algorithms to buy and sell continuously.

The CFTC began looking for manipulation in the silver market in 2008, after the agency received requests from hundreds of investors who complained that silver prices were being rigged. The agency closed the probe in 2013, saying there was no "viable basis" for an enforcement action.

"Twelve years ago, we were just conducting those types of investigations differently. We were relying on statements presented to us either from the entity itself or the traders in sworn testimony," Mr. McDonald said. "We didn't have the same ability to look beneath them to ensure they were truthful and accurate."

Two former JPMorgan traders misled the CFTC when the agency interviewed them as part of the earlier silver-market investigation, according to a November 2019 indictment that charged four of the bank's former

employees with crimes including racketeering. The traders had been asked about conduct that resembled spoofing and denied doing it, the indictment said. All the traders have pleaded not guilty and are fighting the charges, which were filed in Chicago federal court.

In a deal unveiled last week, JPMorgan admitted former traders, including the ones indicted last year, spoofed gold, silver and U.S. Treasury futures markets. The bank also acknowledged misconduct in trading U.S. Treasury securities, the world's most liquid bond market. The \$920 million resolution will allow JPMorgan to sidestep wire-fraud charges if it stays out of trouble for three years.

The CFTC has settled with or sued over 60 defendants for spoofing-related misconduct since 2013, with nearly half of the total coming during 2019 and 2020. Trading arms of Deutsche Bank, Bank of America Corp. and Morgan Stanley have settled CFTC spoofing probes over precious-metals activity.

Some traders say the government has labeled too much activity as spoofing. Traders at big banks sometimes place and cancel larger orders to see whether there is demand to trade in the size they prefer. Often, the banks have clients that need to trade in larger quantities in order to hedge business risks, said Robert Bogucki, former global head of macro trading at Barclays PLC.

"The winners of these prosecutions will be the high-frequency trading firms," said Mr. Bogucki, who was prosecuted and acquitted of market-manipulation charges when a judge threw out the government's claims against him. "The losers become the bank trading desks, and the biggest losers become the end users, where the rubber hits the road in the real economy."

Mr. McDonald said the CFTC's **data-analytics** program has become advanced enough that some civil-enforcement cases can be brought using just trading data, and don't require witness testimony. The Justice Department's criminal cases have generally involved cooperating witnesses, who may be needed to convince jurors there was an intent to defraud.

Some Wall Street watchers say the JPMorgan settlement was unsatisfying despite the big penalty imposed on the bank, which earned \$4.7 billion during its latest quarter. JPMorgan pleaded guilty in 2015 to similar misconduct in the foreign-exchange spot market, the Justice Department's filings noted.

Better Markets, a group that advocates for stricter financial regulation, said the outcome was "grossly inadequate" because of JPMorgan's prior settlements with regulators and law enforcement.

The government's spoofing probes have had an impact on misconduct, Mr. McDonald said. The CFTC sees less spoofing today than it did "even three years ago," he said. Traders may be using newer methods to try to illegally influence prices, he said, including injecting misleading information on one exchange in order to influence prices on a different one.

"So long as you have markets, you are going to have folks trying to monkey with the markets," he said.

### Spoofing fines paid by global banks since 2017



Note: Fines include amounts paid to CFTC and Justice Department  
Sources: CFTC, DOJ enforcement orders

Document J000000020201006ega60001h

# THE WALL STREET JOURNAL.

## Wireless Firm Ligado Seeks to Raise \$4 Billion in Bond Sale

By Andrew Scurria and Alexander Gladstone

390 words

2 October 2020

The Wall Street Journal

J

B11

English

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Ligado Networks LLC is heading back to the debt markets in hopes of raising as much as \$4 billion that would steer the wireless company clear of a possible bankruptcy, according to people familiar with the matter.

The spectrum venture could launch the debt sale as soon as Monday, hoping to refinance more than \$2 billion in loans coming due in December that could otherwise tip the company into its second bankruptcy since 2012, according to people familiar with the matter.

JPMorgan Chase & Co. is managing the offering for Ligado, which is vying to overcome deep-seated resistance to its business plans among Pentagon officials and some members of Congress.

At stake are the rights to develop a valuable swath of radio frequencies that Ligado Networks has proposed developing for cellular use as part of the national buildout of 5G **technology**.

The company has the backing of the Federal Communications Commission and top Trump administration officials including Attorney General William Barr and Secretary of State Mike Pompeo.

Yet lobbying against Ligado by military officials and other U.S. agencies has kept the company in limbo for years, sparking efforts by some lawmakers to restrict its ability to tap a block of airwaves known as the L-band.

Opponents have claimed that granting the company's license request would interfere with Global Positioning System **technology** critical to military craft, aerospace users and weather forecasters.

Delays in the regulatory process have taken a financial toll on Ligado Networks, which has been accumulating debt since the company exited an earlier chapter 11 proceeding in 2015 under its previous name, LightSquared Inc.

The company now faces more than \$2 billion in loans maturing in December that need to be rolled over. Ligado may sell bonds rather than borrow another loan, hopeful they could enter high-yield debt indexes and broaden the base of potential buyers, a person familiar with the matter said.

Early market feedback to JPMorgan suggests that investors could demand hefty yields of more than 13% to participate, according to people familiar with the matter.

Paving the way for the offering is a separate agreement between Ligado Networks and other investors to convert roughly \$8 billion in junior debt and preferred equity into common stock.

Document J000000020201002ega20000q

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