Thank you. It’s a pleasure to be back at NABE. I want to first thank Julia for her kind introduction. And thank you to all of you for this honor.

I am especially privileged to receive a lifetime achievement award named after Paul Volcker – a titan in the field of economics. Paul may best be known for his work as Chairman of the Federal Reserve. But his legacy extends far beyond that role. Indeed, Treasury has a special claim to him too. Paul spent nearly a decade of his career working for our Department. As Under Secretary for Monetary Affairs, he shepherded our country’s transition from one monetary system to another – and with it, a change in America’s role in the global economy. Among the many posts in his long and varied career, Paul later called his role at Treasury “the best job in the world.” With apologies to my former Fed colleagues, we at Treasury take special pride in that.

In the last decade of his life, Paul also left an indelible mark on the field of financial stability. Paul was an outspoken champion for stronger regulation to prevent future financial crises. He led President Obama’s Economic Recovery Advisory Board, counseled the Administration on key changes to the financial architecture, and advocated firmly and publicly for the banking rule that bears his name.

Like Paul, and many of the economists here, I am no stranger to financial crises. My career has spanned almost two decades at the Fed, nearly three years at the Council of Economic Advisors, and over two years now at the Treasury Department. In that time, I have seen the U.S. and global financial systems undergo a number of significant disruptions: the Asian Financial Crisis, the dot-
com crash, the Global Financial Crisis, and the COVID-19 market turmoil. I understand deeply the fear and uncertainty that these disruptions can cause. And I know well the longer-term pain that these disruptions can impose on American families and businesses when they are not decisively managed. These risks were top of mind as we took forceful and immediate actions earlier this month to contain the fallout from the failures of two regional banking institutions.

One constant across these disruptions has been a perennial debate about the proper role of government in regulating the financial sector. Waves of financial regulation have often been followed by concerted efforts at deregulation – premised on the belief that regulation is ineffective and stifles financial innovation and economic growth. I have lived through efforts like these, such as the massive pushback against the Dodd-Frank Act’s enactment and implementation. My response has always been that a stable and resilient financial system is not only compatible with responsible innovation and sustainable growth. In fact, it is a prerequisite for those goals.

Our prosperity depends on the work to safeguard financial stability before a crisis occurs – just as the implementation of a strong fire code can prevent a fire from breaking out. That work mattered in 2020, when a worldwide pandemic-driven “dash for cash” put extraordinary strain on the financial system. A decade of focused work to improve financial stability – coupled with forceful public-sector interventions – helped us avoid the worst possible economic outcomes. This work also mattered earlier this month, when we encountered two bank failures with a stronger financial system and hard-earned lessons from the Global Financial Crisis.

We have made much progress in the past 15 years. But recent events show that, clearly, our work is not done. During the COVID pandemic and again this month, the proverbial fire department had to be called – in the form of interventions by the Fed, FDIC, and Treasury. These events remind us of the urgent need to complete unfinished business: to finalize post-crisis reforms, consider whether deregulation may have gone too far, and repair the cracks in the regulatory perimeter that the recent shocks have revealed. We must also address new areas of risk.

Since my first day at Treasury, I have made it a major priority to restore and strengthen our financial stability apparatus. My remarks today will outline the importance of this work to the American economy. I will establish why financial stability matters to American families, before turning to how our financial system has performed through its most serious tests since the Global Financial Crisis.
Then, I will speak about the progress that we’ve made on our financial stability agenda and the road ahead.

I. THE IMPORTANCE OF FINANCIAL STABILITY

A. Why Financial Stability Matters for the Broader Economy

First, let’s start with a fundamental question: why care about financial stability in the first place?

Simply put, we care about financial stability because families and businesses benefit from a well-functioning financial system. Conversely, they bear the costs of its failures.

When the financial system works, it can be a powerful engine for economic growth. Financial institutions provide credit that enables families to afford homes, invest in education, and otherwise improve their standards of living. Borrowing helps business owners form new ventures and expand existing ones, leading to innovation and job creation. The financial system also gives families and businesses safe places to save, invest, and transact. At a broader level, it helps us efficiently allocate capital across the many productive uses in society.

But a fragile financial system can generate deep pain for American households when it fails. The Global Financial Crisis led to the longest recession in the postwar era. Over 8 million Americans lost their jobs. The net worth of U.S. households fell by over $10 trillion at the lowest point in the crisis. And the long-term unemployment rate did not recover for over a decade. Jorda, Schularick, and Taylor have found that recessions following financial crises are deeper than other downturns. The recoveries are slower too.¹ One study put the price tag of lost output following the Global Financial Crisis at nearly a half to a full year of U.S. GDP. That’s the equivalent of $50,000 to $120,000 for every U.S. household.² And the pain was not evenly distributed. Families in the bottom half of the distribution lost decades of gains in household wealth – while the top lost little.³
Studies show that weak financial systems can amplify business cycles. In a seminal 1999 paper, Bernanke, Gertler, and Gilchrist concluded that endogenous developments in credit markets can serve as a “financial accelerator.” That is, they can turn relatively small shocks into large fluctuations in aggregate economic activity – including more severe economic downturns. Nellie Liang, our Under Secretary for Domestic Finance, has produced with other scholars a helpful analytic approach called “growth at risk.” They conclude that loose financial conditions may support economic growth in the near-term. But that comes at the expense of increased downside risks in the medium term if loose conditions are accompanied by rapid credit growth.

B. The Rationale Behind Financial Stability Policies

The United States has an extensive history of federal financial regulation – one that dates back to the Civil War. Through much of the 20th century, regulators primarily focused on the safety and soundness of banks, along with investor protection and market integrity. But the Global Financial Crisis made clear that this focus was too narrow. Today’s financial system is characterized by increased complexity and interconnection across market actors and geographic boundaries. A single point of failure can cascade through the system like a wildfire – leading to a failure of the financial system to perform its core functions. In the aftermath of the Global Financial Crisis, the United States and many countries pursued new macroprudential policies designed to mitigate systemic risk.

Our goal as policymakers is to build a financial system that can provide core financial services in both good and bad times. Macroprudential policy is not aimed at preventing external shocks nor eliminating all volatility in the financial system. Rather, macroprudential policy aims to make the financial system more resilient to external shocks – so the system can dampen, not amplify, their consequences for American households and businesses. We also aim to prevent the financial system itself from becoming a source of shocks – like it was in 2008.

These policies are possible because financial crises share common elements with one another.
Let’s take the basic concept of fire sales. As described by Shleifer and Vishny, a fire sale is the forced sale of assets at a price below fundamental values. Building on this idea, Brunnermeier and Pedersen show how a negative shock to the net worth of collateralized borrowers can trigger a vicious cycle of forced asset sales. The resulting price declines trigger further forced sales. At each stage, the net worth of leveraged investors falls, requiring additional liquidations.

Of course, the concept of a fire sale is broader than the specific mechanism embodied in the Shleifer-Vishny or Brunnermeier-Pedersen models. Just as the original spark for a real fire can come from many sources, the trigger for systemic stress is often difficult to predict. But there are common vulnerabilities and transmission channels through which financial fires can get out of hand. Excessive leverage, especially when paired with maturity and liquidity mismatches, can increase the risk that fires spread out of control.

Information asymmetries can also lead to runs that have the potential to accelerate and deepen asset fire sales. This dynamic was highlighted in the research that won Diamond and Dybvig the Nobel Prize with Bernanke last year. Earlier this month, we saw one example of how dangerous these sorts of runs can be – as customers withdrew deposits from Silicon Valley Bank (SVB) and Signature Bank en masse.

The fire analogy should make the fundamental rationale for macroprudential financial regulation intuitively clear. Due to the externalities created by fires that can rage out of control, every community has both fire codes and fire departments. Fire departments are there to extinguish fires. But importantly, fire codes are there to prevent fires from starting and spreading in the first place.

II. THE POST-GFC FINANCIAL SYSTEM

The Global Financial Crisis delivered a grave warning to the world about the risk of financial fires. So, we acted.

In the United States, Congress passed stricter fire codes in the form of stronger standards for systemically important banks, financial market utilities, and other firms. These reforms were
designed to reduce their probability of failure and force them to internalize the cost of spillovers. Congress also created firebreaks between certain large firms and their neighbors, requiring them to plan for their own recovery and resolution. New smoke alarms were affixed to the financial system through the creation of the Office of Financial Research at the Treasury Department. That office was tasked with collecting financial data to help identify potential risks. And of course, there was a new fire marshal in town. Congress established the Financial Stability Oversight Council, or FSOC, to coordinate among agencies to identify and respond to emerging threats to U.S. financial stability.

We also knew that financial risks rarely respect national borders. In the years following the crisis, we built up the Financial Stability Board in partnership with other G20 members. We improved communication and coordination for stronger standards for financial stability policy, while also creating robust networks for responding to future crises.

Since then, our financial system has gone through a number of tests.

The biggest test came in March 2020 – just shy of a decade after the passage of Dodd-Frank. As the coronavirus spread rapidly across the world and governments issued stay-at-home orders, economic uncertainty and financial panic set in. What followed were historic selloffs in a broad range of financial assets – from equities to corporate and municipal bonds. Treasury yields rose as investors sought cash in this highly uncertain moment. The S&P 500 painted a clear picture of the panic. It tripped three circuit-breakers in the span of a week as the stock market recorded historic drops.

Over the past year, the financial system has gone through additional tests as financial conditions have tightened. Earlier this month, SVB failed to adequately account for interest rate risks and suffered a run accelerated by the bank’s outsized vulnerabilities. Its failure – along with that of Signature Bank – created a serious risk for contagious runs at other banks.

It is notable that neither of these events triggered the worst-case scenario – a financial meltdown like we saw in 2007 and 2008. In large part, this was due to the post-crisis reforms we put in place. But in both cases, the government had to deliver substantial interventions to ease the pressure on certain parts of the financial system.
This means that more work must be done.

Let me begin with the banking system. During the March 2020 panic, banks served as an important pillar of strength for the financial system. Large banks were better capitalized and more liquid than they were in 2007. Dodd-Frank imposed significant reforms designed to ensure these institutions could better absorb losses and meet customer demands for credit and cash.

But the failures of two regional banks this month demonstrate that our business is unfinished. To be clear, the banking system is significantly stronger than it was heading into the Global Financial Crisis. This is perhaps best illustrated by the fact that we’ve seen relative stability in the overall banking sector this month, even as concerns grew about specific institutions. Still, any time a bank fails, it is cause for serious concern. Regulatory requirements have been loosened in recent years. I believe it is appropriate to assess the impact of these deregulatory decisions and take any necessary actions in response.

We must also address vulnerabilities in the nonbank sector. Some nonbanks – or “shadow banks” – consist of financial companies that carry out traditional banking functions, but are outside of, or only loosely linked to, depository institutions. They have grown substantially in the past few decades. In the United States, credit provided by nonbanks – measured relative to GDP – has more than doubled from 1985 to today. This same measure has remained relatively flat for banks.

In many sectors, nonbanks have increased competition, fostered innovation, and broadened access to credit. But in March 2020, nonbanks and others pulled back from important credit markets. Extraordinary intervention by the government was necessary to stabilize these distressed markets and maintain a sufficient flow of credit to households and businesses. Put simply, the COVID shock reaffirmed the significance of structural vulnerabilities in nonbanks. Now, our duty as policymakers is to respond.

III. PROGRESS ON UNFINISHED BUSINESS
When the President and I took office in January 2021, we inherited a financial stability apparatus at Treasury that had been decimated. For example, I walked in to find an FSOC team that was less than one third of the size it was five years prior. In 2016, FSOC’s policy, analysis, and operations teams were fully staffed. By 2021, the analysis team had been eliminated. This team, working with financial regulators, was responsible for helping monitor systemic risk. This meant that we went into the pandemic crisis without the staffing we needed to monitor risks to the health of the financial system.

Over the past two years, I have made it a top priority to rebuild the financial stability infrastructure at Treasury. We have doubled the size of our FSOC staff, with plans to accelerate hiring in the coming months. Importantly, we have recommitted to our partnership with regulators to make progress on our financial stability agenda.

Let me start with our work on the banking system, before turning to nonbanks.

**A. Banks**

Federal regulators are in the process of reviewing events surrounding the failure of SVB. It’s important that I don’t prejudge the conclusions of their inquiry. So let me focus instead on our response to the situation that we encountered.

Earlier this month, we learned about a situation at SVB that required immediate action. The institution was experiencing a classic Diamond-Dybvig bank run – fueled by uncertainty about the value of its assets. This run was accelerated by unique features of SVB’s deposit base. The bank’s depositors were highly correlated, and an unusually high share of its deposits was uninsured. Withdrawals were occurring at a remarkable speed.

Faced with this run, the federal government took decisive action to restore and strengthen public confidence in the U.S. banking system. Treasury worked with the Fed and FDIC to protect depositors in the resolution of SVB. We also took the same action for Signature Bank – another institution that faced a run at around the same time. This meant that all customers at SVB and Signature Bank
received access to their insured and uninsured deposits almost immediately. To be clear, the steps we took were not focused on aiding specific banks or customers. Our intervention was necessary to mitigate systemic risks and protect the broader U.S. banking system. We also took these actions without protecting the banks’ investors or managers. In addition to these specific actions, the Fed established a new lending facility to provide additional liquidity to the banking system.

Today, the U.S. banking system is sound, even as it has come under pressure. The new Fed facility and discount window lending are working as intended to help banks meet the needs of all of their depositors. The capital and liquidity positions of the overall system remain at strong levels. And as we continue to monitor conditions, let me be clear: this month’s developments have been very different than those of the Global Financial Crisis. Back then, many financial institutions came under stress due to their holdings of subprime assets. We do not see that situation in the banking system today.

Even in a well-regulated system, public confidence is key. When there are cracks in confidence in the banking system, the government must act immediately. This includes making forceful interventions – like we did. As I have said, we have used important tools to act quickly to prevent contagion. And they are tools we could use again. The strong actions we have taken ensure that Americans’ deposits are safe. And we would be prepared to take additional actions if warranted.

It’s also important that we reexamine whether our current supervisory and regulatory regimes are adequate for the risks that banks face today. We must act to address these risks if necessary. Regulation imposes costs on firms, just like fire codes do for property owners. But the costs of proper regulation pale in comparison to the tragic costs of financial crises.

Our Administration is committed to making sure that the U.S. banking system remains the strongest and safest in the world. As we consider next steps, it is vital that we ensure the health and competitiveness of our vibrant community and regional banking institutions. The American economy benefits enormously from our broad and diverse banking system.

B. Nonbanks: Money Market and Open-End Funds
As we strengthen the banking sector, we are also making progress on one of FSOC’s top priorities: mitigating vulnerabilities in nonbank financial intermediation. Many of these nonbank institutions engage in liquidity and maturity transformation: they profit by issuing short-term obligations while investing in riskier and longer-term assets. But they are generally not regulated to account for spillovers to the rest of the financial system during times of extreme stress.

There are two guiding principles in our work on nonbanks. First, policymakers should address risks regardless of where they emanate from. Substance is more important than form; similar activities that create comparable financial stability risks should be subject to comparable regulatory scrutiny. Second, policymakers should adapt and tailor policies to fit the unique structural features of the institutions and markets they are regulating. For example, systemic liquidity risks should be addressed wherever they exist. But specific policy responses should differ depending on the specific activity involved.

These principles prevent risks from shifting around in the financial system in response to regulation. They enable us to address risks wherever they are found.

We have pursued work on nonbanks that are both inside and outside the traditional financial system. First, let me speak on nonbanks inside the traditional system.

If there is any place where the vulnerabilities of the system to runs and fire sales have been clear-cut, it is money market funds. These funds are widely used by retail and institutional investors for cash management; they provide a close substitute for bank deposits. Before the post-crisis reforms implemented by the SEC, all money market funds were generally expected to maintain a fixed $1 net asset value per share. The stable NAV was normally achievable because funds were generally limited to investments that were considered to be low risk. These funds were allowed to round their share prices to $1 when the market value of their investments fell – as long as it stayed above a certain level. But a fund had to respond if its market value fell below that level – that is, if it “broke the buck.” In that case, these funds would have to reprice, and they might cease withdrawals and liquidate their assets.
This created an incentive for a run in times of extreme stress. The first redeemers could exit the fund at $1 per share, but those who waited might be subject to a reduced market value as they are left with claims on less-liquid assets. This created a “first-mover advantage” – an incentive for investors to redeem at the whiff of a problem. During the Global Financial Crisis, anticipated losses on Lehman Brothers commercial paper led to a run on the $62 billion Reserve Primary Fund, the oldest money market fund in the nation. Concerns about Lehman then sparked concerns about commercial paper issued by other banks. This led to runs on other money market funds. A post-mortem report revealed that as many as 28 other funds had NAVs low enough for them to also break the buck.\textsuperscript{11}

Even without a fixed NAV, liquidity mismatch in other kinds of funds can still make them vulnerable to runs and fire sales. Open-end funds offer daily redemptions, but some hold assets that cannot be sold quickly – particularly in large volumes. Like money market funds, this liquidity mismatch does not typically pose problems in normal times when flows to and from funds are not outsized. But in times of market stress, shareholders are incentivized to redeem early – before fire sales of illiquid assets lower the value of their holdings. Driven by this dynamic amid the pandemic shock, a record $255 billion flowed out of bond mutual funds in March 2020.\textsuperscript{12}

The structural vulnerabilities at the heart of money market and open-end funds aren’t new. In the banking sector, capital and liquidity requirements and federal deposit insurance reduce the likelihood of runs taking place. In case runs occur, access to the discount window helps provide buffers for banks. Yet the financial stability risks posed by money market and open-end funds have not been sufficiently addressed.

Over the past two years, the SEC has proposed rules to mitigate the vulnerabilities plaguing these funds.\textsuperscript{13} The SEC’s proposals would reduce the first-mover advantage, reducing run incentives during times of stress. They would also require new liquidity management tools, while mandating more comprehensive and timely information on these funds for the SEC and investors.

Abroad, Treasury has worked with the FSB to advance international commitments that enhance the resilience of money market funds. We will soon review the implementation – and later the effectiveness – of reforms taken by member jurisdictions. Treasury is also working diligently in the
FSB to revise recommendations on liquidity management in open-end funds to bolster their resilience.

C. Nonbanks: Hedge Funds

We’ve also been focused on mitigating systemic risks from the use of leverage at hedge funds and other similar funds.

The hedge fund industry has expanded significantly over the last five years. In 2021, gross assets reached almost $10 trillion, up more than 50 percent since 2016. Hedge funds are also playing a more prominent role in markets that lie at the core of the financial system – like the U.S. Treasury market.

Overall use of leverage among hedge funds is fairly small on average. But leverage appears to be concentrated among a select number of large hedge funds. Twenty-five funds account for around half of all hedge fund borrowing and derivatives exposures. Further, funds with certain strategies are engaged in very significant use of leverage.

Leverage can support economic growth, but excessive leverage is dangerous. It can add fuel to fire sales by triggering a negative spiral of margin calls and rapid asset liquidations. These fire sales can transmit stress to hedge fund counterparties and other market participants – including large, systemic banks. Post-crisis banking regulations have helped reduce the potential of spillovers to the banking system. But spillovers from these fire sales to other market participants remain a risk.

In March 2020, these risks became reality. For example, hedge funds were among the top three sellers of Treasury securities that month. FSOC has determined that they materially contributed to Treasury market dysfunction.

We’ve taken a number of actions to address financial stability risks due to leverage.
First, we restored FSOC’s Hedge Fund Working Group, which had previously been disbanded. No single regulator has the authority or information to comprehensively assess the risks posed by hedge funds. So, the working group has developed a risk monitoring framework to identify hedge fund-related risks to the financial system. The framework is based on data from the SEC’s Form PF, which was initiated after the financial crisis, as well as supervisory information from relevant agencies. This group reports regularly to FSOC and will develop policy recommendations – if it is determined that leverage or other vulnerabilities are significantly increasing financial stability risks.

Second, Treasury’s Office of Financial Research will continue to enhance data collection on bilateral repo transactions without a central counterparty. These are a key source of leverage for hedge funds. This collection will also help to close a large remaining gap for Treasury market data. And it will be important for Treasury’s broader efforts to advance reforms with financial regulators that improve the resilience of the Treasury market, which has seen some episodes of stress in recent years.17

**D. Nonbanks: Digital Assets**

A comprehensive financial stability program must also limit vulnerabilities from non-traditional financial products.

New technologies have the potential to provide faster, safer, and cheaper financial services. They can also foster greater financial inclusion. But as we’ve learned from history, innovation without adequate regulation can result in significant disruptions and harm.

Over the past decade, the digital assets ecosystem has grown significantly in scope and scale. It has also been subject to significant shocks and volatility. In November 2021, global market capitalization reached approximately $3 trillion.18 Just over half a year later, it lost two-thirds of its value – and has not markedly recovered since then.
We have been vigilant in monitoring the potential systemic risks of digital assets since before the collapse of FTX and other platforms. In 2021, the President’s Working Group on Financial Markets issued recommendations for stablecoin regulation. And last year, Treasury and other agencies released a series of reports on digital assets policy in response to an executive order by President Biden. Out of this effort, we identified areas of further work and coordination among the financial agencies, as well as gaps in existing authority that would require legislation.

Take the example of stablecoins. Today, stablecoins are frequently used to pay for speculative crypto-assets. But they could be used more widely for payments for other goods and services. After all, stablecoins are designed specifically with the goal of maintaining a stable value. Typically, that is one-to-one with the U.S. dollar. The largest stablecoins seek to maintain this peg by backing the coin with a pool of reserve assets.

This structure creates the same kinds of run incentives that we see in the traditional financial system. Stablecoin holders often have a “first-mover advantage” to redeem in times of stress – before conditions deteriorate further, fire sales become necessary, and the value of reserve holdings fall. As we saw in 2008 and 2020, runs and fire sales can spread like a contagion. A run on one stablecoin can lead to panicked runs on other stablecoins – causing even broader selloffs.

Given these parallels, we have recommended that Congress enact legislation to establish a comprehensive prudential regulatory framework for stablecoin issuers. Such a framework would include consolidated federal supervision, requirements for how a coin could be backed, capital and liquidity requirements, and restrictions on affiliation with commercial companies.

In addition to stablecoins, we must identify and fill gaps in existing authority for the oversight of other crypto-assets – including those identified in the FSOC digital assets report. We have existing consumer and investor protection standards in traditional financial markets. These same principles and protections should apply in markets for crypto-assets.

Finally, we are also working to address risks specific to digital assets. This includes risks associated with vertical integration of crypto-trading platforms and lack of visibility into the operations of subsidiaries and other entities across these businesses. And we are also exploring broader policy
issues around the future of money and payments – including the possibility of a central bank digital currency.

IV. DEBT LIMIT

I’d be remiss if I did not end by speaking about one of the most important short-term actions that Congress can take to safeguard our financial stability: to raise or suspend the debt limit.

Since 1789, the United States has paid all of our bills on time. It should stay that way. In my assessment – and that of economists across the board – a default on our obligations would cause an economic and financial catastrophe. No financial system is designed or regulated to be prepared for its own government to choose not to pay its bills. A breach of the debt ceiling could lead to a prolonged downturn and a global financial crisis. And it could upend the lives of millions of Americans and those around the world.¹⁹

This catastrophe is preventable. Congress must raise or suspend the debt limit. It should do so without conditions – and without waiting until the last minute.

V. Conclusion

To end, I will note that our work is not yet done. That much was clear from the events earlier this month.

Financial stability is a public good. Government plays a fundamental role in the provision of financial stability, as the costs of systemic failure are externalized to the broader society.

At Treasury, we take this responsibility very seriously. Today, I’ve touched on select areas of our work. But our financial stability efforts extend to areas from cybersecurity to climate-related
financial risks.

As we chart a path forward, let me reflect on the contributions of the economics profession to this endeavor. In one of his most famous passages from “The General Theory,” John Maynard Keynes wrote that “the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood.”

There is perhaps no better testament to this sentiment than the emergence of the field of financial stability. Early economists who studied systemic risk informed the views of the first responders – those who remarkably stopped a financial meltdown mid-stream in the fall of 2008. In 2020, financial regulators in the U.S. and around the world leaned on post-crisis reforms and intervened decisively to avoid a similar meltdown. Their work was made possible by the explosion of research in this area over the preceding decade.

We should celebrate these developments as a collective contribution of our economics profession – just as the Keynesian explanation for recessions and depressions was an accomplishment of our profession in the mid-20th century. It is time to continue this work anew.

My pledge to you is that I will continue to lead on the crucial work of financial stability at Treasury. And I hope you will be our partners as we continue to build a financial system that works for the American people.

Thank you so much for this honor.

1 https://www.jstor.org/stable/42920043


3 https://www.journals.uchicago.edu/doi/abs/10.1086/708815?mobileUi=0ii