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Learning and Innovation under Changing Market Conditions. The Auto Parts Industry in Mexico
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This research explores changes over time in the learning responses and innovation capacity of auto parts suppliers in Mexico in the context of the new economic environment created by the confluence of market changes brought about by the North American Free Trade Agreement (NAFTA) regulations – which included labor, production and organizational requirements and consequent changes in the type of capacities that assemblers demanded from the auto parts suppliers.

The automobile industry is particularly relevant to an analysis of these learning and innovation processes because of its wide set of interrelations with other industrial activities. Its technological requirements and dependence for parts and components have thus tended to stimulate technological development and upgrading in its supporting industries. However, the main subject of the dissertation is not the automobile industry *per se* but rather the institutional aspects affecting learning and innovation in a manufacturing sector that is located in a developing country and shaped by international organizational and technological standards.

The thesis combines elements from three strands of theory: the systems of innovation perspective, analytical tools from the interactive learning and capability building literature and the role of trade in learning and innovation.

The study was based on a unique panel dataset that tracked changes in learning modes for a set of 192 auto parts firms before and after the NAFTA agreement came into force. The results are complemented by two other empirical analyses comparing the technological efforts and firm-level characteristics of exporting auto parts firms with those of non-exporting firms.

The thesis points to the relevance of understanding the historical development of the industry and the role that traditional habits and practices play in shaping the development of the industry in order to understand the learning and innovation patterns followed by the auto parts suppliers. The research also considers how institutions (in the form of policies) can effect changes to (or reinforce) these habits

and practices. The policy environment in the study was designed with the expectation that this policy regime (i.e., NAFTA) would encourage technological learning from international automotive manufactures and, in doing so, build Mexican capacity in this sector. However, the study showed that without purposeful intervention to support learning, the policy regime was not enough on its own to ensure that technological learning and capacity building took place. Therefore, building capacity locally and creating a policy and institutional regime that supports innovation is the only way in which learning and capacity development processes can be enhanced.