July 15, 2009

Social Protection for the Economic Crisis: The U.S. Experience

by

Gary Burtless*

THE BROOKINGS INSTITUTION
Washington, DC

* John C. and Nancy D. Whitehead Chair in Economic Studies, The Brookings Institution, 1775 Massachusetts Avenue, NW, Washington, DC, 20036, USA.

This paper was prepared for the International Symposium "Beyond the Economic Crisis: Social Integration and Shared Prosperity," Seoul, Korea, May 27-28, 2009, sponsored by the Korea Institute for Health and Social Affairs. The opinions expressed in this paper are the author's alone and do not reflect the views of the Korea Institute for Health and Social Affairs or the Brookings Institution.

Social Protection for the Economic Crisis: The U.S. Experience

1. Introduction

Since February 2008 the U.S. government has taken a number of steps aimed at dealing with the most severe financial crisis experienced by the United States in nearly eight decades. The crisis originated in America's real estate and banking industries and has now spread to the rest of the economy and to much of the world. Emergency legislation passed by the U.S. Congress in 2008 and early 2009 attempted to (1) prevent the failure of major U.S. financial institutions; (2) minimize the impact of financial institutions' weakness on ordinary business and consumer borrowing; (3) provide immediate stimulus to consumer spending by raising after-tax household income through temporary tax reductions and increases in government transfers; (4) provide temporary funds to state and local governments in order to reduce their need to boost taxes or reduce spending during the recession; (5) protect the incomes and health insurance of newly laid off workers and members of other economically vulnerable populations; and (6) provide direct federal support for infrastructure investments and research and development projects in health, science, and efficient energy production.

In this paper I focus on the measures Congress has taken to protect household incomes and improve the American social safety net. None of the emergency measures adopted by Congress will result in permanent changes to the U.S. system of social protection, but a couple of temporary programs represent dramatic departures from the past. For the first time, Congress authorized generous subsidies so that laid off workers can continue to receive employer-sponsored health insurance. Most working-age Americans and their families rely on an employer-provided health plan to provide their insurance. When they are laid off from their jobs they generally lose the employer subsidy for this insurance, and for many workers the loss of the employer subsidy makes continued health insurance coverage unaffordable. By offering to pay 65 percent of the cost of the first nine months of post-layoff health insurance premiums, the U.S. government will make health insurance affordable for many of the newly unemployed. In another departure from past economic stimulus policy the Congress appropriated substantial funds for the nation's education system. State governments were given large temporary grants to support primary, secondary, and post-secondary schooling, thus reducing the need for state and local governments to make cuts in educational services. In addition, the federal government appropriated special funds for a large increase in means-tested financial assistance so that low-income students can pay for post-secondary education. Stimulus funds will also provide major increases in grants for post-secondary institutions so they can invest in new buildings and research in innovative health and energy technologies. It is unusual for the federal government to focus so much of its counter-cyclical stimulus policy on the education system and on research and development. Finally, state governments were provided generous but temporary general fiscal relief, linked to the local unemployment rate, so they do not have to cut spending or increase taxes as much as would be necessary without the emergency federal aid.

This paper considers the current financial crisis and the American government's response to the crisis in the area of social protection. The remainder of the paper is organized as follows. The next section considers recent trends in the U.S. economy, particularly those trends that make the current recession different from earlier ones. The following section discusses the U.S. government response to the recession, with special reference to Congressional actions affecting the social safety net. Aside from the extraordinary measures taken by the Administration, Congress, and U.S. Federal Reserve to shore up the nation's ailing financial system, the government's main instruments for addressing the crisis are designed to provide direct income assistance and public services to households, to offer fiscal relief to state governments, and to encourage new investments in public infrastructure and research and development. The conclusion of the paper offers a brief assessment of the U.S. social safety net response to economic crisis. The response has two main components. The first is the automatic stabilization system already in place, even before Congress and the Administration took special steps to address the crisis. The second is the extraordinary measures that Congress has authorized since February 2008. How likely is it that these two kinds of measures will assure social protection to Americans in the current economic crisis?

2. The Financial Crisis and the U.S. Economy

Since the end of World War II the United States has experienced 11 recessions. According to the National Bureau of Economic Research the current and eleventh post-war recession began after December 2007 when payroll employment reached a cyclical peak. Payroll employment has fallen in every month since then. At first the decline in employment and the accompanying rise in unemployment was slow (see Figure 1). Between the fourth quarter of 2007 and the second quarter of 2008 the unemployment rate of Americans between 25 and 54 years old rose only 0.5 percentage points to 4.4 percent, indicating only a modest deterioration in the job market. In the next three quarters the unemployment rate jumped an additional 2.8 percentage points. In the second calendar quarter of 2009 the average unemployment rate of 25-54 year-olds was 8.2 percent, the second highest unemployment rate of any post-war recession. The only recession with a higher unemployment rate using this measure was the 1981-82 recession, when the peak unemployment rate reached 8.9 percent. As of June 2009 the U.S. unemployment rate was still rising, so it is conceivable that unemployment will reach a higher peak in this recession than in any other post-war recession.

Most economists agree that the origins of the current recession can be found in the troubled U.S. housing market. New kinds of home loans and a rapid expansion in new forms of securitized mortgages encouraged Americans to buy homes with very small down payments. Home buyers with questionable credit records were able to obtain mortgages with little money down and generous repayment terms. In spite of the weaknesses in many borrowers' credit histories, the U.S. and world financial markets had an apparently unquenchable appetite for financial securities backed by U.S. mortgages. One result of these developments was a steep rise in U.S. home prices. Figure 2 shows quarterly estimates of the real price of U.S. homes for the period from 1975 to the first quarter of 2009. House prices as estimated by the Federal Housing Finance Agency are deflated using the GDP deflator, a broad gauge of prices in the U.S. economy. After a long period of relative stability between the late 1970s and 1995, the real price of homes increased at an accelerating pace before reaching an all-time peak in the last quarter of 2006. Since then house prices have declined. In some parts of the United States prices have fallen by almost half compared with their peak values. Home buyers who purchased houses with small down payments now have little incentive to repay their loans, because their houses are worth substantially less than their remaining mortgages. A rising percentage of home owners have defaulted on their mortgages or are no longer making payments on their home loans.

The continuing fall in home prices has made potential home buyers reluctant to invest in a house, because homes may be much cheaper six months or two years from now. As the inventory of foreclosed and unsold homes has risen, the rationale for building new homes has disappeared in many parts of the United States. The construction industry experienced massive job losses after home prices began to decline. Since reaching a cyclical peak in the third quarter of 2006, payroll employment in construction has fallen by 1.4 million workers, or about 18 percent.[1]

The cascading number of home foreclosures has sharply reduced the market value of many home mortgages as well as the financial market valuation of securities that are backed by those loans. Banks and other financial institutions that hold home loans or mortgage-backed securities have seen their balance sheets imperiled. In a number of cases, the institutions have failed causing large losses to investors who owned equity or bonds of the failing institutions. In many other cases, the unknown size of the institution's losses has meant that investors are uncertain about the creditworthiness of the institution, causing them to avoid lending to or investing in the institution. The inability of many banks to obtain financing, either from other banks or from investors, has reduced their willingness to lend. The Federal Reserve and U.S. Treasury have established an extraordinary set of programs to restore credit markets. As of July 2009 these efforts have helped rescue major financial institutions and keep credit flowing, but they have been only partially successful. Many potential borrowers who would have had little trouble obtaining credit in 2006 found it impossible or very costly to obtain credit in late 2008 and the first half of 2009.

The decline in home prices and the perceived credit problems of large financial institutions were eventually reflected in U.S. stock market prices (see Figure 3). Like home prices, U.S. equity prices rose steeply after the mid-1990s. Unlike house prices, equity prices experienced a sizeable correction between 2000 and 2002. Stock market prices partially recovered after 2002 and continued rising until the fourth quarter of 2007. After achieving a peak in October 2007, stock market prices declined by about 50 percent. Plunging stock prices and falling house prices sharply reduced the net wealth of U.S. households (see Figure 4). The ratio of household net worth to household disposable income fell from 6.4 in the second quarter of 2007 to 4.7 in the first quarter of 2009. Although the current wealth-income ratio is not low by historical standards, the large losses in household wealth will probably restrain U.S. consumer spending for a number of years as households find it harder to borrow or as they attempt to add to their wealth holdings.

[1] This is the decline in seasonally adjusted average quarterly employment in construction up through the second quarter of 2009.

A drop in consumption is already evident in the national income and product account statistics. Commerce Department data show that U.S. personal consumption expenditures fell 1.5 percentage points between the fourth quarter of 2007 and the fourth quarter of 2008. This is the largest one-year drop in personal consumption since the 1974-75 recession (see the top panel of Figure 5). The slump in consumer demand has had a spillover effect on the wider economy because consumer expenditures typically account for a little more than 70 percent of the total economy. According to Department of Commerce estimates published in May 2009, U.S. GDP fell 2.5 percentage points between the first quarter of 2008 and the first quarter of 2009, one of the steepest one-year declines in the post-war period (see lower panel of Figure 5). Although the drop in U.S. GDP is large in relation to the post-war U.S. experience, especially in the years after 1984, it is not especially severe in comparison with the recent experience of other large industrial economies. The major economies in the European Union and Japan have posted even larger GDP declines than the one experienced by the United States (see Figure 6). Among the G-7 countries, only Canada has experienced a slower rate of decline.

How severe is the recession likely to be? Although economic forecasters do not have a good record of successfully predicting the onset of recessions, past historical experience offers some guidance to thinking about the possible duration and severity of the recession already underway. According to the business cycle dating scheme proposed by the National Bureau of Economic Research, the average completed post-war recession has lasted almost 11 months or about 3.5 calendar quarters, when the length of the recession is defined as the interval from the business cycle peak to the business cycle trough. Using a somewhat different method, we can trace out the trend of real economic output in quarters immediately after the peak quarter of GDP. Figure 7 shows the trend of real U.S. GDP during selected post-war recessions. Included in the sample of recessions are the particularly severe or long-lasting recessions of 1981-82 and 1974-75. Using Commerce Department estimates available in May 2009, the present recession is equivalent to the most serious post-war recessions. Although the drop in real GDP in the first and second quarters of the recession was smaller than in some earlier recessions, the drop in GDP by the third quarter of the recession is equivalent to that in the most severe post-war recessions. The drop in total payroll employment has been 3.9 percent since U.S. GDP reached a peak in the second quarter of 2008 (see Figure 8). That is bigger than the drop in other recent recessions, but it is slightly smaller than the decline that occurred in the 1957 recession. In the

1974-75 recession payroll employment actually rose in the first three quarters after GDP reached a peak (in the fourth quarter of 1973). It began to decline in the fourth calendar quarter after the quarter when peak GDP was attained.[2] The chart also shows how many quarters elapsed before payroll employment reached the level attained at the previous GDP peak. In three of the recessions, this did not occur until 10 quarters after the previous peak level of GDP.

A common way to measure the depth of a recession is to estimate the gap between actual national output and potential output if employment were equal to the maximum level that is consistent with nonaccelerating inflation. The U.S. Congressional Budget Office (CBO) estimates that the lowest level of unemployment consistent with nonaccelerating inflation in 2008-2009 was 4.8 percent of the labor force age 16 and older. In June 2009 the unemployment rate of Americans older than 16 was 9.5 percent, or 4.7 percentage points above the "full-employment" unemployment rate estimated by the CBO. Figure 9 shows the CBO's estimates of the gap between potential and actual GDP over most of the post-World-War-II period. A positive number indicates that potential GDP is higher than actual GDP; a negative number reflects the fact that actual GDP is growing too fast to be consistent with nonaccelerating inflation. The estimated output gap in the first quarter of 2009 was about $950 billion, or 6.3 percent of potential U.S. GDP. Except for the GDP shortfall in the 1981-82 recession, this is the biggest gap between potential and actual output of the entire post-war period.

In making its January 2009 economic forecasts for purposes of predicting future government outlays and revenues, the CBO produced a forecast of the length of the current recession. It is reflected in Figure 10, which shows the predicted trend in actual and potential GDP between 2006 and 2018. In this forecast, the maximum gap between actual and potential GDP will be attained in fiscal year 2010, that is, between October 2009 and September 2010, and will gradually shrink until almost all the gap is eliminated by 2014. By definition, the unemployment rate will increase as long as actual GDP is either shrinking or expanding more slowly than potential GDP; the unemployment rate will begin to decline when the growth of actual output is faster than the growth in potential output. In its most recent forecast of future GDP and unemployment, which was made in March 2009 after the Congress passed a large

[2] Because the baby boom generation and many U.S. women were entering the labor force in the mid-1970s, labor force growth was very rapid at that time. The 1974-75 recession also saw a sharp fall in worker productivity, which accounts for the combination of rising payroll employment and shrinking real output.

stimulus package ("The American Recovery and Reinvestment Act of 2009"), the budget office's predictions became more pessimistic. Nonetheless, the annual unemployment rate at the trough of the recession was predicted to be only 9.0 percent, a rate that is one-half percentage point lower than the 9.5 percent unemployment rate recorded in June 2009. Under this forecast the United States will suffer a recession that is very serious by post-World-War-II standards, but is not unprecedented in its severity. Even if the March 2009 CBO forecast is too optimistic, as seems likely, the nation does not now appear to face an economic or humanitarian crisis on the scale of the Great Depression. In the second quarter of 2009, as this paper was written, some indicators of U.S. economic performance were beginning to improve or at least to decline more slowly. Consumer confidence, for example, has improved since the beginning of the year. Job losses declined in the April-June quarter of 2009 compared with the job loss rate in the previous two quarters. After reaching a low point in early March, U.S. stock prices began to rise, and the creditworthiness of many of the nation's largest financial institutions appeared to improve.

3. The U.S. Safety Net and the Stimulus Package

Even if neither the Congress nor the President took special actions in response to a recession, a number of government programs, including unemployment and disability insurance, social assistance programs, and the income tax system, would provide automatic stimulus and protection of household income. The unemployment insurance program undoubtedly shows the biggest proportional change in spending whenever the economy falls into recession (see Figure 11). When the economy is growing strongly and unemployment is low, unemployment insurance benefits represent only about 0.3 percent of disposable personal income. In the midst of a recession, that percentage more than doubles primarily because the number of workers collecting benefits rises steeply. Part of the increase in the number of unemployment insurance recipients is often due to special measures passed by Congress. Typically, those measures permit laid off workers to collect benefits for longer than the standard period (six months), but much of the increase in unemployment insurance beneficiaries would occur even if the Congress failed to act. Federal income taxes and social insurance tax payments also shrink when the economy contracts. Because the income tax system is strongly progressive, income tax collections decline proportionately much faster than personal and corporate income. Economists Alan Auerbach and Daniel Feenberg estimate that the consumption response to the decline in federal taxes offsets 8 percent of the initial impact of an adverse shock to U.S. GDP (Auerbach and Feenberg

2000). Since income and payroll taxes represent a much bigger share of the U.S. economy than unemployment benefits, the tax system plays a much bigger quantitative role than unemployment insurance in stabilizing the economy.

The tax and benefit system also plays an important role in equalizing incomes and smoothing net income changes across U.S. states and regions. The U.S. is a very large and diverse country. In 2007 the poorest American state (Mississippi) had per capita personal income that was only about half of that of the richest state (Connecticut). The progressive tax system and the progressive formula for determining social insurance and social assistance benefits mean that the difference in net incomes between states is smaller than the difference in their before-tax, before-transfer incomes. States and regions that experience the biggest proportional losses in market income during a recession will generally receive proportionally bigger net gains from their financial transactions with the federal government. Thus, the automatic stabilization that is built into federal taxes and transfer benefits tends to spread the economic pain of a recession more equally across the country than would be the case in the absence of the federal tax and transfer system.

Unemployment insurance. For American workers the most important protection they receive when they are laid off is provided by unemployment insurance. Experienced U.S. workers who are dismissed from their jobs can claim unemployment benefits that replace about half of their lost earnings up to a maximum weekly benefit amount. In most American states this maximum amount is roughly half the wages earned by an average worker covered by the unemployment insurance system. This means laid off workers who earn above-average wages collect benefits that replace less than half of their lost earnings. Benefits are taxed as ordinary income in the income tax system. Unemployment insurance benefits do not last indefinitely. Under ordinary circumstances, U.S. benefits are restricted to just 26 weeks. Laid off workers who fail to find work within six months after losing a job will run out of unemployment benefits before they start earning another paycheck. In recent years between 31 percent and 43 percent of workers who claim unemployment benefits exhaust their eligibility for benefits before finding a job. The percentage which exhausts benefits is higher when the nationwide unemployment rate is high. As in many OECD countries, there has been a long-term rise in the percentage of unemployed workers who suffer long spells of unemployment. This is reflected in the statistics on unemployment insurance benefit exhaustion. In the 1960s the percentage of claimants who exhausted unemployment compensation ranged between 20 percent and 25 percent of all the workers who filed a successful claim for benefits. In spite of the long-term growth in the percentage of workers who suffer lengthy spells of unemployment, long-term unemployment remains comparatively low in the U.S. compared with other industrialized countries. Figure 12 shows the percentage of labor force participants in various OECD countries who were unemployed for one year or more in 2004, a year of solid economic growth in most industrialized countries. The United States ranks fourth from the bottom in this list of 20 countries, indicating that long-term unemployment is a much smaller problem than it is in other OECD countries. Nonetheless, in the current recession both the mean and the median duration of unemployment spells reached post-World-War-II highs.

The OECD has made estimates of the generosity of member countries' programs for replacing earned income after workers lose their jobs. The OECD calculates that in 2007 U.S. workers in single-earner households obtained a net replacement rate of about 52 percent to 61 percent in the case of unemployed workers who earn two-thirds of the average U.S. wage. Workers who earn the average wage typically received net unemployment benefits that replaced between 52 percent and 56 percent of their net wages, and workers earning 1.5 times the average wage obtained a replacement rate between 37 percent and 39 percent of their net wages (OECD 2009). These replacement rates are lower than rates available in most other rich countries, and the gap is particularly large in the case of unemployed workers who have dependents or who have above-average earnings.

Figure 13 shows the net replacement rate for a laid off married worker who has a nonworking spouse and two dependent children and who earned the average national wage before losing his or her job. OECD estimates are displayed for 22 rich countries ranked according to the replacement rate that unemployed workers received in 2007 during the first six months after losing a job. For this type of unemployed worker the United States ranks 19th out of 22 countries, though its rank varies depending on the exact wage and family circumstances of the laid off worker. For workers at other wage levels and in other family circumstances, the replacement rate in the United States can be slightly higher or well below the average replacement rate available to counterpart workers in the other 21 countries. Usually, however, benefits are lower in the U.S. than they are for comparable unemployed workers in other rich countries.

The U.S. unemployment insurance system only replaces the money wages that workers lose when they are laid off. It does not insure workers against the loss of health insurance or other fringe benefits that were provided by their former employers. For a private-sector employee, the employer's contribution for health, retirement, and insurance benefits, excluding mandatory social insurance, averages about 16 percent of the worker's money wage (U.S. BLS 2005). The loss of fringe benefits is particularly important for workers who depend on their employers for health insurance. Insurance purchased outside an employer's health plan is so costly that few unemployed workers can afford it.

When the state or national unemployment rate is high, laid off workers often qualify for unemployment compensation in addition to the standard 26 weeks of benefits. For the past 50 years the Extended Benefits program has provided an additional 13 or 20 weeks of compensation payments for workers in states where the unemployment rate is higher than a threshold or "trigger" rate.[3] Half the cost of this program is paid with funds from the federal government and the other half is paid by states where the program triggers on. (All of the cost of the regular, 26-week package of benefits is paid with payroll taxes raised by state governments.) The Extended Benefits program does not work as well in recent years as it did in the 1970s and early 1980s. During the past 25 years the program has rarely if ever triggered on in most states, even when the local unemployment rate was high. For example, in June 2003 when the U.S. civilian unemployment reached a peak after the 2001 recession, Extended Benefits were available in only 3 out of the 50 states. While the local unemployment rate was exceptionally high in those states, it was also higher than 6½ percent in six other states, including California, Michigan, and Texas. Before the current recession, the Extended Benefits program had failed to "trigger on" in 33 states during any month after the 1981-83 recession (Vroman 2009).

On both humanitarian and economic grounds it makes sense to provide longer duration benefits to laid-off workers when the unemployment rate is high. Because unemployed workers usually need more time to find work in a weak job market, there is a compelling equity argument for offering insurance over longer spells of job search. In addition, the counter-cyclical effectiveness of unemployment compensation is reduced when a large percentage of laid-off workers is dropped from the rolls as a result of exhausting their benefit entitlement. For obvious

[3] Details of the trigger mechanism can be found in U.S. House of Representatives, Committee on Ways and Means (2000), Section 4.

reasons, workers are more likely to exhaust their regular unemployment benefits when the unemployment rate is high. If no extensions of regular unemployment compensation are available, the percentage of all unemployed workers who collect benefits will decline when the length of a recession extends beyond the maximum eligibility period.

The logic of these arguments is understood by most U.S. policymakers. In every recession since the late 1950s Congress has enacted a federally funded extension of unemployment benefits in addition to whatever extension might be available under the federal-state Extended Benefits program. The extension in 1975-1977 was particularly generous, providing unemployment claimants who exhausted both regular and extended benefits with up to 26 additional weeks of compensation (for a total benefit duration that could last up to 65 weeks, including 26 weeks of regular insurance benefits and 13 weeks of Extended Benefits). The special benefit extensions in 1982-1985, 1991-1994, and 2002-2004 were less generous but still provided extra federally-financed benefits that could extend a worker's total eligibility period by up to six months. Special programs to extend the duration of unemployment benefits have been in effect during all or parts of 15 out of the 35 years since 1975. Depending on a worker's state of residence and the details of the federal supplemental program in effect in a particular year, a worker might qualify for 6 to 39 weeks of additional unemployment compensation beyond the 26 weeks available under the regular state insurance program.

In most years, however, unemployment compensation is limited to the first 26 weeks after a worker is laid off. This eligibility period is one of the shortest in the industrialized world. Workers who experience very long unemployment spells receive considerably less income protection in the U.S. than they would obtain in most other industrial countries. Average-wage workers who are unemployed for five successive years would typically receive unemployment and social assistance benefits that replace 40 percent to 50 percent of their lost net earnings in the other 19 countries. In the United States unemployment benefits replace just 5 percent or 6 percent of lost earnings over that five-year span. Even if we add the social assistance benefits available to jobless workers in a long unemployment spell, the replacement rate in the United States falls substantially below the average rate in the other 19 countries (OECD 2004, Table 3.3b).

The U.S. stimulus package for laid-off workers. The Congress has taken a number of steps to expand the protection ordinarily available to laid-off workers. As in earlier post-World-

War-II recessions, it provided federally funded extensions to standard unemployment insurance. As noted above, the Extended Benefits program does not usually trigger on in many American states, unless the local unemployment rate reaches an exceptionally high level. This experience was repeated in the current recession. In the middle of March 2009, when the national unemployment rate among adults 16 and older was 8.5 percent, the Extended Benefits program had "triggered on" in only 15 of the 50 American states (Vroman 2009). Recognizing the shortcomings of the Extended Benefits program, the Congress established a temporary Extended Unemployment Compensation (or EUC) program in July 2008. Depending on the state-level unemployment rate, a laid-off worker who exhausts the standard 26 weeks of regular benefits can collect EUC benefits for between 20 and 33 extra weeks, giving workers an entitlement of both regular and EUC benefits that may range between 46 and 59 weeks. By the middle of June 2009, 33 weeks of EUC benefits were available in 42 of the 50 states, and 26 weeks of EUC benefits were available in the other 8 states. The full cost of EUC benefits will be paid by the federal government. Under the law in effect in May 2009, Congress has authorized EUC benefit payments through the first five months of 2010, although the program is likely to be extended if the U.S. unemployment rate remains high.

In addition to creating the temporary EUC program the Congress also created major incentives for state governments to change the "trigger" rules for the state-federal Extended Benefits program. Under previous law, one-half the cost of Extended Benefits was financed by states. Under temporary rules established in the February 2009 stimulus package, Congress authorized the federal government to pay for 100 percent of the cost of Extended Benefits for benefits paid in 2009 and the first few months of 2010. Because states do not have to pay for any of the benefit costs, they have an incentive to adopt a lower unemployment rate threshold for triggering Extended Benefits. States that follow this strategy can make an additional 13 to 20 weeks of unemployment compensation benefits available to laid-off workers at no extra cost to employers in the state. (In nearly all U.S. states, the unemployment insurance payroll tax is imposed solely on private employers in the state. Workers do not directly pay the tax.) Thus, in some states with exceptionally high unemployment rates, workers may be eligible to receive unemployment compensation for a total of up to 79 weeks, or one and a half years. This is the longest duration of unemployment insurance that has ever been offered to laid-off U.S. workers.

Workers who lose their jobs in states with lower unemployment rates may be eligible for up to 46 weeks of benefits.

In addition to temporarily extending the maximum period that workers can collect unemployment benefits, Congress also took two other steps to improve the protection provided by unemployment insurance. First, it temporarily increased weekly benefit payments by $25, or about 8 percent of the previous average benefit amount. All of the cost of the benefit increase will be financed by the federal government. Second, it temporarily eliminated the federal income tax on the first $2,400 per year of unemployment benefits. This step will increase the after-tax value of unemployment compensation payments by roughly $240 to $360 per year, because unemployed workers typically face a marginal tax of 10 percent or 15 percent. In no previous recession has Congress increased the value of weekly benefits in this way.

Congress also gave incentives for states to change some of the qualifying conditions for unemployment benefits. The goal was to make benefits available to some unemployed or laid-off workers who had previously been excluded from receiving benefits by state laws. For example, one change in the rules would make it possible for laid-off workers to count wages earned in a more recent qualifying period than the standard period that is used under most states' rules. Another rule change would permit workers who are laid off from part-time jobs to obtain unemployment benefits. (Roughly half of states do not permit part-time job seekers to claim benefits.) Under the terms of the 2009 stimulus package, the federal government would assume the full cost of the more generous qualifying provisions for the first couple of years after they are adopted. If states take full advantage of these provisions, the cost to the federal government would represent about one-seventh of the full package of federal unemployment insurance stimulus. These provisions have proven controversial, however, because some state governments are unwilling to make permanent changes in their qualifying requirements in exchange for a temporary payment from the federal government. Of course, most Members of Congress want the states to permanently change their rules to allow more of the unemployed to collect benefits. They are using the funding formula in the stimulus package to achieve this objective. In the end, a majority of states will adopt two or more of the rule changes that Congress wants, and there will be a permanent change in the qualifying rules in those states.

The most surprising feature of the stimulus package for laid-off workers was the provision of generous federal subsidies to help unemployed workers pay for health insurance premiums. The subsidy, which is limited to 9 months per worker, covers 65 percent of the cost to laid-off workers of continuing their coverage under their former employer's health insurance plan. Most working Americans who are not poor receive health insurance through their employer or the employer of another wage earner in the family. Employers typically pay for most of the premium costs of this insurance. Most workers who are laid off lose the employer subsidy. The total, unsubsidized cost of health insurance is typically quite high, around $4,700 a year for single workers and $12,700 for workers with a spouse and child dependents (Vroman 2009). These amounts are 10 percent and 32 percent, respectively, of the average year-round wage of American workers. Not surprisingly, relatively few workers can afford to pay the full cost of these premiums after they are laid off. The result is that many laid-off workers lose their health insurance until they find another job where health insurance is offered as a fringe benefit. (Unemployed workers, especially those with child dependents, may become eligible for means-tested public health insurance under the Medicaid and State Child Health Insurance, or SCHIP, programs, but families must usually have low incomes and few assets to qualify for this insurance.)

Citizens of other rich countries are often shocked to learn that U.S. workers can lose their health insurance coverage when they lose their jobs. In most wealthy countries, health insurance is provided to nearly all the resident population, including the unemployed and their dependents. In the United States, free or low-cost *public* health insurance is provided to the elderly population, to most of the disabled, and to the non-elderly and non-disabled population which is poor (that is, to the population which has an income below a low-income threshold). For non-elderly, non-disabled Americans with incomes above the low-income threshold, inexpensive group health insurance is available only to employees who work for employers that provide health insurance and to the dependents of those employees. Some companies do not provide health insurance to their employees, so their employees do not lose health benefits when they lose their jobs. But for the workers who are provided health insurance through their jobs, the loss of employment typically causes a much bigger loss than the loss of wage income. It also causes the worker and his or her dependents to lose health protection. By providing generous subsidies so these workers can continue their health insurance after they are laid off, Congress dramatically expanded the protection available to laid-off workers who lost good jobs.

Temporary tax reductions. A substantial percentage of the 2008 and 2009 federal stimulus packages was devoted to providing one-time or short-term income tax reductions to households and, on a smaller scale, to businesses. The first Congressional response to the financial crisis occurred in February 2008, almost six months before U.S. GDP started to decline, when Congress passed a law which gave income tax rebates to households and more generous tax treatment of investments to businesses. The 2008 stimulus package also raised the maximum value of a home mortgage that could be purchased by the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). Of these measures the most important was the income tax rebate given to taxpayers. Individual taxpayers received a rebate of $600; married couples received $1,200; and taxpayers with child dependents received $300 for each child. Even Americans who had no tax liabilities could receive partial rebates if their earned incomes were at least $3,000. Social Security beneficiaries also received rebates under the 2008 stimulus law. Rebate checks were scaled back for households with gross incomes above a certain limit. Single taxpayers with incomes above $75,000 and married taxpayers with incomes above $150,000 saw their rebates reduced by $0.05 for every $1.00 by which their incomes exceeded these limits. Thus, rebates of roughly equal size were received by most Americans in the bottom 90 percent of the income distribution. Only people with virtually no income or with incomes near the top of the distribution received no tax benefits under the plan. The estimated one-year cost of the rebates was about $126 billion, or about 1 percent of potential U.S. GDP. The miscellaneous tax concessions for business provided estimated tax relief equal to about one-seventh the amount provided to households through the income tax rebates.

The 2009 stimulus package was about 5.4 times more expensive to the U.S. Treasury than the 2008 package, and it contained a much wider variety of tax and spending provisions. The most costly tax provision, accounting for more than 40 percent of the tax concessions in the stimulus bill, was the temporary "making work pay" tax credit. This credit was modeled closely on a proposal made by President Barack Obama during the 2008 presidential campaign. He pledged to increase the reward for work by giving low-income workers an income tax rebate for part of the payroll taxes they pay. The credit provides workers with a credit equal to 6.2 percent of their earnings, capped at $400 for single taxpayers and $800 for a married couple. The credit rate is equal to the worker's portion of the Social Security payroll tax. The credit is phased out for taxpayers with high incomes, in particular, for single taxpayers with incomes above $75,000 a year and married couples with incomes above $150,000 a year. The credit unquestionably reduces the marginal tax rate on earnings received by Americans in the bottom 90 percent of the income distribution, and thus it should boost the available supply of labor. The Congress and Administration decided to pay the credit through lower tax withholding rates in 2009 and 2010. Thus, most workers started receiving bigger paychecks in March or April 2009. The tax credit is temporary, however. It ends after 2010. In the 2008 campaign, candidate Barack Obama pledged to make the tax credit permanent. Of course, this would greatly increase its cost. The cost of the credit as enacted is predicted to be $116 billion between 2009 and 2011. If the credit instead became a permanent part of the tax code, the cost of the credit over the next 10 years would be $640 billion.

The second most expensive tax provision in the 2009 stimulus package, at a cost of nearly $70 billion, raised the income level at which the "alternative minimum tax" begins to apply. This is a technical change in the tax code, but it has important practical effects for people with high incomes or large deductions from their countable incomes. The original purpose of the "alternative minimum tax" was to prevent high-income taxpayers from escaping all taxes as a result of claiming many deductions and exemptions on their income tax returns. How effectively it achieves this goal is a matter of debate. In any case, a growing percentage of taxpayers is at risk of paying income taxes under the alternative minimum tax rules, and in many cases these taxpayers do not have particularly high incomes. To prevent middle-income families from paying the alternative tax, the Congress has taken steps every one or two years to "temporarily" increase the income levels at which the alternative minimum tax begins to apply. Whether or not the alternative minimum tax rules were suspended in the 2009 stimulus bill, they almost certainly would have been suspended by Congress sometime in 2009. Few taxpayers expected to pay the alternative minimum tax in 2009. According to estimates of the Brookings-Urban Institute Tax Policy Center, almost 80 percent of the net benefits from suspending the alternative minimum tax rules flows to the richest 20 percent of U.S. households (Altshuler *et al.* 2009). Viewed as an economic stimulus measure, this was a poor way to target tax concessions, since high income households have a lower propensity to immediately spend their tax savings than do lower income households.

The stimulus package contained two important provisions to liberalize tax credits that are particularly important for low-income households containing the children. One increased the value of the Earned Income Tax Credit (EITC) for households containing three or more children. This credit was originally introduced to encourage low-income parents to enter the workforce and increase their annual work effort. For workers with very low earnings it gives families a refundable tax credit equal to either $0.34 or $0.40 for every dollar they earn. There is a maximum annual credit – it is about $3,000 a year for parents with a single child and $5,000 a year for parents with two or more children – and when family income rises above some threshold the credit is phased out. The EITC is widely considered successful, partly because the tax benefits are heavily concentrated on a deserving population – working poor parents – and partly because of abundant evidence the credit achieves its goal of encouraging low-wage parents to join the paid workforce. The temporary reforms included in the 2009 stimulus bill provided increased tax credits to parents with three or more children and increased the income levels at which the credit begins to be phased out for married couple families. These are worthy changes, though it is unclear why they are only temporary. Given the population that will receive tax concession under this provision, it is likely that a large percentage of the tax reductions will be spent soon after they are received.

A second provision of the stimulus bill alters the child tax credit. This credit provides permanent tax concessions to families that contain children. Under the terms of the stimulus bill, some features of the child tax credit will be temporarily changed so that low income households receive bigger tax benefits under the credit. Like the change in the EITC, the temporary change in the child tax credit is narrowly targeted on low-income working families containing children. In both cases it is likely that a high fraction of the tax benefits will be spent soon after they are received by families. Since this population includes a high proportion of families with working but poor breadwinners, it is more vulnerable to the effects of a recession than other low-income populations, which may include few working breadwinners. (Pensioners and the disabled are often poor, but they only rarely depend on wage earnings for their support. Therefore, most of them are largely unaffected by weakness in the job market.)

In addition to the temporary tax concession offered to people collecting unemployment insurance, mentioned earlier, the 2009 stimulus package also contains a provision that assists students who are enrolled in post-secondary education. U.S. tax law already contains a permanent "Hope tax credit" that provides students with a tax credit equal to 100 percent of the first $1,200 per year spent on tuition and fees plus 50 percent of the second $1,200 spent on such fees. However, the credit is only provided to students in their first two years of post-secondary schooling. The temporary replacement for the Hope tax credit is called the "American Opportunity credit." It provides a credit equal to 100 percent of the first $2,000 spent on tuition, fees, and other expenses plus 25 percent of the next $2,000 spent on those items. Thus, the maximum annual credit will be $2,500 versus only $1,800 under the Hope tax credit. In addition, the American Opportunity credit will cover educational expenses in four years of post-secondary education rather than only the first two. However, like other items in the stimulus package, this is only a temporary tax credit. Unless the credit is extended by a later Congress, it will only provide tax benefits for educational expenses incurred in 2009 and 2010. When the credit expires, it will be replaced by the old Hope tax credit.

The notable feature of the American Opportunity credit is that it targets temporary tax concessions on Americans investing in higher education. It is one of several provisions in the stimulus package aimed at maintaining or increasing Americans' investments in education. In the spending portion of the stimulus package, Congress funded a major expansion of government grants to low-income students so they can pay for post-secondary schooling. These provisions make good sense. Between December 2008 and April 2009 the number of wage and salary jobs in the U.S. dropped by more than 5.7 million. In the same period the number of unemployed job seekers increased by 6.2 million. Because it is hard for jobless workers to find employment, it makes sense for some of them to stop looking for work and start investing in their own skills so they are better equipped to find work when the job market improves. By providing tax assistance and direct grants to post-secondary students, the government encourages more of the unemployed to adopt this strategy. It is a good strategy for many workers, especially for younger unemployed workers. At the same time, the increased incentive for jobless workers to attend college or participate in training programs may reduce the number of unemployed who are seeking immediate employment.

The 2009 stimulus package also contains a number of other miscellaneous tax provisions, some of them aimed at providing tax incentives for businesses to make energy-saving investments. Some business tax incentives, including time-limited tax concessions for capital investments undertaken in a specified period, can spur business spending in the short run. Many others, however, will probably encourage spending over such a lengthy period that much of the increased spending will occur when the recession is long past. Some of these tax concessions may have a sound justification, quite apart from their success or failure in spurring business investment in the recession. However, to the extent that they cause investment to increase long after the recession is over, these tax concessions will do nothing to speed the recovery or to improve the well-being of workers or families during the recession.

Other direct income assistance and provision of services. From the perspective of social protection, the most important component of the 2009 stimulus package is direct provision of income assistance and social services to households. I have already described some of the most important measures to offer additional income assistance: temporary extensions in unemployment benefits, a temporary increase in the weekly benefit payment for unemployment compensation, temporary health insurance subsidies for workers who lose their health insurance when they are laid off, tax rebates for most American taxpayers and pensioners, targeted tax concessions to working parents who have children, more generous tax credits and means-tested educational grants so that students can afford college. In addition to these measures, Congress took other steps to protect vulnerable populations. It increased for two years the amount of money available in federally funded training programs to pay for retraining unemployed workers and improving the skills of hard-to-employ young people and adults. It provided substantial extra assistance so that states could pay for larger caseloads in the Temporary Assistance to Needy Families (TANF) program, a social assistance program that provides cash transfers to indigent children and their parents. The 2009 stimulus package temporarily increased the generosity of food stamp benefits (now known as Supplemental Nutritional Assistance). This program is essentially a negative income tax program that offers benefits payable in the form of food coupons. As a family's income rises, the value of food coupons provided to the family falls. Families in the top 60 percent of the income distribution are not eligible to receive food coupons. All of the measures just mentioned target assistance benefits on populations that are directly affected by a weaker job market, namely, populations containing working-age adults who can lose jobs or wages.

Fiscal relief for state governments. By my estimate a little more than one-fifth of the 2009 stimulus package, or about $175 billion, was devoted to providing fiscal relief to state governments. This relief was provided in a variety of forms. A little less than $3 billion in federal grants were authorized to help pay for local law enforcement, for example. Nearly $30 billion was authorized to pay for aid for particular aspects of state and local education. Most of this was targeted on education for the economically disadvantaged and for children who have learning or other disabilities. Since most educational spending is fungible, however, it is likely that the extra federal funds earmarked for one educational purpose can be reallocated to other educational functions at the discretion of state and local policymakers.

Congress created two temporary programs to provide general fiscal relief to the states. One gives almost $50 billion to be divided among the states "… in order to minimize and avoid reductions in education and other essential services." In exchange for the generous grants, state governments must show they are making progress in "(1) making improvements in teacher effectiveness and in the equitable distribution of qualified teachers for all students, particularly students who are most in need; (2) establishing pre-K-to-college-and-career data systems that track progress and foster continuous improvement; (3) making progress toward rigorous college- and career-ready standards and high-quality assessments that are valid and reliable for all students, including limited English proficient students and students with disabilities; and (4) providing targeted, intensive support and effective interventions for the lowest-performing schools." (U.S. Department of Education 2009, p. 1) All 50 states will submit applications for these funds, and the applications will be duly considered by federal officials. However, there can be little doubt that nearly all of the funds will be disbursed according to the formula specified by Congress. For most states, no changes in their education policies will be needed to obtain the generous but temporary federal assistance.

The second important form of fiscal relief was provided through a temporary change in the funding formula for Medicaid, the federal-state public health insurance program for low-income Americans. The Medicaid program is administered by state governments, but most of its costs are financed with large federal grants to state governments. If a state maintains a qualifying public insurance program for its indigent population, the federal government pays for a percentage of the state's program costs. The fraction of costs paid by the federal government, known as the Federal Medical Assistance Percentage (or FMAP), is determined by a formula that links the state's federal reimbursement rate to its per capita income. States with high average incomes get 50 percent of their Medicaid program costs reimbursed, while states with low average incomes receive a higher federal subsidy rate. Medicaid is one of the most costly government programs. In 2007 benefit payments under the program represented 2.8 percent of GDP. This means that the federal government's Medicaid grants to state governments are a major source of state revenues. By changing the FMAP formula, the federal government can dramatically raise or lower total state revenues. The 2009 stimulus package temporarily changed the FMAP formula to make it more favorable to states. All states were guaranteed that the percentage of Medicaid costs borne by the federal government would rise by at least 6.2 percentage points (reducing the percentage of program costs borne by the state by an equivalent percentage). In addition, the Congress authorized even bigger increases in the federal match rate for states experiencing large increases in their unemployment rates. These changes in the FMAP formula are effective for the period from October 2008 through December 2010.   The cost of this temporary formula change to the U.S. Treasury is estimated to be $90 billion spread over three years.

Both the temporary measures just described provide immediate relief to state governments. Nearly all state governments in the United States operate under balanced budget rules. Although these rules differ across states, they generally mean that the planned operating budget of the state, excluding the budget for capital investment, must be fully financed with current revenues. These rules, which are usually included in state constitutions, mean that a shortfall in expected revenues must be matched within a few months by an equivalent reduction in planned state spending. Unlike the federal government, which can borrow unlimited funds to pay for its operations, state governments must generally plan to cover the cost of their programs with current tax revenues, fees, or grants from the federal government. The provision of generous fiscal relief in the current recession means that state governments will not have to cut spending or increase taxes as much as they would have to do in the absence of the federal aid.

Federal fiscal relief to the states is particularly important for education and for maintaining social protection to the poor. In the United States, education is primarily the responsibility of state and local governments. The federal government typically pays for only about 10 percent to 12 percent of the total cost of public primary and secondary schools. State and local governments pay for the rest. Since balanced budget rules make state and local budgets pro-cyclical, state legislatures face pressure to reduce school budgets during recessions. The federal government pays for most of the cost of social safety net programs for the poor, but state governments still pay for a substantial share of their costs. Equally important, state governments are responsible for administering some of the biggest means-tested programs, including Medicaid and Temporary Assistance for Needy Families. State governments make the rules that help determine who is eligible for benefits and the amount of benefits. Even though they do not pay for the full cost of the programs, when a recession occurs many states are tempted to curtail eligibility or cut benefits. This is the opposite policy from the one urged by most economists, who think it is important for benefits to be maintained or even improved during a recession.

On the whole, Congress provided states with fiscal relief in a sensible way. The funds were guaranteed to states within a few months of the jump in U.S. unemployment rates, allowing states to maintain educational and social spending they otherwise would have cut. Although a number of state governments will be forced to raise taxes and cut spending, the number is smaller than it would have been if Congress did not provide fiscal relief. The state tax increases and spending cuts will also be smaller. By providing much of the fiscal relief through its matching grants for the Medicaid program, the federal government improved the likelihood that Medicaid insurance protection for indigent Americans will be maintained during the recession. While it is true that the cost savings to states are fungible, many state legislators will be unwilling to cut state Medicaid spending when a Medicaid budget cut would bring with it an even bigger cut in federal matching funds.

Investments in infrastructure and research and development. When the extent of the financial crisis became clear, the Bush Administration and Congress acted quickly to prevent the collapse of major banks and insurance companies. Almost immediately critics of the financial institution rescue package demanded that actions be taken to protect the broader economy. A great deal of the early discussion focused on alternative investments the government could make to improve the transportation system, reduce greenhouse gas emissions, and improve the energy efficiency of the economy. This kind of discussion dominated the early phase of the public debate about desirable components of a good counter-cyclical stimulus plan. In the end the 2008 and 2009 stimulus packages contained relatively small budget allocations for these kinds of investments, especially in the first two or three years after the onset of the recession.

I have divided the various individual components in the 2009 stimulus package into three broad categories: (1) fiscal relief for state governments; (2) direct income assistance and social services; and (3) investments in infrastructure and technology development. Figure 14 shows the allocation of resources in the 2009 stimulus package across these three broad categories, and it further divides the budget totals between two periods, 2009-2010 and 2011-2019. In much of the discussion up to now I have emphasized the time-limited nature of many of Congress's actions. Most tax concessions are limited to the 2009 and 2010 tax years. Nearly all the transfer program benefit increases are scheduled to end by 2011. Nonetheless, a surprisingly large percentage of the total costs to the federal government occur after 2010. An overwhelming fraction of the late-period costs are for the infrastructure and technology investment projects. In the case of tax concessions, benefit increases, and state fiscal relief packages, it is relatively easy for the federal government to start spending and to stop it. It is much more difficult to obtain useful results from an investment in infrastructure or a research and development project if the government is committed to obtain results within a very short period. It takes time to plan a well-designed project and even more time to assemble and carefully manage the resources needed to complete it. The different time horizons of the three kinds of stimulus activities is plain in Figure 15. It shows predicted stimulus spending in years between 2009 and 2015 measured as a percentage of the potential GDP in those years. At the peak of the stimulus program, in fiscal year 2010, total spending will be slightly more than 2½ percent of potential GDP. Only a small portion of the funds will be spent on infrastructure or R&D projects. An overwhelming share will be devoted to direct income assistance and to state fiscal relief. The funding for infrastructure and R&D projects will be spread fairly evenly over most of the next six years. Even if the projects ultimately prove to have high value, their value as counter-cyclical stimulus is questionable. Only a small percentage of funds devoted to the projects will be spent in the next two years, when the gap between potential and actual U.S. GDP is expected to be greatest.

4. Conclusion

American social protection in a recession consists of two main elements, the regular system of social protection that is available in good times and bad and special measures enacted by Congress to provide counter-cyclical stimulus and deal with the humanitarian fallout from labor market weakness. Even without any special measures the U.S. system of social protection provides automatic counter-cyclical stimulus that helps offset the impact of a fall in demand. Millions of additional workers apply for and receive unemployment compensation benefits. These benefits help laid off workers maintain their consumption in spite of the sharp fall or complete loss of their wages. At the same time, the existence of a progressive income tax causes personal and business income taxes to fall proportionately faster than taxable income. Government revenue from the income tax falls much faster than the after-tax incomes of households and businesses. A number of other government transfer programs also provide extra assistance to many of the households hurt by a recession. For example, with a lag of 12 to 24 months the number of workers collecting disability insurance benefits also tends to increase. Jobless workers who are in fragile health are more inclined to apply for disability benefits when it is difficult for them to find a job. Those who qualify for benefits will eventually begin to collect government-financed disability and health insurance benefits. Food stamp and cash social assistance payments also increase after the onset of a recession, when laid-off workers with little income and few assets exhaust their unemployment benefits.

The shortcomings of American social protection are widely recognized in the United States. Average benefits under many transfer programs are lower than those provided by comparable programs in other rich countries. Except for food stamp benefits and Social Security Disability Insurance, most U.S. government transfers available to working-age households are provided by state governments. Benefit amounts and eligibility conditions are determined by state legislatures rather than under a uniform, nationwide standard set by Congress. Because the federal government provides funding to pay for part of the cost of these programs, the Congress usually establishes minimum standards to guide state legislatures in setting benefit levels and eligibility conditions. Nonetheless, there are wide variations across states in the generosity of weekly benefit amounts and in eligibility conditions. In January 2009 the maximum weekly unemployment insurance benefit was $584 in the state of New Jersey but only $230 in Mississippi. Although the cost of living is higher in New Jersey than in Mississippi, the cost difference is much smaller than the proportional difference between weekly benefits in the two states. Many states impose tough qualifying requirements for unemployment insurance, for Temporary Assistance to Needy Families, and for Medicaid health insurance benefits, making it hard for workers and families to obtain benefits under these programs, both in recessions and in prosperity. This means that unemployed workers who are entitled to benefits in some states would be ineligible for benefits in other states. Despite theses cross-state differences, when a recession occurs a greater number of workers and families begins to receive benefits in all of the 50 states, regardless of whether the state imposes lenient or tough qualifying requirements for benefits.

The most serious shortcoming of U.S. social protection for working-age Americans is the high cost of health insurance for people who are not employed by companies which provide subsidized insurance to their workers. Obtaining unsubsidized insurance is very costly for most the unemployed as well as for workers who are employed in firms that do not offer group health insurance. In 2007 about 47 million Americans, or slightly more than 15 percent of the U.S. population, lacked health insurance. Nearly all of the uninsured are working-age adults and their children. Obviously, the loss of jobs during recessions increases the number of unemployed and the percentage of the population that is at risk of losing health insurance. Until 2009 the U.S. government did not provide affordable health insurance to most of the unemployed or to their dependents. A notable exception was the low-income population, which has long been entitled to receive free Medicaid health insurance. However, few middle- and high-wage workers are entitled to receive Medicaid when they become unemployed.

The stimulus package passed by Congress in February 2009 filled some major holes in the standard U.S. social safety net. Most importantly, the Congress established a temporary program to provide health insurance subsidies to workers laid off from jobs that provided health insurance coverage. Even though this program is currently scheduled to expire in 2010, it will provide crucial protection of a kind that has never before been available to laid-off American workers. Many of the other temporary improvements in social protection provided by the 2008 and 2009 stimulus packages will be familiar from stimulus packages enacted in past recessions. For example, Congress has temporarily extended the potential duration of unemployment insurance benefits beyond the 26 weeks of benefits that are ordinarily available, and it has offered to pay for the full cost of the benefit extension out of federal funds. This kind of measure has been adopted by Congress in every recession dating back to the late 1950s. Most economists approve of this kind of temporary benefit extension because it is an effective way to improve the spending capacity of people who are likely to spend immediately a large percentage of the extra benefits. On the other hand, the benefit extension will also encourage unemployed workers to delay accepting a job offer, increasing the average duration of their unemployment spells.

The variation in state benefit levels and eligibility conditions also creates a problem of benefit equity. Laid off workers who live in states with generous eligibility conditions and high benefit levels can expect to derive much greater benefits under the federal benefit extensions than workers who live in states with more restrictive qualifying requirements and lower weekly benefit amounts. As a result, federal taxpayers will pay for much larger additions to standard benefits for residents in high-benefit states compared with residents in low-benefit states. It is hard to justify this benefit discrepancy on equity grounds. Since the extra benefit payments are financed solely out of federal funds, it is unfair to give higher benefits to laid off workers in some states than in others. The benefit disparity seems particularly unfair because many of the low-benefit states are in the American south and southwest, where poverty rates are high and income levels are below the national average. Nonetheless, unemployment insurance benefit extensions are straightforward to implement and are more effective than most other measures in spurring higher consumer spending.

Two features of the 2009 stimulus package are notable. First is the emphasis on providing generous fiscal relief to state governments. Second is the provision of large, though temporary, incentives for states and young adults to invest in education and training. It is not clear how effective these two measures will be in encouraging higher state and household consumption. In past recessions, federal stimulus plans have emphasized extra spending on unemployment benefits, increases in infrastructure investment, and temporary tax cuts to boost consumer spending and encourage business investment. State fiscal relief and temporary incentives for human capital investment have seldom played a large role in stimulus packages. As a result, we have little evidence to assess their short-term impact on government and household consumption. In my view, both kinds of stimulus deserve serious tests. Based on evidence on state spending patterns and post-secondary educational investments in the current recession we will learn more about the counter-cyclical effectiveness of these two policies.

A fundamental question about the stimulus package is whether it is the correct size in view of the severity of the recession. At this stage it is hard to make a clear judgment on this question. No government agency or forecasting organization can offer a credible prediction of the drop in GDP we should expect. It is clear, however, that the United States adopted an earlier and bigger counter-cyclical stimulus package than other countries. Table 1 shows estimates by the International Monetary Fund (IMF) of the size of stimulus packages in nine large economies (IMF 2009). The size of each fiscal package is measured in relation to the size of the country's GDP. According to the IMF's February 2009 calculations, the United States has enacted the largest stimulus package of the nine countries on the list. The next largest stimulus package was adopted by China. The size of stimulus packages bears little if any relation to the drop in GDP these countries have experienced since the beginning of 2008 (see Figure 6). Through the first quarter of 2009, the drop in U.S. GDP was smaller than average, but the size of its stimulus package was considerably larger than average. Similarly, Chinese GDP has continued to grow over the past year, though at a slower pace than in the previous four years. Nonetheless, China is implementing a large stimulus program.

One reason that countries may have adopted a small stimulus package is that they expect a modest economic downturn. Another is that their operating deficit and public debt were high at the start of the recession, giving them little room for additional fiscal stimulus. Finally, some countries may be confident their existing automatic stabilization policies are robust enough to deal with the current economic crisis. Special counter-cyclical measures should be less necessary in these countries. The IMF analysts note, for example, that the United States "… has less extensive social benefits (unemployment insurance, training), particularly compared with Europe." (IMF 2009, p. 2) Even though this is true, it does not follow that the United States fiscal system provides less automatic stabilization than is available in Europe or elsewhere. As noted above, the automatic stabilization provided by the progressive U.S. tax system is quantitatively much more important than the counter-cyclical stimulus provided by unemployment insurance and other benefits targeted on the unemployed. What matters for stabilization is the combined response of taxes, transfers, and other government spending to the overall state of the economy. The IMF analysis sheds no light on this question. If tax systems in other countries are less progressive and more proportional than the U.S. system, then the United States may have more automatic stabilization built into its standard fiscal policy. At least in the short run, the United States probably faces a less binding public borrowing constraint compared with the other countries listed in Table 1.

The most questionable items in the U.S. stimulus package are the appropriations for public infrastructure investment and incentives for investments in energy-saving or health related research and development. These programs may encourage worthwhile investments in socially desirable activities, but it is not clear how much of the extra spending will occur when the economy is shrinking and when other sources of demand are weak. Because much of the additional public spending will not occur for several years in the future, it is conceivable the economy will already be near full employment when the spending occurs. If the recession is severe and prolonged, the extra spending will of course be highly welcome. If the extra spending takes place when the economy is near full employment, the Congress and Federal Reserve Board can make other changes in fiscal or monetary policy to reduce the adverse side effects of the planned spending.

On the whole the 2008 and 2009 stimulus packages were enacted in a timely fashion. The main components of the packages seem defensible in view of knowledge available to lawmakers when the packages were adopted. More than half of the total fiscal effort is devoted to improving the social safety net and providing temporary tax relief to households and businesses. The temporary benefit improvements are appropriately targeted on households with modest incomes and on households whose incomes will shrink as a result of the recession. The temporary tax concessions are more widely distributed across households, but on the whole they will boost net incomes by a larger proportional amount at the bottom of the income distribution than at the top. A little more than one-fifth of the 2009 stimulus package is devoted to providing temporary fiscal relief to the states. The additional federal aid to states will indirectly help preserve social protection because it will reduce the need for state governments to scale back Medicaid, social assistance, and other programs during the recession. About one-quarter of the 2009 stimulus package will support or encourage investments in infrastructure and new technologies. This spending will have little impact on U.S. social protection, though it may serve other worthwhile goals and may turn out to be very useful if the U.S. recession is long and severe.

7. References

Altshuler, Rosanne, and others. 2009. *Tax Stimulus Report Card: Conference Bill as of February 18, 2009.* Washington, DC: Urban Institute and Brookings Institution Tax Policy Center. http://www.urban.org/UploadedPDF/411839_conference_reportcard.pdf

International Monetary Fund. 2009. "The Size of the Fiscal Expansion: An Analysis for the Largest Countries," Working paper (February). Washington. D.C.: International Monetary Fund. http://www.imf.org/external/np/pp/eng/2009/020109.pdf

OECD. 2004. *Benefits and Wages: OECD Indicators 2004.* Paris: OECD.

OECD. 2009. "Benefits and Wages: Statistics," Paris: OECD. http://www.oecd.org/document/29/0,3343,en_2649_34637_39618653_1_1_1_1,00.html.

Auerbach, Alan J., and Daniel Feenberg. 2000. "The Significance of Federal Taxes as Automatic Stabilizers," *Journal of Economic Perspectives* 4(3) (Summer), pp. 37–56.

U.S. Bureau of Labor Statistics. 2005. *Employer Costs for Employee Compensation, March 2005.* USDL 05-1056. Washington, D.C.: U.S. Bureau of Labor Statistics.

U.S. Department of Education. 2009. "Guidance on the State Fiscal Stabilization Fund Program," (Washington, DC: Department of Education). http://www.ed.gov/programs/statestabilization/guidance.pdf

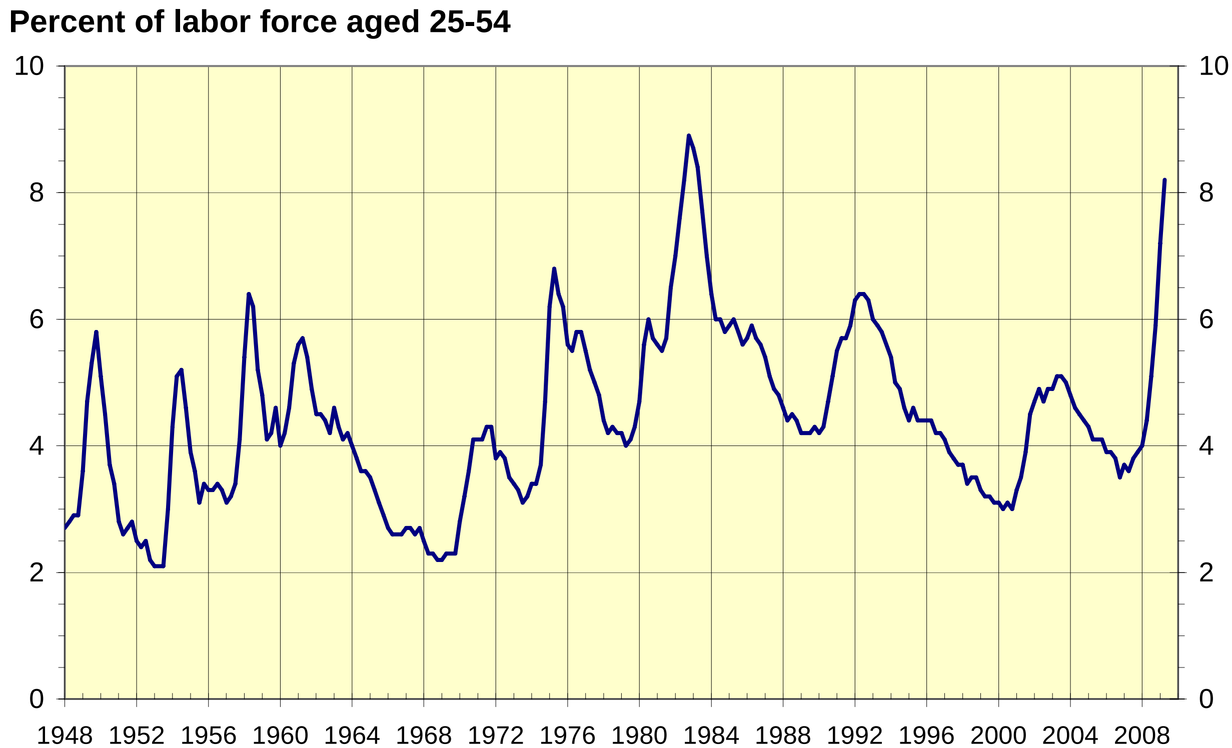
U.S. House of Representatives, Committee on Ways and Means. 2000. *The 2000 Green Book: Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means*. Washington, D.C.: U.S. GPO.

Vroman, Wayne. 2009. "Unemployment Insurance in the American Recovery and Reinvestment Act (HR1)." Mimeo. Washington, D.C.: Urban Institute. http://www.urban.org/publications/411851.html

.

Figure 1.

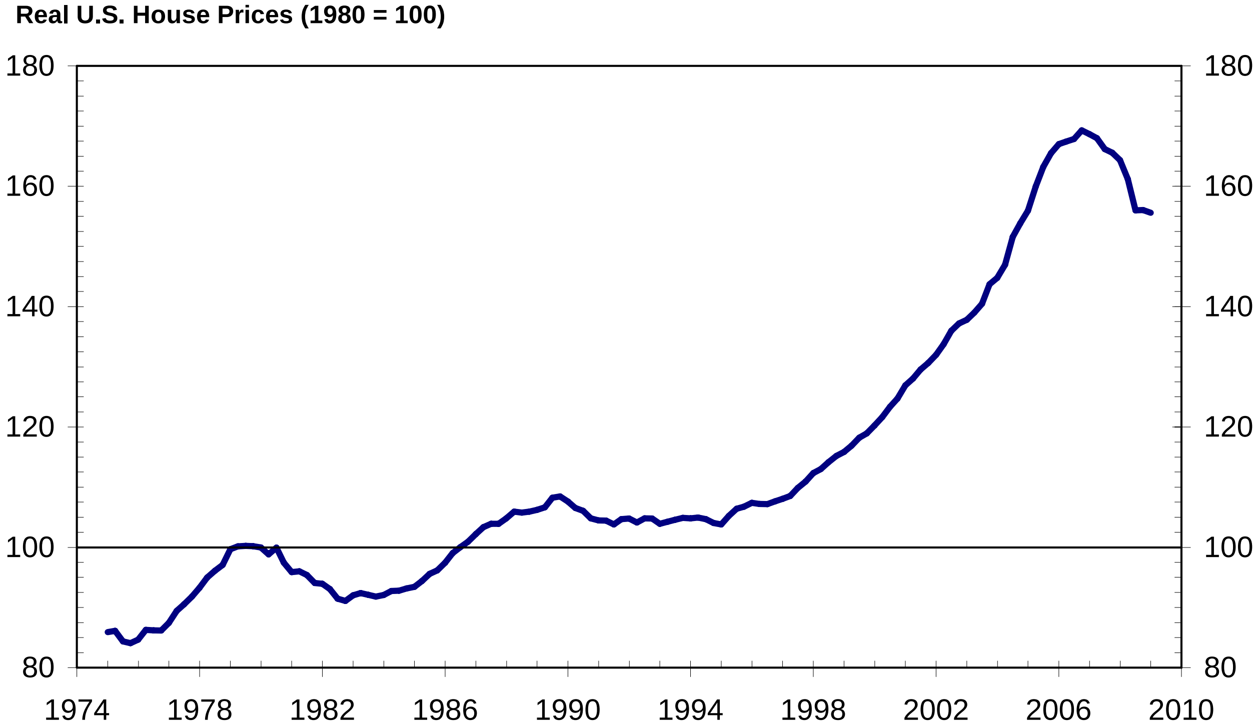
Unemployment Rate among Americans Aged 25-54, 1948-2009:II



Source: U.S. Bureau of Labor Statistics.

Figure 2.

Index of Real U.S. House Prices, 1975-2009:I



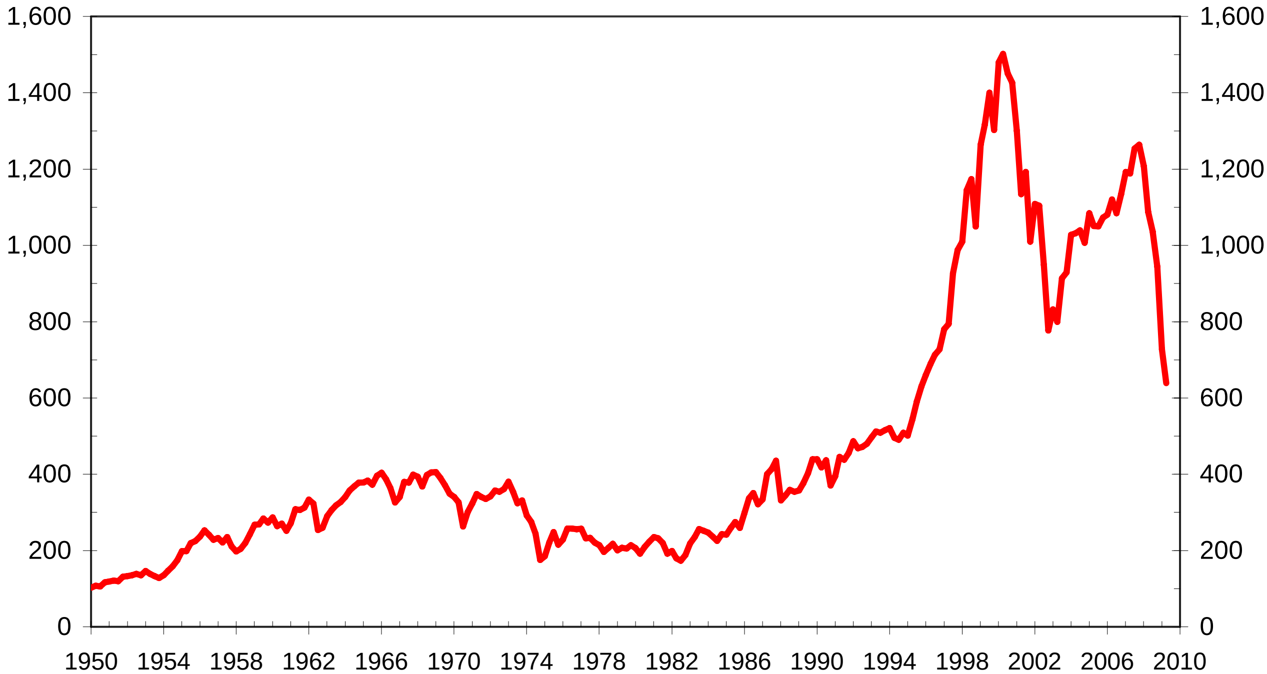
Sources: Federal Housing Finance Agency and U.S. Department of Commerce, Bureau of Economic Analysis.

Note: Federal Housing Finance Agency index of U.S.-average house price deflated using GDP deflator.

Figure 3.

U.S. Stock Market Prices, 1950-2009:II

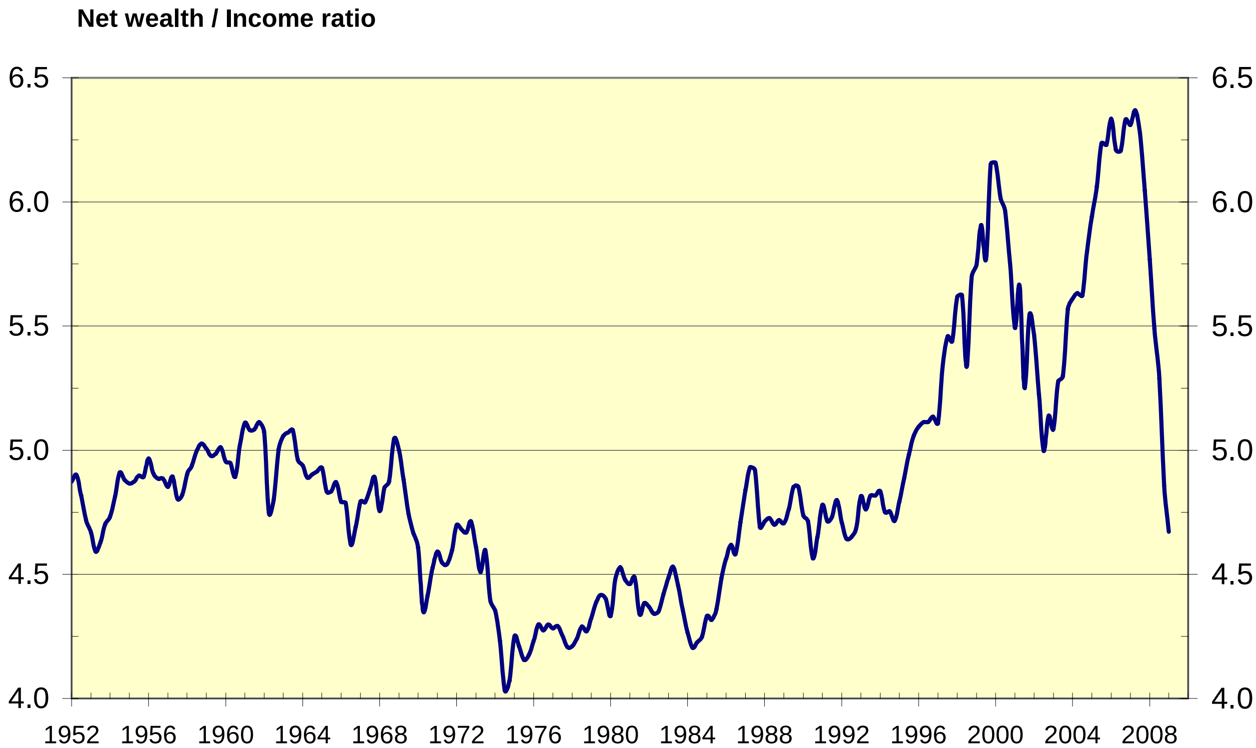
S&P stock index (deflated using 2000 prices)



Source: Standard and Poors composite stock index.

Figure 4.

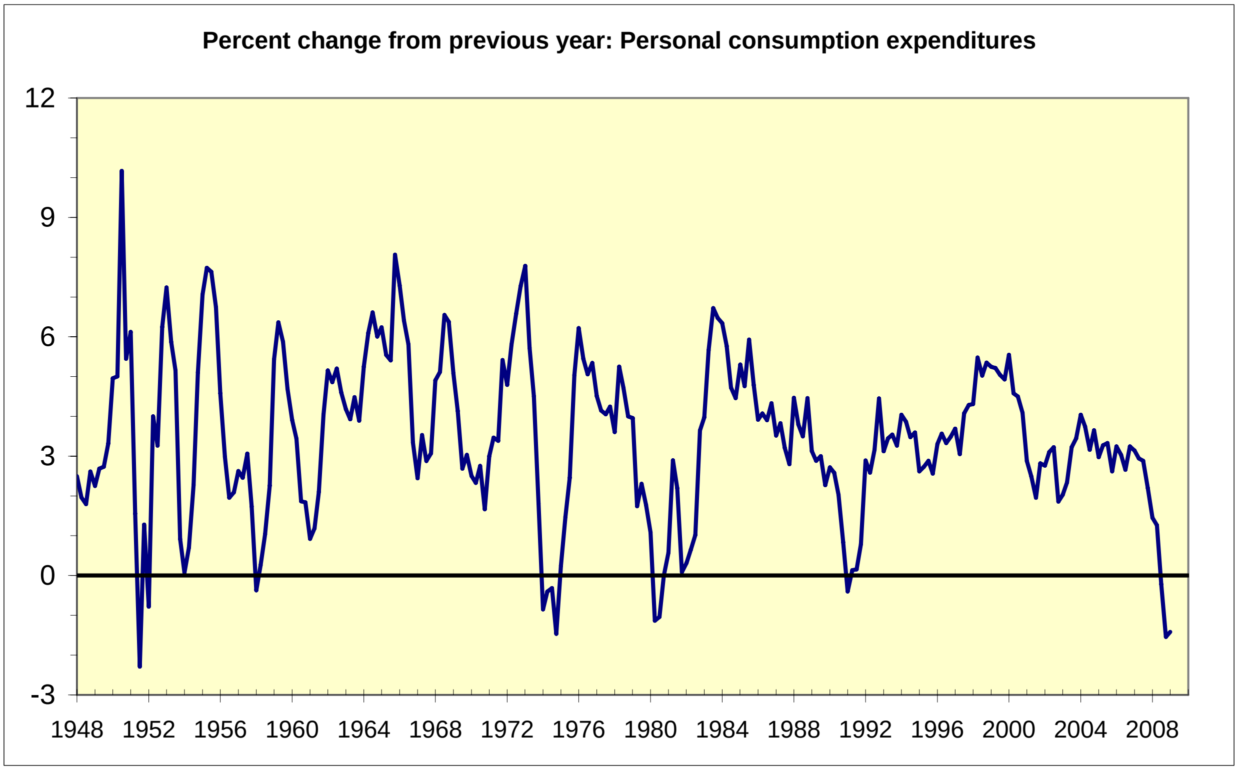
Ratio of Net Household Wealth to Household Disposable Income, 1952-2009:I

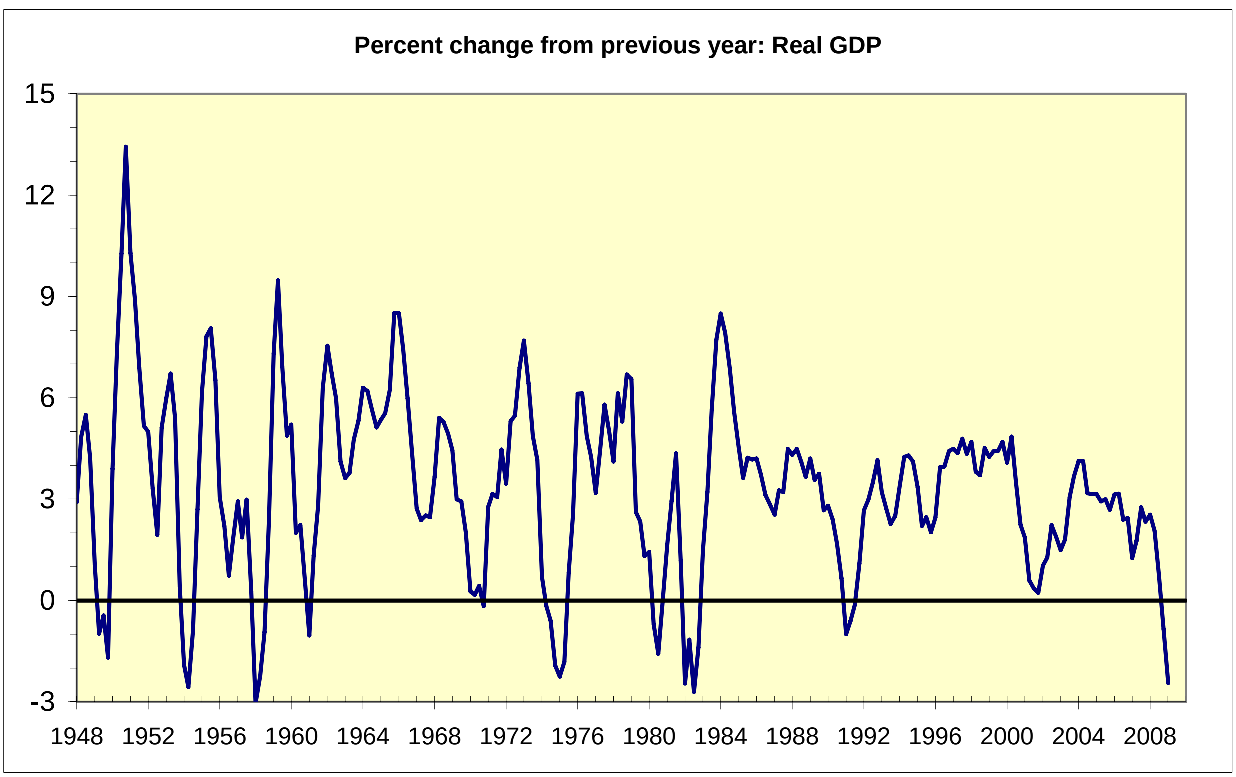


Sources: Board of Governors of the Federal Reserve System, Flow of Funds

Figure 5.

Year-over-year Changes in U.S. Consumption and GDP, 1948-2009:I

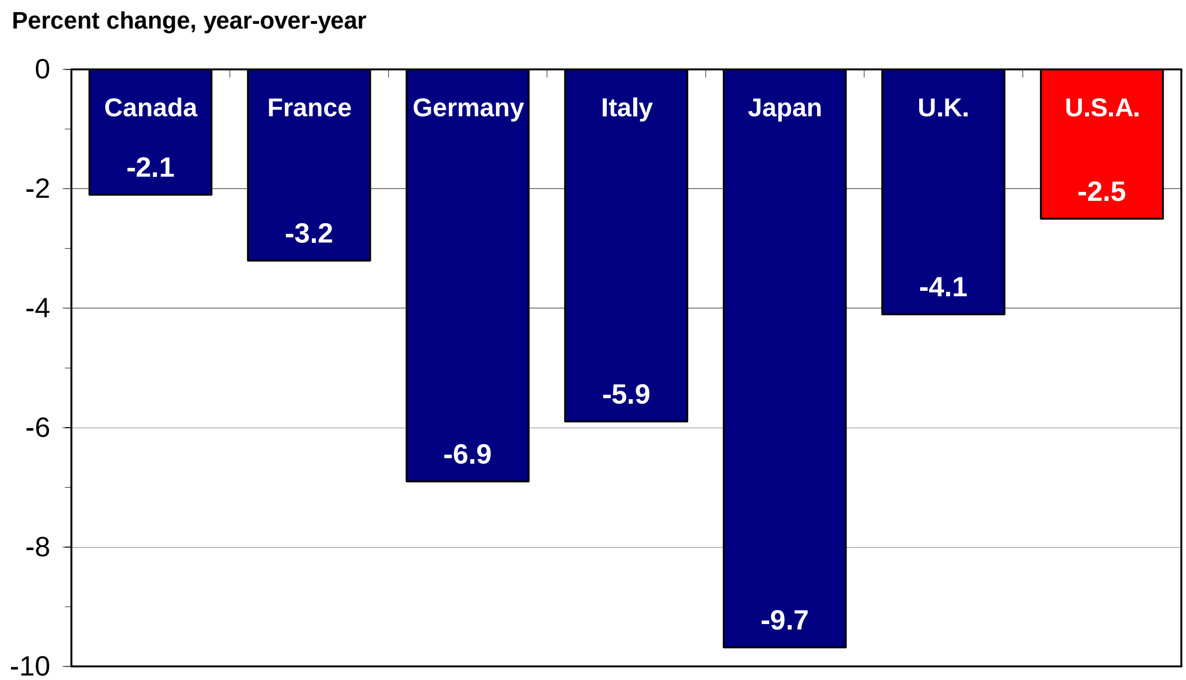




Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Figure 6.

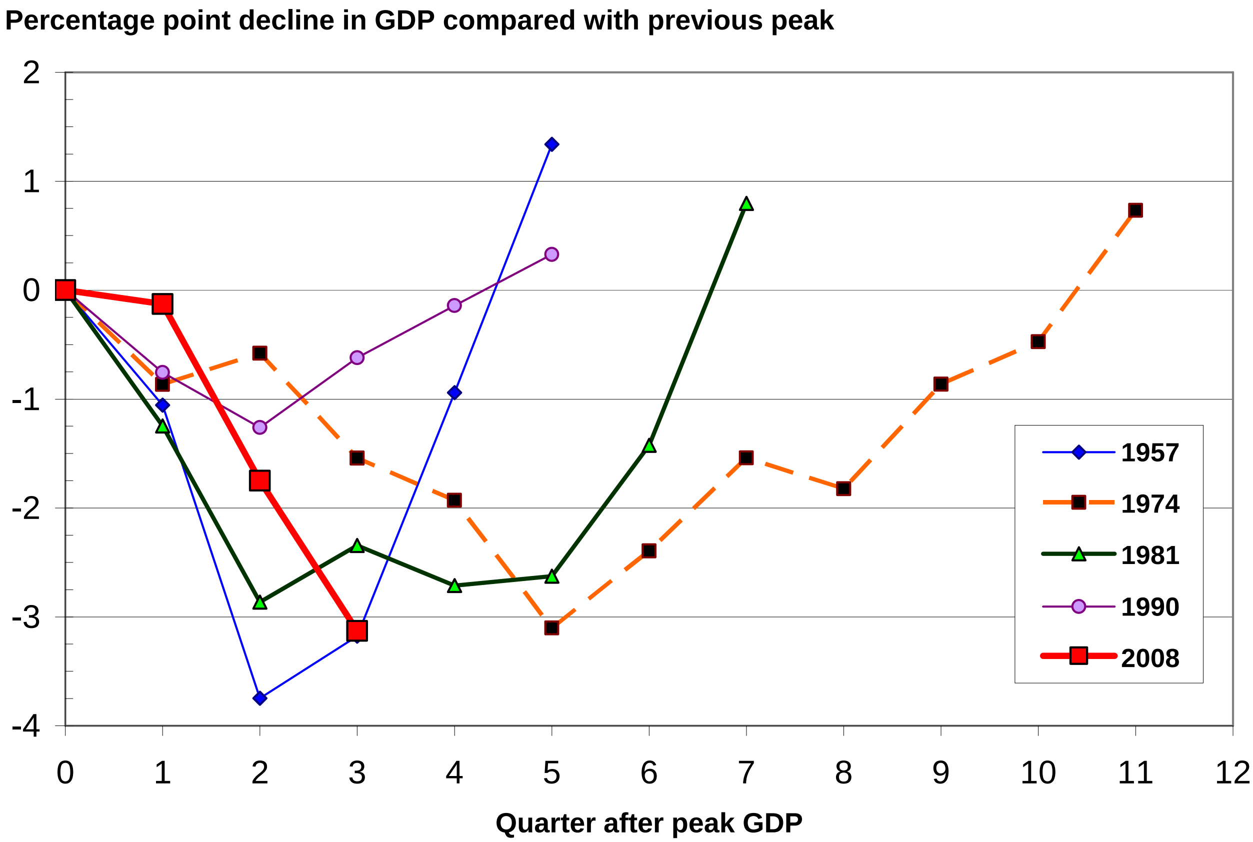
Annual Change in GDP through First Quarter of 2009, G-7 Countries



Sources: Eurostat, Statistics Canada, Economic and Social Research Institute (Cabinet Office, Government of Japan), and U.S. Department of Commerce, Bureau of Economic Analysis.

Figure 7.

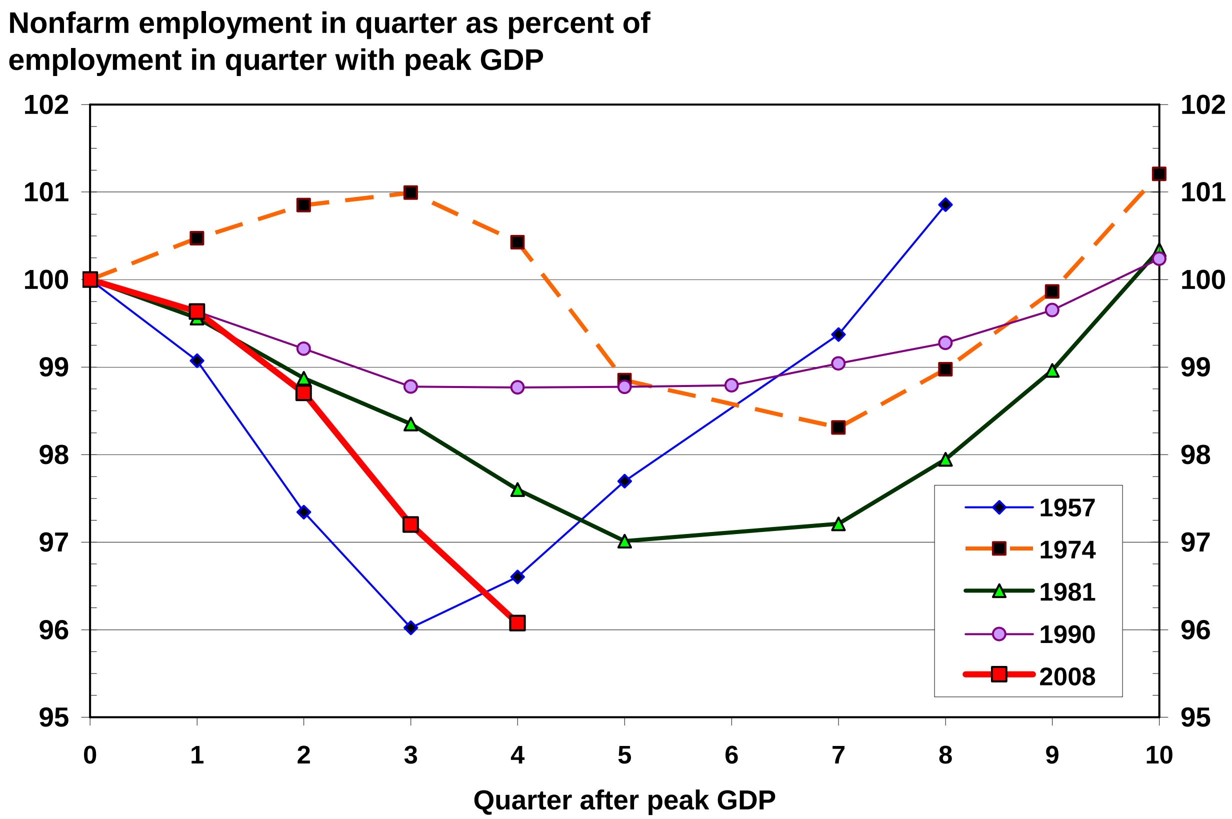
Trend of U.S. GDP During Post-World-War-II Recessions



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Figure 8.

Payroll Employment Trends in Selected Post-War Recessions



Source: U.S. Bureau of Labor Statistics.

Figure 9.

Gap between Potential and Actual U.S. GDP, 1949-2009:I

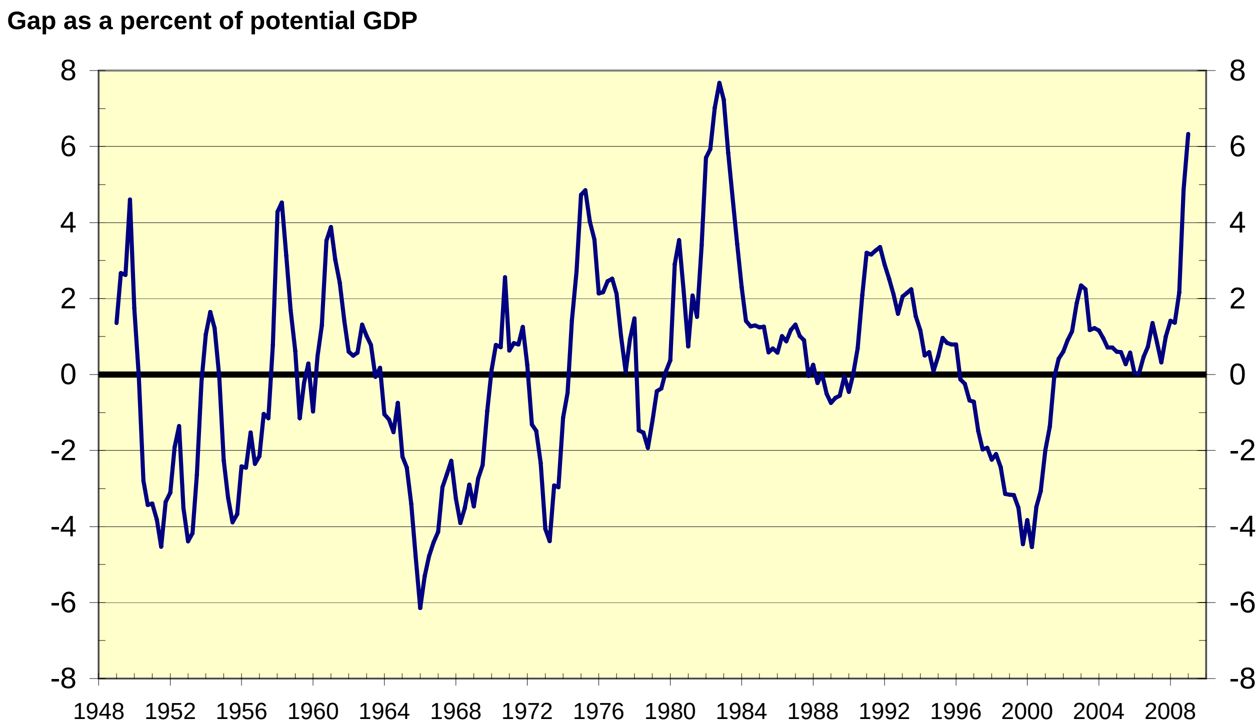
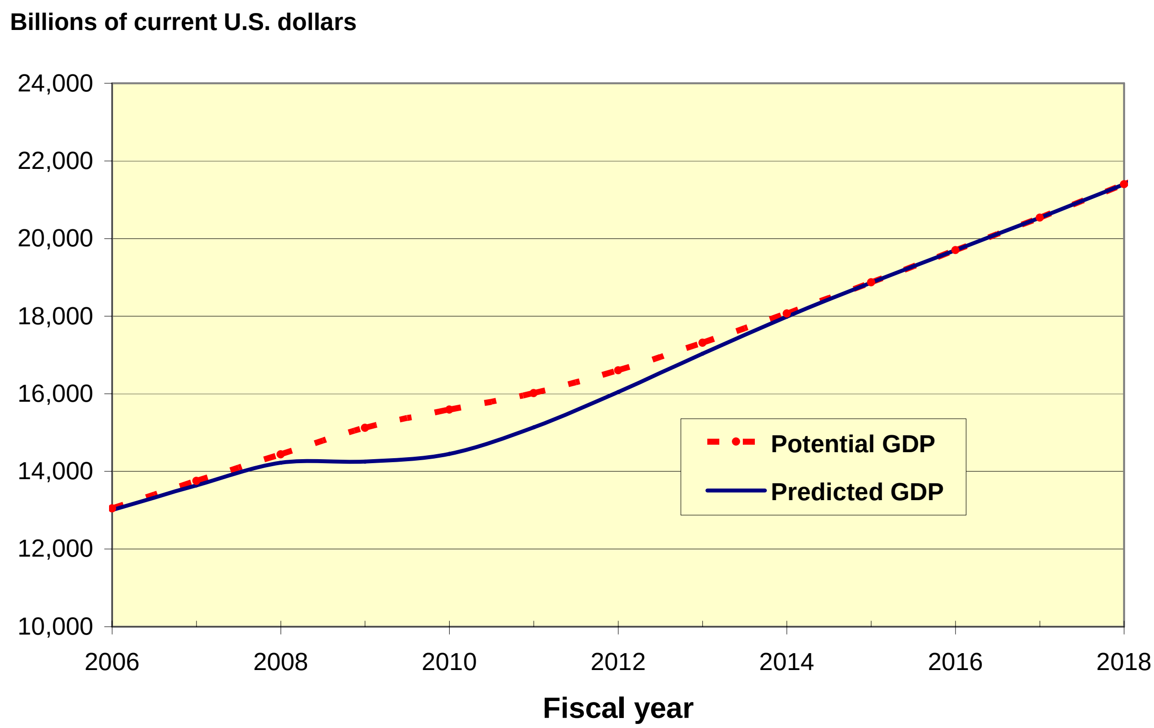


Figure 10.

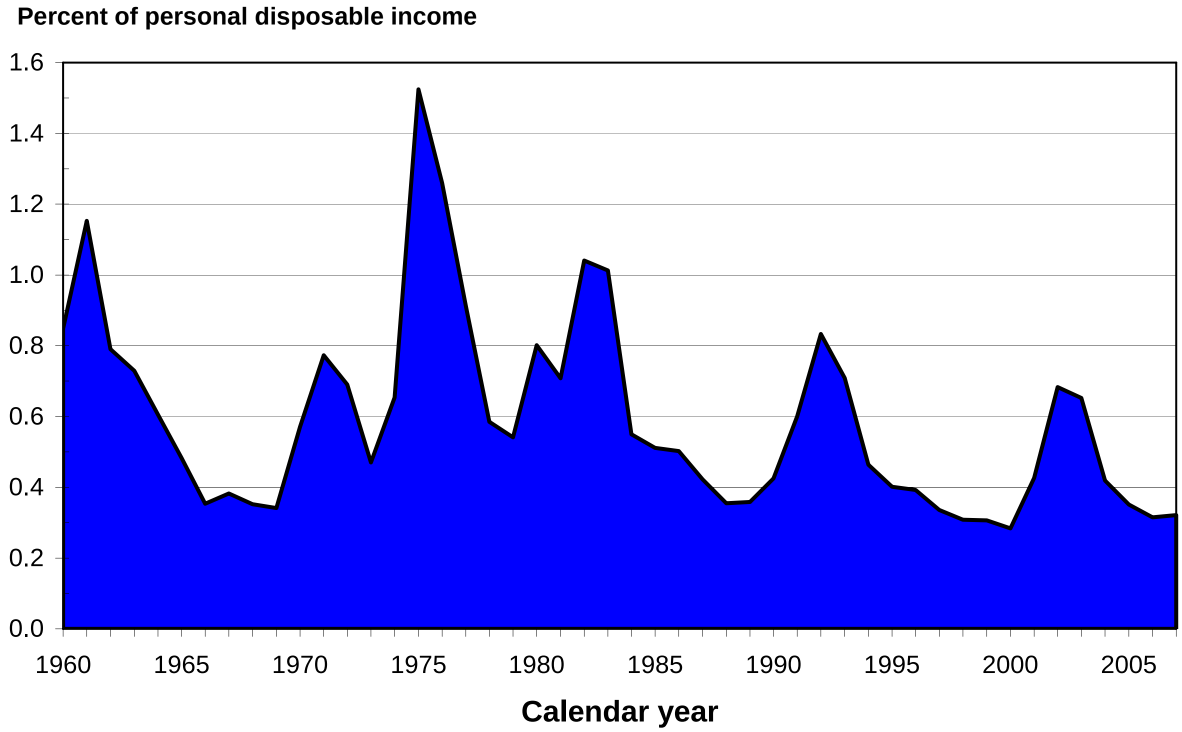
Potential GDP and Predicted GDP under Congressional Budget Office Forecast, 2006-2018



Sources: Congressional Budget Office January 2009 forecast and U.S. Department of Commerce, Bureau of Economic Analysis.

Figure 11.

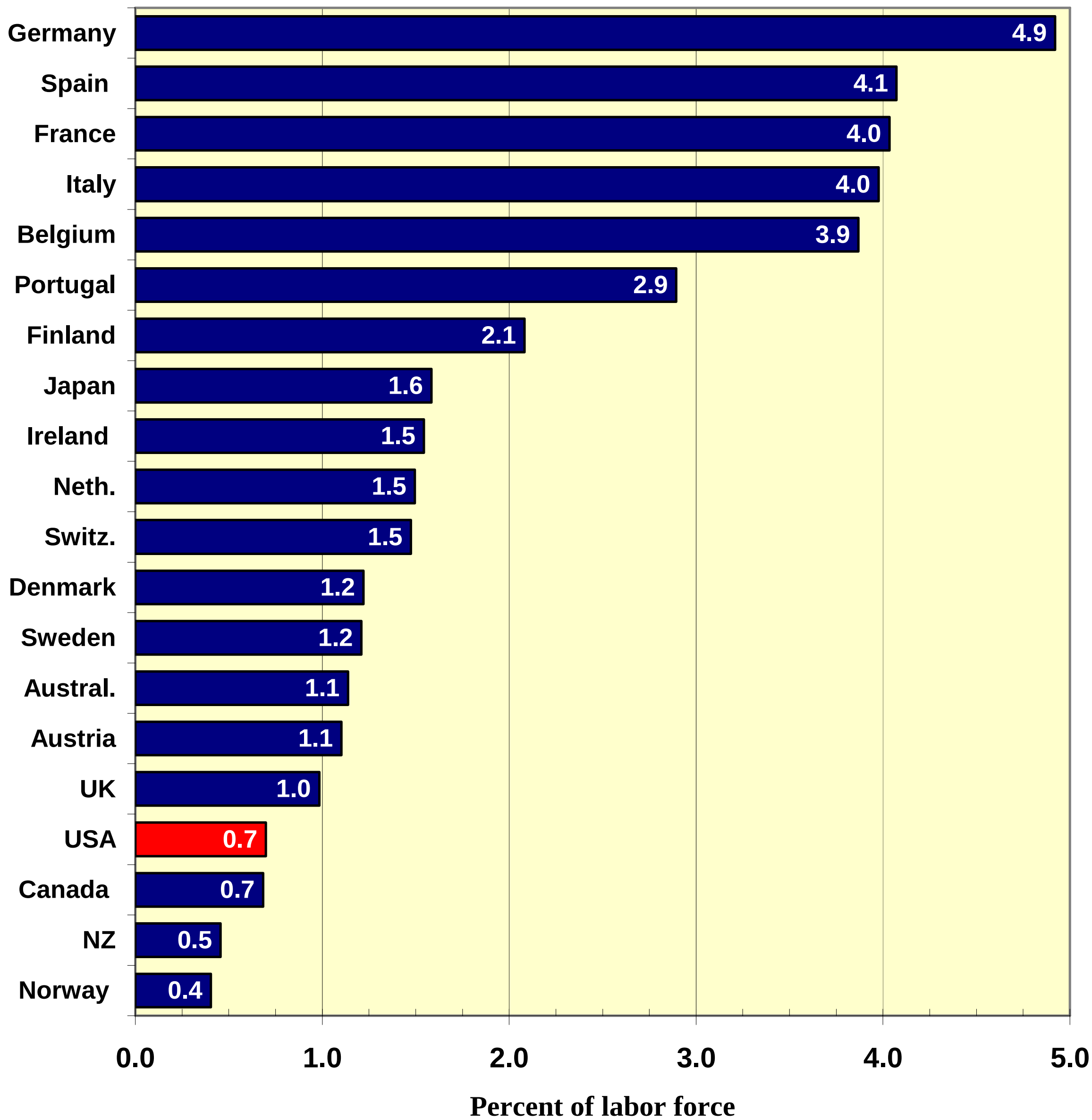
Unemployment Benefits as a Percent of U.S. Personal Disposable Income, 1960-2007



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Figure 12.

Unemployed Who Have Been Jobless for One Year or More as a Percent of the Labor Force, 2004



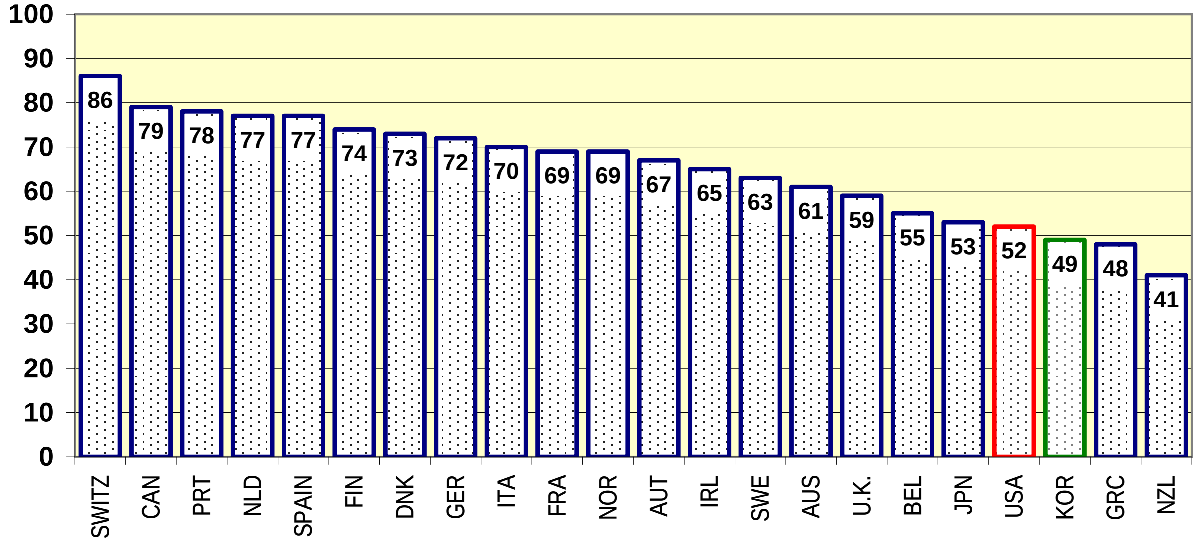
Source: Author's calculations based on *OECD Employment Outlook* (2004), pp. 237 and 258.

Figure 13.

Indicator of Unemployment Benefit Generosity in Twenty-two OECD Countries, 2007

Percent of net earnings initially replaced by after-tax value of unemployment benefits

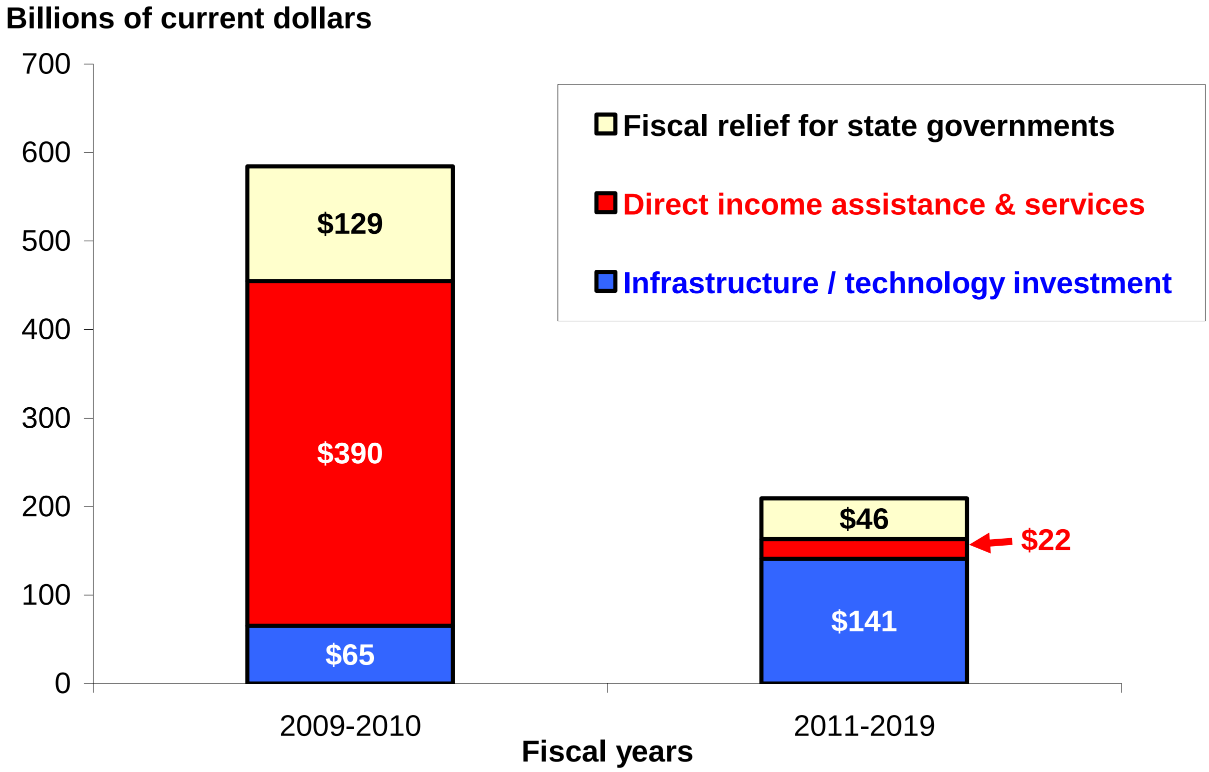
(Married single earner with two children who is paid the average wage)



Source: OECD, *Benefits and Wages: OECD Indicators*, 2008 edition (Paris: OECD).

Figure 14.

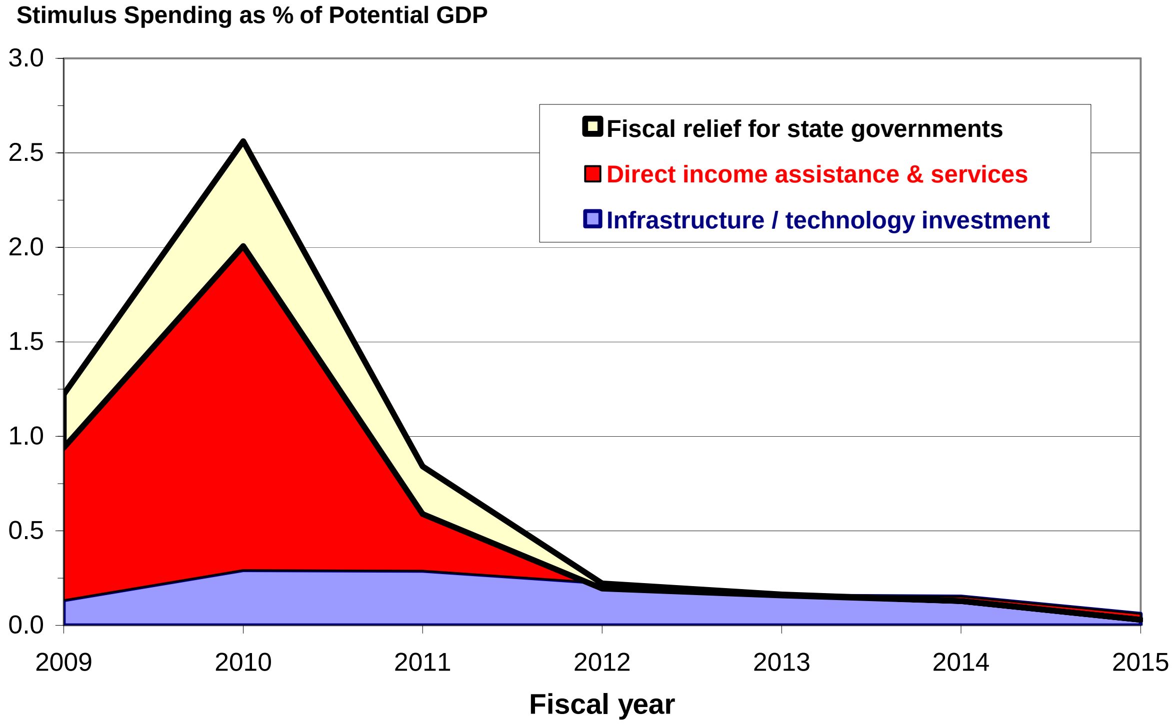
Expected Stimulus Spending under the American Recovery and Reinvestment Act of 2009, 2009-2015



Sources: Congressional Budget Office and Joint Committee on Taxation.

Figure 15.

Expected Stimulus Spending under the American Recovery and Reinvestment Act of 2009, Fiscal Years 2009-2015



Sources: Congressional Budget Office and Joint Committee on Taxation.

Table 1. Fiscal Stimulus Packages in Nine Large Countries, 2008-2010

Percent of GDP

	Calendar years			2008-2010
	2008	2009	2010	Total
Canada	0.0	1.5	1.3	2.7
China	0.4	2.0	2.0	4.4
France	0.0	0.7	0.7	1.3
Germany	0.0	1.5	2.0	3.4
India	0.0	0.5	…	0.5
Italy	0.0	0.2	0.1	0.3
Japan	0.4	1.4	0.4	2.2
United Kingdom	0.2	1.4	-0.1	1.5
United States	1.1	2.0	1.8	4.8
Average 1/	0.5	1.6	1.3	3.4

1/ PPP GDP-weighted average.

Source: International Monetary Fund (February 2009).