In *Hard Times*, Charles Dickens describes in heartrending fashion the effects of the Industrial Revolution on entire populations that wound up forsaken, without work, social security or any other method of survival. The advent of the steam engine was devastating for manual work, despite the fact that virtually all workers of the time had the possibility of using the new machines. Some learned how, others were left out, suffering the consequences. Although anguishing, this is the history of humanity: Deidre McCloskey has shown how technological change has gone hand in hand with this history; from the invention of the wheel, pulleys and fishing nets, technology has transformed the way of producing and of living. Surely there was a militant and intrepid Trump attempting to harness the raging waters at each of those junctures.

With Trump or without Trump, technology will continue to advance and that is something about which we Mexicans have not taken much notice: the nation’s prototypical industrial plant continues to be rather traditional, in that it involves many persons managing machines, even some of enormous complexity. This is in contrast with the exporting plant and the most modern plants of developed countries, which are replete with robots and in which personnel is quite exceptional. In former times two operators were required per loom; today, a single individual with a computer can simultaneously supervise up to five thousand looms. The change, and the destruction of traditional jobs, is impacting and irrepressible. And it’s nothing new.

This reality entails two enormous challenges for Mexico. On the one hand, sooner or later, the traditional manufacturing plant will be razed by the growing sophistication of productive processes and consumer demands. Suffice to imagine what the multiplication of 3D printers will imply, some that most tiny manufacturing plants in Mexico, Fox’s “changarros,” could not even begin to fathom. Many scholars of the Soviet Union have concluded that it was technological change that really undermined the old Russian empire: in the last analysis, the USSR –with the exception of the military- was incapable of keeping pace with the West. In Mexico we are not far from a similar outcome in the whole old, traditional manufacturing plant that, despite all types of tariff and non-tariff protections and subsidies, it will in the end die. It is not by chance that miracle workers - like Trump in the U.S. and AMLO in Mexico- want to return to that idyllic world of the past in which everything supposedly worked in harmony.
The second challenge is not a lesser one: with Trump or without Trump, the same thing is going to happen even in the most ultramodern sector of the country’s industrial plant, which produces, competes and generates billions of dollars in exports. Technological change is unstoppable and robots are advancing by giant leaps and bounds. While we Mexicans are worried about the preservation and, ideally, the modernization of NAFTA, the industrial world is moving vertiginously toward automation. How are we going to perpetuate comparative advantages to attract new enterprises, investments and industrial plants? The question is not an idle one: we have been able to entice investments because of the certainty conferred by NAFTA and the competitiveness that we contribute by means of workforce costs and other inputs. What will we do when these inputs, above all personnel costs, become irrelevant because of robotization?

The problem is becoming serious due to some of the initiatives that the new U.S. Government is promoting, such as the repatriation of profits “stationed” outside the U.S. These profits, estimated at more than one trillion dollars, have been left behind because companies do not want to pay a 35% tax to repatriate them. Trump is proposing a very low tax (between 8% and 20% according to the press) for their repatriation, but in exchange for their being utilized for new investments on U.S. soil. Were this initiative to be approved, it is most probable that this capital would be used for high-tech investments, that is, robots, minimizing the employment of blue-collar workers.

For Mexico, this prospect entails two basic consequences: the first, mentioned before, is that it will modify the whole conception of NAFTA from the time it first entered into effect. The second is that, even if we found the way to continue to draw investment in high tech, the impact on employment would be exceedingly harsh. One must not lose sight of the fact that the salaries of Mexican workers in the modern and export sector are several times higher than those in traditional industry. In sum, we are confronting two fundamental challenges: that of continuing to attract investments; and two, dealing with the impact on employment -or, at least, the absence of new job opportunities- in the industrial sector: some lost to automation, others due to the disappearance of traditional manufacturing.

With or without Trump, the challenges to the country’s development cannot other than grow and make each day more complex. Decades of abandon in these matters has caught up with us; we must address all that was left astray before…

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