

## “Death by a Thousand Cuts”

I see a very disturbing picture emerging in the automotive landscape.

So disturbing that I find it difficult to invoke my usual long-term optimism about the outlook for the North American automotive sector.

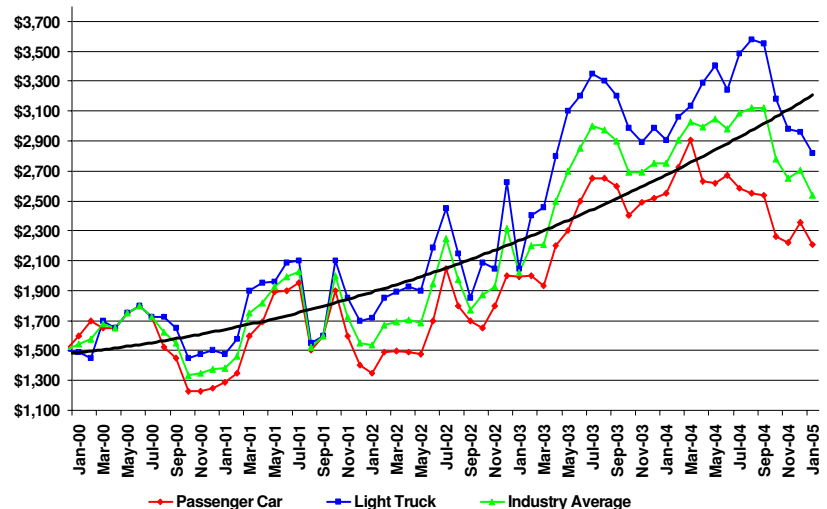
Indeed, unless major stakeholders involved with this industry take corrective action, the entire historical North American automotive model could be headed for very serious trouble.

To be sure, some companies should be able to continue to outperform the market. And Canada, in particular, is doing well compared to the U.S. and Mexico. But most of what we see is negative rather than positive. However, this outlook is not due to one specific problem in the sector. Rather, it stems from dozens of different smaller factors, such as:

- Oversupply of vehicle production, which undermines pricing. There is production capacity in North America to produce about 25 million vehicles but the market will only support 20 million units in a good year.

- Continuing high levels of incentives averaging close to US\$3,000 per vehicle sale. Although incentives have stabilized over the last two quarters, we wonder how much longer the OEMs will have the discipline to pull back incentives.
- Seven consecutive years of price deflation in the U.S. and five in Canada for new vehicles.
- Stubbornly high inventory levels that remain above 60 days supply and, for some OEMs, closer to 80 days supply. I remember when the norm was 40 to 50 days supply.

**Average Incentive \$'s per unit - US\$**  
**Passenger Car vs. Light Truck in the US Market**



Source: Autodata

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## Observations - "Death by a Thousand Cuts"

### North American Production of Vehicles in Number of Units

Includes medium and heavy duty trucks

Calendar Year	U.S. Total	Canada Total	Mexico Total	Total North American Units	Canada Percent Of N.A.	Mexico Percent Of N.A.
1991	8,789,840	1,887,573	989,373	11,666,786	16.2%	8.5%
1992	9,691,443	1,958,236	1,080,863	12,730,542	15.4%	8.5%
1993	10,855,462	2,246,640	1,080,687	14,182,789	15.8%	7.6%
1994	12,249,990	2,321,674	1,092,268	15,663,932	14.8%	7.0%
1995	11,995,248	2,407,155	934,733	15,337,136	15.7%	6.1%
1996	11,830,157	2,397,211	1,222,711	15,450,079	15.5%	7.9%
1997	12,130,575	2,567,750	1,356,360	16,054,685	16.0%	8.4%
1998	12,002,663	2,570,321	1,459,891	16,032,875	16.0%	9.1%
1999	13,024,978	3,056,616	1,534,160	17,615,754	17.4%	8.7%
2000	12,773,714	2,961,636	1,922,889	17,658,239	16.8%	10.9%
2001	11,424,689	2,532,363	1,857,114	15,814,166	16.0%	11.7%
2002	12,279,582	2,629,437	1,804,670	16,713,689	15.7%	10.8%
2003	12,087,028	2,552,862	1,575,447	16,215,337	15.7%	9.7%
2004	11,955,852	2,710,683	1,552,733	16,219,268	16.7%	9.6%
2004/2003	-1.1%	6.2%	-1.4%	0.0%		
2005 F	11,556,983	2,671,861	1,580,983	15,809,827	16.9%	10.0%
2006 F	11,338,901	2,609,500	1,584,340	15,532,741	16.8%	10.2%
2007 F	11,191,215	2,544,852	1,594,365	15,330,432	16.6%	10.4%
2008 F	11,431,174	2,587,303	1,662,146	15,680,623	16.5%	10.6%
2009 F	11,843,589	2,688,022	1,759,433	16,291,044	16.5%	10.8%
2010 F	12,263,002	2,811,683	1,863,163	16,937,849	16.6%	11.0%

Source: DesRosiers Automotive Consultants Inc. and Ward's Automotive Reports

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- A very weak U.S. dollar, which increases prices of vehicles imported from Japan and Korea.
- A strong Canadian dollar relative to the U.S. dollar, which helps pricing in Canada for some, but hurts OEMs manufacturing in Canada. The OEMs who manufacture in Canada produce about two vehicles for every one they sell so the strength of the Canadian dollar does more harm than good.
- Labour costs which continue to grow in the five to seven percent range including benefits. The last

labour agreement increased total compensation over the life of the contract by twenty percent and the unions heavily marketed this as "responsible bargaining". How can the industry allow labour costs to go up by twenty percent when the prices of the vehicles they sell go down by five percent over the same period?

- Escalation of raw material prices led by hot rolled steel prices. This is the real problem with China. Some believe the Chinese are taking contracts from

Canadian suppliers. We find little evidence of this but the Chinese are forcing up the prices of intermediate goods putting margin pressure on suppliers.

- Legacy costs for the traditional "Big Three" tied to their generous pension and medical benefits for retired workers. With a gun to their heads during past labour contracts, they agreed to costs that they wouldn't have to face until well into the future. The future is here now and they cannot afford the pensions and other benefits given to

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retired workers. Also with market share losses there are fewer and fewer active workers on assembly lines to pay for the benefits given to retired workers. The airline industry and the steel industry in the U.S. went into bankruptcy to shed these costs. Could the automotive?

- Medical costs in the U.S., which continue to grow in the eight to ten percent annual range. In the U.S., a retired worker’s health care is paid by their employer. In Canada most of the health care costs of a retired autoworker are paid for by the government. This is the number one cost advantage of assembling vehicles in Canada and the key reason we are maintaining our share of North American assembled vehicles.
- Substantial over-buying of vehicles over the last three to five years as consumers jumped into the market to take advantage of incentive programs.
- A glut of high quality used vehicles softening used vehicle prices, a key source of equity for a new vehicle purchase. Incentive programs worked and as a result, thousands of consumers have brought forward their

purchases of new vehicles. But their used vehicles are swamping the market, thus depressing prices.

- A positive forecast for the Canadian, Mexican and U.S. economies but with upward pressure on interest rates — a critical variable for the vehicle markets.
- Ownership levels in the U.S. above one hundred percent with little room to grow.
- Escalating costs of ownership led by high fuel prices but also insurance prices and the cost of vehicle repair.
- Very high consumer debt loads, especially in the

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***Import brands have resisted the lure of higher incentives and fleet sales so they are more profitable...***

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U.S., which make the vehicle markets ultra-sensitive to interest rate increases.

- In the U.S. a possible end to the mortgage-refinancing boom that has been an important source of capital for new vehicle purchases. With low interest rates, American consumers have tapped into the equity in their homes and many are using

it to fund a vehicle purchase. As interest rates go up, there is less incentive to refinance and the debt carried by those who did refinance becomes more onerous. The U.S. could be facing another S & L crisis such as the one that occurred in the 90’s.

- Continued globalization of the U.S. original parts market — forty percent of OE parts demand now originates from outside the U.S. Fortunately for Canada, a large portion of these OE parts originated in Canada.
- The growth of China as a source for original equipment parts. OE parts imported from China grew by more than forty percent in 2004 although this still accounts for less than two percent of U.S. OE parts demand.
- Border infrastructure problems resulting from terrorist alerts and insufficient border capacity. In 1928, there were six lanes of highway between Windsor and Detroit. And today there are still only six lanes between our dual “Motor Cities.” This makes for a nearly impossible situation for JIT production to operate effectively.

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# Observations - "Death by a Thousand Cuts"

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- Kyoto targets in Canada, which will be difficult to obtain without notable market disruption. If the industry is, in fact, forced to meet Kyoto targets, the market in Canada would face another hit and vehicle companies investments would be impacted.
- An over-proliferation of product, which could confuse consumers and increase complexity. For most of the last decade we have seen about 35 new products enter the market annually. This year there will be over 50 and next year over 60 new products. I'm not sure that production techniques have advanced enough to

## U.S. Original Equipment Parts Market - \$US Billions

Year	Size of the U.S. OE Parts Market	Imports of Parts from all Countries	Imports as a % of Total	OE Parts Sourced From U.S. Suppliers	Imports as a % of Total
1997	\$147.7	\$39.4	26.6%	\$108.4	73.4%
1998	\$162.9	\$41.6	25.5%	\$121.3	74.5%
1999	\$190.0	\$47.7	25.1%	\$142.4	74.9%
2000	\$178.1	\$51.7	29.0%	\$126.4	71.0%
2001	\$164.8	\$48.3	29.3%	\$116.5	70.7%
2002	\$167.2	\$53.4	32.0%	\$113.8	68.1%
2003	\$160.5	\$57.7	35.9%	\$104.4	65.0%
2004	\$154.8	\$64.6	41.7%	\$95.0	61.4%
Change	-3.6%	12.0%		-9.0%	

**The U.S. OE Parts market continues to globalize with more than forty percent now sourced outside of the U.S. (including Canada)**

Source: DesRosiers Automotive Consultants

maintain the necessary economies of scale to accommodate all of this new product.

- Governments continue to target vehicles and their owners with higher fees and

taxes. The automotive sector is the largest industrial contributor to the economy yet governments continue to bite the hand

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## North American Vehicle Sales in Number of Units

Includes medium and heavy duty trucks

Calendar Year	U.S. Total	Canada Total	Mexico Total	North American Total	Canada Percent Of N.A.	Mexico Percent Of N.A.
1997	15,497,860	1,420,018	502,659	17,420,537	8.2%	2.9%
1998	15,967,288	1,428,207	660,863	18,056,358	7.9%	3.7%
1999	17,414,728	1,540,379	706,380	19,661,487	7.8%	3.6%
2000	17,811,673	1,586,054	902,372	20,300,099	7.8%	4.4%
2001	17,472,376	1,597,875	942,431	20,012,682	8.0%	4.7%
2002	17,138,652	1,731,823	1,003,861	19,874,336	8.7%	5.1%
2003	16,967,442	1,625,050	999,106	19,591,598	8.3%	5.1%
2004	17,298,573	1,574,803	1,111,017	19,984,393	7.9%	5.6%
2004/2003	2.0%	-3.1%	11.2%	2.0%		
2005 F	16,800,000	1,536,950	1,000,000	19,336,950	7.9%	5.2%
2006 F	16,400,000	1,484,644	975,000	18,859,644	7.9%	5.2%
2007 F	16,200,000	1,421,447	925,000	18,546,447	7.7%	5.0%
2008 F	16,500,000	1,451,501	950,000	18,901,501	7.7%	5.0%
2009 F	17,100,000	1,491,549	975,000	19,566,549	7.6%	5.0%
2010 F	17,700,000	1,570,363	1,000,000	20,270,363	7.7%	4.9%

Source: DesRosiers Automotive Consultants Inc., AIAMC, Asociacion Mexicana de la Industria Automotriz, A.C., Automotive News, CVMA & Ward's Automotive Reports

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that feeds the economy.  
Will they ever learn?

Overall, however, it is not the market that is the main problem. Price deflation is resulting in vehicle sales that are high by historical standards. Indeed, at the Society of Automotive Analysts meetings in Detroit earlier this year, the economists from GM, Ford and DCX were all forecasting stable or slightly higher volumes for new vehicle sales.

The real problem is profit margin erosion across the entire automotive value chain as costs continue to increase in a vehicle market where price deflation is the norm. Most independent automotive analysts believe that the margin erosion in the auto sector will ultimately lead to lower vehicle incentives, which together with higher interest rates will put downward pressure on the vehicle markets.

The consensus forecast for 2005 is a decline in sales from 19.98 million units in 2004 to 19.34 million units in 2005. Auto analysts are forecasting the downward pressure on vehicle sales to continue for three years with sales bottoming out at 18.55 million units in 2007 before increasing to above 20 million units by the end of the decade.

**Pricing is very lean in both Canada and the U.S.**

## O.E. Parts Price Changes

### O.E. Parts Prices

	Canada	U.S.
1996	1.9%	0.4%
1997	0.2%	-0.8%
1998	3.2%	-0.4%
1999	0.1%	-0.5%
2000	-0.1%	-0.4%
2001	1.7%	-0.1%
2002	2.1%	-0.4%
2003	-4.5%	-1.0%
2004	-1.5%	1.3%

Source: DesRosiers Automotive Consultants, Statistics Canada, and U.S. Bureau of Labor Statistics

Obviously if sales decline then production also has to decline. Production in North America has been weaker than sales in North America because products brought in from offshore continue to grow. And it isn't just the traditional import companies that are selling more in North America. GM for instance imported a substantial number of their GMDAT product from Korea last year.

In 1997, the production-to-sales ratio in North America was 92.2 percent. That meant that more than ninety percent of the vehicles bought in North America were made in North America. When a vehicle is made here the parts producers have an opportunity to supply their OE parts. Last year the production-to-sales ratio fell to 81.2 percent. And that was with a very weak U.S. dollar.

That means that close to twenty percent of the North American market is now supplied from offshore. This limits opportunities for suppliers.

The decline in vehicle production together with the constant price pressure on OE parts suppliers is having a significant impact on the size of the OE parts market. Obviously, when vehicle production drops from 17.7 to 16.2 million units, the size of the OE parts market is going to decline. But the content per vehicle produced is also declining despite the move to larger, higher content vehicles such as cross over products and SUVs.

The content per vehicle in 2001 was US\$14,106. By 2004 it had fallen to US\$13,541 per vehicle. Content per vehicle is lower primarily because of price

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pressures on the OE parts producers. The size of the OE parts market in North America peaked in 1999 at US\$249.0 billion and has declined to US\$ 219.6 billion in 2004. With lower vehicle production expected over the next three years, the size of the OE parts market will fall to US\$205.6 billion, the lowest level since 1997. This is a decline in current dollars of about twenty percent from its peak and a decline of about one-third if measured in real dollars. No wonder parts suppliers are struggling.

As has been the case for most of the last decade, GM, Ford and DCX are expected to continue to lose market share, albeit at a slower pace. This is not

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***Even the most efficient producers and brilliant marketers will have difficulty being successful....***

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necessarily because of what they are doing wrong, but more likely because of what the Japanese and other import brands are doing right.

Import brands continue to increase their production of vehicles in North America. The so-called "new domestics" produced close to 5 million new vehicles in 2004. GM, Ford and DCXs production has fallen for a number of years and is expected to continue to fall. As long as they continue to close plants they will continue to lose market share. You cannot sell what you do not produce.

Import brands continue to invest in new products and are now targeting the strongholds of GM, Ford and DCX, such as full-size pick-up trucks and sport utility vehicles. Toyota, Nissan and now Honda all have full size pick-up trucks in the market. Although their sales are still modest, these brands are picking off the prime customers of GM, Ford and DCX.

Import brands continue to increase their number of dealers and are now penetrating many smaller rural markets with dealers where GM, Ford and DCX have traditionally been strong.

Import brands have resisted the lure of

## North American Production To Sales Ratios

Includes medium and heavy duty trucks

Calendar Year	U.S. Total	Canada Total	Mexico Total	North American Total
1990	69.0%	148.2%	150.6%	78.3%
1991	70.1%	146.7%	153.9%	80.6%
1992	73.9%	159.5%	152.9%	84.6%
1993	76.6%	189.1%	179.2%	88.9%
1994	79.7%	185.0%	182.9%	91.0%
1995	79.6%	207.1%	503.3%	93.5%
1996	76.8%	199.8%	348.8%	91.2%
1997	78.3%	180.8%	269.8%	92.2%
1998	75.2%	180.0%	220.9%	88.8%
1999	74.8%	198.4%	217.2%	89.6%
2000	71.7%	186.7%	213.1%	87.0%
2001	65.4%	158.5%	197.1%	79.0%
2002	71.6%	151.8%	179.8%	84.1%
2003	71.2%	157.1%	157.7%	82.8%
2004	69.1%	172.1%	139.8%	81.2%
2005 F	68.8%	173.8%	158.1%	81.8%
2006 F	69.1%	175.8%	162.5%	82.4%
2007 F	69.1%	179.0%	172.4%	82.7%
2008 F	69.3%	178.3%	175.0%	83.0%
2009 F	69.3%	180.2%	180.5%	83.3%
2010 F	69.3%	179.0%	186.3%	83.6%

Source: DesRosiers Automotive Consultants Inc.

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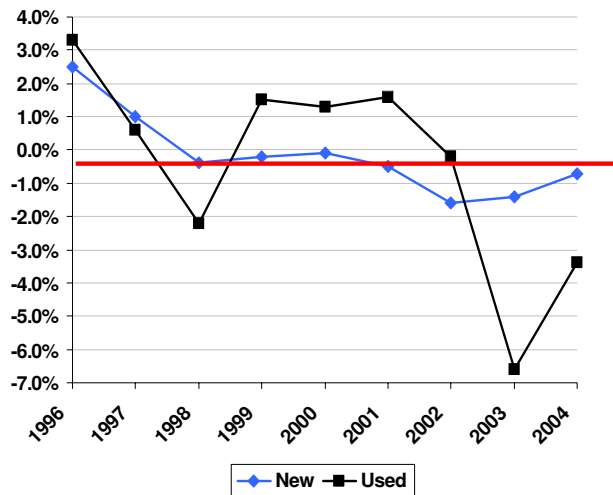
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higher incentives and fleet sales so they are more profitable than GM, Ford and DCX and are using that profit to strengthen their North American organizations.

In conclusion, the markets in North America are in the midst of slowing down, but by very modest levels from historical cyclical downturns. Most analysts are forecasting a soft landing for vehicle sales with total volume down by about 1.5 million units by 2007. As I have

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### US New & Used Vehicle Prices Year-over-Year Percent Change



Source: BLS Consumer Price Index

### Original Equipment Parts Demand- \$U.S. Millions

Includes medium and heavy duty trucks

Forecast is in current dollars

Calendar Year	U.S. Total	Canada Total	Mexico Total	Total North American All Companies	Content Per Vehicle
1991	\$88,403	\$19,026	\$9,954	\$117,384	\$10,061
1992	\$107,637	\$20,360	\$11,876	\$139,872	\$10,987
1993	\$120,459	\$24,386	\$11,947	\$156,792	\$11,055
1994	\$144,770	\$26,738	\$12,856	\$184,364	\$11,770
1995	\$145,144	\$29,741	\$11,350	\$186,235	\$12,143
1996	\$145,134	\$27,851	\$14,866	\$187,851	\$12,159
1997	\$147,708	\$29,947	\$16,394	\$194,049	\$12,087
1998	\$162,894	\$30,407	\$19,364	\$212,665	\$13,264
1999	\$190,036	\$37,299	\$21,687	\$249,022	\$14,136
2000	\$178,072	\$37,739	\$26,372	\$242,183	\$13,715
2001	\$164,778	\$32,098	\$26,196	\$223,072	\$14,106
2002	\$167,212	\$32,022	\$24,116	\$223,350	\$13,363
2003	\$162,121	\$34,313	\$21,139	\$217,573	\$13,418
2004	\$159,560	\$39,036	\$21,025	\$219,621	\$13,541
2004/2003	-1.6%	13.8%	-0.5%	0.9%	0.9%
2005 F	\$151,923	\$39,462	\$21,265	\$212,650	\$13,450
2006 F	\$147,566	\$40,063	\$21,312	\$208,941	\$13,452
2007 F	\$144,915	\$39,338	\$21,387	\$205,640	\$13,414
2008 F	\$147,283	\$39,794	\$22,181	\$209,258	\$13,345
2009 F	\$151,833	\$41,137	\$23,364	\$216,334	\$13,279
2010 F	\$156,424	\$42,814	\$24,625	\$223,863	\$13,217

Source: DesRosiers Automotive Consultants Inc. and Using Industry Data

## Observations - “Death by a Thousand Cuts”

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indicated, however, the problem is not the market, although the auto sector would be better off if the market could find a way to grow.

The problem is pricing. It will be extremely difficult to maintain margins, as there is little to no room to increase prices. Yet costs across the entire value chain continue to grow, be they labour costs, raw material costs, taxes or health care costs.

Only so much of the gap between price deflation for vehicles and cost increases for inputs can be made up with productivity

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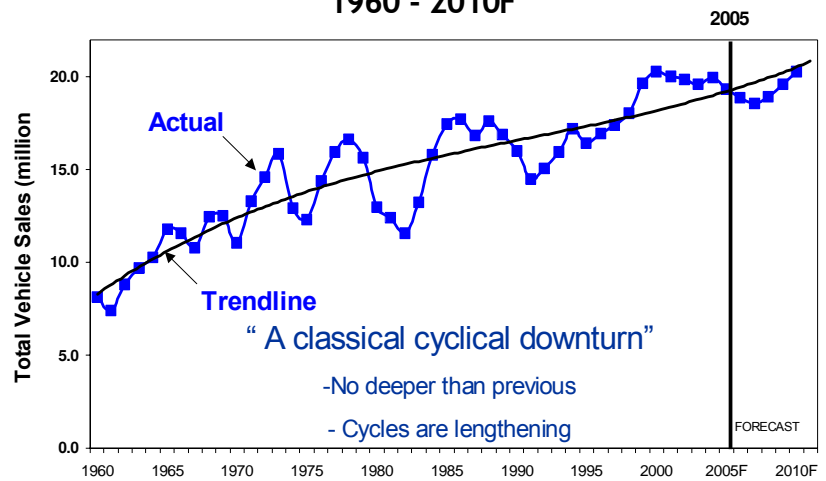
***Import brands have resisted the lure of higher incentives and fleet sales so they are more profitable...***

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improvements. Eventually margins have to be eroded and many companies then become vulnerable to failure, especially if for some reason the markets were to deteriorate. And the failure of any could spell big problems for all.

With so many variables negatively impacting the sector, we describe the current automotive environment as a “Death by a Thousand Cuts.” The automotive sector is bleeding and it could be fatal for some players. But such catastrophes

**Total North American Vehicle Sales  
1960 - 2010F**



Source: DesRosiers Automotive Consultants, AIAMC, Asociacion Mexicana de la Industria Automotriz, A.C., Automotive News, CVMA & Wards Automotive Reports  
Note: Vehicle sales totals include heavy duty trucks.

can be avoided if decisive actions are taken to eliminate the “cuts” and stem the bleeding.

With the health of the entire North American economy being dependent to such a large extent on strong and sustainable automotive sector fundamentals, severe problems within the sector will impact all OEMs, not just GM, Ford and DCX. Even the most efficient producers and brilliant marketers will have difficulty being successful in an economy ravaged by the destructive waves produced by a sick automotive industry.

This is truly a case where the “goose laying the golden eggs” for the North American economy is being killed by circumstances – circumstances which, for the most part, are correctable.

But it will require will, vision, and some sacrifices. And this is where I can again be optimistic. The North American automotive industry has faced life-challenging scenarios before, and it has solved them successfully.

I believe it has the capability to do so again. **DAR**