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Reasons To Worry

By NIALL FERGUSON

Think of the economy of the United States as a dinosaur -- one of those huge herbivores whose bulk shook the ground. A brachiosaur. A brontosaur. A diplodocus. Like them, the U.S. economy is mind-bogglingly enormous -- two and a half times as big as the next largest economy in the world and almost as large as that of the six other members of the Group of Seven combined. The catch is that it has to consume almost incessantly to sustain its great heft.

Contrary to what we used to believe, leviathans like the diplodocus were not exactly sloths. It is now thought that they had the strength to stand on their hind legs in order to reach food at the top of trees. They may even have been able to run rather than merely plod. But it seems reasonable to assume that their reaction times were slow; it was a very long way from the diplodocus's tail to its brain. If a predator sank its fangs into that tail, it might have taken the diplodocus a few moments to feel the pain.

The big question about the dinosaurs is, of course, What caused their extinction? Why were so many species unable to evolve in response to environmental changes? The most common explanation is that a very sudden event, like a meteor's impact, gave the dinosaurs too little time to evolve and provided smaller and more dynamic life forms with an opportunity to take over.

An analogous question for economists is whether the United States is capable of evolving out of its present excessive indebtedness. Or could the global economic environment change so drastically as to threaten, if not extinction, then at least decline relative to smaller, more dynamic economies?

When the National Debt clock in Times Square was turned on in 1989, the federal debt amounted to around \$2.7 trillion. Eleven years later, on Sept. 7, 2000, the clock read: "Our national debt: \$5,676,989,904,887. Your family share: \$73,733." That's when the clock was turned off, because, in those innocent days, it seemed as if the \$5.6 trillion debt was set to decline, perhaps to disappear altogether. On that same date, CNN reported, "Vice President and Democratic presidential nominee Al Gore . . . outlined a plan that he says would eliminate the debt by 2012." The proposal was uncontroversial. Economic advisers to the Republican candidate, George W. Bush, were said to have "agreed with the principle of paying down the debt," but their candidate had "not committed to a specific date for eliminating it."

That should have set the alarm bells ringing. (And, in fact, the National Debt Clock started running again in 2002.)

Since becoming president, George Bush has presided over one of the steepest peacetime rises ever in the federal debt. The gross federal debt now exceeds \$8.3 trillion. There are three reasons for the post-2000 increase: reduced revenue during the 2001 recession, generous tax cuts for higher income groups and increased expenditures not only on warfare abroad but also on welfare at home. And if projections from the Congressional Budget Office turn out to be correct, we are just a decade away from a \$12.8 trillion debt -- more than double what it was when Bush took office.

Big public debts are not always bad, to be sure. It could be argued that in his first term Bush wisely used fiscal policy to boost aggregate demand and counter the impact of the dot-com bust. Public borrowing also allows "tax smoothing" by spreading out over time the cost of big one-off expenses like wars, three of which the United States has fought since 1999.

On the other hand, by requiring larger interest payments, big public debts devour revenue that could be spent on other programs. They may crowd out private investment by pushing up long-term interest rates. They may also have a regressive distributional impact, transferring economic resources from taxpayers to bondholders or from future generations to the present generation.

It all depends how you measure the debt. If you exclude bonds and bills in the possession of government agencies and programs, like the Social Security trust fund, the debt actually held by private investors is less than \$5 trillion. Economists commonly calculate the debt burden as a percentage of gross domestic product. Counting only the debt held by the public, that works out to around 38 percent of G.D.P., a major increase relative to 1981 but still modest compared with the years after World War II. What's more, the C.B.O. forecasts (albeit with the rosy assumption of annual growth close to 5 percent) that the debt-to-G.D.P. ratio will actually decline in the decade ahead, to perhaps as little as 34.5 percent -- even if today's lax budgetary plans are adhered to.

The trouble is that the officially stated borrowings of the federal government are only one part of the U.S. debt problem. For it is not only the government's debt that has grown large of late. Ordinary American households have also gone on prodigious borrowing sprees.

In the past five years alone, the value of U.S. home-mortgage debt has increased by nearly \$3 trillion. Not all of that borrowing went to pay for real estate, the traditional function of mortgages. In 2004, net mortgage borrowing not used for the purchase of new homes amounted to nearly \$600 billion. The International Monetary Fund estimates that this kind of equity extraction has risen from less than 2 percent of household disposable income in the year 2000 to more than 9 percent in the third quarter of last year.

And let's not forget those other debts that families did not formerly run up. Consumer credit in the 1960's and 1970's averaged less than 13 percent of G.D.P. In the past 10 years it has climbed to around 18 percent.

Not only do Americans borrow as never before; they also save remarkably little. The impressive resilience of American consumer spending in the past 15 years has been based partly on a collapse in the personal savings rate from around 7.5 percent of income to below zero. The aggregate national savings rate, which includes the public sector and corporations, averaged 13 percent in the 1960's. Last year it was just 0.8 percent.

The trouble is that, for demographic reasons, Americans need to save more than this. According to the 2006 Retirement Confidence Survey, 6 in 10 American workers say they are saving for retirement, and just 4 in 10 say they have actually calculated how much they should be saving -- many of them figure that they will simply work longer. According to survey data, the average worker plans to work until age 65. But it turns out that he or she actually ends up retiring at 62; indeed, about 4 in 10 workers end up leaving the work force earlier than planned.

This has grave implications for the federal budget. Already, Social Security, Medicare and Medicaid consume nearly half of federal tax revenues. And that proportion is bound to rise, not only because the number of retirees is going up but also because benefits programs are out of control. Over the past four years, Medicare benefits per recipient grew 16 times as fast as the real wages of the workers paying for them through taxation.

In short, the federal government seems to have much larger unfinanced liabilities than official data imply. If you compare the present value of all projected future government expenditures, including debt-service payments, with the present value of all projected future government receipts, the gap is about \$66 trillion, according to calculations by the economists Jagadeesh Gokhale and Kent Smetters. That's almost eight times the size of the official gross federal debt.

American consumption has been the principal engine of economic growth in the world over the past decade. But the readiness of American households and politicians to borrow has an inevitable corollary: the United States has become the world's biggest debtor.

In almost every year since 1992, the gap between the amount of goods and services the United States exports and the amount it imports has grown wider. This year the current account deficit, which is largely a trade deficit, could rise as high as 7 percent of G.D.P., nearly double its peak in the mid-1980's. What results is a remarkable accumulation of foreign debt. Estimates of the net international investment position of the United States -- the difference between the overseas assets owned by Americans and the American assets owned by foreigners -- have declined from a modest positive balance of around 5 percent of G.D.P. in the mid-80's to a huge net debt of minus 20 percent today.

What this means is that foreigners are accumulating large claims on the future output of the United States. However the borrowed money is used, whether productively or not, a proportion of the future returns on U.S. investments will end up flowing abroad as dividends or interest payments.

Asian central banks in particular have been buying large quantities of dollars and dollar-denominated securities. Chinese purchases of U.S. bonds in 2005, for example, are estimated to have risen as high as 2 percent of our G.D.P., a very significant proportion of America's foreign borrowing. At first sight, the channeling of Chinese savings into American bonds seems bizarre. The average American has an income of about \$40,000 a year and has, as we have seen, a personal savings rate of zero. The average Chinese earns around \$1,500 per year but has personal savings of 23 percent of his income -- and is lending a large chunk of these savings, via the People's Bank of China, to the average American. The conventional explanation for this strange transaction is that the Chinese authorities need to buy dollar-denominated bonds to prevent their own currency from appreciating relative to ours. The logic is that China needs a weak exchange rate to ensure that its exports continue to flow into the American market.

Of course, it is not only the Chinese who have been engaging in the accumulation of dollars and dollar-denominated securities. The Japanese have been nearly as active, as have other Asian economies. Middle Eastern oil producers have also been running large trade surpluses, thanks to high oil prices, and investing at least some of the proceeds in the United States.

As a result, there has been an immense rise in foreign ownership of American securities of all kinds, but especially government bonds. Foreign ownership of the U.S. federal debt passed the halfway mark in June 2004. About a third of corporate bonds are now in foreign hands, as is more than 13 percent of the U.S. stock market. One analyst has half-seriously calculated that at the current rate of foreign accumulation, the last U.S. Treasury held by an American will be purchased by the People's Bank of China on Feb. 9, 2012.

To those familiar with the Latin American debt crises of the 80's and 90's, there's a case to be made that the United States is on the road to becoming a Latin American country. While it is certainly true that our net external debt is now as large in relative terms as some Latin American debts have been in past crises, there's a difference. Latin American countries have generally had to borrow in the currency used by their creditors. A decline in the borrowing country's currency, say the peso, threatens to send its dollar-denominated debt skyrocketing in peso terms.

But the happy position of the United States is more like that of Britain in the aftermath of World War II, when a substantial part of its war debt was owed in sterling to current or former colonies. Because Britain borrowed in its own currency, it had control over the unit of account. As the pound slid from \$4 to

below \$2 from the 40's to the 70's, its sterling liabilities were reduced by half in terms of the key postwar currency.

Could the dollar follow a similar downward path? It has happened before. Between March 1985 and April 1988, the dollar depreciated by more than 40 percent against the currencies of America's trading partners. As a fiscal strategy, dollar depreciation has much to recommend it. At a stroke, American exports would regain their competitiveness overseas and Asian imports would become more expensive, leading to at least some contraction -- though not an elimination -- of the trade deficit. Foreign creditors would take the hit, finding their dollar assets suddenly worth much less in terms of their own currencies.

So what's the catch? A sudden increase in the dollar price of American imports could stoke inflation in the United States. There is already some patchy evidence of an upturn in inflation. Whichever measure you use, prices are certainly rising at a faster rate now than they were two years ago, as are hourly earnings. As measured by the spread between conventional bonds and inflation-proof bonds, inflation expectations are also up slightly.

But is that really a catch? Not necessarily. Because higher inflation means that the real value of your debt ends up being reduced (in terms of the purchasing power of the amount that you owe) -- provided, that is, that your debt is not adjustable-rate or index-linked.

Alas, those are two really serious caveats.

It's a pretty safe bet that if a dollar decline shows signs of boosting inflation, the Federal Reserve will raise interest rates. The credibility of the new Fed chairman would be on the line. Even a federal-funds rate above 5 percent might seem too low. Bear in mind that the federal-funds rate (the overnight rate at which the Fed lends to the banking system) has been going up for two years, from its nadir of below 1 percent in June 2004. Now ask yourself, Who has been most affected by this monetary tightening?

Two important categories of debtor spring to mind. First, there are the households with adjustable-rate mortgages. More Americans have variable-rate mortgages than ever before, even if most existing mortgage rates remain fixed. Since March 2004, there has been a 59 percent increase in one-year adjustable-rate mortgages. But that just means that they have become more expensive for new borrowers. The key question is, When do existing A.R.M.'s reset? The answer: Soon.

According to calculations published by Barron's in February, over the next two years the monthly payments on about \$600 billion of mortgages taken out by borrowers in the so-called subprime market (those with checkered or nonexistent credit histories) will increase by as much as 50 percent. This is because many

A.R.M.'s have two-year teaser periods to entice borrowers. After that, the meaning of "adjustable" suddenly becomes (in this case, painfully) apparent.

To which you might respond by saying, *Caveat emptor*. If borrowers fail to read the small print or to anticipate higher rates, then more fool they. And no doubt in the subprime market there are many people who made one or both of those mistakes and will pay dearly for doing so.

Yet the surprising thing is that the second category of debtor vulnerable to higher short-term rates can scarcely plead ignorance or naïveté. For it is none other than the federal government itself.

The protracted decline of long-term interest rates since the 80's has been a boon for an indebted government. Since 1990, the cost of servicing the federal debt has actually declined from 3.2 percent of G.D.P. in 1990 to 1.5 percent in 2005, even as the absolute size of the debt has soared. But that decline has been achieved partly thanks to the term structure of the debt -- that is, to the relatively short duration of the bonds issued by the Treasury, which has allowed the government to take maximum advantage of falling rates. At the end of fiscal year 2005, for example, fully a third of the federal debt had a maturity of less than one year, and the average maturity of the entire debt was just 57 months (down from 74 months at the end of 2000).

This was wonderful so long as interest rates were falling. But now that they have started going up, it creates a potential fiscal nightmare: big slices of the federal debt that have to be refinanced at higher market rates. And that creates a new source of budgetary red ink: rising interest payments. It turns out that George Bush has the biggest A.R.M. in the world.

The most important lesson to be drawn from the history of debt is this: It's not the absolute size of your borrowings that matters. It's not even the relative size in relation to your income. The crux is whether the interest payments you have to make are more or less than you can afford to pay. And that, in turn, is a function of whether or not the rate can move, whether or not your income can change and whether or not inflation can help you or hurt you. On this basis, both subprime American mortgage-holders and a distinctly subprime administration may find the months ahead more painful than they anticipated.

The dinosaurs, we conjecture, succumbed to global climate change. The American beast -- call it *debtlocus* -- faces a comparable economic challenge. The global economic climate seems to be changing. We hear no more talk of deflation; we hear a lot about rising rates.

For America's giant, dinosaurlike economy -- with its small, wealthy head; its big, fat middle; and its long low-income tail -- there is a tried-and-tested response to a change in the weather. Dollar depreciation and inflation have saved the *debtlocus* before. The assumption seems to be that they will do the trick again.

Yet this time may be different. For sinking like a velociraptor's fangs into the tail of the debtlocus are interest-rate hikes that may outpace and check any increase in inflation. And no one knows when and how violently the leviathan may react to this slowly discernible pain.

It is too soon to speak of extinction, of course. But one obvious inference to be drawn from the British experience of an indebted empire and a sliding currency, as well as from the history of the diplodocus, is that eternal life is not on offer.

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