

Why auto's cash flow has moved into the red

by Richard Freeman

Most commentators expressed shock when the auto industry announced collective losses of \$3 billion for the first nine months of 1980. Yet, with ballooning capital expenditures to meet environmental regulations, with Federal Reserve policies that have eroded the customer base of the industry, with oil prices that make gasoline at the pump a luxury, should it be a surprise that cash flow is leaking massively into red ink?

The industry is being contracted, not by normal market forces, but by a combination of policy decisions. America's second largest manufacturing sector, with \$140 billion in sales in 1979, has been slated for permanent contraction under the Carter-Volcker policy of undercutting the consumer goods sector, ostensibly to prop up capital goods. If continued, this means that housing and auto will be the two major items subtracted from the U.S. living standard.

EIR has projected that the auto industry's domestic sales level will be slashed from its 1978 peak of 9.3 million units to a permanent level of 7 million units or less. Two-fifths of the auto work force of 783,000 will become unemployed. A Carter administration official was emboldened to state in mid-September of this year: "There's no use trying to bail out ailing industries like auto. The auto industry is an industry of the past, and it will just have to face the fact."

Financial analysts often discount the question: "Well, Chrysler may go, but then we've only lost 8 to 9 percent of the U.S. auto market. Everyone else is shored up with cash." Yet General Motors and Ford have had negative cash flows for the past three years. They have adjusted their books to conceal the situation for the time being. Ultimately, however, they must cut back on working capital outlays by closing operations further, or resort to costly outside borrowing, or both. The consequences for feeder industries are indicated in Figure 1.

Once it is understood that under prevailing economic conditions, a negative cash flow will be a persistent feature of the Big Three through at least 1985, it can be appreciated that the 20 to 40 percent drops in auto output will not reverse themselves unless national policy is changed by the new administration.

The years of decline

At the start of the 1970s, the auto industry was regarded as "a perpetual cash machine." Now the industry is plagued with a galloping negative cash flow. Few stocks were more valued for their appreciation or hefty dividends than those of Ford and GM. In 1970, while stockholders' equity (stock values plus retained earnings) represented 50 to 55 percent of total capitalization for all manufacturing industry, for the relatively debt-free Ford and GM, the ratios stood at nearly 80 percent (see Figure 2).

The story of the auto sector's decline begins with the Energy Policy and Conservation Act (EPCA) of 1975, which hiked auto's overhead costs no less than 40 percent. The act required downsizing of cars, so-called safety standards including air bag installation (although small cars are inherently less safe than larger ones), catalytic converters to meet fuel emission standards, and a miles-per-gallon ratio of 27.5 by 1985.

Between 1977 and 1985, the auto industry will have to allocate \$90 billion in capital spending just to meet normal model changes and the costs imposed by this act. Not only is this an order of magnitude equal to the total costs of converting the U.S. economy to war production during World War II, but the costs are nondeferrable.

As expenditures for the EPCA began on a significant scale in 1977, the industry was particularly vulnerable to any downturns in its market. Then came the gasoline

price increases and the credit squeeze imposed by the Federal Reserve Board.

The earlier oil shock of October 1973-January 1974, combined with Arthur Burns's tight-credit regime in the fall of 1974, had buckled the auto industry. But it was able to rebound. The second conjuncture, from the winter of 1979 through the fall of 1980, produced more serious effects, with far less room for rebound (see Figure 3).

The recent cash flow picture

Though GM and Ford apparently showed substantial profits in 1979, the best gauge of the actual situation is the way auto's capital spending was financed.

In 1979, the consulting firm H. C. Wainwright calculated what the cost of added government regulations would mean to the auto industry if their profits each year between 1978 and 1985 were equal to their 1978 profits. Wainwright concluded that as a percentage of after-tax profit, General Motors will pay 68.5 percent; Ford, 113 percent; and Chrysler 497 percent.

To calculate how large this environmental/safety tack-on is for an industry already sustaining one of the highest capital spending levels in U.S. industry, *EIR* chose the following method:

First, calculate the 10-year historical trend of actual capital spending of the auto industry from 1968 through 1977. Then extend this trend to yield capital spending amounts—in current dollars—for 1978 and successive years. This builds in an expected inflation rate increase of 7 to 7.5 percent.

Next, compare the figures obtained by extending the trend line to actual spending by the Big Three auto-makers. For example, in 1978, the Big Three spent \$8.3 billion, whereas a simple extension of their past spending trends would have had them spending only \$5.2 billion. The difference approximates the amount paid out for government-mandated programs.

Three billion is larger than all but a handful of industries spend in one year for the entirety of their useful capital formation. During each year since 1978, the differential amount has remained at least \$3 billion.

It can be noted from these tables that in 1975, the year when auto sales crashed, the auto industry decreased its capital spending by \$4.1 billion in 1974 to \$3.5 billion. However, as emphasized above, the Big Three's capital spending cannot drop by an equal amount in the post-1979 period, because of the non-deferrability of a large part of their expenses.

Depreciation lag

GM, Ford, and Chrysler have been faced with huge capital spending outlays, but these outlays were not adequately provided for by their depreciation and amortization set-aside funds. The Big Three use 13- or 14-

Figure 1
Raw materials consumption by U.S. auto industry

Item	Auto's proportion of total U.S. consumption
Steel	20-25%
Malleable iron	50
Zinc	33
Aluminum	17
Copper	13
Synthetic rubber	60
Glass	20 or more

Source: Abraham Katz, Assistant Secretary of Commerce for International Economic Policy.

Figure 3
Auto industry sales in units and dollars

(billions of current dollars)

Year	American cars and truck units sold	U.S. motor vehicles and parts sales
1977 . . .	9,104,000	\$117.8
1978 . . .	9,308,000	\$132.2
1979 . . .	8,316,000	\$139.5
1980 . . .	7,500,000 (estimated)	

Source: *Automotive News* and *Ward's Automotive News*; U.S. Commerce Department, *Survey of Current Business*.

year straight-line depreciation schedules. Simply stated, a machine that cost \$100 million originally will cost twice that amount to replace in 14 years if only a 7 percent inflation rate obtains. The depreciation and amortization schedule simply doesn't cover this inflation discrepancy.

As a result, with soaring capital spending expenditures, and depreciation and amortization that fail to keep up, companies experience worsening cash flows, as can be seen in Figures 4, 5, and 6.

In this case, primary cash flow is defined as cash outflow minus cash inflow. Cash inflow represents profit plus depreciation and amortization. Cash outflow represents dividend payouts plus capital spending and retirement of long-term debt.

The soaring capital expenditure programs further augment cash outflow because, to finance capital spending, a company borrows more long-term debt, increasing its yearly debt retirement costs.

However, this is only the beginning of the cash-flow problem. Historically, GM and Ford have paid very high dividends. For years, this was no problem, given

Figure 2

Debt as percentage of total capital

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
GM	2.8	3.0	2.8	5.4	6.3	5.7	6.5	8.5	6.9	6.8	5.3	4.4
Ford	6.5	5.5	7.7	12.6	14.3	13.2	19.1	19.4	16.6	13.9	10.6	10.9
Chrysler	20.2	21.4	26.8	26.5	24.1	26.0	27.2	30.7	27.1	29.8	28.9	34.9

Source: Annual reports of GM, Ford, and Chrysler.

Total capital consists of stock equity, net retained earnings and long-term debt.

Figure 4

General Motors' primary cash flow, 1969-79

(millions of current dollars)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Cash inflow	3366	2107	3725	3948	4381	2654	3339	5137	5717	6544	6080
Profit	1710	609	1935	2162	2398	950	1253	2902	3337	3508	2893
Depreciation and amortization	1656	1498	1790	1786	1983	1704	2086	2235	2380	3036	3187
Cash outflow	3146	3299	2627	3123	3651	3539	3343	4190	5710	6492	7060
Dividends	1240	983	985	1285	1514	986	701	1603	1958	1726	1533
Capital spending ...	1906	2282	1642	1838	2103	2253	2236	2307	3646	4565	5387
Debt payment	0	34	0	0	34	0	406	280	106	201	140
Net cash flow	+220	-1192	+1098	+825	+730	-885	-4	+947	-7	-52	-980
(cash inflow minus outflow)											

Source: General Motors yearly reports

their high earnings. But by the mid-1970s, Ford and GM set their sights on a dividend yield rate that would be a favorable multiple of AAA corporate bond yields, as can be seen in Figure 7. This became necessary to prevent the price of their stock from slipping badly. The high dividends intensified the cash-flow drain.

When on top of this, profits began to disappear—collectively the Big Three are expected to have negative profits of \$4 to \$5 billion in 1980—the cash flow picture became a disaster

Chrysler's predicament

For the Big Three as a whole, the signs of this disaster had begun to appear in 1977, when the first results of the mandated hike in capital spending emerged. For Chrysler, the situation was already panicky in 1977-78. The company's reaction was to get ready cash by selling off assets—often overseas plants that were newer and more profitable than its Detroit operations. These included the Airtemp division and holdings in Turkey, Argentina, Venezuela, Australia, and Western Europe.

In July 1979, Chrysler asked the U.S. government for \$1 billion in accelerated tax credits. In August, after the administration refused, Chrysler was shut out of the commercial paper market, and must now try to meet its \$1.3 billion short-term financing needs entirely through bank loans.

In the meantime, retained earnings have dissolved. At the start of 1978, Chrysler had \$1.9 billion in retained earnings; it began 1980 with only \$496 million. Its losses so far this year of \$1.6 billion mean that its retained earnings exceed negative \$1.1 billion, almost twice its paid-in equity of \$692 million. By any accounting standard, Chrysler is bankrupt.

In late 1979, the government loan guarantee granted the company forced it to divest more capacity and pledge to sell off its most profitable operation, its financing arm, Chrysler Financial Corporation. In return, it got only \$1.5 billion in loan guarantees; some constituted government guarantees of already outstanding Chrysler bank credit lines, and thus brought in no new capital. Wage concessions totaled \$340 million a year, and suppliers agreed not to increase their prices to

Chrysler for 1980. Chrysler is reportedly as much as five to six months behind in payments to some suppliers.

Resting on larger financial cushions—GM had a \$5 billion cash reserve last summer, of which it has used up \$3 billion—Ford and GM responded to the mandated cash drain by cooking their books and trying to scrape every bit of spare cash in their corporate systems back

into the main treasury.

According to *EIR*'s sources, Ford and GM have been variously looting their subsidiaries, looting their non-consolidated subsidiaries, looting deferrable accrued expenses, looting their dealers, and attempting whatever one-shot gimmicks they can find to increase cash flow. The gimmicks include the following:

Figure 5
Ford's primary cash flow, 1969-79

(millions of current dollars)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Cash inflow	1349	1338	1479	1783	1854	1283	1245	2003	2787	2903	2773
Profit	546	515	656	870	906	361	227	983	1672	1589	1169
Depreciation and amortization	803	823	823	913	948	922	1018	1020	1115	1314	1604
Cash outflow	1283	1372	1313	1624	1923	1790	1313	1596	2224	3305	4117
Dividends	260	259	265	273	317	298	242	263	354	416	467
Capital spending . . .	950	1037	1007	1142	1403	1414	911	1024	1744	2542	3412
Debt payment	73	76	41	209	203	78	160	309	121	250	238
Net cash flow (cash inflow minus cash outflow)	+66	-34	+166	+159	-69	-507	-68	+407	+563	-305	-1344

Source: Ford Motor Company yearly reports

Figure 6
Chrysler's primary cash flow, 1969-79

(millions of current dollars)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Cash inflow	436	341	442	589	627	280	78	730	512	147	-696
Profit	99	-7	83	220	255	-41	-207	328	125	-205	-1,097
Depreciation and amortization	337	348	359	379	372	321	285	402	387	352	401
Cash outflow	778	482	306	452	773	733	460	512	880	822	821
Dividends	94	29	30	47	69	79	0	18	54	65	34
Capital spending . . .	645	416	250	335	629	467	383	424	722	671	749
Debt payment	39	37	26	70	75	187	77	70	104	49	338
Net cash flow (cash inflow minus cash outflow)	-342	-141	+136	+137	-146	-453	-382	+218	-368	-633	-1,517

Source: Chrysler Corporation yearly reports

Figure 7
Dividend performance yields: dividend yields over AAA bonds

	1968	'69	'70	'71	'72	'73	'74	'75	'76	'77
Chrysler .....	.52	.65	.30	.28	.37	.63	1.16	0.00	.19	.67
Ford .....	.71	.73	.65	.53	.53	.75	.86	.77	.59	.85
GM .....	.86	.80	.60	.57	.79	1.09	.92	.58	.95	1.23

Source: Martin Anderson, U.S. Dept. of Transportation, "Effects of Federal Regulation on the Financial Structure & Performance of the Domestic Motor Vehicle Manufacturers," 1978.

- GM is deferring paying worker pension fund pay-ins for its accrued pension fund account for all workers now on layoff. GM says that this is legal, and that in the future, it expects a “lower labor force content,” that is, fewer workers. GM is also shortening payments for delivery of its autos to dealers from a 20-day grace period to immediate payment on delivery of the autos from the factory to the auto dealership. This one-shot deal is giving GM an added cash flow of \$1 billion or more, according to one expert.

- Ford took increased dividends from its German division of \$250 million in the second quarter of this year. At the same time, Ford got its German subsidiary to make a \$250 million loan to Ford U.S.A. headquarters. This gave Ford \$500 million in increased cash reserves at the expense of the viability of its German operations. Ford also took a \$180 million one-time tax credit in 1979 from its United Kingdom plants, putting this tax credit where it pays lower tax rates. This also enhanced cash flows into Ford headquarters.

- Ford and GM are both using odd transfer pricing systems between the parent and its subsidiaries to get more cash into the head office.

- Ford and GM are also alleged to be using similar financial gimmicks with regard to their non-consolidated subsidiaries, whose assets and liabilities do not show up on Ford’s balance sheet, for example, but whose cash transfers can show up on the Ford U.S.A. balance sheet.

Despite these operations, Ford and GM will both have to go to the financial markets for large borrowings next year, including some of the borrowings they had to postpone this year. Ford in particular will be handicapped by the fact that its bond rating, which was AAA on all six categories of its bonded debt three years ago, was reduced to single A this year, and one category has sunk to the “junk bond” BBB rating.

Ford will experience at least a \$2 billion loss on North American car sales operations this year, and GM a lesser amount.

Under such circumstances, if a policy of tight credit continues, the auto industry will triage its operations simply to break even. Chrysler has already cut its total capacity in the United States to 1.5 million cars as part of its loan guarantee agreement. Ford is now talking about a 2.5 million breakeven level, and GM a 5 million breakeven level. This adds up to only 9 million, and it could go lower.

Yet the high level of capital outlays must continue until 1985. The double bind will mean that the Big Three have no spare cash to make the investments in new technology—such as robotics—that would actually modernize the U.S. auto industry and render it competitive.

Figure 8
Age of machine tools in use, 1976-78

	Under 10 years	10-19 years	20 years and over
Manufacturing industry			
in general	30.5%	35.2%	34.2%
Auto	23.8	31.4	44.8
Electrical machinery	33.0	41.7	25.3

Source: 1979/1980 *Economic Handbook of the Machine Tool Industry*.

The competition issue

Conventional wisdom has it that Japanese carmakers and the design and marketing executives of the American companies are to blame for the decline of the U.S. industry. This line of argument was most instructively contained in a June 6, 1980 report by the U.S. House of Representatives Ways and Means Subcommittee on Trade.

The findings of the subcommittee’s staff were that Detroit had become fat and complacent raking in profits year after year in the 1970s, and did not pay enough attention to market conditions. The American buying public wanted smaller cars, but U.S. management wouldn’t listen. So the Japanese and Germans filled the gap with their exports.

The grain of truth in this argument is usually lost even on those who make it. The American auto industry’s disadvantage vis-à-vis the Japanese auto industry arises from one basic cause—the lack of advanced U.S. technology, a technology which the current real economic causes of the collapse in the U.S. auto industry make it impossible to install on the scale required. For example, at a portion of Japan’s Nissan Zama plant, 96 percent of the body-shop welding is done by computer-controlled machines. Nothing comparable exists in the United States. And auto industry equipment is obsolete even by standards obtaining throughout U.S. industry.

As Figure 8 shows, the auto industry has fewer machines under 10 years of age than the manufacturing industry average. And when compared to other U.S. industries, the technological obsolescence of the auto industry is brought into high relief: while one out of every four machine tools in the electrical industry is 20 years of age or older, the average in auto is *nearly one out of two*.