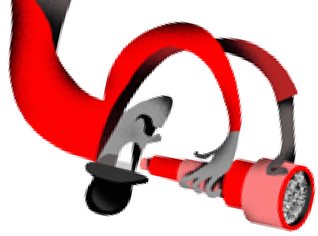


CONTENTS

F R O M T H E C E O

I am writing this in the midst of one of the most bitterly fought presidential elections in decades. But at the Milken Institute, even as we follow electoral politics with keen interest, the results of this year's contest won't change how we conduct our work. While we maintain a significant presence in Washington DC, we don't fall into the pattern of many public policy organizations there whose fortunes revolve around who's in and who's out. Our practice since the Institute was founded in 1991 has been to tackle the nation's problems in the most effective way we know – and that means working with those who want to accomplish important things, no matter their political affiliation.

Some recent examples of the Institute's results-oriented non-partisanship:

• Our FasterCures center has unveiled "Rx for Innovation," a program to inform the next administration's views on the challenges facing the biomedical system. The center is reaching out to patient groups, researchers, companies, philanthropists and policymakers for their input, with the goal of crafting practical recommendations for accelerating access to new and better treatments.

• Housing finance is one area in urgent need of policy change, as revealed by the financial crisis. Experts at the Institute's Center for Financial Markets are working with legislators and their staff on both sides of the aisle to develop guidance for housing finance reform that could be supported by both parties.

• An equally urgent national need is expanded access to capital for business owners and entrepreneurs in minority communities. Our California Center and our Center for Financial Markets are partnering with the Small Business Administration on a pilot program bringing together elected officials, business owners and lenders in two cities (Baltimore and Los Angeles) to chart how best to make credit and equity investment available to African-American and Latino small businesses.

• This summer, the Institute partnered with the Bipartisan Policy Center to host forums at both political conventions. Among the issues addressed: medical innovation, economic competitiveness and tax policy.

The Institute's non-partisanship is part of our DNA. So, while we'll be watching the inauguration ceremonies with interest come January 20, we will be ready to work with whoever's in charge at 1600 Pennsylvania Avenue.

Michael Klowden, CEO

So, here's a problem: what is your humble editor to do if there simply isn't room to fit everything worth reading between the covers of a 96-page quarterly issue? And here's an answer: publish the extra content on our website, MilkenReview.org.

This issue includes an excerpt from *The Euro and the Battle for Ideas*, a new book by Markus Brunnermeier, Harold James and Jean-Pierre Landau that explains the dysfunction of the Eurozone in terms of the diverging economic cultures of the member-states. Check that – this issue includes *part* of the excerpt. The rest can be found on our website, with a handy link that takes readers of the magazine to the place they left off.

Meanwhile, take a gander at what's waiting for you in this issue:

Jason Furman, the chair of Pres. Obama's Council of Economic Advisers, offers a rare glimpse into the difficulties of analyzing macroeconomic data and using it to predict growth, unemployment and inflation. "While we no longer must cope with the information void that policymakers faced in the 1930s, the mountain of data available creates its own problems," he writes. "Chief among them is that we can sometimes ask too much of the data while doing too little to put it in context."

Robert Litan of the Council on Foreign Relations offers two ideas for reducing job insecurity in an era of rapid globalization. One is universal wage insurance that would replace a portion of income lost when a displaced worker takes a lower-paying job. The other: loans for job retraining in which repayment is linked to gains in income.

"It is far too easy to slip off the economic ladder and never fully recover," Litan notes. "To manage the consequences of the sorts of economic displacement that seem inevitable, we need smarter government – not less of it."

Robert Looney, an economist at the Naval Postgraduate School in California, analyzes Brazil's latest adventure in flying too close to the sun. "Brazil is a land of immense economic promise and immense disappointment," he writes. "It is also becoming an icon of the reality that shortcuts to development, especially development subject to the middle-income trap, are deeply problematic."

Ron Haskins, the co-director of the Brookings Center on Children and Families, rebuts the conventional wisdom that partisan politics has blocked all cooperation between Congress and the Obama White House, and offers a menu for possible policy collaboration on social issues after the election. "It would be Pollyannaish to pretend that business as usual has not been unusual in Washington, or that the partisan divide hasn't taken a major toll on the quality of government," he acknowledges. But he focuses on a number of issues – with early childhood education highest on the list – where common ground could still be found.

EDITOR'S NOTE

Charles Castaldi, a former NPR correspondent, revisits Bolivia for an update on how the country is coping with its deep ethnic divisions – not to mention the rule of Evo Morales, the populist president who thumbs his nose at the former colonial powers. "The initial take in Washington was that Evo was cut from the same cloth as Hugo Chávez in Venezuela and was sure to drive the economy (further) into ruin," Castaldi writes. "In fact, this government's track record is the envy of its neighbors."

Ed DeMarco, the former acting director of the Federal Housing Finance Agency, concedes that inertia and interest group politics make it very difficult to redirect Washington's focus on home ownership. But he argues that the vast public resources committed to subsidizing private housing could be spent on building equity rather than facilitating ever-riskier borrowing.

"It's pretty clear that we've been sidetracked into policies that make the mortgage market bigger and more volatile," he writes. "It's equally clear that we've strayed far from the broader public interest – and that the route back lies in building equity, not debt."

Ed Dolan, creator of an eponymous blog on economic literacy, takes an unconverntional tack in asking what could be done to help American workers displaced by international trade. Rather than (or in addition to) helping them out with cash or retraining, he focuses on removing impediments to going where new jobs are plentiful.

Among the most significant: occupational licensing restrictions used to protect incumbents from competition, subsidies designed to steer Americans toward owner-occupied housing that is immensely costly to turn over, and forced disclosure of criminal records that make it very difficult to switch jobs.

Happy perusing. —*Peter Passell*

You've probably figured it out already: the caricature on the spine of the combined 2016 issues of the *Review* is **Robert Solow**, arguably the most influential living economist and certainly one of the nicest people you'll ever meet.

A child of the Depression, he and his sisters were the first in the family to attend college. But he picked a good one (Harvard) and the rest is history. Well, not quite. Solow made a detour between 1942 and 1945, fighting the Wehrmacht in the hellish campaign to capture Italy before returning to Cambridge for a BA and PhD. Then on to a job teaching economics at MIT, where he was key (along with Paul Samuelson and Franco Modigliani) to transforming the department into the best in the nation.

Yes, but what has he done? It's impossible to overestimate the importance of his model of economic growth, which focused much of the profession on the role of technological change in explaining how advanced economies prosper. Certainly, the profession hasn't; he's won both a John Bates Clark Medal (awarded every two years to an economist under 40) and, of course, the Nobel Prize in 1987.

Less tangibly (but probably as important), he was a leading force in demanding mathematical and statistical rigor from economists in training. Yet he never fell into the trap of treating economics as an elegant abstraction. Indeed, he's used his august position in the profession to promote smart, evidence-based policy analysis throughout his career.

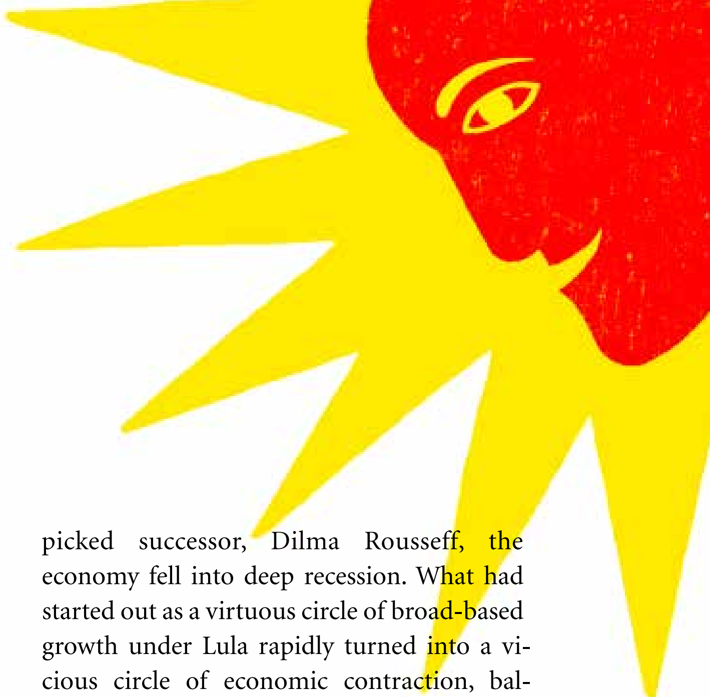
DAVID SMITH

Brazil's Hard Road to Affluence

BY ROBERT LOONEY

ILLUSTRATIONS BY FLAVIO MORAIS

For much of the past century, Brazil has been a classic economic underachiever, the perpetual country of tomorrow. Then, early in the new millennium, the country's mold-breaking populist president Luiz Inácio Lula da Silva unveiled his version of "third way" development, dubbed the Brasilia Consensus, that mixed regulated markets and macroeconomic prudence with carefully targeted welfare programs. His ambitious approach promised results sorely lacking not just in Brazil, but throughout Latin America: buoyant growth, increased equity, reduced poverty – and all of it without yet another round of accelerating inflation.



Too good to be true? In a word: yes. But there's still much to be learned from this latest ride on Brazil's development roller coaster. In particular, that true institutional change comes slowly. And without change that more clearly limits the role of government and focuses on getting economic incentives right, the economic pie won't grow sufficiently to sustain a just and prosperous society.

Looking back, it's easy to see why longtime Brazil watchers allowed themselves to hope this time would be different. During his two-term administration (2003-10), Lula scored some stunning successes. GDP growth averaged 4.1 percent – tepid, perhaps, by East Asian metrics, but heavy duty by Latin American standards. Some eight million jobs were created. More impressively, Lula managed the process of growth without exacerbating the country's notoriously awful inequality. Quite the contrary: the income of the poorest half of households grew at nearly twice the rate of the top 10 percent; all told, 17 million Brazilians climbed out of poverty.

Meanwhile, inflation was held to 6 to 7 percent, down from around 15 percent in the 1980s and '90s. Even in the midst of the 2008-9 global financial crisis, Brazil continued to defy claims that inclusive growth was impossible in a Latin American context.

Indeed, by 2010, Brazil appeared to be on the cusp of becoming a major contender on the emerging-market fast track. Brazilian-style growth-with-a-heart was hailed as a viable democratic alternative to the Chinese authoritarian model or the privatize-or-perish free market approach forced on developing countries by international lenders. Believers saw Brazil's third way as a model for other Latin American countries, and maybe eventually for sub-Saharan Africa.

Then, as suddenly as the good times arrived, they vanished. Under Lula's handpicked successor, Dilma Rousseff, the economy fell into deep recession. What had started out as a virtuous circle of broad-based growth under Lula rapidly turned into a vicious circle of economic contraction, ballooning debt, soaring interest rates and a sharply falling exchange rate under Rousseff. In 2013, mass protests swept Brazil for the first time in decades. In May of this year, Rousseff was suspended by the legislature: In August, she was removed from office.

With 20-20 hindsight, it's easy to explain what happened. All it took was a poisonous mix of rapidly falling commodity prices as the global economy stumbled (Brazil exports a lot of oil, iron ore and soybeans) and serious mismanagement of fiscal policy as government revenues shrank. The country's pervasive corruption became harder to ignore as the economic pie shrank. But the speed and depth of the downturn left a lot of observers wondering whether Brazil's third way wasn't to blame. Which leads to a big question: can Brazil's no-family-left-behind growth model be salvaged – not just in Brazil, but throughout Latin America?

LULA AND THE BRASILIA CONSENSUS

As in many Latin American countries, Brazil's approach to economic development before Lula was largely driven by the conviction that industrialization was Priority One. That required tariff and quota protection against cheaper, better-made imported manufactures.

Although this approach worked (well, sort of worked) in the 1960s and '70s, the chickens came home to roost in the 1980s. Low productivity and dysfunctional markets, compounded by macroeconomic policies that left the economy exceptionally vulnerable to runaway inflation, constrained development.

Despite Brazil's vast natural resources and rapidly growing labor force, GDP growth averaged only 3 percent in the 1980s and 1.9 percent in the 1990s. From 1960 to 2000, labor productivity growth averaged 1.7 percent, compared with 6.6 percent in South Korea and 7.8 percent in China. The country's teeming, violence-ridden favelas became symbols of the Brazilian elite's indifference to extreme poverty. Income inequality was the highest in the Americas and gave a lot of failed African states a run for their greed.

The year 2002 saw the election of Workers' Party candidate Lula da Silva, a tough, leftist union leader who had fought the military governments of the 1980s. He surprised just about everybody by maintaining the prudent macro policies of his center-right predecessor, Fernando Henrique Cardoso, who had conquered quadruple-digit inflation. And, as discussed, Lula expanded programs targeted at relieving poverty with minimal impact on market efficiency.

Specifically, Lula expanded the "conditional cash transfer" social programs first introduced by the Cardoso administration. Low-income families received monthly cash stipends in return for commitments to send their children to school and to remain up to date on vaccinations. In 2006, roughly one in four Brazilian households were covered, virtually eliminating extreme poverty at modest

ROBERT LOONEY teaches economics at the Naval Postgraduate School in California.

cost – an annual outlay of just 0.5 percent of GDP. Instead of pursuing a classic outward-oriented development policy, the export-led growth approach that has worked so well in East Asia, Lula made lemonade from lemons. He accepted Brazil's relatively low savings rate as a given, harnessing increased personal spending to fuel the growth of jobs and wages.

Lula's Brasilia Consensus also deviated radically from a conventional free-market approach by intervening in key markets to give domestic firms a leg up on foreign competitors. This was uncomfortably similar to Brazil's failed import-substitution strategy of the 1960s and '70s; the government imposed high tariffs on many imported goods to provide a protected market for Brazilian firms and to encourage foreign manufacturers to set up production facilities in Brazil. To promote industrialization, the government subsidized credit through the state-run development bank. For foreign direct investors, state involvement was somewhat heavier-handed – for example, imposing local-content rules and local sourcing requirements on foreign firms in the mining and oil/gas sectors.

The four main elements of the third-way Brasilia Consensus proved roughly complementary. Macroeconomic stability helped preserve the purchasing power of household income, which was supplemented by the country's social programs. Increased family income spurred domestic demand to drive the growth of jobs and wages. At the same time, industrial policies favoring domestic production helped maintain employment and create incentives for foreign direct investment.

Interestingly, research suggests that Brazil's cash-transfer programs accounted for only one-fifth of the reduction in income inequality. Economic growth and the associated expansion in employment, plus minimum wage increases and subsidized credit to small businesses through the public banking system, accounted for the rest.

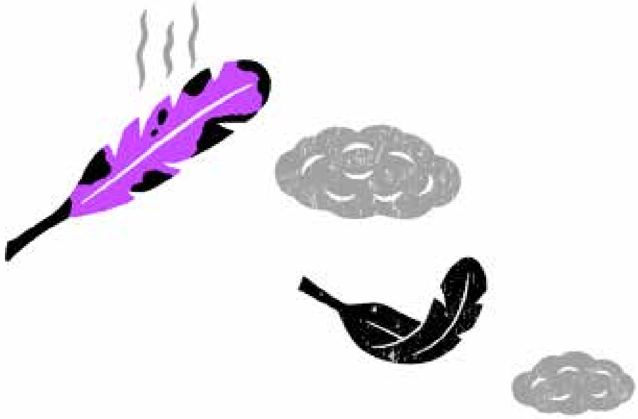
From a political perspective, the Consensus worked (or at least endured) because Lula managed to redistribute income without directly confronting Brazil's business elite. In fact, he sought a convergence of interests between labor and business though the expansion of private consumption. Rates of investment were never high by emerging-market standards. But they were high enough to sustain a reasonable rate of growth. By the same token, government spending as a portion of GDP was high for an emerging-market economy. But steady growth made it possible to keep budget deficits low and inflation in check.

VIRTUOUS TO VICIOUS CIRCLES

I know what you're thinking: did Lula do it all by magic? Protectionism and promotion of growth through the expansion of consumption are widely viewed by mainstream economists as a problematic route to prosperity – at best, a temporary fix for an economy that is operating below capacity and only needs the expansion of demand (any sort of demand) to make everybody better off.

Actually, Lula benefited more from luck than magic – the global commodity boom carried Brazil a long way. Lula's successor could not sustain prosperity based solely on rising demand. What started out as a virtuous circle of mutually complementary policies that expanded economic activity, reduced poverty, blurred ideological divisions and made it possible to run a stable macro policy without encountering bitter political resistance turned into a vicious circle of contraction and instability under Lula's successor.

After Rousseff took office in 2011, Brazil's growth slowed sharply; then, in 2014, the



What started out as a virtuous circle of mutually complementary policies that expanded economic activity, reduced poverty, blurred ideological divisions and made it possible to run a stable macro policy without encountering bitter political resistance turned into a vicious circle of contraction and instability under Luca's successor.

economy went into recession and shrank 3.9 percent. The IMF predicts further shrinkage (more than 3 percent) this year. Unemployment, which decreased from 11.7 percent to 6.8 percent under Lula, drifted back up to 9.2 percent this year; squeezed between falling tax revenues and rising welfare obligations, the budget deficit has soared.

The current slowdown is not unique to Brazil. As a major commodity exporter, Brazil, like fellow emerging-market stars, Russia and South Africa, faces lower prices and volumes. However, many other commodity exporters were better prepared to weather the downturn. In fact, when Chile experienced a major currency depreciation in the wake of falling commodity prices, its government used the weakness to improve the country's competitiveness in other areas. As a result, Chile has been able to maintain 2 percent-plus growth.

But Rousseff's version of Lula's third way only dug Brazil into a deeper hole. Instead of using the emergency to introduce measures that would increase market efficiency, she doubled down on state intervention, papering over low productivity with credit subsidies. Incipient inflation was tamped down with price controls in key sectors. And with no growth to show for the effort in private markets, her government resorted to infrastructure spending: government outlays as a percentage of GDP under Rousseff have averaged 37 percent, compared with 33 percent under Lula. Yet Brazil has little to show for the expenditure, in part because a lot of the money has been dissipated by corruption.

The current macro statistics paint a grim picture. Export revenues are down sharply – the current account deficit was 4.3 percent of GDP in 2015, leading to a 30 percent-plus depreciation of Brazil's currency, the real. Inflation is approaching double digits and wages aren't keeping up, adding to popular frustration.

Meanwhile, the budget deficit, which had been in check for so long, climbed to 10.5 percent in 2015. But deep into a recession, Brazil is hardly in a position to cut social welfare payments that are more important than ever to the nation's poor and near-poor.

Rousseff disguised the deteriorating fiscal situation during her 2014 re-election campaign; later, that fiscal sleight of hand was used as the legal wedge to drive her from office.

The country's lack of progress in basic governance and economic reforms is, of course, only reinforcing the vicious cycle. Brazil's percentile ranking for government effectiveness on the World Bank's Worldwide Governance Indicators fell from an average of 55 under the right-center regime of Cardoso to 53 under Lula to 50 under Rousseff. The country's percentile ranking on corruption eroded from an average of 59 under Cardoso, to 56 under Lula and 55 under Rousseff. The percentile ranking for regulatory quality also declined, from 64 during the Cardoso administration, to 56 under Lula and 54 under Rousseff. By comparison, Chile has consistently ranked in the 85th percentile for government effectiveness and control of corruption and above the 90th percentile for regulatory quality since the World Bank first introduced the governance indices in 1996.

Countries that don't get better at governance — credible corruption fighting, rule of law, regulation with a lighter touch — as they progress through stages of development can't expect to make the leap to the prosperity possible in sophisticated, service-driven economies.

Progress in governance is critical if Brazil is not only to make the economy more resilient to global shocks, but also to lay the foundation for the next stage of development. Brazil is in the latter stages of what economists call a "middle-income trap" in which growth potential slows sharply after it runs out of easy sources of gains like movement from low-productivity agriculture to high-productivity manufacturing and services.

To break out, it is critical to begin the transition from growth based on the accumulation of capital and labor and the exploitation of natural resources to a knowledge-based economy in which innovation makes capital and labor more productive. Countries that don't get better at governance – credible corruption fighting, rule of law, regulation with a lighter touch – as they progress through stages of development can't expect to make the leap to the prosperity possible in sophisticated, service-driven economies.

Brazil has also regressed on the Heritage-Wall Street Journal Index of Economic Freedom. While there have been limited attempts at market-oriented reforms, state controls remain especially burdensome in key areas ranging from electricity to financial services. Brazil currently ranks 122nd of 178 countries, well below decidedly un-free economies like Nicaragua, Saudi Arabia and Egypt. As the index's subcomponents show, large drops under Lula in Brazil's business and fiscal freedom have been sustained under Rousseff. Meanwhile, trade freedom, which increased under Lula, leveled off under Rousseff.

Other statistical ranking systems cast Brazil in the same weak light. When Lula left office, Brazil ranked 48th out of 144 countries on the World Economic Forum's Global Competitiveness Index. In 2015-16, the country ranked 75th out of 140 countries. The rankings are especially low in institutional quality (121), macroeconomic environment (117), health and primary education (103), goods market efficiency (128), labor market efficiency (122) and innovation (84) – hardly the profile of an economy eager for comparisons with Western Europe, North America or the high-income economies of East Asia.

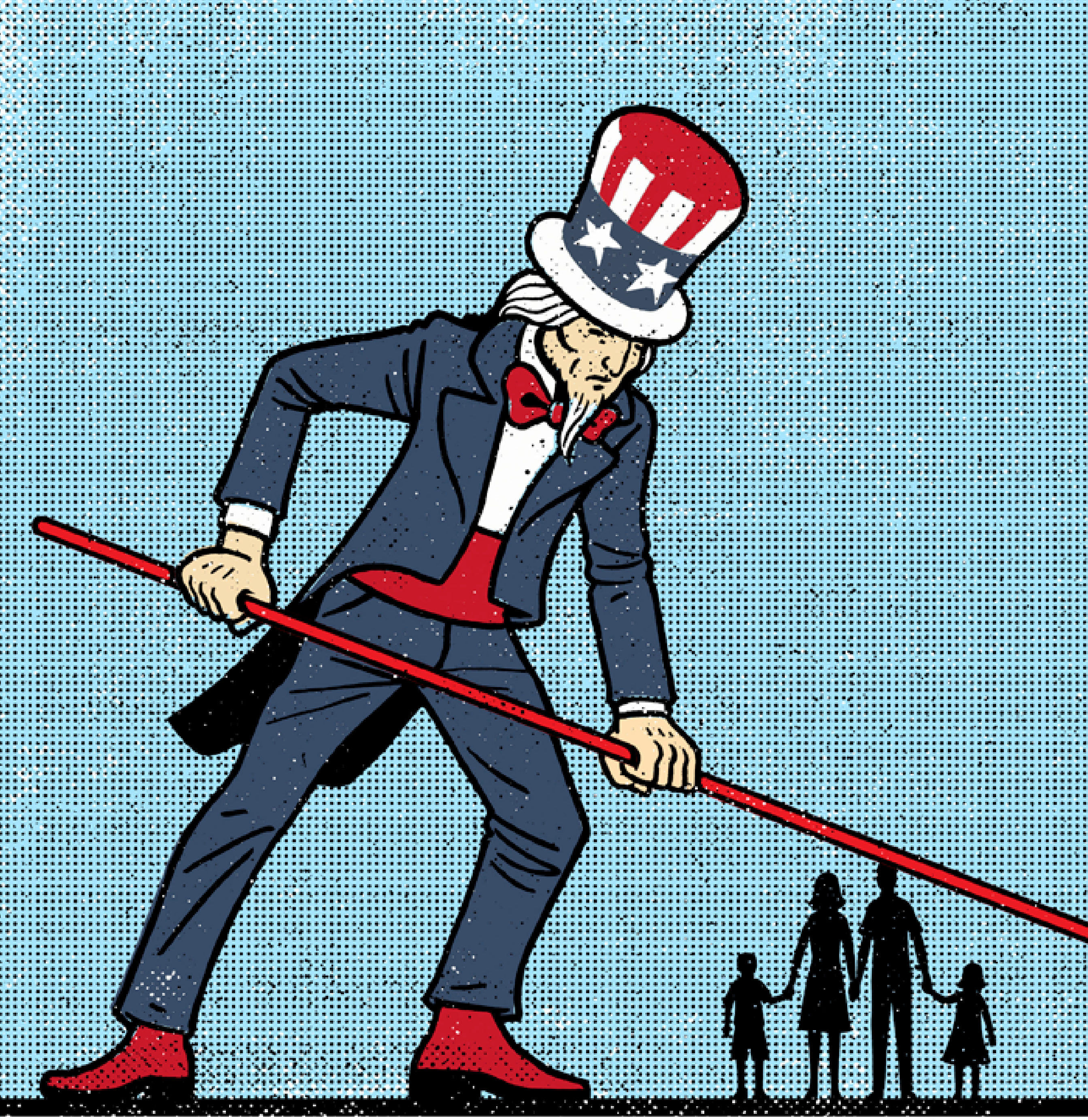
Indeed, looking back, the early success of Brazil's third way seems mostly the product of a serendipitous mix of the global commodity boom, the demand-driven closing of a chronic gap between actual and potential GDP, and the easy pickings to be had from adopting straightforward income support for the poor. When more was required to sustain growth, Brazil came up short.

HARD LESSONS

The appeal of third-way approaches to development is obvious. Pretty much every great development success has taken a high human toll. Lula promised development without tears, and he pulled it off – for a while. But he never tackled the gnawing problem of corruption, and he relied on subsidies to paper over low productivity. Before the current economic crisis, Brazilians tolerated corruption because, as the popular saying goes, "Rouba, mas faz" – he robs, but he gets things done. With nothing much getting done in recent years, tolerance is at an end.

That said, Lula's efforts to attack poverty by means other than trickle-down were admirable. And there is no good reason that more conventional (and more likely to succeed) approaches to development couldn't be complemented with carefully targeted efforts to relieve the misery. Indeed, the conditional cash transfer system pioneered in Brazil has been widely imitated – and has generally proved effective – in Latin America.

Brazil is a land of immense economic promise and immense disappointment. It is also becoming an icon of the reality that shortcuts to development are deeply problematic. The big question is when (and whether) Brazil will be able to lay the cultural and institutional foundation to build a stable, prosperous society.



Free Trade Under Fire

BY ED DOLAN

ILLUSTRATIONS BY DAN PAGE

Free trade has taken some major hits this election season. In the Republican primaries, Donald Trump's forthright protectionism helped him defeat the few rivals who stuck by the traditional Republican free trade line. Those who retreated to the intentionally ill-defined middle ground of "free but fair" did no better. On the Democratic side, Bernie Sanders' attacks on Nafta and the pending Trans-Pacific Partnership raised his popularity with rank-and-file voters, helped to propel him from fringe candidate to a real contender for the nomination and effectively killed the TPP's prospects for ratification in the current Congress.

Trade promises to be even more central in the general election campaign. Taking a leaf from protectionists who preached economic isolation during the Great Depression, Trump is doubling down on his promises to reverse globalization. Speaking in June in western Pennsylvania, he said:

> Our politicians have aggressively pursued a policy of globalization – moving our jobs, our wealth and our factories to Mexico and overseas. … Globalization has made the financial elite who donate to politicians very wealthy. But it has left millions of our workers with nothing but poverty and heartache. … It doesn't have to be this way. We can turn it all around – and we can turn it around fast.

Under pressure from right and left, Hillary Clinton has rapidly backed away from support for trade agreements that she formerly praised as first lady and secretary of state. Interestingly, the "issues" section of her official campaign website, which covers nearly every other topic, does not include a specific heading on globalization or trade. The "manufacturing" section, however, provides the following goal statement, which is hardly a ringing endorsement of free trade:

> Level the global playing field for American workers and manufacturers by aggressively combating trade violations. Establish and empower a new chief trade prosecutor reporting directly to the president, triple the number of trade enforcement officers, stand up to Chinese abuses and crack down on currency manipulation that hurts American workers.

Mainstream economists have supported free trade since David Ricardo outlined the theory of comparative advantage in the early 19th century. However, dissent has increasingly begun to appear. Robert Reich, a professor at the University of California, Berkeley, who was secretary of labor in the Bill Clinton administration, wrote last year:

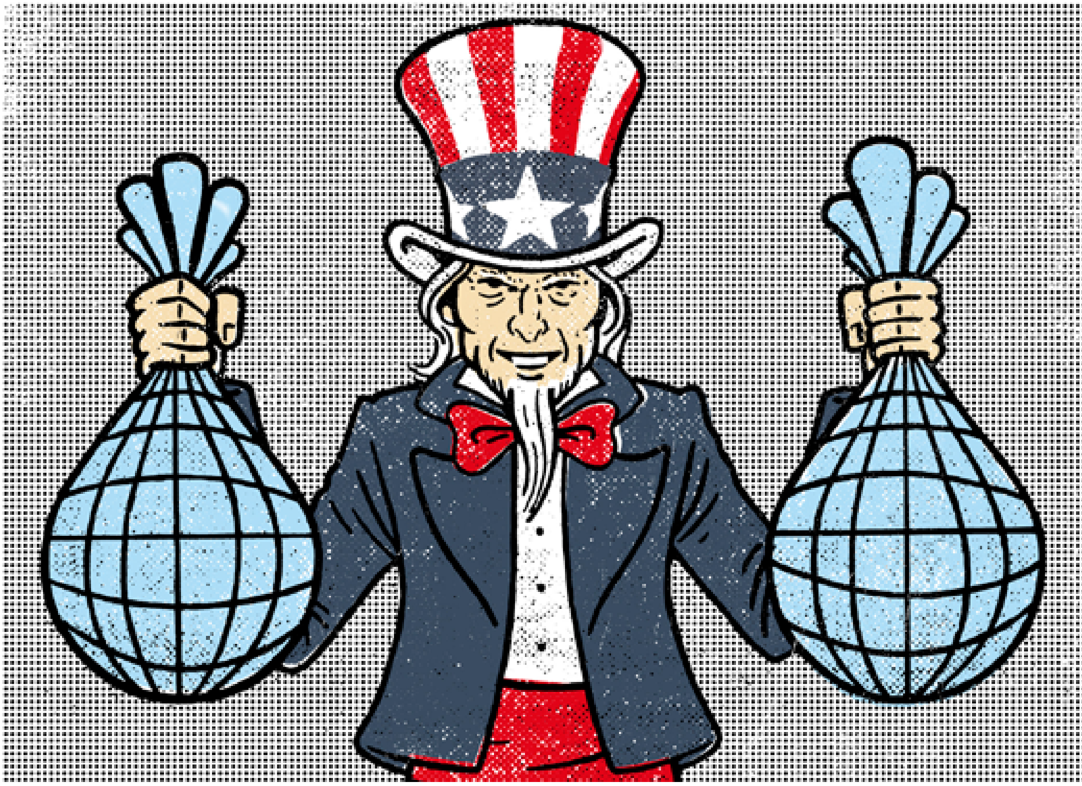
> I used to believe in trade agreements. That was before the wages of most Americans stagnated and a relative few at the top captured just about all the economic gains.

Paul Krugman, the Nobel Prize-winning economist, who, as a *New York Times* columnist, is arguably the most influential left-center economist in the country, acknowledges the many benefits of trade. But he notes:

> [N]ot all free-trade advocates are paragons of intellectual honesty. In fact, the elite case for ever-freer trade, the one that the public hears, is largely a scam. … What you hear, all too often, are claims that trade is an engine of job creation, that trade agreements will have big payoffs in terms of economic growth and that they are good for everyone. … Yet what the models of international trade used by real experts say is that, in general, agreements that lead to more trade neither create nor destroy jobs; that they usually make countries more efficient and richer, but that the numbers aren't huge; and that they can easily produce losers as well as winners.

So who's right here, the protectionists or the free traders? Free traders are mostly right to say that trade promotes economic growth and efficiency, but wrong to think that efficiency is everything. Anti-traders are right to say that economists should pay more attention to the reality that trade produces losers as well as winners, but wrong to think that protectionism is the cure for what ails. Both sides need to be open to ideas for managing trade policy to minimize the social costs.

ED DOLAN is the creator of Ed Dolan's Econ Blog and is the author of the textbook *Introduction to Economics*, now in its sixth edition.



Deficits are also a reflection of the fact that, more often than not, foreigners seek to store their wealth in dollar-denominated U.S. securities, both government and private, because they are seen as the safest in the world.

TRADE FALLACIES

Opponents of free trade have achieved considerable political success, but not because they make a good case. Many of the arguments published on blogs or heard in stump speeches reveal a regrettable ignorance of basic economics. Some examples:

Trade deficits imply that we are losers collectively. One of the oldest arguments against free trade is the claim that countries running trade deficits are like spendthrifts eating the seed corn. In the case of the United States, there are a host of reasons that deficits don't imply economic weakness. Start with the most fundamental, though least intuitive. If more is invested in the U.S. economy than American households and companies are willing to set aside in savings, the difference must be reflected, dollar for dollar, in the trade deficit as foreigners make up the difference.

Actually, pretty much all the reasons for rejecting the equivalence of trade deficits with economic mismanagement are unintuitive. Deficits are also a reflection of the fact that, more often than not, foreigners seek to store their wealth in dollar-denominated U.S. securities, both government and private, because they are seen as the safest in the world. And they are partly due to the status of the dollar as the world's reserve currency; as a matter of convenience and safety, governments and global businesses typically hold their cash reserves in dollars, creating a chronic net demand for dollars that must be offset by U.S. current account deficits. Protectionist measures would do little to change any of this, except, perhaps, to undermine the reputation of America as a country willing to compete aggressively in global markets and worthy of ongoing investment by foreigners.

Americans are victims of currency manipulation. Another favorite tactic of protectionists is to emphasize currency manipulation – that is, foreign government intervention in currency markets to drive down the exchange value of their own currencies – as a source of trade imbalances. Both Trump and Clinton have indulged in this argument, pointing to China as the prime offender.

In fact, the Chinese have manipulated the value of the renminbi in the past, with the goal of making Chinese exports more competitive. But the charge is years out of date. Since 2014, China's foreign currency reserves have been falling, reflecting the central bank's efforts to strengthen – not weaken – the exchange rate. The strong currency policy partly reflects the government's pride in the renminbi's recent inclusion in the basket of currencies the IMF uses to calculate the relative value of its own proto-currency, called special drawing rights. It also reflects Beijing's current concern that a declining currency could touch off a wave of capital flight from China that would undermine growth.

Trading with poor countries always puts Americans at a disadvantage. During the primary campaign, Trump and Sanders both directed special opprobrium at trade with poor countries, where workers earn a tiny fraction of what their American counterparts take home. The implication is that trade with other high-wage countries is fair because it is a contest among equals, while trade with poor countries is unfair because American companies can compete only if they engage in a race to the bottom on wages, benefits and working conditions.

But that view reflects misunderstanding of the factors that determine a country's average wages and their producers' international competitiveness. The high wages of U.S. workers reflect the effects on labor productivity of a host of factors, including the efficiency of capital markets, the quality of technical education and a judicial system that enforces contracts.

Those institutions help American workers to remain competitive despite high wages – or rather, they make high wages competitive because they enhance productivity. But it's worth remembering that they do not affect all sectors equally. They make a comparatively large difference in sectors like pharmaceuticals, financial services and large-scale agriculture, allowing them to thrive as exporters. But they matter less in manufacturing – especially manufacturing that demands a lot of less-skilled labor. So, thanks to the flip side of comparative advantage, the United States imports most of its clothing, furniture, consumer electronics and the like.

Measures to make the United States self-sufficient in low- and middle-tech manufacturing would mean shifting labor and capital from sectors where the country's hard-won advantages make them more productive to sectors where they are less productive. Yes, that might create jobs – but only if it also depressed wages.

THE REAL CASE AGAINST TRADE

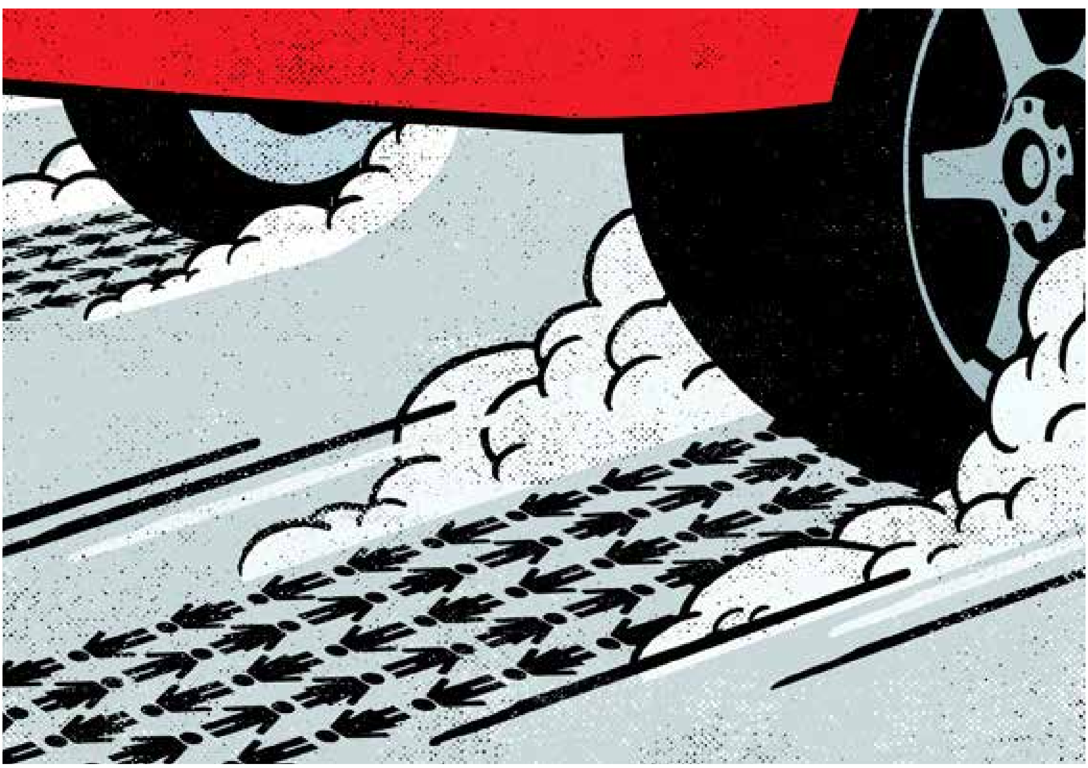
If the protectionists' arguments are wrong on their face, why are they winning the political debate? Because there is a real downside to trade, one that free traders have long known about but often glossed over.

That downside lies in the fact that the benefits of trade in terms of higher wages, higher profits and lower prices are hardly shared equally. Suppose that I decide to switch from American-made tires for my car to Chinese-made tires. There are lots of winners here: I pay less, the importer makes a profit and the Chinese tire worker who makes the tires earns more.

However, the American plant that used to make my tires is now out of business. Joe the tire worker has lost his job. So has the guy at the food truck where Joe bought his lunch, maybe the teachers at the schools whose budget depended on taxes paid by the factory, and so on.

Economists have traditionally excused these losses by arguing that the overall gains from trade were large, while the losses were smaller, transitory and spread widely among the same people who benefit from cheaper tires. The tire example is not hypothetical. A study from the Peterson Institute for International Economics in Washington estimated that the gains to consumers from Chinese tire imports in the form of lower prices amounted to more than $800,000 for each job lost in the domestic tire industry. Moreover, when consumers spent the money they saved on other goods and services, they would create new jobs for the former tire workers. The study dismissed policies devised to protect the U.S. market from cheap tires as a highly inefficient way of preventing displacement or offsetting the consequences.

But what if the adjustment to trade shocks is not smooth? What if Joe, after losing his job at age 55, never finds steady work again?



What if he has to get by on odd jobs, food stamps and Social Security? Or must uproot his family to move 1,000 miles to Texas to take a job at $12 an hour rather than the $30 he earned making tires? What if the consumers who saved on tires never spent a cent of the savings in Joe's old hometown?

If such displacement is permanent, or at least long-lasting, the net gains from trade in tires must be smaller, and the losses more concentrated on the directly affected industry and region, rather than spread widely via labor and product markets.

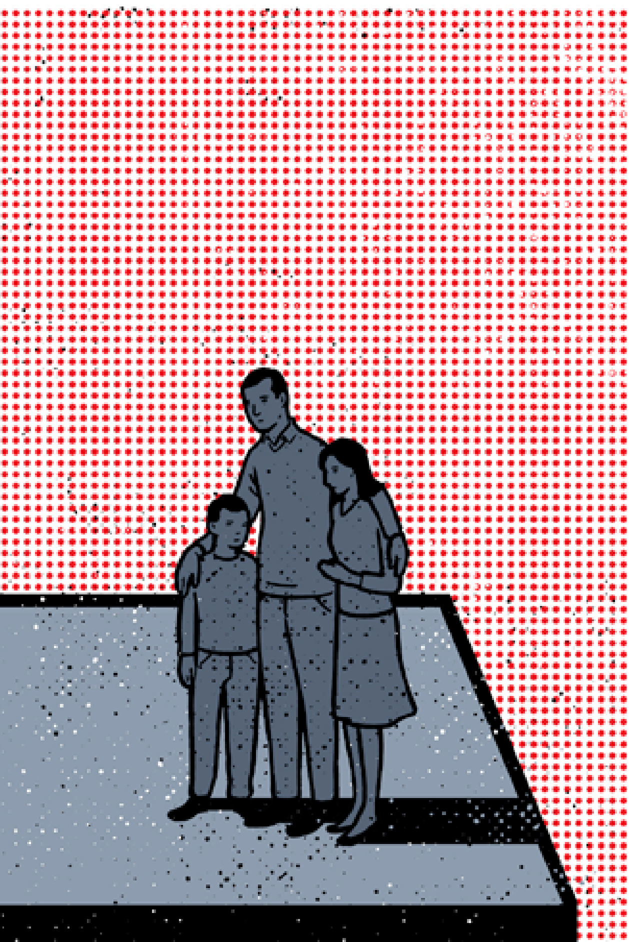
Recent research seems to suggest that worst-case outcomes for Joe and other displaced workers are more common than has generally been acknowledged. In an influential new paper, "The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade," the economists David Autor, David Dorn and Gordon Hanson reach several pessimistic conclusions:

- The costs of trade shocks, including lower wages and loss of jobs, persist for years.
- They are concentrated on workers in specific local labor markets. Labor mobility is not sufficient to ensure widespread sharing of losses by workers across all regions and industries of the economy.
- When an increase in the overall trade deficit accompanies a trade shock (as was the case for the China shock), workers displaced by import competition do not quickly find comparable jobs in more competitive industries. Those who do find work often end up in service jobs that are a poor fit for their skills.
- The enduring local effects of trade shocks include increases in unemployment claims, disability benefits, food stamps and other forms of government assistance.
- Trade shocks disproportionately affect lower-wage workers.

The paper has touched off a lively discussion among economists. Some say they were aware of the magnitude of the downside, but didn't dwell on it because the net benefits were still substantial. Others critiqued the paper's assumptions, methods and data sources, as good fellow professionals should. The question I find most interesting, though, is how policy should change, if the pessimistic conclusions that Autor and his colleagues made about slow adjustment to trade shocks are valid.

SPEEDING ADJUSTMENT

If slow adjustment to shocks undermines the gains from trade and amplifies the pain, we ought to be asking what can be done to speed adjustment. The traditional answer has been to offer a mix of temporary income support, retraining and help with job search and relocation to minimize the consequences for the most affected individuals and regions while ensuring that those who benefit from trade share the costs of adjustment. [*See the article by Robert Litan on page 60 of this issue.*] Those are the intended goals of the federal Trade Adjustment Assistance program.



But the TAA has a poor reputation. Some critics think the program is too narrow and inadequately funded; they urge expansion of TAA. Others point to studies that show the training offered has sometimes been poorly designed and ineffective. Whatever the reason, TAA clearly has not prevented the persistent adverse effects seen in the Autor study.

We need to recognize that the effectiveness of TAA is undermined by numerous policies that retard adjustment and increase the pain. What's more, the problem seems to be getting worse. Economists and policymakers need to more directly confront policies that throw sand in the wheels of labor market adjustment. A checklist:

Work disincentives in the social safety net. Autor et al. show that when a trade shock hits a region, total government benefits increase by a bit less than $60 for each $1,000 increase in trade; of this, TAA itself accounts for less than $4. Each of these social programs – unemployment insurance, food stamps, Social Security disability, etc. – helps cushion the pain of trade-related job loss, but together they create disincentives to finding new employment. Those disincentives arise from the way that benefits fall as family earnings rise. Indeed, a recent report from the Congressional Budget Office estimates that the combined effects of benefit reductions on food stamps, the earned-income tax credit, cost-sharing subsidies for health care and other programs can take back 60 percent or more of the income earned by low-income households.

Effective marginal tax rates are especially high for secondary earners in two-earner

households. If we take child care, transportation and other work-related expenses into account, it may not pay at all for a second household member to take a job. That situation could easily fit a family in which one spouse lost a factory job because of import competition while the other retained a job as, say, a retail clerk.

This poses a dilemma. As research from the Center on Budget and Policy Priorities shows, conservative initiatives to restrict eligibility for safety net benefits have lowered the average effective marginal tax rates for low-income households. However, tighter eligibility limits increase the pain felt by displaced workers and thus could be expected to strengthen the political backlash against trade. Progressives push back against measures to narrow eligibility. But to the extent they are successful in easing the pain of displacement, they slow the speed of adjustment.

The way to resolve this situation would be through a broad-based reform of safety net programs, not through a constant tug of war over eligibility. A good first step would be to consolidate and cash out the numerous, overlapping programs now available to displaced workers, moving in the direction of a broadened earned-income tax credit or negative income tax. As I argued in an earlier article in the *Review*, a universal basic income might be an even better way to meet the basic needs of displaced workers while maintaining work incentives.

Portability of health care. Another reform that would speed adjustment is to move toward a system of universal health insurance that fully decoupled coverage from employment, income or place of residence. The Affordable Care Act has improved matters in one important respect, making it possible for people with pre-existing conditions to purchase individual health insurance when they lose coverage from their employers. However, the law left intact the central role of employer-provided insurance. As a result, displaced workers face, often for the first time, the task of choosing an insurance company and an insurance plan on a state or federal exchange. Furthermore, the cost and availability of coverage vary widely from state to state, making it more problematic for displaced workers to move in search of work.

Note, too, that ACA subsidies for individual policies that low-income families buy on the insurance exchanges are themselves subject to a substantial benefit reduction as household income rises, which increases the effective marginal tax rates faced by people who already receive benefits from other safety net programs. Premium support under the ACA extends further up the income scale than most other safety net programs; subsidies do not entirely phase out until a household reaches 400 percent of the poverty level. That makes them relevant to workers even in relatively high-paid jobs and two-earner families, categories into which many workers displaced by trade would fall.

The ownership bias in housing. Housing can be another important barrier to mobility for trade-displaced workers. As Autor's research shows, trade shocks do not hit individual workers at random; rather, they slam entire regions. Housing prices can fall catastrophically in areas affected by plant closings, a factor that makes it hard for displaced workers to move to localities with higher housing costs in search of new jobs.

The bias of U.S. housing policy toward ownership exacerbates this problem. Already, younger families are increasingly passing up the tax advantages of home ownership in favor of renting, in many cases because of the flexibility that renting affords. They expect to move repeatedly from job to job and city to city in a labor market that, by all forecasts, will remain volatile across their working lives. Tax policies that treat renters and homeowners equally, like those of Canada, Australia, Germany, Japan and other high-income countries, would ease labor mobility for trade-displaced workers.

The scourge of occupational licensing. In a recent book, the University of Minnesota economist Morris Kleiner found that occupational licensing has increasingly spread beyond high-skill professions like law and medicine to relatively low-skill occupations like florists and hair braiders. Nearly one in three jobs now requires some kind of government license, up from one in 10 in the 1970s. Kleiner compares occupational licensing to the medieval guild system, in that the goal is focused on protecting incumbent practitioners from competition rather than on protecting consumers from the risks of tastelessly arranged flowers or clumsily braided hair.

The fact that licensing requirements vary widely from state to state is a particular problem for displaced workers. Suppose, for example, that the family of a trade-displaced factory worker is now dependent on the income of a spouse who is a licensed interior designer, manicurist or pest control worker. Moving to a new state in search of a new factory job would mean loss of that second income during an extended, and often costly, process of requalification.

Three kinds of reform could reduce the adverse impact of occupational licensing on labor mobility. One would be to lift licensing requirements altogether for occupations where the risk of harm to customers is minimal –

flower buyers beware. A second would be to make licensing requirements more uniform and transferable from state to state. A third would replace licensing with simpler certification systems that are less prone to abuse by incumbent practitioners.

Criminal records and background checks. According to the Brennan Center for Justice, some 70 million Americans have criminal records. That is as many as have college degrees, and far more than have served in the military. Criminal records represent a significant barrier to labor mobility, and not just for the 20 million who have felony convictions. Misdemeanors like possession of small amounts of marijuana, arrests for infractions like disorderly conduct that do not result in charges and even prosecutions that result in not-guilty verdicts are sufficient to make prospective employers think twice. The number of people with criminal records, like the number of people who are incarcerated, has grown steadily in recent years. Furthermore, online databases make it more likely that prospective employers will learn of even minor encounters with the criminal justice system.

Many people with criminal records do eventually manage to find some sort of work. However, it does not help that many licensed occupations are off limits to people with criminal records. What's more, if a job offer materializes in a distant city, a criminal record can make it harder to obtain a mortgage or rent an apartment.

Obviously, one policy change that would ease this burden on labor mobility would be to reduce incarceration rates. However, that would not help people who already have records. Another approach is that of the national "Ban the Box" campaign. Its aim is to reduce discrimination by removing the requirement that people notify prospective employers of criminal records on preliminary job applications. The campaign encourages employers to evaluate criminal records on a case-by-case basis after an applicant passes initial screening.

WHY PROTECTIONISM IS NOT THE ANSWER

It's a fact we ignore at our collective peril: the changes brought by globalization have been painful to millions. However, a reversion to protectionism would be a terrible, self-defeating response. Withdrawing from trade agreements and imposing high tariffs on imports would not restore the imagined glories of American manufacturing or make the country great again.

One reason is that a sharp swing toward protectionism would itself be an enormous shock to labor markets. Tens of millions of American workers are employed in export industries that would face loss of business or outright retaliation from trading partners if the United States raised tariffs or withdrew from agreements. More millions are employed by companies that are inextricably tied to global supply chains or import finished goods for resale. Still others work in logistics or financial service operations that would be disrupted by a sharp reduction in imports.

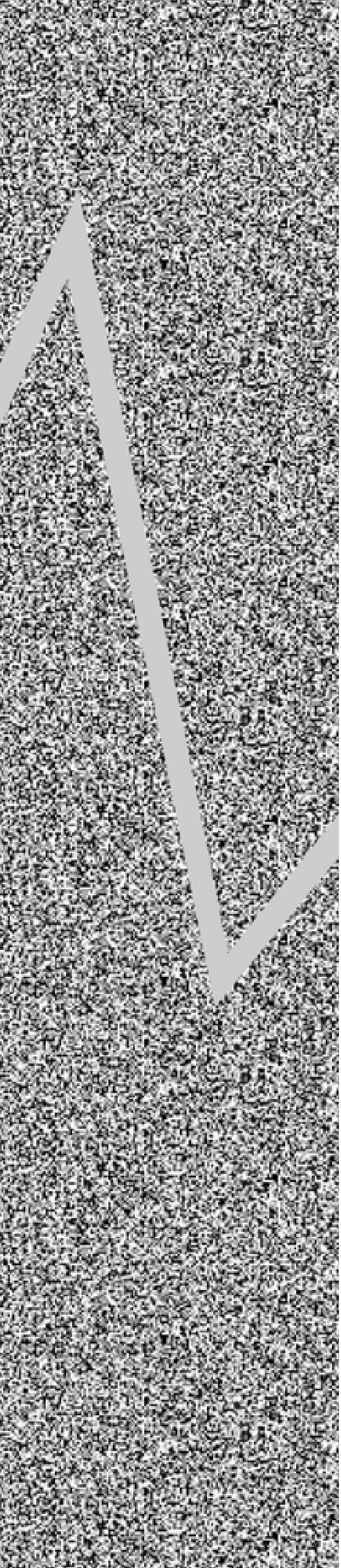
Even if protectionist measures did open up new jobs in domestic industries, workers displaced by foreign retaliation or supply-chain problems would face the same barriers in moving to jobs that trade-displaced workers have faced in the past. The research by Autor and others suggests that it would take years for the consequences of such a shock to work its way through the economy and that some industries and regions would remain permanently depressed.

A second reason protectionism is not the answer is that trade is only one factor behind

the transformation of American manufacturing. Automation and technological change have had an even greater impact. That is evident from the fact that the number of U.S. manufacturing jobs has been falling since the late 1970s, long before Nafta and the rise of China.

But even if high tariffs forced manufacturing *operations* back to the United States, there is no reason to believe that manufacturing *jobs* would return to previous levels. As the Harvard economist Dani Rodrik has meticulously documented, loss of manufacturing jobs is a worldwide phenomenon that has affected Europe, Latin America, Africa and the early industrializers of Asia. Manufacturing jobs appear to have peaked, even in China. Big operators like Foxconn Technology, which assembles iPhones, are laying off workers and replacing them with robots as wages rise. In short, the days when high-school-educated workers could find factory jobs at wages sufficient to sustain a middle-class living standard are not going to return – not in the United States or anywhere else.

It isn't beyond the ingenuity of good-willed people to create policies (at reasonable cost) that allow globalization to run its course without leaving successive waves of workers jobless or transforming them into itinerant laborers. But it isn't going to happen until policymakers and politicians recognize that the damage done by globalization is very real – and that the alternative to confronting the damage is to risk the rise of the demagogues and opportunists.



Extracting the Signal From the Noise

7 Tips for Interpreting Macroeconomic Data

BY JASON FURMAN

ILLUSTRATIONS BY RAUL ARRIAS

IN THE EARLY STAGES OF THE GREAT DEPRESSION, policymakers in Washington were faced with a profound gap in their understanding of the state of the U.S. economy: no one actually knew how many Americans were out of work. Aside from some attempts in the decennial census, before the 1930s no government agency had regularly measured the number of individuals seeking work in the United States.

This inability to measure basic economic conditions may seem shocking to observers of the U.S. economy today. The federal statistical agencies – the Bureau of Economic Analysis, the Bureau of Labor Statistics (BLS) and the Census Bureau – and a variety of other public and private entities now provide a wealth of economic data on an annual, quarterly, monthly and sometimes even weekly or daily basis.

Yet, while we no longer must cope with the void that policymakers faced in the 1930s, the mountain of data available creates its own problems. Perhaps chief among them is that we can sometimes ask too much of the data while doing too little to put it in context. The conflicting demands for timely reporting of data and their accuracy and completeness make it necessary to be cautious in interpreting the numbers.

For example, the BLS originally reported that the economy added 38,000 jobs last May, which could have led an observer to believe the economy was slowing markedly since job growth had averaged over 200,000 a month in both 2014 and 2015. But then in June, according to the Bureau's initial estimate, the economy added 287,000 jobs – a boom.

The truth is that, at a monthly frequency, it is difficult to accurately measure the vitals of the economy, and placing much weight on monthly data when they are first released can lead one seriously astray in assessing what's happening.

It is not just that numbers bounce around from month to month; seemingly comparable measures can offer divergent readings even for the same period. The United States measures economic output in two different ways that in theory provide different routes to the same destination: Gross Domestic Product and Gross Domestic Income. In the second quarter of 2015, the economy grew a disappointing 0.6 percent, according to one, and a solid 2.6 percent according to the other. In this case the difference between these two numbers was simply statistical noise, a reminder that these statistics are an imprecise way to measure the economy's temperature at a quarterly frequency.

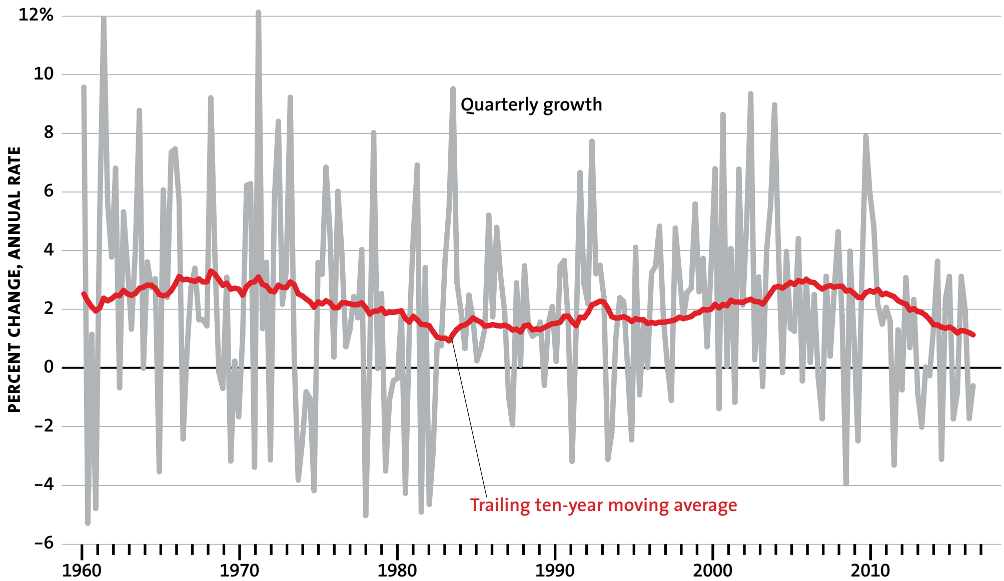
These are not just academic issues. How individuals and institutions (and in some cases, computer algorithms) interpret and react to economic data influences economic policy as well as private consumption and investment decisions.

In the midst of the economic crisis, for example, economic growth for the fourth quarter of 2008 was initially estimated at –3.8 percent and job losses in November 2008 were originally estimated at 598,000. These data points affected perceptions in Washington of what constituted an appropriate fiscal policy response. However, the estimates would later be revised down to much grimmer numbers (–8.2 percent growth and 791,000 jobs lost), which, had they been known earlier, might well have led to a proposal for more stimulus.

Here, I offer seven lessons to help guide those trying to make sense of the wealth of economic data available today, many of them drawing on analytical work by the Council of Economic Advisers. I also provide some applications of these lessons that have proved most valuable in understanding the economy. But all of this has a simple bottom line: when assessing the overall health of the economy, never read too much into a single data snapshot. Rely, instead, on data series over substantial periods and in the context of what other data suggest is happening.

JASON FURMAN is the chairman of President Obama's Council of Economic Advisers.

FIGURE 1: LABOR PRODUCTIVITY GROWTH, NON-FARM BUSINESS SECTOR



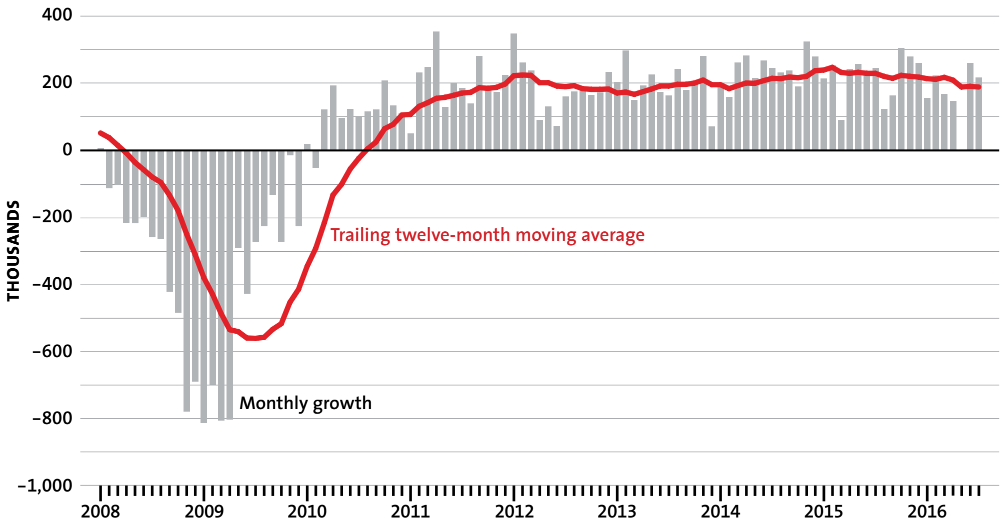
SOURCE: Bureau of Labor Statistics, Productivity and Costs; CEA calculations

UNDERLYING ECONOMIC REALITY, as well as our attempts to measure it, exhibits substantial volatility. Hence, as important as it can be to gauge turning points in prices, employment, output and the like on a frequent basis, it is also important not to lean heavily on any single data point – or even on a combination of data points – because our measures are nowhere close to perfect. This is not the fault of the statistical agencies, but simply due to the inherent complexity of a vast and rapidly changing economy like that of the United States.

More data over longer periods make it easier to disentangle underlying trends from transitory noise. While there are a variety of sophisticated statistical techniques to smooth economic data, a simple moving average that weights past as well as current numbers equally offers a reasonable way to assess trends.

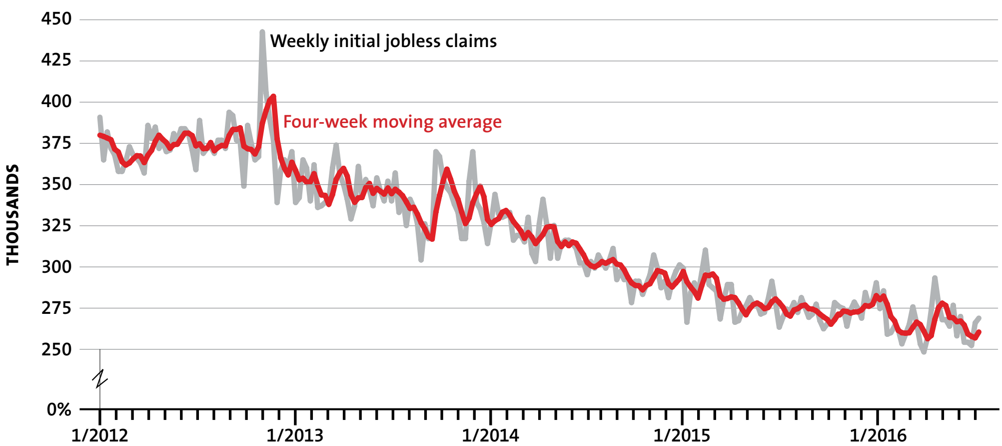
Take labor productivity, a measure of how much output is produced by an average hour of labor. Measured productivity growth is extremely noisy – that is, full of spurious volatility – at a quarterly frequency, and we largely look to it to answer longer-run questions about the economy. Moreover, there is some evidence that the best predictor of productivity growth is a long-term average of past productivity growth. All of this suggests that, at a minimum, productivity growth should be assessed with something like a trailing 10-year moving average as shown in Figure 1.

FIGURE 2: PRIVATE-SECTOR PAYROLL EMPLOYMENT, 2008–2016



SOURCE: Bureau of Labor Statistics, Current Employment Statistics, CEA calculations

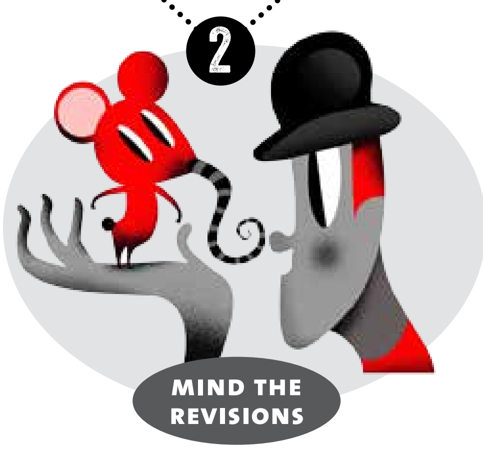
FIGURE 3: WEEKLY UNEMPLOYMENT INSURANCE CLAIMS, 2012–2016



SOURCE: Department of Labor

Payroll job growth is less volatile than productivity growth and thus can be examined in the context of a shorter window like the 12-month trailing moving average shown in Figure 2. From 2012 to the end of 2015, the 12-month moving average of private-sector job growth held steady at about 200,000 per month – a much more accurate picture of the economy than the excessive optimism suggested in the many months when job growth came in above that average or the excessive pessimism of news reports in the many months when job growth fell well short of that average.

Averaging over time is essential with higher-frequency data, like initial claims for unemployment insurance. Initial claims are compiled weekly from administrative data from state offices, so they are not subject to the same measurement error as data derived from sample surveys, such as estimates of job growth. But the series bounces around from week to week, with dramatic movements in both directions that can mislead anyone trying to get a clear picture how many Americans are involuntarily out of work. Last May, for example, initial claims spiked for exactly one week entirely because an unusual law in New York permits many public school employees to claim benefits for their time off during spring break. Using a four-week moving average helps avoid some of the zigzags, as shown in Figure 3, giving a more stable picture of recent trends.



IT'S STANDARD PRACTICE for the statistics agencies to issue revised estimates of economic data that incorporate new information as it becomes available – a fact that is easy to miss, given that these revisions can occur months or even years after the initial reporting. For example, with each month's release of employment data, the Bureau of Labor Statistics also revises the prior two months' estimates of job growth. These revisions are often large and economically meaningful, especially around economic turning points. Estimates of monthly job growth are then revised once a year for the next five years. For example, in September 2011, the Bureau of Labor Statistics reported that job growth in August had been zero, a striking number that fueled concerns the economy was headed into a double-dip recession. But the latest revised estimate for job growth in that month is a far-less-concerning 107,000.

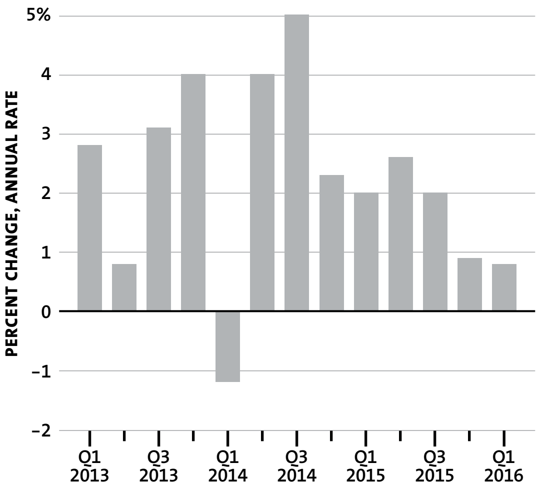
Some of the clearest instances of revisions changing the economic narrative come from the Bureau of Economic Analysis' corrections to quarterly GDP data. When the advance estimate for GDP growth in a given quarter is published, the bureau does not yet have all of the timely data on international trade, business inventories and spending on services; thus, the agency must use projections based on statistical modeling to pencil in more than half of the data. Even nearly three months after the quarter ends, it still has to use trends or indirect indicators to estimate components that comprise about one-third of GDP.

TABLE 1: EXAMPLES OF SUCCESSIVE REVISIONS TO REAL GDP GROWTH (PERCENT CHANGE, SEASONALLY ADJUSTED ANNUAL RATE)

	2001:Q4	2015:Q1
First Estimate	0.2	0.2
Second Estimate	1.4	–0.7
Third Estimate	1.7	–0.2
Estimate as of 8/16	1.1	2.0

SOURCE: Bureau of Economic Analysis, National Income and Product Accounts

FIGURE 4: REAL GDP GROWTH, 2013-2016

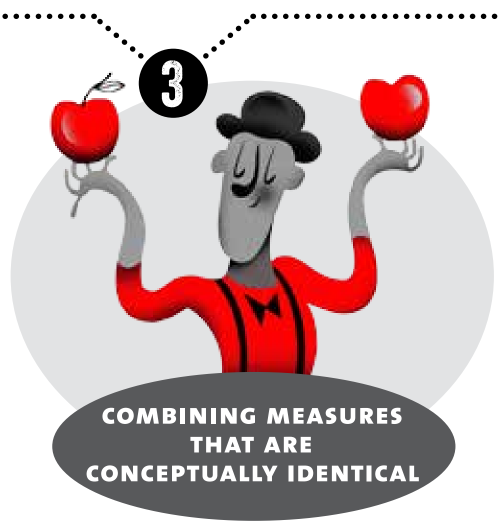


SOURCE: Bureau of Labor Statistics, National Income and Product Accounts

The Bureau of Economic Analysis makes additional revisions to several years' worth of data each July. Together, these revisions can have a dramatic effect on measured economic growth, as shown in Table 1. In the fourth quarter of 2001, the bureau's advance estimate of real GDP growth (calculated as an annual rate) was a tepid 0.2 percent. By the third estimate, this had been revised upward to 1.7 percent; subsequent annual revisions brought it back down to 1.1 percent. In the first quarter of 2015, on the other hand, the advance estimate of 0.2 percent was revised downward to a decrease of 0.7 percent; the most recent estimate for the period was a robust increase of 2.0 percent. (Putting this in context today, 0.1 percent of U.S. GDP – that is, one-thousandth of the GDP – equals about $18 billion.)

These data clearly demonstrate the tradeoff between timeliness and more complete and accurate information. It is always important to be mindful that data can be subject to considerable revision. At the same time, policymakers can't afford to ignore the latest numbers in trying to gain an understanding of the state of the economy – for example, to assess whether we are at a turning point in the business cycle and should adjust macroeconomic policy accordingly.

In this case, it is often useful to combine data from multiple sources to gain a more accurate picture of current conditions. The remaining five tips offer examples of how to do this, with the caveat that even these methods can only minimize, not eliminate, the inherent difficulties in measuring the economy.



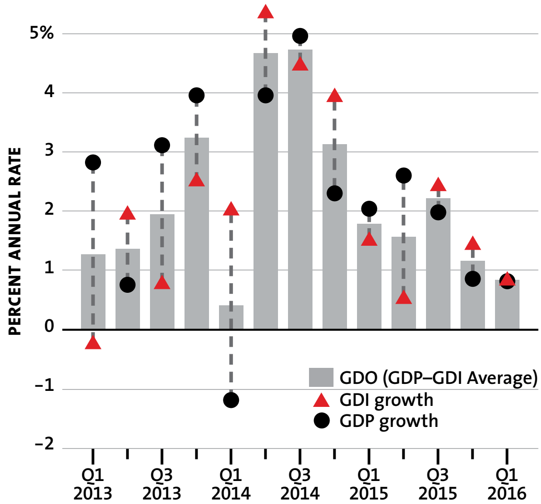
REPORTED GDP GROWTH RATES vary substantially from quarter to quarter. Some volatility is due to true economic fluctuations and some to measurement problems, but it is difficult to figure out whether a startling data point is due to reality or our measurement of reality. For example, it is possible that the economy contracted dramatically in the first quarter of 2014 and then grew rapidly in the next (as Figure 4 shows). But patterns like this seem much more likely to reflect noise in the data.

With economic output, the Bureau of

Economic Analysis publishes an alternative to GDP called gross domestic income (GDI), which aggregates income flows including wages, salaries and business profits. Conceptually, these two measures of output – GDP and GDI – should be equal in a given quarter because the sum of expenditures in the economy should equal the sum of income in the economy. In reality, GDP and GDI nearly always differ, because each measure relies on different data sources and methods of statistical estimation.

It turns out that an equal-weighted average of the two indicators is close to the optimal way to combine them, since the average of GDP and GDI more closely tracks the most up-to-date estimates of GDP growth and is a better predictor of future economic growth than either GDP or GDI alone. The Bureau of Economic Analysis now publishes this average, a concept that the Council of Economic Advisers refers to as "gross domestic output" or GDO, as part of its quarterly data on output. As shown in Figure 5, GDO provides a much more stable reading of the economy than either GDP or GDI. GDO growth shows a similar pattern as GDP growth in the first half of 2014, albeit a less dramatic one than the noisier GDP data alone. And over the last four quarters GDO growth has been relatively steady, avoiding the zigzags that measured GDP growth has undergone.

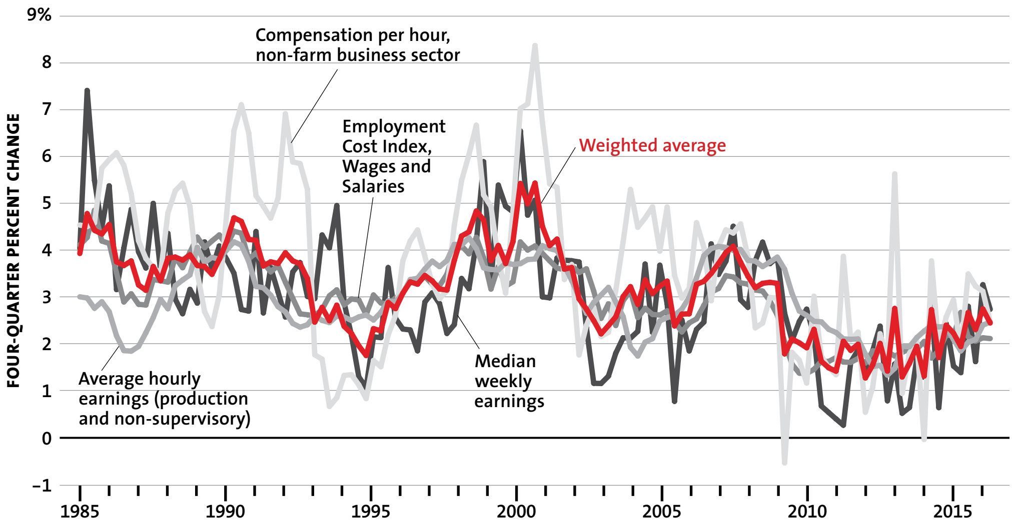
FIGURE 5: GDP AND GDI GROWTH, 2013-2016



SOURCE: Bureau of Labor Statistics, National Income and Product Accounts

COMBINING MULTIPLE INDICATORS can be valuable even when they measure somewhat different concepts. One example of how combining different measures of a similar concept can be useful concerns wages. Statistical agencies publish a dozen-plus measures of wages and labor compensation for the U.S. economy. There are conceptual differences among them, so even if they were measured perfectly they would still track differently. But much of the difference among them is almost surely the result of challenges in statistical measurement (such as sampling error) that are uncorrelated across the different measures. As a result, by combining these

FIGURE 6: MEASURES OF WAGE GROWTH, 1985–2016



NOTE: Weights for average derived from principal component analysis.
SOURCE: Bureau of Labor Statistics; CEA calculations

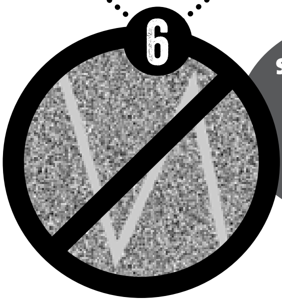
measures, we can lessen the influence of measurement error and can build a better picture of the underlying trend.

Figure 6 shows four such measures – compensation per hour, average hourly earnings, the employment cost index for wages and salaries and median usual weekly earnings – as well as a weighted average of the four. (The weights are generated through principal component analysis, a statistical technique that extracts common information that may be contained in each series.) Despite the volatility in each measure, the weighted average isolates the consistent story they tell: wage growth in the United States remains below its historical average, but has picked up substantially over the past year. At times, however, growth in this weighted average has differed by 1.5 percentage points or more from the common headline estimate of growth – average hourly earnings for private production and non-supervisory workers – which receives roughly one-quarter weight in the overall index.

EVEN WHEN COMBINING various measures of the same concept to improve an estimate, different aspects of the economy sometimes provide contradictory signals. In this case, it is important not only to estimate the truth in any one measure but to understand the full context of the data available.

In the first quarter of 2014, GDO increased 0.4 percent, while non-farm employment rose by 1.5 percent. (Both figures are annualized rates.) In theory, both of these could be correct – businesses may have stepped up their hiring while workers became less productive, thus decreasing total output. As a matter of accounting, these two concepts are reconciled in the productivity statistics, which show that productivity fell by 3.7 percent at an annual rate in the first quarter of 2014. Measured labor productivity growth is, in fact, extremely volatile, as shown in Figure 1 earlier. That reflects a combination of measurement error in both the numerator (output) and denominator (hours worked) and undoubtedly overstates the true volatility of productivity.

This suggests that, when output and employment are sending diverging signals, the truth is likely somewhere in between – again, implying that combining different measures may be superior to viewing each in isolation. In this case, it is reasonable to put substantially more weight on early estimates of employment growth than on early estimates of output growth, in part because GDP growth is typically subject to larger revisions. Even after a more accurate measure of output like GDO arrives, one should still place more weight on employment growth than output growth.



6

SOMETIMES DATA IS SO NOISY IT IS BEST IGNORED

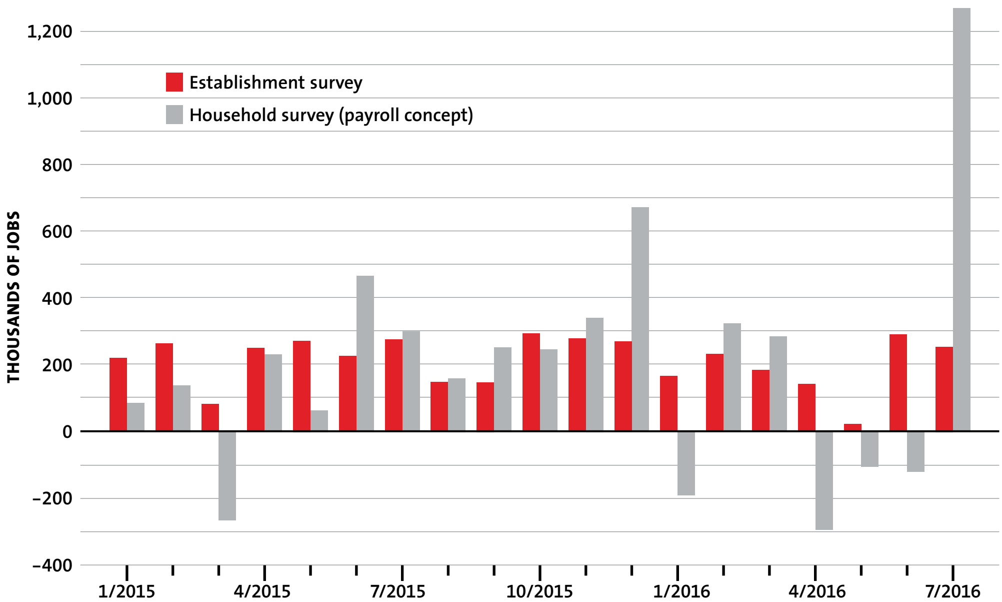
THE BUREAU OF LABOR STATISTICS publishes two measures of job growth every month: the "establishment" or "payroll" survey, which asks employers how many people they have on their payrolls, and the household survey, which asks if individuals are employed or unemployed. Like the different measures of wages, these represent different ways of measuring very similar concepts. As a result, differences between them are more likely to reflect noise than reality – so, in theory, combining them could provide a superior measure of job growth than relying on either one alone.

In understanding whether or how to combine them it is important to note that the household survey in particular is extremely volatile from month to month, as shown in Figure 7, with many instances of sudden spikes in gains (1.27 million jobs added in July 2016) and losses (293,000 jobs lost in April 2016). The establishment survey, on the other hand, can also be somewhat volatile, but does not show nearly the same dramatic month-to-month swings.

This difference in volatility is due to the fact that the establishment survey includes about 440,000 worksites covering about one-third of U.S. employees. In contrast, the household survey is based on only 60,000 households. But the establishment survey is imperfect and suffers from both statistical noise and systematic errors, especially in recording employment gains at new firms that have just come into existence and employment losses at old firms that have closed.

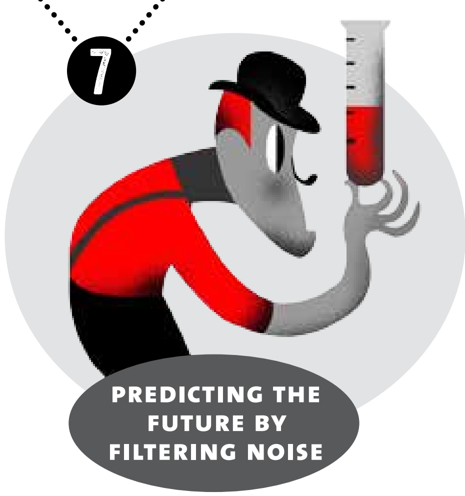
But combining the two does not always lead to more accurate estimates. Although in theory both should contain some information, in practice the household survey is so volatile that it contains practically none. The

FIGURE 7: MONTHLY EMPLOYMENT GROWTH, JANUARY 2015–JULY 2016



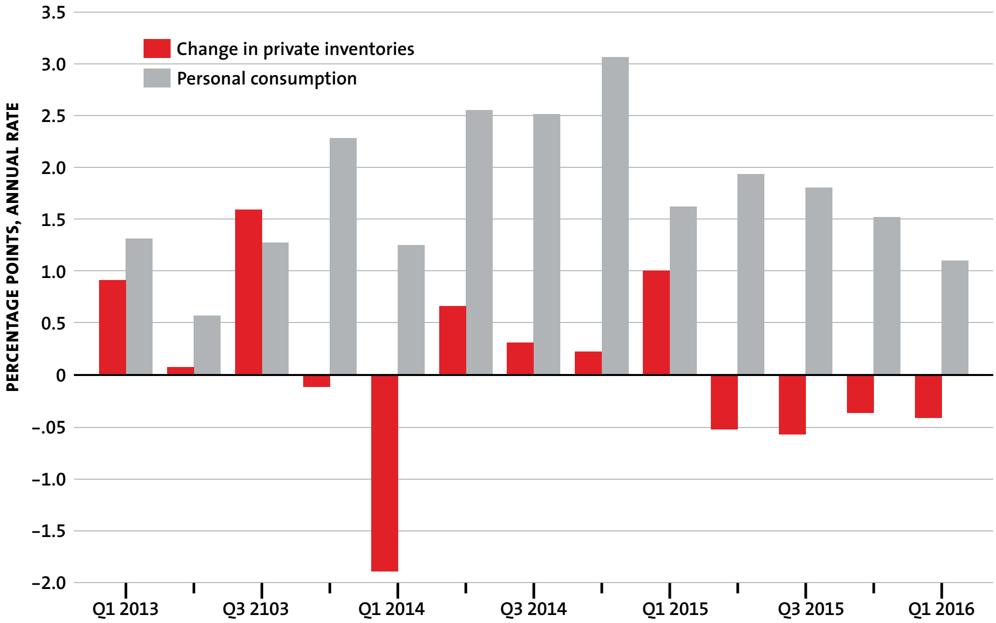
NOTE: Data as of August 9, 2016. SOURCE: Bureau of Labor Statistics

optimal weights to combine information from the payroll and household survey is something like 95 to 100 percent of the weight on the former and 0 to 5 percent of the weight on the latter. So, for all practical purposes, the household survey contains virtually no new incremental information about job growth – and it might as well be ignored. Job growth should thus be estimated by the number in the payroll survey.



AS ASSESSED BY GDO GROWTH, the economy was relatively weak in the first quarter of 2014. A more important question at the time was how much of the weakness was transitory (for example, the result of bad weather) and how much was likely to carry forward. Answering this question involves forecasting future economic performance, something that should only be done with great trepidation and humility, given the large uncertainties inherent in the economy and the limitations of our understanding of how it works.

FIGURE 8: CONTRIBUTIONS TO GDP GROWTH



NOTE: Data as of August 9, 2016. **SOURCE:** Bureau of Economic Analysis, National Income and Product Accounts

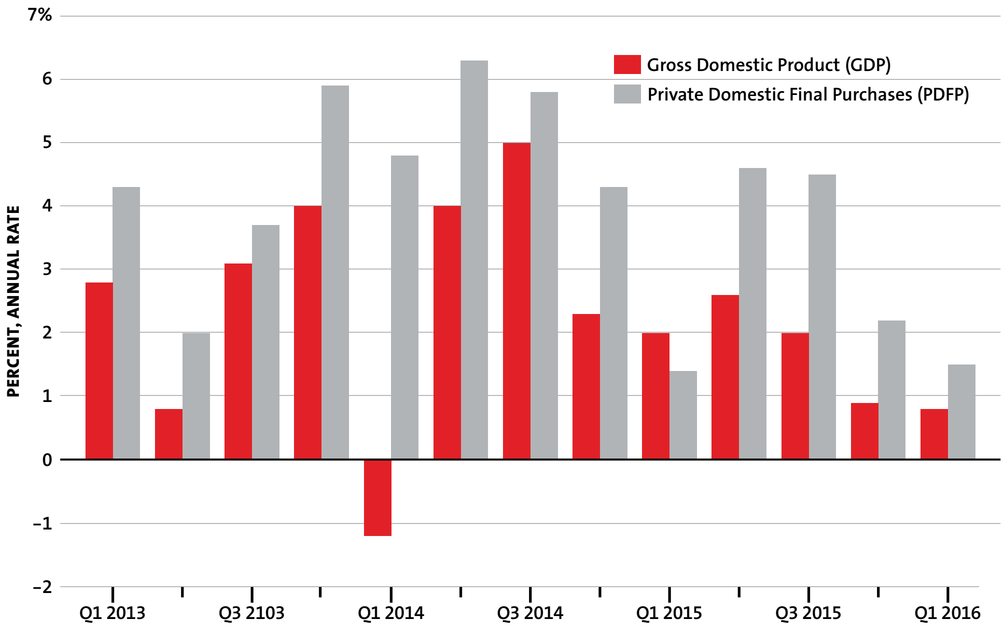
That said, one option is to build an intricate model of the economy using statistical techniques. Another approach is to use judgment – for example, looking at the weather and attempting to assess the impact it could have had on different components of GDP. A third approach is simply to extrapolate from recent performance, a method that, while simplistic, can still generate reasonable forecasts. The question, however, is from which measurements of recent performance we should extrapolate.

As discussed above, economic data are noisy in part because of statistical quirks, but the economy itself is also subject to transitory fluctuations. When we try to measure economic output writ large, we must be mindful that broad aggregates like GDP encompass many different components, some of which contain useful information about the future and some of which do not.

A historical review of the different components of GDP, for example, can give us a better sense of which components are transitory and which tend to be persistent indicators of economic growth. Within GDP, inventory investment bounces around without a clear longer-term trend, as shown in Figure 8, with performance in any given quarter not telling us much about the likely performance in the next quarter. Figure 8 also shows personal consumption, which tells a different story. Personal consumption is about half as volatile as inventory investment and tends to be much more persistent.

One way to make use of this observation is to focus not on the growth rate of GDP as a whole but on the growth rate of personal consumption and fixed investment – a combination called private domestic final purchases (PDFP). Analysis by the Council of Economic Advisers has found those two components of

FIGURE 9: QUARTERLY GDP AND PDFP GROWTH, 2013–2016



SOURCE: Bureau of Economic Analysis, National Income and Product Accounts

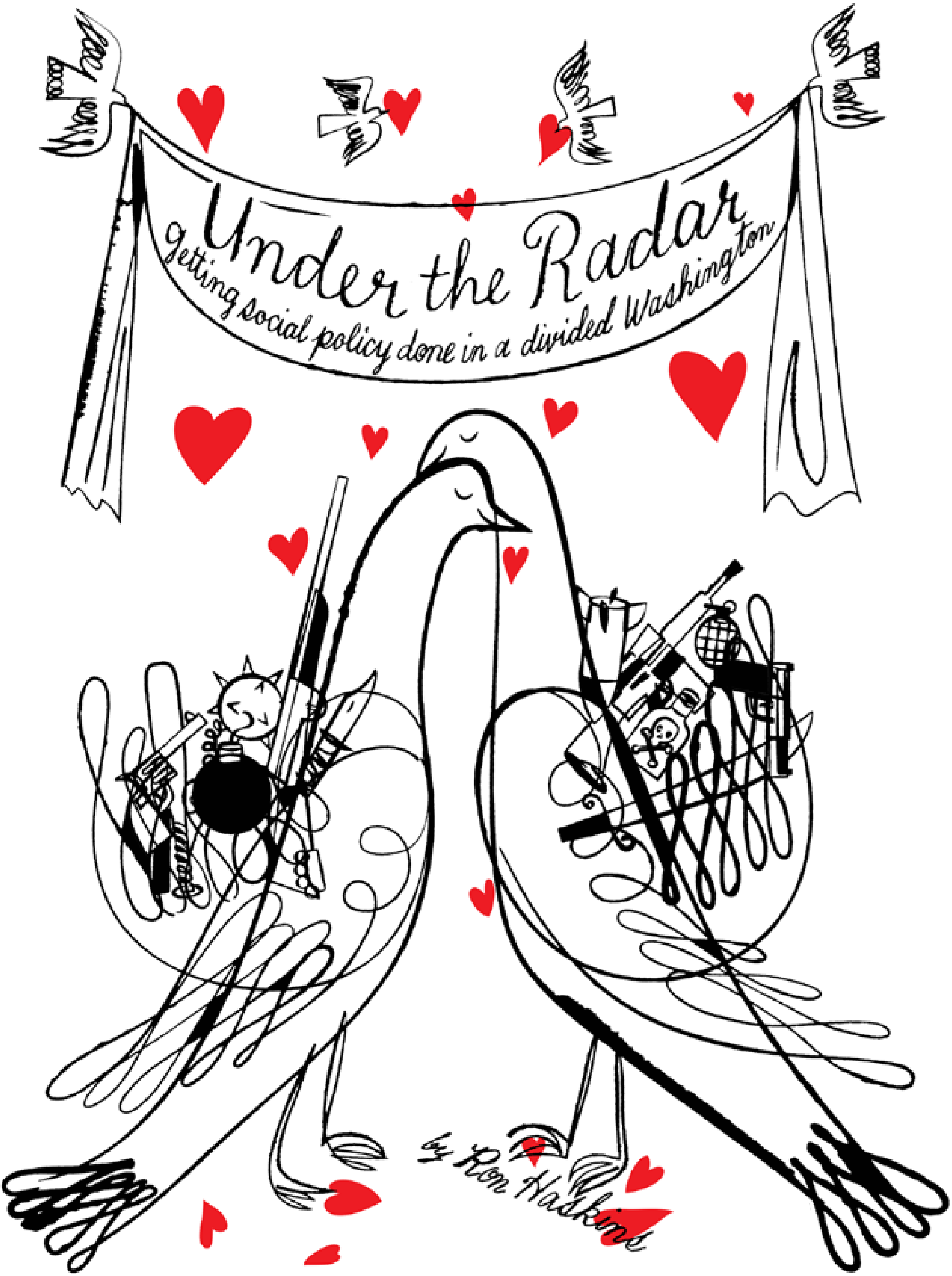
GDP to be the most stable, which means that they are the best predictors of GDP over the next quarter or the next year. (GDO is a more accurate measure of what economic performance actually was in the current quarter, complete with true transitory shocks like weather.)

As shown in Figure 9, GDP growth in the first quarter of 2014 was negative, in part because of bad weather. PDFP growth also slowed in the same quarter because of the rough winter, but to a lesser extent than GDP growth did. In the second quarter of 2014, there was a large rebound in GDP growth, but a smaller bounce-back in PDFP because it is a more stable measure of the underlying trend in the economy. In general, PDFP is a more stable, less volatile measure because it contains more of the signal of underlying trends in the economy, while GDP picks up more of the noise. As a result, PDFP is a better predictor of future economic performance than current-quarter GDP.

LAST THOUGHTS

It's pretty clear that the most reliable long-term economic analysis comes from looking across many samples, time periods, measurements and concepts and avoiding putting too much emphasis on any single piece of information. This is difficult when even a casual observer faces a deluge of economic data.

It's important not to overstate the precision we can derive even from a careful reading of these inherently imperfect measures, given the level of uncertainty and volatility in the economy. But by taking a holistic view of economic data and considering each new report in the context of other data as they become available, it is possible to get a much deeper, and more accurate, understanding of what's really happening.



ILLUSTRATIONS
BY ELVIS SWIFT

Who says nothing gets done in the nation's capital? While it is true that many major issues, including such basic functions of government as passing a budget and taming the federal debt, go without resolution or even serious discussion, a number of important domestic social issues have been addressed in legislation in recent years or appear likely to be addressed soon – and usually on a bipartisan basis. Here, I review initiatives in various stages of their Congressional journey and speculate about what might reach the social-legislation agenda in a still-divided government after the election.

EDUCATION

After enactment of the No Child Left Behind law in 2002 at the behest of the Bush II administration, the federal role in education became even more controversial than usual. Many Republicans found themselves with buyer's remorse because the legislation was seen as empowering the federal government to impose burdens on states and to violate the longstanding principle of state and local control of education – the opposite of the direction conservatives preferred in trying to limit the reach of Washington. But Democrats came to dislike the law as well, in large part because it imposed achievement goals on states that proved impossible to meet and because of what many – including parents – saw as an excessive focus on testing.

Rising popular condemnation of gridlock put pressure on both political parties, producing a window for action on an issue on which Republicans and Democrats shared some common ground. Thus, a major bipartisan education-reform bill was enacted by Congress and signed by President Obama in December 2015. Among the provisions: more flexibility on what tests and standards schools may use to measure the progress of their students, what accountability goals to adopt, and changes in the preconditions for state takeover of failing schools.

WELFARE REFORM

Education is not the only social issue moving in Congress. This year marks the 20th anniversary of the sweeping 1996 welfare-reform law that replaced the landmark New Deal program, Aid to Families with Dependent Children, with the Temporary Assistance for Needy Families program. The differences between the two are substantial. For example, whereas the older program guaranteed benefits to destitute families with children, under the newer one recipients are required to work or prepare for work in order to get benefits. Similarly, whereas under Aid to Families with Dependent Children, states mostly just sent out benefit checks, Temporary Assistance for Needy Families requires each state to have a welfare-to-work program in which at least half of its caseload is enrolled.

Despite the fact that President Bill Clinton favored the reform and half the Democrats in Congress voted for it, many liberals outside Congress predicted disaster as a result of what they saw as the harsh provisions of the welfare-reform law. In particular, they worried that the tough eligibility requirements would lead to much higher poverty rates. In fact, during its initial years (the late 1990s), the new law was associated with an unprecedented increase in work rates by poor mothers and a major drop in poverty among children in families headed by single mothers.

In those early years, around 70 percent of the mothers who left welfare found work.

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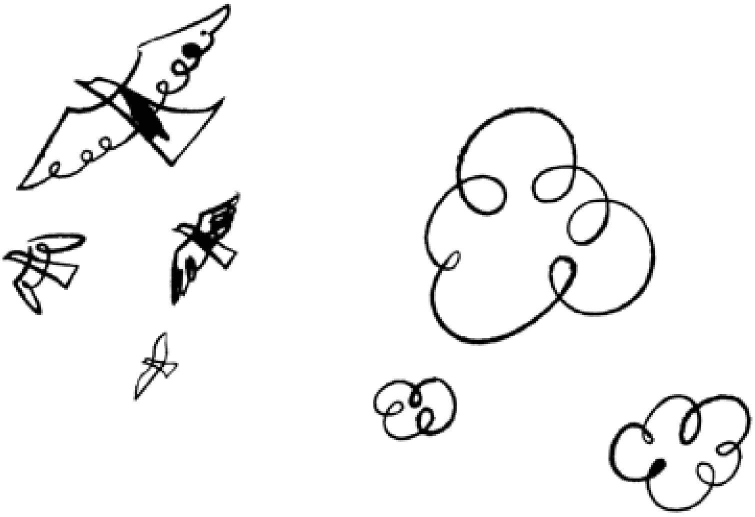


After enactment of the No Child Left Behind law in 2002 at the behest of the Bush II administration, the federal role in education became even more controversial than usual.

True, most ended up in low-wage jobs. But other federal programs that had been designed to subsidize low-wage work of families with children and thereby make work more attractive made most of these families better off financially than they had been before welfare reform. Between 1995, the year before welfare reform, and the back-to-back recessions of the early 2000s, the poverty rate among never-married mothers and their children (an extremely poor demographic group) fell from 52 percent to 39 percent, the lowest that had ever been measured for this group.

A recent study by the nonpartisan Congressional Research Service concluded that the work-support programs reduced the poverty rate among all female-headed families by about half, and even held poverty among these families almost steady during the Great Recession. Thus, despite the recessions, low-income mothers still work more today than they did before welfare reform and the poverty rates for them and their children are, as a result, still lower.

But all is not well with the Temporary Assistance for Needy Families program. After two decades, the reforms seem to have run out of steam, and, as the law permits, states are

using money from the program for purposes other than providing cash welfare and encouraging work. Meanwhile, an increasing number of mothers and their children, who before 1996 would almost certainly have received Aid to Families with Dependent Children cash, are not receiving benefits under the newer program because of its restrictive provisions and the way states are administering it.

As a result, the number of female-headed families in deep poverty (with income at or below one-half the poverty level, or about $10,000 for a mother and two children) increased, even as the overall poverty rate was falling. These mothers need help in the form of cash welfare or in preparing for and finding jobs, and many states are not doing a good job of providing either.

Congress is now considering ways to repair Temporary Assistance for Needy Families. This is a good year to do so because the program needs to be reauthorized this year. (In writing legislation, Congress often requires it to be reauthorized every several years, in order to force itself to assess the impacts of the legislation and to give relevant committees an opportunity to hold hearings and draft amendments.)

Surprisingly, Republicans and Democrats on the House Ways and Means Committee reached bipartisan agreement on a reform bill last year that included more education and other provisions that may have induced states to pre-emptively improve their work programs. But many conservative Republicans strongly objected to the bipartisan bill because they believed it weakened the work requirement and was too narrowly focused. The Republican Study Committee, an influential House group that speaks for the right wing of the Republican Party, held out for a much broader bill that included reforms of other welfare programs and that tightened – not weakened – the work requirement in those other welfare programs such as food stamps and housing.

The bipartisan bill written by the Ways and Means Committee was thereby doomed. And Republicans on Ways and Means decided to take the path of least resistance and drop nearly all the reforms in order to ensure that reauthorization for Temporary Assistance for Needy Families would pass this year. Failing to reauthorize the law would mean that the federal government could not give states the $16.7 billion in annual grants authorized by the 1996 law, an outcome that would be exceptionally embarrassing to Republicans and potentially disastrous to some of the poorest people in the nation.

The reauthorization bill that has now been approved by the House by voice vote (with the reluctant acceptance of Democrats) and awaits Senate action has only two provisions besides the language that reauthorizes spending. The first sets aside $100 million for states to conduct research on their programs – a welcome change in that it reflects a new emphasis on rigorous evaluation of social programs. (I return to this topic below.) The programs to be evaluated are ones that aim to help welfare recipients prepare for, find and keep jobs.

In addition, the research provision would create a clearinghouse at the Department of Health and Human Services that would make the results of the state evaluations available to other states and to the public. These clearinghouses are a fundamental part of the evidence-based movement that, although still modest, is increasingly influential in federal and state policymaking. The Temporary Assistance for Needy Families clearinghouse would provide detailed information about state and local welfare-to-work programs that have been shown to succeed, that have been tried but have not been well evaluated and that have been tried and shown to fail.

Whether this provision will lead to change remains to be determined. A problem preventing states from trying innovative programs is that many have already committed their Temporary Assistance for Needy Families dollars to other functions, such as child protection and abstinence-based sex education, which they were allowed to do under the 1996 reforms. The money is thus filling gaps in other parts of the states' budgets; trying to get it back to ensure benefits for eligible families will set off a conflict between the state agency that controls the money and the state's Temporary Assistance for Needy Families program. Place your bets on the agencies that currently control the funds.

The second provision, on social-impact financing (also called "pay for success"), is designed to promote a clever way to finance government social programs. The idea, developed over the past decade, is to use money supplied by private entrepreneurs (including foundations) to conduct intervention programs that would save government spending. If the government saving is actually realized, as determined by a high-quality evaluation, the investor is paid back with interest. The approach involves two of the fundamental tools of the current emphasis on evidence-based policy. Investors use their own money to support programs they have reason to believe are going to succeed and thereby save government money, which harmonizes with the goal of getting government to spend its funds on programs that produce results. In addition, rigorous evaluation is a central part of the approach because paying for success requires a reliable way of measuring outcomes.

These provisions on developing and testing programs that work to help poor parents and children, plus the reauthorization of the $16.7 billion in Temporary Assistance for Needy Families spending, allowed the bill to sail through the fractious House. There appears to be some opposition in the Senate to the way the House bill finances the pay-for-success provision. But there is a good chance that, before Congress adjourns in the fall, House and Senate negotiators will work out a final bill that closely resembles the House's bipartisan bill. Then it will be up to states to serve their function as the laboratories of democracy and cure what ails the Temporary Assistance for Needy Families program.

CHILD-PROTECTION REFORM

Few people dispute that the focus of the program, helping poor single mothers support their families, should be a priority. But another critical issue is coping with child abuse and neglect, preventing it where possible and minimizing the consequences where it isn't. Each year, around 700,000 children are reported by states to be victims of abuse or neglect. More than 1,500 children die each year from abuse or neglect, about 80 percent of them at the hands of their parents.

To deal with this problem, every state has an elaborate program supported by federal, state and sometimes local dollars and usually called child protective services. That program's offices investigate reports of maltreatment and then offer a range of services and treatments to the adults and children who are involved in confirmed cases. Children are often removed from their parents' homes (about 400,000 children are in foster care at any given moment). Most child protective services offices also offer prevention services, which are much preferred because they often allow children to stay with their parents and avoid the collateral damage of foster care.

Washington spends about $7.6 billion on these programs. But this money is used inefficiently. Because of the way the 1980 law that established the major federal programs was drafted, most federal dollars can only be spent once children have been removed from their homes and families – in spite of the fact that researchers and administrators have come to the view that many more abused and neglected children should be kept at home while their parents participate in treatment. On numerous occasions over the last quarter century, Congress has considered amending the law to permit more of the federal dollars to be spent on prevention and treatment. But the legislation has never passed.

Now the Obama administration and Congressional leaders are very close to agreement on changes that would give states more money for prevention and treatment. The legislation passed the House by voice vote. Interestingly, the House worked with the Obama administration to develop the legislation and to convince Democrats to support it. Now the House and the administration are working together to convince the Senate to put the bill on the president's desk. As in the case of the education bill and reauthorization of Temporary Assistance for Needy Families, this shows that bipartisan action is still possible – in this case, on legislation that many previous Congresses were unable to pass.

EVIDENCE-BASED POLICY

The most basic goal of the rapidly expanding evidence-based-policy movement is to focus government funds on social programs that work, if possible by taking money from pro-

grams that don't. Although this goal seems so obvious that many people assume that government has always operated this way, nothing could be further from the truth. Most decisions in Washington and in state capitals are based on shifting mixtures of ideology, the personal views of elected officials and important constituents, the interests of contractors, the availability of funds to pay for the programs and so forth. Evidence of whether a program works has often been a minor consideration, especially when the federal government distributes billions of dollars to states through programs with broad goals, such as "to improve education," "improve health" or "reduce child abuse and neglect." Such goals are so general that evaluation is meaningless, and in many cases nobody even bothers to try. So policymakers and the public have no way of knowing whether the programs work. The heartwarming anecdote is often king of policymaking in legislative bodies.

But this is changing. The movement for evidence-based policy draws energy from the fact that it is difficult for elected officials to deny that they should want good evidence of whether a program is producing the intended impact – and that the evidence should be used to shift spending from ineffective programs to effective ones. And it's about time: most social programs – including widely heralded programs such as Head Start and Drug Abuse Resistance Education (DARE) – don't consistently produce good results.

One measure of the efficacy of evidence-based policy is the share of federal and state social spending that goes to programs with strong evidence of success. But the evidence-based movement has a quiver full of additional arrows. One of the most popular is the pay-for-success approach, mentioned above. Although still in the experimental stage, with more than 30 projects now going on across the country, pay for success is closely tied to rigorous evaluation of programs. Without it, entrepreneurs won't have accurate guides to where success is possible – and administrators won't know whom to reward and by how much.

Broader use of evidence-based policy could lead to almost immediate improvement in government programs that transcend the many previous efforts to improve their efficiency and effectiveness.

The evidence-based movement is not something dreamed up by policy wonks that's being foisted on the federal government from the outside. Rather, for nearly a decade now, both Congress and the executive branch have been buying into ever-expanding uses of evidence of program success or failure. In 2009, in a move to both expand evidence-based policy and test its effectiveness, Congress (with the approval of the White House) passed several pieces of legislation that established programs requiring those applying for cash to show they were using model programs with evidence of success, to employ high-quality evaluation procedures to test their ongoing effectiveness and to make the results of their evaluations public. Bills further expanding evidence-based policy are in the works.

In an even more striking example of the rise of evidence-based policy, Paul Ryan, the Speaker of the House, a Republican, and Senator Patty Murray, a Democrat, sponsored legislation creating a bipartisan commission charged with helping government and private researchers gain access to administrative data while ensuring that privacy is protected. Although increasing the use of this source of data may seem like a bureaucratic detail, there is now widespread agreement that data sets maintained by the Social Security Administration, the Internal Revenue Service and other federal agencies are gold mines of evidence about vital national issues. Especially important here is that access to the data can greatly reduce the cost of research and produce much more reliable results because of the huge sample sizes involved.

I'm convinced that the potential for evidence-based policy is enormous. Broader use, supported by a bipartisan coalition, could lead to almost immediate improvement in government programs that transcend the many previous efforts to improve their efficiency and effectiveness.

PROSPECTS FOR THE NEW ADMINISTRATION

The beginning of a new administration is usually a time of intense legislative activity. New presidents, knowing that a short honeymoon period is likely, are anxious to enact as much of their agenda as possible. Donald Trump has announced few, if any, social policies that he would implement if he were elected, unless trade protectionism, mass deportation and the exclusion of immigrant groups are seen as solving social problems. By contrast, Hillary Clinton has proposed a host of initiatives. Her campaign website lists 32 areas of domestic policy in which she favors specific legislative changes. If elected, she is likely to focus on a handful of them that stand at least some chance in a polarized Congress.

My guess is that early-childhood education would be near the top of the list. And here, there is a real opportunity to find common ground with a majority in Congress.

Clinton is proposing a robust early-childhood agenda with three core goals: expand Early Head Start for children under age 3, ensure that all 4-year-olds have access to high-quality preschools and provide scholarships for preschools to low-income families. Liberals and most conservatives agree that the federal government has a role to play in equalizing economic and educational opportunity. And they agree that children from poor families fall behind during the preschool years, thus providing a solid rationale for beefing up federal involvement in preschool programs.

Starting with Lyndon Johnson, every president has expanded the federal commitment to early childhood development, either by creating new programs, expanding old ones or both. As a result, the federal and state governments now spend nearly $34 billion annually on these programs. But there are some children, including poor ones, who do not receive any federal support during the preschool years and many more who get federal support but have access only to substandard programs. Research has repeatedly shown that only high-quality programs boost child development in a way that is likely to improve children's school performance and achievement in the long term.

Clinton has called for doubling expenditures on Early Head Start and in campaign speeches has said she would also increase Head Start spending. Although Clinton does not specify how much she wants to spend on the latter or how it would be financed, her proposals would undoubtedly cost many billions per year. If Clinton wants to capitalize on the fact that many Republicans see the value of preschool and accept federal involvement in preschool funding, she will need to work closely with Republicans on Capitol Hill to develop her proposals, which will have the effect of greatly reducing the scope of what she is now proposing.

Given the years of hostility between Hillary Clinton and Republicans, it seems obvious that no matter what the issue, Republicans will be wary and some will be hostile at the onset of a Clinton administration. And some will never change their reflexive rejection of all things Clinton. The new president and her aides will thus need to display great patience and thick skin in the initial days of the administration to get anything done – except, perhaps, in the unlikely event that a Clinton landslide ushers in Democratic majorities in both the House and Senate.

ON REFLECTION

It would be Pollyannaish to pretend that business as usual has not been unusual in Washington for more than a decade, or that the partisan divide hasn't taken a major toll on the quality of government. Even so, on some important social issues – especially those that can safely remain below the radar – Congress has been engaging in normal debate and discussion, generally following routine Congressional procedures and sometimes passing important legislation. We don't know whether or how a Trump administration would develop working ties with a divided Congress, at least in part because we don't know what Trump would want to do beyond his signature initiatives on immigration and trade. But the prospects for a constructive relationship – albeit, one at arm's length – between a Clinton White House and the Republican Congressional leadership seem at least possible.

Homeownership, Wealth Creation and Financial Stability

BY ED DEMARCO

The dream of homeownership remains alive and well in the United States. Despite the disastrous consequences of the Great Recession for millions of homeowners, polls suggest that Americans still want their names on deeds.

We have a long history of public policies that promote homeownership and few politicians are inclined to challenge them. This doesn't mean, however, that those policies achieve their intended outcome. Examining the policies today, especially in light of the recent financial crisis and the wreckage it left in its wake, raises important questions as to whether they encourage families to take on more risk in buying a home than in generations past. Indeed, while Washington struggles to put back together the secondary-mortgage market that led to the federal takeover of the big secondary-market lenders, we should also use this interlude to rethink our approach to promoting homeownership.

U.S. HOUSING POLICY IS A DEBT POLICY

At the federal level, the cornerstones of policy designed to promote homeownership are:

• The tax subsidy implicit in the mortgage interest deduction.

• The mortgage-guarantee programs operated by the Federal Housing Administration and the Veterans Administration and several smaller such programs.

• The subsidization of the mortgage market through explicit and implicit guarantees for the giant market makers – Ginnie Mae, Fannie Mae and Freddie Mac.

The common denominator of these policies is that all three use subsidies to encourage taking on debt to finance a home rather than subsidizing the process of building equity in a home. Granted, even wealthy households typically borrow to buy a house. But people don't aspire to own the mortgage, they aspire to own the house.

Ownership in the broader spirit of the American dream means having equity in a home. So why doesn't public policy focus more on helping families build equity rather than on taking on debt, especially in light of the damage wrought by millions of foreclosures during the Great Recession?

Leverage, using borrowed money to finance an asset purchase, enhances returns if things go well and increases losses if they don't. High leverage – extreme reliance on borrowed money relative to equity capital – led to both record bank failures and record foreclosures in the wake of the financial crisis. Banks subsequently responded by increasing their capital relative to their debt. Families did the same, often by reducing consumption until they brought their debts down to more manageable levels. By the same token, many families have deferred buying homes while undertaking this balance-sheet repair.

Thus it seems that banks and households have gotten the message. It is time to get public policy to adjust as well.

ED DEMARCO, a senior fellow in residence at the Milken Institute's Center for Financial Markets, was the acting director of the Federal Housing Finance Agency and the post-crisis conservator for Fannie Mae and Freddie Mac.

WEALTH BUILDING AND RISK MANAGEMENT

With rental housing, the monthly payment goes to the landlord and that's that. But in paying a mortgage, as the principal balance is gradually paid down, the ownership stake increases. That has motivated millions of families to buy houses as a means of creating personal wealth. And it has motivated policymakers to make this possible – especially for low- and moderate-income families that would otherwise have a hard time saving.

This sounds great, and actually works out some of the time. But very few homebuyers live in their houses long enough to amass much equity before moving on. Moreover, the risks of taking on debt collateralized by housing are often given short shrift, while the benefits are exaggerated.

In view of some seven million foreclosures and forced sales in the past decade, we have been warned. Poor health or unemployment can drive homeowners into foreclosures in which they lose some or all of their equity. Meanwhile, house values can fall for reasons beyond the owners' control, vaporizing equity in the process.

The costs created by forced sales typically go well beyond the immediate loss to the seller. Foreclosure ruins personal credit, often for years. Health effects can be substantial as well, particularly in poorer neighborhoods. Antwon Jones and Gregory Squires of George Washington University and Cynthia Ronzio

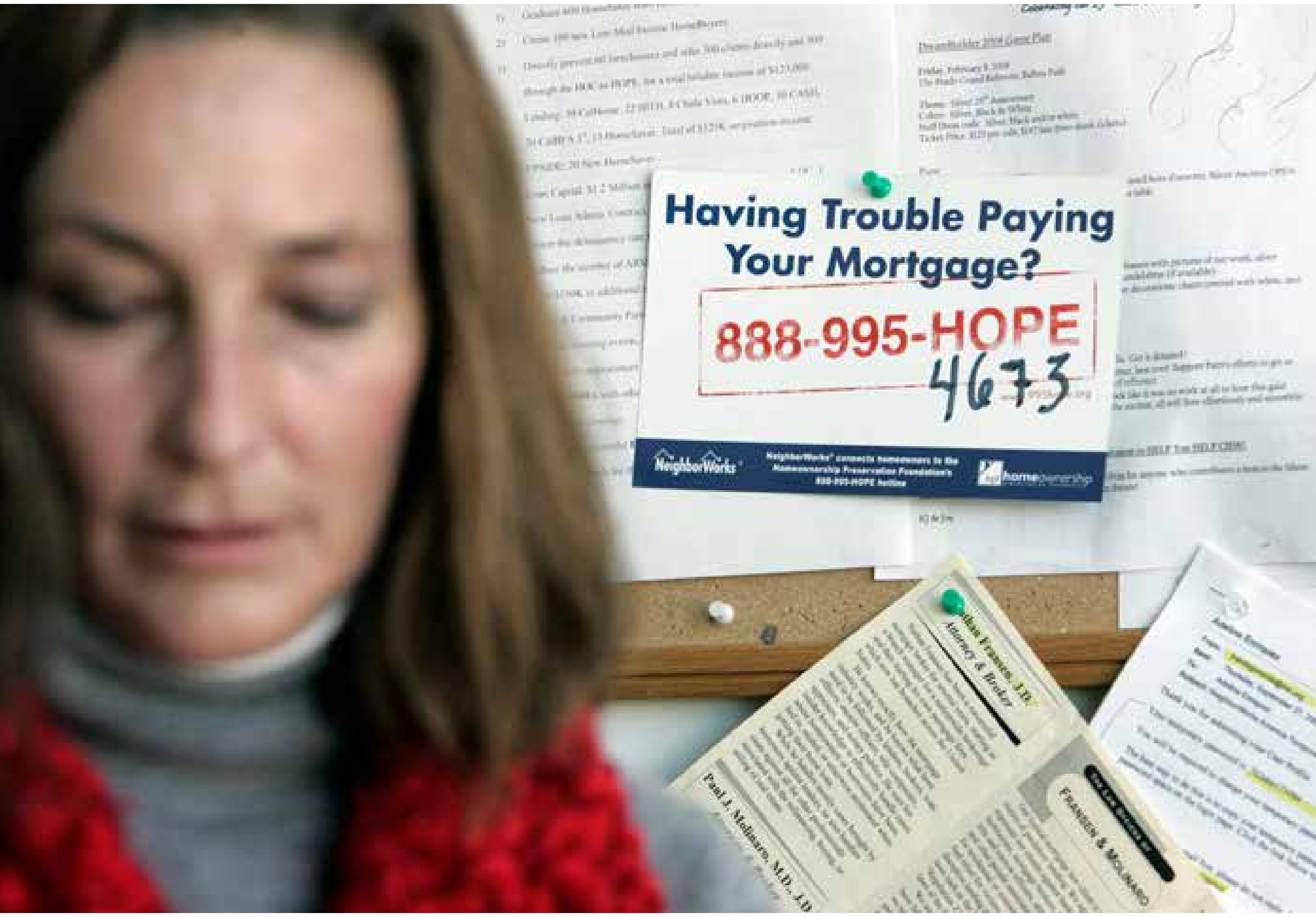
JUSTIN SULLIVAN/GETTY IMAGES

In view of some seven million foreclosures and forced sales in the past decade, we have been warned.

of Health Policy Initiatives document these stress-related impacts in an article in the *Journal of Urban Affairs*. They note moreover that the adverse health consequences may extend beyond the family facing foreclosure, into the surrounding neighborhood. Speaking of spillover effects, the foreclosure or short sale of one house will likely reduce the value of other houses in the neighborhood.

Other routine behavior undermines the wealth building capacity of homeownership. For one, withdrawing equity through cash-out refinancing, or even just extending the borrowing term by refinancing for a longer period than is left on the mortgage, lengthens the period needed to pay down the mortgage principal. Frequent change of residence also has this effect, both due to the costs involved in each sale and purchase and because it does not give the owner time to amass equity.

Finally, even if the homebuyer stays in the house long term, makes timely mortgage payments and does not refinance, the economic returns to ownership usually fall well short of those from other investments. Owning a home is an expensive proposition; every house requires a lot of maintenance. Moreover, unbeknownst to most Americans, average price appreciation is just slightly greater than the rate of inflation. Compared to long-term investments in financial assets such as stocks and bonds, the real return on residential real estate in most areas has fallen well short.



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Families do, of course, derive substantial benefits from being masters of their own domains. Just don't look for those returns on the bottom line. For most people, the returns from owning a home derive primarily from the gratification and independence that ownership brings.

RETHINKING HOUSING-DEBT POLICY

As noted above, federal policies to promote homeownership largely consist of making it easier for buyers to leverage their purchases. Let's reconsider each of the cornerstones.

The mortgage interest deduction lowers a homeowner's personal income tax by allowing mortgage interest payments to be a deductible expense. The larger the interest payment and the higher the homeowner's marginal tax rate, the greater the value of this deduction. The mortgage interest deduction thus lowers the cost of financing a home, creating incentives to purchase more-expensive homes – as well as homes purchased with more debt financing – than would otherwise be the case. Moreover, the benefit accrues mainly to higher-income homeowners. Most middle-income families utilize the standard deduction even if they have a mortgage, so this tax benefit's perceived value may have a larger effect on homeownership rates than its actual value. But it surely increases leverage among homeowners and subsidizes more consumption of housing relative to other goods or savings.

The FHA, the VA and other mortgage-guarantee agencies also promote homeownership by affecting the availability and cost of mortgage debt. By insuring creditors against loss in the event of borrowers' defaults, they use the federal government's pristine credit to lower borrowing costs. They also promote homeownership by offering mortgages with little or no money down. While they have different underwriting standards, the effect is to make the cost of mortgage credit lower and its availability greater than it would otherwise be, and to encourage purchases with minimal down payments.

Finally, over the past several decades, the secondary-mortgage market has become critical in maintaining the flow of credit into housing. Replacing traditional lenders, such as savings and loans – which financed mortgages with their depositors' money – the secondary market gives banks, thrifts and mortgage bankers the option of originating and then selling mortgages to investors. Mortgages are pooled and packaged into mortgage-backed securities and sold to institutional money managers around the globe. Most of these securitizations are carried out through a government corporation (Ginnie Mae, which securitizes FHA and VA mortgages) and two government-sponsored enterprises (Fannie Mae and Freddie Mac, which have been operating in taxpayer-backed government conservatorships since 2008). The liquidity of mortgage securitization is enhanced by the taxpayer-backing of the securities, which ultimately leads back to lower borrowing costs.

Taxpayer-backed securitization contributed to the dominant role of 30-year fixed rate mortgages in U.S. housing finance. Without taxpayer support, shorter-term mortgages and adjustable rate mortgages that are less risky for lenders would likely be more common.

While many argue this package of explicit and implicit government benefits is needed to make homeownership more affordable, those benefits have the cumulative effect of driving up house prices, thereby offsetting some or all of their presumed benefit – especially to first-time buyers. The combined effects also create costs borne by the broader economy. The more we borrow to finance homeownership, the less is available to finance productive investment or other consumption. In economic terms, there is an opportunity cost from the foregone activities that may have otherwise been financed.

The more we borrow to finance homeownership, the less is available to finance productive investment or other consumption.

In sum, these housing policies result in increased leverage and extended repayment terms while driving up house prices. The increased leverage adds risks to household balance sheets, which leads to more foreclosures with their attendant costs than would otherwise result.

THE EQUITY ALTERNATIVE

Can we reorient public policy so it continues to foster homeownership, especially for lower- and middle-income households, while reducing these associated risks and increasing the likelihood that ownership helps families build wealth?

Let me stipulate here that I am accepting the view that promoting homeownership, particularly for lower-income families, remains a desired goal of public policy. That stipulation would be worth re-examining. But here, I'm limiting my analysis to asking how it would be possible to give such families a chance to build wealth in housing over their working lives while reducing the risks associated with high leverage.

How might a focus on equity work? Consider the key building blocks of the current debt-focused policy and how we could give greater weight to equity.

Down Payments

Current policy works to minimize down payments and rewards borrowers with the bonus of larger interest deductions. FHA-guaranteed mortgages require 3.5 percent down, but offset even that by allowing buyers to finance closing costs. The VA, for its part, requires no down payment. And my own modest effort to increase Fannie Mae and Freddie Mac down payment requirements from 3 percent to 5 percent (when I was the acting director of the agency overseeing them) has already been reversed.

It was not always this way. In its early decades, the FHA program had strict underwriting rules and down payment requirements. A generation ago, saving for a down payment was an accepted discipline for young families seeking mortgages, and 20 percent down was the basic rule of thumb. No longer, of course.

This seems both curious, given the wealth-building policy objective at stake, and dangerous, given the risks involved. For anyone who doubts these risks, consider that the default rates in the FHA program often exceed 10 percent and during the crisis reached 33 percent. More generally, negative equity (that is, a loan balance exceeding the value of the house) at the time of default is a powerful predictor of the likelihood of foreclosure, particularly if the borrower's ability to repay has been diminished.

To be fair, the VA program, with its even-weaker down payment requirement, has better loan performance than the FHA program. As a recent Urban Institute study points out, though, this is likely due to the VA's use of a more conservative income-based underwriting test and the limit on the maximum size of its guarantee.

There is a way out – indeed, multiple ways to make it easier to own a house without resorting to high leverage. Let me give one example of a subsidy that focuses on building equity, not debt.

The Federal Home Loan Banks, which provide liquidity for mortgage lenders, are required by law to set aside 10 percent of their income to fund affordable-housing. A portion is set aside by each Bank to subsidize low- and moderate-income first-time homeowners. This subsidy is provided directly to the homebuyer in the form of a matching payment to the buyer's own down payment.

In some cases, the match is 3 or 4 times the borrower's contribution. These combined funds are then available to the homebuyer to make a down payment and pay closing costs. The program also requires borrowers to attend a homebuyer education program. Not surprisingly, mortgagees benefiting from set-asides proved to be more likely to weather the financial crisis.

State housing finance agencies offer similar programs and are leading sources of down payment assistance, especially for first-time buyers. And numerous other local programs exist as well to supplement down payments.

There are two bonuses with this approach. First, it is simple to establish and enforce eligibility guidelines, such as income restrictions, for the program. That means the subsidy is actually delivered to the intended beneficiaries. It can be narrowly targeted at first-time homebuyers. Subsequent steps up the ownership ladder could be unsubsidized.

Second, enhancing the credit quality of borrowers lowers their cost of credit. What's

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There is a way out – indeed, multiple ways to make it easier to own a house without resort to high leverage.

more, lenders' requirements for borrowers to pay for private mortgage insurance if they are highly leveraged may be waived sooner if the assistance gets the borrower to a 20 percent equity stake faster.

DownPaymentResource.com provides a clearinghouse for researching such programs. In June 2016, it had 2,500 down payment assistance programs in its database, with an average down payment benefit of $8,260. In 82 percent of the 513 counties it studied in conjunction with RealtyTrac (a private firm that provides information on the foreclosure market), the average down payment assistance available exceeded 3 percent of the price of the median-valued house in that area.

Not all down payment assistance programs work equally well. The FHA suffered substantial losses from a program focused on seller-funded down payment assistance. But the flaws in that approach are now well understood.

Down payment assistance, by the way, need not come at the time of purchase. It could be provided over the first several years of ownership, contingent on the borrowers' staying current on their payments. Should a borrower become delinquent, the subsidy could be redirected to offset losses to the lenders.

The cost (personal and political) of shifting toward equity subsidies is that families can't

Shorter amortization might mean that people buy less expensive houses and market prices don't inflate quite as much as when they are dominated by high-leverage 30-year financing. But the benefits are substantial.

buy houses until they have enough savings for a down payment. But isn't that better than watching families hit a personal or financial bump in the road and then try to avoid foreclosure when they have no equity in their homes? Promoting more of a savings culture shouldn't hurt either – millions of Americans are failing to plan adequately for their children's college education, not to mention their own retirement.

Mortgage Terms

One reason, apart from lower monthly payments, that the 30-year mortgage endures in an increasingly volatile economy is that the government-backed secondary market supports this product. So, we find interest groups, ranging from non-profits promoting affordable housing for marginal buyers to realtors to the big participants in the secondary market all pushing for government support. But it is surely time to challenge our devotion to the path of least political resistance, particularly because the 30-year mortgage is often a bad fit for borrowers today.

Many first-time buyers remain in their houses for five years or less. That's a period in which loan amortization on a 30-year mortgage may not even be enough to pay the closing costs when the house is sold, much less leave an equity cushion. After five years at today's rates for a 30-year mortgage, just 9 percent of the mortgage is paid off. And even a thin equity cushion is not assured, since it depends on house prices remaining stable. Yet typically, it can cost a family 8 to 10 percent of the value of the house to sell and relocate.

More broadly, according to the National Association of Home Builders, the average owner changes houses every 13 years. After 13 years, a homeowner may have paid down a bit more than 30 percent of the original loan amount – a better cushion, but one still leaving nearly 70 percent of the loan unpaid. Note, moreover, that there is reason to believe that the turnover rate in ownership could increase because younger workers appear more apt to change jobs, and even careers, than their parents or grandparents.

To be clear: a 30-year amortization schedule is not good or bad per se, and I am not advocating its elimination as a contractual option. I am suggesting we be more thoughtful about using public policy to steer buyers toward 30-year obligations.

Shorter-term mortgages, by the way, can be made more attractive to buyers with limited means. Two years ago, Edward Pinto, a fellow at the American Enterprise Institute (and earlier in his career, the chief credit officer for Fannie Mae), introduced something he calls the "Wealth Building Home Loan." This is simply a 15-year mortgage, with little or no money down and some combination of subsidy to "buy down" (that is, to lower) the interest rate and prudent underwriting standards that make it possible to bring the monthly payment within shouting distance of the payment on an equivalent 30-year mortgage.

The rapid amortization offsets the lack of initial equity and the low interest rate means both that the loan is unlikely to be refinanced and that most of every payment pays down principal. After 15 years, the loan is paid off

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and the family has that monthly payment amount to deploy for a child's college education or to plow into retirement savings.

That is just one idea; here's another. Suppose a 30-year mortgage were divided into two distinct payment obligations, one with a monthly payment needed to amortize up to 80 percent of the house cost in 30 years, the other a monthly payment calculated to amortize the remaining portion of the total loan in five years. That way, in five years the borrower would have more than a 20 percent equity stake to rest on, provided house prices did not decline. And the borrower would get the equivalent of a pay raise at the five-year mark because one payment stream would be completed. It would be like saving for a 20 percent down payment *after* buying the house.

Even more simply, borrowers could be educated on the equity-building benefit of making additional principal payments each month on a 30-year loan, or of obtaining a 15- or 20-year mortgage rather than a 30-year one. Or lenders could promote 5/1 or 7/1 or 10/1 adjustable rate mortgages – mortgages in which the interest rate is fixed for an initial period (here, five, seven or 10 years) and then turn into adjustable rate mortgages for the remaining term. The idea would be to appeal to borrowers not intending to live in the same house for more than five to ten years. Such a loan would have lower interest rates and faster equity accumulation than 30-year fixed rate mortgages.

I hear the objections – shorter amortization would still mean higher monthly payments. It might even mean that people buy slightly less expensive houses and market prices don't inflate quite as much as when they are dominated by high-leverage, 30-year financing. But the benefits are substantial: equity would build faster and, over a working life, families would have a lot more money to finance other consumption or to save for retirement or health care or education. Note that financial markets, which process enormous volumes of securitized mortgage debt, would be less risky, too.

The FHA, rather than being the government's poster child for highly leveraged housing finance, might take a leadership role in exploring such options.

Mortgage Pricing

Today, you hear complaints about pricing mortgage credit risk – the insurance premium built into the mortgage rate to compensate the lender for default risk. Some say that the FHA charges too much for mortgage insurance or that Fannie's and Freddie's guarantee fees are too high – notwithstanding that mortgage rates (including the fees) are lower than most of us thought we would ever see in our lifetimes. So how should these fees be set, and how is this relevant to the debate over leverage?

Government-backed lenders should differentiate among borrowers in a manner compatible with taxpayers' interests and sound financial practice. That is, eligible families should pay rates commensurate with their individual risk profiles. Those with lower credit scores and higher debt loads should pay higher rates, other things equal, than borrowers with stronger credit records and lower debt loads. That would ensure taxpayers and credit-risk-bearing investors are protected. It would also help families and neighborhoods because it would reduce the incidence of default and the consequent spillover costs.

The previous paragraph is heresy to housing-policy specialists who aren't wed to market-driven pricing. But I expect most Americans would read it and say "duh." If we substituted autos for houses, housing specialists would mostly say, well of course, riskier drivers should pay more for auto insurance than safe drivers. Yet, for reasons of inertia and political expedience, we use housing finance as a hidden vehicle for income redistribution based on creditworthiness, with the least creditworthy getting the biggest benefit.

Prudent insurance pricing and underwriting standards aren't meant to punish, nor are they meant to deny access to homeownership. They can serve as a means of signaling qualifications that give people clear information as to what they need to do to get into a sustainable homeownership position. But asking families (including lower-income families) that manage their money prudently to pay the costs for families that do not do so seems arbitrary and unfair.

This is an essential problem in housing policy. The entrenched interests relying on the hidden income transfers embedded in charging low-risk borrowers more for mortgages so higher-risk borrowers pay less than their costs are numerous. Not surprisingly, we end up with more high-risk borrowers and more defaults. If we really want to help less creditworthy borrowers on a path to homeownership, let's start with better financial education, budgeting, and fixing credit problems, while improving credit scores. Then help them save for a down payment and perhaps provide matching funds as a subsidy.

Second Liens

A 1982 federal law precludes holders of first liens from limiting second liens – that is, claims against the house that are subordinate to the first mortgage. Given the enormous losses of the past 10 years resulting from house owners extracting equity from their properties by means of second mortgages and then defaulting, it seems clear this restriction should be reconsidered. I am not aware of another lending arena in which a secured holder of a senior lien has no say in subordinate liens that may affect the quality of its collateral.

In a free society, people should be able to make decisions about how to use their wealth, including their home equity. But our legal framework governing mortgage lending should not create incentives for families to put themselves at greater risk; nor should it allow borrowers to freely put lenders and taxpayers in a worse credit position after the fact. Surely we could construct some sensible, prudent guidelines governing second liens, particularly when taxpayer-supported lending mechanisms are being used.

A ROLE FOR STATE AND LOCAL GOVERNMENTS

While I've been writing exclusively about federal policy, state and local governments also have a significant impact on homeownership. As already noted, state and local housing agencies are a key source of down payment assistance. Cutting the other way, though, states and localities impose sizeable taxes and fees on residential real estate transactions, adding to closing costs for buyers and sellers. As Larry White of New York University noted in the Second Quarter 2016 issue of the *Milken Institute Review*, they also add to homeownership (and rental) costs through land-use restrictions and building ordinances that are not justified by the public interest.

EVEN EQUITY SUPPORTS SHOULD HAVE LIMITS

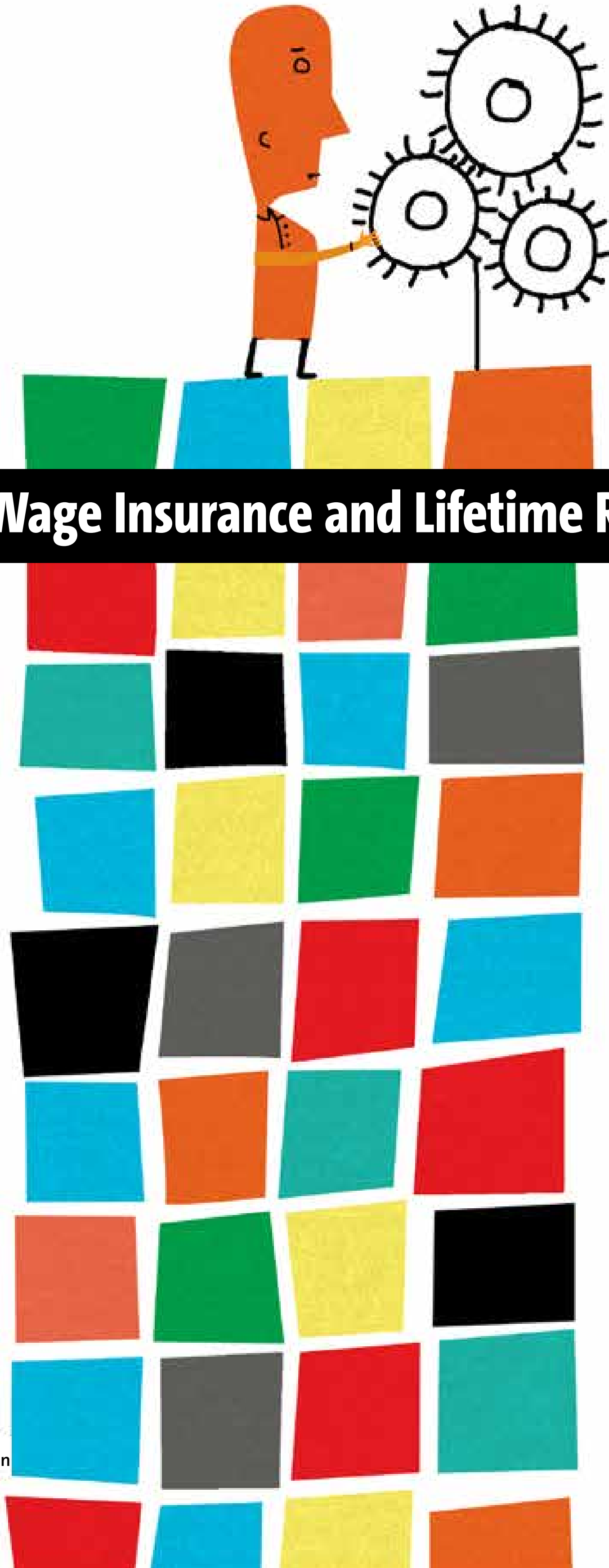
Even families that save enough for reasonable down payments need to be able to afford the monthly payments while withstanding the financial bumps everyone faces along the road. For those with low or unstable income, homeownership can pose stark risks. We do these families no service by encouraging them to stretch their limited or volatile income to buy houses, then leave them to turn slowly in the wind when they must sell but are unable to sell without a loss.

To put a finer point on it, policymakers on both sides of the aisle should temper their impulses to promote homeownership because ownership is not for everyone. Ownership limits one's options to easily relocate – whether to change jobs, respond to new family circumstances or reduce monthly expenses. And housing investments in low-income neighborhoods tend to have lower rates of return and greater price volatility than in other neighborhoods. Those with uncertain incomes may be better off building nest eggs through other forms of savings than that created as a byproduct of monthly mortgage payments.

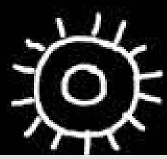
WHOSE HOUSING POLICY?

Our policy debate should not be about the desire of realtors or homebuilders or lenders to maximize the number of profitable transactions. Nor should it be about how to maximize the homeownership rate, regardless of the consequences. It should be about building a sturdier structure all around, with a policy and legal framework that strengthens family finances and enhances the capacity of capital markets to lend willingly to creditworthy borrowers.

It's pretty clear that we've been sidetracked into policies that make the mortgage market bigger and more volatile. It's equally clear that we've strayed far from the broader public interest – and that the route back lies in building equity, not debt.

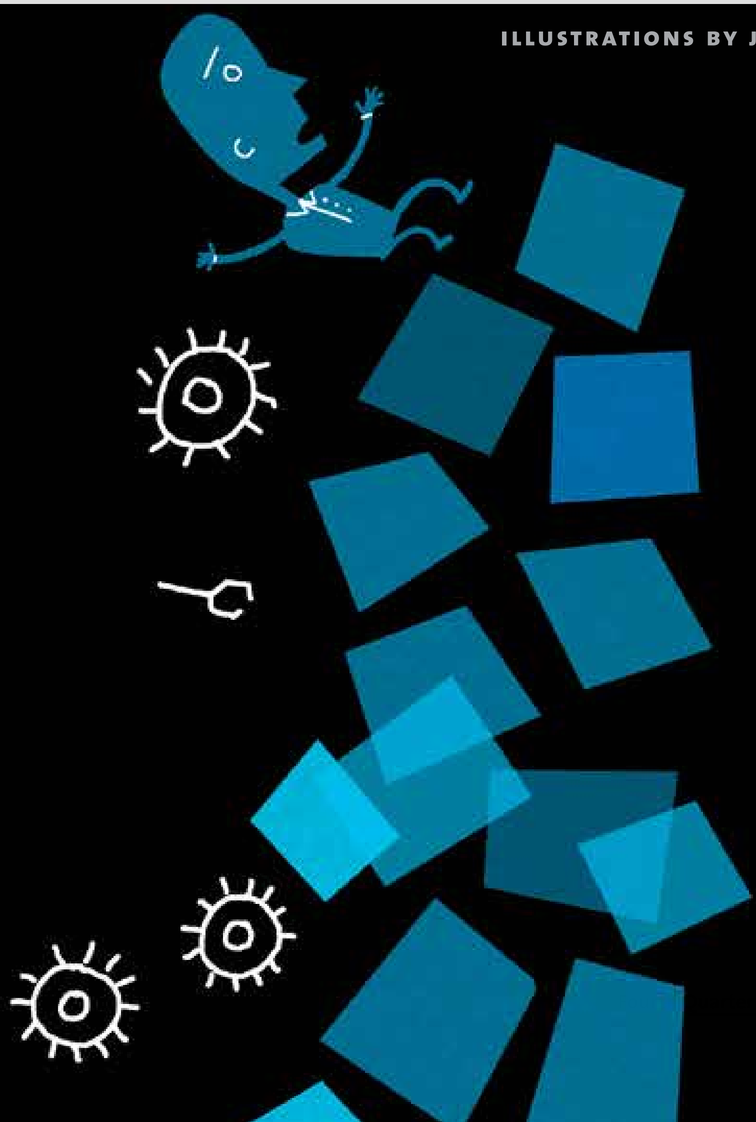


Universal Wage Insurance and Lifetime Retraining



Good Ideas Whose Time Has Come • BY ROBERT LITAN

ILLUSTRATIONS BY JAMES YANG



Regardless of who wins the White House in November – and in spite of all the distractions of this bizarre campaign season – it's a sure bet that the election will be remembered as the year voters revolted against globalization in general and open-trade policies in particular. Nor has this reaction been confined to the United States. Britain's shocking decision in June to abandon the European Union was a product of the same forces of reaction to economic integration with anti-globalization overtones.

In my view, none of this should come as a surprise. What is surprising is that the rebellion took so long to break out.

For decades, it's been gospel in Washington (and in European capitals) that the gains from open trade outweighed the losses. This deeply held belief, reinforced by a mountain of research, powered the negotiators of multiple trade agreements – global ones, like the Tokyo (1979) and Uruguay (1994) rounds of the multilateral General Agreement on Tariffs and Trade (which led to the formation of the World Trade Organization), regional deals like Nafta, and bilateral deals like the ones the United States has with Australia, Chile, Israel, Korea, Panama, Peru and Singapore that cumulatively stripped away most protection from domestic producers.

Even the most faithful followers of Adam Smith and David Ricardo, however, understand that no trade deal benefits everyone. That's why most free traders generally favored the Trade Adjustment Assistance program, which provides aid to workers who lose their jobs. The program was first enacted in 1962 and has been modified multiple times in the intervening years. For some, trade adjustment is a simple matter of economic justice: affluent societies shouldn't let workers bear the brunt of the collateral damage from globalization in the name of the collective good. For others, it's a matter of political reality: the assistance program would serve to weaken organized labor's opposition to open trade.

In fact, unions supported the original program, though with time they came to dismiss assistance as "burial insurance" and now actively oppose ongoing efforts toward global integration – most recently, the Trans Pacific Partnership. The explanation for labor's disenchantment is straightforward. In many cases, it's hard to distinguish workers who lose their jobs to trade from those who lose them for the myriad other reasons that industries rise and fall in a technologically driven economy. And the program's administrators are not in the business of giving every displaced worker the benefit of the doubt.

Moreover, when workers do qualify, compensation often seems inadequate. The Trade Adjustment Assistance program provides extended unemployment insurance, which in recent decades has been tied to required participation in retraining programs – many of which have poor track records at providing jobs at anywhere near the wages displaced workers previously earned.

More fundamentally, neither the Trade Adjustment Assistance program nor any other federal program has helped workers who were let go because their employers found it cheaper to automate their work – or simply because consumers' tastes have shifted away from the products and services they made or provided. The fact that these non-trade factors have

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surely accounted for far more worker dislocation than trade ever did has not deterred critics of trade deals. Liberalized trade at least is something that governments can stop or even reverse. Not so, or at least not so easily, with job-displacing innovation and changing consumer demand.

Accordingly, any program designed to ease worker dislocation that is narrowly targeted at cushioning the job loss caused by trade competition alone is bound to fail in political terms. Trade liberalization has become just too easy for elected officials – or those wanting elected positions – to blame for job losses. If the economy were growing rapidly, constantly churning out jobs paying good wages for the vast majority of workers, this blame game would be more difficult to pull off. But with slow growth and widening income inequality over the past 15 years, the table was set for the backlash against trade that has been so evident this year.

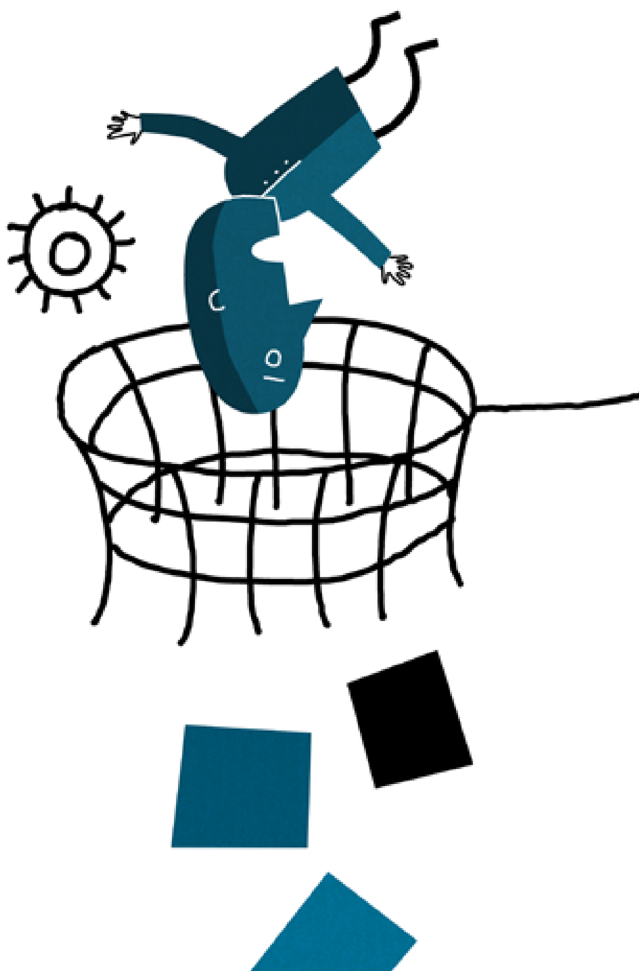
Economic headwinds, due overwhelmingly to factors having nothing to do with trade, make it even more important for those who want to preserve (or expand on) current open-trade policies to do a far better job of managing economic dislocation. Moreover, from a purely moral perspective, the country owes displaced workers a leg up, whatever the cause of their distress. This includes addressing the free-rider problem that inhibits firms from doing more worker retraining themselves for their employees. Companies are understandably reluctant to spend to improve workers' skills when those individuals can simply move to other jobs – especially when economic times are good.

So, what follows are two proposals designed to reduce frictions on both sides of the labor market – to ease workers' legitimate anxieties about economic change from whatever source, and to encourage employers to provide more training – while improving the chances that more Americans can live the American Dream even in a turbulent economy.

WAGE INSURANCE

You can insure against many of the risks in life – damage to property, losses linked to ill health and so forth. But you can't buy insurance against losing your place in the economic pecking order. Society's answer to job loss – temporary (and modest) unemployment insurance – is a feeble substitute.

Why this particular limitation? Private insurance carriers won't sell you a policy against permanent wage losses because of the problem of "adverse selection": The people most likely to buy the insurance would also be the most likely to suffer a loss. It's analogous to the adverse-selection problem that led an initially reluctant President Obama to require



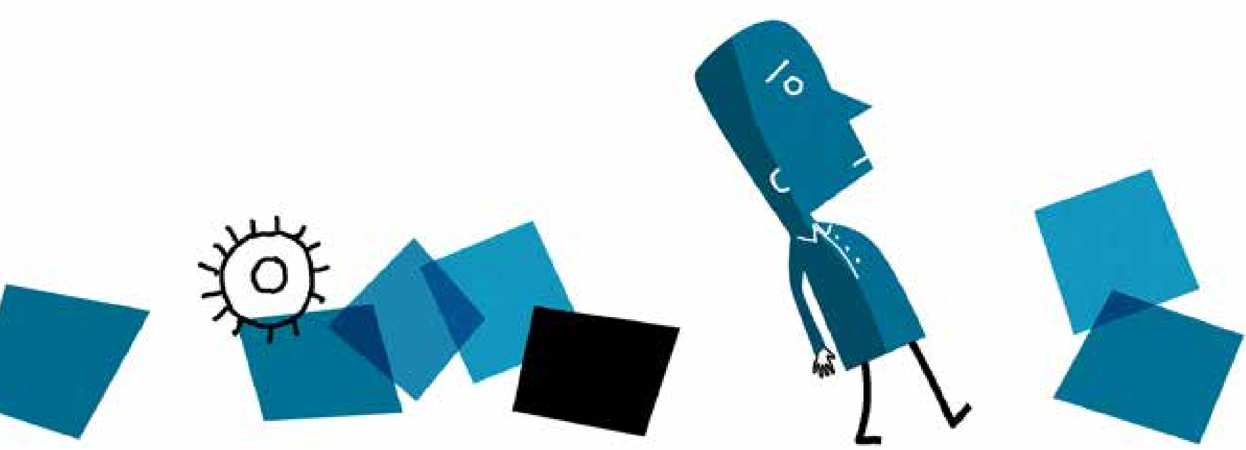
everyone to buy coverage as part of the Affordable Care Act. If enrollment were voluntary, the insurance rolls would be disproportionately burdened by the sickest individuals, raising the cost of providing insurance and discouraging everyone else from buying it.

The United States first limited the adverse-selection problem for temporary income loss arising from involuntary unemployment when it gave the states incentives to provide broad-based, employer-financed unemployment insurance. (Britain, by the way, was the first country to adopt unemployment insurance, in 1911.) I have spent much of my professional career arguing that government ought to extend the protection to include longer-term losses in wages. Back in 1986, Robert Lawrence, then an economist at Harvard, and I proposed wage insurance for workers displaced by trade, an idea that Congress adopted for workers over the age of 50 in 2002. In the 2016 State of the Union address, Barack Obama became the first president to endorse the broader idea of government wage insurance for the entire middle-income labor force.

The details of wage insurance now in place and plans urged for wider adoption have essentially not changed for several decades. Workers displaced by trade who toil for at least three years on their prior jobs receive half the difference between the shortfall of their new wages and the pay of their previous job, up to a cap of $10,000 per year. So a worker who was laid off a $40,000-a-year job and replaced it with a job paying just $30,000 would receive half the difference – $5,000 a year – from the government.

Importantly, the insurance payments begin only after workers have obtained the new jobs and end two years from the date of initial unemployment, giving them strong incentives to take early offers and not remain idle waiting for better offers that may never come while they collect regular unemployment benefits.

The Obama proposal is basically a much broader version of the wage insurance element currently embodied in the Trade Ad-

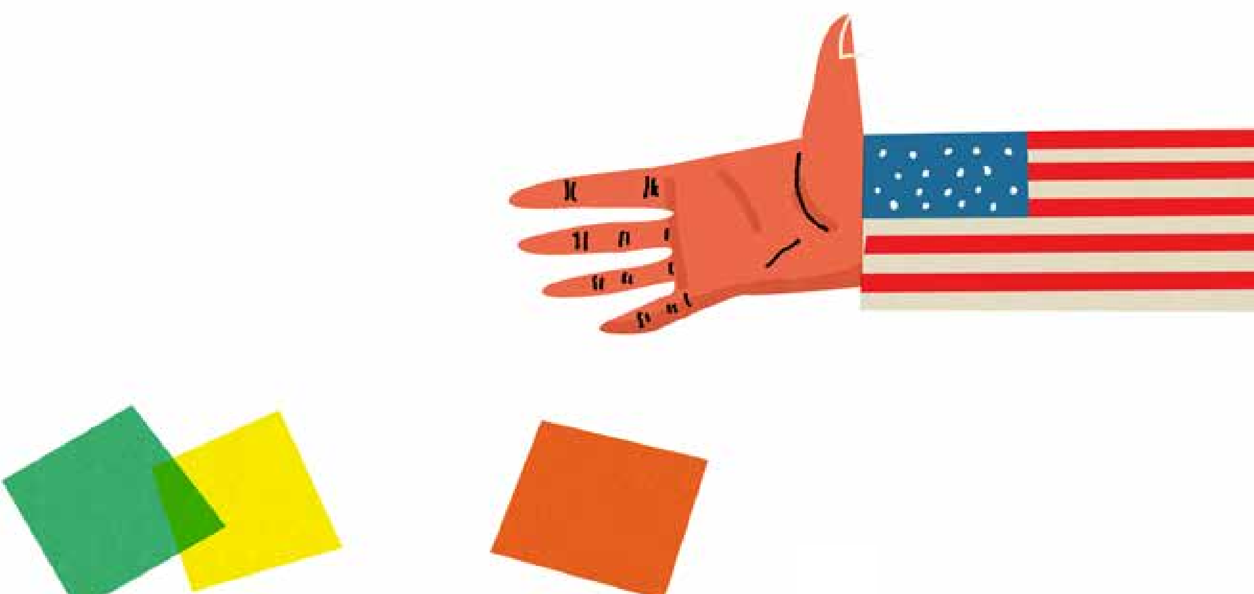


justment Assistance program. It would cover all workers who lose jobs paying no more than $50,000 for any reason (not just trade) and take new jobs at reduced wages. The president's proposal is hardly a panacea, but it would go some distance toward addressing the fears of the large portion of the electorate worried about being pushed off the economic ladder by trade or other forces beyond their control.

Several analyses made before the Great Recession indicated that such a broader wage insurance program would cost in the neighborhood of $3 billion to $5 billion a year. The Congressional Budget Office has provided the most recent cost estimate, post-2008, of just $27 billion over 10 years, or less than $3 billion annually. That's lower than prior cost estimates, primarily because of the $50,000 earnings eligibility cap. Outlays of these amounts could easily be financed by a small increase in the federal unemployment insurance tax. But even if the program had to be financed out of general revenues, it would be a small price to pay for addressing the very real concerns of tens of millions of Americans – and perhaps give Washington some backbone in defending an open-trade system that generates net benefits for the economy.

If it were up to me, I'd be more generous than the Obama proposal, covering workers making up to $100,000 on their previous jobs, perhaps even if they held those jobs for less than three years. I would also be more comfortable if the annual payments were more generous, tying them to inflation or raising the maximum annual payment to $15,000 or $20,000.

One reflexive objection to wage insurance is that it would extend benefits to all middle-income earners with full-time jobs, some of whom would resent handouts from Uncle Sam. But this objection hardly bears close examination. For one thing, wage insurance is a hand up, not a handout, for people who are already helping themselves to recover from job displacement by accepting less-lucrative employment. Conceptually, it is no different than the subsidies the government has awarded buyers of electric cars in order to slow climate



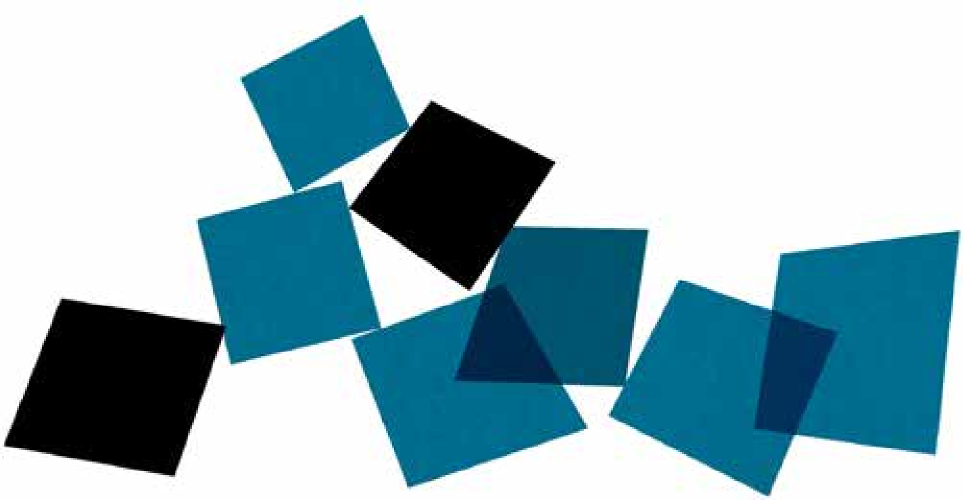
change – a source of "help" that I suspect few, if any, of the green buyers resented.

In principle, wage insurance should have strong bipartisan appeal. Democrats should recognize that income losses linked to a step down in employment is often as great a worry among low- and middle-income workers as short-term unemployment is, and so should welcome insurance as a legitimate extension of the social safety net. Republicans, for their part, should be attracted by the incentives the program creates for displaced workers to find new jobs quickly.

Of course in this era of Congressional gridlock, sweet reason alone will not get just any good idea enacted. But consensus might yet be found if the right interest-group coalition were mobilized. The business community, which is potentially threatened by the antigrowth populist backlash, should back the idea if it can get past the objection that the program would cost its members a very modest amount of money, some of which could be passed on in the form of slightly higher prices (there are few free lunches in this world). So, too, should the elected officials of states and localities that depend heavily on exports.

LIFETIME RETRAINING-LOAN ACCOUNTS

My second proposal is retraining with a twist. Wage insurance would not only help the displaced workers who would directly benefit from it, but would act like a subsidy to firms for providing on-the-job training – the most effective job training of all. That's because with the wage-insurance payments in hand, displaced workers would be more likely to accept the lower wages that firms can afford to pay to workers who lack the precise skills



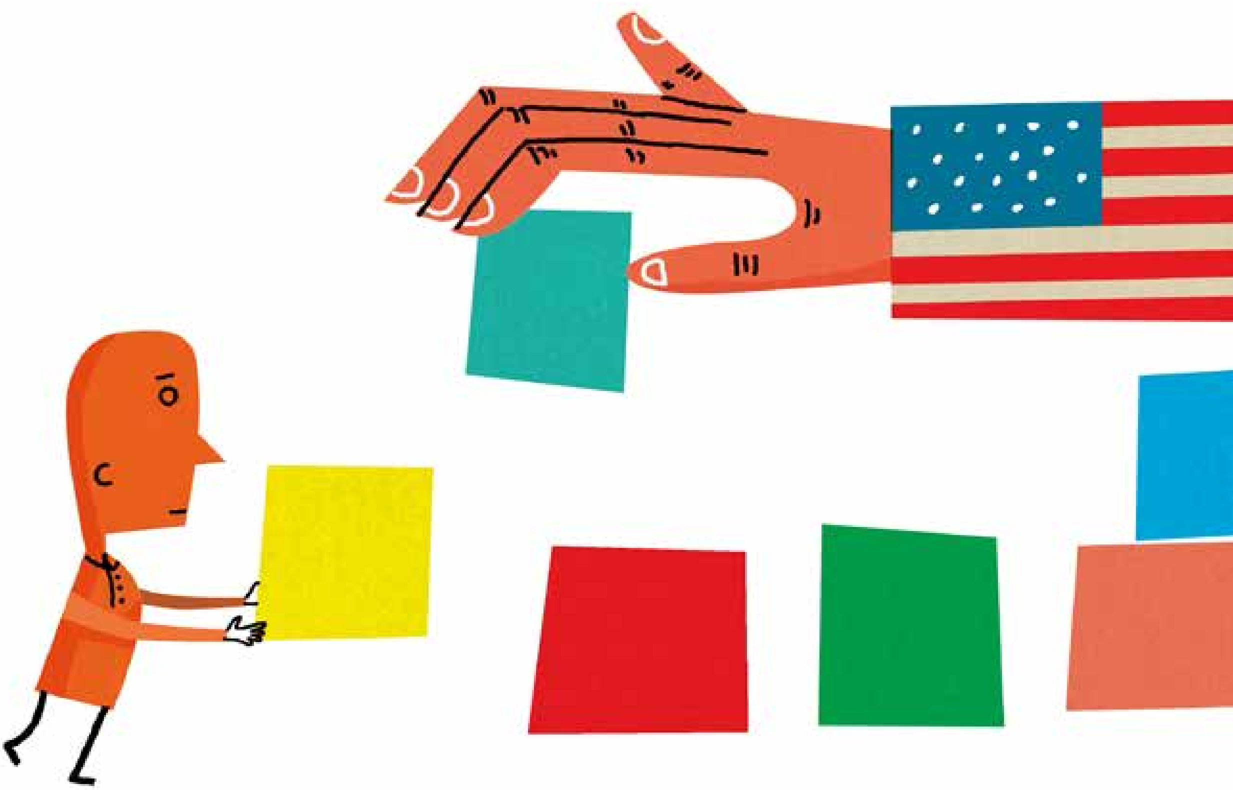
needed to reach peak productivity on day one. Federal wage insurance would thus considerably augment the tax credits that some states now make available to firms for retraining expenses to offset the free-rider problem of training workers who are subsequently free to take their new skills elsewhere.

But finding a new job more quickly with the aid of wage insurance wouldn't help displaced workers who want to train for new careers, but don't have the means to pay for that training. According to a 2016 Federal Reserve study, roughly half of American adults have less than $400 (no misprint) in ready cash to meet an emergency. So relatively few would be able to drop out of the labor force and go back to school for an extended period, even if they had working spouses.

The federal government has well-established programs for providing grants and subsidized loans for young adults going to college, and the federal tax code allows individuals of any age to claim a lifetime learning tax credit of up to $2,000 per year against tuition and fees for attending a qualified educational institution. There's a catch, though: they don't provide the cash upfront for those lacking the means to pay in the first place.

Loans can bridge this gap. But traditional bank loans for going back to school, especially for those past traditional college years, can be difficult if not impossible to get without collateral and may be restricted to people who are enrolled at least half-time in an educational program. It's much harder to get a conventional bank loan if you're going to night school, taking, say, one course a semester, and working during the day.

Moreover, private-sector college loans have conventional terms. I have looked, but can't find, private bank loans whose repayment is tied to income, as is the case with



income-contingent repayment options that are an available (if rarely used) option on regular federal college student loans. Such loans are especially advantageous for students worried about their ability to make their loan payments if they are laid off, or if their new careers don't prove as lucrative as they hoped. With income-contingent repayment, at least they won't go bankrupt or have their credit ruined if their plans don't work out or if forces beyond their control – an economic recession, a personal medical crisis – prevent them from climbing the career ladder.

But even with these limitations, the Department of Education estimates that as many as 90 million Americans, a significant portion of whom have aspirations for new careers, take part in some form of adult education each year. Let's have the federal government make income-contingent repayment loans available to all adults throughout their working lives, up to the age at which people qualify for full Social Security benefits. Repayment schedules could be calculated and easily enforced using a few extra lines on households' annual federal income tax forms.

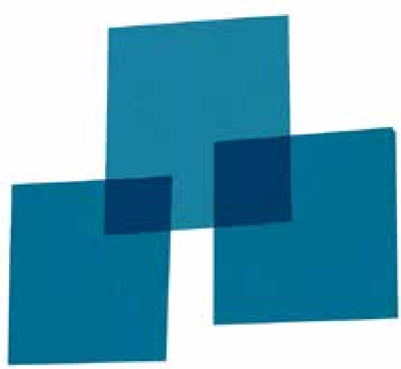
Federal retraining loans, like other college loans, would be funneled through the educational institutions that the trainees attend; this would remove the temptation to divert loan funds for non-education expenses. To minimize the potential for rip-offs by fly-by-night trade schools, federal loans would be available only through institutions meeting minimum standards – among them, a threshold placement rate for new grads, plus full disclosure to prospective students of where grads have been placed and at what salaries.

As with the current income-contingent repayment student loans, the lifetime income-contingent repayment loan accounts should have a cap on repayment somewhat above the amounts borrowed in order to cover the costs of borrowers who don't earn enough to repay the full amount. It is even possible that the government would make money on the program if most workers do well after retraining.

It is more likely, however, that the costs of under-payers would exceed the gains from the full payers. But again, like wage insurance, this would be a cost worth bearing because it would ease friction in the labor market and very likely contribute to an overall improvement in the productivity of the labor force, generating tax receipts and gains to consumers and producers not directly attributable to the program.

This spillover effect raises a Bernie Sanders question: if society as a whole benefits, why shouldn't lifetime retraining be free? One answer: given the budget math showing increasing deficits over the next several decades due to rising entitlement costs, it would be fiscally irresponsible to add even more to the deficit. Yes, in theory, taxes could go up to pay for this particular idea, but Democrats in particular already have pledged rising taxes to pay for other new programs.

Deficits and taxes aside, there is something to be said for requiring people to pay for their education or retraining. Knowing they are on the hook for at least some amount would create an incentive for workers to shop for training more carefully, as well as encourage educational institutions to compete by providing top value for their students' dollars. Note, too, that the proposed income-contingent



repayment system would limit repayments by borrowers who, for one reason or another, are unable to recoup their investments.

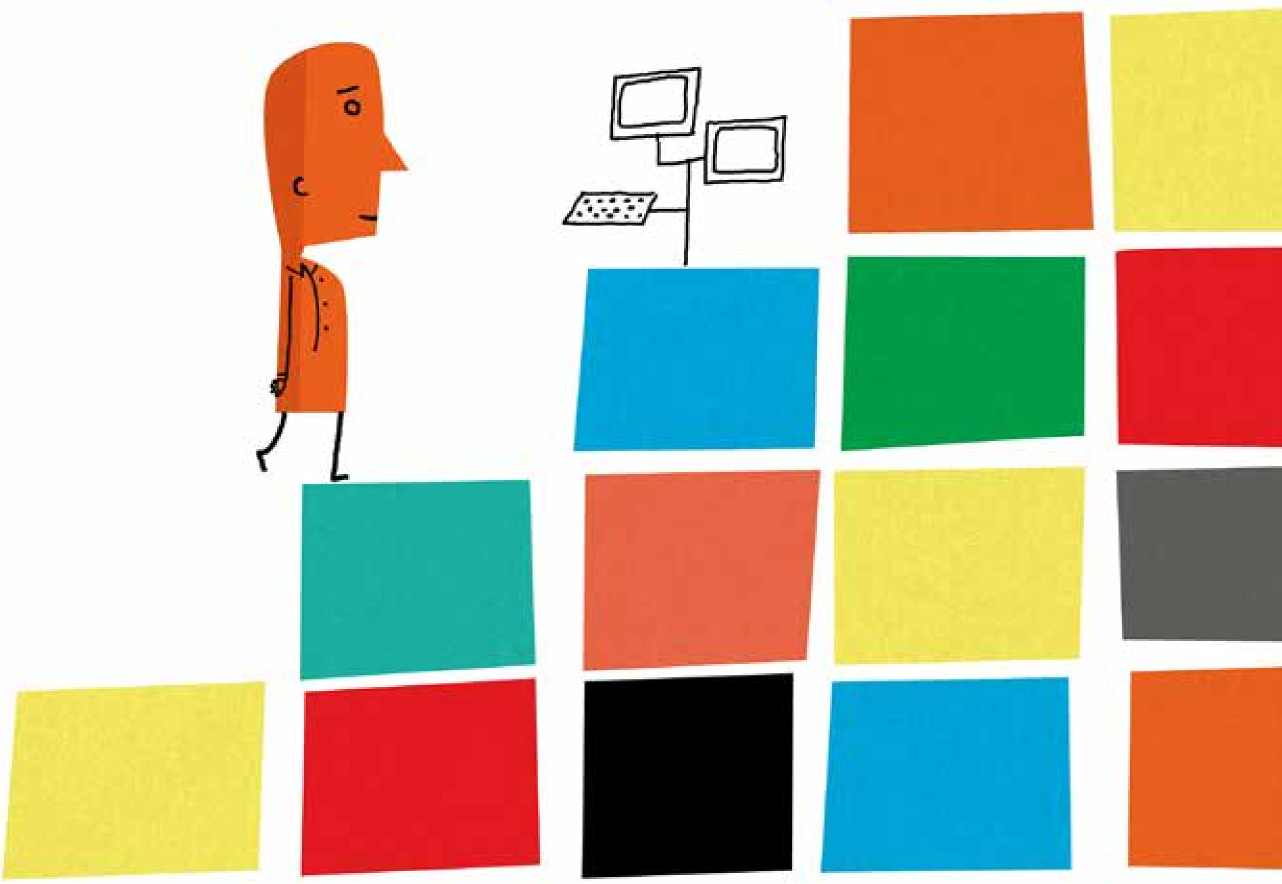
THE ILLS THAT WAGE INSURANCE AND RETRAINING CANNOT CURE

Some perspective is warranted here. Wage insurance and lifetime retraining focus on the issue of income insecurity – the reality that it is far too easy to slip off the economic ladder and never fully recover. Neither program is designed to make much difference for Americans who enter the labor market with marginal education and skills.

I don't have a silver bullet to fix the daunting moral and political problems associated with income inequality and inadequate social mobility. But I am confident that we need to be more open to changes, ranging from charter schools to limited minimum-wage increases to expanded earned-income tax credits for low-wage workers.

Arguably most important, we need to dispense with the idea that government is the natural enemy of efficiency and economic justice. There are certainly plenty of ways in which government intervention can backfire, reducing the size of the economic pie by means of ill-considered regulation or by defending the privileges of incumbent businesses that find it cheaper to compete in the "political market" than in the markets for goods and services.

But the pendulum has swung too far. To manage the consequences of the sorts of economic displacement that seem inevitable in a rapidly changing global economy, we need smarter government – not less of it.



Letter From Bolivia

BY CHARLES CASTALDI

For centuries, Bolivia has been the poor cousin of its neighbors in the southern cone of Latin America. An outpost of the Inca empire in the 16th century, the area endured a brutal Spanish conquest that provoked the indigenous population into a string of uprisings, each of which was met with bloody repression. After independence in 1825 – the victors named the country after Simón Bolívar, the Venezuelan father of Latin America's anti-colonial struggle – it enjoyed an all-too-brief period of enlightened rule. But within a few years it was at war with its neighbors Peru, Paraguay and Chile. In the process, Bolivia lost both its access to the sea and the rich load of minerals under the coastal desert.

Except for a few attempts to improve the lot of indigenous people in the middle of the 20th century, corruption, electoral fraud and inept military rule seemed to define Bolivia's destiny. In the late 1980s, sweeping macroeconomic reforms combined with a rapid conversion to free markets – the "shock therapy" that made then-Harvard economist Jeffrey Sachs a star of his profession – tamed Bolivia's hyperinflation, which had reached an unfathomable 24,000 percent. But shock therapy fell short in meeting its broader goals. Bolivia's indigenous population remained among the poorest on the planet, and the country remained best known for its signal export, coca.

FEDERICO PARRA/AFP/GETTY IMAGES

In the mid-1990s, Juan Evo Morales Ayma, an Aymara Indian who had risen out of poverty to become the leader of the coca growers union, took an essentially defunct right-wing party called MAS (Movement Toward Socialism) and reoriented it left. Evo, as he is known to one and all, began protesting against the U.S. funded attack on coca growing, which was the only source of income for many impoverished Bolivians. The country had become a major supplier to Colombian narcos in the 1980s, who processed the leaves to feed the robust American appetite for what was jocularly known to party animals as Bolivian marching powder.

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In 1997, Morales was elected national deputy from Cochabamba, a city in the Andes. The powers-that-were did all they could to stymie his rise. However, the Aymara and Quechua Indian poor, who are a majority of the population, had seldom seen a politician who not only spoke for them, but actually looked like them. The United States declared him a threat to stability and Bolivian democracy, giving him a helpful boost among his constituents.

Those were also the halcyon days of the IMF's and World Bank's push for privatizing inefficient public sectors in developing countries. So, in the Bolivian town of Cochabamba, the municipal water authority was sold to a private consortium in which Bechtel, the multinational construction firm, was a major shareholder. The newly privatized utility doubled rates. But in the bone-dry *altiplano*, the Andean highlands around La Paz, water and access to it are not to be trifled with. The rate increases were met with stiff opposition that morphed into what came to be known as the Cochabamba water wars. Evo and his *cocaleros* joined the protests, which were met with violent government repression.

Just a few years later, another myopic move added credence to the view of many Bolivians that the white-skinned folks who ran the government were only interested in lining their pockets. This time, it was the sale of natural gas assets to American companies, allegedly at below-market prices. (Bolivia has the second largest reserves in Latin America.) More protests erupted, answered by yet more repression. But by awakening the fury of the Indians, the political establishment signed its

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own death warrant. One president after the other resigned in the face of ever-deepening crises. In 2005, Evo won the presidency by a landslide.

The initial take in Washington was that the populist leader was cut from the same authoritarian cloth as Hugo Chávez in Venezuela and was sure to drive the economy (further) into ruin. In fact, this government has had an economic track record that is the envy of its neighbors.

Growth for the last five years has averaged above 5 percent; all told, since Morales took office in 2006, GDP (adjusted for inflation) is up by 55 percent. Meanwhile, the central bank had stashed away sufficient foreign currency reserves to pay for a year and a half's worth of imports before the commodity boom ended in 2012. Only China can make the same claim.

Equally important, the income gains have been shared; the percentage of the population living in poverty has been reduced by one-third during Morales' years in office.

When I arrived in Bolivia, one story was monopolizing the headlines: a scandal involving Gabriela Zapata, an ex-girlfriend of Evo – he's not married – and her seemingly miraculous rise in a Chinese company that did $500 million worth of business with the Bolivian government. Beyond the corruption narrative, the story included a son she had with Evo, who he claimed had died as a baby.

Then, miracle of miracles, she revealed that the baby was alive and grown up, whereupon the government charged she had made up the story. She was subsequently arrested for money laundering, fraud and influence peddling. To top things off, the government also jailed her lawyer.

This outline for a telenovela – oops, this news – first dropped in February, just as Evo was asking voters to approve his proposal to change the constitution so he could stand for a fourth term. The "no" votes won by eight percentage points and Morale's government lashed out at opponents and the press, blaming them for manufacturing the Zapata story to besmirch his reputation.

SANTA CRUZ

My first stop in Bolivia was Santa Cruz de la Sierra, which lies in a fertile lowlands plain east of the Andes and is a geographic metaphor for the division that has riven the country for much of its existence. Santa Cruz has historically been dominated by land-owning oligarchs of European descent, whose race-based dislike of the "indios" from the western highlands is, even today, barely concealed. This translates into an Obama-like phenomenon: when some people criticize Evo, saying that the Zapata scandal confirms their worst fears about his corrupt and authoritarian leanings, it's hard to parse out how much this has to do with his being a dark-skinned man of indigenous blood.

By awakening the fury of the Indians, the political establishment signed its own death warrant.

But it doesn't take long to see that the economic boom on Evo's watch has remade Santa Cruz from a sleepy agricultural backwater to the economic engine of Bolivia. Construction, both multistory office buildings and housing, is booming. Indeed, Santa Cruz is one of the fastest growing cities in the world. Big money has been made virtually overnight, explaining the scads of Porsches, Mercedes and Audis that cruise the streets.

For decades, agriculture was the mainstay of the economy of the department of Santa

Cruz, with mostly rice, corn, wheat, sugar, meat and poultry on the menu. (A "department" is the equivalent of a state in Bolivia.) Today, 70 percent of the food consumed in Bolivia is grown in the department. But it's natural gas and the infrastructure to support extraction that have brought boom times to the eastern region of the country, where Santa Cruz serves as de facto capital.

Earnings on fuel exports rose from less than $1 billion to over $6 billion last year. And in spite of the fact that Evo has chosen to let the golden goose survive – even prosper – locals aren't inclined to give him credit.

When Morales came to power, he made good on a promise to nationalize the hydrocarbon and mining industries. He flipped the government's cut of gas sales from 20 percent to 80 percent. The Brazilian, Spanish and French oil companies operating in Bolivia cried foul but stuck around, wagering that increased prices and greater volumes would make up for their lower share of the take.

It was a good bet. Earnings on fuel exports rose from less than $1 billion to over $6 billion last year. All told, Santa Cruz department's oil and gas production, added to all its other goods and services output, equals almost 40 percent of GDP. And in spite of the fact that Evo has chosen to let the golden goose survive – even thrive – locals aren't inclined to give him credit.

One morning, I toured a giant sugar mill in Santa Cruz that belongs to the Guttierez family, one of the oldest and most prominent families in town. As we made our way through giant buildings housing cane crushers, boilers and miles of pipes exuding steam, Eduardo Guttierez Jr complained about the restrictions Evo had imposed, requiring producers to set aside enough sugar for domestic consumption before exporting the residual at higher prices. What's more, he said, the refinery is now required to pay an extra month's wages to workers on top of the previously required 13th-month bonus common in Latin America.

In spite of this, he conceded, the sugar business has thrived. While one member of his family called Evo "a dictator surrounded by terrorists," Guttierez Jr sounded more balanced. "Evo was lucky, he was handed a good economic situation," he said, referring to the favorable gas export terms that were obtained just before Morales came to power. "At the same time, I wonder if another administration wouldn't have misspent those profits."

It's a variation on a refrain I will hear over and over again in Santa Cruz: we don't like the guy … still, we're doing pretty well … but things could be better.…

Outside the facility, bulldozers add to a giant mountain of cane residue from the milling process. A cloying sweet smell permeates the air. Beyond the mill, hundreds of acres of cane fields belonging to the Guttierez family form a giant rectangle in the middle of the city. Imagine Central Park as a private farm.

In the afternoon, I drive south through neighborhoods that look much like poor barrios in any Latin American city: tin roofs, some houses of brick, others of rough boards, rutted dirt roads, chickens free-ranging for urban detritus. That makes it all the more surprising to come across large, modern brick buildings that seem out of place amid the blight. Not one or two, but many. These are schools, built in the last few years, that would look at home in any American suburb.

EPA/MARTIN ALIPAZ

Marbella Villalobos Mesa is waiting to pick up her child at the entrance of the Cupesi errado Primary School. "Before, there was nothing here," she said. "There was nothing for poor people like us. But since Evo, things have really changed. We have ended up much better off."

She receives a government stipend for each child who attends school – a conditional stipend system for the poor of the sort that has swept across Latin America. Under Evo, literacy has climbed about 10 percentage points to a respectable 96 percent of the population. But even though the government spends more proportionally on education than most Latin countries, there's no denying that the educational system has problems retaining students who reach working age.

Villalobos tells me she cleans homes and her husband is a mason. They make a combined income of about 3,500 bolivanos a month, which works out to about $500, not counting the children's stipend. It could be worse: the minimum wage in Bolivia is $260 a month.

Inside the front gate, Sergio Rivera, a young teacher, wonders (somewhat aggresively) why I was asking questions. When I explained, he said: "How could we possibly complain about the way things are going?

Álvaro García Linera, Vice President of Bolivia

This wasn't Argentina or Venezuela, which had periods of great wealth. We come from abject poverty."

Rivera points around. He, like everyone around me in and out of the school, has an indigenous complexion. "Most people have experienced the racism that predominated in this part of the country," Rivera said. "Our parents certainly did. But with Evo, things are different. And some people here aren't happy that their skin color no longer gives them a position of privilege."

As I exit, the school another parent, Irina Gil, stops me. "Don't forget, Percy has also done a lot for us poor," she said.

The Percy in question is Percy Fernández, the popular mayor of Santa Cruz and a member of an opposition party. Democracy at the municipal level seems alive and well – all the largest cities are ruled by members of the opposition. Mayor Percy, by the way, is no Boy Scout. He has been taken out of circulation by members of his own party for issuing death threats against journalists and groping women at public events.

Everywhere are reminders of the social division and its origins. The council chamber, where members of Evo's party are in the minority, is adorned with a large mural depicting Spanish soldiers bristling with swords and lances accompanying priests who are converting almost naked Indians to Catholicism. It's a throwback to an era in which the Spaniards were seen by Latin American elites as bringers of civilization.

The next day, I'm in Colinas del Urubó, a new development north of the city where many of the mansions rival those of Beverly Hills in size and architectural crassness. We're talking 10,000 square feet and millions of

©JOSE LIRAUZE/ABI/XINHUA/ALAMY LIVE NEWS dollars. And the lots are selling like hotcakes, with buyers coming from the growing ranks of both well-heeled Bolivians and foreigners who suddenly see Bolivia as a safe haven.

Later in the day, as a light rain falls, I go running along the forest that borders the Piray River, which snakes through Santa Cruz. Soon, I'm following a trail into dense woods and as I come to a clearing, a pack of dogs and a woman with a rather unfriendly countenance intercept me. At first, I'm more concerned about the woman than the snarling dogs. But the sight of an older American in running gear in the rain has her perplexed.

Her name is Amalia Osinogo, and she has lived in this ramshackle neighborhood for decades. When Evo first ran, she campaigned for him and registered everyone in the community to vote. "We were all for him here," she said. "He was a candidate like we had never seen before."

She thought that, in return, the new government would help them obtain titles to the land on which they had squatted. "They came and put in electricity," she said. "But after that we never saw them again. It turns out Evo is like all politicians: once he gets your vote, you stop existing."

She finds his efforts to change the constitution to get re-elected objectionable. "If Evo is not careful," she said, "if he keeps pushing for these types of changes that are against our constitution, he's going to lose the support of people like me."

She invites me to walk through the neighborhood along the river. We reach the riverbed, which, at over a mile across, consists of strands of beige water lacing through deposits of silt from the Andes. Along one bank, a cowboy moves his cattle through high grass. Across the river, I can make out the mansions of Colinas del Urubó.

A day later, I talk to Pedro Rivero Jordan, the executive editor of *El Deber* (which loosely translates as "duty"), the most influential newspaper in Santa Cruz. These days, he said, freedom of expression in Bolivia is a mixed bag. You can find plenty of critical programs on television. Likewise, there are plenty of newspapers that report on government corruption or publish anti-Morales opinion pieces.

"It would be a fallacy to say there's no freedom of expression here," Rivero said. "However, the spaces are diminishing and there's more and more intimidation." He wonders what will happen if the economy turns south or, as is inevitable, more cases of corruption surface. "We'll see how they handle things," he said. "But I'm not optimistic."

Vice President Álvaro García Linera, depending on whom one talks to, is either one of the brilliant intellectuals behind Evo's ascent or a terrorist turned Machiavelli.

Rivero, who died at age 84 before this article went to press, was particularly worried about the designs of Vice President Álvaro García Linera, who, depending on whom one talks to, is either one of the brilliant intellectuals behind Evo's ascent or a terrorist turned Machiavelli. His statements about the fourth estate lean more toward the latter. Regarding the journalists who uncovered the Zapata scandal, García Linera said, "Those responsible [whom he labels 'political media mafia'] will have to go to jail. The law will be applied to all of these liars."

LA PAZ

After the tropics of the eastern lowlands, La Paz, the de facto capital of Bolivia – the actual capital is Sucre – is geographic shock. First, there's the sight of the Andes, with glacier-topped 21,000-foot-high Mount Illimani dominating the horizon. The *altiplano* is a harsh, almost Martian, landscape. La Paz itself sits in what appears to be an eroded canyon at 12,000 feet – an altitude that leaves all but the most acclimatized visitors puffing along the vertiginous streets. But it is the inhabitants of La Paz, not the topography, that make the strongest impression. Unlike Santa Cruz, this is the heart of Aymara indigenous culture. Indian faces are everywhere, their exuberant clothing offering a contrast to the dull gray of the city.

I had last been in La Paz in 1980 during the brief but brutal rule of Gen. Luis García Meza Tejada. Even the military found him reprehensible and removed him after a 13-month reign. The city was a sad and frightening place in those days. Now I saw indigenous women everywhere in their colorful multilayered skirts and bowler hats, a fashion statement introduced by European railroad workers in the 19th century.

The women are called *cholitas*, which used to be a derogatory term. In the 1980s, they were not even allowed to enter parts of the city, ride public transportation or enter most establishments. Bolivia, before Evo, was, for all practical purposes, an apartheid state. But *cholita* has since morphed into a term of indigenous pride.

Another change that strikes me as I move around the city is the plentiful commerce on the streets. The government has let the informal sector flourish as a way to put money into the pockets of indigenous people for whom it's the only source of income. It's part of an economic policy that is largely the brainchild of Luis Alberto Arce Catacora, the economy and finance minister of Bolivia.

That evening, I visit Arce on the top floor of a 20-story building in the heart of La Paz. Even at 8 p.m., there are people milling about and holding meetings. One *cholita* in traditional garb introduces herself as part of his planning staff. Arce's own large office has a spectacular view of the city below, not to mention a bunch of conference tables overflowing with files.

Arce, a former central banker who began advising Evo before he was elected, is in his mid-50s, but his laid-back manner and easy laugh make him seem younger. He's one of the few original cabinet members who remains in the government. In the beginning of

REUTERS/DAVID MERCADO

his administration, Evo filled his cabinet with like-minded activists with no administrative experience. But it didn't take long for him to realize he needed ministers who could actually administer.

Arce's rap is full of Marxist terminology. But it's camouflaged in a modern analysis of the economy that would not sound alien to your average ivory tower liberal academic. He persuaded Evo to throw out the IMF/World Bank playbook as soon as he was elected. Then came the nationalization of natural resources.

"The sales of our state-owned companies in the '90s never produced any profit for us," he said. "There was just a penetration of foreign capital for the exploitation and pillaging of our natural resources."

The first phase in his plan, which he calls the New Bolivarian Model, was to regain control of Bolivia's natural resources through renationalization and increased taxes. Then came the second phase, industrialization. "We sold our gas to Argentina and Brazil, and they converted it to petrochemicals," he noted. "We've since built two petrochemical plants, one to export to Brazil and the other to Argentina. Now we're reaping the profits; we are creating industry and adding value on our side of the border."

SHANTI HESSE/ALAMY

He sees big potential for Bolivia with a new fertilizer plant, with plastics, with electricity. "Why are Argentina and Brazil buying our gas to produce electricity?" he asked. "Why don't I sell them electricity? We have the natural resources to sell energy to all of our neighbors."

His policies, which Evo's critics grudgingly label as prudent, have made the Bolivian economy healthier than it has ever been and obviously played a big part in Evo's re-elections. Leftist governments in Venezuela and Nicaragua have spent heavily to score populist points. But Evo has been downright thrifty

from the beginning, when he acceded to Arce's pleas not to double state salaries. The windfall from higher taxes on the sales of gas went to a mix of industrialization, savings for the inevitable rainy day, and targeted aid to the poor.

"The primary focus of our economic policies has been to attack unemployment and inequality with the redistribution of profits," he said. "We've about 10 million inhabitants in Bolivia, and we've taken about two million of them out of poverty. And we've been able to do this without making the rich poorer."

There is some fear that, with gas prices low, Bolivia will find itself hard-pressed to continue its generous redistributive policies. But Arce appears unperturbed. "Prices of minerals have been falling since 2011 and prices of gas have been falling since 2014," he said. "But we'll continue to do well, because we are keeping the profits in the country."

It helps, of course, to have stashed away $13 billion in foreign reserves (as of April 2015), which is being spent down slowly to buffer the energy-price shock.

Indeed, while Arce talks the lefty talk, his stewardship is praised by the financial establishment in Washington and New York. "Now even at the IMF they admit that all is not well with neo-liberalism," he chuckled.

"We had the great fortune of being able to think about our model, plan it, dream it," he said. "And thanks to the political will of President Evo, we've had the opportunity to see it crystallize. Not too many economists get that opportunity."

The next morning, I take a ride on one of Morales's infrastructure investments that has been a big hit with the public: a $250 million gondola system with three lines that connect far reaches of this chaotic, mountainous city. The government simply wrote a check to an Austrian company, which built the first three lines. Four more are planned.

My 40-cent ticket gets me on the red line to El Alto. The gondolas are full, the faces around me entirely indigenous. The ride feels like flying over the red brick houses stacked tenuously up the sides of canyons.

In La Paz, as a general rule, the higher you go, the poorer the neighborhood. That seems the case when traveling to El Alto, an incorporated city that sits on the 14,000-foot plain above La Paz. It's a place that the whiter folks who live in the south of La Paz generally don't visit, although it's now just two gondola rides away.

El Alto has grown sharply in recent decades, drawing in immigrants from the countryside. It's a stark, otherworldly mix of truck stops, construction sites and mostly poor homes. Outside the center, the streets are dirt; it's often hard to tell if behind the walls there are homes or empty lots. But then one spots a *cholet*, a mansion to which no verbal description can fully do justice. Suffice it to say that the most famous *cholet* – the word combines chola and chalet – is called Optimus Prime. That's right, from *Transformers.* It's an architectural style that was introduced by a local Aymara builder named Freddy Mamani Silvestre, and it combines colorful indigenous themes in a baroque style that seems oddly modern.

The *cholets* mirror the mansions I saw in Santa Cruz, except these mansions are being built for Aymara Indians who have become wealthy since the rise of Evo. Along with repeated warnings not to wander around El Alto alone, I was told that Aymaras are very reluctant to talk to strangers – not uncommon for an indigenous people. But when I spotted a *cholet* under construction and began asking about building methods and rebar sizes, the owner, Mario Choque, a compact Aymaran in his early 60s, began to share complaints about errant plumbers and incorrectly sized electrical wire.

Building woes turn out to be an icebreaker in any culture, though Choque's accent posed a bit of a challenge to me. In El Alto, the lingua franca is Aymara, not Spanish.

Soon enough, Choque was showing me around his half-done *cholet.* We're talking thousands of square feet per floor. And 30-foot ceilings. The typical price tag these days is upward of $500,000.

The bottom floor will go to retail space, he explained, and above that, one floor will become an AstroTurfed sports arena. "I'm like Evo, I love soccer," he said, when he sees my surprised look. "I want my grandchildren to have a safe place to play. We have no parks in El Alto. I'll also rent it out."

He'll also rent out space on the upper two floors, which he plans to decorate in wild colors for weddings and parties. On top of the flat roof is his residence, which bears no architectural resemblance to the rest of the building and looks like a chalet that was dropped in by helicopter. For the moment, it's just an empty shell, but Choque beams with unaccustomed emotion. "Things are going well for us in El Alto," he allowed.

In Choque's case, that's plainly an understatement. Two of his brothers are also building *cholets.* I ask him how he has managed to make so much money. He runs through a dizzying list of businesses and family links that cover everything from traditional fabrics, to cheap imported Chinese fabrics, to bars and food stalls, to trucking. "I grew up poor, just like Evo," he said. "And now look, he's indigenous just like me and he's president."

For the immediate future, it appears that Arce's handling of the economy has left the country in the enviable position of enjoying growth even in the teeth of the big commodity price declines. Arce said he has a plan to remake the Bolivian economy by 2025.

Therein lies the challenge. Evo's current (and last constitutionally mandated) term runs out in 2020. But the government's image and popularity is firmly anchored in his person, and he has yet to cultivate a successor. Can the New Bolivia survive the departure of its iconic leader?

The Euro and the Battle of Ideas

ILLUSTRATIONS BY
PIERRE-PAUL PARISEAU

Most non-European economists, it's fair to say, were deeply skeptical that a common currency would work well in Europe, arguing that the countries contemplating union didn't meet the theoretical criteria for successful monetary integration. But the impasse on approaches to repairing the damage after the Eurozone's near-unravelling in 2008-09 suggests that the problems were even more fundamental. ¶ In their new book, *The Euro and the Battle of Ideas*,* Marcus K. Brunnermeier (Princeton), Harold James (Princeton) and Jean-Pierre Landau (Sciences Po in Paris) look to the differing national economic cultures for an explanation of why the Eurozone was constructed on such an unstable governance foundation in the first place and why member governments have seemingly fiddled while Greece burned. Here, we excerpt the chapter on the schism between German and French approaches to running their economies for clues to why the euro experiment was so badly handicapped from day one. — *Peter Passell*

In the 19th century and for the first half of the 20th, France could generally be characterized as dominated by economic liberalism (in the European, free-market sense) and Germany as largely statist. Then, quite abruptly after 1945, the pattern reversed.

The old traditions in both countries were discredited as a consequence of the political catastrophes of the mid-20th century. The extent of the catastrophe, on both sides of the Rhine, indicated the necessity of a basic change of course. German writers could see how the prominent role accorded to the state in traditional economic theories might have favored Nazi statism. By contrast, younger French thinkers blamed the do-nothing non-interventionism of the traditional liberal school for sluggish economic growth, but specifically for fiscal austerity and consequently the failure to coordinate a viable defense economy in the 1930s. Thus, after World War II, France reacted against old-style laissez-faire and emphasized the desirability of systematic planning, while Germans recoiled from the idea of the state because its actions were arbitrary.

GERMAN ECONOMIC TRADITION

Hayek's Critique of a Planned Economy

The most far-ranging critic of the German model of statism was the Austrian Friedrich Hayek. Hayek accurately identified that the interventionist approach of the Weimar Republic (which had its origins in wartime planning) created a sort of path dependency, in which the answer to failure was not an abandonment of the approach but rather a more radical version. In *The Road to Serfdom*, he asserted that Walter Rathenau, the intellectual who devised Germany's innovative planning regime of World War I, "would have shuddered had he realized the consequences of his totalitarian economics."

Economic planning, as Hayek recognized, was inherently discriminatory: "It cannot tie itself down in advance to general and formal rules which prevent arbitrariness. … It must constantly decide questions which cannot be answered by formal principles only, and in making these decisions it must set up distinctions of merit between the needs of different people."

The issue of arbitrariness applies in a particular way to the actual implementation of capital controls. They were implemented in both Austria and Germany from 1931 – that is, before Hitler came to power in January 1933 and Austrian conservatives created the reactionary corporate state in 1934. But the dictatorship provided more means of enforcing controls.

Hayek cites the German classical liberal thinker Wilhelm Röpke, to the effect that "while the last resort of a competitive economy is the bailiff, the ultimate sanction of the planned economy is the hangman." If he had at the time known Hitler's table talk, Hayek might have cited the musings of the dictator himself: "Inflation does not arise when money enters circulation, but only when the individual demands more money for the same service. Here we must intervene. That is what I had to explain to Schacht [the president of the Nazi central bank], that the first cause of the stability of our currency is the concentration camp."

Ordoliberalism

A considerably softer version of the Hayekian critique of the old German tradition, known


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as Ordo-Liberalismus, was deeply influential in Germany and had a major political impact. Chiefly expounded by Wilhelm Röpke and Walter Eucken, rules needed to be formulated in general terms; the state's actions should be confined to the enforcement of such general laws – for instance, the laws on competition and against cartels, which had been an important part of the older German tradition of business management. Unlike Hayek, who more and more insisted on the spontaneous creation of order and rules, the ordoliberals emphasized the need for an initial elaboration of an appropriate framework.

"Economics professors" in Germany came to have a sort of ideological definition. They were the five professors (only one of whom was really an academic economist, and he was retired) who complained about the Greek rescue package in 2009.

Their vision of order included both a system of general rules and a mechanism by which those rules define the responsibility of individuals and economic agents. The system fundamentally depends on the accountability of market participants. Any measure that limits accountability by promising some sort of contingent rescue would create destructive incentives that would lead to the accumulation of unfulfillable expectations on behalf of the economic actors and unfulfillable liabilities on the part of the government as the ultimate insurer.

As a consequence, ordoliberals worried greatly about "moral hazard," a term taken from insurance (a well-insured person may not take sufficient care that his house does not burn down). On these grounds, the Freiburg School (another name for ordoliberalism) even worried about the limited liability principle for corporations. "Unlimited liability is part of a competitive system," Walter Eucken wrote. In his eyes, too many and too complicated laws breed moral hazard, and the economic agents are given incentives to game the system.

The antitrust thinking of the new German economists also meshed well with the thinking of the U.S. military administration. One of the German ordoliberals, Franz Böhm, wrote that there was "no influential and socially strong group" supporting competition "excepting the American occupation authorities." Competition law thus became a crucial part of the new German philosophy and, as advanced by Walter Hallstein, the German economist and civil servant who became the first president of the European Commission, also of European law.

Ludwig Erhard, the economics minister who pushed Germany's liberalization program, made the link between competition policy and European priorities explicit. In 1952, at the launching of the European Coal and Steel Community, he stated, "We plan to create a common European market. The aim is incompatible with a system of national or international cartels. If we want to create a higher standard of living through technical progress, rationalization and an increase in production, we have to be against cartels."

The resulting vision did not completely remove the state. The rejection of the past was not as extreme as it appeared in some of the ordoliberal manifestos. Indeed, the economic historian Albrecht Ritschl has argued (controversially) that a large part of the distinctively German and rather corporatist approach to the state-business relationship was inherited from the Nazi era.

Ordoliberalism in Today's Germany

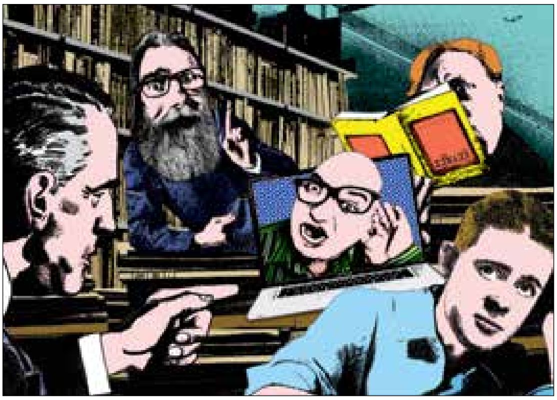
In the 1960s, the German model incorporated a good deal of Keynesianism, but was formulated in terms of a foundation of stability, or a rule-based order. In academic economics, ordoliberalism was largely replaced by a U.S.-style neoclassical synthesis. Most modern ordoliberal academics are lawyers rather than economists.

Some ordoliberalism survived in think tanks and in the economic research institutes that are a feature of the German intellectual landscape and constitute a bridge between academia and politics. The German Council of Economic Experts, which was set up by Ludwig Erhard in 1963 and is intended to educate the public rather than specifically to advise the government, sees itself as embodying the legacy of ordoliberalism. But in general, ordoliberalism has a bad reputation, especially outside Germany, with the *Financial Times* journalist Wolfgang Münchau excoriating "the wacky economics of Germany's parallel universe." As he put it, "German economists, roughly fall into two groups: those that have not read Keynes, and those that have not understood Keynes."

But the traditions of the postwar era certainly exercise a substantial, almost subconscious, appeal to many Germans, and especially to policymakers in the Bundesbank and perhaps also the Finance Ministry. It is also conspicuously represented in the economics pages of the *Frankfurter Allgemeine Zeitung* (*FAZ*), a major German newspaper. The *FAZ* is generally considered to be moderately right-of-center, but even the moderately left *Süddeutsche Zeitung* devotes space to the German economic tradition. In particular, since 2009, both these large German newspapers have worried about the moral hazard implications of euro rescue measures.

Those traditions represent what Keynes famously called "the gradual encroachment of ideas" that rendered politicians and practical men as "slaves of some defunct economist." As the Bundesbank had a major input in the design of the European monetary union, some commentators speak of the "ordoliberalization of Europe."

German officials in some Berlin ministries like to voice their dissent from alleged "fundamentalists" in the Bundesbank. The government also started to distance itself from the Council of Economic Advisers, complaining



that the economists there were inflexible and were looking "too much through German spectacles." The Social Democratic Party economics minister Sigmar Gabriel pointedly delayed supporting the renomination of Christoph Schmidt as chairman of the council.

In the course of the euro debt crisis, German critics of the various rescue packages liked to present themselves as the voice of the economics profession. "Economics professors" in Germany came to have a sort of ideological definition. They were the five professors (only one of whom was really an academic economist, and he was retired) who complained about the Greek rescue package in 2009. They were the 172 professors who in July 2012 signed a letter to the *FAZ* attacking the banking union plan.

The phenomenon of the economics professors even eventually appeared as a new political party: Bernd Lucke (an economics professor from Hamburg) and Konrad Adam (a retired *FAZ* journalist) formed an anti-euro protest party, the Alternative für Deutschland (AfD), which polled surprisingly strongly in the European Parliament elections of 2014. These organized mobilizations of economics professors were not truly representative of the profession, but they wanted to give the impression that they were. Later, the economic professors were forced out of the AfD, which turned in a radical right direction.

The elements of the German economic intellectual tradition can be summed up as follows:

• A focus on the legal, moral and political foundation of free markets in agreed rules, which may be treaties or laws, or shared understandings.

• A strong emphasis on accountability. For market participants, the responsibility is financial – they need to pay the price of failure. Politicians are accountable to voters.

• A concern with the potential for moral hazard arising from lender of last resort activities. The IMF's financial rescue package for Mexico in 1994-5 was heavily criticized by German officials as encouraging reckless behavior by increasing the likelihood of future rescue operations.

• A concern that lender of last resort (LLR) action may corrupt monetary policy because a central bank that has an LLR obligation might be forced to give priority to financial-sector stability over price stability.

• A belief that firm rules are needed to shield monetary policy from fiscal dominance – namely, that by raising the permanent level of expenditures without raising taxes, government can affect the current and future flows of the monetary base and, hence, of the money stock and of the inflation rate.

• A strict approach to government debt. Germany pioneered an approach that it now proposes to Europeanize, with a 2009 law mandating a deficit limit at the federal level of 0.35 percent of GDP by 2016 and an elimination of deficits for states by 2020. German think tanks like the idea of a Europeanization of fiscal rules enforced by some sort of fiscal or debt council.

• The view that growth is not achieved by the provision of additional money or resources, but by structural reforms. Additional money is a sort of trickery, doomed to failure

and analogous to trying to pull yourself out of a swamp by pulling on your bootstraps.

• A belief that present virtue – or austerity – is rewarded by future benefits.

FRENCH ECONOMIC TRADITION

France, too, began the postwar era by rejecting the economic orthodoxies of its past and seeking to Europeanize its new priorities. Low growth and stagnation had weakened France politically, socially and militarily. The obsession with balanced budgets had led to a cutting of defense expenditures that made France more vulnerable.

Part of the picture had been French unwillingness to take John Maynard Keynes seriously. Keynes was not a popular figure in France, doubtless because of his well-known criticism of the 1919 Versailles Treaty, and, in pre-1940 French debates, the role of the state was not seen primarily in terms of macroeconomic stimulus. The new postwar French alternative emphasized the need for the state to coordinate and plan investment. An unplanned or spontaneous market order was likely to lead to underinvestment and low growth.

The Influence of Engineering

The new French tradition had its roots not so much in high thought, but in the work of practical economists who were trained in institutions oriented toward service to the state.

In his last pamphlet, in the aftermath of the 1848 revolution, Frédéric Bastiat concluded that "legislators and do-gooders [should] reject all systems, and try liberty."

That tradition went back a long way. The Corps of Bridges and Roads had been set up in 1716 and organized as a school in 1775. The original intention was to provide an accurate mapping system so as to allow the construction of a national road network for the whole of France. In 1794, a parallel École Polytechnique was established to train "national engineers." A third school for mining had been founded in 1783.

The products of these schools pushed for elaborate and unified transportation, communications and eventually energy transmission systems. They built roads in the 18th century, canals and railroads in the 19th and electricity grids and high-speed train networks in the 20th.

Critics observed that the schools were proud of their complete ignorance of the economic principles of diminishing marginal utility and the time-value of capital. The French planning tradition achieved a new momentum in World War I, when Étienne Clémentel and Ernest Mercier tried to imitate the German war planning approach of Rathenau, and again in World War II.

Even this brief narrative of the evolution of the French planning tradition makes it clear how much interaction there was with Germany. Frederick the Great in Prussia admired French economic planning methods and tried to promote similar developments. He imported technicians and engineers from France and England. So did other German states, with a famous mining school founded in Freiberg in 1765. The École Polytechnique found many imitators in Germany, from the Technische Hochschule in Karlsruhe (1825) onward. Indeed, Germany came to be more widely regarded as the best-practice model of technical education.

Past Liberal Tradition: Say and Bastiat

The 19th century in France was intellectually dominated by a passionately articulated economic liberalism, with Jean-Baptiste Say (1767-1832) arguing after the French Revolution that it was a "gross fallacy" and "productive of infinite mischief" that "what government and its agents receive, is refunded again by their expenditure." He went on to establish Say's Law: "Supply creates its own demand."

The journalist Frédéric Bastiat (1801-1850) became the most brilliant expositor of the principles of laissez-faire and the denouncer of the fallacies of protectionism. In his last pamphlet, in the aftermath of the 1848 revolution, he concluded that "legislators and do-gooders [should] reject all systems, and try liberty."

Later, those principles of liberal economics

~~AUSTÉRITÉ~~
TABAC

were magisterially expounded by Paul Leroy-Beaulieu at the new School of Political Science (Sciences Po) and then at the Collège de France. The liberal tradition of economics had in part evolved – and Sciences Po founded – as an explicit counterweight to the engineering or technocratic vision presented by the graduates of the professional schools.

Planning

The first Monnet Plan was already formulated in 1946. Heavy industry (especially steel) figured prominently in the national investment plans, and individual businessmen were frightened of appearing as laggards or saboteurs. The result was massive investment and quick expansion. The government was obsessed with growing more quickly than German steel and warding off the new and threatening Italian challenge to its industrial strategy.

The French political class saw big steel mills as modern cathedrals that gave expression to a national revival. The chief architect of France's postwar plan, the banker and visionary of European unity Jean Monnet, called for "une politique de grandeur pour l'acier," and indeed he saw some mechanism for extending French control over the continental European steel industry as key to postwar political stability.

In the immediate aftermath of the war, there was an intense discussion of nationalization as a way of raising production. The old Colbertist tradition of a state-guided economy was augmented by admiration for the achievements of Soviet planning. French policymakers believed the Soviet Union had both avoided the Great Depression of the 1930s and won the war because of planning.

Gigantism itself was sometimes also presented as a response to the new German challenge: In 1956, in a gloriously mixed metaphor, *Le Figaro* referred to a "steel fever on the other side of the Rhine in which France should not let herself be outpaced."

Initiatives such as the Marshall Plan also helped to establish the idea that planning might transform the whole European business structure. For steel and coal, planning was given a European context by the Schuman plan and the establishment of the European Coal and Steel Community (ECSC). France also Europeanized its preference structure, and many political figures saw the primary desideratum as the establishment of a mechanism for economic governance that allowed Europe to undertake the same coordination that French policymakers had managed to apply on a national level.

The highest achievements of the French tradition were seen in the coordinated nuclear power network built by Electricité de France, and in some spectacular examples of ingenious but ultimately failed technology. France built the first medium-range passenger jet aircraft, the Caravelle, in the mid-1950s, and then in the 1960s, the supersonic aircraft project that resulted in the beautiful and fast (but commercially unviable) Concorde. In 1978, France's telephone company unveiled Minitel, a sort of predecessor to the internet, with online videotext linked to commercial applications. France's high-speed train system, the TGV, launched in 1981, was only emulated much later by Italy, Spain and Germany – with the United Kingdom still contemplating such a move.

The aura around France's attachment to the plan as an instrument of national revival lasted a long time. France's planning institution, the Commissariat Général du Plan, existed until 2006, when it was renamed the Center for Strategic Analysis, which in 2013 was renamed the Commissariat Général à la Stratégie et à la Prospective (CGSP). There had already been an attempt to transform the institution in the mid-1980s, but it had been vigorously resisted. At that time, Pierre Massé, an engineer from the École des Ponts et Chaussées and the principal architect of planning in the 1960s, had complained that "suppressing the plan in the name of an impulsive liberalism would be giving up the major weapon in the struggle against the dictatorship of the short term."

The same sort of public mobilization of economists for a political cause that took place in Germany against the euro rescue packages occurred in France against the German doctrines and against austerity politics.

Aspects of the older tradition remained in one area: the argument that currency stability was an important objective of policy and that something like the gold standard was a desirable international discipline had a powerful appeal. This case had been brilliantly and persuasively made by Jacques Rueff, who emerged as the economic guru for General de Gaulle. But it was also taken up by the left quite enthusiastically, above all because it could be mounted as a critique of the United States and the manipulation of the dollar in the Bretton Woods era in the interests of American foreign policy.

Contemporaneous Economic Thinking in France

As in Germany, most modern French economists have largely moved away from the traditional concerns of both 19th century liberal economists and postwar French politics with planning. Indeed, French academics have made a decisive contribution to the literature on time consistency and the consequent significance of the correct formulation of rules. In that sense, they have done more than the German ordoliberals to present a version of a system of rules that is really applicable to the complexities of a modern economy, in which competition is not an obvious result of economic activity. Jean Tirole and Jean-Jacques Laffont, in particular, have been instrumental in developing a new approach to the provision of incentives by regulators, in which the dangers of creating moral hazard play a key role.

The visions of the past influence the way that economics is seen. Most French economists complain – as did Thomas Piketty, the author of the best-selling *Capital in the Twenty-First Century* that "economists are not highly respected in the academic and intellectual world or by political and financial elites." In fact, an intellectual culture exists that sees economists as narrow-minded and soulless technocrats who force a dehumanized concept of rationality on their fellow citizens.

Raymond Barre, a European commissioner who was prime minister of France from 1976 to 1981, was lauded as "the best economist of France" by Valéry Giscard d'Estaing, France's president at the time." But "economist" was a dirty word. As the late 1970s were a time of increased inflation and unemployment, the end of the postwar euphoria and a period of general disenchantment with the political elites that had until then managed the Third Republic, the concept of economist as ruler looked sinister rather than beneficent.

Jacques Sapir, a dissident economist who saw himself in the left-wing, critical and, above-all, political tradition, complained that economists were undermining democracy. Bernard Maris, the journalist and economist who was tragically killed in the terrorist attack on the satirical magazine *Charlie Hebdo*, concluded, "What were economists for, one will ask a hundred years from now? To make people laugh."

That kind of critique sat well with a country that was increasingly obsessed with the parallel stories of national decline and triumphant globalization. The approach of modern mainstream French economists does not translate well into the policy debate, which is still dominated by the older and rather eclectic visions of how an economy functions. In general, the French press – notably, *Le Monde* – is committed to the attractions of interventionism. French politicians from every part of the spectrum denounce neo-liberalism. Nicholas Sarkozy criticized "Anglo-Saxon Europe, that of the big market" and repeatedly said that it was his mission to assert the values of French and European humanism as an alternative to the international economic system.

Even economists like to participate in the backlash against modern economics. The same sort of public mobilization of economists for a political cause that took place in Germany against the euro rescue packages occurred in France against the German doctrines and against austerity politics. In September 2010, more than 700 French economists signed a widely publicized manifesto for "an alternative economic and social strategy" for Europe, attacking the "false economic platitudes" of "neoliberal dogma."

The modern French consensus that presidents and economics professors alike shared may be summarized as follows:

• Rules should be subject to the political process and may be renegotiated.

• Crisis management requires a flexible response.

• Constraining the freedom of the government to act – and to borrow – would be undemocratic.

• Monetary policy needs to be used to serve more general goals than simply price stability, such as being concerned with economic growth.

• The lessons of the Great Depression include the principle that adjustment to international imbalances should be undertaken symmetrically, with surplus countries doing their part.

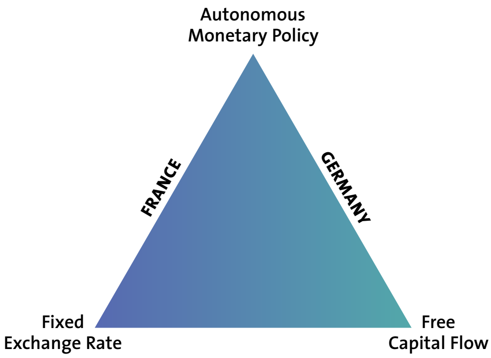
• As multiple equilibria are possible, choosing an unpleasant trajectory for the present is likely to perpetuate rather than remove constraints on growth.

• Present virtue is self-contradictory and self-defeating.

INTERNATIONAL ECONOMICS

Another important dimension of economic thinking along which the German and French philosophies differ markedly is international economic relations – in particular as regards cross-border capital flows. These disagreements flared up during the negotiations preceding the ratification of the Maastricht Treaty in 1992. German economic philosophy calls for free trade, fair (that is, undistorted) competition, and open international capital markets. Capital controls were considered arbitrary, favoring certain industries and inviting political lobbying.

Thus, a world in which exchange rates are free to move, in which no coordinated multilateral interventions are necessary to deal



with macroeconomic shocks, and in which capital can flow freely is very much in keeping with the German tradition. The French philosophy, in contrast, is much closer to the original Keynesian position (evolved as a response to the Great Depression) of fixed exchange rates, controlling capital flows and fostering multilateral adjustment via inflationary policies in surplus countries.

Trilemma

A useful organizing principle for a discussion of these differences is the "trilemma" of international macroeconomics. Basically, this states that an economy cannot simultaneously have a fixed exchange rate and an independent monetary policy and allow capital to flow freely; it must pick two out of three. The choice has profound implications for its ability to adjust to adverse macroeconomic shocks.

The German and French philosophies differ notably in their attitudes toward the desirability of capital flows and in how different economies, especially those linked via some kind of exchange rate mechanism, should respond to asymmetric shocks.

The trilemma tells us that we have to pick one side of the triangle. Germans picked the capital-flow side, while the French preferred fixed exchange rates. This trilemma is, of course, a simplification. In practice, there are varying degrees of commitment to a fixed exchange rate regime, varying degrees of openness to international capital, and varying degrees of monetary policy autonomy. The corners simply represent the boundaries of the possible. Still, the trilemma is useful as a first-pass organizing device, and history provides us with numerous useful examples of how the underlying trade-offs were resolved in the past.

Gold Standard

The gold standard was the dominant international exchange rate system between the mid-19th and the early- to mid-20th centuries. And many modern commentators make analogies between the gold standard and the European currency union, in that both suppressed the autonomy of monetary policy. Under the gold standard arrangement, the central bank of every participating country must stand ready to exchange its currency for gold at some fixed ratio.

How do economies in this system deal with asymmetric shocks – say, an expansionary demand shock in one country and a contractionary one in another? In a currency system with gold backing, trade naturally leads to a flow of gold into surplus countries. As long as central banks in the surplus countries do not "sterilize" the gold inflows – that is, prevent the inflows from increasing the domestic money supply – prices will be pushed up. The opposite happens in deficit countries, and so imbalances tend to auto-correct.

...this article is continued on the *Milken Institute Review*'s website: www.milkenreview.org

Third time's the charm

Now in its third year, the Institute's Asia Summit has become one of the region's can't-miss meetings. Held in Singapore in September, the Summit convened more than a hundred speakers (and hundreds of other participants) to explore the whole spectrum of forces shaping Asia. Videos of all panels are available at no cost on the Institute's website.

Coinciding with the Summit, Institute researchers published a blizzard of reports on Asia-related topics, including an assessment of Asian companies for foreign investors, an analysis of the implications of the changing balances of China's foreign exchange reserves, and the latest "Best-Performing Cities – China" results. You can find them all (and discover the Institute's surprising conclusion about which Chinese city is at the top of the list) at – you guessed it – the Institute's website.

Freshman class – with class

The Institute has partnered with the World Bank's International Finance Corporation and George Washington University to create the IFC-Milken Institute Capital Markets Program at the university. The goal of this unique initiative is to create a network of skilled practitioners in Africa and other emerging regions prepared to lead capital-market development in their countries. Drawn from the most promising professionals, the first group of 18 IFC-Milken Institute fellows arrived in Washington in August. They will complete rigorous classroom work at GWU, along with hands-on work experience at financial institutions in the United States, before returning to their jobs back home.

We're pleased as punch

In September, Edward Greissing took up the reins as the first executive director of the Lynda and Stewart Resnick Center for Public Health, a part of the Institute's burgeoning work in the area. Greissing brings nearly three decades of leadership experience in healthcare to his new position, and was recently the recipient of American Cancer Society's Donald H. Gemson Cancer Prevention and Public Policy Award. "Ed's appointment allows us to focus powerfully on both ends of the spectrum," explained the Institute's president and COO Richard Ditizio, "combining new efforts in wellness and prevention with our acclaimed ongoing work in promoting medical research and cures."

COURTESY OF THE MILKEN INSTITUTE

The first group of IFC–Milken Institute fellows.

Not love, but maybe happiness?

Norway is the highest income-per-capita country of any real size, but does that make Norwegians the world's happiest people? Economists used to brush aside such questions as too airy-fairy to merit a response. No more. Indeed, there is now a veritable cottage industry of economists (and other social scientists) asking who's happy and why. Here, I list the 10 happiest and 10 least happy countries, as measured by Gallup Poll data, along with their per capita incomes, life expectancies and levels of income inequality as reality checks. And I've added the United States to the list … just because. To see the full monty, including a series of essays on what it all means, download the latest World Happiness Report.

But back to the question: does income buy happiness? Well … yes and no. (What answer did you expect from a two-handed economist?) — *Peter Passell*

COUNTRY/RANK	GDP PER CAPITA ($)	LIFE EXPECTANCY (YEARS)	INCOME INEQUALITY
1. Denmark	45,700	79.3	12.0
2. Switzerland	58,600	82.5	8.9
3. Iceland	46,100	83.0	NA
4. Norway	68,400	81.7	6.0
5. Finland	41,100	80.8	5.7
6. Canada	45,600	81.8	9.5
7. Netherlands	49,200	81.2	9.2
8. New Zealand	36,200	81.1	12.4
9. Australia	47,400	82.2	12.7
10. Sweden	47,900	82.0	6.2
13. United States	55,800	79.7	15.0
148. Madagascar	1,500	65.4	19.3
149. Tanzania	2,900	61.7	9.3
150. Liberia	900	58.6	12.8
151. Guinea	1,200	60.1	21.6
152. Rwanda	1,800	59.7	18.2
153. Benin	2,100	61.5	9.4
154. Afghanistan	1,900	50.9	NA
155. Togo	1,400	64.5	NA
156. Syria	5,100	74.7	NA
157. Burundi	700	60.1	19.3

NOTES: GDP per Capita is calculated in terms of purchasing power. Inequality is the ratio of the income of the top 10 percent to the income of the bottom 10 percent (higher is more unequal).
SOURCES: World Happiness Report 2016; CIA Factbook; United Nations; World Bank