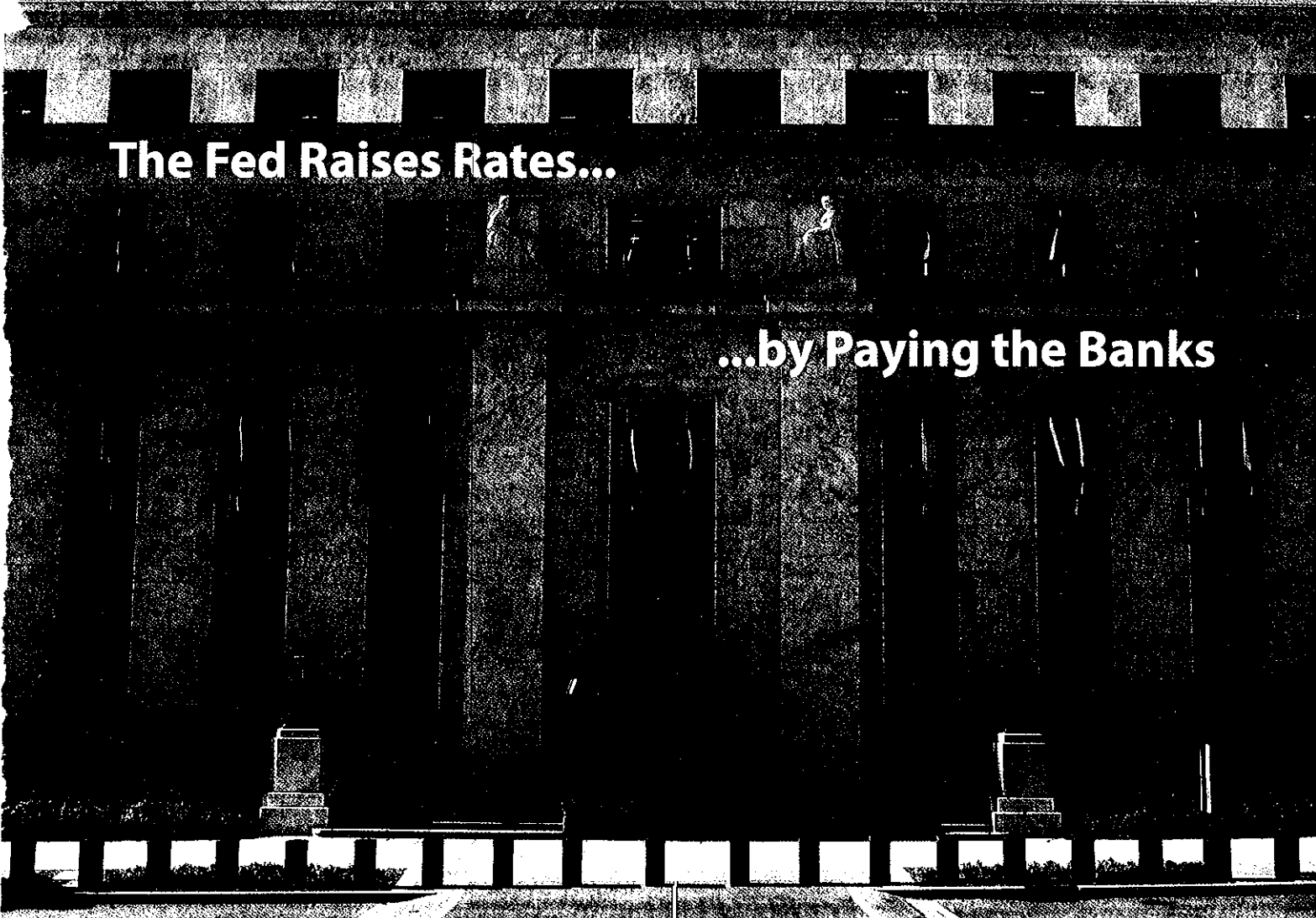




The Fed Raises Rates...

...by Paying the Banks

BY MARTY WOLFSON

THE BUSINESS AND FINANCIAL PRESS HAS BEEN ABUZZ WITH speculation about when the Federal Reserve would begin raising interest rates. After the meeting of its Federal Open Market Committee (FOMC) on December 15-16, the Fed ended the suspense by announcing that it was raising its target federal funds rate by a quarter of a percentage point (to a range of 0.25 to 0.50%). Flying under the radar, though, was the Fed's use of a dramatically different method of raising interest rates. The new method involves paying billions of dollars to banks, primarily by paying interest on banks' reserves held at the Fed. The payments will reduce the amount of money that the Fed remits to the Treasury and, ultimately, to taxpayers.

Why Is the Fed Paying the Banks?

This new method is best understood when viewed in the context of the recent financial crisis. The collapse of the housing bubble in 2007 threatened both the financial system and the broader economy. The Federal Reserve began a campaign of aggressively reducing interest rates, lowering the interest rate that it controls, the federal funds rate, from its peak of 5.25% in September 2007 to just 2% in April 2008. The federal funds rate is an interest rate that banks pay when borrowing from other banks. Lower costs for the banks in turn lead to lower interest rates for business and consumer borrowing, thus encouraging greater spending, output, and employment. >>



Marriner S. Eccles
Federal Reserve
Board Building,
Washington, D.C.,
May 10, 2010.

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THE FED RAISES RATES

In making these changes to the federal funds rate, the Fed used its classic method of changing the level of bank reserves. (See sidebar, below.) It is this method that the Fed jettisoned when it announced its new procedures.

After the failure of Lehman Brothers in September 2008, financial markets became unsettled and many of the traditional funding sources for financial institutions dried up. Into this void stepped the Federal Reserve, which dramatically increased its lending and other interventions to help the banks. In the process, it pumped money into the banking system and expanded bank reserves, significantly beyond the level of reserves necessary to maintain its target for the federal funds rate.

On October 1, 2008, the Federal Reserve began to pay interest on bank reserves. Then-Fed Chair Ben Bernanke, in his recent memoir, gave this reason for the change: "The concern in 2008 was that emergency lending would lead short-term interest rates to fall below our federal funds target and thereby cause us to lose control of monetary policy."

In other words, without paying interest on reserves, banks would have so many excess reserves that did not earn any interest, and be so eager to gain at least some return on them, that the Fed would be unable to prevent them from lending at

rates below the Fed's target for the federal funds rate (2% at that time). By paying interest on reserves, the Fed would eliminate banks' incentive to lend at rates below those it was receiving from the Fed.

This, however, is a curious explanation. The Fed dropped its target federal funds rate by 0.5% on October 8, 2008, and then by another 0.5% on October 29. On December 16, it lowered its target all the way to zero (a band of 0 to 0.25%), where it has stayed for seven years. Why was it concerned about the federal funds rate falling below its target rate when it was in the process of dropping its target rate to zero?

Moreover, in October 2008 the economy was moving into free fall. Real gross domestic product (GDP) fell at an annual rate of 8.2% in the fourth quarter of 2008 and unemployment was increasing rapidly. The Fed explained that it reduced the federal funds rate to zero "in order to provide stimulus to household and business spending and so support economic recovery." So why was the Fed giving the banks an incentive to keep their excess reserves at the Fed rather than lend them out?

The Fed's action can perhaps be understood by examining how it interprets its objectives. In addition to its mandates affecting employment and inflation, the Fed is also responsible for promoting financial stability. For the Fed, this means easing panic in financial markets, but also protecting the

THE CLASSIC METHOD OF AFFECTING INTEREST RATES: CHANGE THE LEVEL OF BANK RESERVES

Banks are required to hold cash in proportion to the amount of their deposits. This cash is termed bank reserves. (Currently, the reserves requirement is 10% of the total amount deposited in checking accounts.) Banks hold some of this cash in their vaults in order to meet requests for withdrawals, but typically much of it is held as deposits with the Fed.

Some banks hold more reserves than they need to satisfy reserve requirements, but some find themselves with a deficit. Those banks needing reserves typically borrow them from banks with a surplus. The interest rate that banks charge to lend their reserves to other banks is called the federal funds rate.

When the Fed wants to lower the federal funds rate, as it did in 2007-08, it buys government securities and writes a check to the seller. When the seller deposits the check in a bank, the bank sends the check to the Fed, which then credits the bank with more reserves. A greater amount of reserves in the banking system reduces the need for borrowing to meet reserve requirements, and the federal funds rate falls.

Likewise, when the Fed wants to increase the federal funds rate, it sells government securities. The buyer gives a check to the Fed written on the buyer's bank, and the Fed reduces the amount of reserves the bank has on deposit with the Fed. The bank, now short of reserves, seeks to borrow them from other banks and is willing to pay an increased federal funds rate in order to do so.

The reserves not needed to meet reserve requirements are called excess reserves. Up to 2008, the Fed did not pay any interest on excess reserves. To earn interest, banks lent out the cash to businesses and consumers and thereby encouraged greater spending. In this way, excess reserves were usually kept relatively low.

viability and profitability of the banks, especially those judged to be systemically important.

Promoting financial stability in the fall of 2008 meant the necessary step of intervening aggressively to prevent the collapse of the global financial system. But the Fed also interpreted it to mean bailing out large banks, even if the process did not sufficiently curtail the banks' power and risky practices. And it meant paying interest on reserves. Such payments directly boosted bank profitability, even if they may have come at the expense of the broader economy.

The Implications of Quantitative Easing

With the federal funds rate at zero, the Federal Reserve began its program of "quantitative easing." This involved buying longer-term assets, U.S. Treasury securities as well as mortgage-backed securities. The Fed's stated objective was to reduce long-term interest rates so as to stimulate spending in housing and business investment.

There were three stages of quantitative easing, and interest rates did indeed fall. But, again, the Fed also had its eye on the banks. After the financial crisis, the demand for mortgage-backed securities fell, since massive numbers of mortgages were in default and payments on the securities were therefore down. As demand fell, the prices of the mortgage-backed securities plummeted. Many of the banks held large quantities of these securities. By purchasing so many of them, the Fed supported their prices and increased their value on the banks' balance sheets.

As a result of its quantitative easing programs, the Fed dramatically expanded its holding of assets. At the end of 2008, it owned less than half a trillion dollars in Treasury securities and no mortgage-backed securities. By November 2015, it held \$2.5 trillion in Treasuries and \$1.8 trillion in mortgage-backed securities. Because buying all these securities meant that the Fed's checks became reserves for the banks, and because the banks were paid for keeping these reserves with the Fed, excess reserves ballooned to \$2.5 trillion.

The Fed's announcement on December 16 that it is raising its target for the federal funds rate does bring to the fore Bernanke's concern in 2008: how to increase the federal funds rate when there are so many excess reserves. The Fed ruled out any large-scale reduction of excess reserves when it also announced on December 16 that it would not be reducing its large holdings of securities. By not selling securities, the Fed would not be accepting checks

from bank accounts and thus not reducing the reserves the banks hold on deposit with the Fed.

The Fed's solution, instead, is to double down and increase the payment of interest on bank reserves. It announced that it will begin paying interest on reserves at 0.5%. This procedure won't reduce reserves, but will give banks an incentive not to make loans at interest rates below the amount they can get from the Fed.

However, this will not totally solve the Fed's problem. Even when it was paying the banks 0.25% interest on reserves, the effective federal funds rate (the rate at which reserves at the Fed were actually being traded) was below 0.25%. This is why the Fed adopted a range for the federal funds rate of 0-0.25%.

The reason the Fed could not keep the federal funds rate at 0.25% was because financial institutions other than banks participate in the federal

Under current Yellen, the Fed has shown genuine concern about unemployment, but it is still trapped in its assumption that there is a "maximum feasible" level of employment above which inflation will exceed the Fed's 2% target.

funds market. In particular, government-sponsored enterprises (GSEs) like Fannie Mae, Freddie Mac, and the Federal Home Loan Banks are allowed to keep funds at the Fed but are not paid interest on them. In recent years the Home Loan Banks have become the main lender in the federal funds market. (They were established during the Depression to lend to savings and loan associations to support housing, but now lend mainly to banks.)

The Home Loan Banks were able to lend federal funds at interest rates below 0.25% and still make a profit. In turn, banks were able to take the borrowed funds and deposit them with the Fed at 0.25%, making a profit as well.

So when the Fed on December 16 established a range of 0.25-0.50% for the federal funds rate, it also announced a new procedure designed to keep the federal funds rate from falling below 0.25%. The new procedure is to conduct overnight reverse repurchase agreements (ON RRP) with the Home Loan Banks (as well as with banks, other GSEs,

THE FED RAISES RATES

and money market mutual funds, which are important lenders in short-term markets).

ON RRP is an imposing-sounding term, but reflects a relatively simple process: the Fed sells government securities to the financial institutions on one day and then buys them back the next. The financial institutions are essentially making an overnight loan to the Fed, with the securities as collateral.

But here's the point: the money the Fed pays to buy back the securities is not only a repayment of the original loan. It also includes an interest payment. And the Fed plans to pay interest at 0.25%, the bottom of its target for the fed funds rate, thus giving the Home Loan Banks an incentive not to lend at less than 0.25%. Although it plans to use ON RRP as a secondary tool to its main focus of paying interest on bank reserves, it anticipates that both of these tools will keep the fed funds rate within its target range of 0.25-0.5%.

It seems that the Fed has backed itself into a corner, where the only way to raise the federal funds rate is to increase its payments to financial institutions. With reserves held at the Fed equal to \$2.6 trillion, even a 0.5% payment to the banks would cost \$13 billion. And, of course, including the expense of the ON RRP program and increasing the fed funds rate in the future would add even more to the cost.

To add insult to injury, 25 minutes after the Fed's announcement on December 16, Wells Fargo Bank reported that it is raising its prime rate (an interest rate tied to business and consumer loans) by 0.25% but not the rates it pays to depositors. Later in the day other large banks, including JP Morgan Chase and Bank of America, made similar declarations.

U.S. Treasury Secretary Jack Lew welcomes Federal Reserve Chair Janet Yellen for their first weekly lunch meeting, February 5, 2014.

Credit: U.S. Treasury Department (public domain).



Is There an Alternative?

Could the Fed, instead, choose not to pay interest to the banks and other financial institutions? This would have the effect of reducing excess reserves, but it would also mean that the Fed would have to delay raising interest rates.

That would, in fact, be a good policy decision. Although the unemployment rate is 5.0%, inflation is still below the Fed's 2% target. In the late 1990s, under then-Chair Alan Greenspan, the Fed allowed unemployment to fall below 4% without an appreciable increase in inflation. If the Fed waits, it could see how far excess reserves would fall without the payment of interest on reserves and how far the unemployment rate would fall without pushing inflation above 2%.

But what if a growing economy and a falling rate of unemployment edged the inflation rate past 2%, say, to 3 or 4%? The top 1% of the income distribution would not like inflation to eat away at their accumulated wealth. However, during times of very low unemployment the demand for workers can be strong enough to push money wages up faster than prices, so workers without a job and those who haven't seen a raise in many years would probably not be unhappy.

Under current Chair Janet Yellen, the Federal Reserve has shown a genuine concern about unemployment, but it is still trapped in its assumptions: There is a "maximum feasible" level of employment. Above that level (or below the corresponding rate of unemployment) inflation will exceed its 2% target. The conclusion from these assumptions is that the Fed should raise interest rates to prevent employment from exceeding the "maximum feasible" level.

Instead, the Fed should adopt a real full-employment target: a job for everyone who wants to work. It should adopt a "minimum feasible" target for inflation: the lowest possible rate compatible with full employment. We need a policy perspective in which economic justice for workers is a higher priority than paying the banks. **D&S**

MARTY WOLFSON is professor of economics emeritus at the University of Notre Dame. He was formerly an economist with the Federal Reserve Board.

SOURCES: Ben S. Bernanke, *The Courage to Act: A Memoir of Crisis and Its Aftermath*, 2015; Federal Reserve Board, "Policy Normalization Principles and Plans," September 17, 2014; Gara Afonso, Alex Entz, and Eric LeSueur, "Who's Lending in the Fed Funds Market?" Federal Reserve Bank of New York, December 2, 2013; Federal Reserve Press Release, December 16, 2015.

Dollar Dominance

Dear Dr. Dollar:

What does it mean that the dollar is the "dominant" global currency? Why does this situation exist? And how does it matter? —Anonymous, via email

BY ARTHUR MACEWAN

Suppose that, when you paid for things with checks, all the recipients of those checks believed that you were a very responsible person, that you would keep plenty of money in the bank to honor those checks. Moreover, not only did the check recipients believe in you, but people in general had this same opinion.

Under these circumstances, the people holding your checks wouldn't have to cash them in. Those checks could simply be used as money. The checks themselves would be acceptable in transactions among all those people who believed you were so responsible.

This situation would be nice for you because you could write plenty of checks and not worry about those checks being cashed in against your account. Extra buying power for you. At the same time, the people who used your checks as money would have an easier time with transactions, having your checks as a widely acceptable form of currency—i.e., they would have more "liquidity." Also, holding onto your checks—keeping them "in reserve"—would be a safe way for people to store money for when they needed it.

Fiction and Reality

To a large extent, this fictional situation with your checks is analogous to the real situation of the U.S. dollar in global commerce. With people and banks around the world using dollars and holding dollars, not "cashing them in" for U.S. goods, the United States—primarily its government and businesses—is able to spend more abroad without giving up so much in goods and services produced in the United States. Governments, businesses, and people around the world have more

liquidity than they would otherwise, and they have more confidence than they would otherwise in the value of the currency (dollars) they are using and holding in reserve

Like you in the fictional scenario, the U.S. government in the real scenario is viewed as "responsible." An important part of the U.S. government being viewed this way is that it would keep the value of the dollar relatively stable—i.e., not much inflation (at least compared to other currencies). This organization of the global finance system, with

The central feature of the Bretton Woods system was that the dollar would be at the core of global commerce.

the dollar in this special, or dominant, position has an interesting history—and some powerful implications.

Where the System Came From

The crucial formal step in creating the dollar-dominated system came at the end of World War II, with the United States in an extremely strong economic position. Indeed, the high level of government spending on the war had brought the U.S. economy out of the Great Depression, while the economies of other high-income countries (and many low-income countries) had been physically decimated by the war. Combined with this economic power, the United States had extreme military power. Thus, the era following World War II came to be called "The American Century" (Of course it was not really a full century, but let's not quibble.)

As the end of the war was coming into sight, in July 1944, representatives of the U.S. government and of 43 allied governments (over 700 delegates in all) met over three weeks at the Mt. Washington Hotel in Bretton Woods, N.H. The purpose of this conference was to set up the arrangements for the operation of the global economy in the postwar era. Although the Soviet Union and China were both represented at the Bretton Woods conference, in subsequent years they did not take part in the arrangements. (Today you can go to Bretton Woods and, at the entrance to the hotel's driveway, see the sign commemorating this conference, but you have to pay an entrance fee to actually get onto the hotel grounds.)

Unsurprisingly, given the relative economic and political power of the allied governments, the U.S. government basically dictated the conference outcomes, arrangements by which commerce among capitalist countries would be organized in the decades following World War II—the "Bretton Woods era." The central feature of these arrangements was that the dollar would be at the core of global commerce. Other countries' currencies would be "pegged" to the dollar, which meant that each government would set the value of its currency in terms of the dollar. For example, in 1949 the French franc was pegged at \$0.37 and the British pound at \$2.80. The dollar itself was set in relation to gold: \$34 to the ounce. Other countries' banks could redeem their dollars for gold at this rate, but, as with your checks, they generally didn't do so. When the gold-redemption promise was terminated in 1971, it turned out not to make much difference—more on that in a moment.

Of course, economies change in relation to one another. In the postwar era, different rates of inflation and different rates of productivity growth meant that the values of the currencies in terms of the dollar had to be

The continued role of the dollar depends on the avoidance of significant inflation in the United States. Yet restraints on inflation generally work against expanding employment. So maintaining the role of the dollar can come at the expense of most people in the country.



changed from time to time. For example, if France was running a trade deficit with the rest of the world (importing more than it was exporting), this meant that the value of its franc was too high in relation to the dollar—i.e., in terms of dollars, the cost of French goods was too high and France's exports would be low, while the cost for France of goods from elsewhere would be too low and France's imports would be high. Moreover, with France's exports not paying for its imports, France would necessarily build up a foreign debt to pay for the excess imports.

One could look at this franc-dollar relationship another way: instead of the franc being too high, one could say that the dollar was too low. But the rules that were established at Bretton Woods excluded the dollar from having to adjust. In this example, it was the French who would have to adjust the value of their currency—i.e., France would have to devalue its currency. And, importantly, it would have to borrow to cover the foreign debt it had built up. The U.S. economy, on the other hand, was protected from the disruption that would have been caused by changing the value of the dollar.

The International Monetary Fund (IMF) was established at Bretton Woods to provide countries in this kind of situation with the loans they needed. The IMF provided these loans, but with various conditions—in particular that the country taking the loans would have to take steps to reorganize their economies, generally in ways that opened them to more foreign commerce, trade, and investment.

While the IMF did play a role in European adjustments, its actions became especially important in lower-income countries, where it used its loan conditions to push countries towards a greater openness to international investment and trade—very much in the interests of multinational firms based in the richer countries. (The World Bank was also created at Bretton

Woods, but its role is not a central part of the story here.)

Change Without Change

The Bretton Woods rules of the game worked fairly well for twenty-five years. In fact, from the perspective of the United States, one might say they worked too well. While the Bretton Woods system promoted U.S. commerce, opening up trade and investment opportunities around the (capitalist) world, it also provided a stability in global affairs in which firms based elsewhere—in Japan and Europe—were able to also expand and ultimately challenge the dominant position of U.S. firms.

A critical juncture in global commercial arrangements then came in 1971: the Bretton Woods system fell apart. A combination of heavy spending abroad by the U.S. government (on the Vietnam War), the economic challenge from other rich countries, and inflation in the United States led the U.S. government to drop its promise of redeeming dollars for gold. Yet, while the system fell apart, there was surprisingly little change in international trade and investment. The relative economic and military power of the United States, though not as extreme as it had been in the immediate post-World War II era, continued. And the perceived threat of the Soviet Union served as a glue, binding the world's major capitalist powers in Europe and Asia to the United States, and leading them to accept continued U.S. economic, as well as military, dominance.

After 1971, various new arrangements were put in place—for example, a system of partially managed "pegs" was established. Yet the dollar remained the central currency of global commerce. Prices of internationally traded goods—most importantly oil—continued to be set in dollars, and countries continued to hold their reserves in dollars.

Although 1971 marked the beginning of a new era in international financial arrangements, the dollar retained its dominant position. Regardless of the various economic problems in the

Free exchange | Exit, pursued by bear

The Fed has at last raised rates. What happens next?

IT IS more than two weeks since the Federal Reserve raised interest rates for the first time in over nine years, and the world has not (yet) ended. But it is too soon to celebrate. Several central banks have tried to lift rates in recent years after long spells near zero, only to be forced to reverse course and cut them again (see chart). The outcome of America's rate rise, whatever it may be, will help economists understand why zero exerts such a powerful gravitational pull.

Recessions strike when too many people wish to save and too few to spend. Central banks try to escape the doldrums by slashing interest rates, encouraging people to loosen their grip on their money. It is hard to lower rates much below zero, however, since people and businesses would begin to swap bank deposits for cash or other assets. So during a really nasty shock, economists agree, rates cannot go low enough to revive demand.

There is significant disagreement, however, on why economies become stuck in this quagmire for long periods. There are three main explanations. The Fed maintains that the problem stems from central-bank paralysis, either self-induced or politically imposed. That prevents the use of unconventional monetary policies such as quantitative easing—the printing of money to buy bonds. The intention of QE is to buy enough long-dated debt to lower long-term borrowing rates, thereby getting around the interest-rate floor. Once QE has generated a speedy enough recovery, senior officials at the Fed argue, there is no reason not to raise rates as in normal times.

If the Fed is right, 2016 will be a rosy year for the American economy. The central bank expects growth to accelerate and unemployment to keep falling even as it lifts rates to 1.5% or so by the end of the year. Yet markets reckon that is wildly optimistic, and that rates will remain below 1%. That is where the other two explanations come in.

The first is the “liquidity trap”, an idea which dates back to the 1930s and was dusted off when Japan sank into deflation in the late 1990s. Its proponents argue that central banks are very nearly helpless once rates drop to zero. Not even QE is much use, since banks are not short of money to lend, but of sound borrowers to lend to.

Advocates of this theory see only two routes out of the trap. The government can soak up excess savings by borrowing heavily itself and then spending to boost demand. Or the central bank can promise to tolerate much higher inflation when, in the dis-

tant future, the economy returns to health. The promise of higher-than-normal inflation in future, if believed, reduces the real, or inflation-adjusted, interest rate in the present, since money used to repay loans will be worth less than the money borrowed. Expectations of higher future inflation therefore provide the stuck economy with the sub-zero interest rates needed to escape the rut.

Governments pursued both these policies in the 1930s to escape the Depression. But when they reversed course prematurely, as America's did in 1937, the economy suffered a nasty and immediate relapse. The liquidity-trap explanation suggests the Fed's rate rise was ill-advised. The American economy, after all, is far from perky: it is growing much more slowly than the pre-crisis trend; inflation is barely above zero; and expectations of inflation are close to their lowest levels of the recovery. If this view is correct, the Fed will be forced by tumbling growth and inflation to reverse course in short order, or face a new recession.

The sticky superpower (over)

America remains the world's economic hegemon even as its share of the global economy has fallen and its politics have turned inwards. That is an unstable combination, says Patrick Foulis

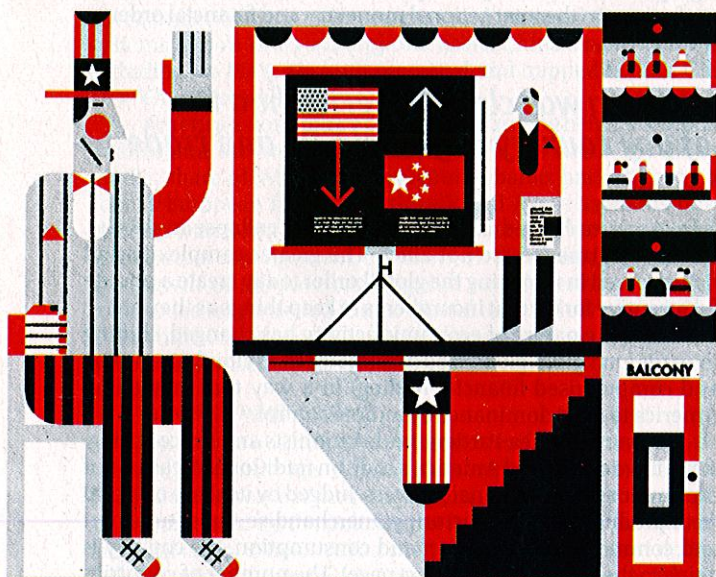
IN JUNE THIS year Jack Ma, the founder of Alibaba, a giant Chinese e-commerce firm, addressed the Economic Club of New York, whose members include many Manhattan luminaries and Wall Street chiefs. Mr Ma's message was that his company exists for the long-term good of society, a far cry from the creed of shareholder value followed by many in the room. He pledged to help America's struggling small firms export to China's 630m internet users, who between them now spend more online than Americans do. The venue for the event was the Waldorf Astoria hotel, which, when it opened in 1931, in the midst of the Depression, was hailed by President Herbert Hoover as "an exhibition of confidence and

courage to the whole nation". Today the Waldorf is owned by a Chinese insurance firm run by Deng Xiaoping's grandson-in-law. The whole event seemed to symbolise a change in the world's economic order.

The Waldorf is run by an Ameri-

This special report will examine the paradox illustrated by Mr Ma's speech. It will argue that America is a sticky economic superpower whose capacity to influence the world economy will linger and even strengthen in some respects, even though its economic weight in the world is declining. For some, this is a welcome prospect. Hillary Clinton, a front-runner for the job of America's next president, wrote last year: "For anyone, anywhere, who wonders whether the United States still has what it takes to lead...for me the answer is a resounding 'yes'...everything that I have done and seen has convinced me that America remains the indispensable nation." But if handled badly, the growing gap between America's economic weight and its power will cause frustration and instability.

Power is the capacity to compel another to do what they otherwise 



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An audio interview with the author is at Economist.com/audiovideo/specialreports

D2

► would not. It can be exercised through coercion, by setting rules or by engendering expectations and loyalties. American power is sometimes defined so broadly that it includes both the flight decks of the USS *Abraham Lincoln* and the legs of Taylor Swift. This report will focus on a narrower point: how America's grip on the global economy helps, enriches, organises, bosses and annoys the rest of the world. This kind of power is often wielded inadvertently: for example, America has no desire to run India, yet India's economy is affected by the Federal Reserve's monetary policy; and two of the subcontinent's leading industries, technology and pharmaceuticals, are subject to American rules that are a de facto world standard.

American economic dominance has never been absolute. Between 1946 and 1991 the Soviet Union's empire of queues and rust aspired to be a rival model. From the 1970s onwards Europe pursued closer integration partly as a counterweight to America; the idea of a single European currency gained momentum as Europeans grumbled about the ascendancy of the dollar. Japan appeared to pose a threat in the 1980s and in its pomp tried to persuade Asia to join a yen zone. Even when the so-called Washington Consensus of American-inspired liberal economic policies was at its peak in the 1990s, many countries, most notably China, ignored it. But until recently one thing was clear: America had the biggest weight of any country in global GDP and trade.

In the first change in the world economic order since 1920-45, when America overtook Britain, that dominance is now being eroded. As a share of world GDP, America and China (including Hong Kong) are neck and neck at 16% and 17% respectively, measured at purchasing-power parity. At market exchange rates a fair gap remains, with America at 23% and China at 14%. By a composite measure of raw clout—share of world GDP, trade and cumulative net foreign investment—China has probably overtaken America already, according to Arvind Subramanian, an economist (see chart). Even if China's economy grows more slowly from now on, at 5-6% a year, its strength on such measures will increase.

The experience of the 20th century suggests that such a transition can happen fast. In 1907 America lacked a central bank and suffered a banking collapse, but by the 1920s the dollar rivalled the pound sterling as the world's most widely used and trusted currency. If the past is a guide, China could surpass America in the blink of an eye, giving it the heft to issue the world's reserve currency and set the rules of trade and finance. A plurality

of people polled by the Pew Research Centre around the world believe that China will become the world's leading economic power. Those aged under 30 are most likely to believe they will live in a Chinese epoch.

But any reordering of the world economy's architecture will not be as fast or decisive as it was last time. For one thing, the contest is more balanced. America is far stronger than Britain was at its moment of precipitous decline, and China is weaker today than America was when it took off. For all its efforts to promote its currency and its institutions, the Middle Kingdom is a middle-income country with immature financial markets and without the rule of law. The absence of democracy, too, may be a serious drawback.

Today's world also relies on a vastly bigger edifice of trade and financial contracts that require continuity. Trade levels and the stock of foreign assets and liabilities are five to ten times higher than they were in the 1970s and far larger than at their previous peak just before the first world war. The speed and complexity of capital flows surpass anything the world has ever seen before. Britain and America were allies, which made the transfer of power orderly, if often humiliating for the declining power. Having squashed Britain's global pretensions at the Bretton Woods conference on the international monetary and financial order in

Until recently one thing was clear: America had the biggest weight of any country in global GDP and trade

1944, America helped cushion its financial collapse in 1945-49. China and America are not allies. The greater complexity and risk involved in remaking the global order today create a powerful incentive for current incumbents to keep things as they are.

Last, the nature of economic activity has changed, shifting towards intangible, globalised services (such as cloud computing and computerised financial trading) in a way that may allow America to exert dominance by remote control.

Economists, Tea-Partiers, trade unionists and Bruce Springsteen have chronicled America's slide on traditional measures of economic and institutional prowess. Judged by its share of world steel production, manufacturing, merchandise trade, transport and commodities production and consumption, the country is going to the dogs (see chart, next page). The number of countries for which America is the biggest export market has dropped from 44 in 1994 to 32 now. Over the same period the equivalent figure for China has risen from two to 43.

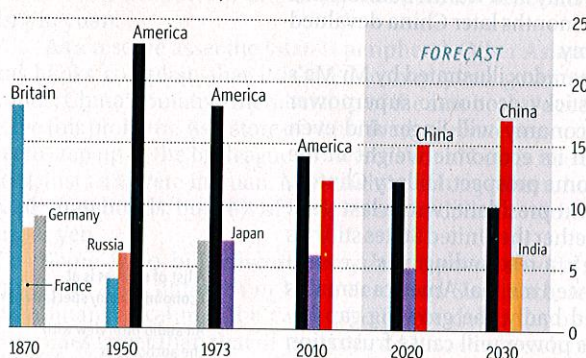
America's lead in other areas, such as research-and-development spending, technology equipment and consumer brands, is no longer as comfortable as it was. Many of the world's most valuable firms are still American, but this overstates their clout abroad: their share of the stock of international corporate investment has fallen from 39% in 1999 to 24%.

America still shines in a number of fields. It has 15 of the world's 20 leading universities. Its Food and Drug Administration is the global benchmark for the efficacy of a new medicine. A patent registered in New York is far more credible than one booked in Shanghai. And Hollywood's domination of the world's box offices is as eternal as a Californian film star's youth.

What is less widely acknowledged is that in some domains America's clout is increasing. The country has demonstrated an astonishing capacity to dominate each new generation of technology. It is now presiding over a new era based on the cloud, e-commerce, social media and the sharing economy. These products go global faster and penetrate more deeply into people's

The ebbs and flows of power

% share* of global economic power



*Weighted by share of world GDP, trade and net capital exports
Source: "Eclipse: Living in the Shadow of China's Economic Dominance", by Arvind Subramanian, 2011

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(over)

Merchandise trade with China

As % of countries' total trade, 2014



Sources: IMF; The Economist

► minds and jobs than anything Silicon Valley has invented before, affecting everyone from cabbies to philanderers to despots.

Facebook and Google do a majority of their business abroad, and that share is rising. When Microsoft was at the height of its powers in 2000, it made less than a third of its sales overseas. American firms now host 61% of the world's social-media users, undertake 91% of its searches and invented the operating systems of 99% of its smartphone users. China's internet firms, including Mr Ma's, are both protected and trapped behind China's "Great Firewall".

America's dominance of the commanding heights of global finance and the world monetary system has risen. The global market share of Wall Street investment banks has increased to 50% as European firms have shrunk and Asian aspirants have trodden water. American fund managers run 55% of the world's assets under management, up from 44% a decade ago, reflecting the growth of shadow banking and new investment vehicles such as exchange-traded funds. Global capital flows, larger than at any time in history, move in rhythm with the VIX, a measure of volatility on America's stockmarkets.

Power through neglect

One of the oddities of globalisation is that although America's trade footprint has shrunk, its monetary footprint has not. The Federal Reserve is the reluctant master of this system, its position cemented by the policies put in place to fight the 2007-08 financial crisis. When the Fed changes course, trillions of dollars follow it around the world. America's indifference towards the IMF and World Bank, institutions it created to govern the system and over which it has vetoes, reflects power through neglect.

The position of the dollar, widely seen as a pillar of soft power, has strengthened. Foreign demand for dollars allows America's government to borrow more cheaply than it otherwise could, and the country earns seigniorage from issuing bank notes around the world. America's firms can trade abroad with less currency risk, and its people can spend more than they save with greater impunity than anyone else. Even when a global crisis starts in America it is the safe haven to which investors rush, and foreigners accumulate dollars as a safety buffer.

Since the attacks of September 11th 2001, America has emphatically asserted control over the dollar payment system at the heart of global trade and finance. Hostile states, companies or people can be cut off from it, as Iran, Burmese tycoons, Russian politicians and FIFA's football buffoons have found to their cost. The threat of this sanction has given America an enhanced extra-territorial reach.

Finance and technology are already a battleground for sovereignty, as Europe's pursuit of Google through antitrust cases has shown. So for America to lay a claim to running the

world economy's central nervous system even though it is no longer its dominant economic power would be the ultimate expression of its exceptionalism. The country would need to show an extraordinarily deft touch. It would have to act, and to be seen as acting, in the collective interest.

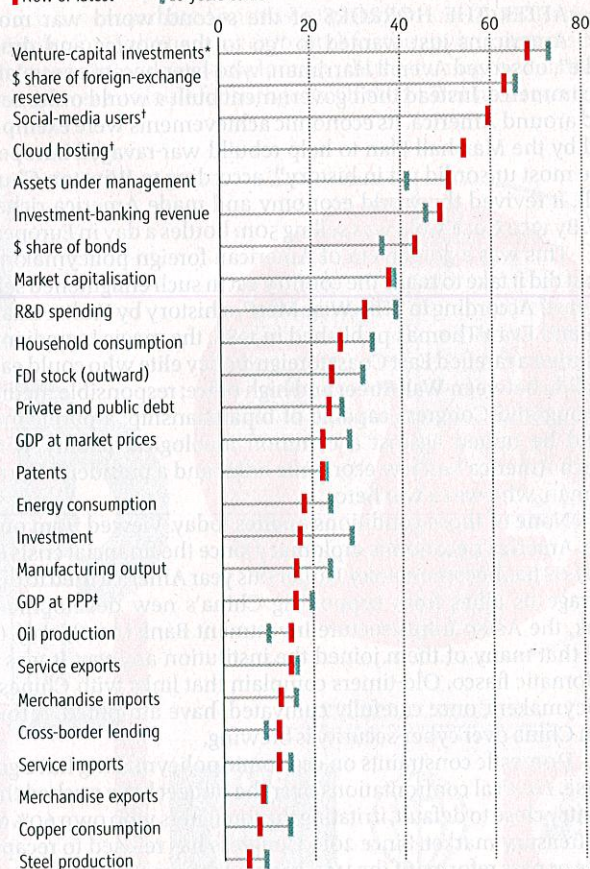
America's political system has shown itself capable of great leadership in the past, not least during and after the second world war. Today it is falling short of these ideals. The global financial crisis proved that America always does the right thing in the end, but only after exhausting all the alternatives. The Federal Reserve provided liquidity to the world, and with a gun to its head Congress stumped up the cash to rescue American financial firms. But since then America's political system has flirted with sovereign default, refused to reform or fund the IMF, obstructed China's efforts to set up its own international institutions, imposed dramatic fines on foreign banks and excluded a growing list of foreigners from the dollar system.

The idea that America's political system does not feel obliged to meet what self-interested foreigners present as its global economic responsibilities is nothing new. When informed about a speculative attack against Italy's currency in 1972, Richard Nixon snapped: "I don't give a shit about the lira." But the country's current indifference may be more than a temporary lull. America's middle class is unhappy with globalisation and its politics are deeply polarised. ►►

From mighty to mingy

America's share of global total, %

■ Now or latest ■ 10 years earlier



Sources: See Economist.com/econ2015 for details

*Seven years ago

†Earlier figure not available

‡Purchasing-power parity

D-7

► If America failed to live up to expectations, what would that mean for the rest of the world? For the moment it is easy for America's policymakers and politicians to be complacent: China's aura of competence has been damaged by its recent economic troubles, and America has the world's perkier economy, admittedly in a sluggish field. But it is important to be clear-headed about the long-term choices. America cannot expect effortlessly to dominate global finance and technology even as its share of world trade and GDP declines and it becomes ever more inward-looking.

This special report will argue that the present trajectory is bound to cause a host of problems. The world's monetary system will become more prone to crises, and America will not be able to isolate itself from their potential costs. Other countries, led by China, will create their own defences, balkanising the rules of technology, trade and finance. The challenge is to create an architecture that can cope with America's status as a sticky superpower. The next article will explain why its internal politics have made this ever more difficult. ■

American politics

Neither leading nor ceding

America's bitter internal politics have made economic diplomacy harder

AFTER THE HORRORS of the second world war most Americans just wanted to "go to the movies and drink Coke", observed Averell Harriman, who later became secretary of commerce. Instead their government built a world order centred around America. Its economic achievements were exemplified by the Marshall Plan to help rebuild war-ravaged Europe—"the most unsordid act in history", according to Winston Churchill. It revived the world economy and made America richer, too. By 1950 Coca-Cola was selling 50m bottles a day in Europe.

This was a golden era of American foreign-policy-making. What did it take to make the country act in such enlightened self-interest? According to "The Wise Men", a history by Walter Isaacson and Evan Thomas published in 1986, the magic ingredients included a rarefied East Coast foreign-policy elite who could easily glide between Wall Street and high office; responsible media; a thoughtful Congress capable of bipartisanship; a public that could be united against a common ideological enemy with which America had few economic links; and a president, Harry Truman, who was a war hero.

None of those conditions applies today. Viewed from outside, America's economic diplomacy since the financial crisis of 2007-08 has become cranky. Earlier this year America tried to discourage its allies from supporting China's new development bank, the Asian Infrastructure Investment Bank (AIIB), only to find that many of them joined the institution anyway. It was a diplomatic fiasco. Old-timers complain that links with Chinese policymakers, once carefully cultivated, have atrophied. A row with China over cyber-security is brewing.

Domestic constraints on economic policymaking have got worse. Political confrontations over the budget have pushed the country close to default, irritating the foreigners who own 60% of the Treasury market. Since 2010 Congress has refused to recapitalise or pass reforms of the IMF, keeping the world waiting.

Foreign banks have been subjected to fines and litigation

costs totalling about \$100 billion, some richly deserved, some little more than shakedowns by local officials looking for headlines and cash. Some banks from the emerging world and a few countries have been all but excluded from the dollar payments system by money-laundering rules whose cost, imprecision and extraterritorial reach are pushing the global banking system away from America. The Federal Reserve's extension of liquidity to foreign banks is under attack from the left and from the Tea Party, and at least a third of Congress wants to review or limit the Fed's powers. In July Congress stopped Exim Bank, a government body that finances exports, from writing new loans.

The grandest foreign-policy initiative has been the Trans-Pacific Partnership (TPP), a proposed trade deal between Asia-Pacific and America. (Another deal with Europe is coming up behind.) In June Congress agreed to hold a simple yes or no vote on any TPP deal that Mr Obama strikes. But TPP is a far cry from the trade pacts of the past. It excludes China and India. The hope is that both countries will eventually ask to join, but they could equally go into a huff and push their own trade pacts. TPP negotiations have dragged on and Congress may now be voting on it during next year, in the midst of a presidential election. Hillary Clinton, the Democratic front-runner, has declined to endorse the pact, even though she had supported it in broad outline in the past. Half the field of Republican candidates are hostile to TPP.

The campaign will also see tensions with China flare. Marco Rubio, a Republican contender, has called on America to stop appeasing China. Donald Trump, another Republican hopeful, said ahead of a visit to America by Xi Jinping, China's leader, that instead of a state banquet he would offer him a Big Mac.

One view is that all this is just a temporary blip. America has always harboured a strain of populism that dislikes elites and foreign engagements, sometimes called the Jacksonian tradition after Andrew Jackson, who served as president from 1829 to 1837. America declined to participate in the Genoa conference in 1922 that aimed to restore Europe's economy. In 1948-49 Congress vetoed American membership of a planned global trade body, the precursor of the World Trade Organisation (WTO). In 1953 Joseph McCarthy, a prominent anti-communist Republican senator, said the career of John McCloy as the second American head of the World Bank and a diplomat in Germany was an "unbelievable, inconceivable, unexplainable record of the deliberate, secret betrayal of the nation to its mortal enemy, the communist conspiracy". In the 1980s relations with Japan were prickly. In the 1990s China's rise and its currency peg to the dollar were the subject of bitter political debates.

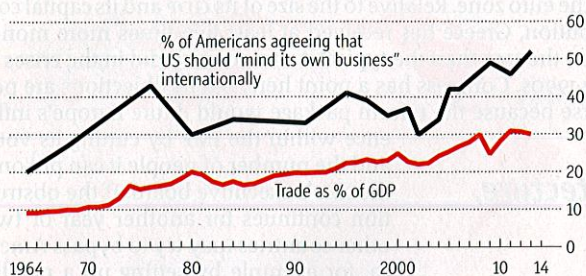
Do the right thing

Optimists point out that America usually manages to overcome its Jacksonian impulses. At the Bretton Woods conference in 1944 it designed and pushed through the IMF and the World Bank, along with a system of fixed exchange rates that lasted until the 1970s. During the 2007-08 crisis American politicians agreed to bail out global banks headquartered in America. They did not stop the Fed from extending up to \$500 billion of loans to foreign financial firms and at least the same again in dollar swap lines to foreign central banks.

Congress has always been tricky to handle. It delegates the power to negotiate treaties to the president but can investigate decisions, try to block funding for foreign-policy initiatives and pass laws that influence foreign policy. It also holds authority over the Fed. Even the policymakers of the post-war golden era found it troublesome. Robert Lovett, who as secretary of defence helped Harry Truman build up NATO, said dealing with Congress was like "getting a shave and having your appendix taken out at the same time". Paul Nitze, who helped draft the Marshall

Stop the world, we want to get off

United States



Sources: Pew Research Centre; World Bank

- Plan, had to appear before Congress 43 times to defend it, losing 15lb (about 7kg) during the ordeal.

In the 1990s America was again ascendant abroad. Its economic ideas became a global, free-market orthodoxy known as the Washington Consensus. America led the response to the emerging-markets crises of 1995-99, prompting *Time* magazine to label a triumvirate of officials, Alan Greenspan, Robert Rubin and Larry Summers, as "the committee to save the world". America passed the NAFTA trade deal, joined the WTO and shepherded China into it, too. But all this was bitterly contested at home. To bail out Mexico in 1995, Mr Rubin, then Treasury secretary, had to use a kitty of money reserved for currency interventions that did not require congressional approval.

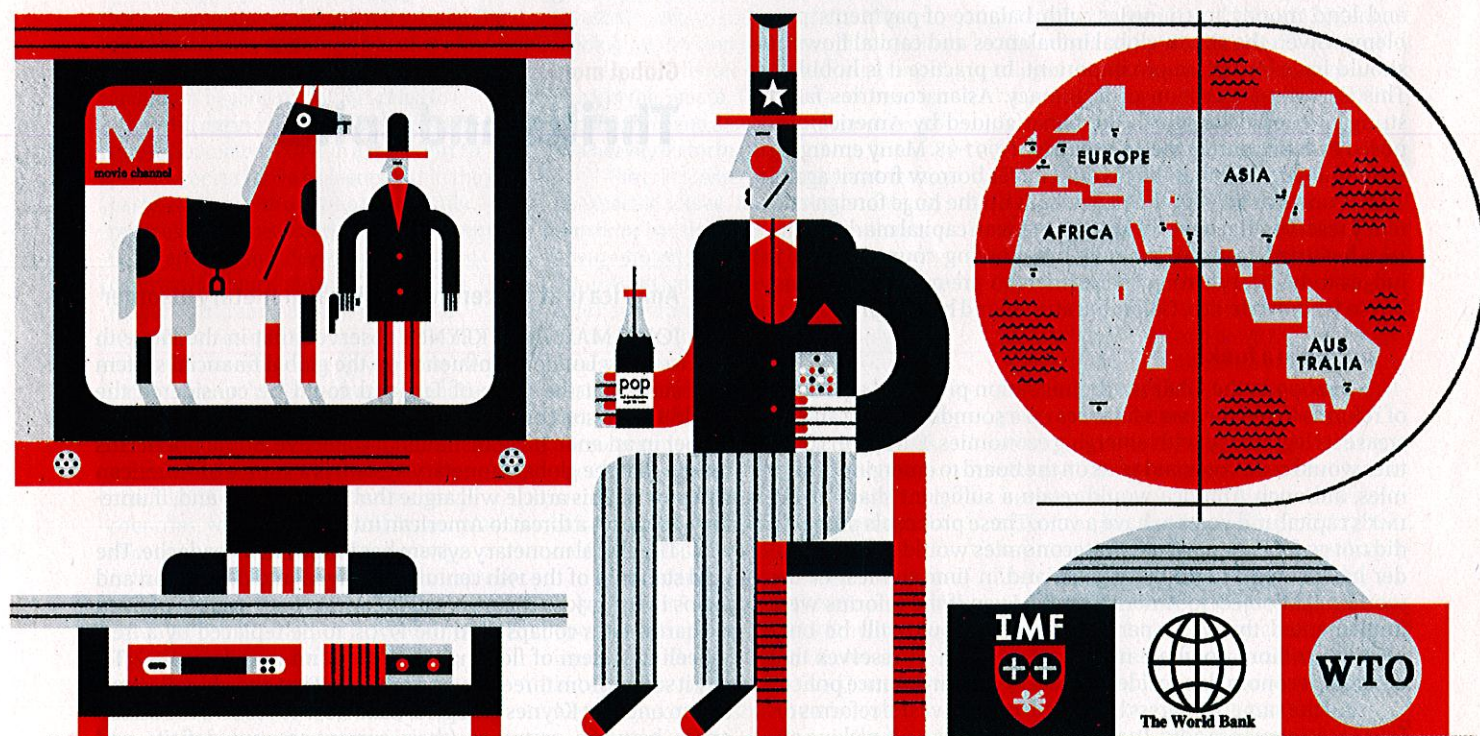
All this suggests that Congress and the American public have always been ambivalent about economic diplomacy, and that the current White House has not been good at managing that tension. But the pursuit of America's enlightened self-interest is also genuinely getting harder, for three reasons.

First, partisan politics have intensified, a fact attributed variously to gerrymandering, to a natural self-induced "sorting" of like-minded people into the same areas, and to the decline of the moderate wings of both parties. Congress has become gridlocked, a problem exacerbated by the 24-hour news cycle, lobbying and the huge sums spent on campaigning.

There is hostility to economic diplomacy on both sides of the political divide. The left wing of the Democratic Party, symbolised by Senator Elizabeth Warren, opposes free trade, perhaps more strongly than it did in the 1990s. The right wing of the Republican Party, the Tea Party, has an expeditionary wing that is willing to use force abroad and an isolationist one that wants to keep the world away from America. Both dislike anything that smacks of world government. Parts of the machinery of economic diplomacy are subject to an operating licence that must be renewed by Congress frequently, for example the president's right to pursue trade deals and try to get them through Congress with a simple yes or no vote, known as Trade Promotion Authority (TPA). These votes are now recurring triggers for ideological battles.

Second, popular discontent with globalisation and worries about stagnant middle-class incomes and shrinking blue-collar jobs have become more prominent. In the abstract, a majority of Americans still support free trade and globalisation. But there are plenty of warning signs. Less than a fifth of them believe that trade creates jobs, and the poorer they are, the less they think it is a good thing. Americans are also suspicious of China, America's most important economic partner. In polls, a majority of them agree that their country should "mind its own business internationally and let other countries get along the best they can on their own" (see chart), and that America's influence is declining.

The third problem is the fallout from the financial crisis, which has exacerbated mistrust of globalisation. It has also made it harder for Wall Street types to work for the government, a staple of American economic diplomacy, thus reducing the quality of manpower available for such jobs. Of the 24 Treasury secretaries ►



D6

▶ since 1945, 14 have worked on Wall Street at some point. America's economic relations with China after it opened up in the early 1990s were built up by an elite that moved just as seamlessly between the government, Goldman Sachs and Citigroup as their Chinese counterparts did between state-owned enterprises, party appointments and government posts.

The financial crisis has also led to a "populist creep" in which bits of the apparatus previously subject to technocratic

The three pillars of the world's economic architecture, the IMF, the World Bank and the World Trade Organisation, are all in bad repair

control have become politicised. One example is the global dollar payments system, which used to be the responsibility of the Fed and the Treasury. Now lots of different official bodies are competing for authority over it and for the power to levy fines on global activity, which at their worst come with a storm of publicity and gagging orders and without judicial process.

Another example is the Federal Reserve itself, whose popularity with the public has fallen over the past decade. Several Republican bills currently passing through Congress are seeking to subject the Fed to more supervision by Congress and the Government Accountability Office. Elizabeth Warren has introduced legislation that would limit the Fed's emergency lending powers to American and foreign banks. These initiatives may not become law, but fear of confrontation with Congress will dull the Fed's appetite to take risks of the kind it did in 2007-08 when it was the world's lender of last resort.

The consequence of American ambivalence is that the three pillars of the world's economic architecture, the IMF, the World Bank and the WTO, are all in bad repair, though for different reasons.

Take the IMF first. It is meant to monitor the world economy and lend money to countries with balance-of-payments problems. Given the size of global imbalances and capital flows, it should have become more important. In practice it is hobbled. This is partly a question of legitimacy. Asian countries faced stringent conditions which the bank (guided by America) imposed on loans during the Asian crisis of 1997-98. Many emerging economies vowed that they would never borrow from it again. That is one reason why they have built up the huge foreign-currency reserves that have distorted American capital markets. The IMF has tried to make amends by allowing countries that it judges to be "very strong" performers to pre-qualify for loans, but so far only Mexico, Colombia and Poland have signed up.

Fund in a funk

In 2009-10 the Obama administration proposed a package of reforms to put the IMF's finances on a sounder footing and increase its legitimacy with emerging economies. European countries would cede votes and seats on the board to emerging economies, although America would retain a sufficient share of the IMF's capital and votes to have a veto. These proposals probably did not go far enough. Emerging economies would still have under half the votes and the capital, and in time the rest of the world might object to America's veto. Even if the reforms were implemented the IMF's permanent kitty would still be only about \$1 trillion, nowhere near the \$6 trillion of reserves that emerging economies consider necessary as an insurance policy.

All the same, Congress has failed to approve the reforms on four occasions since 2010. Part of its complaint is a nit-picking ob-

jection to the technicalities of the IMF's funding; the reform will replace a temporary arrangement with a permanent one. Another grumble is that the IMF has been disproportionately generous to the euro zone. Relative to the size of its GDP and its capital contribution, Greece has received at least five times more money from the IMF than the typical Asian country did in the crises of the 1990s. Congress has a point here, but its objections are perverse because the reform package would dilute Europe's influence within the IMF by cutting its votes and the number of people it can put onto the IMF's executive board. If the obstruction continues for another year or two, other countries may try to bypass America, for example by setting up a parallel fund. That might prompt America to exercise its veto, leading to a bigger spat.

If the IMF is partly beached, the World Bank and the WTO are drifting. The governance of the World Bank, where America has a veto and whose boss it traditionally appoints, has become cumbersome. Emerging economies complain that it is too bureaucratic and obsessed with fashionable campaigns. Its outstanding loans have shrunk from 3% of emerging-market output in 1994 to 1%, although it is now trying to increase them and to reorganise itself. The WTO is still good at enforcing existing trade agreements, but has not managed to bring in a comprehensive new deal for two decades. The so-called Doha round of talks, which began in 2001, has more or less fizzled out. Emerging economies refuse to agree to new trade deals, and America is no longer knocking heads together.

Should anyone care if the IMF, the World Bank and the WTO do not work well? There is no magic about these particular institutions, but a widely agreed international economic framework is worth having. The post-war system hinged on one country looking beyond its narrow self-interest to support a global set of rules. It is now less willing to do that. At the same time the world is becoming more volatile and complex. The best illustration of that is the global monetary and financial system. ■

Global monetary system

Thrills and spills

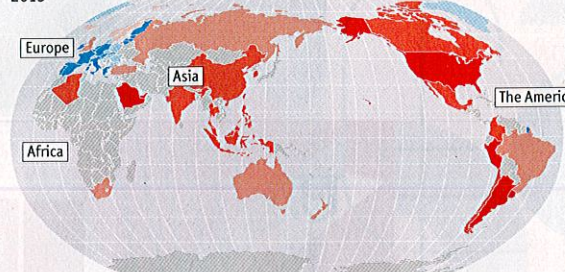
America is at the centre of a global monetary disorder

JOHN MAYNARD KEYNES observed that in the late 19th century London's influence on the global financial system was such that the Bank of England could be considered the world's orchestra conductor. Today America is like the dominant rapper in an anarchic transnational collective. Some politicians reckon that the global monetary system is a source of American soft power. This article will argue that it is unstable and, if unreformed, poses a threat to American interests.

The global monetary system has long been a headache. The gold standard of the 19th century dissolved into depression and chaos in the 1930s. The post-war Bretton Woods system of fixed exchange rates collapsed in the 1970s, to be replaced by a free-wheeling system of floating currencies and mobile capital. Today it suffers from three related problems. First, the old collective-action one that Keynes grappled with: how to resolve the imbalances between countries (their current-account deficits and ▶▶

Dollar zone

Intensity of currency's link to the \$, %
2013



Source: "Currency movements drive reserve composition", by Robert McCauley and Tracy Chan, BIS Quarterly Review, December 2014

Dollar-zone share of world GDP



► surpluses) in a way that does not hurt world economic growth. If deficit countries are forced to bear all the burden of adjustment by cutting back their imports, world output will be lower. This has haunted the euro zone, where tensions between northern countries with surpluses and southern ones with deficits were partly responsible for the crisis. Countries that try to cheapen their currency to boost their exports can set off tit-for-tat devaluations that benefit no one. China's devaluation in August has raised fears of such beggar-thy-neighbour policies.

The second problem is newer and more dangerous: the size

of gross capital flows sloshing about the world. A country with a current-account surplus or deficit has to invest abroad, or attract, net funds of the same amount. In the 19th and 20th centuries economists tacitly assumed that the gross capital flows moving around the world would roughly reflect those amounts. But after two decades of financial globalisation, capital flows dwarf current-account imbalances. In 2007 they reached about 20% of world GDP. That year India's current-account deficit, for instance, was \$16 billion, but the gross capital flows washing into the country were 28 times bigger, partly offset by outflows. Since the 2007-08 crisis very low interest rates have encouraged large-scale speculation, with capital flooding into emerging countries. The chaos in the currency markets this year has reflected the unwinding of these positions.

The third problem is the dollar and America's role in the system. The greenback reigns supreme by every yardstick for an international currency: as a medium of exchange, a unit of account, a store of value and a reserve asset held by central banks. The euro has lost ground, the yen has flopped and the yuan is still in nappies. By one estimate the de facto dollar zone accounts for perhaps 60% of the world's population as well as 60% of its GDP ►►

We all hang together

The crisis of 2023

BY 2023 THE global offshore dollar shadow banking system had grown larger than America's onshore domestic banking system. The euro's credibility had slipped further after Italy's partial default in 2018. The yuan's ambitions beyond its borders came to a standstill during the final days of Xi Jinping's rule in September 2019. In a last effort to placate conservative elements within the party, capital controls were temporarily reimposed, the head of the People's Bank of China arrested for "deviations" and yuan deposits in Hong Kong were frozen. The redback's use abroad never recovered.

That meant the dollar was more in demand than ever as the only reliable medium of payment for global trade. The dollar assets of China's largest bank, ICBC, overtook JPMorgan Chase's entire balance-sheet. Total offshore dollar credit reached \$26 trillion, or about 100% of America's GDP. Emerging countries, with their trade still denominated in dollars, continued to build ever larger dollar reserves. Congress's failure to approve reform of the IMF and the subsequent withdrawal of China, India and Brazil meant there was no global lender of last resort.

In order to create a bigger supply of safe assets, Congress came close to approv-

ing the creation of the Invest America Fund, which sold Treasuries to foreigners and invested in shares overseas. But a bitter ideological row over how its surplus earnings would be distributed left the legislation stuck in the Senate. The imbalance between the supply of and demand for Treasuries led to a heavily distorted market.

The crisis, when it struck, came from an unexpected source. Indonesian and Malaysian firms had invested heavily in solar-energy projects, financed by Chinese and other Asian banks, using dollars and supposedly hedged and in some cases redistributed off the banks' balance-sheets, mainly to Asia's burgeoning pension funds. When shale-oil drilling began in earnest in the European Union, oil prices fell to \$14, making the solar projects uneconomic. Depositors and bond funds fled from the Asian dollar market into Treasuries, still the world's only safe haven. Analysts estimated the need for emergency liquidity at \$5 trillion-6 trillion.

The Federal Reserve proved unable to help. The Fair Fed act of 2017 had prevented it from extending more than \$300 billion of liquidity to other central banks. None of the big Asian commercial banks had branches in New York; most had shut them in protest

after the New York Superintendent of Financial Services, in an election year, had attempted to fine Bank of China \$12 billion and India's largest state banks \$9 billion, alleging corruption in the banks' home countries. That meant they were not eligible to access the Fed's liquidity window.

In desperation, the central banks of China, India, Indonesia, Singapore and Malaysia agreed to pool their dollar reserves, totalling \$8 trillion, and make massive liquidity injections into the Asian dollar banking system. At first it appeared they had stemmed the panic, with interbank rates falling. But as they sold down their holdings of American bonds, the price of Treasuries tumbled, pushing long-term American bond yields up by three percentage points and prompting talk of a housing crash rivalling that of 2007. In a settlement brokered by the Treasury secretary, Jamie Dimon, America agreed to allow the Fed to offer liquidity to Asian central banks in return for accepting their Treasury bonds as collateral. As the crisis eased, America, China and other Asian countries started talks to create a global lender of last resort and to promote the use of the yuan and rupee abroad. A new era of international co-operation had begun.

► (see map, previous page). It is made up of America, the countries whose currencies float in sympathy with the dollar, and countries with dollar pegs such as China.

By law the Fed sets its policy to suit America alone, but a great archipelago of offshore dollar deposits and securities exists outside America. Dollar payments pass through banks that directly or indirectly deal with New York. Countries' trade flows and some of their debts are in dollars, so this is the currency they need. But there is no guaranteed lender of last resort. The Fed lends dollars to foreigners on ad hoc terms. The IMF has insufficient money and legitimacy to play this role. Instead, many countries have built up enormous safety buffers of dollar reserves in the form of Treasury bonds.

Those vast global capital flows tend to move to America's financial rhythm. Countries with currency pegs have to mimic Fed policy or risk excessive capital inflows if they keep rates too high, or outflows if they keep them too low. Global banks are financed in dollars and expand and contract to mirror conditions in America. Firms with dollar debts or deposits have no control over changes in their interest costs or income. Giant global investment funds, usually headquartered in America, often borrow in dollars, and their mood swings to the beat of Wall Street.

The Anna Karenina principle

Just like Tolstoy's unhappy families, every country in the dollar system is unhappy in its own way. The three problems listed above—imbalances, capital flows and dollar dependence—are mixed into a giant omelette that is near-impossible to unscramble. At the heart of the problem is a piece of economic logic known as the "trilemma". It states that a country can have only two of three things it wants: a stable exchange rate, openness to global capital flows and the ability to set its interest rates freely to suit its own economy. Before the Asian crisis in 1997-98 many countries had fixed currencies and were open to money coming across their borders but had no independent monetary policy. The illusion of stability fostered by such pegs led to a build-up of dollar-denominated debts in emerging Asia. When capital inflows dried up, the pegs broke. Currencies plunged in value, pushing up the cost of dollar debts. A brutal recession followed.

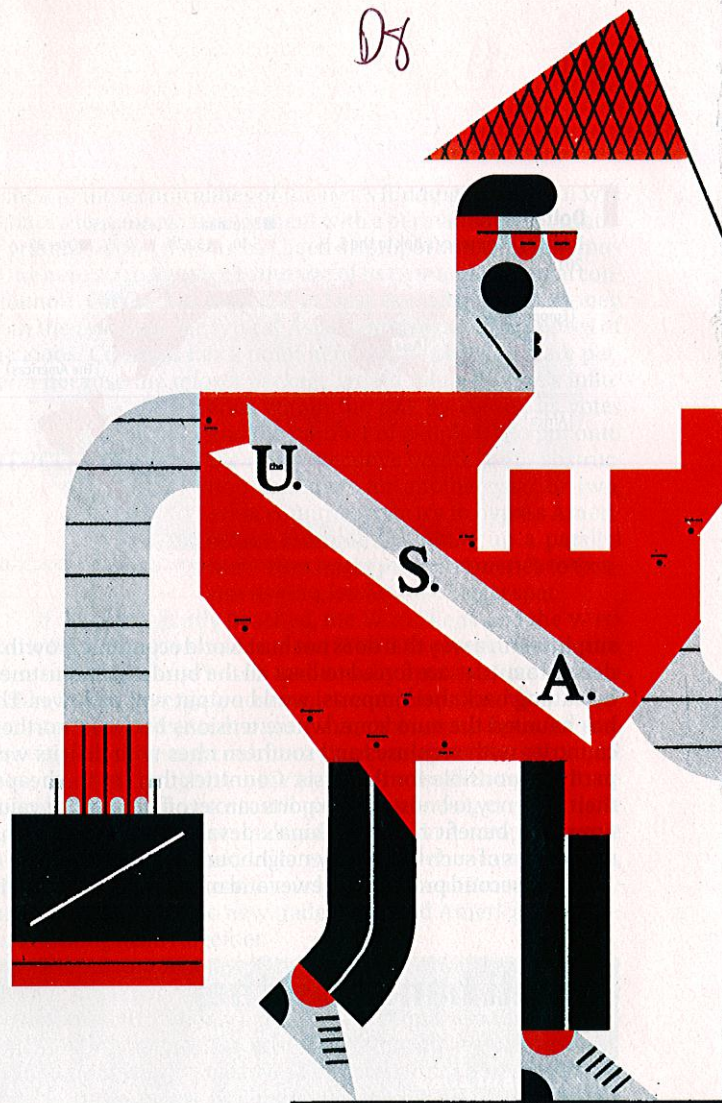
The scars of the Asian crisis explain the emergence of a new consensus: countries should let their currency float so it would act as an adjustment mechanism. Their openness meant they would be buffeted by speculators, but that could be mitigated by keeping their house in order, controlling inflation, deepening local markets and avoiding borrowing in other currencies. For all emerging economies, median net foreign-currency debt (total

debt less reserves) has fallen from 20% of GDP in 1995 to roughly zero today. Most countries built up immense dollar reserves and tried to minimise their current-account deficit or run a surplus. China had its own variation, pegging its currency but at a cheap rate to the dollar. That generated vast current-account surpluses which the government heaped into an ever-growing pile of American Treasury bonds.

None of this has worked as well as expected. Take the floaters first. Large capital flows can cause chaos even if your house is in order, roiling local-currency bond markets and interest rates. Just because you do not borrow in dollars does not mean you are immune to jittery foreigners' antics. Foreigners now own between 20% and 50% of local-currency government bonds in Turkey, South Africa, Indonesia, Malaysia and Mexico. Since 2013 the Fed has pondered tightening rates, and every time it gets close, money cascades out of emerging markets.

China and other countries with fixed pegs are fed up, too. When America raises interest rates, the dollar soars and so do their currencies, hurting exports. Moreover, the value of those huge reserves appears to be periodically at risk from a falling dollar, inflation or even default. During the 2007-08 crisis American officials made weekly calls to reassure their Chinese counterparts that it would not default.

Even America has mixed feelings about the monetary regime it anchors. In theory its ability to trade and borrow cheaply and freely in its own currency is an "exorbitant privilege", in the words of a former French president, Valéry Giscard d'Estaing. The financial crisis caused many to reconsider that view. Artifi- ►

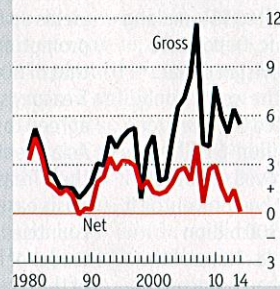


Tempestuous

Global external assets
As % of GDP

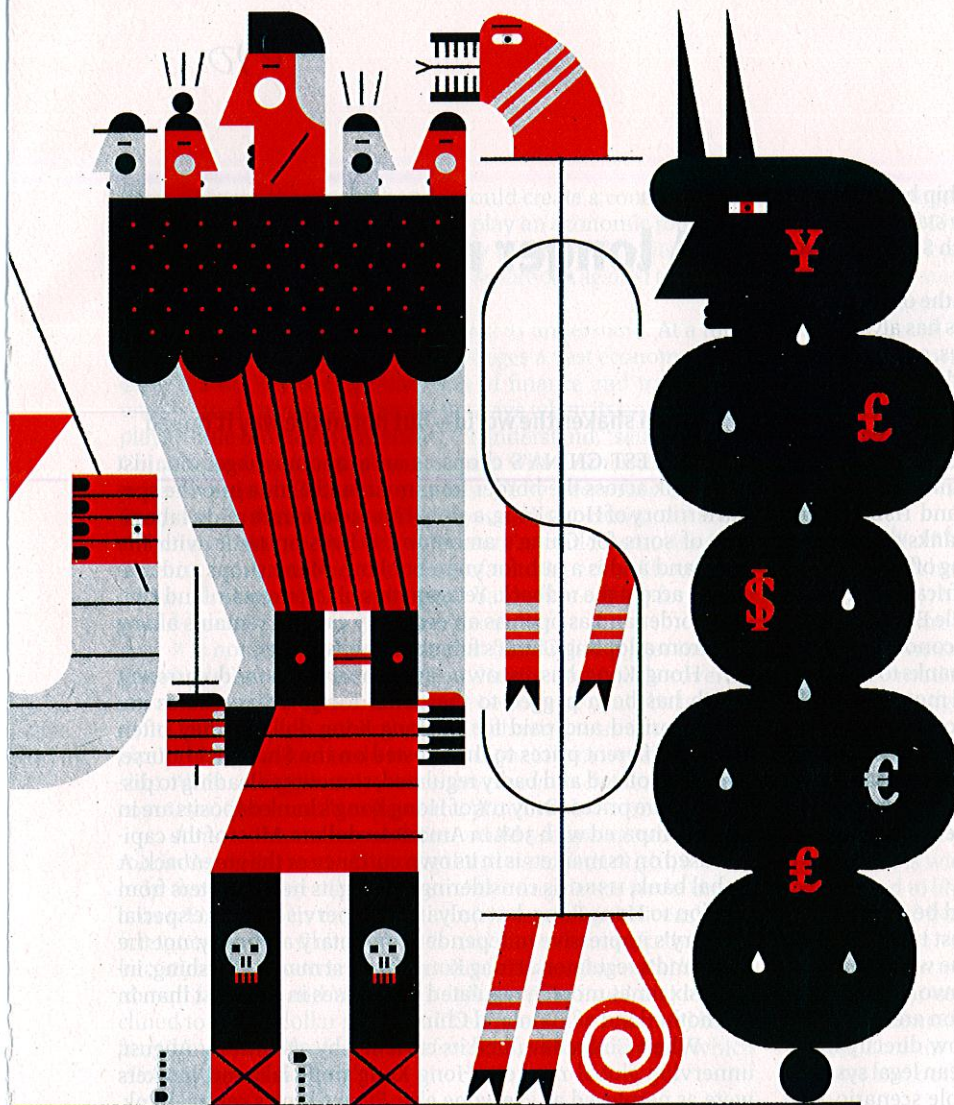


Emerging-market capital flows
As % of GDP



Sources: "External Wealth of Nations", by Philip Lane and Gian Maria Milesi-Ferretti, 2013; IMF; "Capital Flows are Fickle", by John Bluedorn *et al.*, 2013; IMF working paper 13/183

De Over



► cial demand for “safe assets” in dollars may have pushed up the exchange rate, hurting manufacturing jobs. Indeed, it may have helped cause the crisis. Voracious bouts of foreign buying of Treasury bonds distorted the market, lowering interest rates and fuelling a debt binge by banks and homeowners.

One response is to assume that the global system heals itself naturally. The argument goes something like this. The imbalances between surplus countries in Asia and the Middle East and deficit countries, most notably America, will narrow now that oil exporters are earning less and China is trying to move away from its export-led model. Capital flows have gone over the top as central banks have tried to fend off a depression, but as the dollar rises, emerging economies will use their reserves to stabilise their currencies. The system will start to look more normal.

But that is wishful thinking. If the system unwinds and two decades of globalisation go into reverse, things could turn messy, with emerging markets rapidly selling down their reserves, perhaps disrupting the Treasury market, and capital rushing out. It seems just as likely that the system is self-perpetuating. Imbalances reflect long-term factors, such as a culture of precautionary saving in emerging Asia, which mostly lacks social-security safety nets. The sheer scale of the world’s financial system will ensure that global capital flows remain big and violent. Governments still have a strong incentive to run current-account surpluses and to build up huge reserves if they can.

If this crisis-prone system were to stumble along for another decade, it would stretch everyone’s nerves to breaking-point. For emerging economies, their relationship with America has

become lopsided. Conventional wisdom has it that an American recovery is good for all. It raises global interest rates but also global exports, which in net terms benefits emerging economies. An IMF study concludes that a rise of one percentage point in American bond yields, if driven by hopes of better growth, will push up bond yields in emerging economies, but the resulting rise in American imports will boost emerging markets’ industrial production by 2%.

The trouble is that American bond yields often rise for other reasons, which means the net effect may be bad for emerging economies. A dollar rally has been associated with emerging-market troubles in 1980-85, 1995-2001, 2008-09 and 2013-15. And whereas the effect of America exporting its financial conditions is as powerful as ever, its imports of goods from emerging economies have diminished in relative terms. America’s share of global imports has fallen by a third since 2000, to 12%. The trade-off from being in Uncle Sam’s orbit has become less favourable.

America may find that carrying on as before will become acutely uncomfortable for different reasons. One is the off-shore dollar banking system and the risk that America may have to bail it out. The freewheeling Eurodollar market for banking in dollars outside America sprang up in the 1960s to get round red tape in America itself. It has been growing at a furious pace ever since. Foreign banks create dollar deposits and loans at the stroke of a pen: a bank lends a dollar to a foreign firm, which deposits it in a different foreign bank, which lends it out, and so on.

The Eurodollar market was at the heart of the 2007-08 crisis. Dollar depositors and bond investors in European banks panicked and refused to carry on funding them, piling into the safe haven of Treasuries instead and causing a run. Interbank rates in London soared relative to American interest rates. The Fed was forced to provide over \$1 trillion of liquidity, by lending to foreign banks through their American subsidiaries and by extending swap lines to friendly central banks (in Europe, Mexico, Brazil, Japan South Korea and Singapore) which in turn made the dollars available to their banks. Even if these swap lines were not used in full, their mere existence calmed the panic.

Since then the offshore dollar system has become even bigger. It is now about half the size of America’s domestic banking industry, compared with 10% in the 1970s. Offshore dollar credit (bonds and loans) has risen from 28% to 54% of American GDP over the past decade and from 11% to 16% of world GDP outside America. The Eurodollar is becoming the Asian dollar. A sample of a dozen of Asia’s biggest banks (excluding Japan) have a total of \$1 trillion of dollar assets, often financed by debt, with Chinese banks featuring prominently. Singapore now hosts \$1.2 trillion of offshore dollar bank assets.

Some think that this is a cyclical boom, fuelled by low American interest rates. But it could just as easily be seen as reflecting the dollar’s dominance as a global currency: as emerging economies get bigger and more finance-intensive, their use of the

▶ dollar will increase. Assuming that the relationship between offshore dollar borrowing and non-American GDP stays on its current trend, the offshore dollar market could reach \$20 trillion-40 trillion by 2030.

Meanwhile the link between America and the offshore system has become weaker. An elite group of banks has always settled dollar payments with each other using CHIPS, a semi-official body in New York, and a mass of other banks deal through the elite. The hierarchy was shaped like a pyramid. But America slapped so many fines on foreign banks that many lenders now keep away from it, so the pyramid has changed shape. The top has got narrower, with almost all transactions funnelled through five or six global firms, including J.P. Morgan and HSBC. They deal with America on behalf of thousands of banks around the world. These big global banks, in turn, are cutting off direct dealings with some customers—Ukraine, some African countries, third-tier Chinese banks, small firms in the Middle East—because the cost of monitoring them has become uneconomic. Those customers have taken to using layers of smaller banks to act as intermediaries with the big global ones. More and more of the offshore dollar world is trying to avoid direct contact with America, making the middle and bottom of the pyramid wider.

The lesson of 2007-08 was that a run in the offshore dollar archipelago can bring down the entire financial system, including Wall Street, and that the system needs a lender of last resort.

An archipelago too far

Could the Fed save the day again? It would be a lot harder than last time. The offshore archipelago is almost twice as large as it was in 2007 and is growing fast, so any rescue would have to be on a much larger scale. The mix of countries involved is tilting away from America's allies. The banks in question are less likely to have subsidiaries in New York that can borrow directly from the Fed or are viewed as palatable by the American legal system. The consequences could be dire (for one possible scenario, see the box earlier in this article).

The system's longer-term viability may also be tested by an inadequate supply of "safe assets" in the form of Treasury bonds. In the 1960s Robert Triffin, a Belgian-born economist, worried that foreign demand for dollars would jeopardise the Bretton Woods system in which the dollar was redeemable against a limited supply of gold at a fixed price. In today's freewheeling currency system the problem is different. Already foreigners own \$6.2 trillion-worth of Treasuries, or 60% of the total available. If countries carry on building dollar reserves in line with the size of their economies, and America's debt-to-GDP ratio remains steady, Treasuries could be in short supply by 2035.

America could find sneaky ways to create safe assets, such as offering blanket guarantees of bank deposits and corporate bonds to make them as safe as government bonds. Or it could issue far more bonds that it needs and invest the surplus abroad, acting like a sovereign-wealth fund. But after the bail-outs of 2008 Congress wants to limit the scope of the Fed's safety net. Some believe the IMF could meet the demand for safe assets by creating more Special Drawing Rights (SDRs), a form of quasi-money based on a basket of major currencies. Yet if countries wanted to diversify their reserves they could easily do this directly, without a need for SDRs. They want dollars.

The global monetary system is unreformed, unstable and possibly unsustainable. What it needs is an engineer to design smart ways to tame capital flows, a policeman to stop beggar-thy-neighbour policies, a nurse to provide a safety net if things go wrong, and a judge to run the global payments system impartially. If America's political system makes it hard to fill those vacancies, can China do better? ■

China

A longer march

China shakes the world—but not in the way it hoped

TO TEST CHINA'S chops as an economic hegemon, just walk across the border from mainland China into the special territory of Hong Kong, a global financial centre and a laboratory of sorts for China's ambitions. It lives on trade with the mainland and is a hub for yuan banking. Many shops and machines accept the redback. Yet even this place, on mainland China's border and as open as an economy can get, remains a long way from adopting China's financial habits.

Hong Kong has its own laws, institutions and currency, which has been pegged to the dollar for 32 years. Shares are mainly priced and paid for in Hong Kong dollars. They often trade at different prices to those listed on the Shanghai bourse, which is isolated and badly regulated, sometimes leading to distorted share prices. Only 11% of Hong Kong's bank deposits are in yuan, compared with 30% in American dollars. Most of the capital raised on its markets is in its own currency or the greenback. A global bank, HSBC, is considering shifting its headquarters from London to Hong Kong, but only if it is supervised by the special territory's impressive independent monetary authority, not the mainland's regulators. Hong Kong's richest man, Li Ka-shing, invests six times more in regulated businesses in the West than in his motherland of mainland China.

When China devalued its currency by 3% in early August, unnerving global markets, Hong Kong's officials and bankers were as perplexed as everyone else. Even China's central bank, which implemented the policy, seemed confused. It issued a statement promising nothing less than a system that would "keep the exchange rate basically stable at an adaptive and equilibrium level, enabling the market rate to play its role, and improving the managed floating exchange-rate regime based on market demand and supply". Rather than soothe nerves, this tortured prose prompted a big question. Does the pressure resulting from China's slowdown detract from its ambition to rival America on the world economic stage?

China's economy is open in some ways and closed in others, combining to form an incoherent whole. Foreigners can build factories but not buy bonds. China's firms are the world's second-biggest cross-border investors as measured by their stock of direct investment, but its private fund managers are an irrelevance; three streets in Edinburgh host more international assets. Mainland consumers can buy BMW cars and Gucci handbags, but not shares in the firms that make them. The People's Bank of China (along with related agencies) is probably the biggest investor in the world's most transparent bond market, but is itself as opaque as the Huangpu river. State banks lend like lions to Africa but are as timid as mice in Western capital markets. When China stumbles, the price of oil tumbles, but the oil-derivatives contracts that reflect this are traded elsewhere.

Ambition v stability

The Marxist books that China's leaders once studied suggest that such contradictions must lead to change, and there is something to this. For example, huge sums now drain out of China through cracks in its great edifice of rules, ending up in Manhattan property and Swiss bonds. Allowing foreigners to buy ▶

► more Chinese shares and bonds would create a counterbalancing inflow. But China's potential to play an economic role in the world to rival America's rests mainly in the hands of its leaders, and they must weigh their vaulting ambitions against their deep fear of instability.

The ambition part of this is easy to understand. At a minimum China wants the natural privileges a vast economy might expect: a big say over global rules of finance and trade and a widely used currency. Gone are the days when its policymakers played little brother to America's. ("I understand," said Hu Jintao, China's president, in September 2006 when American officials privately requested that the yuan rise 3% by December to placate Congress. By the following May it was up 3.5%). During the financial crisis China realised that its reserves could be at risk from American devaluation or even default. By 2009 Zhou Xiaochuan, the boss of China's central bank, was calling for a new world reserve currency to replace the dollar.

It is not only China's pride that demands a bigger international role but economic logic too. Future trade deals covering new areas such as cybercrime and e-commerce could be tailored to fit China's needs, rather than China having to adopt someone else's rules, as it had to do in 2001 to qualify for WTO membership. With a bigger voice over development lending to poor countries, China could expand and protect its investments.

A more international China could escape its subordinate role in the dollar zone. Allowing the yuan to float might, in time, help the economy adjust better and bring down trade imbalances. Prising open the capital account would make it easier for foreigners to buy Chinese bonds and shares and help the yuan become a global currency. If Chinese firms can trade and borrow abroad in yuan and use fewer dollars, China will feel less inclined to hoard dollar reserves. There would be collateral benefits: China would be forced to reform its financial markets, which allocate capital sloppily.

The danger of instability is pressingly important. If growth slows down, China's reformers may face attacks from the vested interests that oppose change: state banks with guaranteed lending margins, state-owned firms that get subsidised loans, exporters that have borrowed in dollars assuming the yuan can only go up. The lesson from China's modern history is that deeper reforms do happen, though with a lag. In 1989-90 growth slowed to 4% after a botched attempt to quell inflation and the bloody events of Tiananmen Square. By 1992 Deng Xiaoping had reasserted his power through his famous "southern tour", in the course of which he pushed for market reforms and outwitted the party's conservatives.

Softly, softly

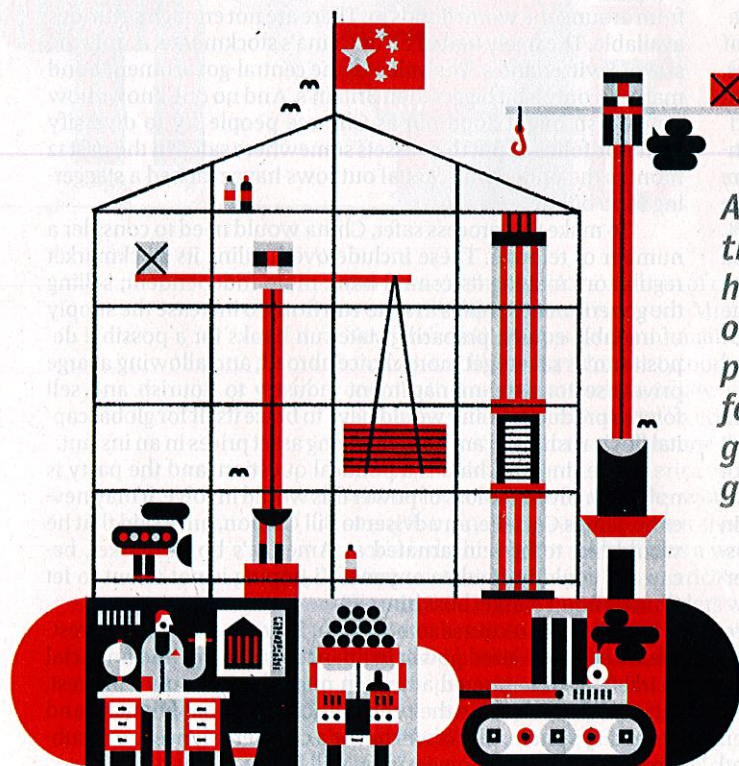
Growth has not got that low yet. Official figures suggest that it is currently 7%, and bearish private forecasters think 5% is plausible. So far the government has dithered. It has pursued membership of the SDR, the IMF's basket of elite currencies, a symbol of its international ambitions and its need for validation by American-designed institutions. But it has also made a clumsy attempt to prop up its stockmarkets. The devaluation of the yuan in August this year can be read either as a reform to make the red-back more freely tradable or an act of panic to boost exports that tilts China back towards the mercantilist policies of the past. It has been a rare misstep by Mr Zhou, the head of China's central bank, who is widely seen in America as the Chinese leader most committed to liberal reforms.

Fear of instability limits how far even the reformers are willing to go. China's repressed financial system leaks and strains in many places, but the government does not want to swap this for one that gets battered as waves of foreign capital from global markets wash in and out. The aim is to make China's capital account open, but not freely so, imposing fiddly rules on inflows and outflows to put off speculators.

China wants to be an economic superpower abroad, but on its own terms. It has built the international monetary equivalent of a ten-lane motorway with no cars on it, or a ghost city of skyscrapers. The government-built infrastructure is there, but so far the people have not come.

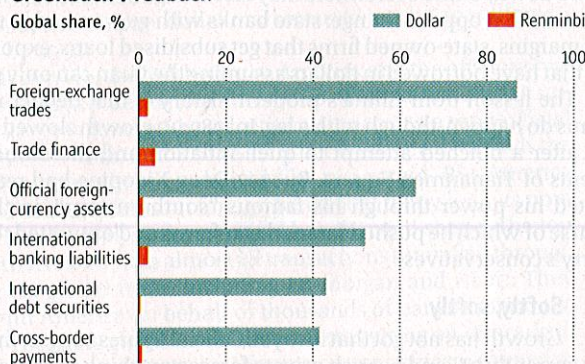
Stand and admire the yuan swap lines between China's central bank and 32 foreign ones, worth \$500 billion (on a par with the Fed's dollar lines); 17 hubs trading around the world, including Doha and Toronto, where China's state banks clear yuan deals; quotas that let \$146 billion of offshore yuan enter the country via the stockmarket (Hong Kong's stock exchange and Shanghai's also trade directly with each other to the tune of \$4 billion a day); and a China-based yuan clearing system equivalent to the New York dollar one for foreign banks due to open this year.

Behold the skilfully drafted articles of the Asian Infrastructure Investment Bank (AIIB), signed in June at the Great Hall of the People in Beijing by 50 countries, including 13 members of NATO as well as such cosy bedfellows as Iran, Israel and Saudi Arabia (the main holdouts are America, Canada, Japan and Mexico). It will have \$20 billion of paid-in capital ►►



Although the yuan has made only slight progress so far, it will gradually gain clout

Greenback v redback



Sources: Bank for International Settlements; IMF

► and a further \$80 billion of callable capital. China has 26% of the votes, giving it a veto over hiring and firing the bank's boss, big capital raisings, constitutional changes and booting out members. America may be uneasy about that, but China could point out that it is supplying 30% of the capital and that it is mimicking America's vetoes at the IMF and the World Bank. Jin Liqun, the AIIB's boss, sought advice in Washington about how to set it up.

Marvel at the China-anchored trade deals now in the works, not least a pact known as RCEP that takes in China, India and 14 other Asian countries which between them generate 30% of world GDP. It is due to be completed in 2016. China is discussing bilateral trade deals with India, the Gulf countries, including Saudi Arabia, and the ASEAN club of South-East Asian countries. President Xi Jinping's "One Belt, One Road" initiative envisages Chinese investment and transport links stretching as far as western Europe.

None of this government-directed infrastructure and diplomacy has yet had much impact on the ground. The surest measure of this is the still-puny stature of the yuan. As a means of payment, it appears at first sight to be making rapid progress. About a quarter of China's trade and foreign direct investment flows are now said to be in yuan.

But these figures are misleading, since they include mainland trade with Hong Kong, where about half of all payments are in yuan. If that is left out of account, the share of China's trade with the world conducted in yuan comes down to below 10%. The proportion of yuan payments over the SWIFT system used by global banks is only 1%. China's big trade partners barely use the yuan in their bilateral trade with the Middle Kingdom. The figure for Australia is 0.7% of bilateral payments with China. Of South Korea's exports to China, 94% are paid for in dollars and 2.9% in yuan.

As a reserve asset the yuan is peripheral. Other Asian central banks complain that it is hard to buy yuan government bonds; China's putative membership of the SDR basket does not solve this problem. As a store of value for the private sector it has yet to step up to the big league. Of international bonds issued in 2014, just 1.4% were in yuan. McDonald's, among others, has issued yuan bonds, but 96% of its debts are in dollars, euros, sterling or yen.

Some \$400 billion-worth of yuan deposits sit offshore, mainly in Asia. But even in Hong Kong and Singapore, Asia's main financial centres, the value of offshore dollar deposits is four times larger than that of yuan ones. This ratio has changed only slightly over the past two years. Redback deposits are often speculative. Offshore banks that raise them are unable to lend

them all out again, so they have to park the cash in mainland banks. Bankers in Hong Kong expect yuan deposits to decline as people worry about further Chinese devaluations.

Although the yuan has made only slight progress so far, it will gradually gain clout. An even bigger shove from the state could help. Foreign firms could be offered discounts or win brownie points if they buy from China using the redback. Samsung, a South Korean colossus, plans to settle flows between its Chinese subsidiaries and its headquarters in yuan.

China is the world's biggest commodity buyer, but oil is traded in dollars. Perhaps Saudi Arabia, which now sells as much oil to China as it does to America, could be persuaded to accept some yuan, despite its reliance on American fighter planes and missiles. In 2010, at the height of the commodities boom, global mining firms forced China to shift from long-term contracts to market-based pricing. Now that the miners are on their knees, China can bully them in turn. State-backed banks, too, could be prodded to do more. China's biggest bank, ICBC, has substantial operations in South-East Asia, only some of which involve yuan.

Eventually the offshore yuan world could become much bigger (although not as large as the dollar archipelago). The yuan has a sizeable lender of last resort, in the form of the swap lines the People's Bank of China extends to foreign central banks. Offshore deposits are governed by laws made in Hong Kong and elsewhere, so investors do not have to worry about China's legal system. China might well develop ways to protect its payments system from America's extraterritorial laws. It will be possible—if not easy—to use a yuan deposit in London to do business in China. The paperwork needed to use it to buy a security, asset, good or service on the mainland will be streamlined over time.

An open society

So why not go the whole way and open up China instead of walling it off from the world? It comes back to the question of stability. A fully open capital account could cause a shock as money from around the world floods in. There are not enough securities available. The freely traded bit of China's stockmarket is only the size of Switzerland's. The value of the central-government bond market is only a bit bigger than Britain's. And no one knows how much cash might flood out as Chinese people try to diversify their portfolios or put their assets somewhere safer. In the past 12 months the underlying capital outflows have reached a staggering \$500 billion.

To make this process safer, China would need to consider a number of reforms. These include overhauling its stockmarket regulation; making its central bank more independent; selling the government's shares in state-run firms to increase the supply of tradable equity; preparing state-run banks for a possible deposit run as savers get more choice abroad; and allowing a large private-sector asset-management industry to flourish and sell foreign products. China would have to brace itself for global capital flows rushing in and out, changing asset prices in an instant.

Opening up China is a political question, and the party is not ready. Given the loss of power this would involve, it may never be. James Carville, an adviser to Bill Clinton, once said that he would like to be reincarnated as America's bond market, because it could intimidate anyone. Xi Jinping is not about to let China's bond market boss him.

China is on course to be a giant in trade and direct investment and a mid-sized power in finance, currencies and financial markets. That tempered ambition might be in its own interest, but it does not resolve the problems of the global financial and monetary system. China will not be a counterbalance to or a substitute for America soon. So what will fill the vacuum? ■