

Productivity: has the European automotive industry reached the end of the road?

Article published on Les Echos.fr on 25 February 2005

Currently lagging behind the USA and Japan, the European automotive industry has several levers at its disposal to achieve considerable productivity gains over the next two to three years.

Since 1998, global automotive production has risen by nearly 15%. The highest potential for growth is now in the Latin American or Asian markets (Iran, China, Korea). Europe only accounts for 30% of the global market and is on the decline for the second consecutive year. In view of this sluggish European market, a report published in November 2004 by the European Commission, describes the EU automotive industry as lagging behind that of the USA and Japan in terms of productivity.

Labour productivity in the European Union (15 members) is 25% lower than that of the USA and 30% lower than that of Japan, according to Brussels. It confirms that the hourly cost of labour in the same European Union is comparable to the figure recorded in the USA, but it is over 10% higher than that observed in Japan and is close to triple that of Korea. But perhaps European manufacturers have not had their final say on the matter yet.

Productivity is in fact typically defined as the relationship between production and the resources used to obtain it. Four separate levers can be identified. Initiatives based on these levers make it possible to achieve considerable productivity gains and moreover show that European manufacturers are going to reap the benefits in the next two to three years.

1 Industrial Policy

Industrial policy is **one of the key levers** to increase reductions in manufacturing costs. The policy practised by the PSA Group, for example, is characterised by three key elements: a platform policy, a cooperation policy and an industrial efficiency policy.

The platform policy, now in place, is beginning to bear fruit in terms of costs. This policy should make it possible to reduce production costs by around 800 million euros per annum between 2002 and 2006.

Equally, PSA Group's cooperation policy is making it possible to expand its range of vehicles and parts more quickly while keeping costs to a minimum by taking advantage of additional skills. For example, the Czech factory in Kolin where, in partnership with Toyota, PSA is producing its new Peugeot 107 and Citroën C1 models unveiled at the Geneva Motor Show, could increase the French manufacturer's margin for this type of vehicle from 1.5% to 4%.

Finally, the PSA Group's industrial efficiency is improving as a result of making better use of European production capacities (114% in 2003) and extensive modernisation. This plan based on best practices should generate savings of around 350 million euros per year by 2006.

PSA : Rate of application of the production platforms policy in Europe			
Sites	2002	2003	2005
Poissy	99%	99%	100%
Aulnay	45%	79%	100%
Ryton	100%	100%	100%
Madrid	35%	80%	100%
Total Platform 1	72%	89%	100%
Sochaux	64%	74%	94%
Mulhouse	56%	62%	84%
Vigo-Manguale	0%*	0%*	0%*
Total Platform 2	35%	0%	100%
Rennes	62%	57%	97%
Total Platform 3	62%	527%	97%

Berlingo/Partner and Xsara Picasso are on hold platforms

2 Investments

Investments are **the second key lever** in the reduction of costs. The purpose behind modernising industrial production tools is to improve performance and make processes more flexible. It affects the entire production line (stamping, panel line, painting, assembly and mechanical installation) and will enable PSA to reduce the unit cost of its vehicles by 150 euros by 2006.

3 Purchases

The Purchasing Department contributes to efforts to improve productivity by favouring proven technical solutions. European manufacturers are therefore practising a globalisation policy to increase the volume of parts and automotive components purchased from suppliers situated in countries with favourable cost structures. Knowing that purchases account for 65% to 70% of a vehicle's cost price, the gains generated from synergies as result of the Renault/Nissan Alliance shown in the diagram below speak for themselves.



4 Research and Development

The increasing effects of the platform policy and new in-house productivity programmes are also making it possible to better control Research and Development expenditure. The number of designs and shapes proposed by European manufacturers has thus increased from 205 in 1997 to 354 in 2006 (namely +73%).

Technological innovation also helps to reduce costs. This can be seen in the introduction of aluminium and with it a clinching and riveting solution that makes it possible to make vehicles considerably lighter; the introduction of high-strength steel and a technique called hydroforming that makes it possible to reduce the thickness of sheet metal or to do away with certain parts; or the introduction of plastic wings affecting the dimensional calculation of the mould that make it possible to reduce vehicle mass and facilitate repairs.

At the same time, for over 10 years manufacturers have been running an initiative with components manufacturers aimed at reducing the costs of the systems and modules used in the manufacture of vehicles. The levers drawn on are classic - design at a target price, production of complete sub-assemblies by components manufacturers, replacement materials and process changes. Between now and 2010, the estimated potential gain for structural parts (chassis and blank body shells) as well as external and internal parts is 15 to 20% .

5 Quality

Finally, productivity generated must not be at the expense of quality. Although taken for granted by customers, quality of vehicle manufacture and performance remains a decisive factor when deciding whether or not to purchase. Media coverage of recall campaigns could lead customers to think that vehicle quality is on the decline. Manufacturers are obliged to choose between greater productivity and the standard of quality required.

Motor vehicle manufacturers' responsiveness in the face of an uncertain economic climate and their ability to re-appraise a situation are proof that the automotive industry has not reached the end of the road. Last year the German automotive group, Volkswagen, stepped up its production cost reduction programme that should enable it to make savings of three billion euros between now and the end of 2005. At the same time it plans to reduce its payroll by 30% between now and 2011, as part of the same programme last autumn it also negotiated one billion euros of additional savings with the unions through a new company collective bargaining agreement that freezes wages for 28 months.

BMW is also banking on improving its productivity by 10% per annum. Mercedes has a productivity reserve of 10%, when its production volumes in comparison with the number of staff it is shown as having are compared with those of BMW.

In view of these challenges, no matter what happens, the European Commission has decided to launch a high level group called "CARS 21", which is supposed to meet for the first time at the 75th Geneva Motor Show. Its task will be to come up with recommendations intended to improve the competitiveness of the European automotive industry on a global level. Subjects such as the harmonisation of tax systems (% on profits, business tax, etc) and social systems (working hours, financing pensions, etc) will certainly be priority areas for improving the competitiveness of the European automotive industry.