

# Europe and Asia Will Become Primary Design Locations of the Future

Among the global regions of the automotive-producing world, CSM Worldwide research shows Europe, North America and Japan/Korea as the current “super-powers” of primary vehicle development, or PVD. PVD refers to the country or region responsible for the design of a platform and its derivative programs. This trend is due to shift, however, with Europe and Asia poised to design the vast majority of the world's automobiles.

In fact, by 2013 Asian and European PVD will account for 90 percent of all global output. Volume of Asian primary developed vehicles is forecast to grow by 54 percent between 2006 and 2013,

while the figure for Europe is forecast at 50 percent. At the same time, output of North American-developed vehicles is expected to fall by 40 percent by 2013.

While South America is an emerging region for primary design, the region as a

*A look at the different approaches by sales parent from 2006–2013 will help underscore the trend:*

BMW currently carries out all vehicle development in Europe and will continue to do so in the future, while archival

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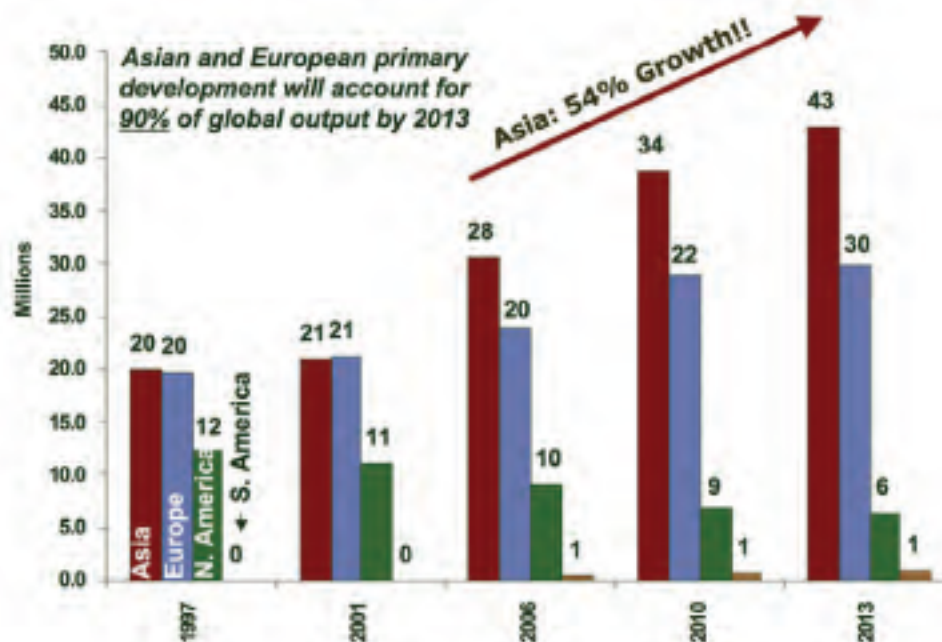
whole is expected to just surpass the 1.0 million unit mark for vehicles designed there by 2013. Most of these vehicles will be specialized, low-cost efforts.

DaimlerChrysler expands Europe development by 25 percent during this period. Because of the Chrysler operations, a significant proportion of DCX's PVD occurs in North America, although the output level of these vehicles is forecast to remain static for the period. DCX's recently announced tie-up with China's Chery Automobile is also expected to produce a small but growing number of Chrysler-badged small cars designed in Asia for sale mainly in North America.

Fiat carries out all of its PVD in-house in Italy with the exception of the GM EPSILON-based Croma and the Suzuki-based Sedici B-SUV. Neither program accounts for major volume.

At Ford and General Motors, we see a marked decline in output of vehicles with PVD carried out in North America. Ford is expected to double PVD in Asia, including design lead of the major B2e

## PRIMARY VEHICLE DEVELOPMENT



base at Mazda, and to add a small amount in Brazil. GM, through GMDAT, will also massively increase PVD emphasis in Asia while adding a small proportion in Brazil. With GM's shift of global EPSILON and DELTA 2 responsibility to Opel in Germany, Europe also receives a boost within GM.

PSA shows little change in PVD sourcing with stable splits between Europe and Asia (the Toyota-based 590N programs), but Renault/Nissan is forecast to show significant growth of European-developed vehicles being built in South Asia.

The Volkswagen Group is not expected to show any great changes through the period. The vast majority of development is obviously expected to occur in Germany with some low-price vehicle development taking place in Brazil.

Interestingly, VW bucks the trend of volume OEMs entirely with no PVD taking place in Asia at all.



Hyundai and Toyota, the stellar growth performers of Europe, carry out all PVD at home in Asia, in line with the strategy

of Honda and, to a large degree, Mitsubishi and Suzuki.

European and Japanese OEMs have a long tradition of looking out from their home markets for sales whilst the legacy of strong internal demand in the United States has led to slowness in overcoming inertia and adapting vehicles for sale outside of North America. In this scenario, Ford and GM are the main movers of design work to Asia and Europe. Additionally, as Asian brands are growing, particularly in North America and now in Europe and South Asia, this volume is supported by development work emanating from Asia.