

ArvinMeritor
2008 company profile edition 1



ArvinMeritor

2008 company profile edition 1

March 2008

Published by

Aroq Limited

Seneca House
Buntsford Park Road
Bromsgrove
Worcestershire
B60 3DX
United Kingdom

Tel: +44 (0)1527 573 600

Fax: +44 (0)1527 577 423

Web: www.just-auto.com

Registered in England No: 4307068

Single-user licence edition

This report is provided for individual use only. If you would like to share this report with your colleagues, please order additional copies or sign up for a multi-user licence by contacting:

Holly Nash

Research manager, just-auto.com

Tel: +44 (0)1527 573 608

Email: holly.nash@just-auto.com

Copyright statement

© 2008 All content copyright Aroq Limited. All rights reserved.

This publication, or any part of it, may not be copied, reproduced, stored in a retrieval system, or be transmitted in any form by any means electronic, mechanical, photocopying, recording or otherwise without the prior permission of Aroq Limited. This report is the product of extensive research work. It is protected by copyright under the Copyright, Designs and Patents Act 1988. The authors of Aroq Limited's research reports are drawn from a wide range of professional and academic disciplines. The facts within this report are believed to be correct at the time of publication but cannot be guaranteed. All information within this study has been reasonably verified to the author's and publisher's ability, but neither accept responsibility for loss arising from decisions based on this report.

Incredible ROI for your budget – single- and multi-user licences

We understand the pressure your research budget is under and price our reports realistically. You won't find our reports with four, or even five-figure price tags, but you will find that they make some of the competition look expensive. Each title is available to you on a single-user basis, supplied on the strict understanding that each title is not to be copied or shared. Alternatively, titles can be shared within departments or entire corporations via a cost-effective multi-user licence. Multi-user licences can also save you money by avoiding unnecessary order duplication. To further add value, all multi-user copies are hosted on a password protected extranet for your department or company –

saving you time, resources and effort when sharing research with your colleagues. To find out more about multi-user pricing please contact Holly Nash.

just-auto.com membership

For just £125 / \$195 / €175* a year you will gain access to a growing portfolio of exclusive management briefing reports, and also receive 12 new briefings for each year you are a member. As well as this impressive list of members' only reports, you also gain one year's access to a constantly updated stream of news, feature articles and analysis. Established in 1999, just-auto has rapidly evolved into the premier source of global automotive news, analysis and data for busy senior executives. For details of the current special joining offer visit: www.just-auto.com/offer.asp

*Prices correct at time of publication.

Table of contents

Single-user licence edition	ii
Copyright statement	ii
just-auto.com membership	iii
Table of contents	iv
List of figures	v
List of tables	vi
Chapter 1 Company dossier	1
Company name	1
Business activity	1
Stock symbol	1
Key executives	1
Summary financials	2
Key competitors	2
Key customers	2
Outlook	3
Chapter 2 Worldwide locations	4
Chapter 3 Financial analysis	5
Chapter 4 Competitor analysis	7
Chapter 5 Key events	10
Chapter 6: SWOT analysis	15
Strengths	15
Weaknesses	15
Opportunities	15
Threats	16
Chapter 7 Customers	17
Chapter 8 Products	21
Chapter 9 Product development	22
Chapter 10 Prospects	25

List of figures

Figure 1: Sales breakdown of ArvinMeritor across customers, FY 2006/07-FY 2005/06 (as a % of net sales)..... 18

List of tables

Table 1: ArvinMeritor's facilities across business segments, FY 2006/07	4
Table 2: Key consolidated financial performance of ArvinMeritor, FY 2002/03-FY 2006/07.....	6
Table 3: Key competitors of ArvinMeritor across product categories	7
Table 4: Summary of key events	10
Table 5: Top vehicle platforms in the CVS segment (in 2006/07)	17
Table 6: Top vehicle platforms in the LVS segment (in 2006/07).....	18
Table 7: Products of ArvinMeritor across segments	21

Chapter 1 Company dossier

Company name

ArvinMeritor Inc

Business activity

Headquartered in Troy, Michigan (USA), ArvinMeritor is a leading global supplier of a wide range of integrated chassis and vehicle body modules. The company classifies its business under two separately reportable business units - Light Vehicle Systems (LVS) and Commercial Vehicle Systems (CVS).

The LVS unit manufactures aperture systems (roof and door modules), chassis systems and steel wheels. The CVS unit manufactures braking systems, trailer suspension systems and driveline modules (front and rear axles). The company also supplies third-party automatic and manual transmission systems integrated with its drive line products. Additionally, the CVS unit also supplies remanufactured components in the aftermarket in the NAFTA region. ArvinMeritor's key aftermarket brands include Euclid, Gabriel, and Meritor.

For the financial year ended 30 September 2007, ArvinMeritor reported sales of US\$6,449m, a gain of 1% over corresponding sales of continuing operations for the previous year. The company is implementing its restructuring program - Performance Plus - to improve its profitability by divesting non-core, non-value added product lines. During the financial year 2006-07, the company divested its light vehicle aftermarket and emission control businesses. The company also closed six of the 13 plants listed for closure under the Performance Plus program.

Stock symbol

ArvinMeritor's shares are traded on the New York Stock Exchange (NYSE) under the ticker symbol "ARM".

Key executives

Charles "Chip" McClure, chairman, chief executive officer and president

Vernon Baker, senior vice president (Sr. VP) and general counsel

Jeffrey "Jay" Craig, vice president (VP) and controller

Lin Cummins, Sr. VP, communications
 James Donlon, Sr. VP and chief financial officer
 Mary Lehmann, VP and treasurer
 Philip Martens, Sr. VP and president, LVS
 Robert Ostrov, Sr. VP, human resources
 Carsten Reinhardt, Sr. VP and president, CVS
 Rakesh Sachdev, president, Asia Pacific
 H H "Buddy" Wacaser, Sr. VP and president, Emissions Technologies
 Bonnie Wilkinson, VP and secretary

Summary financials

In millions of US\$	FY 2004/05	FY 2005/06	FY 2006/07
Net sales	8,873	9,195	6,449
Net income/(loss)	12	(175)	(219)
Capital expenditures	95	107	120
Number of employees	29,000	27,500	18,000

Financial year(s) ended 30 September
 Source: ArvinMeritor

Key competitors

Being a diversified systems provider, ArvinMeritor competes with several large and well established suppliers globally. Dana Corporation and Tenneco are some of the key competitors to the company. In the LVS segment, ArvinMeritor faces competition across various product segments from Delphi, TRW Automotive, Tenneco, Hayes Lemmerz International, Accuride Corporation, Benteler Group, ThyssenKrupp, Webasto, Faurecia, Valeo and Aisin Seiki. The company's CVS segment faces competition from Eaton Corporation, Dana Corporation and Hendrickson.

Key customers

ArvinMeritor has a global client base consisting of both original equipment manufacturers (OEMs) and aftermarket customers. On a regional basis, the company derives nearly 80% of its revenues from sales made in North America and Europe. Volvo, Daimler AG, Volkswagen, Chrysler, PACCAR, GM and Fiat are some of ArvinMeritor's largest customers.

Outlook

ArvinMeritor has been undergoing a major restructuring exercise over the past few years. As part of the restructuring, the company has divested several non-core businesses and reduced excess capacity from its operations in Europe and North America. The company has also strengthened its presence in the Asian region with several key supply agreements and joint-ventures signed in 2006 and 2007. During 2007, the company reduced its exposure to pension allowance obligations. Also during the year, it issued 4% convertible senior unsecured notes worth US\$200m to qualified institutional bidders in a private placement exercise. Notes issued through the exercise will mature in 2027.

For FY 2007/08, ArvinMeritor expects net sales to be around US\$6,750m to US\$6,950m and operating margin to be around 5.5%. The company expects the demand for heavy-duty vehicles in the NAFTA region to revive during the year once the impact of new emission norms is fully absorbed. With the Performance Plus initiative on track, ArvinMeritor expects to record positive cash flow for FY 2007/08.

Chapter 2 Worldwide locations

ArvinMeritor operates 57 manufacturing facilities, 30 engineering and administrative centres, nine warehouses and sales offices in 23 countries across the world. The company's global headquarters are in Troy, Michigan, USA. In 2006, the company also operated 24 joint-venture facilities in 13 countries.

In December 2007, ArvinMeritor employed nearly 19,000 people at its facilities in USA, Canada, Mexico, South America, Europe, South Africa, Australia and the Asia Pacific. In Europe, the company has facilities in Germany, Sweden, Poland, Netherlands, UK, Belgium, Switzerland, France, Hungary and Italy. In the Asia Pacific region, it has operational presence in China, Thailand, Japan, Australia, India, Singapore and Korea. The company's key technical centres are located at Columbus and Detroit in the USA and Augsburg in Germany.

In 2007, the company discontinued operations at its CVS trailer axle and brake facilities at St. Thomas, Ontario (Canada) and Arden, North Carolina (USA); LVS ride control facilities at Toronto, Ontario (Canada) and Chickasha, Oklahoma (USA) and the LVS aperture systems facilities at Brussels (Belgium) and Frankfurt (Germany). The company also announced the setting-up of a new axle and brake assembly unit in Mexico and a chassis systems plant in China under a joint-venture with Chery.

Table 1: ArvinMeritor's facilities across business segments, FY 2006/07

Business segment	Manufacturing facilities	Engineering facilities, Sales offices, Warehouses, Service centres
LVS	32	9
CVS	34	22
Others	6	13
Total	72	44

Source: ArvinMeritor

Chapter 3 Financial analysis

In the financial year ended 30 September 2007, ArvinMeritor reported a 1% increase in sales from continuing operations at US\$6,449m, as compared to US\$6,415m in financial year 2006. The company reported a net loss of US\$30m from continuing operations in financial year 2007, as compared to a profit of US\$112m (adjusted for sales from discontinued operations) in 2006. In the NAFTA region, demand for trucks was lower than expected while European operations of ArvinMeritor continued to face issues arising out of excess capacity.

The CVS business unit recorded sales of US\$4,192m during the year. The business unit's earnings before interest, tax, depreciation and amortization (EBITDA) declined 29% to US\$232m in 2007 from US\$328m in 2006. EBITDA margins in the CVS segment dropped from 7.8% in 2006 to 5.5% in 2007.

The LVS business unit generated sales of US\$2,257m in financial year 2007. The segment reported EBITDA of US\$90m in 2007, as compared to US\$69m in 2006, an increase of 30%. EBITDA margins in the LVS segment increased to 4.0% in 2007 from 3.1% in 2006.

ArvinMeritor's CVS business unit expects heavy duty vehicle sales in the NAFTA market to revive in 2008 and estimates that 220,000 Class 8 trucks would be produced in NAFTA during the year. At the same time, it expects registration of 535,000 units of heavy and medium trucks in Europe. The LVS business unit expects 16,000,000 new vehicle registrations in NAFTA region and 17,000,000 registrations in Europe in FY 2007/08.

ArvinMeritor expects full year sales in FY2007/08 to be in the range of US\$6,800m to US\$7,000m.

In 2006, ArvinMeritor sold off its LVA North American filters, motion control and exhaust businesses; the Gabriel South Africa business (ride control) and the 39% stake in its joint venture, Purolator India. Together, the value of these divestments was US\$220m.

Table 2: Key consolidated financial performance of ArvinMeritor, FY 2002/03-FY 2006/07

(Figures are in millions of US\$, unless otherwise indicated)

	FY 2002/03	FY 2003/04	FY* 2004/05	FY* 2005/06	FY* 2006/07
Net sales	6,480	7,887	6,371	6,415	6,449
Income (loss) from continuing operations	105	117	20	112	(30)
Net income/(loss)	133	(42)	12	(175)	(219)
Capital expenditures	173	149	95	107	120
Cash and cash equivalents	103	132	187	350	409
Total shareholders' equity	925	988	875	944	543
Total assets	5,448	5,639	5,870	5,508	4,789
Number of employees	32,000	31,000	29,000	27,500	18,000

Fiscal year(s) ended 30 September

Source: ArvinMeritor

*Marked financials have been readjusted for discontinued operations

Chapter 4 Competitor analysis

ArvinMeritor's competitors are increasingly focusing on a full system supplier business model where modular system assemblies are shipped to OEMs instead of sub-systems or components. This is leading to a significant technology addition at Tier I supplier level. For example, both ArvinMeritor and Faurecia have developed integrated door modules and sun-roof modules.

Being a diversified systems supplier, ArvinMeritor is present across a number of component areas and faces different competitors in each product area.

Table 3: Key competitors of ArvinMeritor across product categories

Segment	Products	Competitors
LVS	Roof systems	Webasto (Germany), Aisin Seiki (Japan) and Inalfa (Netherlands)
	Access control and door systems	Brose (Germany), Kiekert (Germany), Intier (Canada), Aisin Seiki (Japan), Valeo (France), Mitsui (Japan) and Grupo Antolin (Spain)
	Suspension modules	ThyssenKrupp (Germany), ZF (Germany), Benteler (Germany), Tenneco (USA), Delphi (USA) and TRW (USA), Visteon (USA)
	Suspension systems	NHK Spring (Japan), Sogefi (Italy) and ThyssenKrupp (Germany), Mubea (Germany) and San Luis Rassini (Mexico)
	Wheel products	Accuride (USA), Hayes Lemmerz (USA) and Topy Industries (Japan)
CVS	Truck axles and drivelines	Dana Corporation (USA), AxleTech International (USA)
	Braking systems	Haldex (Sweden), Knorr-Bremse (Germany) and WABCO (Belgium)
	Suspension systems	Hendrickson (USA), Holland Neway (USA)
	Trailer products	Dana (USA) and Hendrickson (USA)
	Transmissions	Eaton Corporation (USA)

Source: ArvinMeritor

In the LVS aperture systems business, ArvinMeritor faces competition from France based Faurecia and Germany based Brose. Faurecia's clientele include most major OEMs based in Europe. The company has been focusing its research and development (R&D) efforts on improving product durability, recycling and weight reduction. In 2006, it spent close to 6% of its net sales on

R&D. The company has developed Syntes, a hybrid metal-plastic structure which integrates air distribution and safety functions on the cross-car beam resulting in significant weight reduction and improved performance. The company has also developed mEasy, a system for ensuring fit and finish between the bumper, headlights, hood and fenders. Further, the company has been increasing its presence in low cost locations of Asia. In 2006, the company signed a joint-venture agreement with South Korea-based Kwang Jin Sang for manufacturing door modules. The company has also managed to create a significant presence for itself in India through relations with Hyundai and Mahindra.

Brose has strong relations with several European OEMs, with supply contracts from BMW, Mercedes, Volkswagen, Ford and Volvo. The company has a strong emphasis on research & development with R&D spending at 8% of sales in FY 2005/06. The company's development efforts are focussed on developing integrated door modules.

USA-based Tenneco is a key competitor to ArvinMeritor's suspension and ride control products. Tenneco has a strong client base of passenger car and commercial vehicle OEMs. The company is undertaking rigorous cost control measures to reduce its high debt levels. It has also been increasing its footprint in emerging markets for low cost production and local supply contracts.

Through its Light Vehicle Systems (LVS) segment, ArvinMeritor supplies steel wheels in Europe and North America. In the North American region, ArvinMeritor's wheel products compete with products from wheels suppliers such as Hayes-Lemmerz, Alcoa, Accuride and Topy Industries.

Hayes-Lemmerz manufactures and markets fabricated steel wheels for OEMs through its Automotive Wheels segment. The company has been working on light weight steel wheels for over a decade and uses flow forming process for steel wheel production. Flow forming is a metal forming process that turns the metal over a spherical spindle and three hydraulic rollers using tremendous pressure. The high pressure and turning action forces the metal to flow along the spindle and take the required shape. The mechanical properties of a cast metal wheel made using the flow forming process are comparable to those of a forged wheel, though being 15% lighter in weight.

ArvinMeritor has developed a unique cladding process named DuraBright which ensures that the bright surface texture of the wheel lasts through its service life. Unlike conventional chrome coatings which are just surface treatments, DuraBright coating bonds with metal layers below the surface helping the coating to bond in a better way. DuraBright clad wheels resemble aluminium coated wheels in surface finish. ArvinMeritor has received convincing response for its cladding process in the North American and European markets. The company has setup a new facility in Mexico for DuraBright wheels and is establishing one in Hungary, Europe to meet supply requirements.

Each steel wheel manufacturer is following a distinct strategy for its future plans. Topy Industries is focusing on alliances, partnerships and collaborations with global suppliers to improve its international presence. Accuride's development is focussed on developing light steel wheels. Hayes-Lemmerz is focusing on its flow forming technology based steel wheels, expanding its presence in low-cost countries, rationalising production capacity, divesting non-core operating facilities and improving operating performance. To this end, the company divested some facilities, including those in Mexico City (Mexico), Cadillac (Michigan), Au Gres (Michigan), Chattanooga (Tennessee) and Berea (Kentucky) in FY 2005/06. ArvinMeritor, with a wide range of product offerings (13- to 24.5-inch wheels), is leveraging its shorter time-to-market capabilities and engineering expertise, especially for new product platforms, to further strengthen its competitive position

Chapter 5 Key events

Table 4: Summary of key events

Year	Event
December 2007	Acquires Canada based Mascot Truck parts
August 2007	Announces sale of LVA European exhaust operations to Klarius
July 2007	Establishes a joint venture with China based Chery for design and production of chassis systems and components
May 2007	Sale of Emissions Technologies group
2006	Sale of LVA ride controls business; Sale of North American LVS exhaust systems business and LVA Purolator business
2005	Joint venture established with China-based First Auto Works
2004	Two joint ventures set up with Sweden-based Volvo group; Sale of its subsidiary, Roll Coater
2002	Acquires full ownership of Zeuna Starker
2000	Creation of ArvinMeritor by the merger of Arvin Industries Inc and Meritor Automotive Inc

Source: ArvinMeritor

Meritor's history:

ArvinMeritor traces its history to 1919 when Willard Rockwell bought Wisconsin Parts and its interests in Timken Detroit Axle Co to manufacture an improved axle based on his design.

In 1953, Willard Rockwell merged Wisconsin Parts, Standard Steel & Spring and Timken Detroit to form Rockwell Spring and Axle Company.

In the 1973, Rockwell Automotive acquired Fumagalli steel wheel business.

In 1990, Rockwell WABCO commenced supplies of anti-lock braking systems (ABS) for tractors and trailers.

In 1993, Rockwell acquired Czech Republic based components facility, Skoda Miada Boleslav. Two years later, Rockwell acquired window regulator business from Dura Automotive Systems.

In 1996, the company launched a new transmission system, Engine Synchro Shift (ESS), which improves operational efficiencies and reduces driver shift effort.

In 1997, Rockwell International spun-off its automotive businesses into a separately listed company, Meritor Inc.

In 1998, Meritor acquired Volvo's heavy vehicle axle manufacturing operations in Lindesberg, Sweden, and Euclid Industries, a leading replacement parts manufacturer for heavy-duty trucks, trailers, tractors, school buses and specialty vehicles. A year later, Meritor acquired LucasVarity's Heavy Vehicle Braking Systems business and enters into a joint venture with ZF Friedrichshafen AG.

Arvin's history:

In 1919, QG Noblitt incorporated the Indianapolis Air Pump Company and secured a patent for the Arvin car heater in 1920.

In 1927, Indianapolis Air Pump Company started the production of mufflers under the new name of Noblitt-Sparks.

In 1950 Noblitt-Sparks, was renamed to Arvin Industries.

In 1974, Arvin started supplying catalytic convertors.

In 1984, Arvin purchased exhaust systems facilities in Mexico. Two years later, Arvin entered into a joint venture with Sango Company, Japan to make automotive exhaust systems.

In 1986, Arvin bought Maremont Corporation, a manufacturer of ride control and exhaust systems and later in the year, Arvin acquired Gabriel, a manufacturer of ride control products.

In 1989, Arvin acquired Spain-based AP Amortiguadores SA, a major manufacturer of shock absorbers.

In 1993, Arvin signed an equally owned joint venture with Italy-based Sogefi SpA and by 1996, had expanded in Thailand, China, Taiwan, Malaysia and India by entering into joint ventures.

In 1998, Arvin acquired a 49% interest in Zeuna Starker (a Germany-based exhaust systems supplier). A year later, the company acquired three companies, Purolator, Camloc Gas Springs and WorldSource.

In 2000, Arvin Industries Inc and Meritor Automotive Inc merged to form ArvinMeritor Inc.

In 2002, ArvinMeritor acquired the balance 51% stake in Zeuna Starker, thereby assuming full ownership.

In November 2003, ArvinMeritor terminated its cash tender offer for acquiring all outstanding shares of the US based Dana Corporation, as the latter's board of directors rejected the offer.

In June 2004, ArvinMeritor opened a new LVS technology centre in Detroit, US, and in September 2004, the company entered into two joint ventures with Sweden-based Volvo Group for the manufacture of drive axles for commercial vehicles. During 2004, Roll Coater was sold to Willis Stein & Partners.

In May 2005, ArvinMeritor entered into a joint venture with China-based First Auto Works (FAW) Sihuan Axle Brake Group for the manufacture of foundation air brakes, automatic slack adjusters and air disc brakes for commercial vehicles. The company also signed an equally owned joint-venture agreement with Korea-based DongWon Precision Industrial Co Ltd for the supply of DPFs and exhaust systems and components in August.

In February 2006, ArvinMeritor sold its North American LVA Purolator business to a joint-venture of Bosch and Mann+Hummel. In the following month, ArvinMeritor signed a collaborative agreement with the US-based Pressure Systems International Inc for the worldwide distribution and commercialisation of automatic tire inflation systems. Also, during the same month, the company sold its North American LVS exhaust systems business to International Muffler Company (IMCO), an exhaust systems manufacturer based in the US. In May

2006, the company announced plans to shut down its exhaust systems manufacturing facility at Redditch, UK.

In June 2006, ArvinMeritor sold its Light Vehicle Aftermarket (LVA) ride control business, Gabriel South Africa to Control Instruments Group Limited for US\$12m. A month later, ArvinMeritor sold its 57% stake in Meritor Suspension Systems Company to its joint venture partner, Mitsubishi Steel Mfg Co.

In August 2006, ArvinMeritor announced plans of establishing a suspension and trailer manufacturing facility in Wuxi, China. In the same month, ArvinMeritor's LVS segment signed a joint-venture agreement with Korea-based Pyeong Hwa Automotive, for assembling door modules at the Slovakia plant of KIA Motors in August.

In November 2006, Meritor WABCO (a joint venture between ArvinMeritor and the WABCO Automotive Products Group of American Standard Companies Inc) entered into an agreement with International Truck and Engine Corporation (ITEC) for the supply of its new hydraulic power brake system, as standard equipment on ITEC's medium-duty truck models.

In May 2007, ArvinMeritor completed the sale of its Emissions Technologies business group to the US-based equity investment firm, One Equity Partners, for US\$310m.

In July 2007, ArvinMeritor formed a joint venture with China based Chery for the design and production of chassis systems and components. In the same month, the company announced the closure of assembly operations at St. Thomas, Ontario, Canada,

In August 2007, ArvinMeritor sold its LVA European exhaust operations to UK based Klarius group.

In September 2007, ArvinMeritor announced the closure of its ride control manufacturing facility at Toronto, Ontario and packaging and distribution center at Chikasha, Oklahoma. The closures were completed under ArvinMeritor's restructuring plan for its ride control businesses in North America.

In November 2007, the CVS unit announced that it would open a new axle & brake assembly and component manufacturing facility in Mexico. In the same month, ArvinMeritor's CVS unit announced the closure of its axle manufacturing facility at Arden, North Carolina in September 2008.

In December 2007, ArvinMeritor acquired Canada based remanufacturer of transmissions, drive axle carriers, steering gears and drivelines Mascot Truck Parts. Mascot Trucks has six remanufacturing plants in Canada and a pan North America logistics network.

Chapter 6: SWOT analysis

Strengths

As the restructuring exercise at ArvinMeritor approaches its 2012 completion date, the company is acquiring a leaner structure. The company has already divested several non-core and non-performing assets of RollCoater, light vehicle aftermarket and emissions businesses. ArvinMeritor's focus is now on growth in the light vehicle systems and commercial vehicle systems markets. The company has successfully reduced dependence on large customers from 74% in 2006 to 54% in 2007.

The ongoing performance improvement initiative - Performance Plus - is expected to save ArvinMeritor US\$150m by 2009. Debt levels have been reduced by US\$700m in the last three years. The company has pushed all significant debt maturities beyond 2012. ArvinMeritor has also reduced its post-retirement pension & other benefits costs from US\$659 in 2007 to US\$180m in 2008.

Many of ArvinMeritor's key brands, including Gabriel, Meritor, Ryde FX and Euclid, have been commercially successful worldwide. The company enjoys a strong and favourable recognition amongst OEM customers.

Weaknesses

With its recent divestments, ArvinMeritor is left with a much smaller product portfolio. The company's fortunes are linked more closely to those of the truck industry in North America and Europe which now accounts for 65% of ArvinMeritor's revenues. Truck sales are expected to decline again in 2010 when new emission norms are enforced in the North American market. Similarly, Europe will witness the enforcement of Euro 6 norms with effect from September 2009 which may have a temporary negative impact on sales.

Opportunities

ArvinMeritor sees significant growth opportunities in the emerging Asian markets of India, China and Korea. An Asian footprint will help ArvinMeritor reduce

product costs in its existing western markets while tapping local supply opportunities. In July 2007, ArvinMeritor formed a joint venture for manufacturing chassis components with China based Chery. In 2005, the company had established a joint venture with China-based First Auto Works (FAW) Sihuan Axle Brake Group for the manufacture of air brakes, automatic slack adjusters and air disc brakes for commercial vehicles.

ArvinMeritor plans to triple its sales in Asia in the next five-year period. In the Asia Pacific region, the company will focus on higher margin product lines. Its strategy for the Asia Pacific region includes optimising its sourcing activities and localising design & engineering activities.

Realising that supply through modules is becoming increasingly important, ArvinMeritor has re-developed several products and in many cases it has cut per module component numbers by 50%. The company also sees significant opportunity in remanufactured aftermarket component supplies in North American commercial vehicle aftermarket.

Threats

ArvinMeritor's products are increasingly being affected by emission and environmental regulations being enforced in North America & Europe. While North America has brought into force new emission norms in 2007, another stricter set of emission regulations will be enforced in the USA in 2010. In Europe, Euro 6 norms are due to be enforced towards the end of 2008. It has been observed that vehicle sales decline during the year of enforcement of such emission norms.

Moreover, the increasing costs of raw materials, steel and oil continue to threaten the company's margins. OEMs are not keen on passing cost hikes to end customers fearing sales cuts.

ArvinMeritor also has a significant surplus capacity in its European operations which affect their profitability.

Chapter 7 Customers

ArvinMeritor services global OEMs and aftermarkets through its strong brand portfolio and distribution network. The company supplies to passenger car manufacturers such as Volkswagen, Chrysler, Ford, PSA, General Motors and Hyundai. The company also supplies heavy-duty, medium-duty and light-duty commercial vehicle manufacturers such as Volvo, Daimler, PACCAR, IVECO, Volkswagen, General Motors and Ford. Its nine largest customers accounted for 54% of the company's net sales in FY 2007/08.

ArvinMeritor's key customers across segments:

- LVS – Volkswagen, Chrysler, GM, Ford, PSA and Asia-based OEMs.
- CVS – Volvo, Daimler, Ford, PACCAR, International Truck and Engine, Fiat, GM, Volkswagen and Asia-based OEMs.

Table 5: Top vehicle platforms in the CVS segment (in 2006/07)

Top 6 platforms	Key vehicles
Volvo Trucks HD	FH, FH16
Freightliner Class 8	Coronado, Century S/T, Columbia
Renault Trucks HD	Premium, Magnum
Mack/Volvo Class 8	VT, VN, Pinnacle, Vision
International Class 8	ProStar, 8000 Series, 9000 Series
International MD	4000 Series, CF Series

Source: ArvinMeritor

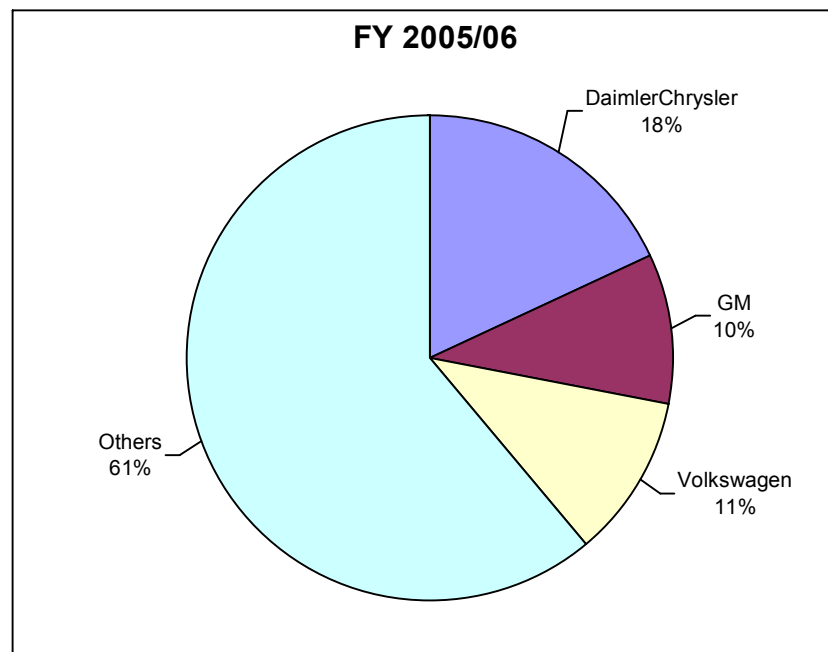
Table 6: Top vehicle platforms in the LVS segment (in 2006/07)

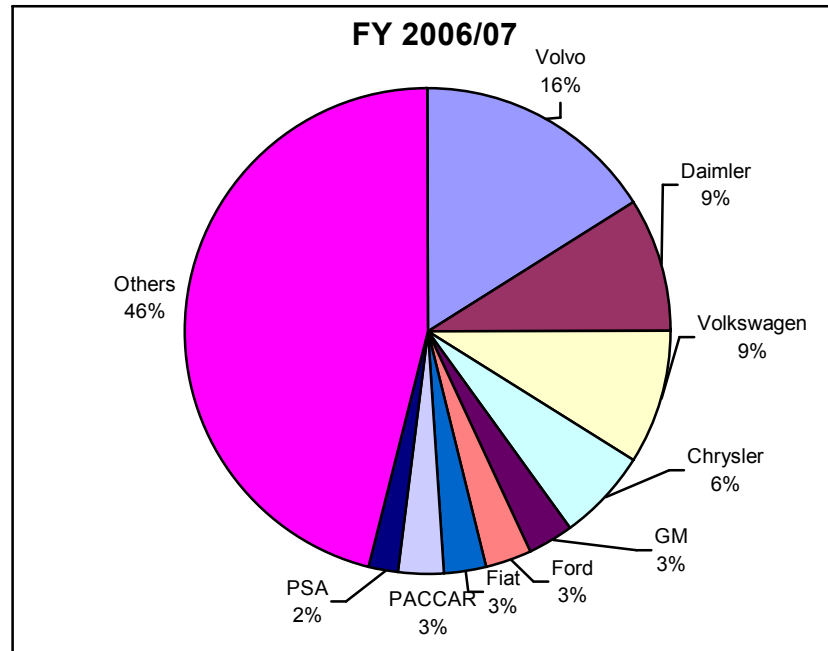
Top 10 platforms	Key vehicles
VW PQ34/35	Golf, Touran, Audi A1, Škoda Octavia
Hyundai NF/CM	Santa Fe, Sonata
VW PQ24/25	Polo, Ibiza, Audi A2, Škoda Fabia
Renault C	Megane, Scenic
Ford Europe C1	Focus, C-MAX, Volvo S40/V50
Dodge DR-DE	Ram
VW 7L	Audi Q7
Peugeot F1	207
GM Europe Gamma	Opel Corsa
Chrysler WK/XK	Jeep Cherokee, Commander

Source: ArvinMeritor

In FY 2007/08, ArvinMeritor recorded 47% of its net sales from North America and 32% from Europe.

Figure 1: Sales breakdown of ArvinMeritor across customers, FY 2006/07-FY 2005/06 (as a % of net sales)





Company	FY 2006/07	FY 2005/06
DaimlerChrysler	-	18
Daimler	9	-
Chrysler	6	-
GM	3	10
Volkswagen	9	11
Others	73	61
Total	100	100

Source: ArvinMeritor

In 2007, ArvinMeritor reported the following new supply agreements:

- In January, ArvinMeritor announced the formation of a long-term supply partnership with Trailmobile Corporation for the supply of Meritor trailer axles, brakes, air suspensions as a standard offering on Trailmobile's products in North America.
- In July, the company announced a joint venture partnership with Chery for the design and production of chassis systems and components. The new company has been named ArvinMeritor Chassis Systems Wuhu Co and is scheduled to commence production of shock absorbers and struts starting 2008, with initial supplies starting with Chery. ArvinMeritor expects the joint-venture to generate sales worth US\$150m by 2010.
- Also in July, ArvinMeritor won a supply order for 1,170 sets of front and rear drive axles with brakes, drivelines, antilock braking systems and transfer

cases, for a new generation of armoured personnel carriers for the US military.

- In November, ArvinMeritor announced that its LVS Body Systems unit was awarded the supply contract for window regulator motors by Hyundai for some future models. An estimated four million motors shall be supplied during the seven year agreement starting January 2010. The motors would be manufactured at ArvinMeritor facilities located in China, India, France and USA for delivery to Hyundai's plants in Korea, Europe, China, India and USA.

Chapter 8 Products

ArvinMeritor is involved in the design, development, manufacture, distribution, sales and services of a diverse range of products and technologies. The company manufactures systems and components for use in light, commercial and specialty vehicles. The company operates through two reportable segments, namely, Light Vehicle Systems (LVS) and Commercial Vehicle Systems (CVS). As of FY 2005/06, the LVS segment accounted for 53.3% of ArvinMeritor's net sales. It operates through three sub-divisions - Chassis Systems, Aperture Systems and Steel Wheels. The CVS segment operates through sub-divisions including Undercarriage and Drivetrain Systems and Specialty Systems. Some of the major brands of ArvinMeritor include Meritor, Gabriel, Euclid, Ryde FX.

In March 2007, ArvinMeritor introduced a new global hub reduction axle product family consisting of single and tandem rear axles for the heavy haul, construction and other markets. The company announced that the axles would first be offered in the Asian market and later be made available in North America. The product family offers a wide range of axles to meet the needs of on- and off-highway applications.

Table 7: Products of ArvinMeritor across segments

Segment	Sub-division	Products
LVS	Emissions Technologies	Exhaust systems and components, mufflers, catalytic converters, exhaust pipes, exhaust manifolds, diesel particulate filters
	Aperture Systems	Roof systems, sunroofs, door systems, latch systems, power and manual window regulators, integrated and modular door latches, hood and trunk latches, actuators, fuel flap locking devices
	Undercarriage Systems	Suspension systems, suspension modules, bead seat attached wheels, fabricated steel wheels, clad wheels and full- face designed wheels
CVS	Undercarriage and Drivetrain Systems	Truck axles, braking systems, trailer products and suspension systems, drivelines, transmission components, heavy-duty axles and transfer cases

Source: ArvinMeritor

Chapter 9 Product development

With a team of 1,450 research & development professionals, including engineers and scientists, ArvinMeritor invested US\$177m (1.9% of the net sales) on R&D projects in FY 2005/06 as against US\$171m in FY 2004/05.

Modular product development has been a key focus area for ArvinMeritor. the company showcased several innovative future products during 2007.

The company has technical centres situated at Columbus and Detroit in the US and Augsburg in Germany. In addition, the company has engineering centres in the UK, USA, Brazil, France, Germany, Canada, India and China.

ArvinMeritor's key product development initiatives in 2007 were as follows:

- In January 2007, ArvinMeritor announced the development of the first Dual-mode diesel-electric drivetrain for a Class 8 ProStar tractor powered by a Cummins diesel engine. The Dual-mode diesel-electric drivetrain integrates both mechanical and electrical propulsion systems. The system uses the electric motor drive primarily for periods of high demand under low-speed, high-load operating conditions. Above a specified speed and load, the mechanical propulsion system blends its power with the electric motor until it reaches highway speeds, where the drive phases to completely mechanical. The electrical system provides additional power during hill climbing, even at highway speeds. Additionally, the engine also charges an onboard energy storage system, which provides power to the electric motor when demand is high. Energy that is generated during braking is captured and stored using regenerative braking. ArvinMeritor also supplied the tandem axle, regenerative braking system, air disc brakes and advanced ABS with integrated stability control and driver assistance systems (from Meritor WABCO Vehicle Control Systems), software, electronic controls, transfer case, motors, as well as the battery power from a third party.
- In March 2007, ArvinMeritor introduced its RideSentry trailer suspension system with a new PinLoc slider locking mechanism which secures the

slider pins before the trailer is put in transit. The PinLoc slider uses an angled pin design and an air assist with parking brake while engaging the mechanism. The technology helps curb accidents arising in situations where trailers were operated without slider pins.

- Also in March 2007, ArvinMeritor introduced its new global hub-reduction axle family of single and tandem rear axles for heavy duty applications. The new global family of hub-reduction axles offers ratios ranging from 3.61:1 to 7.21:1.
- In May 2007, ArvinMeritor unveiled its Active Air Suspension System during the Vehicle Dynamics Expo held at Stuttgart. Currently under development on a mid-size performance sedan, the new system provides continuously variable spring rate adjustments providing low frequency active body control for improved ride, handling and stability. The system shares most components with a standard air suspension system thereby enhancing its modularity and scalability prospects.
- Also in May 2007, at the Vehicle Dynamics Expo, ArvinMeritor unveiled its Active Damping System. Currently under development on a coupe, the new system uses an electro-magnetic mechanism to improve the response time, force range and the ability to shift on force.
- At the IAA Frankfurt Motor Show in September 2007, ArvinMeritor unveiled its patented Low Energy Release (LER) door latch technology. Using integrated electronics and software controls along with a redesigned mechanical system, LER improves passive entry functionality, releases at a far higher seal loads, provides silent locking operations and an increased resistance against theft tools. The product is substantially lighter than existing latch systems and uses up to 50% fewer parts.
- Also at the IAA Frankfurt Motor Show, ArvinMeritor unveiled the Next Generation Sunroof which uses 50% fewer components, providing considerable weight savings,
- In November 2006, Meritor WABCO Vehicle Control Systems introduced its new InfoLink option for the Enhanced Easy-Stop Basic trailer Anti-lock Braking System (ABS). Using this option, the driver can monitor and control trailer functions (from the tractor), as the system enables the tractor's PLC messages to be shared over the constant power line,

converted further to a format suitable for telematic devices or in-cab displays. Moreover, the InfoLink option is compliant with FMVSS-121 requirements.

Chapter 10 Prospects

ArvinMeritor has emerged as a leaner company with resources focused on high value addition products. Under its restructuring and performance improvement plans, it has been successfully addressing problems such as unviable post-retirement employee benefit schemes, surplus capacities, unprofitable product lines and high debt levels. The company is expected to completely emerge out of its strategic bottlenecks by 2012 when its restructuring and performance improvement initiative, Performance Plus, concludes.

ArvinMeritor is also implementing its 3R strategy (rationalise, refocus and regenerate) to minimise risks through business diversification with focus on organic growth. The company is increasing its content per vehicle in developed markets besides improving core products in order to comply with environmental and safety related regulations. The company is also enhancing its presence in emerging markets.

The company is focusing on developing its global ride control businesses. This would include the integration of design, manufacturing and distribution of light-duty, medium-duty and heavy-duty commercial vehicle original equipment and replacement shock absorbers and struts. The company will integrate and leverage its global design, supply and operational infrastructure to develop advanced vehicle stability solutions to cater to OEMs and the aftermarket.

In 2006, the company divested its LVA North American filters, motion control and exhaust businesses; the Gabriel South Africa business (ride control) and the 39% stake in its Indian joint venture, Purolator India. These divestments generated cash proceeds of US\$220m.

ArvinMeritor recorded sales worth US\$6,449m in FY 2006/07 and a net loss of US\$30m from continuing operations in the same period. The CVS business unit recorded sales worth US\$4,192m during the year and an EBITDA of US\$232m in FY 2006/07. The LVS business unit generated sales worth US\$2,257m in FY 2006/07 and an EBITDA of US\$90m in the same period.

The CVS unit sales in North America, which had declined following the enforcement of new emission regulations, are expected to revive in FY 2007/08. ArvinMeritor expects full year sales to be in the range of US\$6,800m to US\$7,000m in FY 2007/08.