Appendix 1

# U.S. Policy Response

# Appendix 1: U.S. Policy Response

In this appendix, we identify policies that will help meet the economic challenges experienced by the U.S. middle class and those who want to get into it, as well as deliver the benefits of economic growth in a more inclusive manner.

These policies, which are both demand side and supply side in orientation, seek to both encourage more economic growth and ensure that its benefits are felt by the many, not just the few. Indeed, our goal is to ensure growth that will result in more-broadly distributed income gains. The strategies we identify include measures to increase workers' share of productivity gains, expand investments that foster demand, change tax policies in order to ameliorate inequality, increase net export demand by changing trade rules, support public service to limit the damage to youth caused by long-term unemployment, and increase financial stability. These policies are also designed to increase output, make individual workers more productive, and support long-run innovation and productivity growth. They include policies to increase labor-force participation and labor-force growth, increase the accumulation of human capital and earning capacity, support innovation, and change corporate governance to incentivize investment for the long term.

It is important to note that categories are not mutually exclusive. For example, public investment can both increase demand and add to the long-run productive potential of the economy.

Taken together, the demand- and supply-side policies we propose will make the U.S. economy more inclusive, more stable, and more dynamic over time.

## Increase workers' share of productivity growth, which will help sustain demand

The gains from economic growth have become very unequally distributed in the United States. During the 2009–2012 period—the first three years of recovery from the Great Recession—average household income in the United States grew by 6 percent. However, most of those gains were not distributed widely. Fully 95 percent of income gains went to the top 1 percent of households.[1] During this same period, the share of income growth accruing to the bottom 90 percent of households was (minus) -15.7 percent.[2]

There is a need for policy to ensure that growth is broadly shared with employees, not just employers and the owners of firms—shareholders. Increasing the incentives for profit sharing, empowering workers to bargain with their employers, and establishing a robust minimum wage will help achieve this goal. Of course, a high-pressure economy with a tight labor market is the one surefire way that median wages have increased in the past 40 years. Therefore, policies that encourage a tight labor market will also foster wage growth.

## Increasing support for profit sharing

As wage growth and productivity growth have diverged, an increasing share of the net income of business has gone to management pay and to shareholders. In addition to measures that support wage growth, there is a need to create institutional change that will allow more-inclusive capitalism in which profit income is more broadly shared.

Inclusive capitalism practices range from employee stock-ownership plans, or ESOPs, and worker cooperatives—which allow workers an ownership stake in the company—to cash-based profit- and gain-sharing programs, which pay workers a portion of the capital-related income they helped generate but do not grant ownership. The connection between all types of inclusive capitalism is that they compensate a broad base of workers—not just top executives—on the basis of group performance rather than individual performance.

For workers, inclusive capitalism is associated with higher pay, expanded benefits, greater job security, participation in decision making, greater trust in the company and management, and better labor-management relations.[3] For businesses, inclusive capitalism is often associated with increased productivity and profitability and a lower risk of business failure.[4] Profit sharing is also associated with higher productivity. An analysis of more than 60 studies by Rutgers University economist Donald Kruse found that, on average, profit-sharing plans produce a one-time 4 percent to 5 percent increase in the level of productivity in the year they are implemented; in the long term, productivity growth is unaffected, and this gain does not disappear.[5] In addition, companies often benefit from greater worker loyalty and effort, lower turnover rates, and an increased willingness on the part of workers to suggest innovations.[6] Policy to support profit sharing should ensure that it is universally applied within firms so that managers and employees share in risks, and of course, profit sharing should not replace stable, diversified pension plans.

The United States should explore new policies to encourage profit sharing by companies, such as:

- Increase tax incentives: To encourage larger firms to participate in profit sharing, firms should be allowed to deduct incentive-based pay as a business cost. However, firms should be eligible for such tax benefits only if incentive programs are sufficiently broad based to cover most of their workers—for example, if the value expended on the top 5 percent of employees is also expended on the bottom 80 percent.

- Expand tax incentives for ESOP creation: The United States has significant tax subsidies for ESOPs. Of the firms taking advantage of the ESOP tax incentives, most are smaller (with a median size of 125 employees).[7] Estate tax relief should be provided to a retiring founder or owner who transfers a successful firm to an ESOP.

- Improve education: Many companies and employees are simply unaware of the benefits of inclusive capitalism. Several states have centers to promote ESOPs on the theory that there are often high start-up costs for ESOPs that can be deferred by education centers. The United States should establish an Office of Inclusive Capitalism within the U.S. Department of Commerce to help address these issues.[8]

## Expanding worker voice

There is a need to increase worker voice and bargaining power to deliver higher wages because of the downward pressure on wages highlighted in previous chapters. Collective bargaining by employees plays this role in many advanced economies. It delivers benefits both for union members and for workers who are covered by collective bargaining agreements even though they are not union members.

In the United States, however, the incidence of collective bargaining is relatively low. There are several reasons for this, but one strong contributing factor is the process by which workers decide whether they want to exercise their rights to collective bargaining. At the moment, this process is time consuming, generates a high level of conflict, and often puts individual workers at risk of retaliation from employers. This environment works to the detriment of both firms and workers since stronger collective bargaining rights are part and parcel of high-productivity workplaces, where employees and management share ideas about making the business more efficient.[9]

The U.S. National Labor Relations Act guarantees the right of workers to form unions and bargain collectively with employers. In practice, the exercise of these rights can be difficult because of the way the law is administered. The time between worker petitions for representation elections and the elections themselves can take many months. The environment surrounding the election can be intimidating since there are no constraints on employer-initiated captive-audience speeches and penalties for firing union supporters and other acts of coercion are minimal. There is strong empirical evidence that coercion is widespread and has increased in frequency over time.[10] When representation elections are won, there are no real remedies when an employer fails to bargain in good faith.

Relatively small changes in procedure can make the process fast and fair and reduce the atmosphere of conflict that can surround the election and initial bargaining. For example, U.S. policy changes could expedite elections to determine union representation by requiring that elections be held within five days of a successful petition for bargaining. Such policies could fast-track litigation issues and limit captive-audience speeches at the place of employment, making worker attendance at these speeches voluntary. U.S. law could provide effective remedies for unfair labor practices by implementing mandatory injunctions to end unfair labor practices and allowing double back pay and the right to compensatory damages for workers who are subject to unfair labor practices during elections. Currently, employees who are fired because of union activity need to mitigate their lost wages, which means the costs to employers is minimal.[11] If there is employer coercion in the election process, the law could make card check, as opposed to a formal election, a mandatory remedy.

It would also help to require automatic arbitration of first contracts. Currently, even if employees elect to join a union, there is no remedy if an employer refuses to bargain on a first contract in good faith following the representation election. This tactic can frustrate the purpose of the election. Automatic arbitration would change the incentives of both employer and employees and encourage good-faith bargaining.

## Modernizing employment rules to accommodate the changing nature of work

The United States is unique in providing significant aspects of basic economic security through the employment contract. The prime example is health care insurance: In the United States, the prototypical manner in which a middle-class family receives health care insurance is through an employer. In Europe and much of the developed world, health care is delivered through the government. As a consequence, this means that as employment changes and the employer-employee relationship unravels, American families are left far more vulnerable than their counterparts in other countries. With the passage of the Affordable Care Act, a significant element of economic security is guaranteed within the United States regardless of employment status; however, other elements—including pensions, workers' compensation, and unemployment compensation—are all still tied to employment.

The unraveling of the traditional employer-employee relationship has made it more difficult to provide basic economic security and labor-law protections to workers. As corporations have shed employees through devices such as subcontracting or hiring independent contractors, they have also shed traditional responsibilities as employers, leaving families to face risks on their own. Americans face one of three options: stand by as families increasingly bear these risks, create government programs to address the need, or attempt to modernize the employer-employee relationship to ensure that employers continue in their traditional roles.

Reasonable applications of existing employment law can help. Firms that misclassify employees have long been an issue in the U.S. construction industry, where firms use subcontractors and create subsidiaries to avoid employer responsibilities.[12] Currently, many workers at franchises of large corporations are nominally employees of the franchise, but the franchising corporation determines much of their workplace life. The National Labor Relations Board, or NLRB, has proposed treating the parent corporation of McDonald's, the world's largest chain of fast-food restaurants, as a joint employer with its franchised stores for purposes of meeting the requirements of labor laws.[13]

The elimination of state-level obstacles to worker voice can also help. At the same time wages have stagnated across the country, some states have enacted laws that limit collective bargaining coverage and reduce wage growth. Wisconsin, Michigan, and Indiana, for example, have recently passed laws restricting collective bargaining by public employees, and the latter two have become "right to work" states, which weaken workers' abilities to garner higher wages through unions. A recent study by the Economic Policy Institute shows that median compensation growth has been lowest in states where collective bargaining coverage has declined.[14] States that are trying to restart robust wage growth for their citizens should consider reversing these policies.

In addition, we need to create new institutional forms to empower workers. For example, mandatory works councils—elected bodies of employees with rights to information, consultation, and codetermination of certain employment conditions at local workplaces—have the potential to make both firms and workers better off.[15] They can do so by increasing the sharing of information between workers and management and creating more cooperative labor relations generally. As Harvard economist Richard B. Freeman and Edward Lazear, who chaired the Council of Economic Advisers under President George W. Bush, have put it:

> *Councils with rights to information reduce economic inefficiencies by moderating worker demands during tough times. Conversely, by assuring that firms use worker-provided information to benefit labor as well as the firm, councils increase the willingness of workers to communicate to management, raising social surplus.*[16]

While works councils are established institutions in many advanced economies, they do not exist in the United States. Works councils in the United States must be effectively structured so they create incentives for workers and managers to share information, which can improve productivity and create worker voice in decision making while maintaining strong support of employers.

## Increasing the minimum wage

When large fractions of the workforce are earning low wages, their welfare is affected and their contribution to aggregate demand is limited. Comparative empirical work on the share of low-wage work in advanced economies suggests that the most important determinant of the observed differences across economies is the degree of inclusiveness of labor-market institutions. Inclusiveness is defined as "mechanisms to extend the wages, benefits, and working conditions negotiated by workers in industries and occupations with strong bargaining power to workers in industries and occupations with less bargaining power."[17]

There are two principal mechanisms that operate successfully in advanced economies today to generate inclusiveness for low-wage workers: agreements to extend coverage of collective bargaining agreements to nonunion workers and firms and minimum wages that are high and tied to the median wage of all employed workers.[18] In contrast to other advanced economies, in the United States, about 13 percent of workers are covered by collective bargaining agreements, and the minimum wage is low relative to average production-worker wages.[19]

The United States should set a minimum wage that is at least high enough to prevent full-time workers from living in poverty. Increasing the federal minimum wage to at least $10.10 per hour would accomplish that goal; that rate is slightly less than half the current average wage of private production and nonsupervisory employees. Importantly, the minimum wage should be indexed to rise with the consumer price index so that low-income workers do not automatically see pay cuts when Congress fails to update laws. The available evidence strongly suggests that a strong minimum wage is one good way to reduce the share of workers who are trapped in low-wage work; it also saves taxpayers money by reducing reliance on transfer programs such as the Supplemental Nutrition Assistance Program, or SNAP, formerly known as the food stamp program.[20] Recent empirical research by economists Arindrajit Dube, Michael Reich, and William Lester shows that an increase of the magnitude considered here would not have measurable negative employment effects.[21]

Similarly, the U.S. Department of Labor should significantly increase the salary threshold that guarantees overtime rights for salaried workers making below a certain salary. Overtime rights ensure that workers receive extra pay when they do extra work. Today, the threshold stands at about $24,000 per year and covers 11 percent of salaried workers—much less than 1975's inflation-adjusted $50,000-per-year threshold that guaranteed overtime rights for two-thirds of workers.[22] The U.S. Department of Labor has signaled that it will increase the salary threshold in 2015.

## Better target public investment to increase demand and raise long-run productive capacity

The United States faces two distinct, important, and related challenges on national infrastructure investment. First, there are too many good investments—that is to say, too many projects with positive financial return—that we should be making as a nation but are not. The solution to this challenge is simple but requires political courage: We must increase how much we are investing in infrastructure to raise potential and actual gross domestic product, or GDP. Second, we should make important, data-driven changes to the process of both how we fund these projects and how we track outcomes to improve public trust and continuously improve the efficiency and usefulness of infrastructure spending over time.

Independently, both reforms are crucial, but together they become even more so. Improving how we manage infrastructure priorities and projects raises the return on public investments, ensuring that taxpayers get the most for their infrastructure dollar as we catch up on deferred maintenance and build out the fundamental services and facilities that America needs to compete in the 21st century.

## Expanding infrastructure investments to increase productivity and relieve constraints on growth

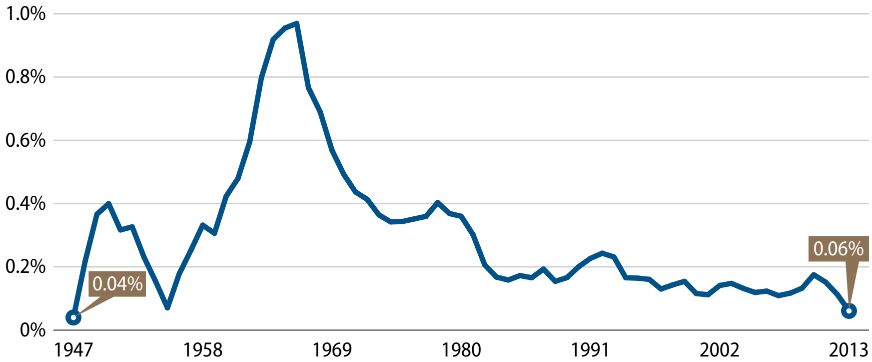
An economy can only grow as fast as its infrastructure systems can move information, people, and goods. Infrastructure investments provide strong middle-class jobs and productive assets that serve as the foundation for long-term economic competitiveness, increased prosperity, and a high quality of life. By comparison, failing to invest in these systems leads to deteriorating facilities, unpredictable service disruptions, congestion, and higher costs to businesses and households. Now is the time to increase public investment in America's infrastructure. To underscore this argument, look no further than New York City's John F. Kennedy International Airport, a major national and international hub, which has been described as a third-world facility.

Similarly, the amount of deferred maintenance in our nation's roads, public schools, and water facilities is huge. (see "Public investment in infrastructure" text box below) The U.S. air traffic control system, which relies on ground-based radar rather than GPS technology, is decades out of date and inefficient. Underfunded infrastructure creates real costs for Americans: Bad roads increase auto repair costs for all drivers, outdated air traffic control costs travelers time, both at work and with their families. Most embarrassingly, we send too many of our children to school in antiquated and dangerous buildings where peeling lead-based paint lowers their IQ scores at the same time that we expect them to learn.[23]

FIGURE A1.1

**U.S. public investment is at near-historic low**

Net federal nondefense investment as a share of GDP, 1947–2013




Source: Bureau of Economic Analysis, "U.S. National Income and Product Accounts."

According to the International Monetary Fund, or IMF:

> *Even in some advanced economies, in which measures of the quantity of infrastructure appear high relative to those in the rest of the world, there are deficiencies in the quality of the existing infrastructure stock. Business executives' assessment of the overall quality of infrastructure has been declining for the United States and Germany, reflecting largely the perceived deterioration in the quality of roads and highways. As the American Society of Civil Engineers (2013) notes, 32 percent of major roads in the United States are now in poor or mediocre condition, and the U.S. Federal Highway Administration estimates that between $124 billion and $146 billion annually in capital investment will be needed for substantial improvement in conditions and performance—considerably more than the current $100 billion spent annually on capital improvements at all government levels.*[24]

If the United States addresses these needs now, there are both short-term and long-term benefits. Stimulating employment in sectors that have been hard hit by the Great Recession, such as construction—in which employment remains well below normal levels—will have a positive effect on wages and create more middle-class jobs for workers who do not have postsecondary degrees. Given that the U.S. economy is operating below potential and current and expected real interest rates are quite low, there is currently little risk that private investment will be displaced.

Moreover, many kinds of public investment—including spending on public transportation, water, power, education, and research and development—have positive social rates of return when executed well.[25] That is to say, there are net gains in overall productivity from making these types of investments.

In addition, because an increase in current output levels may have positive effects on potential output in the future—the "hysteresis effect" identified by J. Bradford DeLong and Lawrence H. Summers in 2012—the net benefits from public investment during a period of significantly depressed output may be amplified, and such investments may even pay for themselves.[26]

To bring our infrastructure to a competitive level and to increase demand when it is needed, the United States should raise public investment in infrastructure by $100 billion annually for the next 10 years.

## Public investment in infrastructure

**Public schools**

U.S. public school facilities are in need of extensive improvements. Data recently collected by the U.S. Department of Education show that:

> *Among public schools with permanent buildings, the building systems/features were rated as being in* ***fair or poor condition*** *[emphasis added] in their permanent buildings in 14 to 32 percent of the schools: windows (32 percent); plumbing/lavatories (31 percent); heating system, air conditioning system, and ventilation/filtration system (30 percent each); energy management system, security systems, and exterior lighting (29 percent each); roofs, interior finishes/trim, and internal communication systems (25 percent each); electrical system (22 percent); technology infrastructure (21 percent); interior lighting and life safety features (19 percent each); exterior walls/finishes (18 percent); and framing, floors, and foundations (14 percent).*[27]

The numbers noted above amount to thousands of schools with leaking windows and plumbing, faulty heating and air conditioning, peeling paint, and defective electrical wiring. The data also indicate that the financial shortfall is significant:

> *53 percent of public schools needed to spend money on repairs, renovations, and modernizations to put the school's onsite buildings in good overall condition. The total amount needed was estimated to be approximately $197 billion, and the average dollar amount for schools needing to spend money was about $4.5 million per school.*[28]

**Water infrastructure**

Because water infrastructure is typically out of sight and underground, it is a chronic source of underinvestment. Americans are aware of deficient roads and bridges because these examples of failing infrastructure are easy to relate to and the system's flaws are known. In 2013, the American Society of Civil Engineers graded America's roads a C+. In the same report, America's water infrastructure received a grade of D+.[29]

The water system is profoundly inefficient—the U.S. Environmental Protection Agency, or EPA, estimates that about one-sixth of the water we treat for drinking and pump into our systems simply leaks out.[30] Moreover, our water systems are based on a hodgepodge of outdated technology, much of which is at or past the end of its useful life.[31] In the Northeast and Midwest, roughly two-thirds of all water mains were installed before the Great Depression.[32] In parts of the West, water still travels through wooden pipes, a technology so out of date that few workers even have the skills to maintain the system.[33]

The need to modernize the water system is vast, not only to maintain existing systems and accommodate growing populations but also to reduce losses as climate change makes drinking water more valuable. Simply maintaining the current system is a tremendous investment. Even before federal austerity measures took place in 2011, the EPA estimated that it would take $384 billion to keep up with drinking water infrastructure needs over the next 20 years.[34]

## Increasing the return on public investments by defining national goals and ensuring accountability through performance management

The vast majority of infrastructure funding flows to states, metropolitan regions, and public authorities through formulas set by law. For example, only about 5 percent of federal transportation funding is awarded competitively.[35] These formulas typically reflect the needs of members of Congress more than the needs of the country. As a result, political geography is the most important factor when deciding how to allocate scarce resources. We need to change that dynamic while recognizing that formula programs have an important role to play in distributing infrastructure funding.

In addition to raising overall investment, the federal government must reform infrastructure funding in three important ways: first, increase the share of federal funds distributed through nationally competitive grant programs to 25 percent of the total, with a focus on projects of regional and national significance; second, rationalize formula programs so that money flows based on need and not political geography; and third, institute rigorous performance management, including requiring grant recipients to collect and report data to demonstrate that their project selection decisions are advancing national infrastructure policy objectives.

While discussions of infrastructure tend to focus on dynamic mega projects, the vast majority of funds support smaller maintenance and capacity improvement projects. Although they are less splashy, these projects are every bit as critical to economic growth and competitiveness as big-ticket projects are. At the same time, there are numerous projects of regional and national significance that remain stuck in the planning stages because states and local authorities simply cannot afford their completion. The benefit of a hybrid approach to distributing federal infrastructure funds is that it leverages the efficiency of formula programs while ensuring that we advance critical large-scale projects of regional and national significance, such as tunnels between New York and New Jersey. Moreover, performance management will help build public support for increased investment by demonstrating that state and local authorities are good stewards of public dollars and that they are making progress toward national objectives.

The greatest constraint on infrastructure investment is the public's willingness to pay various user fees and taxes; the public rightfully demands that infrastructure be a sound investment instead of pork-barrel spending that wastes taxpayer money. Establishing clear policy goals and holding grant recipients accountable through a process of performance management is central to overcoming these political hurdles and unlocking public support. Leadership in the infrastructure space requires the ability to connect government investments to a vision of the future with opportunities and prosperity for families and businesses alike. The key element is trust, which is earned by demonstrating results.

Infrastructure projects take years to plan and construct, a reality that often complicates efforts to establish public trust that investments are yielding promised results. The companion to setting clear national goals is measuring system performance over time. Performance management is a transparent, data-driven, and rational approach to infrastructure investments that maximizes performance outcomes through detailed analysis of system data. For each national goal, there should be a corresponding set of performance measures. Tracking results over time allows elected officials to mark progress and reinforce the fact that tax dollars are flowing to worthy projects.

Across asset classes—from airports to bike lanes—infrastructure investments should increase economic competitiveness, improve access to opportunity for diverse communities, maintain facilities in a state of good repair, reduce major injuries and fatalities, improve efficiency, and minimize impacts on ecological and social environments. Translating these goals into specific performance measures will vary depending on the sector.

New investments in infrastructure should:

- Require project sponsors to model how projects of regional and national significance will achieve national policy goals as part of the competitive selection process
- Increase the share of competitively funded federal infrastructure spending to 25 percent
- Require project sponsors to track and report on system performance over time, including a comparative analysis of how the project performs compared to initial estimations
- Prioritize project applications from sponsors that have a proven record of cost-effective delivery facilities that advance national policy objectives
- Require national, regional, and metropolitan governments to report on system performance for each of the performance measures that correspond to policy goals

## Increase demand and provide for housing needs by restoring residential investment

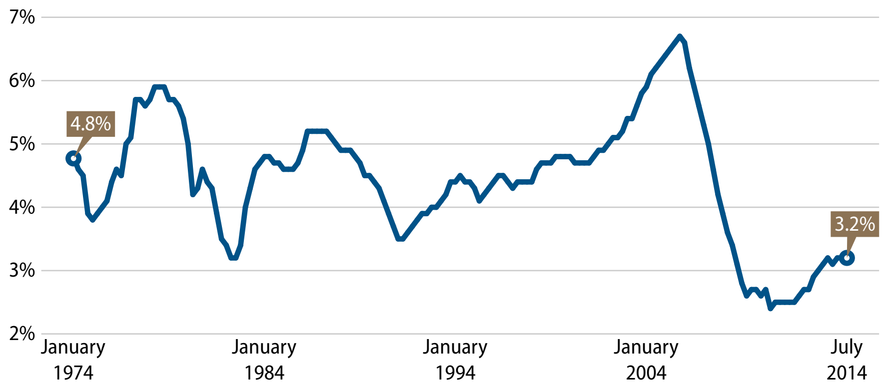
Residential investment usually leads the U.S. economy out of recessions. It is not playing its traditional role in this recovery, and this is one reason why the recovery has been slow. Residential fixed investment, relative to GDP, is below its normal value. In the second quarter of 2014, the ratio was 3.2 percent, down from a 1970–1990 trend value of 4.7 percent.

We need to take action to stimulate investment in both single-family homes and rental housing, which will increase employment and provide for the housing needs of our population. This is especially important because construction and other work related to the housing industry provide middle-class jobs for workers without university educations. We believe there are several policy changes that can help facilitate safe, sustainable homeownership and the production and preservation of affordable rental housing.

**FIGURE A1.2**

**Housing investment remains a drag on the U.S. economy**

Private residential fixed investment as a share of GDP, 1974–2014




Source: Bureau of Economic Analysis, "U.S. National Income and Product Accounts."

### Single-family housing

Overall, the national mortgage market is significantly smaller today than it was before the Great Recession. The national homeownership rate has dropped from close to 70 percent to 64 percent.[36] Cash investors made 29 percent of all purchases in 2013, way above the historic norm of 10 percent to 12 percent.[37] Housing starts remain depressed, and even optimistic projections for 2015 remain well below levels seen before the housing boom.[38]

Access to mortgage credit remains tight. For a conventional mortgage, the average FICO score is 754, and while Federal Housing Administration, or FHA, credit is easier to obtain with average credit scores around 680, it is still tighter than historical norms.[39] The Urban Institute estimates that approximately 1.2 million fewer purchase mortgages were made in 2012 than would have been the case if credit availability had remained at pre-bubble 2001 levels.[40]

In terms of specific populations, homeownership rates for young people (ages 25–34) are among the lowest in decades.[41] While that could be explained in part by the timing of the Great Recession and by the later ages at which this demographic group is forming families, even 35- to 54-year-olds (Generation X)—who should be in their prime homeownership years—have a homeownership rate that is lower than expected.[42]

Perhaps most troubling, homeownership rates for people of color have dropped dramatically, with Latinos falling by 9 percent from their peak and African Americans by 13.7 percent.[43] Because the majority of families formed in America going forward will be families of color, a steep reduction in the numbers of Latinos and African Americans buying homes spells trouble for the housing market for decades to come.[44] The drop in homeownership rates also plays a significant role in the ever-increasing wealth disparities between whites and people of color.

At the same time, while home prices nationally have rebounded from the lows reached during the Great Recession, price recovery has been remarkably uneven, with some localities still deeply underwater. For example, in the Las Vegas Metropolitan Statistical Area, or MSA, home prices are still 45 percent below their peak, and in Miami, prices are 41 percent below.[45] In cities and ZIP codes throughout New Jersey, Michigan, California, Georgia, and other states, the percentages approach and exceed 50 percent.[46]

Even in many of the housing markets where prices have recovered, these price increases are not just the result of a healthy market fueled by household formation and families building wealth but are also driven by institutional investors.[47] This investor presence may support housing prices and perhaps even inflate them but will not necessarily stabilize neighborhoods or pave the way for move-up buyers or homeownership in the future.

The communities and populations hit the hardest by the foreclosure crisis remain in the worst shape. Not only are 17 percent of homeowners (8.7 million) underwater nationally, but in the 395 hardest hit ZIP codes, between 43 percent and 76 percent of homeowners are underwater.[48] More than 70 percent of these ZIP codes have incomes below the national median, and in two-thirds of them, African Americans and Latinos account for at least half of the population.[49]

The foreclosure crisis wreaked havoc on neighborhoods and household finances across the country. Since the start of the crisis, there have been 5 million completed foreclosures, with about another 630,000 homes in some stage of foreclosure; at least 1.5 million households have managed to avoid foreclosure through tools such as short sales but still lost their homes and any equity they had accumulated in it.[50] These foreclosures have cost homeowners, neighborhoods, and investors dearly: A typical foreclosure costs borrowers up to $7,000 in administrative costs alone, costs investors more than $75,000, reduces the value of neighboring homes, and costs local governments through reduced property taxes and increased anti-blight expenditures.[51] A recent study even linked foreclosures to declines in neighbors' health.[52]

## Rental housing

The decline in homeownership has led to an increase in renters, placing significant upward pressure on rent prices. As of 2012, more than half of all renters spend more than 30 percent of their income on housing, which is the historical upper limit of rent affordability. More than one-quarter of all renters spend more than half of their gross income on rent, significantly reducing their ability to pay for food, child care, health care, and other necessities.[53] While the number of households experiencing worst case housing needs—either because they live in severely inadequate housing or spend more than half of their income on rent—has increased, Congress has repeatedly cut rental assistance programs and subsidies for affordable housing production, and the share of households eligible for these benefits that actually receive them has continued to fall.[54]

Consequently, the U.S. economy cannot benefit from the economic multiplier effects of a strong housing market, including construction jobs and local and state tax revenue. Additionally, the persistence of negative equity continues to depress aggregate consumer demand. At the same time, many creditworthy households that wish to buy a home cannot because of today's restrictive lending, losing out on the ability to build wealth by buying a home at a time of historically low prices.

## Policy changes

To restore residential investment and to protect homeowners, the Federal Housing Finance Agency, or FHFA, should encourage homeownership and affordable rental housing by:

- Changing its pricing rules so that mortgages are equally affordable to all qualified borrowers—in other words, without sacrificing control of credit risk. Right now, Fannie Mae and Freddie Mac charge higher fees to all but the most pristine borrowers. This policy drives up the cost of credit for many potential homeowners, pushes these borrowers to government-insured mortgages, and dampens demand for mortgages overall.

- Permitting Fannie Mae and Freddie Mac to offer loan modifications with principal reductions. Principal reductions help keep borrowers in their homes,[55] encourage those borrowers to maintain their homes properly, and save money for the taxpayer by reducing the costs that Fannie and Freddie have to bear when mortgages they guarantee go through foreclosure.[56]

- Working with Fannie Mae and Freddie Mac to implement targeted lending programs, underwriting pilots, and partnerships with nonprofits and other market participants in order to expand access to credit.

- Setting strong benchmarks for the government-sponsored enterprises, or GSEs, to increase affordable single- and multifamily lending, including subgoals for small multifamily properties and reporting requirements for single-family rental,[57] and implementing the "duty to serve" rule enacted in the Housing and Economic Recovery Act of 2008 that requires Fannie and Freddie to better support rural housing, affordable housing preservation, and manufactured housing.

Nothing about these changes will enable the GSEs to once again take on excessive credit risk through purchasing high-risk loans and securities as they did in the run-up to the financial crisis. They do not create exemptions from the strict Dodd-Frank requirements that creditors assess a borrower's ability to repay a mortgage loan. Nor do they weaken the authority of the Consumer Financial Protection Bureau to enforce those Dodd-Frank requirements.

Additionally, both FHFA and FHA can support affordable homeownership and rental housing, as well as neighborhood stabilization, by appropriate disposition of distressed loans. Both of these agencies have overseen bulk sales of pre-foreclosure distressed loans aimed at saving money for the taxpayer and potentially providing these borrowers with last chances to save their homes.[58] Distressed mortgage sale programs, if designed responsibly, can limit the damage of the foreclosure crisis by helping homeowners to access foreclosure alternatives, supporting neighborhood home prices and stability, and limiting losses to taxpayers. Both FHFA and FHA should better promote these goals by imposing a basic set of requirements on all loan buyers, helping neighborhood-based nonprofits participate in loan sale programs, ensuring loans that are sold have met all loss-mitigation requirements, and collecting and sharing detailed program performance data. Similarly, state and local officials should ensure adequate protections for tenants in single-family rental homes, and federal regulators should monitor cash-investor activity in the single-family rental market; measure its impact on tenants, rents, neighborhoods, and homeownership opportunities; and take action as needed. In areas with a significant amount of cash investment, there are risks of home-price bubbles, a renewed cycle of price declines if the investors sell in bulk, or locking potential homeowners out of the purchase market if they are unable to compete with investors buying in cash.

## Use scalable public service to counteract cyclical employment declines for young workers

One of the costs of the Great Recession has been a sharp rise in long-term unemployment. Long-term unemployment affects people of all demographic groups, but its impacts are particularly devastating for young people. Young workers have their whole careers in front of them, and long-term unemployment among this group can reduce their lifetime earnings while increasing fiscal pressure on public benefit programs.[59]

National service programs have a long and successful history of harnessing the desire of citizens to serve their country, and these programs also deliver important economic benefits that are especially valuable in times of high unemployment. National service is for people of all ages, but some programs are specifically designed for young people, such as the National Civilian Community Corps, or NCCC. Policymakers should maximize the benefits of national service by creating a new funding stream for service programs that automatically rises when long-term unemployment is high among young workers and falls when it is low. The temporary positions created by this automatic funding stream should focus on workers who have exhausted their regular unemployment benefits.

National service helps participants get jobs—exactly what a country needs during periods of high unemployment. In the United States, a study by the Corporation for National and Community Service, or CNCS, found that out-of-work people who chose to volunteer were 27 percent more likely to find a job than similar people who did not volunteer, with an even stronger effect found among those living in rural areas or lacking a high school diploma. Another CNCS study found that the AmeriCorps program improved job skills among participants and led many to choose a career in public service.

Congress should always provide robust funding for a baseline of national service programs by fully funding the 250,000 positions authorized by the Serve America Act in discretionary appropriations. Congress should establish a separate mandatory funding source to specifically address periods of high long-term unemployment among young people.

The temporary positions funded by mandatory spending should be designed to handle the drawdown that must follow any temporary expansion. AmeriCorps Volunteers in Service to America, or VISTA, and NCCC are well suited to address this challenge. VISTA focuses on building capacity, rather than supporting ongoing operations. NCCC regional campuses can tailor their projects to anticipate the end of temporary funding increases, and NCCC has the additional advantage of being designed for young people. These programs can grow quickly to efficiently utilize this temporary funding increase. Developing a platform to certify high-quality programs and organize them within a searchable database can further expand the growth potential of national service.

Various economic indicators could be used effectively to automatically set the mandatory funding level, so long as funding is robust enough to make a significant difference for reducing long-term youth unemployment. For example, an effective policy response to the current situation would be to double the number of national service positions that should be funded in all times under the Serve America Act from 250,000 positions to 500,000 positions. If the much larger VISTA program administered three-quarters of the temporary positions created by mandatory funding and NCCC administered the remaining one-quarter, an additional 250,000 positions would cost approximately $5 billion per year.[60]

By pegging a portion of national service funding to economic conditions, these programs would function as automatic stabilizers, which is a proven way to use fiscal policy to respond to economic challenges. Automatic stabilizers, such as unemployment insurance and nutrition assistance, expand during recessions and contract during expansions. Applying the automatic-stabilizer concept to national service programs would mobilize the engine of service when it will deliver the most economic benefit.

## Ensure a level playing field for global trade

Over the past several decades, advances in communication and transportation technology—along with agreements to ease policy trade barriers—have led to a proliferation of global trade and investment that have helped reduce poverty around the world, driven down prices for consumers, and created a web of stable institutions that draws other countries into the global trade and finance system with geopolitical benefits extending well beyond the economic realm.

At the same time, however, global trade integration creates a fundamental tension by remaking relationships in the organization of production and the workplace and altering the structure of labor markets in developed economies that contribute to rising inequality. Globalization and trade deals are not synonymous. The United States has no bilateral trade agreement with China, but offshoring to China has had significant impact on U.S. workers.

These dynamics make it crucial that trade agreements develop rules of the game that provide both American workers and American companies with a level playing field. Trade agreements should ameliorate international arbitrage on wages and help create a race to the top, rather than a race to the bottom. At a minimum, trade agreements should support conditions for collective bargaining and union formation that are stronger than what exist in current U.S. trade agreements so that workers in competitor countries can raise their real wages. Furthermore, trade agreements should support good environmental regulation so that countries are not compelled to court investment by allowing business to create environmental externalities.

Trade agreements should also require that countries with significant state-owned enterprises regularly disclose relevant financial information and contracting details for review by independent, third-party entities in order to enjoy access to the privileges afforded by trade agreements. Otherwise, independent businesses may be forced into competition with firms subsidized by national governments.

Finally, mechanisms must be found to ensure that the goal of free trade is not subverted by exchange rate manipulation. With the U.S. dollar at the center of the international financial system, misaligned exchange rates present an impediment to employment and wage growth for the United States in particular. But undervalued exchange rates also pose significant costs to people in the countries that are doing the manipulating, effectively reducing their real wages by raising the cost of imported goods and services—and therefore that of domestic, import-competing goods and services.

The World Trade Organization, or WTO, rules pertaining to exchange rates are inadequate to address the challenge of unfair advantage from skewed exchange rates. Thus, it is unsurprising that no WTO member country has ever brought a currency dispute to the body. New trade agreements should explicitly include enforceable disciplines against currency manipulation that appropriately tie mutual trade preferences to mutual recognition that exchange rates should not be allowed to subsidize one party's exports at the expense of others.

In the United States, globalization has created downward pressure on wages. However, a system of trade deals that creates upward pressure on wages in developing countries—and will lead to the development of a larger middle class in those countries—can help not just American companies but American workers as well.

## Use tax policy to support demand and promote fairness

While the U.S. tax system is more progressive than the tax systems of most other Organisation for Economic Co-operation and Development, or OECD, countries, other countries spend government receipts in a significantly more progressive manner than the United States does. This fact increases the importance of the U.S. tax system as a tool to aid the middle class.

Within the range of federal taxes imposed in the United States, it is the income tax that is the driver of progressivity. The estate tax is progressive for very-high-valued estates and, though small as a share of aggregate federal receipts, adds some progressivity to the system. Yet in recent years, regressive payroll and excise taxes have been growing as a share of federal tax receipts, while progressive income and estate taxes make up a smaller share.[61]

Approaches that use the tax system to address inclusive prosperity are best divided into short- and long-term measures. This is because the fundamental restructuring needed to create a more equitable system will take time to accomplish, both substantively and politically. In the meantime, given stagnant middle-class incomes, it may make sense to provide temporary tax relief for those who do not benefit from the United States' signature program that supports low-income workers—the Earned Income Tax Credit, or EITC. Relief beginning at this level would help prevent more households from slipping out of the middle class until wage growth catches up in the recovery.

Short-term middle-class tax relief would ideally be provided until income stagnation is overcome and would be structured as a tax credit to avoid having the amount of the benefit increase with the taxpayer's tax bracket, as occurs with benefits delivered through deductions. It could phase in beginning at the point at which the EITC phases out—$23,260 for joint filers with children—and phase out beginning at $85,000 for joint filers with no credit available once income reaches $95,000. The tax relief could automatically expire in three years or automatically phase out based on Bureau of Labor Statistics data showing improvement in wage growth of a specified amount for the middle class. Thus, this special tax credit would be carefully targeted. Moreover, given that more than one-third of tax filers would benefit from this relief, these credits could make a meaningful contribution to demand.

In the longer term, the tax system needs to become more progressive. As economist Thomas Piketty has emphasized, progressive taxation of income and wealth has a strong influence on the structure of inequality in market economies.[62] Historically, progressive taxation has limited the concentration of income and wealth. It has also provided needed revenue for social spending. In recent decades, however, the progressivity of tax systems has declined in some advanced economies with the result that high-income households and corporations now face lower effective tax rates.

In the United States, a decades-long accumulation of tax exemptions, deductions, and exclusions has helped reduce effective tax rates on high-income households and corporations. These provisions in the tax code, sometimes referred to as "tax expenditures," shelter significant amounts of income and wealth from normal taxation.[63]

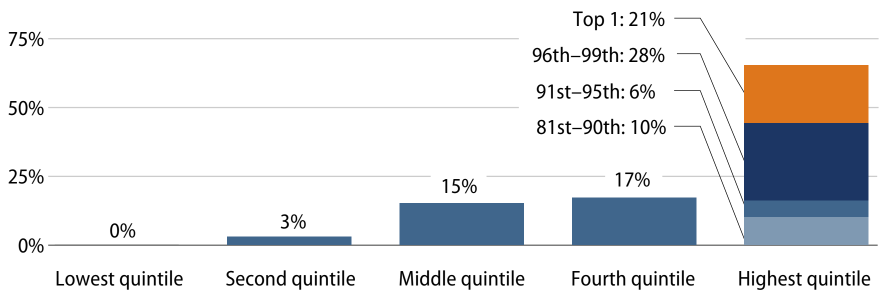
## Step-up in basis

Eliminating the tax rules that shelter high-income households and corporations would raise their effective tax rates, make the tax code more progressive, and avoid the waste created by strategies for tax avoidance. One example of a rule that allows sheltering of income from taxation is a provision of the tax code known as "step-up in basis," which functions as a direct subsidy for inherited wealth. This is how it works: Typically, when an asset is sold, the capital gain subject to taxation is the sales price minus the seller's basis in the asset, normally the price that the seller originally paid for the asset.[64] For inherited property, however, the basis is generally the fair-market value of the asset on the date the previous owner of the asset died.[65] Calculating an heir's basis in an asset using its more recent value—the date when the previous owner died instead of its original cost—is called a step-up in basis. The Congressional Budget Office estimates that the step-up in basis rule will reduce federal revenues by $644 billion over 10 years, with 21 percent of that subsidy going to the top 1 percent of income earners.[66] (see Figure A1.3) Step-up in basis is a particularly valuable subsidy for the wealthiest estates. A study published by the Federal Reserve estimates that unrealized capital gains comprise 55 percent of the total value of estates worth more than $100 million.[67] That means that more than half of the wealth accumulated within the richest estates has never been subject to income taxes.

**FIGURE A1.3**

**Step-up in basis primarily benefits the wealthy in the United States**

Share of total tax benefits




Source: Congressional Budget Office, "The Distribution of Major Tax Expenditures in the Individual Income Tax System" (2013), available at http://www.cbo.gov/sites/default/files/cbofiles/attachments/43768_DistributionTaxExpenditures.pdf.

## Housing expenditures

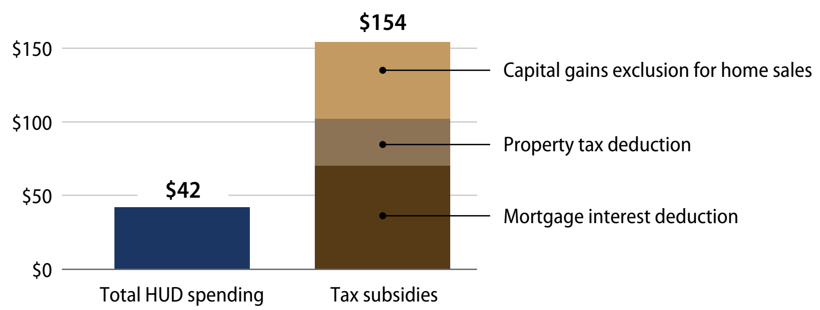
U.S. federal housing subsidies flow primarily through the tax code. The Office of Management and Budget, or OMB, expects the mortgage-interest deduction to cost the government $70 billion in fiscal year 2014 alone.[68] The federal tax deduction for state property taxes paid will cost about $32 billion in FY 2014.[69] Homeowners also do not have to pay taxes on up to $250,000 of capital gains when they sell their primary residence, which doubles to $500,000 for married taxpayers. That capital gains exclusion will cost the government about $52 billion in FY 2014.[70] Together, these three housing tax expenditures—which primarily benefit higher-income taxpayers[71]—total $154 billion for FY 2014. In comparison, the entire U.S. Department of Housing and Urban Development, which administers the government's largest affordable housing programs, will spend about $42 billion in FY 2014.[72]

While tax policy can be an effective tool to promote responsible homeownership for working families, the current system needs reform. This could be accomplished by converting itemized deductions, including the mortgage-interest and property tax deductions, into tax credits. While deductions deliver a larger benefit to taxpayers in higher tax brackets, credits deliver the same benefit to all taxpayers, making the tax code more progressive. The eligibility rules for the capital gains exclusion on home sales could also be tightened to focus this benefit on long-term homeowners.

**FIGURE A1.4**

**U.S. federal housing subsidies flow primarily through the tax code**

Budgetary impact of selected policies in 2014, in billions of dollars




Source: Office of Management and Budget, *Fiscal Year 2015 Budget of the U.S. Government* (The White House, 2014), available at http://www.whitehouse.gov/omb/.

## Transfer pricing

Companies can shift income away from the United States and toward low-tax jurisdictions by selling intangible property, such as copyrights or patents, to their foreign subsidiaries in lower-tax countries and then paying the foreign subsidiaries handsomely for the right to use the intangible property. The price paid by the U.S. firm is a deductible expense and is difficult for tax officials to challenge.[73] By setting transfer prices to maximize the tax benefits, U.S. multinational corporations can reduce their U.S. tax bills without changing the real ownership of any assets or the overall financial position of the multinational company. The tax code contains transfer-pricing rules that are supposed to prevent multinational corporations from gaming the tax system in this way. The goal of transfer-pricing rules is to ensure that prices paid between members of a multinational corporate group reflect what would have been bargained for between unrelated parties, known as the "arm's-length principle."[74] In the case of intangibles, however, many of the tools used to assess the accuracy of pricing become less reliable and easier to evade.[75] First, comparable transactions between two unrelated companies do not often exist for many of the transactions that occur within a corporate group.[76] As a result, government tax administrators do not have a baseline to use when determining what an arm's-length transaction would have looked like. Second, the unique nature of patents, copyrights, and trademarks compounds this problem since even the closest examples of transfers of rights between unrelated companies involve intangible assets with significant differences.[77] Workable anti-base erosion rules can overcome these ambiguities and prevent multinationals from gaming the system.[78] President Barack Obama's FY 2015 budget includes a rule to prevent transfer-pricing abuse that would raise revenues by about $21 billion over 10 years.[79]

## Corporate taxes: Earnings stripping

The United States taxes income earned by U.S. businesses under a worldwide system.[80] Under this system, tax is owed to the United States regardless of whether the income is earned in Alabama or Albania. However, U.S. multinational corporations are also offered the option to defer taxes owed on profits earned by their foreign subsidiaries. Taxes can be deferred on these profits until the foreign subsidiary repatriates the earnings back to their U.S. parent company.[81] But while those foreign profits are considered offshore for tax purposes, companies often place those profits in U.S. bank accounts, where they are able to earn interest and circulate through the U.S. economy.[82] The deferral of taxes on foreign corporate income is the largest tax expenditure in the corporate tax code and is projected to cost the United States more than $80 billion per year.[83]

Deferral creates an incentive to move profits to foreign subsidiaries, especially those with low corporate tax rates, in order to delay when taxes are due in the United States. While some profits may be in offshore locations for legitimate business reasons, other profits earned domestically are artificially shifted offshore for tax purposes. This explains why 40 percent of all foreign profits for U.S. corporations in 2011 were booked in Bermuda, Switzerland, Luxembourg, Ireland, or the Netherlands.[84] These five countries are often referred to as tax havens because of their extremely low tax rates.[85]

U.S. multinationals have clever ways of stripping earnings from their U.S. books and shifting those earnings to their foreign subsidiaries. One common way to do this is by maximizing debt held in the United States. The interest on that debt can be deducted as a business expense and thus reduce the U.S. company's taxable income. Corporations are generally allowed to borrow money in the United States to finance foreign operations and then deduct the interest costs from their U.S. taxable income immediately, even though their foreign income is not taxed until it is brought back into the United States.[86] By changing the rules on deferring interest deductions, this source of base erosion could be limited.[87]

## Financial stability

The last long generation witnessed the Latin American debt crisis of the early 1980s, the 1987 stock-market crash, the savings and loan debacle, the real estate and leveraged-buyout implosions of the early 1990s, the Mexican financial crisis, the Asian financial crisis, the Russia Long-Term Capital Management crisis, the Internet bubble and its aftermath, the Enron and high-yield collapse of the early 2000s, and the recent financial crisis and Great Recession.

Former Federal Reserve Chairman Ben Bernanke said of the last of these events:

> *As a scholar of the Great Depression, I honestly believe that September and October of 2008 was the worst financial crisis in global history, including the Great Depression. If you look at the firms that came under pressure in that period … only one … was not at serious risk of failure. … So out of maybe the 12, 13 of the most important financial institutions in the United States, 12 were at risk of failure within a period of a week or two.*[88]

In each of these events—on average once every three years—a financial system whose function was to spread and manage risk proved instead to be a source of risk with consequences for the jobs and livelihoods of hundreds of thousands, if not millions, of people who were not engaged in any way with investment or speculation. At the same time, developments within the financial system have been important drivers of rising inequality and perhaps also of declining corporate performance.

The Dodd-Frank legislation of 2010 represents the most major overhaul of American financial regulation since the Great Depression. It calls for substantial change in areas ranging from the capital and liquidity ratios of financial institutions to conflicts of interest on the part of rating agencies, from executive compensation to the regulation of derivatives, and from provision for the failure of financial institutions to limitations on proprietary trading. Its premise is that the prevention of financial crises requires intervention at multiple levels to be maximally effective.

The first priority for ensuring stable finance in the future has to be its effective implementation. At a minimum, this means not permitting its requirements to be watered down in response to pressure from financial-sector lobbyists. The recent weakening of provisions limiting systemic risks associated with derivative transactions by way of the last-minute insertion of language into must-pass budget legislation must not become a precedent. Further, it is essential that regulators energetically and thoughtfully carry out their responsibilities under the legislation. It is disconcerting that the implementation of regulations in many areas has yet to go into effect as the fifth anniversary of Dodd-Frank's passage approaches.

Beyond the implementation of Dodd-Frank and the steps the international community have already taken, there are a number of issues that have to be addressed before we can be confident in the stability of the financial system.

First, stronger regulation of the shadow-banking system is essential for stability. Indeed, if the effect of more extensive capital and liquidity regulation of major financial institutions is to drive financial activity into an unregulated shadow system, it could even be counterproductive. It is essential that wherever maturity mismatches create the possibility of runs on financial institutions, there are mechanisms to ensure stability in place. These are likely to include capital and liquidity requirements. In particular, we are concerned that the current compromise on money market funds is insufficient both to ensure their stability in future crises and to protect the broader system against regulatory arbitrage.

We support proposals to require money market funds to have subordinated capital buffers to absorb losses. These buffers would reduce the probability of runs because fund shareholders would be aware that the subordinated investors were in a first-loss position. In addition, the holders of the subordinated debt would have incentives to curb excessive risk-taking by the funds. The level of buffers should of course be conditioned on the riskiness and diversification of a fund's assets. But it has been estimated that buffers in the range of 3–4 percent could be adequate.[89]

Second, current procedures for dealing with misconduct by financial-sector participants are manifestly inadequate as evidenced on the one hand by the pervasiveness of malfeasance in areas ranging from money-laundering controls, to market manipulation, to mortgage marketing, and foreclosure implementation and, on the other, by the almost total absence of successful prosecutions of individuals. The practice of allowing settlements without admissions of guilt by financial institutions and their employees should be severely curtailed. Regulators have to either have systems in place that permit accountability for malfeasance or to take responsibility for their absence. And all bonuses should have provision for clawbacks in the event that malfeasance is subsequently discovered.

Third, existing liquidity and capital requirements should be reviewed in light of evidence on the magnitude of losses relative to measured capital during 2008. Large banks including Washington Mutual, Wachovia, and National City were merged into other banks. Net realized losses at Washington Mutual amounted to 9.6 percent of tangible common equity, 7.6 percent at Wachovia, and 9 percent at National City.[90]

There is reason to believe that the observed loss rates at large about-to-fail banks understate what was in store for them had they been allowed to fail and put into bankruptcy. Using default probabilities calculated from credit default swap, or CDS, data for October 2008, University of Chicago economists Pietro Veronesi and Luigi Zingales estimated average bankruptcy costs for 10 large banks and dealer banks at 22 percent of total assets.[91]

It should also be noted that the average loss rate for banks insured by the Federal Deposit Insurance Corporation, or FDIC, that failed during the crisis was 28 percent. The scale of these banks was far smaller than Wachovia or Washington Mutual.[92] However, the scale of realized losses is in the Veronisi and Zingales ballpark.

## Increase labor-force participation and labor-force growth

Families in all advanced economies have changed dramatically over the past half century. Gone are the days when most children had a full-time, stay-at-home caregiver. Today, mothers work in record numbers. However, women's labor-force participation in the United States has fallen relative to other comparable nations—due in no small part to the lack of policies to help working families manage the dual responsibilities of earning wages and caring for family members. Addressing the issues facing working families can help fight income inequality by boosting labor-force participation, increasing wages for working caregivers, and reducing temporary separations from the labor force by supporting continuous employment.

In particular, paid parental leave, paid caregiving leave, paid sick days, paid vacation, protections for part-time workers, and workplace flexibility are important to increase the inclusiveness of advanced-market economies.

### Using family-friendly labor-market policies to increase female labor-force participation and income

There are substantial benefits from paid parental leave. Access to paid parental leave increases labor-force participation for mothers in the years after giving birth.[93] Women with access to paid leave are more likely to return to work and to return more quickly, to the same employer, and at the same or a higher wage.[94]

Paid parental leave increases employment security at a time when families face the additional cost of a new family member. Because mothers with access to paid leave are more likely to return to work and return more quickly, they experience less time out of the paid labor force and earn higher wages because of increased employment experience. Moreover, children with mothers who have access to paid leave are more likely to be breastfed, which is associated with key health benefits for infants; are breastfed for longer periods of time; and are more likely to receive vaccinations on the recommended schedule, resulting in lower disease risks and future cost savings.[95]

The United States is the only advanced economy that does not guarantee paid maternity leave and one of only a handful that does not guarantee paid paternity leave. Only 12 percent of U.S. workers have access to paid parental leave through their employer, and rates are significantly higher for those with the highest earnings.[96] Approximately 60 percent of workers have access to unpaid, job-protected leave through the Family and Medical Leave Act, or FMLA.

This has a number of negative effects. It contributes to relatively low rates of female labor-force participation in the United States. In 1999, 74 percent of women between the ages of 25 and 54 were in the labor force. Today, the percentage is down to 69 percent. In contrast, female labor-force participation has increased in other advanced economies where parental leave is normal and workplace flexibility is allowed. Participation rates in Japan, Canada, Germany, and France now exceed those in the United States—something that was not true in 1999.

When mothers are the only workers expected to take lengthy leaves from work, it can create a disincentive to hire women of childbearing age, whether they eventually become parents or not. Gendered differences in work experience are one of the major drivers of the gender wage gap, which is partially the result of women taking more time away from paid labor to address caregiving needs. The stigma around parental leave is one of the reasons why mothers have lower wages than child-free women (and all men) even when productivity is taken into account.[97]

Mothers' greater leave taking also contributes to societal expectations that women are responsible for the majority of child care. Fathers who have access to greater paternity leave are more involved in their children's caretaking, and the effects remain significant as the child ages.[98]

To bring domestic policies up to the level of other advanced economies, the United States can build upon the FMLA and follow the examples of California, New Jersey, and Rhode Island by implementing a national paid family and medical leave insurance program.[99] Notably, leave in these states is gender neutral and non-transferable, which has led to increased leave taking among fathers.[100] The Family and Medical Insurance Leave Act provides one avenue to achieving this goal.

In order to expand access to job-protected leave to the 40 percent of workers who are currently ineligible, the United States should expand the FMLA to cover workers in smaller firms and with shorter job tenures.

Quebec, Canada, offers a model for advanced economies looking to create more-gender-equitable parental leave. Additionally, offering "use it or lose it" paid paternity leave has increased men's take-up rates of this benefit in Scandinavia.[101]

When workers have access to sick leave that can be utilized when they or a family member experience a short-term illness or to access preventive care, they recover more quickly, require less time away from work, and are less likely to come to work sick, reducing the spread of infection among co-workers and the public.

Workers with access to paid sick leave are more likely to receive recommended preventive care such as colonoscopies and mammograms, to experience fewer workplace accidents, and to remain employed.[102]

The United Kingdom and Australia guarantee workers the right to paid sick leave, while Canada guarantees the right to leave but does not stipulate that it must be paid. The United States has no national policies regarding sick leave—paid or unpaid.

It has been shown that workers who have and take paid vacation experience higher productivity when at work, have stronger workplace morale, have longer tenures with their employer, and experience health benefits.[103] The United States, however, is the only advanced economy that does not guarantee paid vacation. As a result, almost one-quarter of workers have no paid vacation and no paid holidays.[104] High-wage workers are significantly more likely to have access to paid vacation than low-wage workers.[105] Canada, in contrast, guarantees two weeks of paid vacation, while Australia offers four weeks and the United Kingdom offers 5.6 weeks.[106] These days off are in addition to paid holidays, the number of which varies per nation.

The United States should mirror the rest of the wealthy world by ensuring that workers have access to at least some paid vacation.

Globally, women are more likely to be part-time workers, in part due to family caregiving responsibilities.[107] In the United States, part-time workers are significantly less likely to have access to any form of paid leave or health insurance.[108] This is especially problematic as the rate of people working part time for economic reasons rose dramatically during the Great Recession and remains high.[109] Many low-wage workers struggle to work enough hours, and working multiple jobs has become even more difficult due to the increased prevalence of zero-hours work contracts. These on-call work arrangements do not guarantee that workers will receive hours of work for pay but nevertheless require full-time availability. Ending exclusions from protective wage and benefit requirements is eminently sensible.

Protections for part-time workers would provide safeguards for some of the U.S. economy's most vulnerable workers. Part-time work is especially common in the service sector—jobs that tend to pay low wages and offer few benefits. For example, the average workweek in the U.S. leisure and hospitality industry is only 26.2 hours across all production and nonsupervisory workers, but average wages are less than $14 per hour.[110]

Workers are spending more time at work today than they did a generation ago, yet inflexible and unpredictable schedules make it difficult for workers to balance their jobs with family and personal needs. Almost 30 percent of all Americans report having work schedules with varied daily start and stop times, with 10 percent reporting schedules that fluctuate so much that they cannot accurately predict a typical weekly work schedule.[111] This is particularly true for low- and middle-income families: Nearly 70 percent of low-income workers in the United States do not have the option of changing their scheduled start or stop time if needed. Only about half of workers can alter their schedule or the location where they do their work if they need to.[112] The ability to exercise even minimal control over one's work life is important, and access to predictable schedules can help workers provide or arrange for proper child and elder care without paying unnecessary care costs.

Both the United Kingdom and Australia have right-to-request legislation, which permits employees to request flexible work arrangements and requires that employers seriously consider such requests and provide justification if requests are rejected.[113] The U.K. legislation covers those responsible for the care of a child or an adult. In Australia, the legislation covers workers with disabilities, workers over age 55, and those who are experiencing domestic violence or caring for a family or household member who is experiencing domestic violence.[114]

The United States and Canada have no federal mandates on access to flexible work policies. In Canada, however, some local jurisdictions have provisions permitting some forms of workplace flexibility such as "compressed" work weeks in which workers still work 40 hours per week but not necessarily over the course of five full working days. In the United States, San Francisco[115] and Vermont have recently adopted right-to-request provisions.[116]

Right to request enjoys broad popular and business support in the United Kingdom and Australia and has not been shown to impose undue administrative or financial burdens. It provides an easy improvement in the lives of workers with family responsibilities and should make it easier for them to maintain continuity of employment and stability of income.

## Using immigration policy to counteract the slowdown in domestic population growth

Many advanced economies are faced with slowing natural population growth rates. Since growth in output is heavily dependent on growth in labor inputs—as standard growth accounting exercises demonstrate—declining labor-force growth reduces the growth of potential output.[117]

The decline in population growth, combined with relatively higher life expectancy and lower retirement ages, can also contribute to secular stagnation. These factors combine to increase the savings rate, since older households tend to save more and people who live longer will need to save more for retirement. Moreover, as population growth slows, so does expected demand for goods and services. This reduces investment demand. The increase in the savings rate and reductions in investment demand contribute to a tendency for advanced economies to operate at a low level of output and employment.

The United States is in a better long-term position than Japan and many European economies, which have experienced declining domestic population growth, in part because immigration has contributed to the growth of our labor supply. According to the Congressional Budget Office, or CBO, there were approximately 40 million foreign-born people living in the United States in 2012, and they made up about 13 percent of the population, the highest percentage since 1920.[118] The labor-force participation rate of 25-year-old to 64-year-old male immigrants was 90 percent, higher than the 83 percent for prime-age, native-born men. The participation rate for prime-age, foreign-born women was 65 percent, compared to 72 percent for native-born women.[119] These facts are part of the reason that CBO estimated that comprehensive immigration reform as considered by the Senate would increase 2023 GDP by 3.3 percent and reduce the deficit by $200 billion over the next 10 years and an additional $700 billion over the following 10 years.[120]

If we can continue to attract both the highly skilled and unskilled labor that we need to complement the growth in our domestic labor force, it will help us sustain long-term economic growth. As CBO has concluded, the growth in the labor force from increased immigration has raised output, productivity, and average wages in the long term.[121]

## Expand educational opportunity to increase human capital and support economic mobility

### Supporting early childhood education

The global financial crisis of 2008, along with the resulting widespread austerity cuts to social programs, significantly exacerbated levels of inequality in developed nations. In response, national governments are increasingly investigating policy solutions that address the destabilizing effects that the crisis had on economic productivity and social cohesion. Over the past decade, evaluations of small demonstration programs and large-scale federal programs alike have added to the body of evidence supporting the existence of high-quality early childhood programs.

Early childhood education, or ECE, programs have been shown to substantially reduce the school-readiness gap that manifests even before children enter kindergarten, producing positive outcomes that last well into adulthood.[122] Evaluations of high-quality preschool programs in Boston, Massachusetts, and Tulsa, Oklahoma, for example, showed that children gained an additional year of learning in language, reading, and math.[123] These gains in the early years go on to positively affect everything from high school graduation rates to lifetime earnings.[124] Importantly, all recent evidence has shown that these programs make the most profound difference in the lives of low-income children and children of color.[125]

Research confirms that ECE has positive long-term effects over the course of a child's lifecycle. Investment in high-quality early childhood programs beginning at birth—including preschool and child care—can have the dual benefit of preparing children for success and helping parents, especially women, participate in the labor force. National ECE programs, together with other improvements to the educational system, promise to add significantly to human capital formation in advanced economies.

### Eliminating financial barriers to higher education

As recently as 1996, the United States had the second highest share of adults who earned postsecondary education credentials and the highest share of adults with university degrees, according to the Organisation for Economic Co-operation and Development's measurements of educational attainment levels across developed nations.[126] More recently, however, America's level of educational achievement has fallen behind other nations. In 2012, the most recent year measured, the United States ranked fifth in the percentage of adults who had earned postsecondary education credentials.[127]

The United States is also showing more-pronounced downward educational mobility. Twenty-nine percent of American men and 17 percent of American women had less education than their parents, compared with the OECD average of 19 percent for men and 13 percent for women. Twenty percent of U.S. men and 27 percent of U.S. women had more education than their parents, compared with the OECD average of 28 percent and 36 percent, respectively.[128]

Education beyond the secondary level—known in the United States as higher education and in some other countries as tertiary education—has been shown to increase the prosperity of communities, states, and nations. Recent studies in the United States have shown that a 1 percent increase in the share of a state or region's population who are college graduates raises wages, not just for the college graduates but for high school graduates and dropouts as well—by 1.6 percent and 1.9 percent, respectively.[129] But increasing college attendance and completion rates has proven difficult in the United States, resulting in largely stagnant college attainment rates that threaten economic prosperity, particularly among at-risk populations.

In the United States, the lack of college attainment has contributed to a growing student-loan debt problem. Many students are having difficulty repaying their student loans, and students who left college without a degree are having the most trouble repaying their student loans.[130] Today, more than $1 trillion in federal student loans are outstanding.[131] As of 2013, only 60 percent of borrowers in repayment were actually making their scheduled payments. The remaining 40 percent were in deferment, forbearance, or default, indicating that the student-loan borrowers are in distress.[132]

To solve this problem, the United States needs a bold new approach. We should make higher education virtually free at a community college or a public four-year college so that all high school graduates and their families have no doubt that they can afford higher education. Each high school graduate would receive support at a level up to the tuition and fees at a public four-year college or university. If students attend a community college, they would receive an amount that would cover the cost of that education. If a student attends a private college or university, the student would receive an amount equal to the comparable public education.

Under such a system, students would be required to repay all or part of the support they received as a percentage of their income over a specified period of time—for example, 20 years or 25 years. If former students are struggling economically, no payment would be required until their earnings are sufficient to make payments. And similar to the payroll tax for Social Security, there would be a cap on the amount that an individual would need to repay.

Such a system is similar to those employed by other countries, including those that have surpassed the United States in terms of college attainment rates. Under the Australian financial aid system, students receive money from the government to cover the tuition and fees at Australian colleges, including all public universities and some private institutions.[133] The government supports these institutions directly and requires students to pay for a portion of their education. This amount is known as the student contribution and can be financed by the government. Students receive a bonus or discount of the loan amount if they are able pay a portion up front or if they enroll in certain programs, including math, science, education, and nursing.[134] The debt borrowed to cover the student contribution is repaid after graduation using the tax system. The borrowed amount does not accrue interest; it is indexed each year based on an increase in the consumer price index.[135] Repayment is based on the borrower's income. No payment is required for borrowers who earn less than $53,000 annually. Repayment rates are graduated based on income and range from 4 percent of income paid by those who earn $53,000 to 8 percent of income paid by those who earn more than $99,000.[136]

Since 2000, Australia has significantly boosted the share of its population that has earned postsecondary education credentials and degrees. In 2000, just 27 percent of Australian adults had earned postsecondary education credentials. By 2012—the most recent year for which data are available—the share of adults in Australia with postsecondary education credentials had increased to 41 percent; the country is ranked eighth among the countries examined. Among Australian young adults ages 25 to 34, 47 percent have earned postsecondary education credentials, up from 31 percent in 2000.[137] Overall, Australia is first among all OECD and partner countries in the share of young adults (77 percent) who are expected to pursue university degrees before turning 25 years old.[138]

Several other countries have shown marked improvement based on the statistics from the OECD. New Zealand, for example, has implemented a program similar to that of Australia and has seen significant increases in the levels of college attainment. Recently, Germany announced free tuition at its public colleges and universities.

## Supporting apprenticeship and other skills training

In the United States, young workers are not gaining the skills they need to replace a rapidly aging workforce. The average age of a skilled manufacturing worker is 56 years old.[139] But too many young people lack sufficient literacy and numeracy skills—the ability to work with and understand numbers—calling into question their ability to effectively perform these jobs when the older generation leaves the workforce.[140]

As a result, employers are increasingly worried about their ability to find skilled labor. A PricewaterhouseCoopers, or PwC, survey of global CEOs found that "an inability to find enough skilled talent is the number one concern of business executives around the world."[141] Less than one-third of respondents to the PwC survey felt confident that they would find the talent they need to grow their companies.[142]

Meanwhile, the United States is experiencing high levels of youth unemployment. It currently stands at more than 12 percent, more than double the national rate of unemployment.[143]

There is a clear need to develop and expand the skills of workers who do not go to university. There is a wide spectrum of technical and vocational training that is needed. Apprenticeship is good example of skills training that has worked in many advanced economies.

Apprenticeship is a worker-training model that supports economic growth by boosting companies' productivity and connecting workers to good jobs. An apprenticeship is a job in which the worker is paid to learn a set of skills through on-the-job training. A strong and diverse apprenticeship system that includes a wide range of sectors and occupations helps businesses meet the demand for skilled workers while offering higher wages and better employment outcomes.

Switzerland, Germany, and Austria have long-established apprenticeship systems that are renowned for their high quality. A majority of young people from these three countries enter the workforce through apprenticeships, which are available across a wide range of sectors and occupations. Apprentices are typically in their teens and early 20s. The governments are very involved in regulating, developing skills standards for, and subsidizing the programs.

The United Kingdom[144] and Australia[145] have sought to expand their apprenticeship systems in recent years. Both countries have successfully increased participation by employers and workers, expanded occupations, and increased gender diversity. But apprenticeships in the United Kingdom and Australia are low quality compared to Switzerland, Germany, and Austria, and much of the growth in apprenticeships in the United Kingdom and Australia has been among workers over age 25. The U.K. and Australian governments provide some subsidies, but this can and should be improved, as well as their involvement in regulating apprenticeship quality. To that end, the United Kingdom recently launched an effort to engage employers to develop uniform apprenticeship standards.[146]

The United States has a small apprenticeship system of about 375,000 apprentices, heavily concentrated in the building and construction trades.[147] U.S. apprentices are typically older (with an average age of 29) and overwhelmingly male.[148] Although limited in number and type of occupations, the existing programs are high quality. The federal government spends $30 million annually on administration, but offers no financial incentives to employers or apprentices, and apprenticeship standards vary across the country.

There is substantial evidence that apprenticeship programs efficiently increase the accumulation of productive human capital. Researchers have found that U.S. workers who complete an apprenticeship make about $300,000 more than comparable job seekers in their lifetimes.[149] Apprentices in the United Kingdom have been found to make a weekly wage that is 10 percent higher than that of their peers.[150]

A Swiss study found that employers spend around $3.4 billion annually training apprentices but see a return of approximately $3.7 billion each year from apprentices' work during training.[151] In Canada, researchers found that employers receive a benefit of $1.47 for every dollar spent on apprenticeship training.[152]

In the United States, Washington state realized a return on investment for apprenticeships of $23 for every public dollar invested—substantially higher than for any other workforce-training program, including community colleges, which were found to have a return on investment of $3 for every public dollar invested.[153] The U.K. Department for Business, Innovation and Skills and the National Audit Office determined that for every pound spent by the government to support apprenticeships, the United Kingdom gets a return of between 18 pounds and 28 pounds.[154]

For these reasons, apprenticeship programs are a promising policy for increasing skill levels and long-run economic growth.

## Reform corporate governance to encourage long-term investment

There is substantial evidence (see Chapter 2) that the incentive structure currently facing corporate decision makers is flawed. Horizons for investment decision making have been shortened because management compensation is strongly tied to short-term stock-market performance. While the incentives of performance-based pay are straightforward for many professions, the difficulty of measuring the performance of corporate executives leads to misaligned incentives that do not lend themselves to simple solutions, yet share prices are typically the singular measure of executive performance linked to compensation.

As these incentives have been increasing, declines in marginal tax rates on high incomes appear to have increased the incentives for managers to seek increased compensation overall, as the after-tax gains have increased. Unfortunately, this process has been strongly driven by peer benchmarking with little empirical evidence that these changes in incentives have improved overall economic efficiency.[155] Large executive compensation packages limit the corporate income available to compensate ordinary workers and reduce the incentives for corporate decision makers to invest profits in future projects, even when those investments are in the best long-term interest of the firm.[156]

Both the public and private sectors can and should reform this incentive structure in a variety of effective ways. On the public side, most corporate tax regimes currently allow all executive compensation to be deducted from income as a cost of doing business.[157] By limiting these deductions—for example, allowing only compensation packages of $1 million or less to be deducted—very high management pay would become more costly to the corporation. Differential tax treatment can also be used as a lever to better align the long-term incentives of stakeholders and executives in a variety of ways.

Behavioral distortions that arise from the practice of compensating upper management with stock options can be attenuated by significantly increasing the time between option vesting and exercise and by limiting the amounts that can be exercised in a given period.[158] In addition, because corporate stock buybacks create potential conflicts of interests for managers with option compensation, policymakers should examine revisiting Securities and Exchange Commission, or SEC, regulations to find ways to discourage managerial opportunism while allowing useful repurchases.[159]

While the liquidity of equity markets makes some long-term governance issues difficult to address without public policy, investors and fund managers already have the incentive structure and power to correct many problems. Excessive short-termism, whether driven by executive compensation or other factors, is not in the best interest of stakeholders in the firm.

Greater disclosure and usability of both corporate boards and individual board members' track records would greatly reduce transactions costs in determining the quality of governance at firms. In the short term, firms that take governance seriously would see share prices appreciate as investors realize that these firms are better managed, and in the long run, this behavior should compel more firms to pursue better governance and executive compensation practices.

## Conclusion

Inclusive prosperity has been an elusive goal for U.S. policymakers, especially after a severe economic downturn from which we have yet to fully recover. We have identified strategies that would quickly bring the U.S. economy back to full strength by increasing the purchasing power of the middle class, thereby creating a virtuous cycle of prosperity as companies have an incentive to hire. Critically, many of these policies, such as infrastructure and residential investment, will also make our economy more productive in the long run. When combined with inclusive supply-side policies such as reducing barriers to affordable, high-quality early childhood and higher education, they could usher in a new era of inclusive growth.

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