

ARRESTING A RECESSION: THE AMERICAN RECOVERY AND REINVESTMENT ACT (2009)

Vincent Amanor-Boadu, PhD
Department of Agricultural Economics
Kansas State University
Manhattan, KS 66506

March 2009

Summary

The American Recovery and Reinvestment Act (2009) (Stimulus Package) uses a combination of macroeconomic theories in its efforts to arrest and address the current recession. While its outcome is uncertain, this paper argues that unless trust and confidence in the financial sector are rebuilt to allow credit to flow again, this Stimulus Package may fail to achieve its desired objective quickly and efficiently.

Arresting a Recession: The American Recovery and Reinvestment Act (2009)

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By the time fourth quarter 2008 rolled around, there was no longer any debate that the U.S. economy was in recession. Unemployment had nearly doubled from its levels the year before and company announcement of layoffs were becoming anchored on news reports. According to the Bureau of Labor Statistics (BLS), the nonfarm payroll employment fell by 598,000 and the unemployment rate rose in December 2008 from 7.2 to 7.6 percent. In all, the BLS estimated that payroll employment has declined by 3.6 million since the start of the recession in December 2007, with about 50 percent of this decline occurring in the last three months of 2008 and the total number of the unemployed by the end of January 2009 stood at 11.6 million. The outlook was dim as major sectors of the economy continued to exhibit significant weakness: automobile, financial services, information technology and construction.

The economy had been central in the last three months of the Presidential campaign and it was, therefore, not surprising that the new president wasted no time submitting a major economic stimulus package to Congress. The stimulus package, appropriately named the American Recovery and Reinvestment Act of 2009 (ARRA), amounted to about \$787.2 billion and had the five overarching objectives:²

- To preserve and create jobs and promote economic recovery;
- To assist those most affected by the recession;
- To provide investments needed to increase economic efficiency by spurring technological advances in science and health;
- To invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits; and
- To stabilize State and local government budgets in order to minimize and avoid reductions in essential services and counterproductive state and local tax increases

The overall objective of this paper is to provide an overview of the Stimulus Package Bill and determine what needs to happen for it to achieve its objectives. To do this, the paper begins with an overview of the economic theories that are traditionally used to support government policies addressing economic recessions and offers a historical perspective of previous recessions in the U.S. The paper challenges policy makers to carefully identify the root causes of such complex economic turmoil and use public policy to help economic agents develop the necessary enhance confidence they need to respond to signals to help return the economy to its growth path.

¹ Dr. Vincent Amanor-Boadu is an assistant professor in the Department of Agricultural Economics, Kansas State University. He may be reached by email at vincent@ksu.edu or by telephone at (785) 532-3520

² H.R.1, American Recovery and Reinvestment Act of 2009 (Enrolled as Agreed to or Passed by Both House and Senate), Library of Congress (<http://thomas.loc.gov/cgi-bin/query/F?c111:8:./temp/~c111BOGXzd:-e2885:>).

Setting the Stage: How the Economy Works at the Macro Level

The economy has three principal segments: consumers; businesses; and government. Consumers sell their time and talent (as workers and suppliers) to businesses and to the government in exchange for wages, salaries and fees. These may be spent on goods produced by businesses, including donations to charity, and for their obligations to the government in the form of taxes. They may save any excess income they have after these expenditures or invest them in businesses. Businesses, on the other hand, sell goods and services to consumers, the government and other businesses in exchange for revenues. They spend this revenue on paying their workers, paying for the inputs they use in production and paying taxes and other fees due to government. Any excess revenues they have after paying all costs may be saved or distributed to shareholders as dividends or other payments, or invested in their own activities or those of others. Shareholders may be other businesses, consumers or government, and they may spend the investment receipts from businesses on their own activities, reinvest them or save them. The savings become available for lending.

Although the government mainly coordinates the activities of businesses and individuals to ensure the rule of law prevails and property rights are protected, it participates directly in the economy as a consumer of products and services from businesses and as a buyer of time and talent from individuals to produce goods and services, such as roads, waterways, defense and security, parks, etc. Tax revenues and fees are used to pay for these public goods and services, which may be purchased from businesses, and to pay salaries and wages to its employees. Any surplus government revenues may be saved, invested or used to expand the provision of goods and services believed to increase citizens' well-being.³

The pursuit of private objectives by individuals and businesses generally leads to growth and economic expansion, i.e., production and consumption of more goods and services and higher business revenues and personal incomes which produce higher tax revenues for governments. Regrettably, this pursuit of private objectives in the aggregate can sometimes lead to adverse economic results manifested by declining consumption by individuals, lower business revenues, increasing unemployment, which fuels further declines in consumption. Without any intervention, this negative feedback loop in the economy can cause significant hardship and jeopardize economic progress and public safety. It is for this reason that preventing the sustained exacerbation of these adverse economic conditions attracts intervention from policymakers.

Economic Declines and Recessions

Sustained adverse economic conditions may lead to recessions and unrelenting recessions may cause economic depressions.⁴ The National Bureau of Economic Research (NBER) uses peaks and troughs in the GDP to define the onset of recession and expansions. With its method,

³ Although *citizens* form another unique segment of the economy, they are often overlooked in economics literature because they are equated to consumers. However, there are significant conceptual and behavioral differences between citizens and consumers which frequently obfuscate economic policy development and implementation. For an extensive discussion of these differences and their implications, see Mintzberg (1996).

⁴ Traditionally, economists define a recession as a minimum of two consecutive declines in real quarterly GDP. They, however, do not have a generally accepted definition for economic depression and use two rules of thumb to identify it: Declines in real GDP in excess of 10 percent; and a recession lasting more than 35 months.

the Business Cycle Dating Committee of the NBER specified the onset of the current recession as December 2007, when the last economic peak was reached. The expansion period leading up to this peak lasted 73 months, beginning November 2001.

The NBER has identified eight recessions, including the current one, since 1960, represented by the brown bars in Figure 1.⁵ The “triggers” of these recessions were likely as follows: the Cuban Missile Crisis (April 1960-February 1961); Egypt-Israel War (December 1969-November 1970); Oil Embargo (November 1973-March 1975); Iranian Revolution (January 1980-July 1980); Iran-Iraq War (July 1981-November 1982); Savings & Loan Crisis (July 1990-March 1991); Dot Com/9-11 Crisis (March 2000-November 2001); and Credit Crunch (December 2007 and ongoing at the time of writing).⁶ The longest recession since 1960 was the Dot Com/9-11 recession, lasting 21 months from peak to trough, while the shortest was the one triggered by the Iranian Revolution. While the first five recessions may have been triggered by external forces (predominantly Mideast political upheavals and their consequent effects on energy supply and prices), the last three have had strong domestic antecedents. The *Dot com* bubble, for example, had initiated the recession of 2000 before the 9-11 attacks.

Seasonally adjusted monthly unemployment rates from 1960 to February 2009 are also presented in Figure 1 **Error! Reference source not found.** The figure shows that highest unemployment was about 11 percent which occurred during the recession triggered by the Iran-Iraq War.⁷ The unemployment rate by February 2009 was already at 8.9 percent, which is higher than the 8.6 percent peak rate achieved during the Oil Embargo-triggered recession of the 1970s. There is every indication that the current upward trend in the unemployment rate will continue until the other economic factors—productivity, aggregate demand and similar employment-boosting factors—reverse the decline. While the unemployment rate always rises during recessions and falls afterwards, Figure 1 shows that was not the case in the two prior recessions. In both instances, the unemployment rate continued to rise months after the recession had ended. For example, after the Dot Com/9-11 Recession ended, unemployment continued to rise for another five months, from 5.5 percent in November 2001 to 5.9 percent in April 2002, before starting its decline.

Using seasonally adjusted Bureau of Economic Analysis’ data, it is observed that GDP increased from about \$527 billion in the first quarter of 1960 to nearly \$14.3 trillion in 2008 fourth quarter, equivalent to an average quarterly growth rate of about 1.8 percent.⁸ This growth in GDP has been fueled principally by personal consumer expenditures, which rose from about \$327 billion in the first quarter of 1961 to \$10.16 trillion in third quarter of 2008 before dropping to about \$9.93 trillion in the fourth quarter of 2008. Private domestic investments increased from \$89.1 million in the first quarter of 1961 to a peak of \$2.25 trillion in the second quarter of 2006, from where it has been mostly declining, settling under \$1.95 trillion in the fourth quarter of 2008. Government expenditures increased from about \$108 billion in the first quarter of 1961 to peak at almost \$2.95 trillion in the third quarter of 2008, after which it dropped to about \$2.91

⁵ The NBER is deliberate in calling a recession, choosing to wait until the data show whether a decline is large enough to qualify as a recession based on a turning point in the economy marking a true peak. Therefore, the specific factors that caused any particular recession are frequently difficult to isolate.

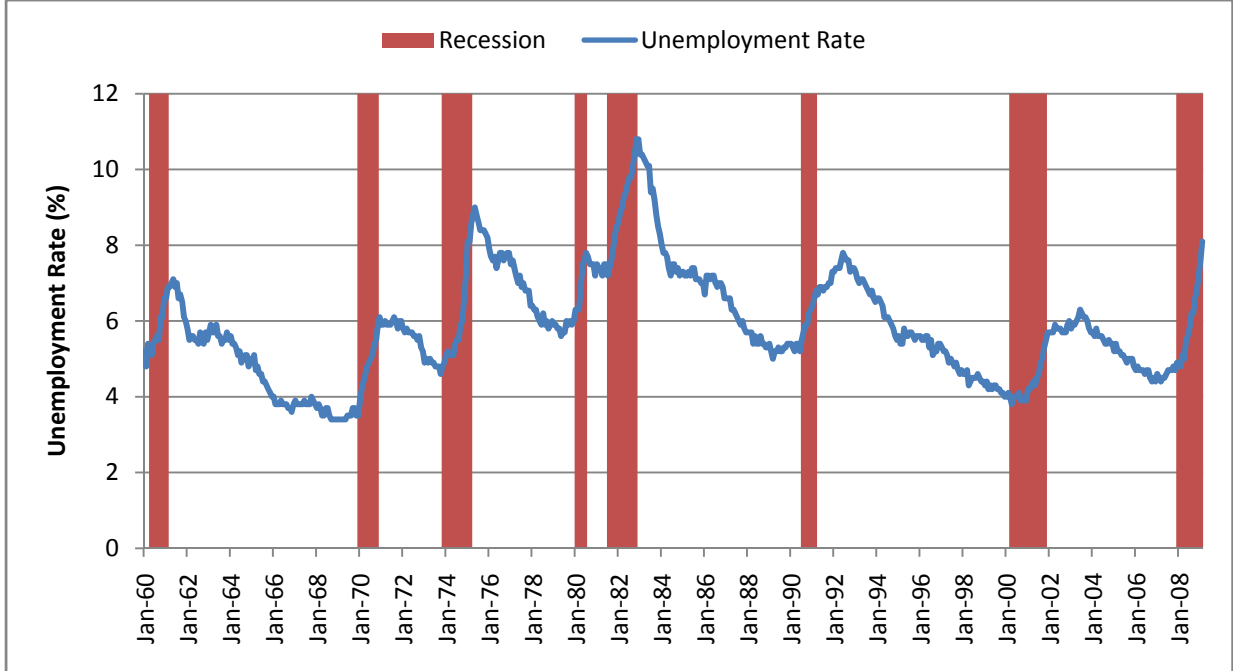
⁶ The width of the bar indicates the duration of the recession.

⁷ The biggest decline in GDP also occurred during the recession triggered by the Iran-Iraq War and the second highest decline since 1960 is current Credit Crunch recession.

⁸ The components of the GDP are personal consumption expenditures, private domestic investments, government expenditures and net exports.

trillion in the fourth quarter. Over the same period, net exports have been declining from a peak of \$7.5 trillion in the second quarter of 1965 to a trough of nearly negative \$778 billion in the second quarter of 2006. By the end of 2008, the net export position was about negative \$530 billion. Thus, over the years, the U.S. has been importing more than exporting.

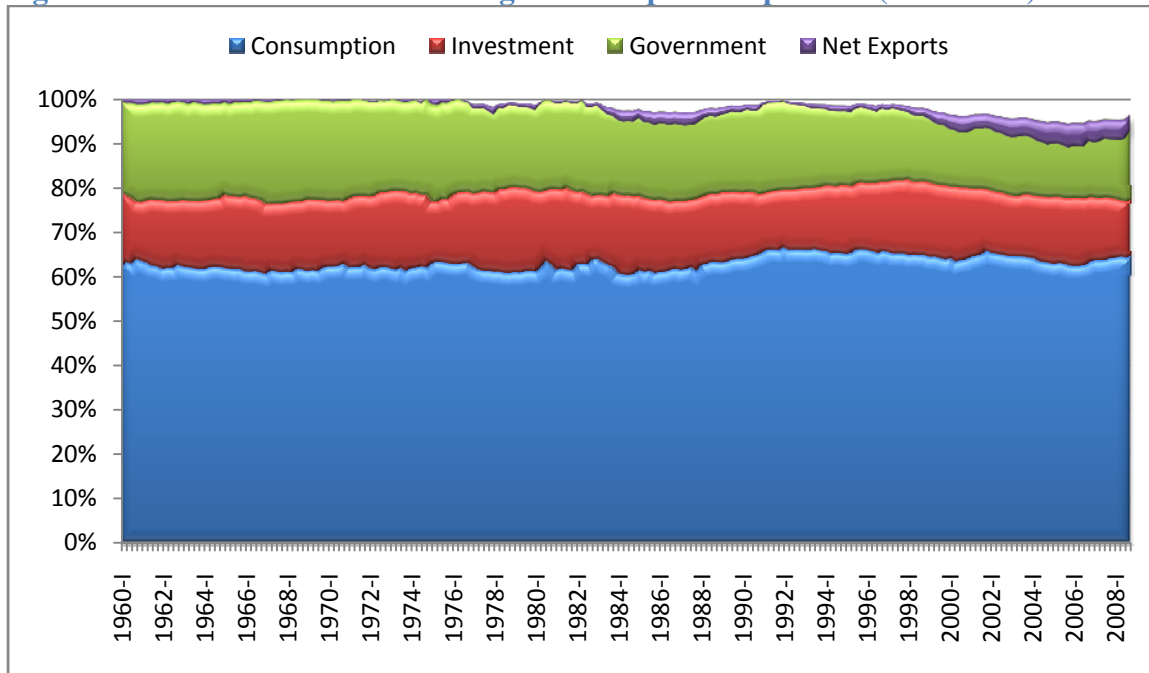
Figure 1: US Recessions (NBER Approach) and Monthly Unemployment Rates Since 1960



Source: National Bureau of Economic Research (www.nber.org) and Bureau of Labor Statistics (www.bls.gov).

Looking at the component expenditures as proportion of total GDP is instructive in determining the relative contribution of the four segments to GDP (Figure 2). In the first quarter of 1961, personal consumption expenditures accounted for about 62 percent of total GDP and by the third quarter of 2008, it had peaked at 70.9 percent. However, by the fourth quarter of 2008, it was 69.6 percent, a level last seen in the first quarter of 2006. Government expenditure share of GDP showed a downward trend over the period. For example, from a peak of 23.3 percent of GDP in the third quarter 1967, the government share of GDP declined to 17.2 percent by the first quarter of 1998. It has been increasing since then, reaching 20.4 percent in the fourth quarter 2008, a share not seen since 1991. Private domestic investment is the third largest component of GDP in the U.S. It increased from \$0.23 trillion in the fourth quarter of 1960 to a peak of \$1.95 trillion in the first quarter of 2006. It has since dropped to \$1.65 trillion at the end of fourth quarter 2008. Private investment share in GDP peaked in the second quarter of 2000 at 18.2 percent, and has since declined to 14.2 percent by fourth quarter 2008; a share that low was last seen in the first quarter of 1996. On average, the data shows that over the past nearly five decades, personal consumption has accounted for 65 percent of GDP, government expenditures for 20 percent and private investments for 16 percent. The difference of -1.4 percent comes from net exports, indicating that, on average, the U.S. has been importing more than it has been exporting, over the same period.

Figure 2: Distribution of GDP among its Principal Components (1961-2008)



Source: Bureau of Economic Analysis (www.bea.gov)

Personal consumption expenditures, as stated earlier, come from wages and salaries as well as dividends from investments and credit from lenders. When the economy begins to shrink and demand falls, businesses lay workers off, reducing the wages and salaries available for consumption, triggering constraints on consumer credit and forcing a reduction in consumption expenditures. Falling demand also implies a reduction in profits which affect dividend payouts and private investment opportunities. These interrelationships among the principal participants in the economy have defined the solutions economists have proposed for addressing recessions and other economic downturns. We turn our attention now to this debate.

Alternative Views on Dealing with Recessions

Given that the economic decisions and behavior of consumers, businesses and governments determine economic reality, how may civilized societies deal with economic declines? John Maynard Keynes (1883-1946), a British economist, argued that government can act as a stimulator of consumption when the economy is declining through public works projects that create jobs *rapidly* and/or reduced taxes so that consumer incomes can rebound, allowing for the purchase of goods and services produced by businesses, which provides a positive feedback to employment and growth. As consumption increases, causing employment to increase, both personal incomes and business revenues increase and governments can then generate higher tax revenues to pay for the expenditures they incurred to stimulate the economy. Thus, according to Keynes, governments play a very important role in the economy by being the only ones who can effectively create demand when demand halts because of adverse trends in the economy. Simply put, then, Keynes and his followers argue that governments should expand their own expenditures and reduce taxation on individuals and businesses during recessions and other adverse economic downturns and do the opposite during economic booms.

Milton Friedman and his Chicago School colleagues challenged Keynes and his followers, arguing that governments should focus on managing money supply in the economy during recessions instead of attempting to influence aggregate demand. The Monetarists, as Friedman and his friends are called, argued that market economies are inherently stable if money supply is kept relatively stable, thus making demand management unnecessary and even counterproductive. Their analyses showed that expansions in government spending to stimulate the economy create a future drag on the economy by increasing interest rates in attempts to control inflation that is the likely consequence of expanded spending.

Supply-side economics, advocated by Robert Mundell and Arthur Laffer in the 1970s, argue that it was neither aggregate demand nor money supply but production that drives the economy. Arguing that tax rates influenced production—in terms of investments in productive activities and the willingness of people to work—they noted that reducing both income and capital gains taxes could increase supply of goods and services and lead to increased government revenues at the same time. Supply-side economics draws on Say's law—i.e., supply of any good creates its own demand *for other goods*—and advocates encouraging supply through reductions in the marginal tax rate to stimulate total input demand, and ultimately increase output demand.

Supply-side economics draws on the principles of Austrian School, whose leadership under Ludwig von Mises and Friedrich von Hayek, also challenged Keynesianism, arguing against its “fundamentally collectivist approach.” They argued that markets, on their own, are able to address their problems, and any interventions by governments are bound to create problems by distorting the economic signals transmitted to economic agents. Their solution is for government to leave economic agents alone to sort out the problems they create through their own independent decisions.

From the practical perspective, it is difficult, if not inaccurate, to attach a single label to most government policies used to address economic recessions. For example, practical Keynesian policies in the United States and elsewhere have not thrown monetary policies out and monetary policies have often been implemented with significant government spending and tax reform. A good example of these mixed approaches is the Reagan era which adopted supply-side economics with increasing government spending (and associated deficits), tax reform and new monetary policies by the Federal Reserve. Finally, absolute laissez-faire has been a utopia no modern government has dared try in a recession because the interim human suffering that may occur threatens the very notions of liberty central to the free market economy.

Practice, therefore, deviates from the theories' academic positions because the economy and its influencing forces are too complex to be reduced to simple rules and maxims. Economic actors—individuals, businesses and governments—are not passive and impartial arbiters, but active participants whose very participation influences policy outcomes. Politicians, as distinct actors in the economic drama, have broader mandates than managing the economy and some of their mandates may conflict, causing them, in the words of Herbert Simon, to adopt satisficing instead of maximizing solutions.⁹ Similarly, institutional economists have shown that because economic agents are not automatons, their anticipations and responses to policies can affect their outcomes.¹⁰ It is this complexity that makes assessing and predicting the outcomes of these macroeconomic models more powerful after the fact.

⁹ Simon, H. “Rational Decision Making in Business Organizations,” *The American Economic Review*, 69(1979): 493-513.

¹⁰ Williamson, O.E. “Strategizing, Economizing, and Economic Organization,” *Strategic Management Journal*, 12(1991): 71-94.

The 2009 Stimulus Package

The ARRA has as its primary aim the provision of a stimulus to the U.S. economy to arrest the recession induced by the Credit Crunch. Its objectives, however, extend beyond the recession and reach into reinvesting in specific areas of the economy that the government deems important for the long-term sustainability of the U.S. economy. These multiple objectives are reflected in the distribution of the stimulus funds.

The total Stimulus Package is \$787.2 billion, divided into two broad divisions: Division A (Appropriations) accounts for about \$308.4 billion (39.2 percent); and Division B (Tax, Unemployment, Health, State Fiscal Relief, and Other Provisions), accounts for about \$478.8 billion (60.8 percent).¹¹ Table 1 and Table 2, developed from Congressional Budget Office (CBO) data and the ARRA text, show the allocations to the specific titles under the two divisions. In Table 1, Health and Human Services, Labor, Education and related agencies receive almost \$71.3 billion to provide job training and employment services, education for the disadvantaged, health resources and services, children and family services and new resources to the National Institutes of Health to support research.¹² Agriculture, Rural Development, Food and Drug Administration and related agencies, on the other hand, receive about \$26.5 billion for food and nutrition assistance program (food stamps) (\$20 billion in anticipation increase in the number of people depending on the program as the level of unemployment increases as a result of the recession). The development of distance learning, telemedicine, and broadband infrastructure in rural communities receive about \$2.5 billion and another \$1.38 billion is allocated to the development of rural water and waste disposal infrastructure. Tax provisions account for more than \$288.3 billion of the total \$478.8 billion in Table 2, and they a number of incentives for individuals and families as well as businesses and for specific initiatives such as renewable energy and infrastructure financing tools. The remaining items under Division B cover unemployment support directly under Title II and indirectly under Title III by way of helping unemployed workers maintain the health insurance plans they had prior to becoming unemployed. It also includes about \$90 billion for the states to support health care by providing fiscal relief for temporary assistance for Medicaid Federal Medical Assistance Percentages (FMAP) and Disproportionate Share Hospitals (DSH) allotments. Distribution of the stimulus funding is in line with the Obama administration's overarching policy objective to alter the country's energy environment. To this end, tax incentives under Division B of the ARRA target renewable energy and energy conservation, carbon dioxide sequestration, advanced energy facilities, and support for innovation such as plug-in electric vehicle.

¹¹ Division A encompassed fifteen titles, thirteen of which have spending allocations and two cover general provisions for implementing the act and the accountability and transparency provisions of the division. Division B has seven titles, and five of them have spending or tax provisions while the remaining two provide directions on broadband technology opportunities program and limits on corporate executive compensation and corporate governance which principally covered companies that receive support under the Troubled Asset Relief Program (TARP). Also, Title XIII of Division A and Title IV of Division B are the same.

¹² As in most sections of the Act, allocations aim to support and expand authorizations of existing legislations providing these services. For example, \$5 billion was allocated as grants under the Elementary and Secondary Education Act (1965), and \$3.15 billion under the Children and Family Services program is distributed using the Head Start Act and the Community Services Block Grant Act.

Table 1: Allocations for Division A (\$ Billions)

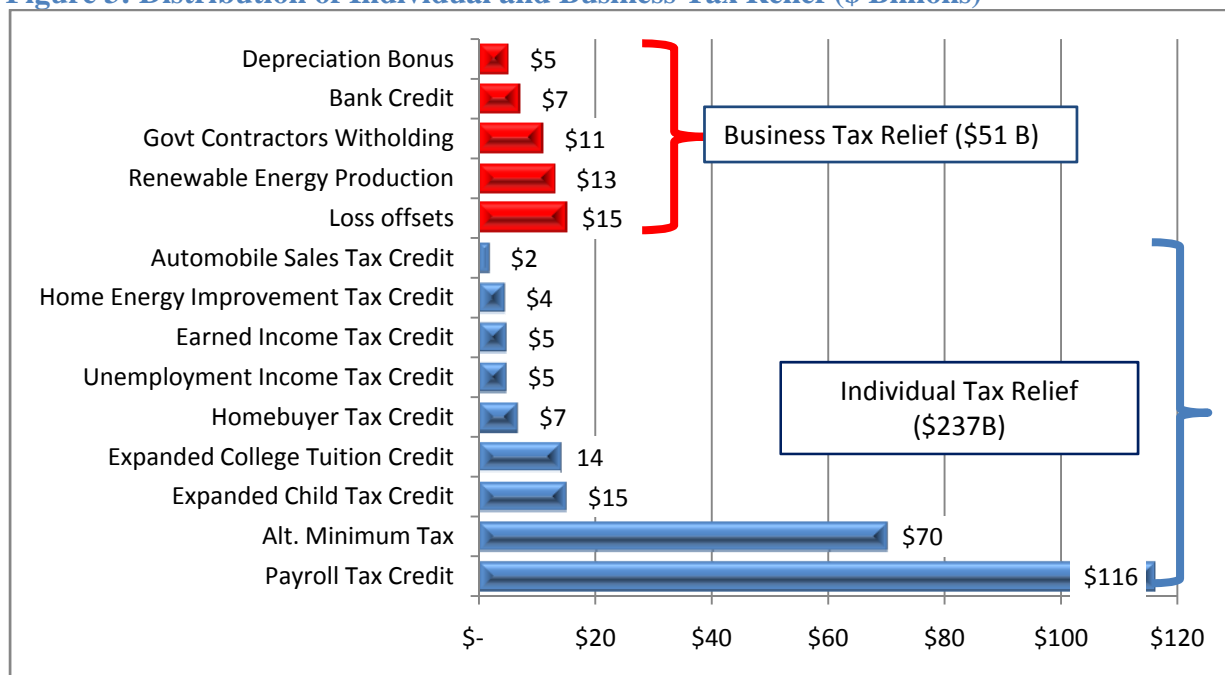
Title	Name	Authority	Est. Outlay
Title I	Agriculture, Rural Development, Food and Drug Administration, and Related Agencies	\$26.47	\$26.43
Title II	Commerce, Justice, Science, and Related Agencies	\$15.92	\$15.81
Title III	Department of Defense	\$4.56	\$4.53
Title IV	Energy and Water Development	\$50.83	\$50.78
Title V	Financial Services and General Government	\$6.86	\$6.71
Title VI	Department of Homeland Security	\$2.76	\$2.74
Title VII	Interior, Environment, and Related Agencies	\$10.95	\$10.55
Title VIII	Departments of Labor, Health and Human Services, and Education, and Related Agencies	\$72.56	\$71.27
Title IX	Legislative Branch	\$0.03	\$0.03
Title X	Military Construction and Veterans Affairs and Related Agencies	\$4.28	\$4.25
Title XI	State, Foreign Operations, and Related Programs	\$0.60	\$0.60
Title XII	Transportation, Housing and Urban Development, and Related Agencies	\$61.94	\$61.05
Title XIV	State Fiscal Stabilization Fund	\$53.60	\$53.60
Division A	Total	\$311.34	\$308.38

Table 2: Division B Allocations (\$ Billions)

Title	Name	Authority	Est. Outlay
Title I	Tax Provisions	\$288.42	\$288.34
Title II	Assistance for Unemployed Workers and Struggling Families	\$60.56	\$58.14
Title III	Premium Assistance for Cobra Benefits	\$24.68	\$24.68
Title IV	Medicare and Medicaid Health Information Technology; Miscellaneous Medicare Provisions	\$17.56	\$17.56
Title V	State Fiscal Relief	\$90.04	\$90.04
Division B	Total	\$481.26	\$478.76

In summary, the Stimulus Package's tax relief totaled about \$288 billion, with 82.3 percent going towards individuals and only 17.7 percent going to business (Figure 3). In typical Keynesian fashion, the tax relief policy provides consumption and investment incentives. For example, the payroll tax credit involves \$400 per person or \$800 per couple tax credit for both 2009 and 2010 but only for individuals or couples earning under \$75,000 or \$150,000 respectively. Businesses received about \$15 billion for use in offsetting current losses with profits from previous five years while about \$13 billion is allocated for extending tax credits for companies producing renewable energy to 2014. Other incentives include the repeal of the federal withholding law which allowed the federal agencies to withhold 3 percent of payments due to government contractors to ensure they paid their federal taxes, and accelerated depreciation on equipment purchases through 2009.

Figure 3: Distribution of Individual and Business Tax Relief (\$ Billions)



The spending component of the Stimulus Package is estimated at about \$499 billion, and it has been organized into seven groups to highlight the policy focus: Health Care; Education and Research; Energy; Income Support and Welfare; Infrastructure and Housing; Government Facilities and Supplemental Expenditures; and Others (Figure 4). Health care and education account for half of the expanded government expenditure under the ARRA. Two health care initiatives—Medicaid support to the states to prevent cutting of services and health insurance premium subsidies for the unemployed under the COBRA program—account for more than 75 percent of the \$147.7 billion allocation to health care spending.¹³ According to the CBO, about 91.3 percent of the total \$787.2 billion of the stimulus outlay is spent in the first three years. As expected, the Stimulus Package causes an expansion in the federal deficit between 2009 and 2019. For example, CBO estimates that the federal deficit will increase by \$185 billion in 2009, \$399.4 billion in 2010 and \$134.4 in 2011.

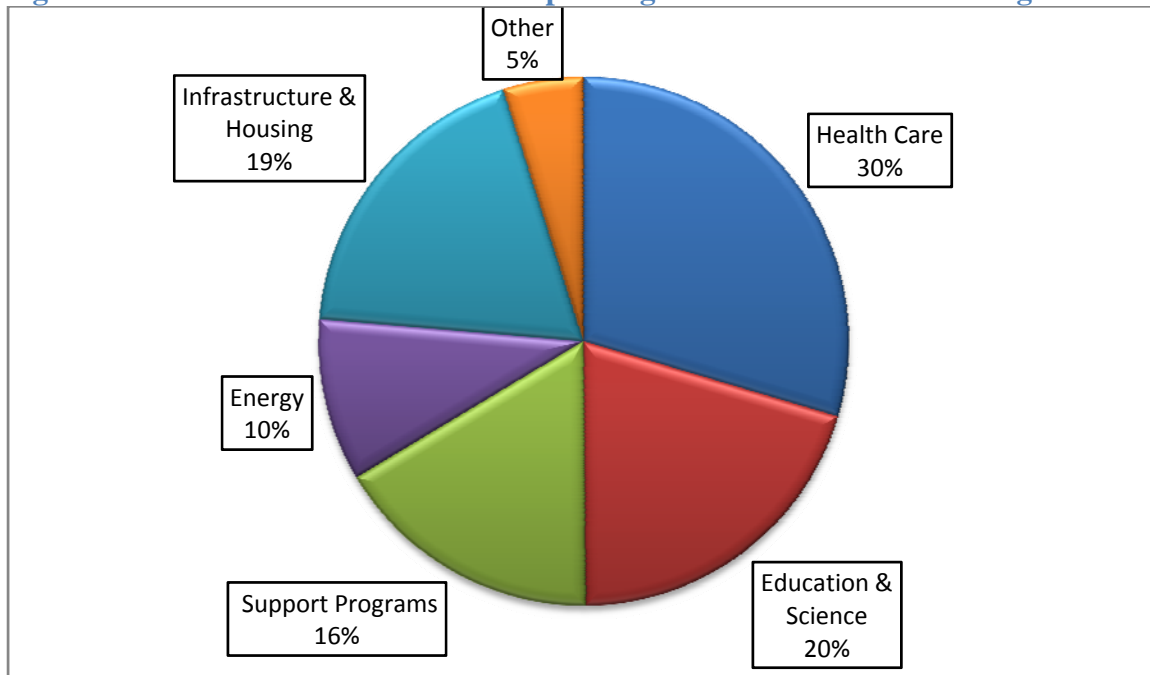
A Need for Trust and Confidence

The purpose of every stimulus package is to stimulate consumption and investment in an effort to arrest an adverse economic situation. The ARRA is not the first attempt to arrest this Credit Crunch recession. The Bush administration passed the Economic Stimulus Act (2008) in February 2008 when the economy started showing signs of slowing down, involving among others, the distribution of tax rebate checks of \$600 to 130 million individuals and providing

¹³ COBRA is the Consolidated Omnibus Budget Reconciliation Act of 1986 provides certain former employees and their families with the right to temporary continuation of health coverage at group rates provided they pay entire premium. It is generally cheaper than individual health insurance.

incentives for business investment at a total cost of \$152 billion.¹⁴ The “hypothesis” for this intervention was that boosting aggregate consumption by consumers and investment by businesses would arrest the impending recession.

Figure 4: Distribution of Government Spending under the Stimulus Package



However, by midsummer 2008, it was obvious that the problem with the economy was not consumer demand despite the positive effect the stimulus checks on consumption.¹⁵ The increase in home mortgage defaults was, then, identified as the potential cause, leading to passionate discussions about how to prevent foreclosures and instill confidence in the housing market. By early fall, there was general agreement that the credit markets were responsible for the economy’s problems, resulting in the Emergency Economic Stabilization Act (2008), a \$700 billion initiative that was aimed principally at preventing the collapse of the U.S. financial system.¹⁶ Under this Act, the Treasury Department was given authority to make capital injections into financial institutions and purchase and insure certain types of troubled assets for the purposes of providing stability to financial system while preventing disruption in the economy and protecting taxpayers.¹⁷ Its “hypothesis” was that providing capital to banks while relieving them of their troubled assets would unclog the credit markets and restore growth.

¹⁴ Public Law 110-185 110th Congress. Available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_public_laws&docid=f:publ185.110.

¹⁵ Broda, C. and J. Parker. “Did the 2008 U.S. Tax Rebates Work?” Available at <http://www.voxeu.org/index.php?q=node/1541>.

¹⁶ Emergency Economic Stabilization Act (2008). Available at http://www.house.gov/apps/list/press/-financialsvcs_dem/essabill.pdf.

¹⁷ The principal component of the Act, the Troubled Asset Relief Program (TARP), included residential or commercial mortgages and any securities, obligations, or other instruments that are based on or related to such mortgages, that in each case was originated or issued on or before March 14, 2008, the purchase of which the Secretary determines promotes financial market stability, and any other financial instrument that the Secretary, after consultation with the Chairman of the Board of Governors of the Federal Reserve System, determines the purchase of which is necessary to promote financial market stability.

A critical assumption underlying the hypothesis of the Emergency Economic Stabilization Act was that prices of the troubled assets were transparent and could, thus, be acquired easily and quickly. Another assumption that only became evident in the Act's implementation was that certain companies were *too big to fail*, and thus, must be protected from failure regardless of market signals. The companies qualifying for this treatment include such financial giants as AIG and Citigroup. With billions of dollars injected into these companies, there is still no clear sign to date that their financial stability is improving. Meanwhile, as of March 27, 2009, there had been 21 banks failures, nearly as many as the 25 that occurred in all of 2008 and more failures than in the 60 months between 2003 and 2007.¹⁸

That the Emergency Economic Stabilization Act has not worked to date suggests that its assumptions are indefensible against reality. Thus, it is argued that it is not the troubled assets, per se, that are causing the problem, but the prevailing uncertainty about the extent of exposure of financial institutions to the risks associated with opaque financial instruments (such as collateralized debt obligations (CDOs), credit default swaps (CDS), tranching, etc.) used to acquire these assets and complicate their risk ratings. The opacity of the transactions has eroded trust and confidence that these institutions have in each other, and reduced their willingness to lend to each other, thereby initiating and sustaining the credit crunch. In the absence of trust and confidence, risk becomes inordinately high and its cost (i.e., interest rate necessary to compensate for the risk) exorbitant to the point of absurdity. In other words, the lack of trust and confidence in the balance sheets of financial institutions is currently so high that no amount of reasonable interest rate can encourage banks to lend to each other.¹⁹ This, in turn, has contributed to lack of credit in the rest of the economy despite the fact that the riskiness of many segments of the economy has not changed.

It has been difficult to price these troubled assets because of the opacity of their nature and structure, making the Troubled Asset Relief Program (TARP) less than successful to date. As noted by Lawrence Ausubel and Peter Cramton of the University of Maryland, the pricing of these assets has unleashed an irrational fear among policymakers about the risk of over-pricing (taxpayer giveaway) or under-pricing (causing the banks to refuse to sell), a fear that contributed to Secretary Paulson's adoption of the "suitcase approach"—involving the delivery of large sums of money to both insolvent and solvent banks with little or no strings attached.²⁰ Yet, pricing and offloading these assets is at the heart of the trust and confidence issue in the financial industry and until it is addressed, not much progress will be seen in the credit markets. And until progress in the credit markets occur, the Stimulus Package may fail to arrest the Credit Crunch recession.

There are good examples that show that transparent pricing of the assets of failed companies, no matter how large, is possible, feasible and efficient for the whole economy. Take

¹⁸ Indeed, only 11 of the 57 bank failures in 2008 and 2009 have assets and deposits in excess of \$1 billion. The largest failed bank to date is Washington Mutual Bank of Seattle, with \$597 billion in assets and deposits. Far behind it is IndyMac Bank of Pasadena, California with assets of \$32 billion. For the list of failed banks, see the Federal Deposit Insurance Corporation (FDIC) website (<http://www.fdic.gov/bank-/individual/failed/banklist.html>).

¹⁹ Consider the case of Merrill Lynch's \$21.5 billion losses that did not surface until Bank of America's purchase of the company was complete and company executives had received \$3.6 billion in bonuses. See Louise Story and Eric Dash's "Undisclosed losses at Merrill Lynch lead to a trading inquiry," International Herald Tribune, (<http://www.iht.com/articles/2009/03/06/business/06wall.php>), March 6, 2009.

²⁰ Ausubel, L.M. and P. Cramton. "No Substitute for the "P"-Word in Financial Rescue," *Economists' Voice*, The Berkeley Electronic Press, February 2008.

the cases of Bear Stearns and Lehman Brothers on the one hand and AIG on the other. In the case of Bear Stearns, its share price dropped from a peak 52-week value of \$133.20 to \$2 when its financial exposure brought it to the brink of collapse. JPMorgan Chase indicated its willingness to purchase it at that revealed valuation price—and the Federal Reserve subsidized Bear Stearns’ shareholders by \$8/share, bringing the purchase price up to \$10. This purchase allowed Bear Stearns to *continue in business*, albeit as a division of JPMorgan Chase, who announced the acquisition and merger as uniting “two great companies” to offer and “the most complete range of financial services in the industry.”²¹ While Lehman Brothers’ story ended a little differently because of its bankruptcy on September 15, 2008, that Barclays Bank of the UK was able to purchase its brokerage arm and Nomura Holdings of Japan its remaining assets, including its business operations in the Asia Pacific region, the Middle East and Europe, is indicative of the market (with the help of the Federal Reserve) being able to price assets at levels that facilitate exchange.

JPMorgan Chase, having cash on hand, was well positioned to acquire its rival, Bear Stearns. Similarly, Barclays and Nomura Holdings could secure Lehman’s assets to create wealth for their shareholders. Over the same period, Berkshire Hathaway acquired a \$5 billion stake (10 percent) in Goldman Sachs on very attractive terms for its shareholders, because like Bear Stearns and Lehman, Goldman Sachs’ exposure to the mortgage-backed securities’ risk had resulted in a cash crunch. Likewise, Japan’s largest bank Mitsubishi UFJ Financial Group, took a \$9 billion (21 percent) stake in Morgan Stanley because of its own financial troubles for similar reasons. Meanwhile, Bank of America picked up Merrill Lynch in an all-stock deal of \$50 billion in December 2008. The point is this: While shareholders in failed companies lose wealth, those in thriving companies gain productive assets at attractive prices. Thus, as Warren Buffet is reputed to have said: “Capitalism without failure is like Christianity without hell . . . people make mistakes in capitalism. They shouldn’t be penalized for being misled, but they shouldn’t be protected from mistakes.”²²

Contrast the foregoing with the government’s bailout of AIG which began with a 24-month secured credit facility of \$85 billion at 8.5 percent over the LIBOR in exchange for 79.9 percent of the company in September 2008 and a series of cash infusions over the months such that by March 2009, a total of about \$192.5 billion had been sunk into the company.²³ The argument for these continuous cash infusions into AIG has consistently been its enormous size and the potential adverse effects of its failure on the global economy. While it may be true that the failure of a company as large as AIG could adversely affect many around the world, a carefully managed separation of its solvent subsidiaries from the insolvent ones could have minimized any potential collateral damage. But this strategy is now remote because after pouring nearly \$200 billion into AIG, changing course becomes unthinkable because of a “ferment and widespread

²¹ JPMorgan Chase converted Bear Stearns’ outstanding shares into JPMorgan Chase common stock at 1:0.21753. The acquisition and merger deal was completed on May 30, 2008. Press release available at the Bear Stearns’ <http://www.bearstearns.com/>.

²² Taipei Times. “Buffett and Munger feel no pity for financial stupidity in the U.S.,” May 7, 2008, Page 9. Available at <http://www.taipetimes.com/News/editorials/archives/2008/05/07/2003411282>.

²³ AIG requested and received another \$37.5 billion and \$40 billion in October and November 2008 respectively. After it posted a loss of \$61.7 billion for 2008, it again requested and received \$30 billion from the government in March 2009.

belief among managers in the inevitability of their projects' ultimate success."²⁴ The continued talk about nationalization is evidence of this belief that putting more money into these failing firms will ultimately lead to the desired outcome. The signals sent by this approach to market participants could extend the recession and dampen the Stimulus Package's potential success.

Conclusion

The primary purpose for this paper was to explain the ARRA within the broader context of macroeconomic policymaking. The paper began with a broad overview of the principal schools of thought on how to deal with recessions—Keynesianism, Monetarism, Supply Side Economics and the Human Action approach. It argues that none of them is effective under all conditions, suggesting that the adoption of any solution must be based on antecedents to the recession and not on any economic or political ideology.

The Stimulus Package, like most policies attempting to deal with prior recessions, combines expanded government spending and reductions in taxes advocated by Keynesianism. The Federal Reserve has simultaneously been pursuing aggressive monetarist policies, expanding money supply through direct investments in financial institutions and keeping interest rates low. Ultimately, whether the Stimulus Package achieves its objective depend on financial markets becoming unclogged and credit flowing to consumers and businesses to support consumption and production. It was observed that the cause of the credit crunch is the eroded trust and confidence in the financial industry due to suspicions about toxic asset exposure. It was suggested that trust and confidence would not return until these assets are properly priced and balance sheets of these firms adjusted accordingly. It was shown that abandoning the "too big to fail" mentality could help address the troubled assets by facilitating sensible pricing and careful wind downs of insolvent operations in the economy.²⁵ The sooner this is done, the faster the objectives of the Stimulus Package can be realized.

²⁴ Isabelle Royer. "Why Bad Projects are so hard to kill." *Harvard Business Review* (Feb. 2003), Cambridge, MA: Harvard Business School, 8 pp. The direct cost to the government of the Bear Stearns' failure amounted to about \$30 billion, the amount the Federal Reserve provided to support Bear Stearns' less liquid assets, such as mortgage-backed securities, which could not be sold.

²⁵ See Ausubel et al. (2008) and Klemperer (2008) for alternative troubled asset pricing approaches.

Further Reading/Viewing

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Acknowledgement

I am grateful to a number of people who took time to converse and comment on the paper. They include Arlo Biere and Michael Woolverton, Department of Agricultural Economics, Kansas State University, Stephen Dyer, Department of Electrical and Computer Engineering, Kansas State University, Richard Porter, Porter Cattle Co., Jay Armstrong, Armstrong Farms, and Jim Bassett, retired executive, Cargill Corporation. All errors and omissions are, however, mine.

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