

BACKGROUND

Federal-Mogul is a global automotive parts manufacturer. It manufactures engine bearings, sealing systems, fuel systems, lighting products, pistons, ignitions, brakes, friction and chassis products. The Company is based in Southfield, Michigan. Its principal customers are original equipment manufacturers or "OEMs" (55%) and the aftermarket (45%).

The Company is primarily a roll-up of acquisitions that occurred in 1998 and 1999 including Fel-Pro (\$722 million in February 1998), T&N (\$2.4 billion in March 1998), Cooper Automotive (\$1.9 billion in October 1998), Glocker Dichsysteme (\$40 million in October 1998), Tri-Way Machine, Camshaft Manufacturing and Alcan (\$100 million in January 1999). As shown in the Company's key financial metrics in Exhibit A, these acquisitions dramatically increased the size of the business; but to fund them, the Company also increased its debt and interest expense.

The Company has significant market share in both its OEM and aftermarket business, as shown in the following three tables:

OEM MARKET

Business	Segment	Market Share		Key Customers
		NA	Europe	
Powertrain	Pistons	25%	31%	GM, Ford, C, PSA
	Rings	42%	77%	GM, Ford, C, BMW
	Bearings	51%	44%	GM, C, PSA, VW
	Valve Seats	50%	36%	GM, C, PSA
Sealing	Seals	43%	17%	GM, Cummins, PSA
	Gaskets	25%	21%	GM, C, PSA, VW
	SPG	73%	42%	Yazaki, Delphi
Friction		22%	29%	Bosch, TRW, Meritor

AFTERMARKET

Segments	Brand	Size	Mkt Share	Position
Gaskets	Fel-Pro	430	61%	#1
Chassis	Moog	640	50%	#1
Seals/Bearing	National/BCA	290	46%	#1
Wipers	Anco	216	41%	#1
Fuel	Carter	270	25%	#2
Ignition	Champion	620	23%	#2
Engine	Sealed Power	630	20%	#1
Brake	Wagner	1250	19%	#2

2001 Sales

Segment	Sales	EBITDA
Aftermarket	45%	40%
Powertrain	28%	34%
Sealing	11%	13%
Friction	6%	8%
Other	10%	5%

The critical mass, strong brand names and leading market share are the strengths of the Company. While the aftermarket business has been in a state of decline over the past few years, the latest quarterly sales numbers of aftermarket parts retailers have shown improvement. Industry analysts indicate that the peak repair needs for a car are eight years after a car is sold. Based on historical sales numbers, there is reason to be optimistic due to the increased SAAR levels of automobiles in the 1996-2000 timeframe. This may lead to an increase in aftermarket parts over the next several years. Skeptics maintain that vehicle parts are lasting longer and the current slide in the aftermarket business will continue. Several prominent sell-side industry analysts have recently projected that the aftermarket will decline by as much as 2% each of the next few years.

CUSTOMERS

The development of power systems, brake systems, and sealing systems has led Federal-Mogul to leading market share on a variety of platforms and among the top two global suppliers in several products. Because of its global presence and service of European and Asian OEMs, Federal-Mogul is well diversified. Sales to the Big 3 account for just 16% of sales, with its biggest customer (GM) at 6% of sales and Ford and Chrysler at about 5% each.

Customers continue to be supportive of the Company. Federal-Mogul continues to receive new orders from customers and has reported net new business of \$1.3 billion over the next five years. The Automotive OEMs are extremely savvy in American bankruptcy law and have teams to deal with problem suppliers. According to one Big 3 source, Federal-Mogul is "not even on the list of troubled suppliers." This indicates that the OEMs are comfortable with the status of Federal-Mogul and are more than willing to support the Company during the bankruptcy and award it new contracts.

FACTORS LEADING TO BANKRUPTCY

The Company filed for bankruptcy protection in October 2001. The most significant factor leading the Company's bankruptcy was its exposure to asbestos liability from some of the businesses it acquired. This issue will not be discussed in detail during this exercise, but the key point is that the Company had to make cash payments of around \$350 million in each of 2000 and 2001, which put severe strain on its liquidity. The bankruptcy process is intended to resolve the Company's current and future asbestos liabilities so that it can move forward.

At the same time as the Company faced an escalating asbestos liability crisis, the financial performance of the business deteriorated from its peak level of sales in 1999.

As the economic cycle turned in 2000 and 2001, the Company's sales shrunk and margins compressed. The Company's fixed cost structure creates operating leverage that works in investors' favor when sales are strong, but works against them in a downturn. Bankruptcy should provide an opportunity to rationalize certain fixed costs and implement plans to improve productivity and margins.

CAPITAL STRUCTURE BEFORE BANKRUPTCY

For the purpose of this exercise, assume that the Company has \$2.3 billion of bank debt, which is secured by substantially all the assets of the Company. Before the bankruptcy filing, the bank debt bore interest at Libor plus 250 basis points annually, but the Company had also hedged its exposure to fluctuations in the Libor rate with interest rate swaps that fixed Libor at 3.5%.

Assume that the Company has \$2.1 billion of unsecured bonds that are strictly subordinated to the bank debt. Before the bankruptcy filing, the bonds bore interest at rates ranging from 7.5% to 8.5% annually.

The Company appears to have ample liquidity to continue funding its operations during bankruptcy, which should minimize the risk of disruption to the business.

MANAGEMENT

In January 2001 Federal-Mogul hired Frank Macher as the new CEO and Chip McClure as the COO. Macher has 35 years of experience with 30 years at Ford and five years as CEO of ITT Automotive. McClure was COO of Detroit Diesel for three years and has spent the past fifteen years in a series of Automotive Senior Management positions. While both of these executives have extensive experience in the Automotive industry, turning around Federal-Mogul while at the same time dealing with an asbestos crisis was too much to handle prompting the October 1 filing. The Company has laid out a Six-Point plan to cut costs and improve profitability but has yet to show signs of progress. While it would seem that there is significant SG&A savings and overhead to cut, management will have a difficult time effecting change in a slowing economic environment.

FINANCIAL STATEMENTS/FORECAST

Management has provided some forecasts for sales and EBITDA, as shown on Exhibit B. As shown, the Company forecasts a mild recovery in sales for 2002 and a return to approximately 3-4% annual sales growth for 2003-2004, driven primarily by growth in the Powertrain and Sealing businesses. Economists are forecasting U.S. GDP growth to be around 2% for 2002 and in the 2-3% range from 2003 onward.

Although the Company may never see 17.8% EBITDA margins again, management projects 14-15% in the later years of its projections equating to \$858 million and \$964 million in 2004 and 2005. In the event that the Company is unable to achieve 15% EBITDA margins, it should at least be able to achieve 200-300 basis points of margin improvements as it gets its costs in line. The Company expects most of its EBITDA margin improvement to come from maintaining or reducing operating expenses while sales grow. The Company does not necessarily expect to see gross margin

improvements, however there may be a degree of variance from management's projections depending on how commodity prices and input costs change in the future.

Management has given guidance that its ordinary-course capital expenditures should be in the range of \$350-400 million annually from 2002 onward. The Company has had to be relatively cautious with capital expenditures in recent years because of the strain of its asbestos obligations, so a greater degree of investment may be required if sales recover faster than projected.

Management has identified several incremental initiatives to restructure operations and improve productivity, shown in Exhibit C. The new CEO has credibility in the marketplace; historically, however, the Company has been overly optimistic and missed financial targets for the last two years.

COMPARABLE ANALYSIS/COMPETITORS

Federal-Mogul competes with large and small suppliers of product in every line of its business. The industry is highly competitive and players win or lose new contracts based upon quality, price, engineering ability, deliverability and relationships.

A table of comparable companies is shown in Exhibit D. Assume that industry convention is to value companies on the basis of their 2003 EBITDA, although you may try to argue for a different approach in the negotiation if it suits your purpose.

Federal-Mogul Corporation
Historical Financials

\$ millions

Exhibit A

	<i>Actual</i>					<i>Forecast</i>		
	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>
Net Sales	1,807	4,469	6,488	6,013	5,466			
Cost of Goods Sold	<u>1,381</u>	<u>3,290</u>	<u>4,709</u>	<u>4,596</u>	<u>4,355</u>			
Gross Profit	426	1,179	1,778	1,417	1,111			
Operating Expenses	<u>285</u>	<u>724</u>	<u>849</u>	<u>845</u>	<u>830</u>			
Operating Profit	141	455	930	573	281			
Add back: D&A	<u>50</u>	<u>276</u>	<u>228</u>	<u>251</u>	<u>250</u>			
EBITDA	191	731	1,157	824	531			
<i>Subtract:</i>								
Maintenance Capex	50	229	395	313	295			
Cash Interest	33	204	274	289	130			
Asbestos Payments	<u>20</u>	<u>75</u>	<u>178</u>	<u>351</u>	<u>350</u>			
Free CashFlow	88	223	310	(131)	(244)			
Note: Total Debt	302	3,342	3,211	3,717	4,932			
<i>Financial Ratios</i>								
Gross margin	23.6%	26.4%	27.4%	23.6%	20.3%			
Operating margin	7.8%	10.2%	14.3%	9.5%	5.1%			
EBITDA margin	10.6%	16.4%	17.8%	13.7%	9.7%			
EBITDA/Interest Expense	5.8 x	3.6 x	4.2 x	2.8 x	4.1 x			
(EBITDA-CAPEX)/Interest	4.3 x	2.5 x	2.8 x	1.8 x	1.8 x			
Total Debt/EBITDA	1.6 x	4.6 x	2.8 x	4.5 x	9.3 x			

Federal-Mogul Corporation
Management Forecast
Exhibit B
\$ millions

	<i>Fiscal Years Ending December 31,</i>				
	2001	2002E	2003E	2004E	2005E
Sales					
Powertrain	1,514	1,669	1,779	1,844	1,993
Sealing	599	630	686	749	862
Friction	338	350	365	392	411
Aftermarket	2,460	2,435	2,464	2,489	2,505
Other Ops	555	463	468	471	469
Total Sales	5,466	5,547	5,762	5,945	6,240
<i>% Growth</i>		1.5%	3.9%	3.2%	5.0%
EBITDA					
Powertrain	263	290	340	378	422
Sealing	97	90	116	161	183
Friction	64	86	107	130	138
Aftermarket	317	325	346	363	381
Other Ops	38	9	54	64	63
SG&A Initiatives	-	26	57	84	107
Corporate	(249)	(308)	(325)	(322)	(330)
Total EBITDA	530	518	695	858	964
<i>% Margin</i>	9.7%	9.3%	12.1%	14.4%	15.4%

Federal-Mogul Corporation
Restructuring & Productivity Initiatives
\$ millions

Exhibit C

	<u>2002E</u>	<u>2003E</u>	<u>2004E</u>	<u>2005E</u>	<u>2006E</u>
Low Cost Manufacturing	(5)	19	38	39	53
Restructuring of Operations	6	43	94	102	109
SG&A Rationalization	26	57	84	107	121
Material Cost Reductions	73	137	185	225	257
General Productivity Enhancement	<u>69</u>	<u>139</u>	<u>200</u>	<u>273</u>	<u>344</u>
EBITDA Impact	169	395	601	746	884
Incremental Capex for Projects	(101)	(100)	(95)	(68)	(58)
Restructuring Costs	<u>(60)</u>	<u>(73)</u>	<u>(42)</u>	<u>(23)</u>	<u>(14)</u>
Net Cash Flow	8	222	464	655	812

Federal-Mogul Corporation

Comparables

\$ millions

Exhibit D

Name	Revenue		EBITDA Forecast		Net Debt	Interest Rate (Avg.)	Enterprise Value	Notes
	2002E	2003E	2002E	2003E				
Company A	1,150	1,335	220	260	100	5.0%	1,550	Largest competitor in the Powertrain segment, strong management team
Company B	770	925	97	122	200	7.5%	675	Medium-sized diversified competitor
Company C	2,375	2,496	285	302	900	11.0%	1,200	Aftermarket player with #2 to #4 market share in most segments
Company D	8,772	8,891	740	799	1,600	7.0%	3,875	Auto conglomerate with a broad range of businesses and markets
Company E	400	410	60	73	-	-	475	Specialist in Sealing segment with strong European penetration
Company F	1,920	1,950	190	198	400	8.0%	890	Recent spin-off of an automotive conglomerate's non-core parts division
Company G	690	620	55	50	175	13.0%	190	Smaller competitor, rumored to be close to bankruptcy

Note: Interest Rate (Avg.) represents the average interest rate the company pays on its debt