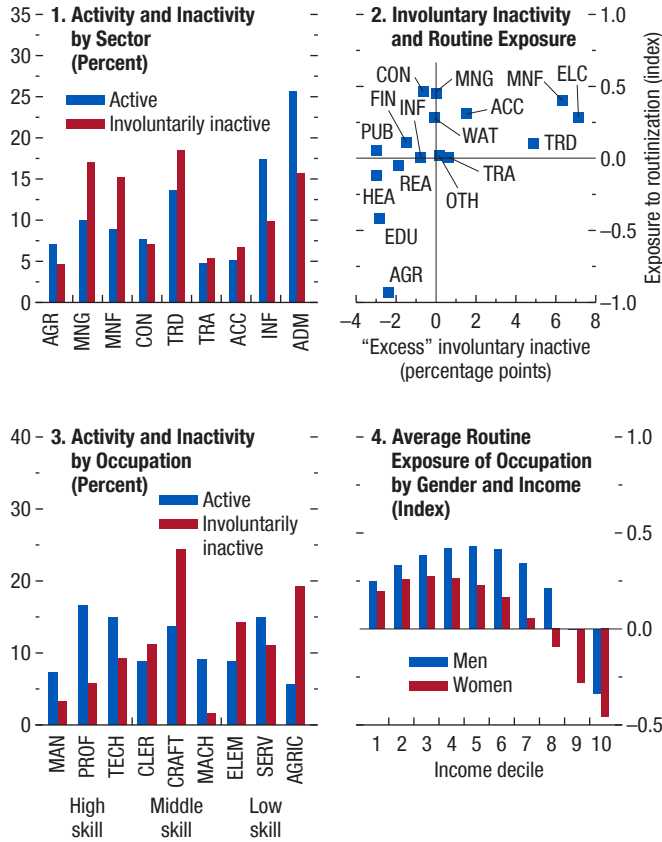


**Figure 2.7. The Role of Exposure to Routinization**

The involuntarily inactive drop out disproportionately from highly routinizable sectors and occupations. Vulnerability to routinization is especially pronounced for men in the middle of the income distribution.



Sources: Das and Hilgenstock (forthcoming); Eurostat, European Union Labour Force Survey; and IMF staff calculations.

Note: Reported statistics are estimated from a random sample of 10,000 respondents per country per year from the European Union Labour Force Survey over the period 2000–16. In panels 1 and 3, active includes employed and unemployed, and involuntarily inactive refers to people inactive due to dismissal. For the inactive, sector or occupation is that of last employment. In panel 2, “excess” involuntarily inactive refers to the difference between inactive individuals in a sector as a share of all nonparticipants and the active individuals attached to the sector as a share of the labor force. In panel 2, routine exposure is a proxy for the share of jobs in a given sector that are at risk of being automated based on Das and Hilgenstock (forthcoming). Panel 4 in turn shows how automatable given occupations are. ACC = accommodation and food service activities; ADM = administrative and support service activities; AGR = agriculture, forestry, and fishing; AGRIC = skilled agricultural workers; CLER = clerical workers; CON = construction; CRAFT = craft workers; EDU = education; ELC = electricity, gas, steam, and air-conditioning supply; ELEM = elementary occupations; FIN = financial and insurance activities; HEA = human health and social work activities; INF = information and communication; MACH = plant and machine operators; MAN = managers; MNF = manufacturing; MNG = mining and quarrying; OTH = other services; PROF = professionals; PUB = public administration and defense; REA = real estate activities; SERV = sales and service workers; TECH = technicians; TRA = transportation and storage; TRD = wholesale and retail trade; WAT = water supply, sewerage, waste management, and remediation activities.