Hi Everyone,

What will jobs look like in the future? Should we be worried about robots displacing workers? We hear these questions all the time. Last week, we held an ECA Talk on the impact of technological change on job creation. Robots may be taking over many low-skill jobs, but technology is also creating opportunities, generating new jobs and increasing productivity. Automation should change what it takes for a location to be an attractive site for production, so how it impacts offshoring and foreign direct investment (FDI) decisions? What is the likely impact on European manufacturing and beyond? What should developing countries of our region do to continue attracting FDI in the age of automation?

If you missed the talk, do watch the video of our discussion and read some related research below.

In the meantime, our team has been hard at work preparing our spring update, with a feature chapter on investing in Human Capital. Specifically, we will focus on access and quality of tertiary education – an important investment to prepare for future jobs. We will also look at minimizing risks associated with noncommunicable diseases such as obesity, smoking, and heavy drinking – all important to keep the aging populations of our region healthy, active and productive, well into old age.

We have many more exciting events planned over the next months, so mark your calendars and stay tuned.

Happy Reading!
Asli

FEATURE STORY

Have Robots Grounded the Flying Geese? Automation and Offshoring in Europe’s Manufacturing Sector

Robots are often blamed for displacing workers, but is there another dimension of automation that could be a boon to Europe? At a recent ECA Talk, Mary Hallward-Driemeier, senior economic adviser at the World Bank, discussed the impact of automation on offshoring and foreign direct investment decisions. Her recent analysis shows that, although there are some early warning signs, the intensity of robot use in high-income countries has a positive impact on foreign direct investment growth from high-income to low- and middle-income countries.

Video || Presentation || Working paper
RELATED WORLD BANK RESEARCH

✔ Does Automation in Rich Countries Hurt Developing Ones? Evidence from the U.S. and Mexico
Does the increasing robotization in high-income countries boost "reshoring" and negatively affect the outlook for developing countries? The authors use administrative data on Mexican exports and find that higher exposure to U.S. automation did not affect wage employment, nor manufacturing wage employment overall, although with mixed sectoral effects.

✔ Robots, Tasks and Trade
This paper examines the implications of industrial robotization for North-South trade, wages and welfare. The empirical analysis reveals that greater robot intensity in own production could lead to a rise in imports sourced from less developed countries in the same industry and an even stronger increase in exports to those countries. Northern robotization may lead to higher wages and welfare in the South.

✔ Automation and Labor Market Outcomes: The Pivotal Role of High-Quality Education
The authors of this paper propose an overlapping-generations model in which the quality of a country's education system determines how well skill supply can respond to increased demand from automation and whether automation will be beneficial or detrimental. The model and empirical findings suggest that it is middle-income countries that are most vulnerable to automation if their education systems are unable to affect cognitive and noncognitive skills sufficiently.

✔ Does the Adoption of Complex Software Impact Employment Composition and the Skill Content of Occupations? Evidence from Chilean Firms
What impact does the adoption of complex business management software have on the skill content of jobs? Using a novel panel data set for Chilean firms between 2007 and 2013 the authors find out that this type of technologies reallocates employment within firms away from skilled workers and increase the use of routine and manual tasks.

BLOGS

✔ What does the rise of robots mean for trade?
Bob Rijkers, Paulo Bastos & Erhan Artuc, April 2019
Analysis of the impact of robotization on bilateral trade flows over the past two decades suggests that, if anything, automation and 3D printing are boosting trade. A 10 percentage point increase in robots in advanced economies is associated with an 8.6 percentage point increase in imports of semi-finished products from developing countries. Read the blog »

✔ Automation and innovation: forces shaping the future of work
Simeon Djankov, July 2018
One of the exciting directions for economic research is the changing nature of firms. The World Development Report 2019 sets out some of the features of what's happening: physical assets become a thing of the past, the boundaries of the firm blur as start-ups quickly become global players by selling online, and consumer data are explored to open new markets. Read the blog »

✔ The implications of automation for education
Harry A. Patrinos, Raja Bentaouet Kattan & Kevin Macdonald, November 2017
Automation is heralding a renewed race between education and technology. However, the ability of workers to compete with automation is handicapped by the poor performance of education systems in most developing countries. This will prevent many from benefiting from the high returns to schooling. Read the blog »

CALENDAR OF EVENTS

- March 5, 2020 - 10AM: ECA Lecture "Gender in Europe and Central Asia" with Caren Grown, Senior Director, Gender, World Bank Group
April 7, 2020 - 9AM: ECA Talks "Successes and Challenges of the ECA Countries Transition to the Market Economy after the Fall of the Berlin Wall" with Joseph Stiglitz, professor at Columbia University and recipient of the Nobel Memorial Prize in Economic Sciences, and William Easterly, Professor of Economics at New York University and Co-Director of NYU’s Development Research Institute.


May 13-14, 2020: Conference on Firms, Job Creation and Competition

June 1, 2020: ECA Lecture "Rising Debt" with Carmen Reinhart, Minos A. Zombanakis Professor of the International Financial System at Harvard Kennedy School.

Check ECA Lectures and ECA Talks to learn more about our events.