Auto Industry Bailout Versus Cash for Clunkers
(CARS: Car Allowance Rebate System)

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Outline

• Context
• Bailout
• CARS
• Comparison of Bailout and CARS
• Discussion
Key Players

- United States Federal Government: Department of Treasury, Congress, Bush/Obama Administrations
- The Detroit Big Three: GM, Chrysler, Ford (GMAC)
- Taxpayers
Scene before Bailout and CARS

• Big Three reduced market shares
  – GM’s market share reduced from 53% in 1966 to 20% in 2008
• Inefficient management policies
• Previous bailout of Chrysler in 1980s
Time Line of Events

- **November 4, 2008**: President Bush pushes for $25 billion loan to auto industry.
- **February 17, 2009**: GM and Chrysler request additional $5 billion.
- **March 30, 2009**: President Obama insists on true change in management of automakers.
- **April to June 2009**: Automakers begin Chapter 11 bankruptcy protection proceedings.
- **July 24, 2009**: CARS program begins.
- **August 25, 2009**: CARS program ends because the $3 billion in funding has been spent.
Bailout Totals

GM: $50.4 billion
Chrysler: $12.5 billion
GMAC: $12.5 billion
Auto Bailout Total: $75.4 billion
TARP: $700 billion
Bailout Map

Source:
http://bailout.propublica.org/main/map/index
Big Three Across America
Bailout would not only help Detroit

Map from 2006
Bailout Requirements

General Motors

• Sustainable profitability
• Healthy balance sheets
• Operational restructuring
• Technology leadership

Chrysler

• Determined not to be viable as a stand-alone company
• Partnership with Fiat
  – Chrysler will benefit from Fiat’s advanced technology and efficient management structure
  – Still in the process due to additional government requirements
    • Stockholder Cash-outs

GMAC – Financial Services

• Continue to help buyers and dealers finance their purchases
• Must take-over Chrysler Financial
• By June 8, 2009 – Plan for repayment of loan to be submitted
  • $9.1B must be new capital
Discussion Questions

What would have happened *without* the recent automotive industry bailout?

What role did embedded policies in the Big Three play in their financial problems?
Cash for Clunkers

- $3 billion government rebate program
- $3,500 to $4,500 rebate depending on mpg improvement
- 700,000 new cars bought in less than 30 days
- $1 billion spent in less than one week
- Popular program
## Cash for Clunkers Eligibility

### What Are the mpg* and Vehicle Category Requirements?

<table>
<thead>
<tr>
<th>If my trade-in vehicle is a...</th>
<th>Then the new vehicle I buy must be a...</th>
<th>My new vehicle must get an mpg* of at least...</th>
<th>My new vehicle's mpg* must be higher than my trade-in vehicle's mpg* by...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passenger Automobile</strong> (must have an mpg* of 18 or less)</td>
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<td>22 mpg*</td>
<td>4-9 mpg*</td>
</tr>
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</tr>
<tr>
<td><strong>Category 2 Truck</strong>: (must have an mpg* of 18 or less)</td>
<td>Passenger Automobile</td>
<td>22 mpg*</td>
<td>4-9 mpg*</td>
</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>Category 2 Truck</td>
<td>15 mpg*</td>
<td>2-4 mpg*</td>
</tr>
<tr>
<td><strong>Category 3 Truck</strong>:</td>
<td>Category 2 Truck</td>
<td>15 mpg*</td>
<td>1 mpg*</td>
</tr>
<tr>
<td></td>
<td>Category 3 Truck</td>
<td>NA‡</td>
<td>2 mpg* or more</td>
</tr>
</tbody>
</table>

However, the new vehicle must be similar in size or smaller than the trade-in vehicle.
Scrappage Scheme

- Program in U.K. before U.S. Cash for Clunkers program
- Similar principles
- Trade-in based on weight (not mpg)
## History of Scrappage Programs

<table>
<thead>
<tr>
<th>Program Location</th>
<th>Stated Goal of Program</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>Reduce vehicle abandonment and reduce GHG emissions</td>
<td>1976 - present</td>
</tr>
<tr>
<td>U.S.: Los Angeles Region</td>
<td>Reduce criteria pollutant emissions</td>
<td>1990, 1993</td>
</tr>
<tr>
<td>Greece</td>
<td>Reduce criteria pollutant emissions</td>
<td>1991 - 1993</td>
</tr>
<tr>
<td>U.S.: Delaware</td>
<td>Reduce criteria pollutant emissions</td>
<td>1992</td>
</tr>
<tr>
<td>U.S.: Illinois</td>
<td>Reduce criteria pollutant emissions</td>
<td>1993</td>
</tr>
<tr>
<td>Hungary: Budapest</td>
<td>Reduce criteria pollutant emissions</td>
<td>1993 - present</td>
</tr>
<tr>
<td>Denmark</td>
<td>Reduce criteria pollutant emissions</td>
<td>1994 - 1995</td>
</tr>
<tr>
<td>France</td>
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<td>1994 - 1995</td>
</tr>
<tr>
<td>Ireland</td>
<td>Reduce criteria pollutant emissions</td>
<td>1995 - 1997</td>
</tr>
<tr>
<td>Norway</td>
<td>Reduce criteria pollutant emissions</td>
<td>1996</td>
</tr>
<tr>
<td>Canada: Vancouver</td>
<td>Reduce criteria pollutant emissions</td>
<td>1996 - present</td>
</tr>
<tr>
<td>Italy</td>
<td>Reduce criteria pollutant emissions</td>
<td>1997</td>
</tr>
<tr>
<td>Germany</td>
<td>Stimulate auto industry</td>
<td>2009 - present</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Reduce criteria pollutant emissions and stimulate auto industry</td>
<td>2009 - present</td>
</tr>
<tr>
<td>U.S.: Texas</td>
<td>Reduce criteria pollutant emissions</td>
<td>2009 - present</td>
</tr>
<tr>
<td>Austria</td>
<td>Stimulate auto industry</td>
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<tr>
<td>Portugal</td>
<td>Stimulate auto industry and reduce GHG emissions</td>
<td>2009 - present</td>
</tr>
<tr>
<td>Romania</td>
<td>Stimulate auto industry</td>
<td>2009 - present</td>
</tr>
<tr>
<td>Spain</td>
<td>Stimulate auto industry and reduce GHG emissions</td>
<td>2009 - present</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Stimulate auto industry and reduce GHG emissions</td>
<td>2009 - present</td>
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<tr>
<td>Cyprus</td>
<td>Stimulate auto industry</td>
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<tr>
<td>Slovakia</td>
<td>Stimulate auto industry</td>
<td>2009 - present</td>
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<tr>
<td>U.S. (CARS)</td>
<td>Stimulate auto industry and reduce GHG emissions</td>
<td>2009 - present</td>
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Allan et al. 2009
Cash for Clunkers
Fuel Economy Improvement

- Trade-in average mpg: 15.8
- New mpg: 24.9
- In August 2009, increased new car fuel economy by 0.9 mpg

DOE 2009
Cash for Clunkers
Economic Stimulus

- Stimulus interventions should be “timely, targeted, and temporary” with results that are “speedy, substantiated, and sustained”
- Tax rebate research
  - Not targeted
  - 50% to 60% of rebate spent within first 6 months
Cash for Clunkers Targeting

- How many of the 700,000 cars would have been purchased without the Cash for Clunkers program?

- Who is using Cash for Clunkers?
Cash for Clunkers Targeting

- Estimates of additional car sales due to Cash for Clunkers range from 200,000 to 400,000 (of 700,000 total).
Cash for Clunkers
Return on Investment

• $25,000 per new car x 700,000 estimated new cars purchased = $17.5 billion
• $25,000 per new car x 400,000 estimated additional car sales due to Cash for Clunkers program = $10 billion
• $25,000 per new car x 200,000 estimated additional car sales due to Cash for Clunkers program = $5 billion
Cash for Clunkers Criticisms

• Not meeting environmental goals
  • “Car scrapping initiatives are often mistakenly labeled as green because they subsidize the purchase of cars that are usually, more fuel-efficient than those they replace, but the schemes are by their nature wasteful and routinely fail to take into consideration the amount of energy required to build a vehicle in the first place.” - Andrew Davis

• Administrative complications
  • “On the other hand, the clunker program was overly complicated, a nightmare to manage for dealers and difficult to understand for consumers. I would give the pure sales impact of the program an A and the administration of the program a D.” - Jess Toprak
Cash for Clunkers
Other Effects

- Create interest in car-buying
- Alter car-buying preferences
  - Scrappage program in Spain
Discussion Questions

Is the Cash for Clunkers program a cost-effective stimulus program? Is the Cash for Clunkers program more effective for economic stimulus or for environmental benefit?

How could a Cash for Clunkers program target consumers who would not otherwise purchase a new car?
## Bailout Versus Cash for Clunkers

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<th>Cash for Clunkers</th>
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<tr>
<td><strong>Total Funding</strong></td>
<td>$73.35 Billion</td>
<td>$3 Billion</td>
</tr>
<tr>
<td><strong>Time Frame</strong></td>
<td>December 2008 to 2016</td>
<td>August 2009</td>
</tr>
<tr>
<td><strong>Direct Recipients of Funds</strong></td>
<td>General Motors, Chrysler, GMAC</td>
<td>Participating dealers and consumers (700,000 transactions)</td>
</tr>
<tr>
<td><strong>Social Goals</strong></td>
<td>Protect domestic jobs and companies.</td>
<td>Protect domestic jobs. Provide incentive to consumers to replace existing clunker with more fuel-efficient vehicle.</td>
</tr>
<tr>
<td><strong>Environmental Goals</strong></td>
<td>Continue corporate research and development operations in fuel-efficient and alternative-fuel vehicles.</td>
<td>Reduce carbon-dioxide emissions through increased fuel-economy of vehicle fleet.</td>
</tr>
</tbody>
</table>
Discussion Question

What other approaches could have been implemented to rejuvenate the mature United States automotive industry?