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PUTTING AMERICA BACK TO WORK

Policies for job creation and stronger economic growth

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All across the country, Americans are talking about the unemployment crisis and their fears for themselves and their children. For too long this widespread concern has been overlooked by Washington, D.C., policymakers who have instead focused on the budget deficit. But with slow U.S. growth in the first two quarters of 2011, economic stagnation in Europe, and the increased prospects that the economy could shrink again before it regains the ground lost in 2008 and 2009, the nation's economic policy discussion may finally be returning to how to spur growth and job creation. In fact, the Obama administration announced that on September 8 it will outline a plan on for creating jobs, further focusing attention on this issue.

A renewed emphasis on job creation is desperately needed. The unemployment rate has been at roughly 9% or above since the spring of 2009. Among black and Hispanic workers, nearly one in four is unemployed or underemployed in a typical month. Unemployment has doubled since 2007 for each educational group, including college graduates and workers with advanced degrees. Polling shows that more than 40 percent of families have been directly affected by unemployment in the last year, a condition that has prevailed since June 2009 (Mishel and Shierholz 2011).

Economic forecasters tell us that unemployment will remain high for the foreseeable future. The Blue Chip consensus indicates unemployment will be 8.5% in the last quarter of 2012 (Blue Chip Economic Indicators 2011), but Goldman Sachs' forecast suggests it could actually be as high as 9.3%. The latest Congressional Budget Office projections show unemployment averaging 7.9% in 2014 (CBO 2011a), a level higher than the worst month in either of the last two recessions.

TABLE OF CONTENTS

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This paper presents a menu of policies that could generate millions of jobs and put the unemployment rate on a steep downward trajectory. Many observers and policymakers will be putting forward ideas in the near future, so it is important to first present criteria for judging the merits of jobs policies. The four most important criteria are detailed below:

CRITERION ONE
Will the policy make a real difference in job creation in the next 24 months?

The first question that should be asked about a jobs plan is, "Will a sizeable number of jobs be created within two years?" The recessionary labor market has already persisted for three-and-a-half years, and some relief to working Americans is long overdue. Since robust job growth should extend beyond the next 24 months, we should also ask whether a plan will ensure sufficient economic growth to drive steep declines in unemployment beyond 2013.

This criterion is important because some policies already suggested by Congress and the administration will generate jobs too slowly, with little or no impact in the near term. For instance, policies mentioned by the Obama administration, such as patent reform and new trade treaties, will do little to lower the unemployment rate over the next two years. Similarly, when conservatives argue for reduced regulation or immediate deficit reduction, they are arguing for policies that even their proponents should acknowledge will not substantially reduce joblessness in the near term (and, in the case of deficit reduction, will amplify unemployment).

Long-term competitiveness initiatives may have other policy virtues, but fighting today's joblessness is not one of them. Only policies focused on knocking down the near-term unemployment rate should be proffered as an answer to this pressing problem.

CRITERION TWO
Is the policy effective and efficient?

A jobs plan should be an effective use of resources so that each billion dollars in either expenditures or lost revenue generates more jobs than alternative plans. Simply put, some policies offer more bang for the buck. We know from the Congressional Budget Office, academic experts, and private-sector forecasters what are the most effective policy tools for generating jobs (Elmendorf 2010; CBO 2011b; and Zandi 2010, 2011). Less cost-effective job creation plans come at a higher opportunity cost; that is, they create fewer jobs and add more to the budget deficit. (See the **Appendix** for a comparison of the cost-effectiveness of the proposed job creation policies.)

CRITERION THREE
How is the policy funded?

The most effective job creation policies cannot be "paid for" by higher taxes or other spending cuts in the near term.[1] Effective jobs policy injects money into the economy and increases the overall demand for goods and services, thereby raising the need for more workers to produce those goods and services.

But if a job creation policy must be "budget neutral"—that is, it must be accompanied by a tax increase or budget cut—then the benefits of the spending injected in the economy are diluted at best. Simultaneously offsetting stimulus spending is simply not feasible given the magnitude of economic support needed for such spending to be effective. So, an effective jobs plan should either be deficit-financed or paid for in later years only after the economy is much stronger and has much lower unemployment.

CRITERION FOUR
Is the policy at the appropriate scale to produce a substantial number of jobs?

In order to put a significant dent in unemployment and establish a fast trajectory toward low unemployment, the jobs plan must be sufficiently large. As of the second quarter of 2011, the output gap—the shortfall between actual and potential gross domestic product—stood at $1.0 trillion (-6.3%), having narrowed from a peak of $1.2 trillion (-8.2%) in the second quarter of 2010 as a result of the American Reinvestment and Recovery Act (Fieldhouse 2011a). Halving the output gap would require more than $350 billion in additional fiscal support for this year alone; this is in addition to maintaining current budget policy, including the payroll tax holiday, emergency unemployment benefits, discretionary spending levels, and transportation investments.[2] Proponents of jobs plans should set clear goals regarding the extent to which unemployment will be reduced over the next two years.

While the first three criteria can be used to evaluate individual job creation policies in isolation, this final criterion of scale should be applied instead to a package of job creation policies. Given the magnitude of the jobs crisis, there is no one policy from the menu we present below that singlehandedly achieves the scale required—a *combination* of policies is necessary.

The following menu of 11 job creation proposals meets the above criteria and should be considered by any policymaker interested in making a serious dent in the jobs shortfall. These proposals are not intended as a comprehensive plan, and no individual policy would adequately address the unemployment crisis. But these are all cost-effective job creation policies that could generate significant employment gains over the next 24 months, assuming they are deficit-financed. An extension of current programs and some combination of new investments and non-budgetary job creation policies could result in the robust jobs plan we need.

Grouped in three categories, below is a short outline of the policies that are elaborated upon throughout this paper.

First, do no harm: Renew or expand current job-creating programs

1. Temporarily increase disposable income for low- and middle-income consumers by renewing the payroll tax cut or replacing it with a refundable tax rebate that puts even more money in their wallets. This would increase employment by roughly 1 million jobs in 2012 (relative to the scheduled expiration of the payroll tax cut).

2. Renew the Emergency Unemployment Compensation (EUC) program, increasing the purchasing power of unemployed consumers and increasing employment by 528,000 jobs in 2012 (relative to the scheduled expiration of the EUC program).

3. Pass the president's budget request for the Surface Transportation Act, which increases investments in rail, highway, and transit improvements by $213 billion over the next decade. The impact of this policy would be an increase in employment by an average of 117,000 jobs annually (350,000 total) over the next three years, with larger job gains in future years.

Launch new investments and budgetary programs to put millions of Americans to work

4. Restore the increased federal Medicaid matching rate, easing state-level budget cuts and tax increases, thereby creating or saving 444,000 or more jobs in one year.

5. Enact a direct job creation program to put up to 2.2 million people to work over the next two years repairing schools, rebuilding communities, improving national parks, and, through rehiring, serving as police officers, firefighters, and teachers.

6. Invest $200 billion in renewable energy and energy efficiency improvements, which could increase employment by 2.1 million jobs over a period of years.

7. Enact a job creation tax credit for firms that add employees, or increase hours or raise wages of rank-and-file workers, over the next two years. A properly designed program could increase employment by 2.4 million jobs over the next two years.

8. Implement a federally subsidized work-sharing program, which could increase the number of people employed by 1 million over the next year.

Pursue non-budgetary job creation policies

9. Elicit further monetary support from the Federal Reserve, which could resume large-scale asset purchases and announce a higher inflation target, increasing employment by between 2-3 million jobs over the next few years.

10. End currency manipulation by countries that trade with the United States, which could increase employment by up to 2.25 million jobs over the next few years.

11. Encourage widespread mortgage refinancing to reduce mortgage payments and keep people in their homes,

which could increase employment by 62,000 to 248,000 jobs annually by putting more money in consumers' wallets.

First, do no harm: Renew or expand current job-creating programs

Under current law, the economy will lose a substantial pillar of fiscal support when the payroll tax holiday and emergency unemployment benefits expire at the end of 2011. Allowing the payroll tax cut and Emergency Unemployment Compensation to lapse would reduce employment by 1.5 million jobs in 2012 (Fieldhouse and Pollack 2011). Additionally, the Surface Transportation Act is up for reauthorization, and Congress is unwisely considering cutting transportation investments, which would further reduce employment. Maintaining funding levels for transportation infrastructure should be a minimum goal, while an increase would boost national employment levels. Maintaining all three of these current budgetary policies would satisfy the "do no harm" principle and put in place the first building block of a meaningful jobs agenda.

1. Temporarily increase disposable income for low- and middle-income consumers

Renewing the payroll tax cut or, even better, replacing it with a refundable tax rebate would put more money in the wallets of working families and boost consumption. The payroll tax holiday enacted in December 2010 reduced Social Security taxes on employees by two percentage points, increasing take-home pay by $112 billion, increasing sales by businesses, and creating jobs producing, transporting, and marketing those goods and services. This tax holiday, which expires at the end of 2011, could at a minimum be renewed.

An alternative and more effective policy would be to replace the tax holiday with a better-targeted lump-sum refundable tax rebate that delivers more to low-income families and the middle class, and less to those with higher incomes. Replacing the payroll tax cut with a targeted tax rebate would support more than 1 million jobs in 2012, roughly 110,000 more than would be saved by extending the payroll tax holiday (Fieldhouse 2011b).

2. Renew or expand the Emergency Unemployment Compensation program

Unemployment compensation creates jobs by increasing consumer demand. It gives jobless workers enough money to survive until they find a new job, and with jobs so scarce—not even one vacant job for every four unemployed Americans—millions of workers will need a year or more to find work.

The federal Emergency Unemployment Compensation program has been providing $60 billion in extra annual consumer spending, meaning more business and about 700,000 more jobs on Main Street. Renewing the EUC when it expires at the end of 2011 would create roughly 528,000 jobs in 2012 (Fieldhouse and Pollack 2011). The unemployment insurance safety net could also be expanded for greater economic support by reintroducing COBRA health insurance subsidies and the $25 additional weekly benefit (Federal Additional Compensation), two Recovery Act programs that lapsed in 2010.

3. Pass the president's budget request for the Surface Transportation Act

The Surface Transportation Act sends Highway Trust Fund money to the states to build new highways, bridges, and rail lines and to repair the old ones. Reauthorizing the program would create 14,000 jobs for every billion dollars invested, increase productivity, conserve fuel, avoid accidents, and save lives (Pollack 2010). The president's 2012 budget proposed a six-year reauthorization at $556 billion, which would increase transportation investment by $213 billion over the next decade (CBO 2011c). This increase would add 350,000 job-years over 2012–14, and the employment impact would continue to rise over time with increased outlays.[3] The president's budget, which would contribute $30 billion to an infrastructure bank and make a special $50 billion upfront investment, is the minimum investment that should be considered.

Launch new investments and budgetary programs to put millions of Americans to work

The following policies have the ability to accelerate growth and put millions of Americans back to work, more quickly returning the economy to potential output and lowering unemployment.

Some policies, such as support to state and local governments, would have an immediate impact on economic activity and employment. Other policies, such as discouraging foreign currency manipulation, would deliver employment gains more gradually (with a significant employment impact as soon as 18 months). All of these policies, however, will noticeably boost employment within the next 24 months. With an employment deficit of 11.1 million jobs (Shierholz 2011) and unemployment projected to remain above 8% into 2014 (CBO 2011a), any of these proposals could be part of a well-rounded jobs strategy.

4. Restore the increased federal Medicaid matching rates from the Recovery Act

State and local governments afflicted by the Great Recession and falling tax revenues are laying off tens of thousands of employees every month. Altogether, more than 600,000 jobs have been lost in state and local government during the past two-and-a-half years. The state budget crisis is expected to intensify this budget year; without additional federal support, state layoffs will likely become a greater drag on monthly employment gains.[4]

The fastest way to support state governments would be to restore the increased federal Medicaid matching rates from the Recovery Act, which provided $88 billion in grants through the Medicaid reimbursement formula. But additional federal assistance was phased-out in July. (A moratorium on states' interest payments on Federal Unemployment Account (FUA) borrowing or outright forgiveness of FUA debt for states with insolvent unemployment trust funds would also provide immediate fiscal relief to those states hardest hit by the jobs crisis.)

An additional $42 billion in Medicaid grants (matching the Recovery Act increase for FY2010) could close over 40% of states' budget shortfalls and provide immediate economic support, particularly for states with high unemployment (which saw greater increase in federal matching rates). This assistance could increase employment by an estimated 444,000 jobs in one year.[5] Because the Medicaid reimbursement process provides a quick infusion of cash and targets states with high unemployment, there is reason to believe the impact would be considerably higher—some estimates suggest $42 billion would increase employment by 1.6 million jobs (Chodorow-Reich et al. 2011).[6]

While many government, health, and education jobs would be created or saved, the evidence shows that the majority of employment gains would come from the private sector.

5. Enact a direct public employment program

A large-scale, temporary employment program that hires workers to address such unmet public needs as provision of child care, improvements to public lands and parks, repair and maintenance of public school buildings, delivery of health services and before and after school services, and the other needs of communities across the nation could employ millions of currently jobless Americans. The New Deal did this successfully on a large scale, using both federal agencies and state and local entities as the employers. Several good public service employment plans have been proposed, including the following:

- Rep. Jan Schakowsky's *Emergency Jobs to Restore the American Dream Act* would increase employment by 2.2 million jobs by repairing public school buildings, establishing a national corps of child care workers, putting hundreds of thousands of teachers back in the classroom, hiring police and firefighters, adding staff in the National Parks, and creating a national service corps to put hundreds of thousands of young people to work improving public lands, building trails, and doing community service work (Office of Congresswoman Jan Schakowsky 2011). The act would provide $227 billion over two years, with half of its impact coming before the end of 2012.
- Rep. Keith Ellison's *Put America to Work Act* would provide states, cities, and Native American tribes with

an additional $350 billion in grants over the next two fiscal years, targeting assistance to hard-hit states and communities. These grants would be used to hire unemployed workers to rehabilitate public buildings, expand food banks and Head Start programs, provide child care, improve recreational facilities and provide recreational programs, remediate or demolish abandoned or vacant buildings, and address other locally determined needs, creating 2.1 million jobs in 2012 and 1.5 million jobs in 2013 (Fieldhouse 2011c).[7]

- *Fix America's Schools Today!* is a more narrowly targeted proposal to put 600,000 people to work (mostly in construction, a sector with 1.5 million unemployed) to repair our 100,000 public schools, half of which are more than 40 years old (Filardo, Bernstein, and Eisenbrey 2011). The backlog of deferred maintenance and repairs to our schools is almost $300 billion, and the Great Recession's damage to local budgets means the problems are likely to worsen. A $50 billion investment would be a good start on bringing all schools up to fire code, replacing leaky roofs, improving HVAC systems, repairing structural damage, and making energy-conserving improvements. The existing federal elementary and secondary education K-12 grant program could be used to distribute funds to school districts.

6. Invest $200 billion in renewable energy and energy efficiency improvements

Large-scale investments in renewable energy and energy efficiency improvements would help make the transition to a cleaner economy, thereby reducing the dangers of global climate change, lowering energy costs for U.S. businesses, and creating millions of manufacturing, transportation, and construction jobs. Increased domestic energy production from renewable sources would also decrease the trade deficit and dependence on foreign oil. The Recovery Act included unprecedented investments in renewable energy and energy efficiency improvements, but much more can and should be done, including:

- Establishing both a National Renewable Electricity Standard and a National Energy Efficiency Resource Standard to encourage efficient generation, transmission, and use of electricity and natural gas.
- Renewing the Home Star rebate program, reauthorizing the Recovery Act's section 1603 production tax credit, and adopting the Obama administration's Better Buildings Initiative.

A $200 billion investment in these initiatives would create approximately 2.1 million jobs each year (Walsh, Bivens, and Pollack 2011). These program expenditures would take time to be implemented effectively, but each $10 billion spent in the next year on such projects would generate more than 100,000 jobs during that time.

7. Enact a job creation tax credit

A well-designed job creation credit could encourage both immediate hiring and sustained employment, inducing firms to hire millions of additional workers over the next two years. By calculating the credit based on Social Security payroll, the credit would encourage firms to add employees, increase hours, and raise wages for rank-and-file workers.[8] Bartik and Bishop (2009) provided an estimate of how a well-designed credit that paid for 15% of a new worker's wages in the first year of implementation and 10% in the second year (even assuming quite low elasticities of labor demand) could generate 2.4 million jobs over the two-year period, at a cost of $180 billion.

8. Implement a federally subsidized work-sharing program

Spreading work and wages with a work-sharing program could provide income support to households, keep workers employed and attached to the labor market, and also benefit businesses by helping them retain more of their current workforce, which would keep training costs down as they ramp up production when the economy begins growing again. European countries, particularly Germany, have had success with work sharing. German unemployment has actually *fallen* since the beginning of the recession, even though the country's gross domestic product fell significantly.

A work-sharing program would subsidize wages at firms that manage to substitute shorter hours for layoffs. Baker (2011) has provided an estimate of how a well-designed plan for work-sharing could increase annual employment by 1 million for the next two years, even if participation is quite low (at 10%). Baker estimates that shifting from unemployment insurance to a more generous system of short-term work would require a subsidy to employers of roughly $4,500 per job saved (30% above average unemployment benefits).[9]

Pursue non-budgetary job creation policies

While debt-financed fiscal support is the most effective tool for fighting joblessness in the near term, other policy levers could also ease the distress in the labor market (Bivens 2011).

9. Elicit further monetary support from the Federal Reserve

The Federal Reserve has committed to maintaining exceptionally low short-term interest rates through mid-2013, but much more can be done to lower long-term interest rates and keep disinflationary expectations at bay, thereby allowing households to work off their nominal debt burdens more quickly. By purchasing long-term securities (thereby pushing down interest rates at the long-end of the term-structure), the Fed could boost asset prices and provide welcome downward pressure on the international price of the dollar, both of which would support growth in manufacturing. Lower real interest rates would also induce more business investment and personal consumption.

Chung et al. (2011) estimate that the last round of quantitative easing (QE2—which involved the purchase of $600 billion of medium- and long-dated Treasuries) supported enough economic activity to create or save 700,000 jobs. Gagnon (2011) has argued that a third round of quantitative easing of at least $1 trillion should be announced, and that $2 trillion in asset purchases would be more appropriate. He argues that a $2 trillion increase in monetary support would generate at least $500 billion in additional GDP, leading to the creation of well over 3 million additional jobs.

Krugman (2010) has made the case that targeting a higher inflation rate in order to lower real interest rates and ease household and business debt burdens would also spur recovery. Federal Reserve Chairman Ben Bernanke had at one time made a similar proposal. When the Japanese economy was stuck in a liquidity trap in the 1990s, Bernanke proposed that the Bank of Japan explicitly target an inflation rate in the range of 3-4% to increase nominal spending (Bernanke 1999).

10. End currency manipulation by countries that trade with the United States

Currency realignment with China and other nations could create more than two million jobs (mostly in the manufacturing sector), boost our exports, and slow the rise in imports by making U.S. products more globally competitive.

For example, the Japanese yen's increased value relative to the dollar has led Nissan to announce that it is shifting production of vehicles for the U.S. market from Japan to the United States. More dramatic production shifts by other multinational corporations would occur if the Chinese yuan were allowed to rise in value relative to the U.S. dollar by 25–30%, and the gains in employment would be seen in as few as 18 to 24 months (Scott 2011).

A 28.5% revaluation of the yuan coupled with currency revaluations by Hong Kong, Singapore, Taiwan, and Malaysia could generate up to 2.25 million jobs and shave as much as $71 billion from the annual U.S. budget deficit as a result of increased economic activity. The Currency Reform for Fair Trade Act of 2011 (H.R. 639 / S. 328), introduced by Reps. Tim Ryan and Tim Murphy and Sens. Sherrod Brown and Olympia Snowe, would impose countervailing duties to deter illegal currency undervaluation, thus putting pressure on countries to realign their currencies.

11. Encourage widespread mortgage refinancing

Excessive mortgage payments are a drain on the economy. Millions of homeowners would benefit from refinancing their mortgage loans at lower interest rates but have been unable to do so because of barriers, including underwater mortgages, upfront fees, and weakened credit scores.

Fannie Mae, Freddie Mac, the Department of Veterans Affairs, and the FHA could require loan servicers to send applications for easy refinancing to eligible borrowers. The refinancing applications would require minimal paperwork, and the loan servicers would earn a modest fee for every refinanced mortgage, which would be rolled into the principal of the mortgage and amortized over its lifetime. The federal agencies would issue new mortgage-backed securities covering the refinanced mortgages, using the proceeds to repay the old mortgage backed securities.

A year ago, Morgan Stanley and JP Morgan Chase estimated that such a mass refinancing program could save about $50 billion a year in mortgage payments (Hubbard and Mayer 2010). More recently, Goldman Sachs estimated that a large scale mortgage refinancing program could reduce annual interest payments on Fannie- and Freddie -backed mortgages by up to $40 billion annually (Philips 2011), although some of this refinancing would occur without a deliberate policy push. Refinancing could be expected to save households as much as $10 billion this year and even a program limited to fixed-rate mortgages could reduce interest payments by $20 billion annually.

Based on this range, a large-scale mortgage refinancing program would increase employment by between 62,000 and 248,000 jobs annually.[10] Goldman Sachs notes that this program could be complemented by a third round of quantitative easing; reducing 30-year fixed mortgage rates by an additional quarter percentage point would increase interest savings by $10 billion, leading to an employment increase of 62,000 jobs annually.

An effective jobs program emphasizes the need to remove the statutory debt ceiling

Deficit-financed stimulus is presently the most effective way to boost investment and consumption, and the scale of needed economic support rules out offsetting its near-term budgetary impact. Job creation legislation could include a supplemental increase in the statutory debt limit or exempt its debt issuance from the statutory debt limit. Without appropriate changes to the debt ceiling deal or the statutory debt limit, any new job legislation will move up the date on which the debt ceiling is reached, leaving the economy vulnerable again to agonizing, protracted negotiations and the risk of default. A better option would be to simply repeal the statutory debt limit.

Appendix: Measuring the effectiveness of proposed job creation policies

The effectiveness of a job creation program can be measured by how much additional economic activity would be generated. A rise in economic activity will result in increased employment, and the number of jobs created is directly related to how much extra economic activity is produced relative to the current budget or economic policy. As a general matter, the amount of near-term economic activity generated per dollar, or "bang-per-buck," is determined by the rate at which money is circulated through the economy. Economic security programs such as food stamps and unemployment insurance are believed to have a high bang-per-buck because recipients have a high marginal propensity to consume, meaning they will rapidly spend this income support on groceries and other necessities, pumping more demand into the economy. It is widely agreed that permanent tax cuts, on the other hand, generate relatively little economic activity because some or most of a tax cut is saved (CBO 2010; Zandi 2011). The policies outlined in this paper are all cost-effective programs demonstrating a high bang-per-buck. The fiscal multipliers used in evaluating the potential employment impact were estimated by Zandi (2010, 2011), and are consistent with those published by CBO (Elmendorf 2010; CBO 2011b).[11]

The payroll tax cut for workers demonstrates a fiscal multiplier of 1.09 (Zandi 2010). Replacing the payroll tax cut with a refundable, targeted tax rebate, as we propose, would increase the multiplier for this policy to 1.22, the multiplier for refundable lump-sum tax rebates (Zandi 2011). Extending the Emergency Unemployment Compensation program demonstrates a multiplier of 1.55. Increased infrastructure spending demonstrates a multiplier of 1.44. Raising the Medicaid matching rate is assumed to demonstrate the same multiplier as the general aid-to-state-governments multiplier—1.37. Direct employment grants to state and local governments, as proposed by the

Put America to Work Act, are also assumed to demonstrate the general aid-to-state-governments multiplier of 1.37.

It should be noted that the actual budgetary cost of a job creation program *decreases* with its cost-effectiveness. Every dollar reduction in the GDP gap has historically been associated with a $0.37 reduction in the federal budget deficit (Bivens and Edwards 2010). This means that a dollar in infrastructure spending, which would decrease the GDP gap by $1.44, would be expected to raise $0.53 in revenue. Based on this expected offset, the final budgetary cost of a dollar in infrastructure investment is closer to $0.47. The degree to which stimulus is partially self-financing increases with the amount of economic activity generated by a job creation program, but as a general matter, the net budgetary impact would be much lower than the direct cost for any of these recommended policies.

Not all of the policies' potential employment impacts were measured using fiscal multipliers. The employment impact of the Emergency Jobs to Restore the American Dream Act was independently estimated by Rep. Schakowsky's staff. The employment impact of the Fix America's Schools Today program was based on prior research and average salaries for maintenance workers (Filardo 2008). The employment impact of investments in renewable energy and efficiency was taken from prior research on the impact of similar investments in the Recovery Act (Walsh, Bivens, and Pollack 2011). The employment impact for work sharing is based on research by Baker (2011), but Zandi (2011) calculates that temporary federal financing of work-share programs would demonstrate a high multiplier of 1.64. The employment impact of the job creation tax credit was taken from Bartik and Bishop (2009) and is based on the economic literature for labor demand elasticities.

The employment impact stemming from reducing mortgage payments by refinancing mortgage loans at lower rates is estimated by assuming that these mortgage savings generate economic activity akin to nonrefundable lump-sum tax rebates that have been scored by Zandi (2010). Such rebates are estimated to have a multiplier of 1.01. While this would be on the low end of fiscal policies being recommended in this list, we feel fully comfortable advocating for a refinancing program because the jobs effects are essentially a bonus to relieving underwater mortgage-holders, a worthy policy goal in and of itself. The employment impact of additional monetary support from the Federal Reserve is based on estimates from Gagnon (2011) and Chung et al. (2011) regarding the past and projected potential impact of asset purchases. (No assumptions are made about the impact of inflation targeting.) The employment impact of ending foreign currency manipulation is based on the potential improvement in the U.S. current account deficit and the impact on GDP associated with this policy, with all estimates detailed by Scott (2011).

Endnotes

1. There are some exceptions to the rule that near-term budgetary offsets noticeably diminish the effectiveness of fiscal stimulus, but they are so politically unlikely it is hardly worth mentioning them. Nevertheless, tax increases that have such small multiplier effects that they would offset very little of the stimulative effects of the policies discussed here are possible to imagine; phasing in a new higher tax bracket for millionaires or taxing financial transactions are two such examples. See Bivens (2011) for a discussion of balanced-budget multipliers.

2. Increasing economic activity by an annualized $504 billion in the second quarter of 2011 (half of the output gap) would require $360 billion in direct government spending, assuming a fiscal multiplier for general government purchases of 1.4 (Zandi 2011). More fiscal support would be needed to generate this level of activity if the package contained tax cuts, which demonstrate a lower bang-per-buck.

3. Job-years refer to a job held for a single year, meaning that five jobs created in a single year is the equivalent to one job created and sustained over five years. All estimates of employment gains assume that a 1% increase in gross domestic product corresponds with 1.2 million full-time nonfarm payroll job gains. This is consistent with CBO estimates of the impact of the 2009 Recovery Act and private sector forecasts.

4. State governments are expected to face a collective budget shortfall of $103 billion for the fiscal year that started in July, and with only $6 billion in federal assistance remaining, the effective shortfall will be 37% greater than last year's shortfall (McNichol, Oliff, and Johnson 2011).

5. This estimate assumes that general aid to states demonstrates a fiscal multiplier of 1.37 (Zandi 2011).

6. Chodorow-Reich, Feiveson, Liscow, and Gui Woolston estimate that an additional $100,000 in federal Medicaid outlays results in an additional 3.8 job-years, of which 3.2 job-years are outside of government, health, and education employment (Chodorow-Reich et al. 2011).

7. Both the budgetary and employment impact are measured in fiscal years.

8. Social Security payroll taxes are only paid on the first $106,800 of earnings, so pay increases for workers earning more than this amount would not be rewarded by the credit. This policy would not subsidize unearned income compensation (i.e., stock options) or cash bonuses for executives.

9. Mark Zandi estimates that temporary federal financing of work-share programs demonstrates a bang-per-buck of 1.64, higher than unemployment benefits (1.55) and second only to a temporary increase in food stamps (1.71). (Zandi 2011).

10. These estimates assume that reduced mortgage interest payments behave as nonrefundable lump-sum tax rebates with a fiscal multiplier of 1.01 (Zandi 2011). The net stimulative impact of $10 billion to $40 billion in reduced interest payments is assumed to be only $8 billion to $32 billion because roughly one-fifth of agency backed securities are held by households through mutual funds and real estate investment trusts, resulting in an offsetting wealth effect (Philips 2011).

11. The Zandi multipliers, however, are more specific than the CBO multipliers, which are presented as a range between a low- and high-estimate.

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