

Chapter 3

Policy

Policy

The central challenge of economic policy in the industrial world

The central challenge for economic policy in advanced-market economies is renewing the growth of living standards for everyone. As market incomes have stagnated or declined, the prospects for many households have dimmed. Tax-and-transfer systems have mitigated some of these market effects, but they have not counteracted all of them. To change this dynamic, policies must be directed toward reviving growth rates, increasing productivity, and ensuring that middle- and lower-income households are the substantial beneficiaries of the subsequent economic progress.

Increased economic growth depends on both aggregate demand and supply. At the moment, many advanced economies are operating below capacity because of shortfalls in aggregate demand. There is an immediate need to increase demand to get these economies back to full employment and higher wages. In the longer term, increased growth will depend on increasing the overall productive capacity of the advanced economies.

Delivering high-employment, high-productivity economies, with rising employment and rising wages, will also help bring budget deficits down and put national debt on a downward path. As the experience of the United Kingdom has shown, low productivity and the stagnation of wages leads to lower income tax and national insurance receipts, as well as higher spending on social programs. The result has been that targets to reduce the United Kingdom's deficit have been missed by a substantial margin. Higher productivity and wages are essential to putting public finances on a robust and sustainable footing without deep and damaging cuts to public spending and investment.

Restoring demand

In response to the downturn initiated by the financial crisis of 2008, many advanced economies have responded by quickly embracing fiscal austerity. Government expenditures were reduced rapidly in the belief that immediate attempts to bring budgets into balance would somehow serve to increase demand and restore output and employment. This has not happened, and as International Monetary Fund, or IMF, chief economist Olivier Blanchard and IMF economist Daniel Leigh have recognized, the negative output effects have been significant.¹ A better approach to the current situation is to recognize that many advanced economies find themselves in a liquidity trap. That is, in some countries, even when central banks manage to push the short-term interest rates to zero or close to it, the effects on aggregate demand are insufficient to bring those economies to full employment. This was a major problem in the United Kingdom in 2011 and 2012, and it seems clear that the economies of Japan and most of the eurozone are in such a trap—and that the United States was at least in this trap. Where these countries' fiscal positions allow and where demand is weak, governments should consider making investments in their people, stimulating demand and addressing the challenge of stagnant wages. Domestic policy will of course be most effective if there is adequate global demand, and with so many of the world's large economies in similar positions, international coordination on demand management becomes of paramount importance.

Increasing supply

A return to an economy growing at full potential will produce substantial benefits for middle- and lower-income households. Increasing growth where it is currently not occurring will increase employment. Lower levels of unemployment and underemployment in labor markets, combined with increased productivity, will deliver rising real wages. The increase in potential output and productivity will improve not only long-term economic welfare but also the ability of government finances to fund necessary expenditures.

In the longer term, however, once advanced economies have thoroughly recovered, expanding potential output will require more progress on the supply side. Advanced economies need to increase the productive capacity of their workforce, make much needed investments in the public goods that support business growth, adopt family-friendly policies that will increase the number of workers, and take steps to aid innovation.

Promoting inclusion

While increased growth has obvious economic benefits, we now have plenty of evidence that, absent appropriate policy, middle- and lower-income households may not share fully in future productivity gains or economic growth at large. So advanced economies need to take steps to increase both employment opportunity for all and the earning power of all their workers. While many of these reforms will follow from economic principles, we must not lose sight of social barriers to inclusion that are just as important. As our societies become increasingly diverse, ensuring that people of every race, ethnicity, gender, background, and faith participate and share in economic gains is not only a matter of fairness but also one of the most fundamental approaches to ensuring inclusive growth in our economies.

In the remainder of this chapter, we identify policies that will serve to increase demand, increase long-run supply, and promote inclusion in the benefits of economic growth.

Domestic agenda for growth with inclusive prosperity

Managing globalization is critical both to increasing growth and to maintaining public support for the openness on which the modern global economy, and its related wealth, is built. Because the movement of goods, services, labor, and capital inevitably results in both winners and losers, it is essential that countries' domestic policy framework is equipped to ensure that growth is more sustainable and more equitable than in recent years. The principles discussed in this section are essential to ensuring that inclusive prosperity takes place. Different countries will, however, have different specific policies in response to these principles depending on their domestic circumstances.

Raising wages: Full employment in an economy where work pays

As advanced economies recover from the financial crisis, their primary goal must be returning people to decent work with a decent salary. Unemployment is falling across advanced economies, but in the aftermath of the global financial crisis, the slack in the labor market is manifesting itself in different ways. In the United States, for example, the labor-force participation rate for prime-age workers remains below previous levels, and real hourly compensation in the nonfinancial corporate sector

has remained essentially flat since the end of 2008.² In the United Kingdom, productivity remains unusually weak.³ Real wages have seen consistent weakness over the past few years. In both the short term and the long term, the first step toward achieving inclusive prosperity is a healthy labor market with growing wages and incomes.

Although years of slow recovery have rightly focused policymakers on restoring demand, sustaining healthy labor markets and middle-class living standards for the long term also means helping families get past barriers that keep too many people from fully participating in the economy. While experiences vary across countries, female employment rates are still below those of men, and in some important examples, such as the United States, employment among working-age women has declined significantly since 2000.⁴ Increasing the ability of families to earn two full incomes is vital to inclusive prosperity. In the sectors where job growth is taking place, good jobs with clear career progression must be developed so that workers can build on success, further develop their human capital, and earn stable wages that can support a middle-class life.

For most people in work, the spending power of wages—especially as it relates to the most important components of a middle-class lifestyle—is being eroded.⁵ In many countries, the relationship between wages and productivity has broken down, while minimum wages have lost their real value.⁶ The increase in part-time work across developed countries is associated with salaries that are not enough to attain an acceptable standard of living.⁷ Various countries have had upward pressure on wages even with a relatively loose labor market because they have institutions that create that upward pressure in the firm even as external pressures—such as globalization—push wages down. To help support decent living standards for all workers, there is an important role for tax credits, but they must be used in conjunction with a strong minimum wage to ensure they are an added reward for hard work rather than a subsidy for low pay.⁸

Understanding the interaction between minimum wages and public assistance is crucial to setting the right policy. A minimum wage that ensures a parent working full time can support a child without relying on government assistance has myriad benefits. Direct costs to the Treasury are reduced, workers gain greater independence, and workers have more time when they do not have to schedule additional trips to maintain their benefits.

It is also important that minimum wages adjust to keep up with pay at the middle and top. However, as crucial as minimum wages are to raising living standards for low-wage workers, strong minimum wages are not a cure-all. There are trade-offs in relying on minimum wages to raise living standards, and we must not lose sight of the fact that we need a mix of policies that deliver fairness and productivity growth. A labor market that works for everyone includes a healthy minimum wage that the vast majority of workers out earn.

Support for young people facing long-term unemployment

Many advanced economies are experiencing near-historic levels of youth unemployment, with levels as high as 54 percent in Spain and still above 10 percent in the United States, more than double the national rate of unemployment.⁹ The consequences of high youth unemployment can be long lasting: Research shows that workers who are unemployed as young adults earn lower wages for many years following their period of unemployment due to forgone work experience and missed opportunities to develop skills.¹⁰ It is therefore essential that young people who are out of work are brought back into the labor market as quickly as possible.

Case study: U.K. Future Jobs Fund

In 2009, the United Kingdom's Labour Government introduced a Future Jobs Fund, or FJF, in response to significant concerns about the long-term effects of rising youth unemployment. The Department for Work and Pensions, or DWP, pledged 150,000 temporary paid jobs lasting six months for unemployed young people and people living in disadvantaged areas, with a maximum DWP contribution of 6,500 pounds per job. The incoming Coalition Government ended the program in March 2011.¹¹

An independent national evaluation¹² found that of the 105,220 participants who started FJF jobs between 2009 and 2011, an estimated 43 percent of participants obtained a job outcome after FJF—in the majority of cases with the same employer as their FJF job—with “impressive levels of job sustainment.” The FJF had a noticeable effect on the youth labor market by creating jobs when few were available—accounting for 22 percent of 18- to 24-year-olds who stopped receiving Jobseeker's Allowance.

Analysis of the FJF's value for money suggests that it had a net cost to government of 3,946 pounds per participant, or just more than 9,000 pounds per job outcome, when direct tax revenues and benefit savings were taken into account. This cost-benefit calculation does not account for benefits such as indirect tax revenues, wider community benefits, and long-term tax revenues, so it is likely to have overvalued the cost to government of FJF.

As well as increasing employment and skills, FJF has left a legacy that includes more-inclusive approaches to recruitment and selection by employers, a change in employers' attitudes toward young and unemployed people, a number of successor temporary job programs currently in development, and a marked change for the better in many participants' lives.

Family-friendly labor-market policies to increase female labor-force participation and income

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 in most advanced economies—though the United States is an outlier, with working-age women’s participation in the labor market falling fairly steadily since about 2000.¹³ In some countries, there are large potential gains in labor supply to be had if policies that help working families manage the dual responsibilities of earning wages and caring for family members can be improved. A recent analysis by Cornell University economists Francine Blau and Lawrence Kahn suggests that had family-friendly policies in the United States expanded in line with those of European economies, U.S. women’s labor-force participation rates would have been 7 percentage points higher in 2010.¹⁴ 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—which increases labor-force participation for mothers in the years after giving birth—should be encouraged where it is not currently adequate.¹⁵ Paid caregiving leave, paid sick days, paid vacation, protections for part-time workers, and workplace flexibility are all important to increase the inclusiveness of advanced-market economies. These policies are especially important in diverse nations, where many community traditions call on family members to shoulder a large share of the caregiving burden.

In addition to promoting greater economic security for working families, family-friendly policies can also benefit business’ bottom lines by reducing turnover and improving employee morale and productivity.¹⁶ Some policies, such as greater access to workplace flexibility, have no direct cost to employers, while others, such as paid sick days, present minimal costs that are dwarfed by the potential savings through increased retention and reduced absenteeism.¹⁷ Even in the United States—where leave is most limited—longer leaves, such as those provided to new parents or family caregivers, can be funded and administered through governments with very low costs per individual covered.¹⁸

Other countries that already offer these rights are beginning to look at the role that universal and affordable or expanded free child care can play. It is no accident that the Nordic countries have some of the highest employment rates among working-age women; they have made significant commitments to caring for children to support this outcome. Affordable, universal child care is associated with higher

female employment rates, particularly for mothers. Boosting maternal employment rates not only increases family income and maintains women’s human capital by improving mothers’ attachment to the labor market, but it also increases the tax base, generating a positive cost-benefit return over time.

Case study: The gains from leave and workplace flexibility policies

All advanced economies except the United States guarantee the right to paid maternity leave. Not all guarantee leave for fathers, however, and many offer significantly less parental leave to fathers. This has a number of negative effects. When mothers are the only workers expected to take lengthy periods away from work, it can create a disincentive for employers to hire women who they believe are likely to have children—whether they become parents or not.

Gendered differences in work experience are one of the major drivers of the gender wage gap, which is partly 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. Mothers’ greater leave taking 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. Policies that grant fathers use-it-or-lose-it parental leave are relatively new but show promise in sharing caregiving responsibilities more broadly, while removing some of the expectations of caregiving differences that may drive gender wage gaps.¹⁹

The benefits of paid caregiving leave closely mirror those of paid parental leave. Unfortunately, paid caregiving leave is much less common in advanced economies. Australia and Canada guarantee workers the right to paid caregiving leave. The United Kingdom only guarantees unpaid time off. Sweden guarantees leave with 80 percent salary replacement. Policymakers around the globe are still recognizing the benefits of these policies, and policy innovation in this space is one area where advanced economies can improve living standards through smart policy reforms.

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.

The United States is the only advanced economy that does not guarantee its workers paid vacation. As a result, almost one-quarter of workers have no paid vacation and no paid holidays. High-wage workers are significantly more likely to have access to paid vacation than are low-wage workers. Canada, by contrast, guarantees two weeks of paid vacation, while Australia and the United Kingdom offer four weeks. These are in addition to paid national holidays, the number of which varies per nation.

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 these requests and provide justification if the requests are rejected. The U.K. legislation covers those responsible for the care of a child or an adult, while 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.

The United States and Canada have no federal mandates on access to flexible work policies. In Canada, however, some local jurisdictions have provisions that permit some forms of workplace flexibility, such as compressed work weeks. And in the United States, San Francisco, California, and Vermont have recently adopted right-to-request provisions.

Raising take-home pay for low-wage workers

Expanding labor-market participation is critical but must go hand in hand with efforts to raise wages. When large portions of the workforce are earning low wages, their welfare is affected and their consumption is limited, which weakens aggregate demand. 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.²⁰

For lower-wage workers, a principal mechanism to generate inclusiveness is a minimum wage that provides sufficient income and is tied to the median wage of all employed people. The available evidence strongly suggests that this is one good way to reduce the share of workers who are trapped in low-wage work.

As U.S. experience has demonstrated, an Earned Income Tax Credit, or EITC, is also a valuable tool to keep low-wage workers from living in poverty. The U.S. system provides important income supplements while rewarding increased work. The United Kingdom’s tax credit system has been similarly effective.

Increasing worker voice to increase wages

As productivity growth and median wages have diverged, an increasing share of the net income of the corporate sector has gone to management pay and to shareholders. When workers have less voice to demand higher wages, prosperity is not widely shared, a problem that is acute in the United States, where collective bargaining coverage is much lower than in most other advanced economies. In addition to measures to support wage growth, there is a need to create institutional change that will allow for a more inclusive capitalism, in which profit income is more broadly shared.

Our Australian commissioner, Wayne Swan, has noted that good policy reforms have been a large driver of increased income growth in Australia. Collective bargaining reform, prudent fiscal and monetary policy, a strong public-private partnership that has strengthened the pension system and financial sector, and a series of reforms aimed at increasing competitiveness reflect policy that has been a driver of growth, not a drag on it. Swedish Commissioner Pär Nuder pointed to a cooperative relationship between labor and management as a key to rapid growth in both productivity and wages in Sweden.

Some countries, such as Germany, have workers represented on company boards, as well as works councils and tripartite institutions of learning, which provide education on how to make workplace democracy effective and productive. Different countries will have more or less appetite for these kinds of reforms depending on their labor-market traditions and current outcomes.

Other inclusive capitalism practices range from employee stock-ownership plans and worker cooperatives—which allow workers an ownership stake in a 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 these schemes 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 often associated with higher pay, expanded benefits and greater job security, participation in decision making, trust in the company and management, and better labor-management relations. For businesses, inclusive capitalism is often associated with increased productivity and profitability and a greater likelihood of corporate survival. 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.

There is a range of policy options that could support inclusive capitalism. In the United States, for example, there are tax incentives for Employee Stock Ownership Plans, or ESOPs, though they do not extend to other forms of gain sharing. Although substantial benefits can accrue to business owners from ESOPs, workers also benefit because they tend to receive higher overall compensation, in part due to increased productivity. It should be emphasized that a progressive implementation of profit sharing ought not to require employees to give up existing compensation or employment rights. And government support for profit sharing should be in favor of making it available for all employees.

Protecting workers who are underemployed

The unraveling of the traditional employer-employee relationship has made it more difficult to provide basic labor-law protections to workers. As corporations have shed employees, through devices such as subcontracting or hiring independent contractors, they also have shed traditional responsibilities as employers.

This has long been an issue in the U.S. construction industry, where firms use subcontractors and create subsidiaries to avoid employer responsibilities. Currently, many workers at franchises of large corporations are nominally employees of the franchisee but have much of their workplace lives determined by the franchising corporation. Hospital, retail, and other workers are treated as just-in-time workers, required to report to work on demand, with no guarantee of minimum hours. In the United Kingdom, many workers employed on zero-hours contracts are in a similar position. Some companies are employing up to 85 percent of their workforces on contracts of this kind.²¹ This form of employment makes weekly household budgeting almost impossible and reduces employers' commitments to their workforces.

To address these problems, basic legal protections for employees need to apply when an employment relationship exists, and these protections should not be negated by legal form.²² Firms that are in reality employers should be made responsible for basic protections such as overtime pay, workers' compensation, and unemployment compensation, as well as for following other protections provided by labor law. In some countries, certain rights are quite rightly bestowed on individuals after a continued period of employment by the same organization. Legal distance from employees should not shield the employer from fulfilling basic responsibilities.

Educational opportunity for all

The analysis in Chapter 2 shows that advanced economies are increasingly rewarding those with high skills. It is therefore essential that education systems ensure that there are clear routes to high skill levels through both academic and vocational paths.

In many countries, young workers are not gaining the skills they need to replace a rapidly aging workforce. Across Organisation for Economic Co-operation and Development, or OECD, countries, the share of 45- to 49-year-olds in the workforce will rise 6 percent from 1995 to 2030.²³ In the United States, the average age of a skilled manufacturing worker is 56.²⁴ But too many young people lack sufficient literacy and numeracy skills, calling into question their ability to effectively perform these jobs when the older generation leaves the workforce.²⁵ Across OECD countries, between 5 percent and 28 percent of people are proficient at only the lowest levels in literacy, and about 8 percent to 32 percent of people are proficient at only the lowest levels in numeracy.²⁶ Worse yet, "OECD Skills Outlook 2013" indicates that skills are actually declining in some countries. For example, 55- to 65-year-olds in

England and Northern Ireland score about average relative to other OECD countries in literacy, but 16- to 24-year-olds are far below average in literacy. The United States is experiencing a similar trend in numeracy.²⁷

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.”²⁸ Less than one-third of respondents to the PwC survey felt confident that they would find the talent they need to grow their companies.²⁹

There is a clear need to develop and expand the skills of workers who do not go to college. There is a wide spectrum of technical training, vocational education, and apprenticeships that is needed, which will vary substantially across advanced economies. In all cases, however, government, educational institutions, and businesses must work together to ensure that there is a clear and high-quality route of progression for those who choose not to go to college.

Early learning and childhood education

The evidence on economic growth points consistently to the importance of accumulating human capital, and nowhere is this more true than in the area of early childhood development.³⁰ Hallmark research from Nobel Prize-winning economist James Heckman demonstrates that childhood development—from before we are born through our early years, often before formal schooling—is especially critical to an individual’s potential development.³¹ The richness of the environment in which children develop at this age has lifelong effects on income, health, and cognitive development. At such a formative age, as economist Raj Chetty and his co-authors demonstrated, the quality of a child’s kindergarten teacher and educational environment can dramatically affect people’s income, probability of college attendance, and home ownership and retirement saving rates at age 27.³² And as discussed earlier, these investments in our future productivity also ease the burdens faced by families trying to participate in the labor force today.

This is where the strategy of inclusive prosperity is so important. For a country to be most effective in realizing its economic potential, opportunities to build human capital must be broadly available in the population. However, as income inequality has risen and as economic mobility has tightened across many advanced-economy countries, the opportunities for quality early learning and education are becoming scarcer.³³

The richness of this early life environment is also, of course, highly correlated with parental socioeconomic status. Rice University economist Flávio Cunha and University of Chicago economist James Heckman summarized the evidence: “The best documented market failure in the life cycle of skill formation in contemporary American society is the inability of children to buy their parents or the lifetime resources that parents provide.”³⁴ Economists measure the extent to which these privileges bestow competitive benefits upon offspring as the intergenerational elasticity of income—or, in other words, the part of the child’s income that is not explained by their individual ability or characteristics.

To harness the full economic potential of our countries’ human potential means that children from low- and moderate-income backgrounds need the same opportunities to fully develop their talents that wealthy children have. The economic benefits that follow from a true meritocracy require that we all get the chance to develop to the best of our abilities and find an occupation that best uses our talents. This research suggests that early childhood education, or ECE, programs have an even more profound effect on overcoming the intergenerational transmission of parental status. Chetty and another group of co-authors show that, in the United States at least, the regions that produced the most upward socioeconomic mobility also have lower inequality, lower residential segregation, better-quality primary schools, and stronger social environments.³⁵

Overall, the research confirms that ECE has a positive long-term effect on the cognitive development of children. Investments in well-designed national ECE programs, together with other improvements to the educational system, promise to add significantly to human capital formation in advanced economies.

World-class schools

World-class schools are essential for achieving inclusive prosperity, fostering community cohesion, encouraging a genuine stake in society, and participating in democratic structures. Education is a human right and a public good. Education is empowering and allows individuals to become actors rather than passive bystanders in the role of the state.

A system of world-class schools enables schools to collaborate; recognizes the need for economic, social, and emotional investment in education; promotes positive and developmental accountability; and secures entitlement for all children and young people. To secure inclusive prosperity, public education must be defined by its universality and encourage personal fulfillment, social responsibility, knowledge,

cultural acquisition, and skills for life. It should deliver on society's needs for social and economic development, political participation, environmental responsibility, and international solidarity.

There is increasing evidence of the importance of both formal and informal education structures. Informal education and learning takes place through investment in informal structures such as libraries, recreation centers, and cultural experiences. Access to these facilities ameliorates the barriers parents of disadvantaged children face in investing in cultural capital. Schools can often be the hub of these experiences, symbolizing the state's literal involvement in the community.

Formal education must include clearly set out rights and entitlements, including the right to a curriculum based on globally competitive standards developed through consensus, not ideology, and the right to professionally qualified teachers, who receive continuous training and development. In order for parents to be involved in their children's education, they need detailed information and effective frameworks that explain what is happening within schools, why it is happening, how they can engage, and how they can seek redress if they have problems or concerns.

The importance of collaboration is demonstrated by the OECD's Programme for International Student Assessment, or PISA. Schools that are encouraged to operate in wholly marketized systems and that do not build on each others' experience will create an iniquitous school system. Systems must therefore be developed to ensure that schools—across communities and economic and social divides—are encouraged to collaborate meaningfully.

A broad and balanced curriculum is vital for the development of inclusive prosperity. This is a curriculum that allows students to gain the core skills needed for the world of work; gives them the space and time to develop; and enhances the so-called soft skills—including team working, people management, civic and school engagement, and diversity awareness—to ensure that children are allowed to be fully engaged members of society in preparation for adult life. Crucially, any curriculum must allow for economic and political literacy, as well as independent advice and guidance about the world of work.

To be inclusive and to enable all learners to meet their potential, the state should implement policies to ensure that those denied the full range of opportunities to develop their social and human capital through their lives outside school do not experience enduring disadvantage. Equality of opportunity is central to inclusive

prosperity; it is therefore incumbent on policymakers to ensure that all possible steps are taken to remove barriers to opportunity and achievement that children and young people often face and mitigate the risk of lasting social and economic exclusion.

In order to encourage parental involvement in education—still the more important determining factor in educational outcomes—parents need to be genuinely engaged in the running of and life of the school. This is not a matter of taking over from educational professionals but rather a matter of active participation in the development of the school. In England, for example, the Co-operative Movement and the teaching union (the National Association of Schoolmasters Union of Women Teachers, or NASUWT) developed the cooperative school model as a counterweight to an increasingly marketized system; it has been very successful in encouraging genuine stakeholder engagement, and, consequently, there are now more than 1,000 cooperative schools.

Community involvement is also key to developing world-class schools, ensuring that the school is not only reflective of the community but also reflective of the community's needs. Democratic engagement and oversight of schooling ensure transparency over the spending of public money and are therefore crucial.

A world-class school system requires a high-quality workforce. It is essential, therefore, that teachers are appropriately trained, qualified, and supported throughout their careers by access to continuing professional development; that they are recognized and rewarded as highly skilled professionals; and that they have working conditions that allow their professionalism to flourish, all of which enables them to focus on teaching and learning. Teachers must be empowered to engage in the running of their schools through a stakeholder model of education and must have progressive trade unions working in partnership with government and other employers as their representatives.

Another important component of a world-class school system is an inclusive higher-education system. Technological change and globalization have increased relative demand for workers with postsecondary educations; raising the percent of the workforce with postsecondary educations will boost wages for all workers.³⁶ For many workers today, a college or university education is as much a necessity as a high school education was for their parents. Advanced economies should be working to make their higher-education systems more inclusive of all qualified students, regardless of their parents' economic backgrounds. For example, Germany recently made college education free,³⁷ while Australia has significantly increased attainment with its combination of no upfront fees and income-based repayment.³⁸

Finally, world-class schools can only be achieved through a close relationship with local and national employers. This relationship must be a two-way process that allows businesses to have input into the development of the education system but also creates incentives for businesses to invest in training.

Support for vocational education

Developed countries need strong education and training systems that connect individuals to good jobs and provide vocational alternatives to higher education. Despite high levels of youth unemployment around the world, surveys indicate that employers are increasingly worried that candidates do not have the technical competencies needed to fill jobs.³⁹ There are a significant share of good jobs in the economy that do not require a college degree, but many of the most advanced economies lack clear avenues for young people to gain the skills and credentials required for these middle-skill jobs.

Young people should be able to seamlessly transition from secondary school into one of a number of pathways to attaining postsecondary credentials, including baccalaureate and sub-baccalaureate degrees, technical certificates, and apprenticeships. Young people must have chances to access different paths to adult success so that talent is not wasted due to youthful indiscretion; precociousness and maturity are gifts, but they should not be requirements that exclude talented individuals from maximizing their potential. Countries can better prepare young people for the labor market by providing effective counseling to students at the secondary and postsecondary levels, directing funds to programs with demonstrated effectiveness, and incentivizing employers to partner with educational and training institutions to develop programs that lead to good jobs. Employers should also come together to document the skills and formalize the credentials required for high-growth jobs in their sectors.

Support for apprenticeships to increase productivity and employment

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 over their lifetimes. People who complete an English apprenticeship have been found to make a gross weekly wage 10 percent higher than those who have not.⁴⁰

A Swiss study found that employers spend around \$3.4 billion annually training apprentices but earn \$3.7 billion each year from apprentices' work during training.⁴¹ In Canada, researchers found that employers receive a benefit of \$1.47 for every dollar spent on apprenticeship training.⁴²

Apprenticeships are also an effective public investment. In an analysis of workforce-training programs in the U.S. state of Washington, researchers found that the return on investment for apprenticeships is \$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. Apprenticeships in Washington, as in the rest of the United States, have a low public cost because employers and labor unions pay the bulk of the expenses. In the United Kingdom, the Department for Business, Innovation and Skills and the National Audit Office determined that for every pound spent by the government to support apprenticeship, the country gets a return of between 18 pounds and 28 pounds.

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

Apprenticeship training

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 workers 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 enter the workforce through an apprenticeship, 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 and Australia have sought to expand their apprenticeship systems in recent years. They have successfully increased participation by employers and workers, expanded occupations, and

increased gender diversity. But these apprenticeships are low quality when compared with Switzerland, Germany, and Austria, and much of the growth in apprenticeships has been in workers over age 25. The governments provide some subsidies and are less involved in regulating quality. England has recently launched an effort to engage employers to develop uniform apprenticeship standards.

The United States has a small apprenticeship system of about 375,000 apprentices, heavily concentrated in the building and construction trades. Apprentices are typically older—with an average age of 29—and male. Although limited in numbers and 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. Apprenticeship standards vary across the country.

Measures to support innovation and regional clusters

Innovation is crucial for raising long-term trend-growth levels. Since there are often market failures in the supply of innovation, the government has a critical role in providing incentives for research and development and putting in place wider policies to support clusters. Harvard professor Michael Porter defines clusters as “geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions ... in particular fields that compete but also co-operate.”⁴³ Research generally shows that clusters lead to positive economic benefits,⁴⁴ though the more challenging question is how government can play a positive role in developing and advancing clusters.

Supporting innovation clusters

Governments can encourage innovation through a mixture of tax policies such as research and development tax credits, grants for research into specific technologies or prizes for solutions to particular challenges, and support or incentives for patient capital that recognizes the long-term nature of returns from innovation.

While there are divergent views on the role of government in cluster policy, it is broadly accepted that the role of government is not to cut new clusters out of whole cloth but rather to support and develop existing clusters. As Mark Muro and Bruce Katz of the Brookings Institution have written, “Clusters can’t be created out of nothing and cluster initiatives should only be attempted where clusters already exist.”⁴⁵

Porter has argued that “government should reinforce and build on established and emerging clusters rather than attempt to create entirely new ones,”⁴⁶ seeing a role for government in “cluster upgrading,” which focuses on “removing obstacles, relaxing constraints, and eliminating inefficiencies.”⁴⁷ Enrico Moretti notes that it is “really hard to engineer an innovation cluster,”⁴⁸ instead advocating for the use of R&D and education policy to lay the groundwork for successful clusters.⁴⁹

Different governments have taken a number of different approaches to encouraging clusters as set out in the text box below. Governments will want to find the right balance between general policies to encourage overall levels of innovation and more-specific spatial or industrial policies that encourage innovation in particular areas or technologies.

Case study: Current cluster policies

Every country does cluster policy differently, whether they call it cluster policy or not. Here, we consider two examples in more depth—from the United States and the United Kingdom—and what lessons we can learn more broadly from recent experience.

United States

To assist industry, academics, and policymakers with better data, in 2010, the U.S. Department of Commerce’s Economic Development Administration formed the U.S. Cluster Mapping Project with Harvard Business School’s Institute for Strategy and Competitiveness.⁵⁰ Additionally, other federal agencies—including the Small Business Administration, the Department of Energy, and the Department of Labor—have been involved in funding interagency cluster initiatives, with a focus on competitive “race to the top”-style grants. For example, the i6 Challenge operated three multiyear grant competitions for “local ecosystems to catalyze technology commercialization, new venture creation, and jobs . . . which stand to positively influence the formation of regional clusters and cluster strategy development,”⁵¹ funding 19 projects with an average grant of \$1.6 million.⁵² And the Job Search Accelerator Program has funded three rounds of grants for clusters around the United States since 2011, including a round dedicated to rural jobs and another round dedicated to advanced manufacturing.⁵³

United Kingdom

In 1999, the United Kingdom established a Clusters Policy Steering Group—led by Lord David Sainsbury, a member of the Inclusive Prosperity Commission—which assisted in the publication of the

government’s “Planning for Clusters” white paper.⁵⁴ This called for regional groups to consider the effect on clusters when planning their land-use and infrastructure policy.⁵⁵ Additionally, the Department of Trade and Industry published its research assessment that identified and mapped U.K. industrial clusters in 2001,⁵⁶ and Regional Development Agencies designed and implemented cluster-development policies in the United Kingdom until they were disbanded in 2010, leaving underfunded local enterprise partnerships to assist clusters.⁵⁷ The Coalition Government has, however, taken forward the funding of Catapult Centres, which are designed to bring together the best of the United Kingdom’s businesses, scientists, and engineers to work side by side on research and development and on transforming ideas into new products and services to generate economic growth.

Recent research commissioned by Lord Sainsbury provides a snapshot of the United Kingdom’s economically productive clusters.⁵⁸ The report identifies the 31 most economically significant clusters in the United Kingdom, which despite containing less than 10 percent of the nation’s businesses generate 20 percent of its overall economic output. Together, these clusters employ 4 million people—one in seven of the working population—and typically offer substantially higher salaries than their surrounding regions. The report calls for decisive action and targeted support to help these clusters fulfill their potential, including better support to incentivize universities to commercialize their research and contribute to their local knowledge economies; measures to address critical skills shortages in areas valuable to clusters, such as computing and engineering; and greater investment in targeted infrastructure projects.

Decentralization to support innovation clusters

Much existing and proposed policy focuses on changing conditions directly related to innovation itself. However, some economists have noted that indirect support can also be crucial. Using the example of Seattle, Washington, Edward Glaeser has pointed out that a combination of land-use policy and transit investment can be crucial to supporting development of innovation clusters. He notes that Seattle's decisions to support high-density housing through land-use regulation and to build transit that makes high-density living workable have combined to keep the cost of housing in Seattle within reasonable bounds.⁵⁹ This has made it easier for Seattle to attract high-technology businesses and to supply the support services that are needed for these businesses.

Since it is possible to identify cities that serve as successful innovation clusters, a policy that includes land-use regulation in support of high-housing density, along with support for transit infrastructure that makes high-density housing livable, could be implemented. The result could be long-term gains in productivity growth at relatively low cost. Pursuit of such a policy would not require picking winning firms or the location of future innovation clusters.

It should also be noted that the gains from supporting innovation clusters are not confined to high-technology businesses and workers. There is evidence that the wages of less-skilled workers rise as the concentration of highly educated workers in a city increases.⁶⁰ Moreover, cities tend to be much more energy efficient than exurbs, so there are environmental gains from support for urban economies.

Greater long-termism in the private and public sectors

To provide greater macroeconomic and financial stability and to raise productivity, it is essential that markets work in the public interest and for the long term rather than focusing only on short-term returns. Meanwhile, policies to improve the supply side of the economy or to address long-term risks such as climate change should be developed and implemented on a cooperative basis to create greater certainty.

Reforming corporate governance to encourage long-term investment

There is substantial evidence that the incentive structure for corporate decision makers is flawed. Horizons for investment decision making have been shortened because management compensation is tied to short-term stock-market performance. There is little evidence that increases in executive remuneration in recent decades has improved overall economic efficiency. Instead, this may have limited the corporate income available to compensate ordinary workers. To be clear, the direct costs of top-end pay packages are relatively small as a portion of the economy, but the indirect effects of incentivizing managers on the basis of short-term stock performance have major implications for investment, innovation, and wage growth. As executives have become increasingly incentivized to focus on short-term share prices, the firms they manage have turned away from investments in innovation and long-term capital formation, as well as wage growth and workforce investments.

In the United Kingdom, economist John Kay carried out an independent review for the government that concluded that “short-termism is a problem in U.K. equity markets, and that the principal causes are the decline of trust and the misalignment of incentives throughout the equity investment chain.”⁶¹ The review by Sir George Cox in “Overcoming Short-termism within British Business” also concluded that “the potential to deliver quick results to the potential detriment of the longer-term development of a company has become an entrenched feature of the U.K. business environment.”⁶²

Reforms to corporate governance are therefore critical. There are a number of potential ideas that could be implemented, including making directors more independent of company staff, moving away from quarterly reporting, taking measures to reduce the ease with which hostile takeovers can take place, and promoting greater information disclosure from brokers and other market participants.

As well as improving corporate governance, there are some sectors where competition has broken down that will need interventions to support the reasonable functioning of the free market. The banking sector is one example that is discussed in more detail below. In the United Kingdom, energy markets are under investigation by the Competition and Markets Authority because of the view that features of the energy market were preventing, restricting, or distorting competition.⁶³ The Labour Party has set out a series of measures to reform the market.⁶⁴

Investment in infrastructure

An economy can only grow as fast as its infrastructure systems can move information, people, and goods. Infrastructure investments provide strong 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 leads to deteriorating facilities, unpredictable service disruptions, congestion, and higher costs to businesses and households.

Following the end of World War II, advanced economies invested heavily in infrastructure to support rapid population and economic growth. Today, many of these facilities have depreciated and degraded, and they need to be replaced or substantially repaired in order to maintain their economic usefulness. At the same time, almost every economic sector touches part of a global supply chain or earns revenues from international sales. Rapidly increasing trade volumes and just-in-time production models demand high-quality infrastructure. As a result, advanced economies face the twin challenges of maintaining legacy assets while also investing in critical projects that will support future growth and prosperity.

The International Monetary Fund recently noted the need for infrastructure upgrades in particular economies:

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.⁶⁵

Where there are these sorts of gaps, there are very strong reasons to close them. Doing so efficiently can increase an economy's long-run growth potential. It can generate major employment for groups that have fallen most behind in recent years. And where an economy has the problem of surplus savings, this kind of expenditure is even more important as a source of demand.

Of course, financing for public investment of any kind must depend on economic circumstances. Where countries' fiscal positions allow and where opportunities exist for increased productivity, governments should consider carrying out new public investment programs.

Mitigating and adapting to the effects of climate change

Climate change poses a unique challenge to advanced and emerging economies, and an international response is required. Many coastal emerging economies are some of the poorest on Earth. This global challenge also represents a profound opportunity. Due to their considerable legacy of investments, advanced economies—especially those with significant coastline such as the United States, Australia, and the United Kingdom—stand to suffer significant financial losses as a result of a changing climate. At the same time, wealthy nations have the most advanced technology and the greatest resources at their disposal to both reduce emissions and adapt to a warmer world. The path forward requires a clear-eyed recognition that we are already behind the curve in adapting our economies to the reality of climate change. It also requires a clear understanding of the immense economic consequences of failing to stabilize CO₂ levels through aggressive action, while using every tool in our arsenal to maximize the emissions-reduction benefits for every dollar we spend on decarbonizing our economies. Our approach to inclusive prosperity must recognize that those most exposed to the costs of climate change are the lower- and middle-income households that are the focus of this commission, and a failure to insulate households from the risks of climate change is a failure of national security.

The challenges of climate change are serious, and we should not understate them. After decades and trillions of dollars in investing in our energy sectors and economies, we have learned that business as usual is not a viable option. We already know some of the investments made by people and corporations in carbon-intensive assets will be realized as losses. Groups around the world have noted the existence of a so-called carbon bubble—assets that are currently valued for the market price of their fossil fuels but that cannot be fully utilized without serious adverse climate impacts.

But the opportunities for clean energy investments are vast. The developing nations of the world promise new markets for advanced economies, but to realize this potential, electrification must be vastly scaled up across the globe, while carbon emissions must be brought down. It is important not to lose sight of the fact that energy is an intermediate input and not an end goal in itself. In the near term, we can cut emissions by making investments in new electricity generation—or by making efficiency investments that lead to the same level of end services to consumers—while using less of our existing generation. The paths to solving the problem are many, and policymakers must not let doctrine get in the way of innovative solutions to make our climate more stable and our population more productive. Nonetheless, those countries and regions that do not currently put a price on carbon—including the United States—should look to do so. This would help mitigate carbon pollution, provide incentives to invest in low carbon infrastructure, and send an important signal that the world is serious about this issue.

While private entities will shoulder much of the burden of transitioning to a lower-carbon economy, whether through developing new technologies or through investing in producing them at scale, there is a strong role for the public sector in achieving a sustainable climate and a vibrant global economy. Increased patterns of severe weather events in developed countries have led to renewed calls for significant investments in public and private infrastructure. The return on these investments is twofold, providing insurance against future events and creating jobs and positive investment opportunities today. The most visible elements of a resilient infrastructure, such as flood control and more robust distribution systems, represent only one part of this opportunity. Generations of underground infrastructure, from subways to pipelines and water systems, must be modernized and hardened against extreme weather, but this process is not a discrete shift. Mitigating climate change will save trillions of dollars in adaptation investments, preserving communities and investments that have been built up over generations.

A failure to meet the challenge of climate change is a failure to ensure inclusive prosperity. Governments must coordinate and target their efforts, lest dealing with extreme weather events diverts scarce public dollars away from other productive uses, as experience indicates the public sector will be the insurer of last resort. A reactive policy will come at the expense of other societal needs such as education, so governments can only ensure investments in their citizens by making concrete commitments today to avoid costly, open-ended commitments in the future.

International cooperation to provide the conditions for inclusive growth and shared prosperity

Shared efforts to raise global demand

Chapter 2 outlined the related risks facing developed countries, including secular stagnation, deflation, and low productivity. The global economy is also at risk from a slowdown in some emerging-market countries, including, notably, China. Against this backdrop, it is imperative that advanced economies focus their policy efforts on completing the task of macroeconomic recovery from the financial crisis. Fiscal austerity has created needless self-inflicted harm in many advanced economies, and more policy coordination is needed to boost domestic demand in many countries. Moreover, the poor overall performance in countries recovering from the financial crisis is holding back wages and the restoration of household income.

Greater efforts are now needed to use international forums such as the G-20 and the International Monetary Fund to coordinate policies that increase global demand. Within the scope of individual countries' fiscal outlooks and policy approaches, there is a strong case for internationally coordinated, long-term public investment over other forms of public spending or tax cuts. In a period when many advanced economies are operating well below potential output and real interest rates are relatively low, there should be little concern that this would displace private investment.

A renewed focus on the international economy and regional partnerships

International trade plays a central role in most advanced-economy countries. The depth and diversity of commercial and cultural interactions across the globe are the lifeblood of our economic system, providing a spur to innovation and opportunities for growth. The revival of the World Trade Organization trade talks and all new regional or bilateral trade deals must be focused on establishing high standards for open global markets, with a level commercial playing field. This ensures that the benefits of trade outweigh its costs, and in the high-pressure, high-productivity economy we envision, workers and investment can fuel a more inclusive prosperity.

Policies to boost the opportunities from growing trade appear foremost in other areas of this report—creating a business environment conducive to the right kinds of investment with high standards; developing a skilled workforce; incentivizing innovation; and connecting the chain between stages of innovation, from research and ideas to commercialization and production. Here, we focus on policies to advance inclusive prosperity through building trade and investment relationships.

Both the United States and the European Union are negotiating major trade and investment deals with each other as well as with the emergent bloc of Asia-Pacific economies—places where basic economic institutions can operate quite differently than in most advanced-economy countries. Here, the potential for cooperation between the United States and Europe to harmonize the high-income economies’ sets of standards is a particularly important impetus for the Transatlantic Trade and Investment Partnership, under present negotiation. The United States and the European Union have much fertile ground to expand complementary trade and investment while protecting public services, as well as to cut the cost of doing business across the Atlantic while establishing strong rules and norms for conduct throughout the global economy.

Continued cooperation on financial stability

The global financial crisis exposed major flaws in the global financial system. Excessive and ill-understood risks were taken before 2007 across the financial system, with many financial institutions operating with too little capital and inadequate liquidity and risks being transferred across national boundaries. The recession caused by the crisis badly affected public finances. Banks needed to be bailed out to prevent catastrophic contagion, and government receipts from the sector and the wider economy fell sharply.

When banks are too big to fail, it ultimately means that they are benefiting from an implicit taxpayer subsidy. The IMF has estimated the value of this subsidy to be as much as \$110 billion.⁶⁶ This means that creditors are more willing to provide funding without paying sufficient attention to a bank’s risk profile, encouraging higher leverage ratios and greater risk taking. It gives larger banks a competitive advantage because they are more easily able to attract creditors. Most importantly, it inexorably leads to real taxpayer bailouts. Bank of England Governor Mark Carney has called it a “heads-I-win-tails-you-lose bubble.”⁶⁷

Those running the banks did not, in most cases, have to deal with the catastrophic consequences of some of their mistakes. Large rewards were paid out for what turned out to be, over the subsequent years, huge failure. In the words of the United Kingdom’s Parliamentary Commission on Banking Standards, remuneration “lacked down-side incentives in the worst case scenarios that were remotely comparable to the upside incentives when things seemed to be going well.” This both undermined the stability of the sector and fuelled public anger with the banking sector.

Global cooperation is necessary to ensure that a repeat of the global financial crisis can never take place. Shared rules are needed to ensure that banks are properly regulated and have sufficient capital buffers in place, as well as that downward pressure on excessive risk-free bonuses is maintained.

As a result of the international Basel III agreements and of additional steps taken by individual financial regulators, real progress has been made on achieving these goals. However, there are signs that more may be required if the issue of systemic stability is to be fully addressed. The evidence of continuing too-big-to-fail subsidies indicates that market discipline has not yet forced banks to adequately self-insure against individual loss by financing more of their assets with equity. And of course, market discipline would never force equity sufficient to insure against the systemic spillover effects of inadequate self-insurance.

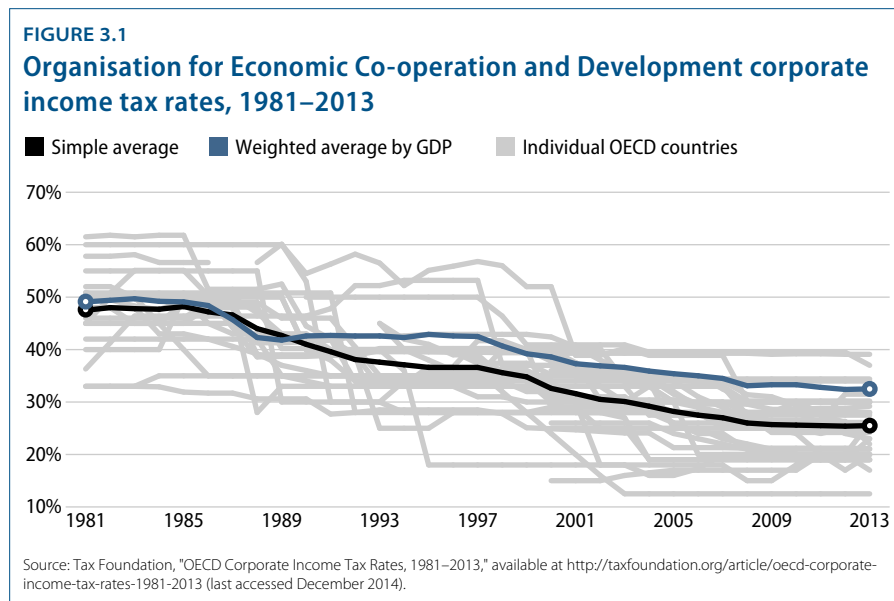
In addition, there are major potential problems yet to be addressed in the shadow-banking system. For example, it is not clear that the run risks created when assets are funded using short-term repurchase agreements or the cash from securities lending—or for that matter, when money market mutual funds purchase asset-backed commercial paper—have been effectively addressed. Nor is it easy to see how much leverage shadow banks create for the financial system as a whole.⁶⁸

There is clearly more to be done to reduce the instability problems posed by important elements of the financial system.

A concerted focus on tax avoidance and preventing a race to the bottom on international tax competition

In recent years, statutory corporate tax rates have declined among member countries of the Organisation for Economic Co-operation and Development, dropping an average of 7.2 percent between 2000 and 2011. There is a risk of a race to the bottom in rates as governments attempt to attract corporate residence. There is also, therefore, a potential threat to corporate income tax receipts, which constitute an important component of government revenues—on average, equivalent to around 3 percent of gross domestic product, or about 10 percent of total tax revenues, across OECD countries.⁶⁹

At the same time, there is growing evidence that corporate tax planning aimed at shifting profits in ways that reduce a corporation's tax base in high-tax locations has given rise to significant amounts of globally untaxed corporate income. This situation is compounded by the increasing mobility of income and the growth of digital assets. Studies of U.S. multinational corporations have been the most rigorous and indicate that U.S. federal revenue losses due to base erosion and profit shifting range from \$10 billion to more than \$80 billion annually.⁷⁰



Increasing the share of tax revenues from corporations will require a high degree of international cooperation. The OECD has recognized this problem and instituted the Base Erosion and Profit Shifting, or BEPS, initiative.⁷¹ Previously, the OECD had focused on the elimination of double and triple taxation of companies engaged in cross-border business as a means of promoting growth and fairness. BEPS is aimed at eliminating double nontaxation, which puts the tax base of countries at risk and results in unfairness between domestic and international enterprises. Ironically, the rules that were implemented years ago to eliminate double taxation have also led to double nontaxation in certain circumstances. Taxpayers have become increasingly adept at taking advantage of these legal means of tax avoidance and tax planning. This leads to the distortion of normal economic decisions and substantial revenue loss for countries.

BEPS focuses on developing solutions to the cross-border corporate taxation problem. Another initiative of the OECD, the exchange of information process, focuses on preventing cross-border tax evasion by individuals by promoting bank and financial institution transparency. Under that process, the OECD has developed a Common Reporting Standard and is working to promote adoption across its member nations.

It is critical that member countries support the OECD's efforts, not just by participating in the process but also through concrete actions in their own countries to implement common standards adopted through it. While international action is needed to tackle avoidance, multilateralism must not be used as a pretext for inaction. Knowing who ultimately owns and controls companies and how much tax they are paying, particularly in tax havens, is essential to tackling tax avoidance.

To date, the OECD has presented seven actions of its 15-point plan to end so-called stateless income. The most challenging actions remain, including perhaps the most important: the development of a multilateral instrument to be used by member countries to amend their existing bilateral tax treaties. While most countries share concern, even outrage, at tax avoidance by highly profitable multinationals and may agree in principle that it is wrong, it is far more difficult to agree on mechanisms to address this problem. Yet only through global coordination will governments be able to preserve the important role that corporate tax revenues play in funding critical national programs and to ensure balanced, sustainable economic growth both nationally and globally.

Conclusion

Many advanced economies have struggled to deliver middle-class income growth in the midst of the challenges and changes outlined in Chapter 2: an increasingly global economy, rapid technological change, and a shift in economic power from workers to corporations. The lesson is that economic growth, even coupled with productivity growth, is no longer enough to ensure middle-class income growth. Instead, nations must make smart, progressive public policy choices, such as the ones outlined in this chapter, in order to ensure that all of their citizens share in economic success.

The policy agenda laid out in this report will help our economies reach—and even expand—their potential to deliver inclusive prosperity. Fair minimum wages, family-friendly labor standards, and profit sharing, for example, will raise demand by putting more money in workers’ pockets as a reward for their hard work. These policies will also increase workers’ incentive to work—and work efficiently. Increasing access to and the quality of our educational systems, from preschool through college, will reduce wage inequality, boost productivity, and foster innovation—as will successful regional-cluster policy. A collection of policies—such as enacting major infrastructure investment, reforming countries’ unique corporate governance structures, and focusing on mitigating climate change—will create stable, sustainable growth by encouraging both the public and private sectors to focus on the long term. Finally, policy coordination and collaboration between our countries and others can bring greatly needed international economic and financial stability, all the while preventing a race to the bottom on international tax competition.

The high stakes for both our citizens and our economies justify the kind of bold action advocated in this report. To achieve our vision, we must meet the challenges and risks of a modern world with a robust policy response that effectively, efficiently, and compassionately reforms our economies for long-term sustainable growth. Taken together, this agenda can help make our vision of inclusive prosperity a reality across the developed world.

Endnotes

- 1 Olivier Blanchard and Daniel Leigh, "Growth Forecast Errors and Fiscal Multipliers." Working Paper 13/1 (International Monetary Fund, 2013), available at <http://www.imf.org/external/pubs/ft/wp/2013/wp1301.pdf>.
- 2 For U.S. trends, see, e.g. Jackie Odum and Michael Madowitz, "The State of the US Labor Market," Center for American Progress, October 2, 2014, available at <https://www.americanprogress.org/issues/economy/news/2014/10/02/98227/the-state-of-the-u-s-labor-market-pre-october-2014-jobs-release/>.
- 3 For a more thorough explanation of the U.K. productivity puzzle, see, e.g. Alina Barnett and co-authors, "The UK Productivity Puzzle", *Bank of England Quarterly Review*, Q2 2014, 114-128. Bank of England, London, available at <http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q201.pdf>.
- 4 See, e.g., Claire Cain Miller, "Why U.S. Women Are Leaving Jobs Behind." *The New York Times* December 12 2014, available at <http://www.nytimes.com/2014/12/14/upshot/us-employment-women-not-working.html>.
- 5 Jennifer Erickson, ed., "The Middle-Class Squeeze" (Washington: Center for American Progress, 2014), available at <https://www.americanprogress.org/issues/economy/report/2014/09/24/96903/the-middle-class-squeeze/>.
- 6 Jason Furman, "Global Lessons for Inclusive Growth," Prepared remarks before The Institute of International and European Affairs. Dublin. May 7, 2014, available at http://www.whitehouse.gov/sites/default/files/docs/global_lessons_for_inclusive_growth_iea_jf.pdf.
- 7 Alexandre Kolev and Catherine Saget, "Are Middle-Paid Jobs in OECD Countries Disappearing? An Overview," Working Paper No. 96 (OECD, April 2010), available at http://www.ilo.int/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_145083.pdf.
- 8 Empirical work from the U.K. suggests the incidence of minimum wages falls heavily on corporate profits, while having little effect on employment. See Mirko Draco, Steve Machin, and John Van Reenen "The Impact of the National Minimum Wage on Firm Profitability." *The American Economic Journal: Applied Economics* 3 (1) 129-151. 2011.
- 9 Bureau of Labor Statistics, *Current Population Survey* (U.S. Department of Labor, 2014); Bureau of Labor Statistics, *Employment Situation Release* (U.S. Department of Labor, December 2014), available at <http://research.stlouisfed.org/fred2/series/LNS14000036>.
- 10 Sarah Ayres, "The High Cost of Youth Unemployment" (Washington: Center for American Progress, 2013), available at <http://americanprogress.org/issues/labor/report/2013/04/05/59428/the-high-cost-of-youth-unemployment/>.
- 11 Rajeev Syal, "Back-to-work scheme scrapped by Cameron 'produced net gain for UK,'" *The Guardian*, November 23, 2012, available at <http://www.theguardian.com/society/2012/nov/23/back-to-work-scheme-gain>.
- 12 Tracy Fishwick, Pippa Lane, and Laura Gardiner, *Future Jobs Fund: An independent national evaluation*, (London: Centre for Economic and Social Inclusion, 2011), available at http://www.cesi.org.uk/sites/default/files/publications/CESI_future_jobs_fund_evaluation.pdf.
- 13 For a detailed discussion of the trends driving declining U.S. labor-force participation for genders since 2000, see Robert A. Moffit, "The Reversal of the Employment-Population Ratio in the 2000s: Facts and Explanations," *Brookings Papers on Economic Activity* Fall 2012, available at <http://www.brookings.edu/about/projects/bpea/papers/2012/employment-population-ratio-moffitt>.
- 14 Francine D. Blau and Lawrence M. Kahn, "Female Labor Supply: Why is the US Falling Behind?" NBER Working Paper 18702. January 2013, available at <http://www.nber.org/papers/w18702>.
- 15 Heather Boushey and Sarah Jane Glynn, "The Effects of Paid Family and Medical Leave on Employment Stability and Economic Security" (Washington: Center for American Progress, 2012), available at <http://cdn.americanprogress.org/wp-content/uploads/issues/2012/04/pdf/BousheyEmploymentLeave1.pdf>.
- 16 Heather Boushey and Sarah Jane Glynn, "There are Significant Business Costs to Replacing Employees" (Washington: Center for American Progress, 2012), available at <http://cdn.americanprogress.org/wp-content/uploads/2012/11/CostofTurnover.pdf>.
- 17 Ibid.
- 18 Heather Boushey, Ann O'Leary, and Alexandra Mitukiewicz, "The Economic Benefits of Family and Medical Leave Insurance" (Washington: Center for American Progress, 2013), available at <https://www.americanprogress.org/issues/economy/report/2013/12/12/81036/the-economic-benefits-of-family-and-medical-leave-insurance/>.
- 19 Rebecca Ray, Janet C. Gornick, and John Schmit, "Parental Leave Policies in 21 Countries" (Washington: Center for Economic and Policy Research, 2008), available at <http://www.cepr.net/index.php/publications/reports/plp>.
- 20 Jerome Gautie and John Schmitt, "Low-Wage Work in the Wealthy World" (New York: Russell Sage Foundation, 2009).
- 21 Sarah Butler, "Sports Direct forced to advertise zero-hours contract terms," *The Guardian*, October 27, 2014, available at <http://www.theguardian.com/business/2014/oct/27/sports-direct-zero-hours-contract-terms>.
- 22 In the United States, they are found in the provisions of the Fair Labor Standards Act. The Department of Labor, "Compliance Assistance - Wages and the Fair Labor Standards Act (FLSA)," accessed January 2015, available at <http://www.dol.gov/whd/flsa/>.
- 23 Organisation for Economic Co-operation and Development, "Work Force Ageing: Consequences and Policy Responses," Working Paper 4.1 (OECD AWD, 1998), available at <http://www.oecd.org/els/public-pensions/2429096.pdf>.
- 24 The Boston Consulting Group, "Skills Gap in U.S. Manufacturing Is Less Pervasive Than Many Believe," 2012, available at <http://www.bcg.com/media/press-releasedetails.aspx?id=tc%3A12-118945>.
- 25 Organisation for Economic Co-operation and Development, "OECD Skills Outlook 2013" (2013), available at <http://skills.oecd.org/skillsoutlook.html>.
- 26 Ibid.

- 27 The Manufacturing Institute, "Global Responses To The Skills Gap: Emerging Lessons" (2014), available at http://www.themanufacturinginstitute.org/~media/31DE0E38891749E082377F028F285A28/Global_Symposium_Report_3_27_14.pdf.
- 28 PricewaterhouseCoopers, "New solutions to close the skills gap," 2012, available at http://www.pwc.com/en_US/us/people-management/publications/assets/pwc-solutions-close-talent-gap.pdf.
- 29 Ibid.
- 30 Robert J. Barro and Jon-Wha Lee, "A New Data Set of Educational Attainment in the World, 1950-2010," 2012, available at http://www.barrolee.com/papers/Barro_Lee_Human_Capital_Update_2012April.pdf.
- 31 James Heckman, "Skill formation and the economics of investing in disadvantaged children," *Science* 312 (2006): 1900-1902.
- 32 Raj Chetty and others, "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project STAR," *The Quarterly Journal of Economics* 126 (4) (2011): 1593-1660.
- 33 Miles Corak, "Inequality, Life Chances, and Public Policy in the United States" (Washington: Center for American Progress, 2012), available at <https://www.americanprogress.org/issues/economy/report/2012/12/05/46851/how-to-slide-down-the-great-gatsby-curve/>; Heather Boushey and Adam S. Hersh, "The American Middle Class, Income Inequality, and the Strength of Our Economy" (Washington: Center for American Progress, 2012), available at http://cdn.americanprogress.org/wp-content/uploads/issues/2012/05/pdf/middleclass_growth.pdf.
- 34 Flávio Cunha and James Heckman, "The Technology of Skill Formation." NBER Working Paper 12840. January 2007, available at <http://www.nber.org/papers/w12840>.
- 35 Raj Chetty and others. "Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States." NBER Working Paper 19843. January 2014, available at http://obs.rc.fas.harvard.edu/chetty/mobility_geo.pdf.
- 36 See Lawrence Katz and Claudia Goldin, *The Race between Education and Technology* (Cambridge: Belknap Press, 2010).
- 37 Rick Noack, "7 countries where Americans can study at universities, in English, for free (or almost free)," *The Washington Post*, October 29, 2014, available at <http://www.washingtonpost.com/blogs/worldviews/wp/2014/10/29/7-countries-where-americans-can-study-at-universities-in-english-for-free-or-almost-free/>.
- 38 Organisation for Economic Co-operation and Development, "Country Note: Education at a Glance 2014." 2014, available at <http://www.oecd.org/edu/Australia-EAG2014-Country-Note.pdf>.
- 39 Manpower Group, "Talent Shortage Survey Results," 2011, available at http://www.files.shareholder.com/downloads/MAN/1621405974x0x469531/7f71c882-c104-449b-9642-af56b66c1e6d/2011_Talent_Shortage_Survey_US.pdf.
- 40 Centre for Economic and Business Research, "Productivity Matters: The Impact of Apprenticeships on the UK Economy" (2013), available at <http://www.apprenticeships.org.uk/about-us/~media/Documents/Productivity-Matters-Report-FINAL-March-2013.ashx>.
- 41 South Carolina Chamber of Commerce, "Apprenticeships in South Carolina: Baseline Report and Recommendations" (2003).
- 42 Ben Olinksy and Sarah Ayres, "Training for Success: A Policy to Expand Apprenticeships in the United States" (Washington: Center for American Progress, 2013), available at <http://americanprogress.org/issues/labor/report/2013/12/02/79991/training-for-success-a-policy-to-expand-apprenticeships-in-the-united-states/>.
- 43 Michael E. Porter, "Location, Competition, and Economic Development: Local Clusters in a Global Economy," *Economic Development Quarterly* 14 (1) (2000): 15-34, available at http://ibr.hi.is/sites/ibr.hi.is/files/Location_Competition_and_Economic_Development__Local_Clusters_in_a_Global_Economy.pdf.
- 44 Mark Muro and Bruce Katz, "The New 'Cluster Moment': How Regional Innovation Clusters Can Foster the Next Economy" (Washington: Metropolitan Policy Program at Brookings, 2010), available at http://www.brookings.edu/~media/research/files/papers/2010/9/21%20clusters%20muro%20katz/0921_clusters_muro_katz.pdf. (25).
- 45 Ibid.
- 46 Michael Porter, "On Competition" (Cambridge: Harvard Business School Press, 1998).
- 47 Muro and Katz, "The New 'Cluster Moment'".
- 48 WBUR, "Economist Enrico Moretti Looks At 'Geography Of Jobs'," May 23, 2012, available at <http://www.hereandnow.wbur.org/2012/05/23/moretti-geography-jobs>
- 49 Enrico Moretti, *The New Geography of Jobs* (New York: Mariner Books, 2012).
- 50 Harvard Business School, "Institute for Strategy and Competitiveness at Harvard Business School to Map Clusters in U.S. Regions," Press release, December 9, 2010, available at <http://www.hbs.edu/news/releases/Pages/mapclusters120110.aspx>.
- 51 Krisztina "Z" Holly, "Universities in Innovation Networks: The Role and Future Promise of University Research in U.S. Science and Economic Policymaking" (Washington: Center for American Progress, 2012), available at http://www.americanprogress.org/wp-content/uploads/issues/2012/01/pdf/dwwsp_university_innovation.pdf.
- 52 Author's calculations, U.S. Commerce Department Press releases available at <http://www.commerce.gov/news/press-releases/2012/09/19/obama-administration-announces-winners-i6-challenge-competition-promo>, <http://www.commerce.gov/blog/2011/09/29/obama-administration-announces-12-million-i6-green-investment-promote-clean-energy-i>, <http://www.commerce.gov/news/press-releases/2010/09/23/us-commerce-secretary-gary-locke-announces-winners-i6-challenge>.
- 53 U.S. Department of Commerce, "New Obama Administration Initiative to Spur Job Creation and Accelerate Economic Growth in 20 Regions across the Country," Press release, September 22, 2011, available at <http://www.commerce.gov/news/press-releases/2011/09/22/new-obama-administration-initiative-spur-job-creation-and-accelerate->; Matt Erskine, "Rural Jobs and Innovation Accelerator Challenge Awards \$9 Million to 13 Projects to Boost Rural Economies, Strengthen Regional Industry Clusters," *The Commerce Blog*, U.S. Department of Commerce, August 1, 2012, available at <http://www.commerce.gov/blog/2012/08/01/rural-jobs-and-innovation-accelerator-challenge-awards-9-million-13-projects-boost-r>; U.S. Department of Commerce, "Obama Administration Announces \$20 Million for 10 Public-Private Partnerships to Support American Manufacturing and Encourage Investment in the U.S.," Press release, October 9, 2012, available at <http://www.commerce.gov/news/press-releases/2012/10/09/obama-administration-announces-20-million-10-public-private-partnersh>.

- 54 U.K. Department of Trade and Industry, "Clusters | DTI policy," 1998, available at <http://webarchive.nationalarchives.gov.uk/+http://www.dti.gov.uk/clusters/policy.htm>.
- 55 Jon Swords, "Michael Porter's cluster theory as a local and regional development tool: The rise and fall of cluster policy in the UK," *Local Economy* 28 (4) (2013), available at <http://lec.sagepub.com/content/28/4/369.abstract>; U.K. Department of the Environment, Transport, and the Regions, "Planning for Clusters: A Research Report," 2000, available at <http://www.china-up.com:8080/international/case/case/381.pdf>.
- 56 Department for Business Enterprise & Regulatory Reform, "Business Clusters in the UK – A First Assessment," 2007, available at <http://webarchive.nationalarchives.gov.uk/+http://www.dti.gov.uk/regional/clusters/clusters-assessment/page17380.html>.
- 57 U.K. Department of Trade and Industry, "The Government's Expenditure Plans 2001-02 to 2003-04 and Main Estimates 2001-02," 2001, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/250893/5112.pdf; Gordon Marsden, "RDA closure leaves big questions for growth in the English Regions," *The Guardian*, April 2, 2012, available at <http://www.theguardian.com/uk/the-northerner/2012/mar/31/localgovernment-regeneration-gordon-marsden-regional-development-agencies-leps>.
- 58 Centre for Cities and McKinsey & Company, "Industrial revolutions: capturing the growth potential," July 2014, available at <http://www.centreforcities.org/publication/industrial-revolutions/>.
- 59 See Edward Glaeser, "How Seattle Transformed Itself," *Economix*, March 8, 2011, available at http://economix.blogs.nytimes.com/2011/03/08/how-seattle-transformed-itself/?_php=true&_type=blogs&_r=0.
- 60 Enrico Moretti, *The New Geography of Jobs* (New York: Houghton Mifflin Harcourt, 2012), pp. 98-100.
- 61 John Kay, "The Government Response to the Kay Review," UK Department for Business Innovation & Skills, November 2012, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/253457/bis-12-1188-equity-markets-support-growth-response-to-kay-review.pdf.
- 62 Sir George Cox, "Overcoming Short-termism within British Business," 2013, available at www.yourbritain.org.uk/uploads/editor/files/Overcoming_Short-termism.pdf.
- 63 Competition and Markets Authority, "Energy market investigation" (2014), available at <https://www.gov.uk/cma-cases/energy-market-investigation>.
- 64 Labour Party, *Powering Britain: One Nation Labour's plans to reset the energy market*, available at <http://www.yourbritain.org.uk/agenda-2015/policy-review/energy-green-paper>.
- 65 International Monetary Fund, "World Economic Outlook, Legacies, Clouds, Uncertainties" (2014), available at <http://www.imf.org/external/pubs/ft/weo/2014/02/>.
- 66 International Monetary Fund, "Global Financial Stability Report: Moving from Liquidity- to Growth-Driven Markets" (2014), available at <http://www.imf.org/External/Pubs/FT/GFSR/2014/01/pdf/text.pdf>.
- 67 Mark Carney, "Inclusive capitalism: creating a sense of the systemic," Bank of England 2014, available at <http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech731.pdf>.
- 68 See Daniel Sanches, "Shadow Banking and the Crisis of 2007-08," *Philadelphia Federal Reserve Bank Business Review*, Q2 2014, 7-14, available at http://philadelphiafed.org/research-and-data/publications/business-review/2014/q2/brQ214_shadow_banking.pdf.
- 69 Addressing Base Erosion and Profit Shifting. Paris: OECD. February 12, 2013, available at http://www.oecd-ilibrary.org/taxation/addressing-base-erosion-and-profit-shifting_9789264192744-en.
- 70 Testimony of Mark J. Mazur, Assistant Secretary for Tax Policy, U.S. Department of the Treasury, before the U.S. Senate Homeland Security and Government Affairs Permanent Subcommittee on Investigations, May 21, 2013.
- 71 Organisation for Economic Cooperation Development, "Action Plan on Base Erosion and Profit Shifting," 2013, available at <http://dx.doi.org/10.1787/9789264202719-en>.