

## INTRODUCTION

*Jorge Carrillo*

The emergence of new auto producers in the world market has become important since the mid-eighties. The works which are presented here, give a clear account of this process, particularly the introductory article by Yannick Lung. The table and graph shown below allows us to see the growth in the production of vehicles in countries such as Brazil, Mexico, and Korea.

While traditional countries such as Japan and eastern and central Europe are reducing the volume of vehicles they produce, other emerging countries such as China, India, Korea, Russia, Brazil, Mexico and the Asian countries are increasing their participation in production. India, for example, grew 25 percent since the mid-nineties; Mexico reached the twelfth position in world production and it is predicted to arrive in tenth place in the year 2001. At the regional level, even the participation of the emerging countries is strengthened to a greater extent. Such is the case of Brazil in Mercosur, China in Asia and Mexico in NAFTA. While countries such as the United States and Canada continue increasing their productive capacity, their rhythm of growth has become much slower than the emerging countries.

The widespread prediction is that this tendency will continue in the short and long terms. This is expected for India, Mexico and Brazil, not only via an increase in exports—especially in Mexico—, but also via increased income in the middle classes in India, Brazil and the upper class in Mexico.

The increase in production volume and in productive capacity has been accompanied by an increase in the finished products imported, in CKD kits and even in autoparts and components.

It should be emphasized that the presence of the automobile industry in the so-called emerging

countries is a recent phenomenon in all cases. In Latin American countries such as Brazil and Mexico the manufacture of vehicles was initiated in the sixties (although the importance of CKD sets for assembly goes back to the twenties), but it is not until the mid-eighties that the direction of the process changes. In other words, the emergence of competitive participation in the world auto market has meant in these cases a profound restructuring of existing industry, as well as the presence of new direct foreign investment, mainly in the form of transplants (both in finished vehicles as well as in autoparts). Mexico reoriented its production from the internal to the external market and changed from a slow, lethargic speed to dynamic flight (from 'sitting ducks' to 'flying geese'). Russia was transformed from a vehicle producer to a supplier of parts, although it is beginning to produce automobiles again. In other cases such as Korea, the process has been less dramatic and its growth has been more sustained starting in the mid-eighties.

As can be seen in the several articles in this volume, the emergence of new producers means great opportunities for the survivors (India, Mexico, Brazil), not only because of expectations of growth in regional markets but also because of the low density of the current ratio of automobiles per person. In countries such as India there are two hundred persons for each car produced and in Mexico 225 persons for every vehicle produced for the internal market.

Another important aspect is the relative increase in technological capacity within plants. Not only is this true of transplants which incorporate the most advanced technology available at the moment and the best

organizational practices, but plants also function as zones for trying out new designs which can be implemented at a global level. Such is the case of the modular system in the VW plant in Resendes, Brazil; or the Renault motor plant in Spain. Or in the case of autoparts in the Technical Center of Delphi in Juárez, Mexico. In the same way, unique and specialized platforms are developed for producing models such as the New Beetle in Puebla, Mexico.

The auto industry is an industry which contributes value added par excellence at the end of its production chain. This, which has traditionally been reflected in the growth of wages as in the development of domestic autoparts suppliers, has become disrupted with the growth of the emerging countries. In countries such as the United States and Canada, the growth in wages as been reduced, in terminal plants and in auto parts plants, and has even become negative in cases such as Japan. As far as the development of suppliers is concerned, these have also been moved to the same emerging countries. In a parallel fashion, in the new producers the increase in wages is very reduced (South Korea, Taiwan, Mexico and China) and the development of domestic suppliers has not yet ceased to be a goal.

Finally, the research moves us forward but leaves many questions to be answered. Yannick Lung wonders if the growth of the auto industry in the emerging countries will really replace a large part of the capacity of the traditional producers. It is in this sense that several limitations are formulated which contrast with the optimistic vision of the success of the emerging countries, and of the substitution of new products and the deterioration of traditional products.

Firstly, there are few emerging countries which participate in these new processes, as well as few regions within each country.

Secondly, the future of these countries within the world automobile accord is not clear and certainly not assured (for example, Argentina and Russia). Factors such as political instability (Brazil and Russia), financial instability (Brazil,

Mexico, Asia, Russia), volatility in internal demand (Mexico), newly evolving customer needs and poor supplier bases, are in this sense important sources of uncertainty.

Thirdly, it is not clear what paths companies are taking in view of the mega fusions. New questions float in the air: Will rationalization be increased with the differences in production costs among various countries and with the ease of relocating segments and plants due to freer trade? What type of labor relations and corporate strategies will prevail? Will the imports coming from corporations in central countries (Mercedes in Mexico, for example) increase along with the presence of global players providing supplies?

Fourth, at what point will the increase in the productive capacity in the emerging countries have effects on economic and social development such as they have had in traditional countries? The case of Mexico and China are examples in this sense of the strategy of the low road, since, on the one hand, productivity and competitiveness of companies is increased, but on the other, the intensification of work is increased, low wages remain and the development of domestic suppliers is poor.

Finally, there are also central questions for future research formulated in the works that follow such as these: If the movement of plants making finished products and autoparts has not involved the closure of many plants in the traditional countries, what is it that continues to be moved to the emerging countries? And, what are the ecological limits of the dynamic development of the auto industry in emerging countries? That is to say, going beyond contamination, what are the social, urban, and technical limits of this productive growth, above all in the use of the automobile. Facing these challenges, authors such as Garibaldi and Battaglini propose new concepts, such as mobility and integration between the auto industry and new urban design (systematic design of the urban system as a network of public space), in order to be able to confront new challenges.

*Jorge Carrillo*  
*Collegio de la Frontera Norte*  
*Universidad Autonomia Metropolitana-Iztapalapa*  
*Chula Vista – États- Unis*