Fiscal Policy[1]

We now examine the specific actions that fiscal policymakers have taken in response to the recession. We begin by discussing the assorted stimulus packages that have been implemented. We then discuss the automotive bailout which I am lumping into fiscal policy.

2008: The First Stimulus

In early 2008, the collapse of the housing sector had raised fears of a possible recession. At this time, most forecasters were not predicting a recession, and very few were predicting a downturn as severe as the one that emerged. Congress therefore passed a relatively bi-partisan fiscal stimulus.

The 2008 stimulus was entirely in the form of tax cuts totaling $168 billion. Throughout the Spring of 2008, the IRS issued tax rebate checks: $600 for individuals making up to about $87,000, $1200 for married couples making up to $150,000, and $300 for individuals who pay little or no tax. The policy was sold using standard Keynesian reasoning, by increasing households' disposable income, consumption would increase, output would increase, and unemployment would decline. Because it was a one-time tax change that did not significantly alter marginal income tax rates, the legislation probably did not have significant supply side effects by encouraging labor supply.

The 2008 stimulus has earned a reputation as being ineffective. The CBO issued a report summarizing studies of the bill's impact.[2] It concluded that households eventually spent between 30% and 67% of the rebates. (Note that this is less than the typical estimates of the marginal propensity to consume. The report also concluded that the tax rebates increased the growth of consumption by 2.3% and 0.2% in 2008Q2 in 2008Q3, but decreased consumption after the policy ended in 2008Q4 by 1.0%. Although this increase in consumption is non-trivial, it was nowhere near enough to offset the effects of the coming recession.

[1] These are undergraduate lecture notes. They do not represent academic work. Expect typos, sloppy formatting, and occasional (possibly stupefying) errors.

[2] See the CBO's 6/10/2009 report, "Did the 2008 Tax Rebates Stimulate Short-Term Growth?"

Standard macroeconomic theory suggests that this result is unsurprising. Recall the Life Cycle Model. It predicts that households choose their consumption based on their expected lifetime wealth and they they attempt to smooth their consumption over time. Because the 2008 tax cuts were both small and temporary, they did not have a major effect on lifetime wealth. Households thus did not make major changes to their consumption path.

2009: The Second Stimulus, the ARRA

By the Winter of 2009, the economy was reeling from the financial panic that followed the collapse of Lehman Brothers. Policy makers were now significantly worried about the severity of the ongoing recession. At this point policy makers decided to enact a stimulus far larger than that of 2008.

The bill is officially known as the *American Recovery and Reinvestment Act*. When commentators refer to the "stimulus package,"' they almost always mean this bill and not the tax rebates of 2008. The final bill included about $550 billion in new government spending, and about $275 billion in tax cuts. The bill passed almost entirely along party lines with only 11 House Democrats voting no, and 3 Senate Republicans (including Arlen Specter of Pennsylvania who later switched to the Democratic party, in part due to the uproar over his vote) voting yes. President Obama signed the bill into law on 2/17/09.

Given the magnitude of this bill, it is worthwhile to examine some of its larger components:

1. State Fiscal Stabilization Fund, about $50 billion. The recession, which has reduced taxable income, affected both Federal and State budgets. Unlike the Federal government, most states are unable to borrow in order to finance large budget deficits. Hard hit states must therefore choose among budget cuts and tax increases in order to balance their budget. Both solutions will likely amplify the effects of the recession and the former may directly increase unemployment if budget cuts involve layoffs.

As a result of states' inability to borrow, many economists believe that direct aid to states is among the best ways to spend stimulus dollars. Such spending may prevent state government layoffs, thus saving, if not creating, jobs. Many economists were disappointed in the fairly small fraction of the stimulus devoted to aid to the states. Most of aid to states is targeted at education spending. (Note: To pass the bill in the Senate, this type of spending was reduced in the final bill.)

One complication of aid to states is how to allocate the spending across the states. Should California, for example, receive extra aid because it is in especially bad shape even if that rewards some states for their fiscal irresponsibility?

2. Infrastructure, about $50 billion. Projects such as road and bridge repair are among the most viable example of fiscal stimulus. They also seem to have been designed to maximize the time it takes for me to drive home. They are also a textbook Keynesian example of expansionary fiscal policy. Government spending increases the consumption of the workers employed in the projects. It also benefits all of the businesses who rely on this consumption, as well as the manufacturers of the equipment needed to undertake these projects.

3. $50 billion for the extension of unemployment benefits, additional food stamps, and other welfare programs. This type of spending has two beneficial effects. First, it increases the disposable income of the recipients which then has the standard Keynesian effects on consumption and output. Second, it also reduces the adverse financial impact of the recession on the poor and unemployed.

4. About $ 30 billion to extend COBRA, a health insurance program for people who have recently left a job. The purpose of this spending is more to assist the unemployed than to stimulate the economy.

5. About $15 billion for $250 checks to social security recipients and the disabled.

6. About $35 billion for energy programs including weatherization, development of renewable energy sources, and upgrading the nations electrical grid. This is another example of spending with a duel purpose; to stimulate the economy and to alter the nation's energy policy.

7. About $150 in tax cuts for $500 per person tax cuts that begin to be reduced at incomes exceeding $75,000 for individuals, and $150,000 for married couples. Like the 2008 tax cut,

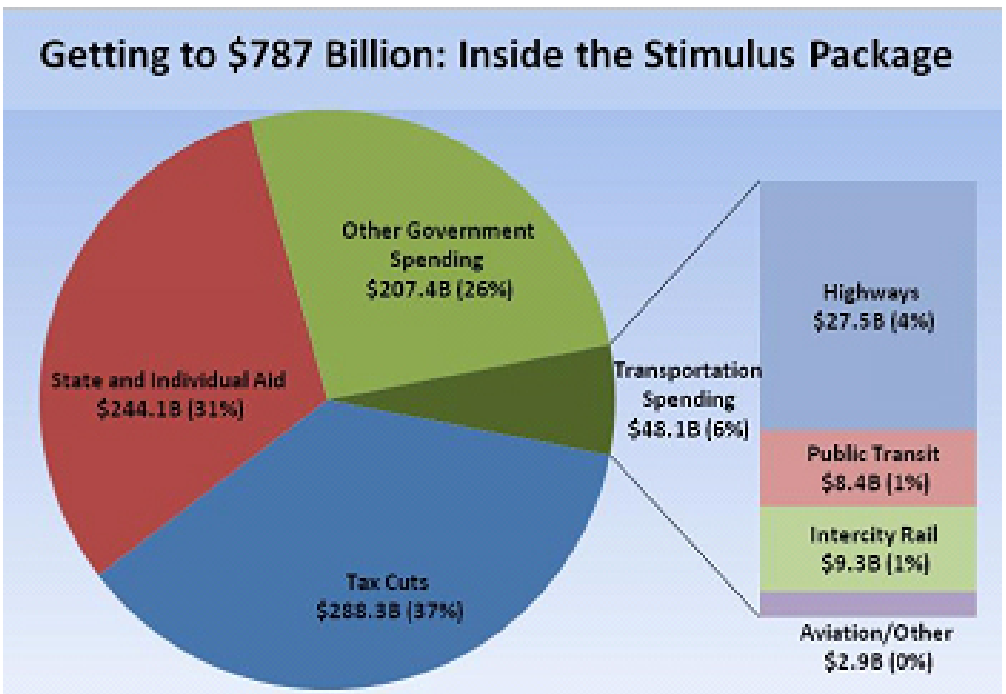
households that do not pay taxes may also receive this rebate. This tax cut is similar in size to the 2008 stimulus (within a larger package). Like the 2008 tax cuts, this is a temporary tax cut based on demand-side economics.

8. The floor for the alternate minimum tax (AMT) was raised. The AMT is a tax that acts to limit the amount of deductions that a household may claim. By raising this limit, Congress essentially lowered taxes on middle income households. This policy may have both supply side and demand side effects.

9. An $8000 tax credit for homes purchased in 2009.

This list is not remotely exhaustive. The stimulus package includes many other tax cuts and types of government spending. The following chart illustrates the ARRA's outlays:[3]

Table 1:



[3]Source: Economy League of Greater Philadelphia

The Debate over the Stimulus of 2009

The arguments in favor of the stimulus package are straightforward. Increasing aggregate demand, in many models, will increase output and reduce unemployment. The Obama administration claimed that the stimulus package would create or save 3.5 million jobs. This figure was obtained using a multiplier of 2.5 for government spending (see the CEA report) and converting 1% higher GDP growth into 1 million jobs.

In August 2011, the CBO issued another report on the ARRA.[4] It estimated the following effects for the second quarter of 2011:

i. GDP was between 0.8% and 2.5% greater than had the ARRA not been passed.

ii. The U-3 unemployment rate was between 0.6% and 1.5% lower.

iii. Increased employment between 1.0 million and 2.9 million jobs. It may have increased the number of full time jobs by 4.0 million if we include part time jobs that became full time because of the bill.

The same report also estimated multipliers for different components of the ARRA: Table 1 shows these:

These benefits, of course, come with a cost. In January 2012, the CBO estimated that, including accrued interest, the ARRA would increase the deficit by $831 billion by 2019.[5] This represents a cost of $287,000 to $831,000 per job created.

Opponents of the stimulus relied on several arguments.

1. Increased deficits.

[4] August 2011. "Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from April 2011 Through June 2011

[5] January 2012, "The Budget and Economic Outlook: Fiscal Years 2012 to 2022."

Table 2: Estimated Multipliers for Components of ARRA

Government Purchases	1.0-2.5
Aid to Localities for Infrastructure	1.0-2.5
Other Aid to Localities	0.7-1.8
Transfers to Individuals	0.8-2.1
One-Time Payments to Retirees	0.3-1.0
Two-Year Tax Cuts to Low/Middle Income HHs	0.6-1.5
One-Year Tax Cut to High Income HHs	0.2-0.6
Homebuyers' Tax Credit	0.3-0.8

2. The Classical tradition of macroeconomics believes that expansionary demand policy either does not increase output or has only modest effects. A tradeoff exists between more GDP growth and higher deficits. The closer one is to the Classical tradition, the more likely they are to conclude that the stimulus is not worth the debt that it entails.

3. Critics were concerned that the stimulus included wasteful spending or "make work" projects. In a memorable speech, Louisiana Governor Bobby Jindal cited \$140 million for "something called volcano monitoring," as one such example. Shortly afterward, Mount Redoubt, a volcano near Anchorage, Alaska erupted, undermining this example while demonstrating the mountain's own liberal bias. So far, there have been surprisingly few investigative reports on wasteful stimulus spending.

4. There is concern that the increased level of government spending will not be temporary or that the policy was being used as a trojan horse to promote controversial policies.

5. Some have criticized the stimulus package for not spending fast enough. As of 11/20/09, about \$220 billion of the stimulus had been allocated. By the Summer of 2010, most of the stimulus had been spent.

6. The stimulus will increase the price level, raising concerns of inflation. As with the Fed's more than doubling of the monetary base, however, this concern was not realized.

A Third Stimulus

Between 2001 and 2003, Congress passed, and President Bush signed, a series of widespread tax cuts. Many of these tax cuts were scheduled to expire at the end of 2010. Without action, marginal tax rates would thus increase at the beginning of 2011. The Obama administration wanted to extend some of these tax cuts, while allowing those on wealthier to expire, along with increased government spending. Congressional Republicans supported making the tax cuts permanent and opposed most new spending. In December 2010, a deal was reached. It included:

1. All the tax cuts, including those on high income households, were extended by 2 years.

2. Unemployment compensation was extended, but not to those who have been unemployed for over 99 weeks.

3. Payroll taxes were reduced for one year by 2%. may economists believe that this tax cut will have a large effect because payroll taxes are regressive. Supporters of social security, however, worried that it would be difficult to undo this cut and that the action thus risks the program's solvency. This tax cut was, however, allowed to expire as planned.

4. The plan is expected to increase the national debt by about $900 billion.

A Fourth Stimulus and the Sequester

In December 2011, Congress and President Obama agreed to extend the payroll tax cut and additional unemployment compensation through the end of 2012. Part of this deal included enacting automatic changes to fiscal policy scheduled to take effect on 1/1/2013. These automatic changes include $491 billion in spending cuts through 2021 to both defense and non-defense spending.

The original idea behind the automatic cuts, known as sequestration, was that neither political party really wanted them. The hope was that this would help motivate a genuinely bi-partisan agreement to change the country's long term fiscal trajectory.

Although sequestration was delayed two months, it did occur on March 1, 2013. Sequestration represented significant cuts to spending as well as a major tax increase due to the expiration of the payroll tax holiday. These cuts will almost surely reduce economic growth in the short run. They have, however, slowed the projected growth rate of the national debt which is now nearly flat over a ten year horizon

The Automotive Bailout

The three largest American automakers: Ford, General Motors, and Chrysler, once dominated the global car market. With the rise of Asian and European automakers, however, the Big 3 began to lose market share both abroad and in the United States.

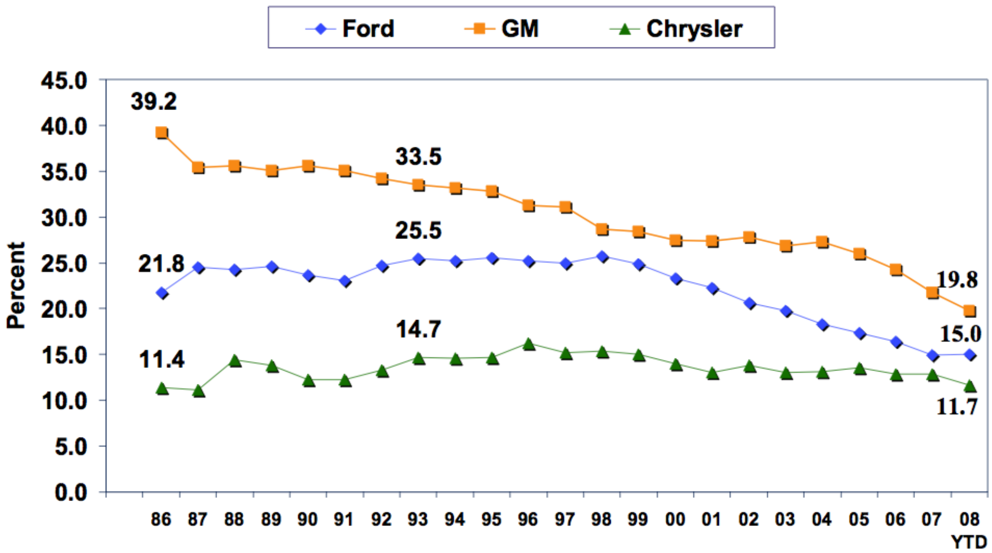
When Japanese cars first began appearing en-masse in the United States, these cars (unfairly) had a reputation for poor quality. Over-time, however, perceptions reversed and by the 1990s, Japanese cars were seen as higher quality than their American competitors.

The financial crisis badly hurt the American Big 3. Decreased aggregate demand passed through to the automotive market. Also, higher default rates reduced the profits of automakers' finance divisions. By the Spring of 2009, all three firms were in financial distress. Ford managed to recover on its own. GM and Chrysler went into a government assisted (hence the term "bailout.") bankruptcy. Briefly, we will look at a few of the causes of the Big 3's troubles. The following chart shows the Big 3's declining market share:[6]

1. Poor response to increased competition. When superior Japanese automobiles arrived in the United States, the first response was not to compete through improved quality. Detroit instead attempted to boost demand for American models by appealing to consumers' patriotism (e.g. "Buy American" campaigns). In one case, an American automaker banned Japanese cars from the firm's parking lot. Detroit's reputation for poor quality thus become entrenched. Even though the quality gap between Detroit and Japan had narrowed by 2009, a significant segment of the market would not even consider American models due to perceived low quality.

[6] Source: Center for Automotive Research.

Table 3: Big 3 Share of North American Automotive Market



2. Fuel price shocks. American vehicles, on average, get fewer miles per gallon than Japanese models. In particular, American automakers were heavily reliant on fuel inefficient SUVS, and trucks. When fuel prices spiked (which actually occurred before the financial panic) and when decreased employment and incomes made consumers more cost conscious, customers substituted away from many American models.

3. Poor management. Steven Rattner worked for the Treasury Department as the "car czar." Read his article in *Fortune*. He has the following quote regarding GM's management:

> Everyone knew Detroit's reputation for insular, slow-moving cultures. Even by that low standard, I was shocked by the stunningly poor management that we found, particularly at GM, where we encountered, among other things, perhaps the weakest finance operation any of us had ever seen in a major company.
>
> For example, under the previous administration's loan agreements, Treasury was to approve every GM transaction of more than $100 million that was outside of the normal course. From my first day at Treasury, PowerPoint decks would arrive from GM

> (we quickly concluded that no decision seemed to be made at GM without one) requesting approvals. We were appalled by the absence of sound analysis provided to justify these expenditures.
>
> The cultural deficiencies were equally stunning. At GM's Renaissance Center headquarters, the top brass were sequestered on the uppermost floor, behind locked and guarded glass doors. Executives housed on that floor had elevator cards that allowed them to descend to their private garage without stopping at any of the intervening floors (no mixing with the drones).
>
> In my relatively few interactions with chairman and CEO Rick Wagoner, I found him to be likable, dedicated, and generally knowledgeable. But Rick set a tone of "friendly arrogance" that seemed to permeate the organization.

He is equally harsh regarding Chrysler:

> Badly run after Daimler bought it in 1998, Chrysler had been sold nine years later at the peak of private equity mania to Cerberus Capital Management. Larded up with debt, hollowed out by years of mismanagement, Chrysler under Cerberus never had a chance. We marveled, for example, that Chrysler did not have a single car that was recommended by Consumer Reports.

4. High labor costs. Several Japanese automakers have opened production facilities in the American South. While often exaggerated, it is surely true that labor costs for Detroit are higher than for its Japanese competitors. A major difference between the two is that Detroit is heavily unionized through the United Auto Workers (UAW), while Japanese production in the United States is not.

The Bush administration had directed $17 billion of TARP money to GM and Chrysler to keep them in business. By the Spring of 2009, however, it was clear that this was inadequate. Without government assistance, GM and Chrysler would very likely fail and be liquidated. The government considered 4 options.

1. Public sentiment was to allow both firms to fail. GM and Chrysler poor performance is not exceptional, poorly run firms fail and go out of business all the time in an efficient economy. Saving either firm would create both morale hazard and disrupt the free market. Unlike with financial institutions, it was harder to justify government intervention as necessary to preserve access to credit.

2. Save both firms through the bankruptcy code. By managing a bankruptcy, both firms could be reorganized, incompetent management could be replaced, and poor labor contracts could be renegotiated. The main argument in favor of saving both firms was their size. Liquidation would have led to a significant increase in unemployment resulting from laid-off autoworkers as well as in related industries (e.g. the automakers' suppliers).

3. Save GM, but not Chrysler. As bad off as GM was, Chrysler was worse. Austan Goolsbee, a key economic adviser to President Obama, argued that allowing Chrysler to fail would boost sales of both GM and Ford.

4. Save both, but not through bankruptcy. Policy makers were concerned that consumers would not buy cars from a bankrupt firm (consumers may worry about the validity of their warranties). Also, re-organization through bankruptcy often takes years. The problem with this approach is that it would have been harder to replace management and lower labor costs.

The government ultimately decided on #2 (they came very close, however, to allowing Chrysler to fail). Rattner writes:

> We were all shocked to realize that when the collateral damage of a Chrysler shutdown was factored in (like lost jobs at dealers and suppliers), the short-term effect of a Chrysler shutdown could be 300,000 more unemployed, similar to what was lost across the entire economy in the month of July. And with the memory of Lehman's collapse

still fresh, we imagined the potential for other systemic risk. That cemented matters for Larry and me.

The bailout and bankruptcies included the following provisions:

1. The government injected about $50 billion of new capital into GM, and $12 billion into Chrysler to allow them to continue operations. The government was to sell its ownership after the companies recovered.

2. Several production lines were sold or shut down (e.g. Saturn, Saab, and Hummer).

3. The firms debt was renegotiated and reduced (including their obligations to the UAW).

The final estimate for the automotive bailout put the cost to the taxpayer at $16.6 billion.[7] The The Center for Automotive Research claims that the bailout saved 1.5 million jobs. The exact figure, however, is debatable. I have not seen a convincing estimate and personally suspect that 1.5 million is too high.

[7] Source: January 2015 TARP Special Inspector General Report.