

Market Analysis, Research & Education

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Stimulus Scorecard: Evaluating the Plan

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Does the composition and the size of the U.S. government's new economic stimulus legislation provide the right framework for success?

Measuring the plan's effectiveness

To provide a shot in the arm to an ailing economy, a stimulus package must possess two primary characteristics. First, it must enter the economy quickly. Second, it should have a large multiplier effect—the economic impact for each dollar spent that is magnified as the money moves through the economy. Additionally, most economists feel the components of a stimulus program should be temporary in nature so that they can be easily unwound once the economy recovers.

One difficulty is that there are a limited number of government spending and tax-cut categories that meet all of these criteria. As a result, providing hundreds of billions of dollars of stimulus in a fast and effective

fashion is highly daunting. This is one reason why economists generally agree that government stimulus can make a difference during an economic downturn, but they tend to have major disagreements about the best manner in which to provide that stimulus. Similarly, the political debate has tended to center on ideological generalizations favoring either tax cuts or government spending, but the fact of the matter is there are many different types of each approach that offer a variety of expected results. There is simply no consensus about a silver bullet or single solution that provides iron-clad success in any given situation.

MARE analyzed the components of the stimulus legislation according to the following criteria. First, we evaluated how quickly the stimulus might enter the economy. We defined a program as "fast" if it will have at least some of its impact in 2009, with the vast majority of the spending occurring within the next two years. Second, we analyzed how much impact the spending will have on economic growth. Wherever possible, we assigned a multiplier to a program using estimates from Moody's Economy.com, where Chief Economist Mark Zandi's work was widely utilized by Congress as an input for the new legislation. A multiplier greater than one means the expected economic benefit of the spending is greater than the actual dollar amount spent, and implies a positive economic "bang for the buck." Finally, we assessed the degree to which certain programs may have the potential to boost long-term economic growth. This is the most subjective portion of the analysis, and probably the least important from a stimulus perspective, but it aims to provide some idea of how items such as research—if executed effectively—may lift an economy's productivity rate over time.

Evaluating the programs

Using the above criteria, we estimate that nearly half of the expenditures in the legislation fund highly stimulative programs that are both rela-

KEY TAKEAWAYS

- The \$790 billion stimulus package is not perfect nor a panacea, but it generally has the composition to make a positive difference for the ailing economy.
- Though some provisions do not meet the standard definition of economic stimulus, many of the programs should enter the economy relatively quickly and provide a solid "multiplier effect" that boosts the knock-on impact of government spending.
- The size of the package represents a middle ground between those who propose doing nothing (a risky viewpoint given the gravity of the economic crisis) and those who support spending much more (which may heighten the risk of the government experiencing fiscal problems).

tively speedy, in addition to having expected multipliers greater than one (see Table A in Exhibit 1, below).¹ A sample list of this group includes:

- **Aid to states**— Direct assistance to states, including Medicaid benefits, is quick and has a high multiplier because it is used for spending that otherwise would have been cut.
- **Payroll tax credits**— Hit paychecks quickly and exclude the wealthiest taxpayers who may be more inclined to save the money.
- **Aid programs such as food stamps and unemployment benefits**— Disbursed quickly and go to cash-strapped lower income consumers who are most likely to spend their income.

- **Infrastructure spending on already-planned state highway projects**— Spent relatively quickly and creates jobs.

The other half of the package contains various groups of spending categories whose impact or timing is less certain (See Table B in Exhibit 1). This does not imply that the spending on these programs will not be stimulative, but simply that there is not enough information to estimate their success. Some sample highlights include:

- **Alternative minimum tax (AMT) relief**— Hits the economy relatively quickly, but has a low expected multiplier effect (less than one), in part because it helps middle-income taxpayers who did not previously pay the tax. Middle-income consumers may

EXHIBIT 1: Individual programs included in the stimulus bill can be broadly grouped into two categories: Those with high multipliers and fast economic impact, and those with low multipliers, vague time horizons or uncertain effectiveness.

Sample of Major Provisions in U.S. Stimulus Bill

		Cost (\$ Billions)	Multiplier	Speed	Potential Long-Term Economic Impact
A More Effective/ Efficient	Direct Aid to States	\$147	1.36	Fast	Low
	Payroll Tax Credit	\$116	1.29	Fast	Low
	Extension/Increase in Unemployment Benefits	\$41	1.64	Fast	Low
	Highway Infrastructure Development	\$29	1.59	Fast	Medium
	Increase in Food Stamp Benefits	\$20	1.73	Fast	Low
B Less Effective/ Efficient or More Uncertain	Alternative Minimum Tax (AMT) Relief	\$70	0.48	Fast	Low
	Medical Record Modernization Incentive Program	\$18	?	Slow	Low - High
	Public Transit Improvements & Railway Grants	\$16	1.59	Slow - Fast	Medium
	Renewable Energy Tax Cuts	\$13	?	Slow - Medium	Low - High
	NIH Biomedical Research	\$10	?	Slow	Low - High

Multipliers from Mark Zandi's U.S. House Committee on Small Business testimony on July 24, 2008. A multiplier of 1.36 implies that for every \$1 of spending, \$1.36 of economic activity is generated. Source: Wall Street Journal, Moody's Economy.com, FMRCo (MARE), House Committee on Rules, Joint Committee on Taxation, Congressional Budget Office.

be inclined to save rather than spend their tax cuts (as they generally did with the tax rebate in 2008).

- **Spending on new projects**— Includes initiatives designed to increase productivity in various industries, including computerizing medical records, building a national electrical “smart” grid and providing broadband to more communities. Spending is likely to take years, with a potential boost to long-term growth but also a high degree of uncertainty about eventual multipliers.
- **Other infrastructure projects**— Includes everything from constructing new schools to public transit improvements. Timing is highly uncertain for most of these projects, though infrastructure spending generally has a high multiplier.
- **Renewable energy and energy efficiency**— Includes tax cuts and grants for renewable energy investments, in addition to making federal buildings more energy efficient. Timing and expected impact vary widely.
- **Spending on education and research**— While some of this money may be spent relatively quickly, the benefit to the economy is difficult to measure and may play out over many years.

Overall, the components of the stimulus plan represent a broad mix of programs that are likely to have a variety of different effects on the economy over different periods of time. On the one hand, roughly half of the package is fairly identifiable as programs that are relatively quick and stimulative, and will likely provide their biggest boost to the economy over the next two years. Most of their impact will be in mitigating the worst of the economic downturn. On the other hand, the other half of the package is less certain. There are some programs that are timely but have lower expected multipliers (AMT relief); there are some programs that have higher expected multipliers but whose timing is more uncertain (infrastructure spending); and there are many programs that on paper have a high potential to provide long-term economic benefits but whose success and timing remain highly uncertain.

For many of these longer-term programs— including increases in research and education, modernizing the electrical grid, supporting alternative energy, and upgrading medical-records technology— the objec-

tive is clearly not limited to short-term economic stimulus. Their ultimate success will be dependent on the details of their implementation. Many of these are worthwhile causes that on paper have the potential to expand the productive capacity of the economy over the long-term. However, these categories generally do not fit the classic definition of “stimulus,” and their ultimate success will be known only in hindsight.

Sizing up the plan

There has been much debate over the size of the new plan. On one extreme of the ideological spectrum, there are opponents to any fiscal stimulus at all. Arguments for this point-of-view contend that government programs may lead to waste and distortion of the free markets that provide the impetus for long-term economic growth. There is certainly some merit to this point. However, in a moment of extreme financial and economic crisis, the key risk to doing nothing is that the free market’s self-correcting mechanism may be so impaired on a temporary basis that the downtrend negatively reinforces itself until it becomes a complete catastrophe. At those critical moments, the government may be the only economic entity that can stem the momentum of deflationary forces and restore confidence [See related MARE article, *Obama’s Economic Challenge: The Velocity of Hope*]. Given the gravity of the situation today, doing nothing is a risky strategy.

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A stronger argument for limiting the size of a stimulus program is that government spending today will necessarily borrow from future growth, in the sense that higher revenues will have to be raised in the future to pay for current expenditure. This is an even bigger problem today, with the U.S. government already running a deficit of more than \$1 trillion and depending on foreigners to finance more than half of its outstanding debt.ⁱⁱ There is a

very real danger that massive new deficit spending could meet with reluctance on the part of lenders to finance it, potentially resulting in higher interest rates that work against a potential recovery.

A stimulus package must be large enough that it has some impact, both in real economic terms as well as on general confidence. The \$790 billion legislation—one of the largest government spending programs ever—is equal to about 5.5% of annual GDP, which at best would boost economic output by less than 3% over the next two years. With the U.S. economy contracting at an annualized rate of around 4% during the fourth quarter of 2008, this plan is not large enough to single-handedly replace all the lost output of the current downturn.^[i] However, it is large enough to have an impact on the economy, with proponents hoping it will create 3.5 million new jobs. Some economists have argued for a significantly larger package as insurance against a more protracted downturn, but given the fiscal challenges facing the U.S. government, the size seems to be a reasonable compromise.

Investment implications

Much of the political debate during the past several weeks has focused on the details of minor programs or on what the stimulus package will not be able to achieve. It may be easy for investors to lose sight of the bigger picture. With the economy currently trapped in a downward spiral, multi-faceted government action is a necessary evil. The stimulus package is just one portion of the official government response; stabilizing the financial system and maybe even the housing sector are arguably more important. No effort individually is a cure-all, but all of them together are needed to provide stability at a time when a 1930s-style scenario is not out of the question. The positive news is that, at least on paper, much of the new legislation meets the general criteria that economists typically use to measure the presumptive effectiveness of economic stimulus programs. Devising a perfect stimulus package is nearly impossible for a variety of reasons, but the plan's imperfection does not mean it is unnecessary. ■

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Investment decisions should be based on an individual's own goals, time horizon, and tolerance for risk. Past performance is no guarantee of future results.

[i] All analysis of the stimulus bill in this article included all programs with a cost greater than \$1 billion, which encompasses 96% of the total cost of the bill. Bill components and cost figures sourced from House Committee on Rules, Joint Committee on Taxation, Congressional Budget Office, and Wall Street Journal. Source: FMRCo (MARE) as of 2/17/09.

[ii] Source: Office of Management and Budget, U.S. Treasury, Haver Analytics, FMRCo (MARE) as of 12/31/08.

[iii] Source: Bureau of Economic Analysis, Haver Analytics, FMRCo (MARE) as of 12/31/08.