Memorandum

Date: December 8, 2008

To: Clients of BBK and Anderson Economic Group LLC
Interested Parties

From: Patrick L. Anderson, Principal & CEO, Anderson Economic Group LLC
Kriss Andrews, Managing Director, Auto Industry Practice Lead, BBK

Re: Taxpayer Cost of Federal Financing of Auto Manufacturers Compared with Likely Costs of Bankruptcies in Industry

---

I. Purpose of this Report

The purpose of this report is to provide policymakers and taxpayers with an objective, independent assessment of the relative cost of two possible scenarios: a bridge loan or other financing provision by the US government to the "Detroit 3" automakers, or a near-term bankruptcy by one or more of the automakers. While there are other policy issues that the auto industry and Congress should consider, the relative taxpayer cost of these two scenarios is critical.

II. Overview of Methodology

The analysis was conducted using a conservative and defined methodology:

- The direct taxpayer costs of multiple scenarios for a bridge loan, and a bankruptcy, were estimated over a two-year period.
- These costs included the initial outlay for any Federal bridge loan, less interest payments and gains on warrants to the government, and an allowance for loss equal to the amount unpaid after two years; and foregone tax revenue from unemployed workers (net of taxes on replacement earnings), increased costs to state and federal unemployment trust funds (net of increased payments), and additional burdens on the PBGC.
- The mid-range bridge-loan scenario involved an outlay of $30 billion, for which the US government received interest payments and gains on warrants, but only half of which was repaid within two years.
- The bridge-loan scenario incorporated significant employment reductions, plant closings, and brand eliminations, broadly consistent with the plans submitted to Congress on Dec. 2. We included the direct tax effects of these changes in the same manner as for the bankruptcy scenario.
- We modeled the likely outcome of a bankruptcy using the business judgment we provide to our clients in these matters. In particular, we took into account the franchised nature of automobile retail sales, and the warranty requirements that consumers consider when purchasing.

- Our mid-range bankruptcy scenario involves two, but not all of the Detroit 3, initially pursuing a reorganization under Chapter 11 and then going into Chapter 7 liquidation.
- We recognize the very real possibility that a bankruptcy by one or two original equipment manufacturers ("OEMs") could, through supplier bankruptcies and through loss of consumer confidence in all domestic automakers, pull all three into bankruptcy, along with many Tier I suppliers.
- For each scenario, we carefully avoided double-counting the potential costs or benefits, for example by excluding the earnings of unemployed workers that found new jobs, and by including income taxes paid on unemployment benefits. We also limited the additional burden to the Federal government by taking into account the existing pension fund assets available to fund retirement benefits for Detroit 3 employees.
- There were certain categories of costs we did not include in the total taxpayer cost, but which are likely to be considerable. These include: lost investment earnings from asset price collapses, lost residual values on financed or leased automobiles, lost principal on bonds issued by bankrupt automakers and suppliers, additional expenditures by state and federal social service programs, and others.

III. Conclusions

- Even under the bridge-loan scenario, we expect significant reductions in employment and income, with resulting reductions in state and federal tax revenues. However, the losses of employment, income, and tax revenue under a bankruptcy scenario are unequivocally much higher.
- In particular, we expect the direct costs to the taxpayers of a bankruptcy, even under our mid-range scenario involving only two of the Detroit 3 going into bankruptcy, to be *more than four times that of the cost of a Federal bridge loan that was only partially repaid.*
- Note that this is a very conservative estimate that incorporates a reduction in employment under both scenarios, allows for some portion of the domestic auto manufacturing base to survive even a bankruptcy, and considers only directly-caused wage and tax losses.
- Moreover, the immediate impact of the collapse of two automotive manufacturers would be an industrial gridlock that would further exacerbate our present economic crisis, and would likely result in a shutdown of nearly all auto production in the US for some time period, even at non-bankrupt automakers assembling in the US. However, automakers assembling in Europe, Japan, China, and Korea would be much less affected, and would likely to be the beneficiary of shifts in consumer buying patterns that could persist for several years.
- The other direct economic costs of a bankruptcy could be similarly distressing. These could include additional debtor-in-possession financing of an already bankrupt auto maker by the Federal government, professional fees for bankruptcy that are paid out of a shrinking corpus that would otherwise fund retirement benefits and warranty work, and traumatic costs to affected communities.
- Credit and related markets would be further disrupted, with housing, the value of securities such as outstanding bonds of the automakers and suppliers, and a meaningful amount of commercial and automotive assets further degraded in value.
- The inescapable outcome of a bankruptcy scenario is the permanent shifting of some share of manufacturing employment and technology expertise to foreign countries. This occurs even if, as we assume in this analysis, that a portion of the employment from a bankrupt US auto maker shifts to another domestic or transplant operation in the US.

Please see Table A-1, "Comparison: Bridge Loan vs. Bankruptcy," on page 4.

IV. Employment Effects

- Active employment for the Detroit based OEMs exceeds 225 thousand, with an additional 865 thousand employed in contractually-related dealerships and parts manufacturers. In addition, about two indirect jobs are tied to each of the above jobs. Note that this does not include all jobs that are related to the industry.

- Even with federal support and a successful restructuring, nearly 500 thousand one-year jobs would be lost, considering losses at the OEMs, their suppliers and dealers, and other directly-affected industries. These figures are net of allowances for re-employment.
- Under our mid-range bankruptcy scenario, which contemplates two of the Detroit-based OEMs failing, the job losses would total over 1.8 million one-year jobs, again after allowances for re-employment.

Please see Table A-2, “Employment Assumptions,” on page 5, and Table A-3, “Employment Impacts in Scenarios Analyzed,” on page 6.

V. Tax Effects of the Failure of the Domestic Automotive Industry

- States would see their revenues reduced by nearly $12 billion if there is a failure in the domestic automotive industry; restructuring outside of bankruptcy would reduce state coffers by a smaller $2.3 billion.
- Federal tax revenue, considering only income and payroll taxes, would be reduced by some $40 billion by a collapse of two of the domestic manufacturers; a restructuring of the industry outside of bankruptcy would degrade federal revenues by $8.8 billion.
- Unemployment trust funds would be degraded by some $8.3 billion under the mid-range bankruptcy scenario; and by a much smaller $3.3 billion if the industry restructures outside of bankruptcy.

Please see Table A-4, “Lost Tax Revenue Due to Employment Reductions,” on page 7.

VI. Independence of Opinion; Limitations and Disclaimer

This report represents the independent judgement of the authors, and was not sponsored by any of the auto manufacturers discussed in the report. However, we note that our clients have included, and may include in the future, governments affected by the events discussed in this report, as well as auto manufacturers, dealers, suppliers, and customers of the automobile industry.

This report, including any updates and exhibits, does not constitute investment advice, and includes conjectures and forecasts of future events that are uncertain and inherently unknowable. The authors assume no liability for decisions made using, or disregarding, the information in this report.

VII. About the Authors

Anderson Economic Group, LLC is a consulting firm with offices in East Lansing, Michigan and Chicago, Illinois. The company’s consulting practice areas include Finance & Business Valuation; Public Policy; and Market & Industry Analysis. Founded in 1996 by Patrick L. Anderson, the firm’s client list includes numerous state governments, local governments, universities, trade associations, and large and small businesses across the US and in a handful of other countries. The company’s informative web site, which contains a number of reports available for free download as well as descriptions of consulting services, can be accessed at: http://www.andersoneconomicgroup.com.

BBK is an international business advisory firm that has extensive experience in the management of troubled companies and their varied constituents, and has represented customers, debtors and creditors in the automotive and many other industry sectors, including cases involving every automotive OEM and the vast majority of major suppliers. BBK maintains offices in Detroit, Chicago, Frankfurt, Nashville, New York, and Shanghai, China. Kriss Andrews and BBK have been involved in hundreds of automotive supplier restructurings in the last decade. BBK has unparalleled experience in this arena. The BBK website can be accessed at: http://www.e-bbk.com.

Comparison: Bridge Loan vs. Bankruptcy
U.S. Taxpayer and Other Costs (First 2 Years)
$ Billions

U.S. Taxpayer Costs	Bridge Loan Mid-Range Scenario (a)	Bankruptcy Mid-Range Scenario (b)
Cost of Gov't Bridge Loan (2 Years)		
Initial Outlay	$ 30.0	
Less: Interest Earnings	(3.0)	
Less: Gain on Warrants	(10.0)	
Less: Repayment (Partial)	(15.0)	
Net Cost of Bridge Loan	$ 2.0	
Lost Tax Revenues / UI Benefits Paid (2 Years)		
Federal Income Taxes	4.3	19.8
Social Security Taxes	4.5	20.5
State Income Taxes	1.1	5.1
State Sales Taxes	0.5	2.4
Property Taxes	0.5	3.6
State Unemployment Taxes	0.2	0.8
Benefits Paid Out From UI Fund	3.3	8.3
PBGC (Underfunded Pensions)	-	5.4
Subtotal Tax & PBGC Costs	14.4	65.9
Total Cost to U.S. Taxpayer	**$ 16.4**	**$ 65.9**

Other Direct Economic Costs	Bridge Loan	Bankruptcy
Impact to Individuals and Families (2 Years)		
Net Pre Tax Wage Loss	24.0	109.9
Loss of Retiree Health Benefits	12.9	39.2
Loss of Employee Health Benefits	4.9	18.3
Impact to Credit Markets (One Time Losses)		
Further Declines in Housing Values, Affected Communities	15.3	51.0
Loss of Value, Liened Vehicles	5.1	17.0
Investment Losses in OEM Bonds	-	6.6
Loan Losses on Trade Payables	-	4.3
Possible Cost of Supporting Two Automakers in Bankruptcy		36.0
Professional Fees for Bankruptcy Proceedings (2 Years +)	-	5.0

National & Other Economic Implications	Bridge Loan	Bankruptcy
National Implications		
Loss of Significant US Industrial Capability	**Moderate**	**High**
Permanent Shift of Manufacturing Jobs Offshore	**Moderate**	**High**
Dependence on Foreign Companies / Technology	**Low**	**High**
Increased Cost to Government Support Programs	**Moderate**	**High**
Economic Implications		
Gridlock for Auto Suppliers / Other Manufacturers	**Moderate**	**High**
Inventory & Other Losses to Car Dealerships	**Moderate**	**High**
Warranty Reserves Required	**Low**	**High**

(a) Assumes restructuring by each of the automakers broadly consistent with plans submitted to Congress.

(b) Assumes 2 of the 3 automakers seek Chapter 11 protection under the Bankruptcy Code and eventually convert the cases to Chapter 7 liquidations.

Sources: Analysis by BBK and AEG LLC

Table A-2

Employment Assumptions in Domestic Automotive Industry, Mid-2008

OEM Employment, Nov. 2008			
Chrysler	51,500		
GM	104,000		
Ford	72,000		
Total Big 3 Employment		**227,500**	
Other Direct Auto Industry Employment, 2008			
Suppliers, Estimate (1.5 of OEM)	341,250		
Dealers, Estimate (2.3 times OEM employment)	523,250		
Total Other Auto Industry Employment		**864,500**	
Total Employment: OEM, Dealers, and Suppliers			**1,092,000**
Indirect Employment			
After review of multipliers for industry; using 2 instead of 4-6			**2,184,000**
TOTAL DIRECT AND INDIRECT EMPLOYMENT (Domestic Auto Industry)			**3,276,000**

Source: Anderson Economic Group, LLC

Table A-3

Employment Impacts in Scenarios Analyzed

	Scenario 1: Re-structuring with Federal Bridge Loan			Assumptions
	Year 1	Year 2	Total	
OEM Losses, Big Three (direct losses)	34,125	19,338	53,463	15% of losses for industry Year 1; 10% loss in Year 2
Supliers and Dealers (direct losses)	129,675	73,483	203,158	15% of losses for industry Year 1; 10% loss in Year 2
Other Industry (indirect losses)	218,400	98,280	316,680	10% loss in Year 1; 5% loss in Year 2
Total Direct and Indirect Employment Losses in Auto Industry	382,200	191,100	573,300	
Less: New jobs in other industries; move to other auto makers	(57,330)	(28,665)	(85,995)	Account for 15% job replacement for each year's new employment losses
Net New Job Losses Each Year	**324,870**	**162,435**	**487,305**	
Unemployed Workers Each Year; Assumes 50% of workers unemployed in Year 1 find employment in Year 2.	*324,870*	*324,870*		Unemployed workers each year equals the new job losses each year plus the unemployed from the year below. We assume 50% of laid off workers in Year 1 find employment in Year 2.

	Scenario 2: Two OEMs Go to Chapter 11, Not Successful--Goes to Ch 7; Third OEM Reduces Employment			Assumptions
	Year 1	Year 2	Total	
OEM Losses, Big Three (direct losses)	99,200	69,980	169,180	From AEG report, include 92,000 for GM and Chrysler, 10% of Ford in Year 1; 10% of remaining Ford in Year 2 and remaining GM and Chrysler not lost in Year 1. Assumes all employment lost by Year 2
Supliers and Dealers (direct losses)	259,350	151,288	410,638	Assumes losses of 30% in Year 1; Assumes another 25% loss in Year 2.
Other Industry (indirect losses)	873,600	458,640	1,332,240	Assumes 40% loss in Year 1 and 35% of remaining loss in Year 2.
Total Direct and Indirect Employment Losses in Auto Industry	1,232,150	679,908	1,912,058	
Less: New jobs in other industries; move to other auto makers	(6,161)	(101,986)	(108,147)	Accounts for 5% in Year 1; 15% in Year 2
Net New Job Losses Each Year	**1,225,989**	**577,921**	**1,803,911**	
Unemployed Workers Each Year; Assumes 50% of workers unemployed in Year 1 find employment in Year 2.	*1,225,989*	*1,190,916*		Unemployed workers each year equals the new job losses each year plus the unemployed from the year below. We assume 50% of laid off workers in Year 1 find employment in Year 2.

Table A-4

Lost Tax Revenue Due to Employment Reductions

Tax Impact Category	Scenario 1: Sucessful Re-org; Employment Reductions Two Year Time Period		Scenario 2: Two OEMs Go to Chapter 11, Not Successful--Goes to Ch 7; Third OEM Reduces Employment Two Year Time Period	
State Taxes				
Property Taxes	$	487,305,000	$	3,625,357,875
Sales Taxes	$	520,914,881	$	2,383,946,361
State Income Taxes	$	1,118,646,702	$	5,119,442,415
State Unemployment Taxes	$	204,668,100	$	761,325,154
Subtotal: State Taxes Lost	*$*	*2,331,534,683*	*$*	*11,890,071,805*
Federal Taxes				
Federal Income Taxes	$	4,320,952,927	$	19,774,670,274
Social Security Taxes	$	4,516,206,295	$	20,539,967,095
Subtotal: Federal Taxes Lost	*$*	*8,837,159,222*	*$*	*40,314,637,369*
Benefits Paid Out from UI Fund	$	3,294,181,800	$	8,287,687,330
Pension Guaranty Benefit Corporation	$	-	$	5,387,000,000
Tax Revenue Lost, UI Benefits Paid, PBGC Losses	**$**	**14,462,875,705**	**$**	**65,879,396,504**

Note: Does not include increases in public assistance payments, Medicaid, and other government benefits; reductions in business income taxes; or lost tax revenue from changes in industrial tax property base.

Source: Anderson Economic Group; BBK

Copyright; Permission to Reproduce in Entirety; Fair Use of Excerpts

CostCompBankrutpcy-AEGBBK.fm