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TO: Interested Parties

FROM: Lauren Oppenheimer, Senior Policy Advisor and Jim Kessler, VP for Policy

RE: The Dominoes of Default

"The cornerstone of the global financial system is that the United States will make good on its debt payments," says ***Mark Zandi, Chief Economist at Moody's Analytics****. "If we don't, we've just knocked out the cornerstone and the system will collapse into turmoil."*[1]

Mainstream economists say that failure to raise the debt ceiling—in essence, to default—would have a devastating and cascading effect on the U.S. economy. But while there's an intense debate in Washington about when and how to raise the debt ceiling, there's been far less focus on *exactly* what would happen in U.S. capital markets and how it would affect Main Street if the U.S. defaulted. This memo attempts to explain the five most significant and likely economic consequences—or domino effects—America would face if we default on our debt.

What is Default?

When the U.S. runs a budget deficit—taking in less revenue than it spends each year—it must borrow money in order to keep the government running. How does it bridge that shortfall between taxes and spending? It issues Treasury bonds, which are bought by investors, who are in essence loaning money so Uncle Sam can keep paying Social Security checks, fighting in Afghanistan or keeping the national parks open. Treasury offers bonds, sometimes referred to as Treasuries, T-bills or notes, which range from 3-months to 10-years in maturation.

While some investors engage in active buying and selling of Treasuries for short-term gains, investors typically purchase Treasury bonds for one reason—they are widely considered the safest investment in the world. The bonds pay interest to investors, but generally at a low rate since the allure of this investment is safety. Because of their soundness, many institutional investors rely on T-bills. Pension funds and insurance companies use the interest to pay retirees. Public plans, including Social Security, are some of the largest holders of Treasuries. And individual retirees also own Treasuries directly, using the interest to pay their bills.

Default would occur if the debt ceiling were breached. If the U.S. does not raise the debt ceiling and all extraordinary measures taken by the Treasury Department are exhausted, the U.S. could have severe problems in paying back its debts. Should the U.S. fail to make an interest payment to any bondholder—even for a day—the result would be default.

The U.S. government would lose the ability to borrow from creditors beyond our existing outstanding current debt. In essence, our national credit card would be cut-off. Then we would face an immediate and stark choice: attempt to use the remaining revenue coming in from taxes and fees to make good on the government's obligations to pay the interest, or refuse to make those interest payments to investors—thus defaulting on our debts—and use the resulting savings to keep the government running.

If Congress decides to honor our debts and keep making interest payments on T-bills, the gap between revenue and spending would be about $125 billion each month, based on Congressional Budget Office (CBO) estimates of our current year deficit.[2] The alternative—to forgo paying bondholders and thus defaulting on the interest payments on those Treasury bills—would relieve only some, but not nearly the majority, of the monthly shortfall.

Which is Worse: A Government Shutdown or Default?

Defaulting on the debt is vastly different than a government shutdown. What makes default so different and much more dangerous is that it has not only short-term effects, but significant medium and long-term ones as well:

***Short-term*:** If the U.S. defaults and there isn't enough cash to cover all federal expenses, basic government payments like Social Security and veterans' benefits could be suspended. That would cause great inconveniences, but these suspended payments would eventually be made up and people would be made whole with retroactive payments.

***Medium-term*:** Even after those payments resumed—which they eventually would when the debt ceiling is raised and the government can borrow again—the effect would be enduring. Imagine a typical middle-class family: default is a bit like that family missing a series of payments on their home, car, insurance, and credit cards. This would change their fortunes for a long time by driving down their credit rating from good to poor; sure, they'd be able to borrow again, but it would be more expensive simply by having that lower rating.

***Long-term*:** This type of default is most akin to a large company that suddenly cannot meet its payroll or pay its vendors. Questions arise over whether the company will ever be the same. Employees may well seek somewhere else to work as they now have doubts about the certainty and timeliness of their paycheck. Customers may seek to buy goods elsewhere, because they are not sure the company will be able to service its products or make good on the warranty on its goods. Vendors may demand different terms for purchases of their products and services. Investors may flee, lowering the value of the company.

Domino Effects: Five Consequences of Default

So what exactly are the most likely medium and long-term effects of default? What would cause these dominoes to fall, and how might they affect the average American? The following are brief sketches of the five most serious consequences of default.

1) Treasury bond rates rise.

As noted above, the U.S. government does not collect enough in taxes to operate, so it must take on debt and sell bonds. Typical buyers of bonds are institutional investors (like pension funds), foreign countries (often sovereign wealth funds) and individuals (usually through mutual funds and 401Ks).

Investors believe that there is virtually no chance that the United States government would ever default on these loans. As a result, Treasury bonds pay a very low rate of return. Low risk means low interest rates.

If the government defaults, credit rating agencies would downgrade the rating of Treasury bonds. A downgrade means the U.S. would have to raise the interest rate it offers for these bonds in order to get investors to continue buying them. This is because their number one draw—a risk-free investment—would now be a fallacy.

As an analogy, imagine if a major safety defect were found in all Volvos—a company that sells safety as its main feature. The company would have to resort to offering expensive enticements to get customers back into the showroom. The T-bill is the Volvo of investments. It is all safety and (with apologies to Volvo) little pizzazz.

Default would thus mean the cost of borrowing for the U.S. government would increase, perhaps dramatically.

- Both Pimco and J.P. Morgan estimate a rise in Treasuries of 50 basis points (0.5%).[3]
- J.P. Morgan estimates that the increased cost of government borrowing (the interest we pay on our publicly held debt) would bump up annual deficits by $10 billion in the short run and by $75 billion per year over time.[4]
- J.P. Morgan estimates that higher Treasury rates would cause our GDP to decrease by 1%.[5]
- For every 1% change in GDP growth, there is an estimated 0.46% change in total employment, according to economist William Seyfried.[6] Using his estimation, the U.S. would shed 640,000 jobs.[7]

To be clear, this is a conservative estimate as default is a "black swan" event that has no American precedent. Another possible scenario: "Market participants would take the dollar, Treasuries, and the S&P 500 out behind the barn and shoot them," said Steve East, chief economist for Height Analytics.[8] "The ultimate damage could be far greater," agrees Terry Bolton of J.P. Morgan.[9]

The United States has the luxury of borrowing money more cheaply than any other country because Treasury bills are the safest investment on earth. But that would no longer be the case with default. Losing this safety feature would be a devastating blow, jeopardizing our ability to borrow at low rates, a huge advantage for America and part of our engine for economic growth. While no one likes debt, if it costs one company 5% interest for a loan and a second company 6.5%, which is likely to be more profitable? That lower rate is something we can't afford to jeopardize.

2) The stock market drops, potentially sharply.

The financial services firm Janney Montgomery Scott estimates that default would cause the S&P 500 index to lose 6.3% in value in three months.[10] J.P. Morgan estimates the loss to be closer to 9%.[11] Using the milder forecast:

- The S&P 500 would lose $756 billion in value or close at 1,257.53.[*12] This money would vanish and deal a significant blow to overall economy.
- According to the Employee Benefit Research Institute, the typical 401K of an investor in their 50s at the end of 2009 had $139,932 in their portfolio.[13] A 6.3% loss in the S&P 500 would cost this portfolio $8,816.

This, too, is a conservative estimate. Another possibility would be the liquidation of assets to raise cash. If investors start selling assets, prices will go down on all types of securities, including stocks, bonds and real estate. We have had recent experience with mass liquidation. From July 2008 to March 2009, the U.S. lost $7.4 trillion in stock wealth or nearly $66,200 per household.[14]

Regardless, though, of any specific prediction about exactly how much the market might decline, the causes of a likely, and perhaps sharp, drop are two-fold.

First, historically, securities trend downward when Treasury bond interest rates rise, because investors tend to switch from stocks to bonds when they offer higher interest rates. The rise in Treasury bond rates would not be short term, so stock market losses could be prolonged.

Second, investor confidence would be shaken in the event of default and they would react by selling stocks. As noted in *Forbes*, "When the credit rating of a whole country is lowered, it means investors view every business in that country as more risky, which is bad for stocks."[15] This combination would encourage foreign investors to take their money out of U.S. markets and put it in more stable markets, and it may be difficult to convince them to return.

How might this matter to the average American? After a first ever U.S. government default on its debt, it would be quite unclear when the stock market would fully recover its value, and an extended stock market loss could make pensions and 401K portfolios experience more lasting losses than even the last downturn—leaving many with fewer savings for retirement. This would put more unsustainable pressure on government entitlement programs to pick up the slack.

In March 2008, a week before Bear Stearns collapsed, the Dow stood at about 12,300. Today, the Dow Index is in the 12,600 range.[†] But, it took 3 years to get back, and the Dow is still well below its historic high. Many investors have not recovered from the losses suffered in 2008, and for most folks nearing retirement there just hasn't been enough time for them to recover their nest egg.

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[*] The S&P 500 Index closed at 1,342.08 on May 11, 2011.

[†] The Dow Jones Industrial Average closed at 12,630.03 on May 11, 2011.

The repercussions of default on the stock market in the short term may or may not be in the same percentage range as the market in 2001 (after 9/11) or in 2008. But there would likely be significant losses that could affect millions of Americans.

3) The dollar loses its "special status."

In many ways, the U.S. dollar is just like any other commodity that is bought and sold. When there are more sellers than borrowers its price and status drops.

Foreign holdings of U.S. dollars are enormous, because the dollar is the world's "reserve currency." Countries keep trillions of American dollars in reserve in case of economic or national security emergencies. For example, China has $3.0 trillion and Japan has $1.1 trillion in reserves.[16] If a foreign government undergoes an economic upheaval, they can dig into their reserve of American dollars and weather the storm. According to the Federal Reserve, the U.S. dollar "constitutes more than half of other countries' official foreign exchange reserves."[17]

But political and economic volatility in the form of a U.S. default would compel investors to sell some of their holdings. According to *The Economist,* "The defeat of proposed legislation, the election of a particular politician or the release of an unexpected bit of economic data may all cause a currency to strengthen or weaken against the currencies of other countries."[18]

A U.S. default may convince institutional investors and sovereign wealth funds that the dollar is not where their reserves should be kept. Currency reserves can be revoked; the British Pound was formerly the dominant currency for trade, but the dollar became the currency of choice after the U.K. amassed a huge debt due to the costs of World War I.[19] Default could threaten the dollar's status as the currency reserve of choice. A report by J.P. Morgan highlights the experience of the decrease of foreign holdings in Fannie Mae and Freddie Mac debt during the 2008 economic downturn.[20]

If investors liquidate their holdings of U.S. dollar assets, the value of the dollar would decrease and inflationary pressures are likely, though not certain, to occur. Default drives down the value of the dollar because there would be a "flight to quality" to more secure currencies such as the Euro, the Yen, the Swiss franc, or the monetary metals such as gold and silver, according to Steve East of Height Analytics.[‡21]

What might that mean on Main Street? On the one hand, if the U.S. dollar loses its "special status" and the value of the dollar decreases, exports like commercial airplanes and computer chips become cheaper. On the other hand, imports like gas and electronics become more expensive, causing increased pain at the pump for American drivers and higher prices on popular products like iPhones and laptops.

‡ Currencies are traded on the foreign exchange market, also known as the forex market, which is an over-the-counter market.

4) Mortgage rates rise.

The rate that Americans pay for their mortgage is generally tied to the interest rate on Treasury bonds. Thus, if interest rates rise on Treasuries, mortgage rates would certainly follow, ticking upward. Mortgage rates for the highest-rated borrowers are usually 150 basis points, or 1.5%, higher than what a 10-year Treasury bond pays in interest.

The head of Pimco, the world's largest bond fund, said a failure to raise the debt ceiling would be "catastrophic—global investors would move money at the margin to countries that have their act together, interest rates might rise by 50 basis points overnight, the stock market would plunge".[§22]

What would this mean for the average home-buyer?

- A 50 basis point increase in a mortgage would immediately add $19,100 to the lifetime cost of a 30-year fixed rate mortgage on a median home loan of $172,000 for an existing home.[23]
- The same loan for a new home loan of $221,900 would add $24,738 to the lifetime cost of the loan.[24]

In turn, higher mortgage rates would add another blow to an already struggling housing market, pushing home-sale prices down, and potentially leaving even more borrowers underwater.

5) Small business and consumer credit tightens and chokes the recovery.

Once the dominoes of default begin to fall—rising Treasury bond rates, declining stock markets, rising mortgage rates—lending to small businesses and consumers will constrict.

Why would lending tighten? In short, there would be less money made available to people and businesses to borrow, i.e. far less liquidity.

This liquidity shortage would be a direct result of uncertainty and volatility in the markets. When there is economic uncertainty and volatility, credit gets squeezed because banks want to keep as much money in reserve as they can.

What credit is still available would be costly because banks would increase their interest rates on loans. Small business owners would have a difficult time getting a loan from their bank for start-up costs or business expansion—or have to pay rates that they simply could not afford.

Consumers would have trouble securing a car, student or personal loan. Credit card rates—which are also tied to Treasury rates—would rise, making purchases more expensive and having the result of depressing retail sales. Less spending by consumers and small business could severely harm the country's economic recovery.

[§] Arguably, an increase in mortgage rates by .5% is a conservative estimate and can be attributed to the initial increase of overnight rates.

Conclusion

Defaulting on our debt is not an abstract idea that might affect a few institutions on Wall Street; it would harm tens of millions of Americans in profound and lasting ways. Should the U.S. government default, the short and medium-term effect would be that the economic recovery would be halted. The combination of factors including cessation of consumption and investment, and asset liquidations, are all self-reinforcing and would lead to a downward spiral.

In years past, the vote to raise the debt ceiling has always had an element of politics. When Republicans controlled the levers of government, Democrats generally voted against it. When Democrats controlled the levers, Republicans generally voted against it. And when power was split, so was the vote. But the measure always passed.

Policymakers should push America back from the brink, reach a bipartisan agreement, and protect America's economic future through an extension of the debt ceiling.

Endnotes

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