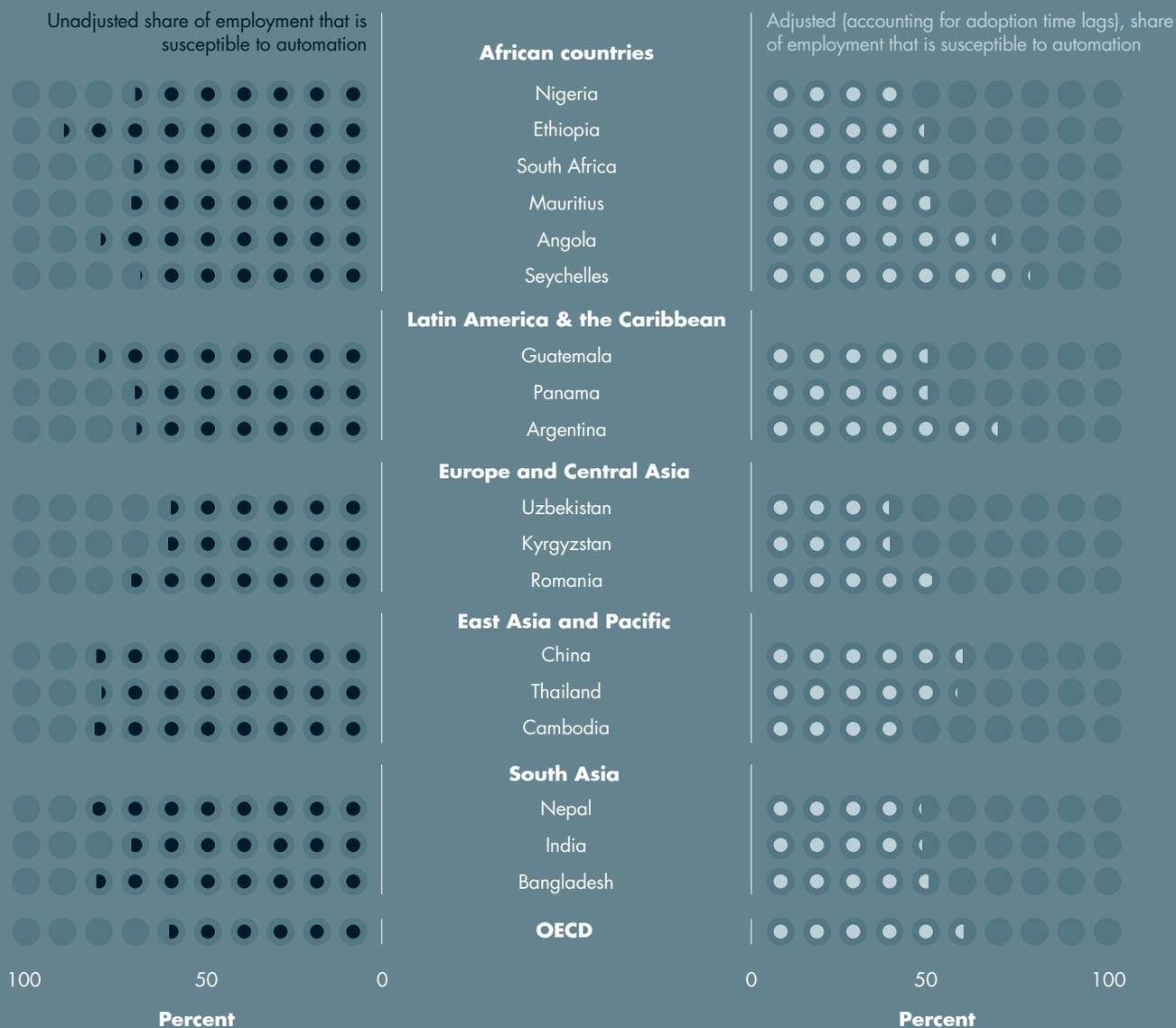


FIGURE 2.4.

JOBS AND AUTOMATION: HOW SUSCEPTIBLE IS AFRICA?

The automation of jobs has been a historical challenge in the developed world and is becoming a growing one in the developing world: Both in Africa and elsewhere, two-thirds of all jobs are susceptible to automation due to advancing technology. The situation, though, is not necessarily dire, as slow adoption of advanced technology and lower wages are likely to stave off automation and its resulting job displacement in developing countries. The figure below demonstrates the number of jobs susceptible to automation generally (left), and also the number of jobs susceptible to automation but incorporating the lag time of uptake (right). The figures on the right show that in a majority of cases these developing-country jobs are safer than they would otherwise be in the short term owing to lags in technology adoption.



Note: As indicated in the World Bank's World Development Report 2016, unadjusted probabilities of automation for occupation are from Frey and Osborne's 2013 paper, "The Future of Employment: How Susceptible Are Jobs to Computerisation?" and weighted by employment, while the adjusted probabilities—which account for the slower pace of technology adoption in poorer countries, using the adoption lag of earlier technologies—are from Comin and Mestieri's 2013 paper "If Technology Has Arrived Everywhere, Why Has Income Diverged?"

Source: World Bank. 2016. World Development Report 2016: Digital Dividends. Washington, DC: World Bank. doi:10.1596/978-1-4648-0671-1. License: Creative Commons Attribution CC BY 3.0 IGO. Available at: <http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf>.