



HUGE RETURN ON TAXPAYER INVESTMENT

Benefits of the Auto Restructuring Plan Vastly Exceeded the Costs

BY ROBERT E. SCOTT

The return on investment for the public from the restructuring of the domestic auto industry was extraordinary. Federal, state, and local governments saved between \$10 and \$78 for every dollar invested in the auto industry restructuring plan. Federal taxpayers are likely to recoup most or all of their investment in GM, and will enjoy a net gain of at least \$61 billion on their \$5 billion to 7 billion investment in the auto industry recovery plan. This was a very savvy investment, at a time when failure to intervene would have been catastrophic for the domestic economy.

The General Motors Company completed the largest global initial public stock offering (IPOs) in history this week (November 18). The U.S. government sold nearly half its stock holdings, which puts it well ahead of schedule for exiting from ownership of the company. The proceeds from the stock sales alone (Thursday's and the expected returns from the ultimate sale of its remaining 500 million shares in the company) will pay back most or all of the U.S. government's initial \$49.5 billion investment in GM (Welch, Spears and Trudell 2010). Overall, the government may lose only \$5 billion to \$7 billion on the entire recovery plan (Trudell 2010) after GM and Chrysler are privatized again. This report, however, shows that this investment resulted in far larger savings to the economy, and to federal, state, and local budgets. Without the aid of the government-assisted restructuring, one or more of the Big 3 domestic automakers would have collapsed. Between 1.1 and 3.3 million domestic jobs would have been lost, resulting in the loss of 0.5% to 3.0% in GDP in each year between 2009 and 2011, which would have sharply increased federal, state, and local budget revenues. This report shows that the auto recovery plan resulted in net savings to the federal government of between \$70 billion to \$389 billion in this period, and an additional \$24 billion to \$126 billion in savings to state and local government. In other words, the \$5 billion to \$7 billion not recouped via stock sales and loan repayment is offset many times over by the \$94 billion to \$515 billion in net savings to government.

Potential economic impacts of the auto crisis

If one or more of the Big 3 U.S.-based auto producers had been allowed to fail, it would have resulted in a complete shut-down of the domestic auto industry for a year or more, numerous studies and commentators estimated.¹ This conclusion was based on two observations. First, given the financial crisis and the uncertainty about recovery in the auto industry, it was highly unlikely that any bankrupt automaker would be able to re-organize under Chapter 11 of the bankruptcy laws (Zandi 2008). The key concern was that they would be unable to obtain "debtor-in-possession" financing needed to

TABLE 1

**Projected economic impacts of auto industry collapse
(without government-assisted restructuring), 2009-11**

	2009	2010	2011
Projected impacts on employment (jobs)			
<i>White House, Office of The Press Secretary (2008)*</i>	-1,100,000	-669,073	-449,222
<i>Center for Automotive Research (CAR 2008)</i>			
<i>Worst-case scenario (1)</i>	-2,951,344	-2,462,016	-1,771,563
<i>Best-case scenario (2)</i>	-2,462,375	-1,497,734	-1,005,594
<i>Economic Policy Institute (2008)**</i>	-3,309,700	-2,760,957	-1,986,668
Estimated impacts on GDP*** (percentage points of GDP)			
<i>White House, Office of the Press Secretary (2008)*</i>	-1.10	-0.67	-0.45
<i>Center for Automotive Research (CAR 2008)</i>			
<i>Worst-case scenario (1)</i>	-2.95	-2.46	-1.77
<i>Best-case scenario (2)</i>	-2.46	-1.50	-1.01
<i>Economic Policy Institute (2008)**</i>	-3.31	-2.76	-1.99
GDP: Nominal dollars (billions)****			
<i>White House, Office of the Press Secretary (2008)*</i>	-\$156.6	-\$97.7	-\$67.3
<i>Center for Automotive Research (CAR 2008)</i>			
<i>Worst-case scenario (1)</i>	-\$420.2	-\$359.3	-\$265.6
<i>Best-case scenario (2)</i>	-\$350.5	-\$218.6	-\$150.8
<i>Economic Policy Institute (2008)**</i>	-\$471.2	-\$403.0	-\$297.8

* Assumes employment recovers at rate of CAR best case scenario in 2010 and 2011.

** Assumes employment recovers at rate of CAR scenario 1 in 2010 and 2011.

*** Using the rule of thumb that a 1% increase in GDP increases payroll employment by 1 million jobs (Bivens and Fieldhouse, 2010 and CBO 2010).

**** Based on baseline CBO projections of GDP for 2009-2011 (CBO 2010a).

(1) Assumes 100% reduction in big three production in 2009, employment recovers slowly in 2010 and 2011.

(2) Assumes that only one of big three firms fails in 2009, leading to 100% shutdown in 2009 and a 50% recovery in 2010 and 2011.

SOURCE: Economic Policy Institute analysis of Scott (2008), White House Office of the Press Secretary (2008), and Cole, et. al. (2008).

restart operations. Another important factor was the near certainty that customers would abandon any company in bankruptcy, destroying sales and any hope for its future.

As a result, these companies would likely have ended up in Chapter 7 bankruptcy in which most or all of the employees would have lost their jobs and all the assets would have been liquidated. In addition, and more important, the ripple effects of a shutdown would have resulted in a wave of bankruptcies and similar shutdowns in the auto-parts industries. All foreign and domestic auto assemblers in the United States use many of the same suppliers, so a shutdown by any one of the Big 3 would have brought essentially the entire domestic auto industry to a complete halt for a year or more.

Table 1 reviews the likely effects of the collapse of one or more domestic automaker in 2009, and estimates the likely economic impacts of these events. The Bush White House's Office of the Press Secretary (2008) estimated that the collapse of one or more automakers would result in the loss of 1.1 million U.S. jobs in 2009. The Center for Automotive Research (CAR 2008) estimated that 2.5 to 3.0 million jobs would have been lost in 2009, and Scott (2008) estimated that 3.3 million jobs were at risk.

Given the state of the economy, and the fact that unemployment levels in the auto industry and throughout the economy remained very high between 2009 and 2010 (and are projected to remain at current levels for at least the next year), it is very likely that a collapse of the auto industry would have resulted in an even deeper recession. The CAR (2008) report estimated that 61% to 83% of auto workers would have remained unemployed in 2010, and 41% to 60% would have been unemployed in 2011.

This report uses these shares to estimate the numbers of jobs lost in 2010 and 2011 according to the White House (2008) and Scott (2008) studies, which did not project unemployment into future years. The low-end assumptions are used for the White House estimates, and the high-end assumptions with the Scott (EPI) estimates. Table 1 estimates that a shutdown of one or more U.S. automakers would have resulted in the loss of about 1.1 million to 3.3 million jobs in 2009, 700,000 to 2.8 million jobs in 2010, and 400,000 to 2 million jobs in 2011, as shown in the top portion of Table 1.

Impacts on GDP

Table 1 also estimates the impact of unemployment on GDP using fiscal multipliers from the CBO (2010), as developed in Bivens and Fieldhouse (2010). These multipliers use the rule of thumb that a 1% increase in GDP increases payroll employment by 1 million jobs (and vice versa). This estimate is conservative for the auto industry, which is a high-productivity sector; workers in the auto industry generate higher-than average levels of value added per worker, so their proportionate impact on GDP is likely higher than the CBO average.

Table 1 estimates that the permanent shutdown of one or more domestic automaker in 2009 would have reduced GDP by 1.1% to 3.3% in 2009, by 0.7% to 2.8% in 2010, and by 0.5% to 2.0% in 2011, as shown in the 2nd block of results in Table 1. Using CBO (2010a) baseline projections of GDP for 2009-11, these results translate into the loss of an additional \$157 billion to \$471 billion in GDP in 2009, \$98 billion to \$403 billion in 2010, and \$67 billion to \$298 billion in 2011.

Impacts of an auto shutdown on government budgets

Table 2 examines the impacts of these increases in unemployment and lost GDP on government budgets, specifically in three areas: Federal, state and local, and unemployment insurance.

Bivens and Fieldhouse (2010) use CBO (2010) to develop a rule of thumb that each dollar increase in actual GDP relative to potential GDP has been associated with a \$0.375 reduction in budget deficits (and vice versa). Hence, the reductions in GDP shown in the bottom section of Table 2 would result in the federal budget deficit increases shown in the top section of Table 2. (These results are summarized in Table 3, below.)

Follette, Kusko, and Lutz (2009) estimate a relationship between state and local budgets and changes in state GDP. They develop a rule of thumb that for each one dollar change in state GDP, the state budget surplus will change by \$0.1.² Since national GDP equals the sum of GDP at the state level, the national estimates of the impact of an auto shutdown on GDP are used to estimate the impacts on state and local finances. Combining the GDP estimates in Table 1 with the Follette et al. (2009) rule of thumb suggests that state budget balance would have declined by \$16 billion to \$47 billion in 2009, \$10 billion to \$40 billion in 2010, and \$7 billion to \$30 billion in 2011.³

In addition, states would be liable for at least the first 26 weeks of unemployment insurance (UI) compensation. Using data from the BLS on the average weekly unemployment compensation in the 50 states (simple average for all

TABLE 2

Auto industry collapse: Costs avoided by the recovery plan (\$billions)

	2009	2010	2011
Impact on federal budget* (nominal, billions of dollars)			
<i>White House, Office of the Press Secretary (2008)</i>	\$58.7	\$36.6	\$25.3
<i>Center for Automotive Research (CAR 2008)</i>			
<i>Worst-case scenario (1)</i>	\$157.6	\$134.7	\$99.6
<i>Best-case scenario (2)</i>	\$131.5	\$82.0	\$56.5
<i>Economic Policy Institute (2008)</i>	\$176.7	\$151.1	\$111.7
Impact on state budget surpluses**			
<i>White House, Office of The Press Secretary (2008)</i>	\$15.7	\$9.8	\$6.7
<i>Center for Automotive Research (CAR 2008)</i>			
<i>Worst-case scenario (1)</i>	\$42.0	\$35.9	\$26.6
<i>Best-case scenario (2)</i>	\$35.1	\$21.9	\$15.1
<i>Economic Policy Institute (2008)</i>	\$47.1	\$40.3	-\$29.8
Impact on state unemployment insurance payments***			
<i>White House, Office of the Press Secretary (2008)</i>	\$8.3		
<i>Center for Automotive Research (CAR 2008)</i>			
<i>Worst-case scenario (1)</i>	\$22.2		
<i>Best-case scenario (2)</i>	\$18.5		
<i>Economic Policy Institute (2008)</i>	\$24.9		

* Using the rule of thumb that a 1% increase in GDP increases the federal budget surplus by an amount equal to 0.375 percentage points of GDP (Bivens and Fieldhouse, 2010 and CBO 2010a).

** Using rule of thumb that a 1% increase in state GDP increases state budget surpluses by 10% (Follett, Kusko and Lutz (2009).

*** Based on average weekly unemployment compensation (BLS data) for first 26 weeks covered by the States.

SOURCE: Economic Policy Institute analysis of Scott (2008), White House Office of the Press Secretary (2008), and Cole, et. al. (2008).

states of \$289.04/week), the bottom of Table 2 reports estimates of total state unemployment liabilities for the workers laid off in 2009. These results assume that states are liable for only the first 26 weeks of unemployment compensation, and that the federal government pays for extended benefits. Workers are currently eligible for up to 73 weeks of extended UI benefits, depending on unemployment rates in their state.

Table 3 summarizes the estimated total impact of an auto industry shutdown on federal, state, and local government budgets over the three-year period (2009-11) examined in this report. Federal budget deficits would have increased somewhere between \$70 billion and \$389 billion; state and local budget revenues would have declined between \$24 billion and \$126 billion. These estimates are adjusted to correct for the budgetary consequences of actual changes that did occur in auto industry employment between 2007 and 2010, as noted in Table 3.

Former head of the U.S. Automotive Task Force Steve Rattner estimated that the government may lose only \$5 billion to \$7 billion on the entire recovery plan (Trudell 2010) after the auto companies are privatized again. Thus,

TABLE 3

Summary: Net, total costs avoided by the auto recovery plan, 2009-2011

Total, 3-year impact on federal and state budgets, net of actual budget impacts*	Federal	State & local
<i>White House, Office of the Press Secretary (2008)</i>	\$69.7	\$24.4
<i>Center for Automotive Research (CAR 2008)</i>		
<i>Worst-case scenario (1)</i>	\$341.0	\$110.6
<i>Best-case scenario (2)</i>	\$219.0	\$74.5
<i>Economic Policy Institute (2008)</i>	\$388.6	\$126.0

* Net of the actual impact of auto industry employment changes that actually occurred. Approximately 327,000 jobs in auto assembly, stamping and parts production were lost between 2007 and 2009; approximately 17,000 jobs per year have been recovered, so the actual increase in unemployment increased the federal budget deficit by approximately \$51 billion (over three years), and state budget deficits by \$16 billion. These amounts have been deducted from deficit savings shown in Table 2.

SOURCE: Economic Policy Institute analysis of Scott (2008), White House Office of the Press Secretary (2008), and Cole, et. al. (2008).

Federal taxpayers will enjoy a net gain of at least \$63 billion on their \$5 billion to \$7 billion investment in the recovery plan. The government is likely to recoup most or all of its investment in GM, based on the expected returns from the sale of the stock it holds in the company (Welch, Spears, and Trudell 2010).

Conclusion

There is tremendous demand for the GM stock IPO (Welch, Spears and Trudell 2010). In retrospect, it was a savvy investment in many ways. Without this investment, an additional 1 to 3 million workers would have been added to the unemployment rolls. The recession would have been substantially deeper, as output would have declined by an additional 1.1% to 3.3%, and those effects would have persisted through at least 2011. The ultimate cost of the entire auto industry recovery plan to U.S. taxpayers will be only \$5 billion to \$7 billion. This expense has resulted in net savings to federal, state, and local governments of between \$94 billion and \$515 billion, a return on investment of between \$10 and \$78 per dollar invested in saving the industry. Furthermore, federal taxpayers alone enjoyed a net gain of at least \$61 billion on their \$5 billion to \$7 billion investment in the recovery plan. This was a wise investment, at a time when the alternative would have been catastrophic for the domestic economy.

Endnotes

1. See Table 1 for a summary of three major studies of the likely impacts of a collapse of the one or more domestic auto producers. Zandi (2008) also estimated that approximately 2.5 million jobs would be at risk if one or more domestic automakers had shut down. See also Bloom and Montgomery (2010).
2. This estimate includes the combined impacts of changes in spending and tax receipts. This estimate seems low, based on a review of Census data on state and local finances for 2008, which shows that sales, property and individual income tax receipts exceed 10% of state GDP for a number of states. Thus state expenditures on the first 26 weeks of unemployment insurance compensation are estimated here separately.
3. CAR (2008) developed their own estimates of the likely impacts of an auto industry shutdown on income tax receipts, social security tax receipts and transfer payments. The sum of these estimates ranged from \$108 billion to \$156 billion over the 2009-2011 period. These estimates are substantially smaller than the fiscal impact estimates for the CAR study shown in Tables 2 and 3 of this report. The estimates developed here are based on broader, economy-wide estimates based on the overall impact of a shutdown on GDP, while the CAR estimates were less inclusive and were based on income estimates for a average workers.

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