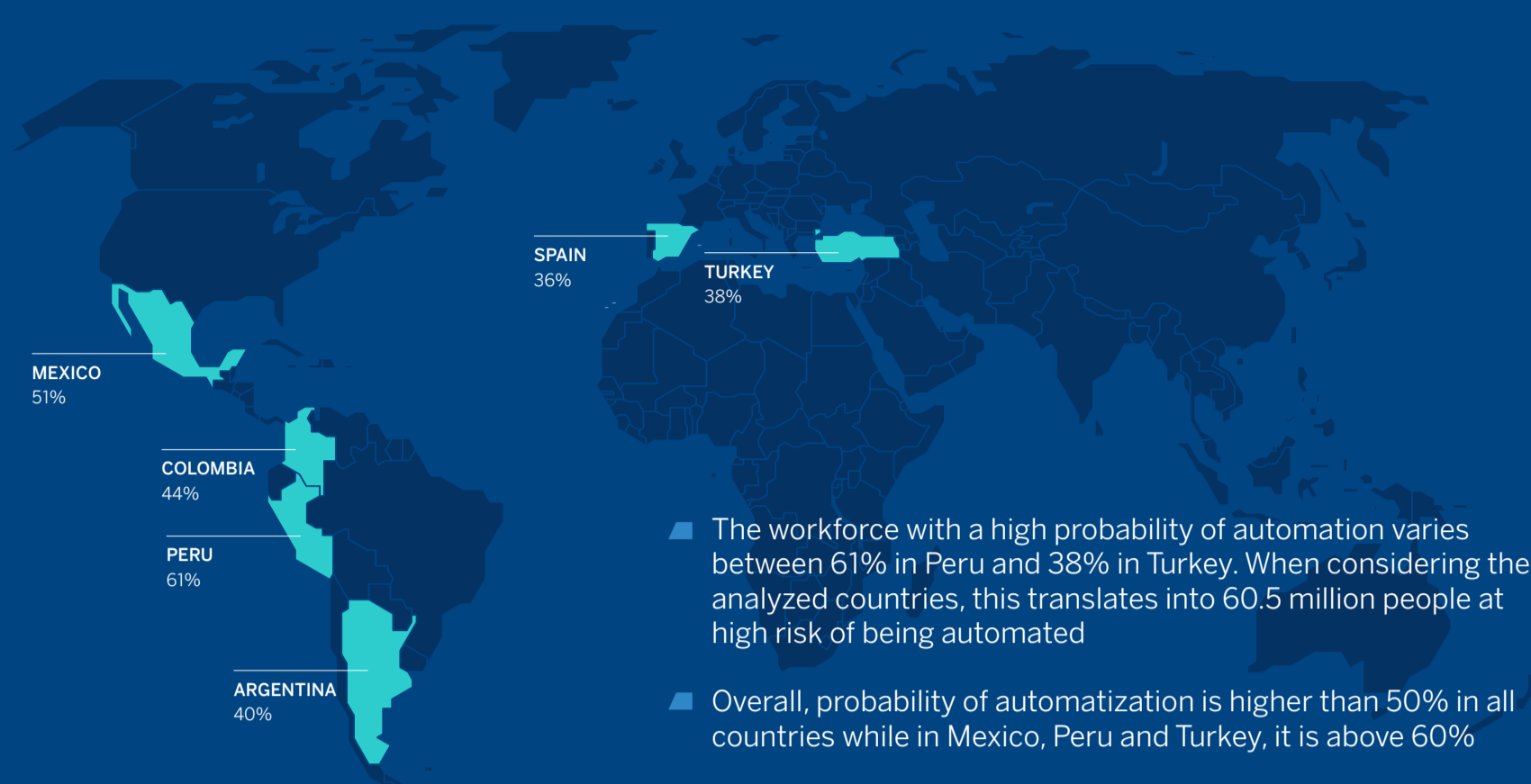


# Employment vulnerability to the digital revolution

Some stylized facts on Argentina, Colombia, Mexico, Peru and Turkey



## Age



- In **Peru**, 64% of employees over 49 years old and 60% of employees under 33 years old are at high risk of losing their current job to automation. In contrast, in **Turkey** only 35% of younger employees and 23% of older employees are at high risk

## Gender



- **The risk faced by male and female workers to lose their job is very similar.** However, women face a higher risk that is 10 and 5 percentage points more important than men in Turkey and Peru respectively. In the rest of the analyzed countries the distribution is more uniform

## Education



- The higher the level of education, the lower the probability of automation of associated occupations. In **Colombia, Argentina and Mexico**, reaching secondary education shows no risk reduction compared to only primary education. It stands out that 80% of professions with low education (nil or primary) in **Peru** have a high risk of automation
- **Workers of the future would spend more time in activities for which machines are less capable**, such as taking care of people, applying expertise, and communicating with others. The skills needed will also shift, requiring more social and emotional aspects, and more advanced cognitive capabilities, such as logical reasoning and creativity

## Sector of activity



- **The probability of losing the current job** is greater in sectors or tasks where physical work is performed in predictable environments for example, agricultural activities and hotels and restaurants. This characteristic stands out in our analysis of Mexico and Peru
- Conversely, in all countries, **education and health care clearly stand out** among the sectors with low risk

## Informality



- **Workers in the informal sector** have the highest average probability of losing current job due to automation, reaching close to 70% in the case of **Mexico, Turkey and Peru.**
- Low risk represents on average 48% of total public jobs in the studied countries, and for informal jobs the high risk of automation corresponds to 53%

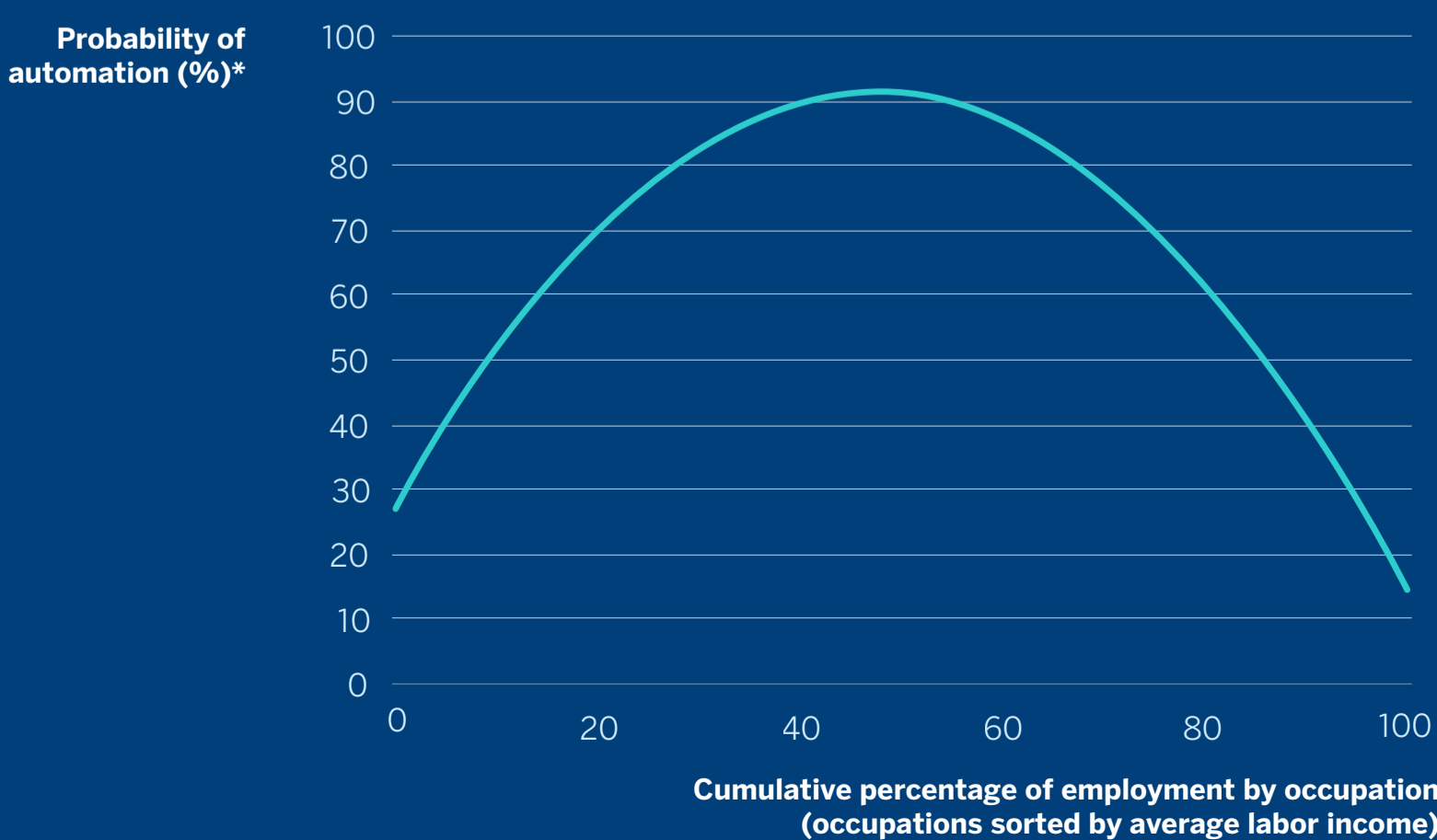
## Size of the company



- The probability of losing a job due to automation tends to **decrease with the size of the company**
- **Self-employed workers tend to be involved in businesses with low productivity** or low qualifications which can be easily automated, as well as many small family businesses

## Income

**Inverted U shape of weighted risk of automation i.e low values for professions at the top and the bottom of the income distribution.** Theory explains the inverted U shape in that Information technology complements highly educated workers who participate in abstract tasks, replaces workers with moderate education who perform routine tasks, and has less impact on low-skilled workers performing manual tasks (service jobs as health aides, security guards, ordinances, cleaners and waiters)



\*Due to insufficient number of observations the U shape does not apply to Argentina